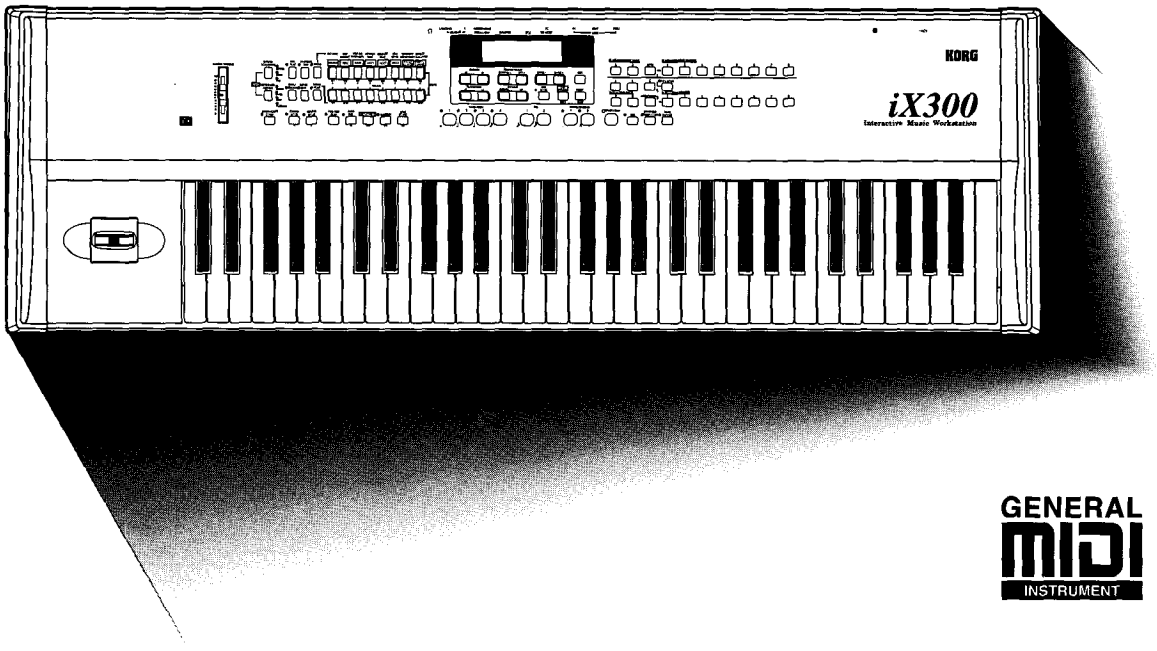
Interactive Music Workstation

iX300

Reference Guide



GENERAL MIDI INSTRUMENT

AI² Synthesis System

KORG

Ⓔ ①

Table of Contents

1. Arrangement Play mode

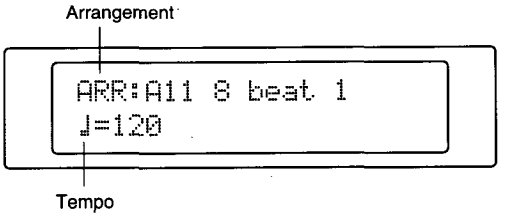
Functions of Arrangement Play mode

The following table lists the functions of Arrangement Play mode, showing the title and main contents of each display page.

Display page	Contents	Manual page
1. Performance monitor	Select arrangements, display tempo and chord	☞P. 2
2. Style select	Select styles	☞P. 3
3. Track settings 1	Select a program, set pan and send level	☞P. 4
4. Track settings 2	Damper pedal settings, track status, wrap around point, octave	☞P. 5
5. Chord latch/Variation change	Chord latch, variation change	☞P. 7
6. Effect select	Effect type, effect on/off	☞P. 8
7. Effect placement	Effect placement, C/D pan, L/R levels for effects 1/2	☞P. 9
8. Effect 1 parameters	Parameter settings for effect 1	☞P. 10
9. Effect 2 parameters	Parameter settings for effect 2	☞P. 10
10. Rename arrangement	Modify the arrangement name	☞P. 11
11. Write arrangement	Store an arrangement into the user bank	☞P. 12

Page 1. Performance monitor

When you press the [ARR. PLAY] button you will enter Arrangement Play mode.
In this page you can select the arrangement that you wish to play, and adjust the tempo.
This page also displays the chord that is produced when you play the keyboard.



ARR (Arrangement) [A11...A88, B11...B88, U11...U88]

Use the **[ARRANGEMENT BANK] buttons** and **[ARRANGEMENT NUMBER] buttons** to select an arrangement. The display will show the bank, number, and arrangement name.

If you select a new arrangement while you play, the new arrangement will start playing from the beginning of the next measure, and the tempo setting will change accordingly. If you do not want the tempo to change when you switch arrangements, press the [KBD LOCK] button. In this case, the transpose setting, the keyboard sound, and the effect settings will also be locked.

Arrangements can also be selected using a separately sold foot switch or the pedal on an EC5 external controller. For details refer to Disk/Global mode "Page 7. Assignable pedal settings" or "Page 8. EC5 external controller settings."

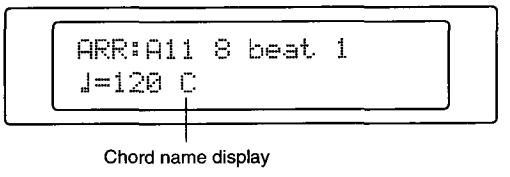
♩ = (Tempo) [40...240]

Use the **TEMPO/VALUE** [UP/+] and [DOWN/–] buttons to adjust the playback tempo of the arrangement within the range of ♩=40–240.

When you press the [START/STOP] button the selected arrangement will playback at the specified tempo.

If the Disk/Global mode Clock Source parameter is set to MIDI or HOST as the synchronization clock, the tempo of the arrangement will be controlled by MIDI Clock messages from an external sequencer or personal computer connected to the ***iX300***. In this case, the screen will display EXT in the location where the tempo would otherwise be displayed, and it will not be possible to adjust the tempo using the [TEMPO/VALUE] buttons or the [TAP TEMPO] button. If you wish to adjust the tempo, adjust the tempo of the external sequencer that is connected.

Chord name display



When you play the keyboard, the chord name will be automatically detected and displayed in the LCD. When a chord is detected while an arrangement is being played, the arrangement will change to fit that chord.

In order for chords to be detected, press the [CHORD SCANNING] button, and select either LOWER, UPPER or FULL to specify the area in which chords will be detected.
If you select LOWER and play the keyboard area below the split point, even single notes will be detected as chords, and the arrangement will play accordingly.
If you select UPPER and play the keyboard area above the split point, three or more

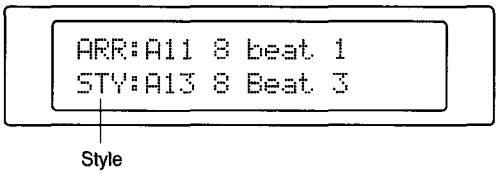
notes pressed together will be detected as chords, and the arrangement will play accordingly.
If you select FULL and play three or more notes together in any area of the keyboard, a chord will be detected, and the arrangement will play accordingly.
To set the split point, hold down the [SPLIT POINT] button and press the key that you wish to set as the split point.

[CHORD SCANNING] setting	Keys below the split point	Keys above the split point
LOWER	Single notes or more	–
UPPER	–	Chords of 3 or more notes
FULL	Chords of 3 or more notes	Chords of 3 or more notes

If you select a different arrangement while an arrangement is playing, the new arrangement will maintain the last-played chord. To cancel the chord that was detected, stop the arrangement and press the [RESET/YES] button. You can also cancel the chord by stopping the arrangement and selecting a different arrangement.

For details on the chords that can be detected, refer to the list of chords in "8. Appendices," (☞Page 151 in this manual).

Page 2. Style select



STY (Style) [A11...A88, B11...B58, U1...U4]

Use the [ARRANGEMENT BANK] buttons and the [ARRANGEMENT NUMBER] buttons to select the Style to be used by the Arrangement.
U1–U4 are User Styles. If styles created on the ***i1/i2/i3*** are loaded, they can be selected by U1–U4.

If you select a different style while an arrangement is not playing, the backing track settings of the arrangement will change to the program, volume, pan, and tempo settings associated with the selected style. At the same time, the BASS track and ACC1–ACC3 tracks will be given octave settings of 0, and the wrap around point will be changed to ORG. For details on octave settings and wrap around point settings, refer to "Page 4. Track settings 2."

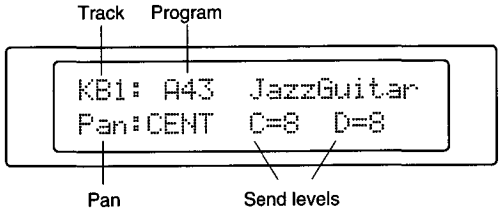
If you select a different style while an arrangement is playing, the backing track settings (sounds etc.) will not change, but the arrangement playback pattern will be significantly modified by the selected style. At this time, if the [KBD LOCK] button has been pressed and the LED is lit, the tempo setting will not be changed. If the LED is off, the setting will change to the default value.

To create an original arrangement, select a style that is close to what you have in mind, then change the program, volume, pan, and tempo as desired, make effect settings, and write your new arrangement into the User bank.

Styles can also be changed using a footswitch or the pedals of an EC5 external controller. To do so, refer to Disk/Global mode "Page 7. Assignable pedal settings" and "Page 8. EC5 external controller settings."

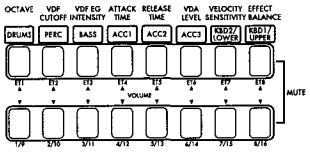
Page 3. Track settings 1

In this page you can specify the program (sound), pan (stereo location), and the volume levels (send levels) to the two effects for each of the eight tracks in the arrangement.



Track [DRUM, PERC, BASS, ACC1...ACC3, KB1, KB2]

Use the [TRACK/CHANNEL] buttons to select the track whose program, pan, or send level you wish to modify.
When you press the [DRUM] button the drum track will appear, and when you press the [PERC] button the percussion track will appear. When you press the [BASS] button the bass track will appear, and when you press one of the [ACC1]–[ACC3] buttons the corresponding accompaniment track will appear.
When you press the [KBD1] or [KBD2] button, the corresponding keyboard track will appear.



The arrangement will play with the track settings that are displayed when you press the [DRUM]–[ACC3] buttons. When you play the keyboard, the sound will be according to the settings of the keyboard tracks.
When a track is displayed, you can press the upper (▲) or lower (▼) [TRACK/CHANNEL] button to adjust the volume. Pressing both the upper (▲) and lower (▼) buttons simultaneously allows you to mute the track.

Program [A11...U88, Dr11...Dr44]

Select the program (sound) that each track will play.

To change the current program, use the [PROGRAM BANK] buttons and [PROGRAM NUMBER] buttons to select the desired program.
To select a drum program (Dr11–44), press the [PROGRAM BANK] button [USER/DRUM] several times so that the Dr display appears, and then press a [PROGRAM NUMBER] button to select a drum program.

Pan [OFF, L15...L01, CENT, R01...R15, PROG]

Set the stereo location of each track. This will determine the channel A and B level.

CENT will place the track in the center, **L values** will place it toward the left, and **R values** will place it toward the right. As the values increase, the sound will be further away from the center toward the left or right.
A setting of **OFF** will turn off the track output to channels A and B.
A setting of **PROG** will cause the pan setting specified by each program to be used.

C=/D= (Send levels) [0...9, P]

For each track, set the level that is sent from channels C or D to the effect system.

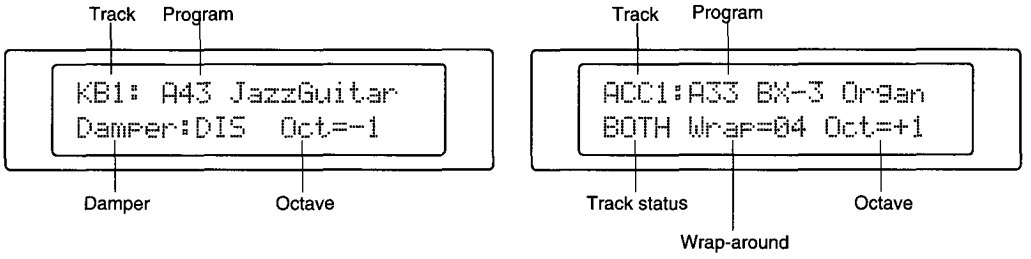
With a setting of **P**, the effect send levels specified by each program will be used.

For each arrangement, the effect system can use one of four output routings (Serial, Parallel 1, Parallel 2, Parallel 3), which will determine the placement of the two stereo effect

processors and how the output signals will be routed. For details on the output routing, refer to "Page 7. Effect placement" (☞Page 9 in this manual).

Page 4. Track settings 2

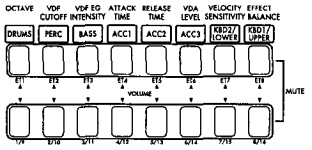
For each track in the arrangement, this page lets you set damper pedal operation and set the keyboard range (octave, wrap around etc.).



Track [DRUM, PERC, BASS, ACC1...ACC3, KB1, KB2]

Use the [TRACK/CHANNEL] buttons to select the track whose program, pan, or send level you wish to modify.
When you press the [DRUM] button the drum track will appear, and when you press the [PERC] button the percussion track will appear. When you press the [BASS] button the bass track will appear, and when you press one of the [ACC1]–[ACC3] buttons the corresponding accompaniment track will appear.

When you press the [KBD1] or [KBD2] button, the corresponding keyboard track will appear. When you play the keyboard, the sound will be according to the settings of the keyboard tracks.



The arrangement will play with the track settings that are displayed when you press the [DRUM]–[ACC3] buttons.
When a track is displayed, you can press the upper (▲) or lower (▼) [TRACK/CHANNEL] button to adjust the volume. Pressing both the upper (▲) and lower (▼) buttons simultaneously allows you to mute the track.

Program [A11...U88, Dr11...Dr44]

Select the program (sound) that each track will play.

To change the current program, press the [TRACK/CHANNEL] button for the track that you wish to modify to access that track in the LCD, and then use the [PROGRAM BANK] buttons and [PROGRAM NUMBER] buttons to select the desired program.
To select a drum program (Dr11–44), press the [PROGRAM BANK] button [USER/DRUM] several times so that the Dr display appears, and then press a [PROGRAM NUMBER] button to select a drum program.

Damper [DIS, ENA]

This enables or disables the damper effect for the keyboard.
This setting will be available if you have selected the KB1 or KB2 track.

With a setting of **ENA** (Enable), the damper pedal will function. With a setting of **DIS** (Disable), the damper pedal will not function.

For example if the [KEYBOARD ASSIGN] key has been pressed to make the LAYER indicator light, and you are playing an organ and a piano program, you can disable the

damper only for the organ, so that the damper will apply only to the piano.

Also, if you wish to use the damper switch to control the Chord Latch function of "Page 5. Chord latch/Variation change," you can select DIS to disable the damper function so that the sound will not be held (sustained) while the chord is latched.

Oct (Octave) [-2...0...+2]

This raises or lowers the pitch of the currently selected track in 1-octave steps over a maximum of 2 octaves.

With a setting of **0** the program will play at its normal pitch. However it is not possible to set the octave for the DRUM or PERC tracks.

By simultaneously pressing the TEMPO/VALUE [UP/+] and [DOWN/–] buttons, you can return to the value that this parameter had when the cursor was moved to it.

There are other ways to change the octave. You can change the octave of a track by pressing its [TRACK/CHANNEL] button. Also, you can press the [OCTAVE] button to set the octave of the KBD1 track.

Track status [OFF, INT, EXT, BOTH]

When an arrangement is playing, this setting specifies whether the musical data from the corresponding track will be played internally or transmitted to an external MIDI tone generator.
This setting is available when the DRUMS, PERC, BASS, or ACC1–ACC3 tracks are selected.

Tracks with a setting of **OFF** will not play.
Tracks with a setting of **INT** will be played only on the internal tone generator. Normally you will use the INT setting. In this case, musical data will not be transmitted from the MIDI OUT or TO HOST connectors.
Tracks with a setting of **EXT** will not be played by the internal tone generator, but their musical data will be transmitted from MIDI OUT or TO HOST to an external device.
Tracks with a setting of **BOTH** will be played on the internal tone generator, and their musical data will also be transmitted from MIDI OUT and TO HOST.

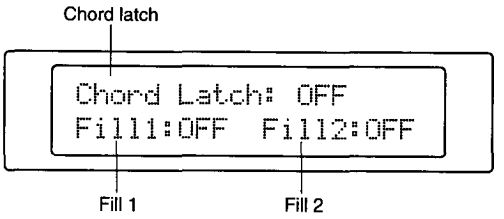
Wrap (Wrap-around point) [ORG 1...12]

Depending on the chord progression, the keyboard area in which the track is playing may appear to be an octave higher than it should be, producing an unnatural feeling. If you set this wrap-around point, any specified chords whose root falls above this point will be "wrapped around" to the octave below. This will prevent the track from sounding in an unnaturally high register.
This setting is available when the BASS or ACC1–3 tracks are selected.

The wrap-around point can be set for each track in **semitone steps** up to a **maximum of 12 steps**, relative to the chord root. This value will be the interval between the key specified by the chord variation of the style. However if you set the same wrap-around point for all the backing tracks, all the backing tracks will wrap-around to a lower octave at the same moment during play, also producing an unnatural feeling. You can ensure that the playback feels natural by muting other tracks, playing the chord progression of the song, and setting the wrap-around point individually for each track.

Tracks with a setting of **ORG** will use the wrap-around point specified for the currently-playing style.

Page 5. Chord latch/Variation change



Chord Latch [ON, OFF]

This turns the chord latch function on/off.

Chord latch is a function that prevents the chord from changing even when you change your keyboard fingering, as long as the damper pedal remains pressed.

If you are using the chord latch function and do not want the damper pedal to function, set the "Page 4. Track settings 2" Damper setting to DIS.

Fill 1/Fill 2 [OFF, →1...→4, 1&2...3&4, UP, DOWN]

When you press the [VARIATION] button [1]–[4], the arrangement will be played with its corresponding variation. If you press the [FILL] button [1] or [2] during arrangement play, a fill-in will be inserted.
This setting specifies how a variation will be selected after the fill-in ends.

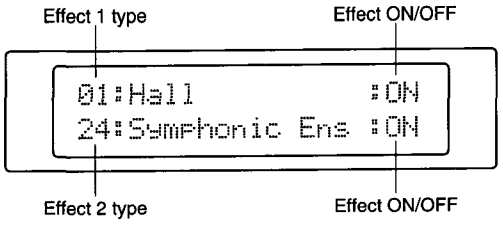
Fill 1 specifies how a variation will be selected after the Fill [1] button is pressed to play fill-in 1, and **Fill 2** specifies how a variation will be selected after the Fill [2] button is pressed to play fill-in 2.

With a setting of **OFF**, the same variation as before will continue to play when the fill-in ends.
Settings of **→1 – →4** will cause the specified variation to always be played. For example, if Fill 1 has been set to →2, pressing the FILL [1] button during arrangement play will cause fill-in 1 to always be followed by variation 2, regardless of the variation that was playing before the fill-in.
Settings of **1&2–3&4** will cause two variations to alternate. For example if you specify 2&3 for Fill 1, pressing the FILL [1] button during playback of an arrangement that is set to variation 2 will cause fill-in 1 to be followed by variation 3. The next time you press the FILL [1] button, the fill-in will be followed by variation 2, and so on.

However in this example, if the FILL [1] button is pressed during playback of an arrangement that is set to variation 1 or 4, the variation will not change.
With settings of **UP** or **DOWN**, the variation after each fill-in will step upward or downward each time the [FILL] button is pressed. For example if Fill 1 is set to UP, and you press the FILL [1] button during playback of variation 1, variation 2 will be selected following the fill-in. The next time the FILL [1] button is pressed, the selected variation will alternate as 2→3→4→1→2→...

Page 6. Effect select

Here you can select effects, allowing you to add a professional finish to your sound.



The *iX300*'s two digital effect processors can be used to apply effects to the arrangement. The two digital processors allow two different effects to be applied simultaneously, to modify the sound of the programs played by the arrangement, and greatly enhance the musical expression.

Effect type [00: No Effect...47: Delay/Rotary]

The effect type can be selected independently for Effect 1 and Effect 2.

For details on each effect type, refer to "6. Effects" (☞Page 103 in this manual).

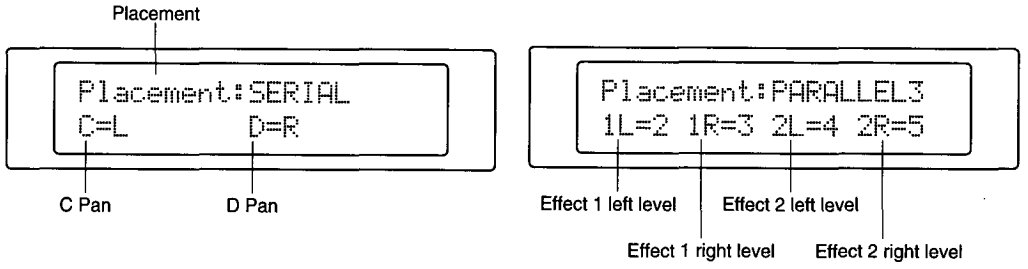
Effect ON/OFF [OFF, ON]

This switches each effect on/off.

The selected effect can also be switched on/off using an optional footswitch, foot pedal, or EC5 external controller. For details refer to Disk/Global mode "Page 7. Assignable pedal settings" and "Page 8. EC5 external controller settings."

Page 7. Effect placement

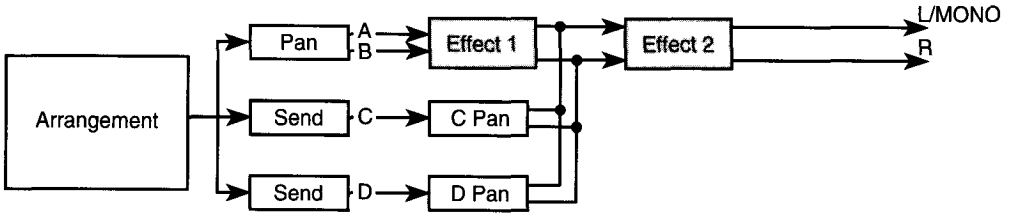
Here you can specify how the two effect processors applied to the arrangement will be combined (including the pan and level settings for channels C and D).



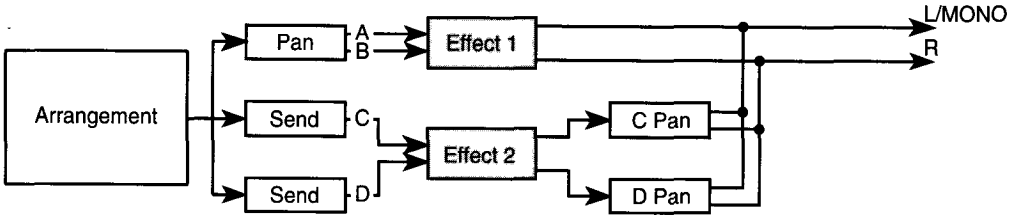
Placement (SERIAL, PARALLEL 1, PARALLEL 2, PARALLEL 3)

Specify the placement of the two effects and of the C/D pan and L/R level adjustments of channels C and D.
Pan and send levels to the effects are set independently for each track in "Page 3. Track settings 1."

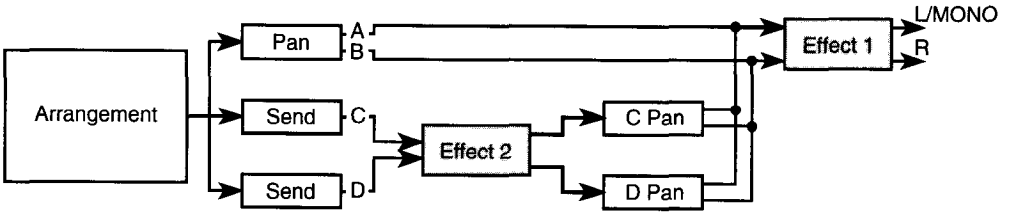
With a setting of **SERIAL**, effects 1 and 2 will apply to channels A and B. Since the signals from channels C and D will be mixed in at the locations specified by C Pan and D Pan after effect 1, only effect 2 will be applied to them.



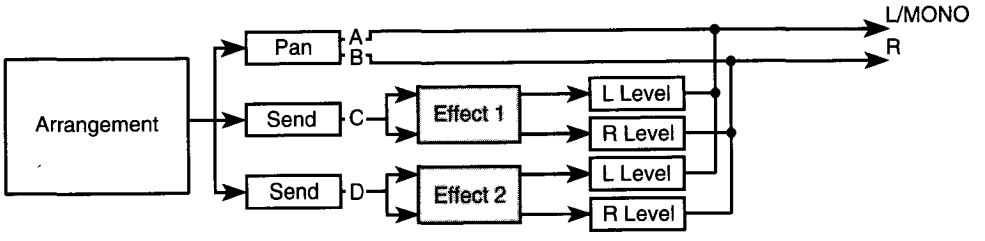
With a setting of **PARALLEL 1**, effect 1 will apply to channels A and B, and effect 2 will apply to channels C and D. After effect 2, the C Pan and D Pan parameters will set the panning. Finally, the signals from the two effects will be mixed.



With a setting of **PARALLEL 2**, effect 2 will apply to channels C and D, and after effect 2 the C Pan and D Pan parameters will set the panning. Then the signal will be mixed with channels A and B and sent through effect 1.



With a setting of **PARALLEL 3**, effect 1 will be applied to channel C, and effect 2 will be applied to channel D. The left/right levels of effect 1 and 2 are specified, and their signals are then mixed with channels A and B. These are the effect send/return settings which mix the dry (unprocessed) sound with the wet (processed) sound.



C (C Pan) [OFF, R, 99:01...01:99, L]

This sets the panning of the signal from channel C.
This setting will appear if a Placement of SERIAL, PARALLEL 1, or PARALLEL 2 is selected.

L places the signal at the left.
R places the signal at the right.
OFF turns off the channel C signal.

D (D Pan) [OFF, R, 99:01...01:99, L]

This sets the panning of the signal from channel D.
This setting will appear if a Placement of SERIAL, PARALLEL 1, or PARALLEL 2 is selected.

L places the signal at the left.
R places the signal at the right.
OFF turns off the channel D signal.

1L/1R (Effect 1 Left/Right Level) [0...9]

This sets the level of the signal from effect 1 that is mixed with channels A and B.
This setting will appear if a Placement of PARALLEL 3 is selected.

As this **value is increased**, the level of the signal mixed with channels A and B will increase.
With a setting of **0** the signal will be off.

2L/2R (Effect 2 Left/Right Level) [0...9]

This sets the level of the signal from effect 2 that is mixed with channels A and B.
This setting will appear if a Placement of PARALLEL 3 is selected.

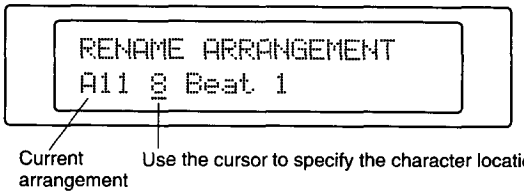
As this **value is increased**, the level of the signal mixed with channels A and B will increase.
With a setting of **0** the signal will be off.

Page 8. Effect 1 parameters
Page 9. Effect 2 parameters

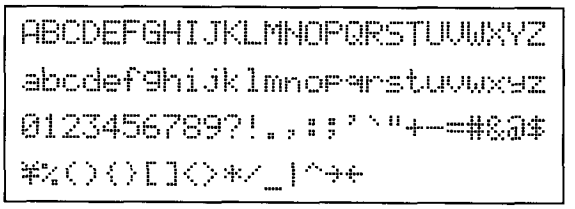
Pages 8 and 9 contain parameter settings for the effects that were selected in "Page 6. Effect select," and allow you to make the effect settings that will be used by the arrangement. The settings for effects used in other modes are set in the respective mode.
The effect parameters that can be set in these pages will depend on the effects that are selected. For details on effect parameters, refer to "6. Effects" (☞Page 103 in this manual).

Page 10. Rename arrangement

Here you can modify the title of the arrangement that is being edited.
A title of up to 10 characters can be assigned to the arrangement.



The following characters can be used.



Use the [CURSOR] keys to move the cursor to the location of the character you wish to modify, and use the [TEMPO/VALUE] buttons to modify the character.

Pressing the [SUSTAIN/INS] button will copy the character at the cursor, allowing a character to be inserted at that location.
Pressing the [SPLIT POINT/DEL] button will delete the character at the cursor location.

Page 11. Write arrangement

This operation stores an arrangement whose settings you have modified into the user bank.

From other pages, you can press the [REC] button to enter this page.
When an arrangement is written, the settings of the [CHORD SCANNING] button and [KEYBOARD ASSIGN] button (of the panel buttons which are used by an arrangement) will also be written in addition to the settings that were made in this mode.

① Use the [TEMPO/VALUE] buttons to select the arrangement number that will be the destination.
It is not possible to use the [ARRANGEMENT BANK] and [ARRANGEMENT NUMBER] buttons to input the arrangement number.

② The title of the arrangement currently existing in the number specified in step ① will be displayed. Make sure that it is OK to erase (overwrite) that arrangement.

Once you perform the Write operation, the erased arrangement cannot be recovered.

③ If you are sure you wish to Write the data, press the [RESET/YES] button.

Button settings

In addition to the parameters that are displayed in the various pages, the ***iX300*** has a variety of parameters that are accessed by pressing buttons.

[PROGRAM BANK] buttons and [PROGRAM NUMBER] buttons

Each arrangement has two keyboard timbres, KBD 1 and KBD 2. When you play the keyboard, it is the programs of these timbres that you are hearing. These timbre programs (sounds) can be selected using the [PROGRAM BANK] and [PROGRAM NUMBER] buttons.

However, the program for KBD2 can be selected only if [KEYBOARD ASSIGN] has selected LAYER or SPLIT.

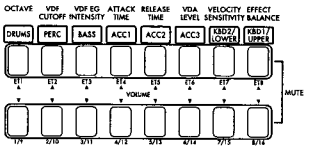
Bank	Number of programs	Contents	ROM/RAM
A	64	GM programs	ROM
B	64	GM programs	ROM
C	64	*iX300* preset programs	ROM
D	64	*iX300* preset programs	ROM
E	64	*iX300* preset programs	ROM
USER	64	User programs	RAM
DRUM	28	Drum programs	ROM (26)/RAM (2)

- **The program assigned to KB1**
  If the [KEYBOARD ASSIGN] button has selected SINGLE or LAYER, this program will sound no matter which area of the keyboard you play.
  If the [KEYBOARD ASSIGN] button has selected SPLIT, this program will sound when you play the keyboard area above (and including) the split point.

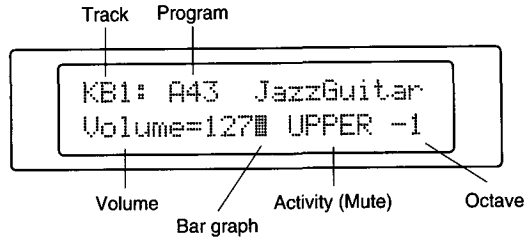
- **The program assigned to KB2**
  If the [KEYBOARD ASSIGN] button has selected LAYER, this program will sound no matter which area of the keyboard you play.
  If the [KEYBOARD ASSIGN] button has selected SPLIT, this program will sound when you play the keyboard area below the split point.

[TRACK/CHANNEL] buttons

For each track DRUMS, PERC, ACC1–3, KBD1 and KBD2, these buttons are used to adjust the volume of the sound program and to mute (silence) the track.
When you press one of the [TRACK/CHANNEL] buttons for a track, the settings of that track will be displayed.



After setting the parameter, press the [EXIT] button to return to the previous display. Alternatively, the previous display will reappear automatically if approximately 7 seconds pass without any operation being performed.



While the track settings are displayed, you can use the [PROGRAM BANK] and [PROGRAM NUMBER] keys to select the program for that track.

If the [KEYBOARD ASSIGN] button is set to either SINGLE or M.DRUM, the program and volume of the KBD1 track will be displayed even if you press the [TRACK/CHANNEL] buttons to select the KBD2 track.

Volume [000...127]

Each time you press the upper (▲) [TRACK/CHANNEL] button, the volume will increase by one step. If you continue pressing the button, the volume will continue increasing.
Each time you press the lower (▼) [TRACK/CHANNEL] button, the volume will decrease by one step. If you continue pressing the button, the volume will continue decreasing.

The volume will be displayed as a numeric value and as a bar graph at the right of the value.
The track volume that you specify here will be the volume when the Volume parameter of the backing sequence is set to 127.

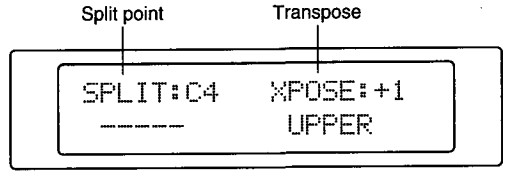
Activity [– – – –, (UPPER/LOWER/PLAY)]

When both the upper (▲) and lower (▼) [TRACK/CHANNEL] buttons of a track are pressed simultaneously, that track will alternate between muted (silent) and un-muted (normal).

Muted status is indicated by a display of – – – –.
When a track is not muted, the display will indicate **PLAY** (however for the KBD1 track and KBD 2 tracks, the display will be **UPPER** or **LOWER**, respectively).

[TRANSPOSE] buttons

If you need to transpose the music, press the TRANSPOSE [+1] or [–1] buttons to access the transpose setting.



The pitch can be transposed in semitone steps over a range of 11 steps upward or downward. When transpose is modified, not only the sounds played by the keyboard, but also the arrangement track and the chord detection function will be transposed as well.
Simultaneously pressing [+1] and [–1] will reset the setting to 0.
After setting the parameter, press the [EXIT] button to return to the previous display. Alternatively, the previous display will reappear automatically if approximately 7 seconds pass without any operation being performed.

[SPLIT POINT] button

When the [SPLIT POINT] button is pressed, the current split point will be displayed. The split point and all keys above it are referred to as the UPPER keyboard range, and keys below the split point as the LOWER keyboard range.

To set the split point, hold down the [SPLIT POINT] button and press the key that you wish to be the new split point.

The split point setting is an important factor in how chords you play are detected. For details refer to the explanation of chord name display in "Page 1. Performance monitor" (☞Page 2 in this manual). The area of the keyboard that is muted will also be determined by this split point setting.
When the [KEYBOARD ASSIGN] button has pressed to make the SPLIT indicator light, the area above (and including) the split point will be the KBD1 track and the area below the split point will be the KBD2 track, and you can specify the sound (keyboard timbre), volume, and mute settings etc. for each of these tracks.
After setting the parameter, press the [EXIT] button to return to the previous display. Alternatively, the previous display will reappear automatically if approximately 7 seconds pass without any operation being performed.

[OCTAVE] buttons

Regardless of the page that is displayed, you can press the OCTAVE [UP] or [DOWN] buttons to set the octave of the KBD1 track. To set the octave of the KBD2 track, use the [TRACK/CHANNEL] buttons to display the KBD2 track, and then press the [OCTAVE] buttons. The pitch of each track can be adjusted in steps of an octave, for a maximum of 2 octaves up or down.
When both [UP] and [DOWN] are pressed simultaneously, the setting will be reset to 0.
After setting the parameter, press the [EXIT] button to return to the previous display. Alternatively, the previous display will reappear automatically if approximately 7 seconds pass without any operation being performed.

[TAP TEMPO/NO] button

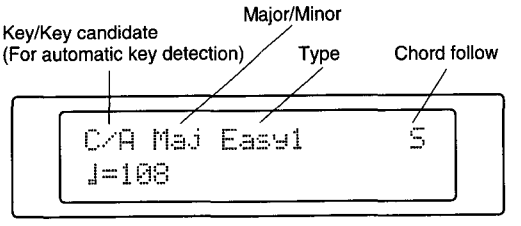
When adjusting the tempo in "Page 1. Performance monitor," you can also set the tempo by pressing the [TAP TEMPO] button several times at the desired rhythm.

[REC] button

When you press the [REC] button, "Page 11. Write arrangement" will appear.

[INTERACTIVE COMP.] button

When you press the [INTERACTIVE COMP.] button, the following display will appear.



Key [ANL, C/A, C#/A#, D/B...B/G#]

Specifies the key of the song that you wish to play. The tonic of the major key is displayed at the left of the slash (/), and the tonic of the minor key at the right of the slash.

With a setting of **ANL**, the automatic key analysis function will operate. If you are not sure of the key, this function will automatically find the key for you.
Select **ANL** and then press the [START/STOP] button to start the arrangement. Play the melody in time with the rhythm. Press the [START/STOP] button to stop the arrangement, and press the [TEMPO/VALUE] buttons to see the keys that fit the melody you played.

Major/Minor [Maj, Mm, min, mM]

Specifies whether the song you wish to play is in a major or minor key.

Maj (major): The chords will be mostly major.
Mm (major): The chords will be mostly major, with occasional minor chords added.
min (minor): The chords will be mostly minor.
mM (minor): The chords will be mostly minor, with occasional major chords added.

Type [Easy 1–2, General 1–4, Special 1–2]

When the interactive composition function is used to add chords, you can specify the tendency of the chords that will be produced.

With a setting of **Easy**, the easiest and safest chords will be assigned. "2" will produce chords that are somewhat more complex than "1."
With a setting of **General**, conventional chords will be assigned. The selections from 1–4 will produce slightly different tendencies. Try them out, and use the one that is most suitable for your song.
With a setting of **Special**, unique chords will be assigned. "1" and "2" will differ somewhat in the way in which chord tendencies are affected by the major/minor setting. Try them out, and use the one that is most suitable for your song.

Chord follow [S, F]

This specifies the frequency at which the chords assigned by the interactive composition function will change.

With a setting of **S**, chords will be assigned at the beginning of each measure. I.e., one type of chord will be assigned to each measure.
With a setting of **F**, chords will be assigned at the beginning and the middle of each measure. I.e., up to two types of chord will be assigned to each measure.
Normally there will be no problem with leaving this set to S, but if you are playing a tune that contains large numbers of notes at a slow tempo, you may wish to try a setting of F.

2. Backing Sequence mode

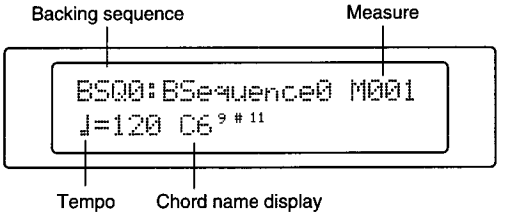
Functions in Backing Sequence mode

The following table shows how the *iX300*'s Backing Sequence mode is organized, showing the title, main contents, and manual page reference for each display page.

Display page		Contents		Manual page
1. Playback/realtime recording		Select a backing sequence, volume/mute		☞P. 18
		Initial settings	Track, track activity, quantize, metronome, recording mode for extra tracks, start/end measure	
2. Step recording		Recording track selection		☞P. 21
		Recording	Input of playback data	
3. Erase backing sequence		Erase a backing sequence		☞P. 24
4. Copy backing sequence		Copy a backing sequence		☞P. 24
5. Edit 1	5-1. Delete measure	Delete measures		☞P. 25
	5-2. Insert measure	Insert measures		☞P. 26
	5-3. Erase measure	Erase data from measures		☞P. 27
6. Edit 2	6-1. Copy measure	Copy measures		☞P. 28
	6-2. Bounce track	Combine tracks		☞P. 28
	6-3. Quantize	Adjust timing of recorded data		☞P. 29
7. Shift note		Selective shifting of pitches		☞P. 30
8. Event edit		Select the edit track		☞P. 30
		Edit	Edit events	
9. Extra track settings 1		Select track Select program	MIDI channel Transpose, detune	☞P. 35
10. Extra track settings 2		Select program, pan, send level		☞P. 36
11. Effect select		Effect type, effect on/off		☞P. 37
12. Effect placement		Effect placement, C/D pan, L/R levels for effects 1 and 2		☞P. 38
13. Effect 1 parameters		Parameter settings for effect 1		☞P. 39
14. Effect 2 parameters		Parameter settings for effect 2		☞P. 39
15. Next backing sequence		Specify the next-played backing sequence		☞P. 40
16. Rename backing sequence		Change the name of a backing sequence		☞P. 41
17. SMF converter		Convert to standard MIDI file		☞P. 42

Page 1. Playback/realtime recording

Here you can make initial settings for recording/playback.



BSQ (Backing sequence) [0...9]

Selects the backing sequence that you wish to playback or record.

The name of the selected backing sequence will appear in the LCD. You may modify this name if desired. Refer to "Page 16. Rename backing sequence" (☞Page 41 in this manual).
To specify the arrangement used by the selected backing sequence, press the [EXIT] key while in this page 1, and use the [ARRANGEMENT BANK] and [ARRANGEMENT NUMBER] buttons. To return to the previous display, either press the [EXIT] button or wait several seconds.

M (measure number) [001...999]

Specifies the location (measure pointer) at which recording or playback will begin. Each track of a backing sequence can record up to 999 measures.

When you press the [RESET/YES] button, this measure pointer will be reset to 001. Normally when a backing sequence is played back to the end, this pointer will return to 001 automatically.

♩ = (tempo) [REC, AUT, 40...240]

REC can be selected when the [REC] button has been pressed to enter record ready mode. If you select REC and then record, tempo changes can be recorded in realtime. AUT is used during playback. With a setting of AUT, the recorded tempo will playback. With a setting of 40–240, tempo can be manually adjusted during recording or playback.

Since you can record and playback at different tempo settings, a song that is difficult to play can be recorded at a slow tempo, and then played back at the desired tempo.

Chord name display

When a backing sequence is playing back, the recorded chords will be displayed, and the backing sequence will playback accordingly. During recording, when a chord you play is detected, the backing sequence will change as appropriate for that chord.

To detect chords, press the [CHORD SCANNING] button to select either LOWER, UPPER or FULL.
If you select LOWER and play the keyboard below the split point, even single notes you play will be detected as chords, and playback will follow the detected chords.
If you select UPPER and play the keyboard above the split point, three or more notes that you play simultaneously will be detected as a chord, and playback will follow the detected chord.
If you select FULL and play three or more notes simultaneously in any part of the keyboard, playback will follow the chord that is detected.

To change the split point, hold down the [SPLIT POINT] button and press the note that you wish to set as the new split point.

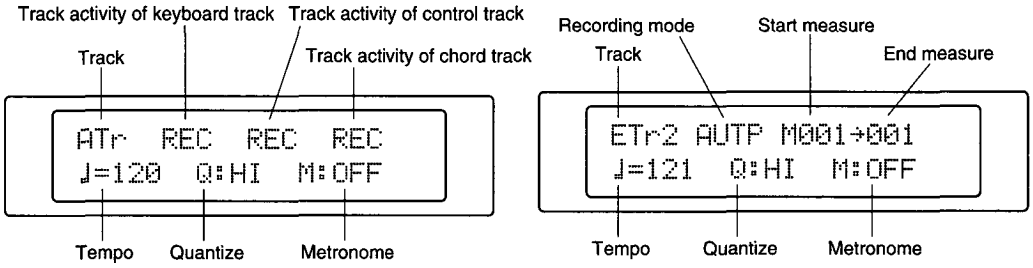
[CHORD SCANNING] setting	Keys below the split point	Keys above the split point
LOWER	Single notes or more	–
UPPER	–	Chords of 3 or more notes
FULL	Chords of 3 or more notes	Chords of 3 or more notes

To cancel the chord that was detected, stop the backing sequence and then press the [RESET/YES] button. If you stop the backing sequence and select a different backing sequence, the chord name will not be displayed until a chord is detected.

For the chords that can be detected, refer to the list of chords that can be detected in "8. Appendices" (☞Page 151 in this manual).

Realtime recording

In page 1, pressing the [REC] button will take you to a display page in which you can specify the recording track, recording quantize, and metronome on/off etc.
Here you can also specify the recording track and quantize.
Set parameters as desired and press the [START/STOP] button to begin recording. Press it again to stop recording.



Track [ATr, ETr1...ETr8]

Selects the track that you wish to record.

With a setting of **ATr**, realtime recording can be done on the Keyboard, Control, and Chord arrangement tracks. (When recording, you will need to set the Track Activity in addition to these settings.)
Settings of **ETr–ETr8** allow you to realtime record on the extra tracks. (When recording, you will need to set the Recording Mode in addition to these settings.)
Similar to the keyboard tracks, extra tracks allow keyboard playing to be recorded, and are used when you need to layer musical parts in addition to the keyboard tracks.

Track activity [– – – –, REC, (KBTr/CTRL/CHRD), MUTE]

This will appear if you have selected ATr as the track.
This allows you to specify recording, playback, or mute for the control track and chord track.

A display of – – – – indicates that this track contains no data. In this case, it will be possible to select REC, but since there is no data, it will not be possible to playback or to select MUTE.
A setting of **REC** lets you perform realtime recording on the track. However, since you will be able to select REC whether or not data already exists in that track, be aware that recording on track which already contains data will cause the previous data to be lost.
If **track activity** is set to REC for the **Keyboard track**, your keyboard playing will be recorded.
If **track activity** is set to REC for the **Control track**, selections and changes you make to arrangements, variations, fill-in, intro and ending etc. using the panel controls will be recorded.

If **track activity** is set to REC for the **Chord track**, chord data that was detected by the chord display function (the specified chords) will be recorded.
With settings of **KBTr**, **CTRL**, or **CHRD**, these tracks will only playback, and recording will not take place on these tracks.
With a setting of **MUTE**, the data of that track will not be played back (recorded). If data already exists in a track and you do not want the track to playback during realtime recording, you can select MUTE for that track.

Recording mode [OVWR, OVDB, AUTP, MANP]

This will appear when ETr1–8 is selected as the track.
The recording mode specifies the method by which realtime recording will occur when you record on the extra tracks. There are four ways in which you can perform realtime recording on the extra tracks.
First use OVWR or OVDB to record the data. Then if you wish to re-record part of the data, select AUTP or MANP to re-record the desired section.

OVWR (Overwrite recording) will overwrite the newly recorded data onto the track. Any data previously existing on the track will be erased, and replaced by the newly recorded data.
OVDB (Overdub recording) will add the newly recorded data to any previously existing data.
AUTP (Auto punch recording) allows you to specify a Start Measure and End Measure (located at the right in the display) before you begin recording, so that only the specified area of measures will be re-recorded.
MANP (Manual punch recording) lets you manually specify the area to be re-recorded. Playback the data, press the [REC] button at the beginning of the section that you wish to re-record. Recording will begin. When you reach the end of the section to be re-recorded, press the [REC] button once again, and recording will end (normal playback will resume). Instead of pressing the [REC] button, you can also use a pedal which has been assigned to PUNCH IN/OUT. When you press the pedal at the measure from which you wish to re-record, recording will begin. When you press the pedal once again, recording will end. To assign a pedal to PUNCH IN/OUT, refer to Disk/Global mode "Page 7. Assignable pedal settings" or "Page 8. EC5 external control settings."

Q (Recording quantize) [HI, 𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯 ... 𝅘𝅥]

This setting specifies the timing precision of the recorded notes.

With a setting of **HI**, notes will be recorded precisely at the timing at which they were actually played. (On the ***iX300***, the timing accuracy is 1/96th of a quarter note.)
With a setting **other than HI**, all notes will be recorded at the nearest interval of the specified timing. For example with a setting of 𝅘𝅥, all the notes you play will be recorded at the nearest quarter note timing interval. If pitch bend or other continuous controller data is recorded at a rough quantize setting, the changes will sound unnatural when the data is played back. To avoid this, record the data at a setting of HI and then use "6-3. Quantize" to adjust the timing of only the note data.

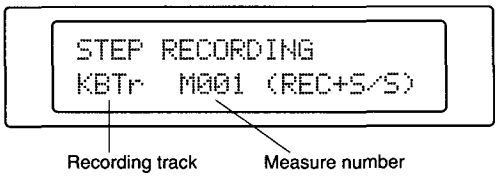
M (Metronome) [OFF, ON, REC]

This turns the metronome on/off.

With a setting of **OFF**, the metronome will not sound except for the pre-count before recording.
With a setting of **ON**, the metronome will sound during recording and playback.
With a setting of **REC**, the metronome will sound only during recording.

Page 2. Step recording

Here you can step-record data to the Keyboard track, Chord track, Control track, and Extra tracks.
By using the Step Recording function, you can record individual steps of note data, control data, or chord data. However if this recording method is used on a measure which already contains data, the previously existing data will be erased and replaced by the newly recorded data.
When you finish recording, press the [START/STOP] button to exit Step Recording.



Recording track [KBTr, CHRD, CTRL, ETr1...ETr8]

Selects the track on which you wish to perform step recording.

With a setting of **KBTr**, step recording will occur on the keyboard track.
With a setting of **CHRD**, step recording will occur on the chord track, allowing you to record a backing sequence chord progression.
With a setting of **CTRL**, step recording will occur on the control track, allowing you to record selections of arrangements used in the backing sequence, or chord variations etc.
With a setting of **ETR1–ETR8**, step recording will occur on one of the eight extra tracks.

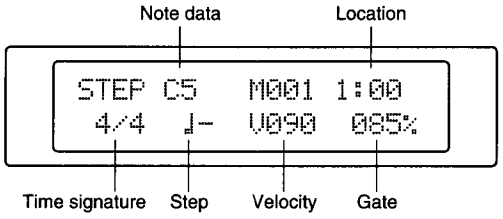
M (measure number) [001...999]

Specifies the location (measure pointer) at which recording or playback will begin. Each track of a backing sequence can record up to 999 measures.

When you press the [RESET/YES] button, this measure pointer will be reset to 001.

Step recording on the keyboard track

Set the recording track to KBTr, press the [REC] button, and then press the [START/STOP] button to get the following display.
Use the [CURSOR] buttons to select the time signature, step, velocity, and gate parameters, and input data by using the TEMPO/VALUE [UP/+] and [DOWN/–] buttons to specify the settings for each parameter.
When you finish recording, press the [START/STOP] button to exit step recording.



Note data

This indicates the name of the most-recently entered note. This will appear if you have selected KBTr or ETr1–8 as the recording track.

Location

This indicates the current location (at which data will be entered).
The one-digit number at the left of the colon ":" indicates the beat within the measure.
The two digits at the right indicate the position within the beat, in 1/96th quarter note units.

Time signature [1/4...16/16]

This sets the time signature. This will be displayed if you have selected KBTr or ETr1–8 as the recording track.
To modify the time signature during the song, use the "Page 8. Event edit" operation to modify the time signature parameter displayed at the bar line.

Step [𝅝, 𝅗𝅥, ♩, ♪, 𝅘𝅥𝅯, 𝅘𝅥𝅰, /. /3]

This specifies the length of the step by which you will move forward each time a note is entered. This will be displayed if you have selected KBTr or ETr1–8 as the recording track.

The step is displayed as a note symbol. From 𝅝 (whole note) to 𝅘𝅥𝅰 (32nd note) you can also specify a . (dot: lengthen the note value by 1.5 times) or a 3 (triplet: set the note length to 2/3 of the original value).
In addition to using the TEMPO/VALUE [UP/+] and [DOWN/–] buttons to set the step, you can also use the [VARIATION] buttons, [FILL] buttons, and [INTRO/ENDING] buttons to directly enter the desired note value.

Velocity [002...126, KEY]

This specifies the force of the note.

With a setting of **KEY**, the velocity with which the note was actually played on the keyboard will be input. This will be displayed if you have selected KBTr or ETr1–8 as the recording track.

Gate [001...100%]

This specifies the duration that the note will sound, relative to the length of the step (i.e., with a setting of 100, the gate time will be the same as the step length.)

Lower values will produce crisply-played notes (staccato).
Higher values will produce smoothly-played notes (tenuto).

Step recording on the control track

If you set the recording track to CTRL, press the [REC] button, and then press the [START/STOP] button, the control track step recording display will appear.

Use the [CURSOR] buttons and the [TEMPO/VALUE] buttons to specify the type of event and the data values, and press the [RESET/YES] button to input the event.

When you finish recording, press the [START/STOP] button to exit step recording.

Input event

Specifies the type of data that you wish to input into the control track.
The following events can be input.

All of these events are input at eighth-note intervals (♪). If you need to specify the timing of an event with greater precision, input the event and then use "Page 8. Event edit" to adjust the location of the event to the desired degree of precision.

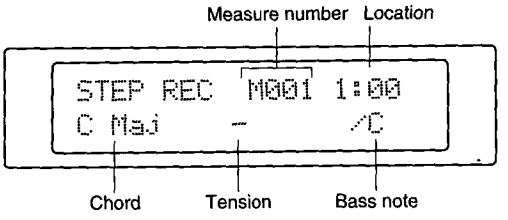
Event type	Values
ARRANGEMENT *	U11–88, A11–88, B11–88
STYLE	A11–88, B11–58, U1–4
STY, ELEMENT (style element)	OFF, VAR1–VAR4, INT1, INT2, END1, END2, FIL1, FIL2
KB ASSIGN (keyboard assign)	SINGLE, LAYER, SPLIT, DRUM
CHORD SCAN (chord scanning)	OFF, LOWER, UPPER, FULL
CHORD HOLD	OFF, ON
BASS INV. (bass inversion)	OFF, ON
TRANSPOSE	–11... –1, 00, +1... +11
DRUM MUTE	PLAY, MUTE
PERC MUTE	
BASS MUTE	
ACC1 MUTE	
ACC2 MUTE	
ACC3 MUTE	
DRUM MAP **	1–8
KB1 PROG (KBD1 program) *	A11–A88, B11–B88, C11–C88, U11–U88, D11–D88, E11–E88, Dr11–Dr44
KB2 PROG (KBD2 program) *	
KBD1 OCT. (KBD1 octave)	–2, –1, 0, +1, +2
KBD2 OCT. (KBD2 octave)	

* These can also be input using the [ARRANGEMENT BANK] and [ARRANGEMENT NUMBER] buttons, and the [PROGRAM BANK] and [PROGRAM NUMBER] buttons.

** These are collections of patterns which replace certain percussion instruments in the drum maps and drum programs with other percussion instrument sounds, and provide a total of 8 types of patterns, for example letting you replace snare drum sounds with side stick sounds, or exchanging hi-hat cymbal sounds and ride cymbal sounds. By changing the drum map, these allow you to create variety while using the same drum programs and same style elements. For the sounds that are replaced for each drum map, refer to the drum map tables in "8. Appendices."

Step recording on the chord track

Set the recording track to CHRD, press the [REC] button and then press the [START/STOP] button to get the following display.
Input data into the chord track either by entering chords directly from the keyboard, or by using the [CURSOR] buttons and the [TEMPO/VALUE] buttons to specify the chord, tension, and bass, and then pressing the [RESET/YES] button.
When you finish recording, press the [START/STOP] button to end step recording.



Chord

Specifies the chord to be input into the chord track.

Tension

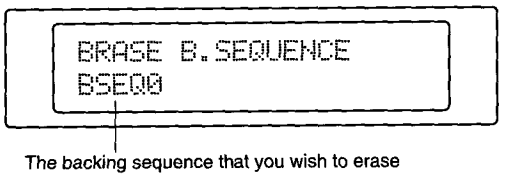
Specifies the tension that will be added to the chord.

Bass note

You can specify a bass note that is independent of the chord root.

Page 3. Erase backing sequence

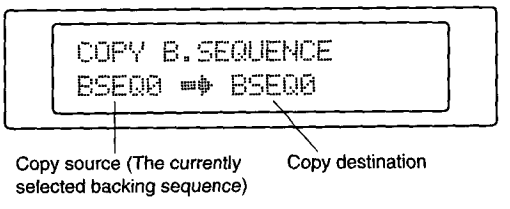
This function erases all data from the currently selected backing sequence.



The number of the currently selected backing sequence will be displayed. Press the [RESET/YES] button.

Page 4. Copy backing sequence

This function copies the entire contents of the currently selected backing sequence to a different backing sequence.

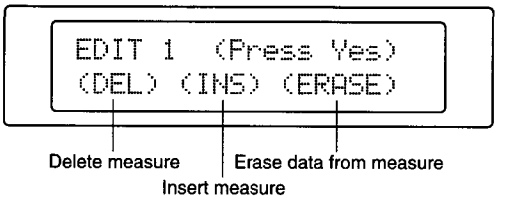


Use the [TEMPO/VALUE] buttons to select the copy destination of the backing sequence, and press the [RESET/YES] button.

If the same backing sequence has been selected for both the copy source and copy destination, the data will not be copied even if you press the [RESET/YES] button.

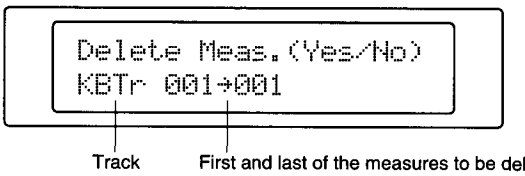
Page 5. Edit 1

In this page you can select one of the following three operations: delete measure (DELETE), insert measure (INSERT), erase data from measure (ERASE).
Use the [CURSOR] buttons to move the cursor to the desired operation, and press the [RESET/YES] button to access the sub-page in which that operation can be executed.



5-1. Delete measure

This operation deletes measures from the specified track.



① Use the [CURSOR] buttons to move the cursor to the track, and use the [TEMPO/VALUE] buttons to specify the track. If you specify ALL, measures will be deleted from all tracks (chord track, control track, tempo track etc.).

② Move the cursor to select the first and last of the measures that are to be deleted. If you wish to delete only one measure, set the same number for each field.

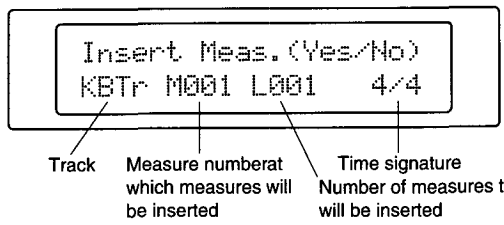
③ After specifying the measures that are to be deleted, press the [RESET/YES] button.

< Modifying the time signature >

The measures that follow the deleted measures will be moved toward the beginning of the song to fill the gap. If you delete measures from a single track, the subsequent measures that are moved will be the same time signature as other tracks.
Measures whose measure number was affected by the delete measure operation may be shortened or lengthened as a result.

5-2. Insert measure

This operation inserts measures into the specified location.



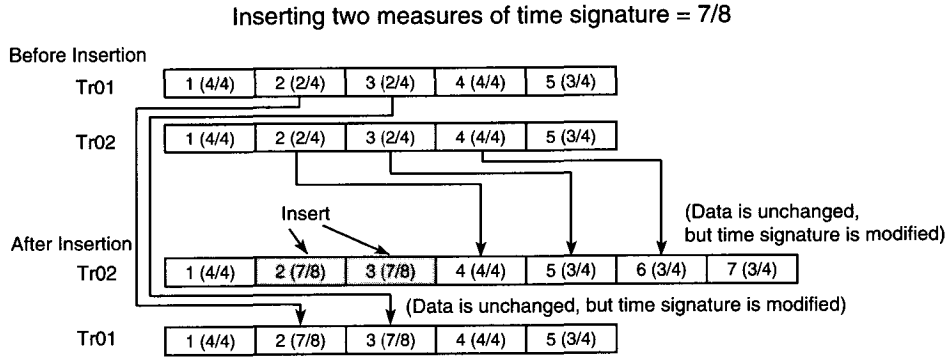
① Use the [CURSOR] buttons to move the cursor to the track, and use the [TEMPO/VALUE] buttons to specify the track. If you specify ALL, measures will be inserted into all tracks (chord track, control track, tempo track etc.).

② Move the cursor to specify the measure number at which the measures will be inserted, and the number of measures. You may also specify the time signature of the new measures, but since other tracks will be affected if measures of a different time signature are inserted, refer to the following diagrams before you specify the time signature.

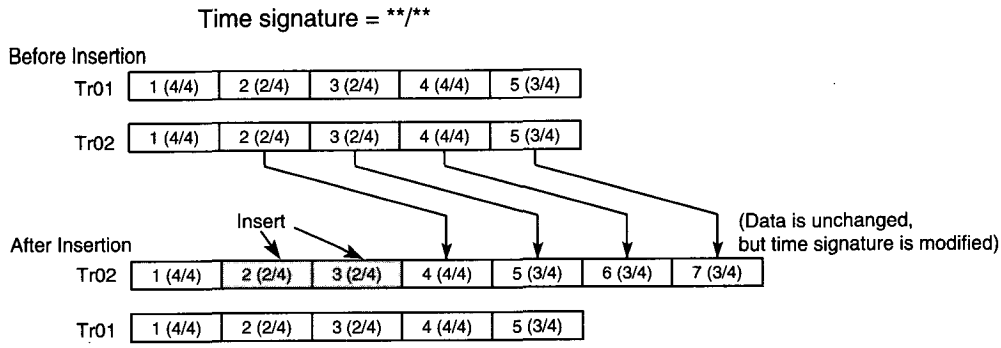
③ After settings are complete, press the [RESET/YES] button.

< If you insert measures of a different time signature >

The modified time signature will apply if tempo is set to ♩=AUT.
If a different time signature is selected, the corresponding measures of all tracks will be set to this time signature, meaning that those measures will become either longer or shorter.



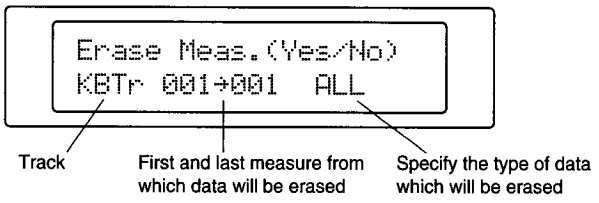
If you execute the Insert operation with a setting of **/**, the new measures will have the same time signature as the corresponding measures of other tracks which already contain data. If other tracks are all empty, the same time signature as the next appearing measure will be used.



Regardless of whether you select a different time signature or not, the measures which follow the inserted portion will be moved backward (toward the end of the song). If you insert measures into only one track, the measures which are moved backward will be given the same time signature as the corresponding measures of the other tracks.
As a result of the insertion, measures whose numbers have changed may be shortened or lengthened.

5-3. Erase measure

This operation erases part or all of the data from the specified measure(s). (This operation erases only the data from the measures; the measures themselves will remain.)



① Use the [CURSOR] buttons to move the cursor to the track, and use the [TEMPO/VALUE] buttons to specify the track. If you specify ALL, data will be erased from all tracks (chord track, control track, tempo track etc.).

② Move the cursor to specify the first and last measure numbers from which data will be erased. If you wish to erase data from only one measure, set the same number for both.

Type of data	Erased data
ALL	All data
NOTE	All note messages
CTRL	All control change messages
AFTT	Channel/polyphonic aftertouch messages
BEND	All pitch bend messages
PROG	All program change messages

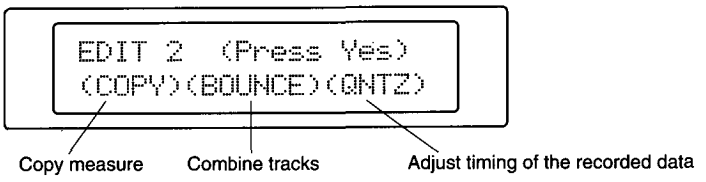
③ After settings are complete, press the [RESET/YES] button.

< Erasing control changes >

For CTRL (control change) messages such as damper switch (and also for pitch bend messages), erasing the message which turns off the effect (or resets the normal pitch bend value) will mean that the effect will be "stuck" on. If this occurs, either erase the remaining messages, or use "Page 8. Event edit" (☞Page 30 in this manual) to correct the data.

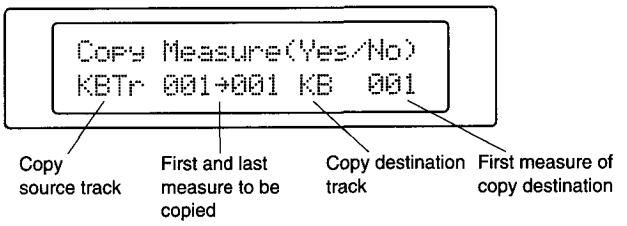
Page 6. Edit 2

In this page you can select one of the following three operations: copy measures (COPY), combine tracks (BOUNCE), or adjust the timing of the recorded data (QUANTIZE). Use the [CURSOR] buttons to move the cursor to the operation that you wish to execute, and press the [RESET/YES] button to access the sub-page in which the selected operation can be executed.



6-1. Copy measure

This operation copies measures within a track or between tracks.



① Use the [CURSOR] buttons to move the cursor to the copy source, and use the [TEMPO/VALUE] buttons to specify the track. If you specify ALL, all tracks (chord track, control track, tempo track etc.) will be affected.

② Move the cursor to the first and last measure, and specify the measures. If you wish to copy only one measure, set these to the same value.

③ In the same way, specify the copy destination track. If you have specified ALL as the copy source, the copy destination will automatically be set to ALL.

④ Specify the first measure of the copy location.
If you have specified CTRL (CONTROLLER) or CHORD (CHD) as the track, it will not be possible to execute the Copy Measure operation unless the copy source and destination are the same.

⑤ When settings are complete, press the [RESET/YES] button. Be aware that if data already exists in the copy destination measures, this data will be overwritten and replaced by the copied data.

<Changes in time signature>

If tracks other than the copy destination track contain time signature data corresponding to the copy destination measures, the copied measures will have the same time signature as the corresponding measures of the other tracks.

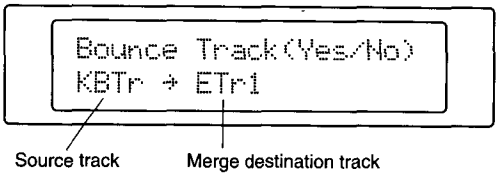
This may cause the copied measures to be cut short or lengthened.

6-2. Bounce track

This operation combines (merges) the backing sequence data of two tracks (keyboard tracks or extra tracks) into one track. The resulting track will use the program, MIDI channel, and other track settings of the merge destination track. Also, all backing sequence data that was previously in the source track will be erased.

If both tracks contain pitch bend, damper pedal, or other control change data, merging this data may produce unexpected results. For this reason, you should use the "Page 5. Edit 1" 5-3. Erase Measure operation to erase all control change data from one of the

tracks before you merge the data.



① Use the [CURSOR] buttons to move the cursor to the merge source track, and use the [TEMPO/VALUE] buttons to specify the track.

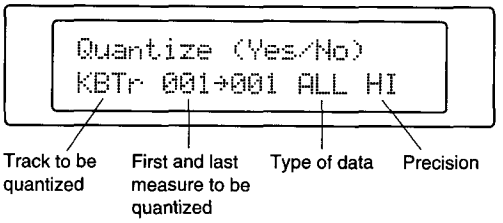
② Move the cursor, and select the merge destination track.

③ When settings are complete, press the [RESET/YES] button.

6-3. Quantize

This operation quantizes the data to adjust the timing of previously-recorded data.

This operation allow more flexibility than the Quantize parameter that is also found in Backing Sequence mode "Page 1. Realtime recording," since the "6-3. Quantize" operation allows you to specify the type of data and the range of measures that will be quantized, letting you avoid undesired effects on other measures or types of data.



① Use the [CURSOR] buttons to move the cursor to the track selection, and use the [TEMPO/VALUE] buttons to specify the track to be quantized. To quantize the chord track, control track, or tempo track, select CHRD, CTRL, or TEMPO respectively.

② Move the cursor, and specify the first and last of the measures that will be quantized. If you have selected a track other than the tempo track, the following types of data can be selected for quantization.

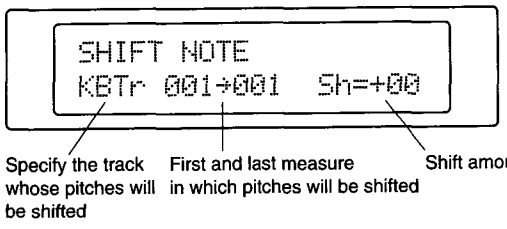
Type of data	Data to be quantized
ALL	All data
NOTE	All note data
CTRL	All control change messages
AFTT	All channel/polyphonic aftertouch messages
BEND	All pitch bend messages
PROG	All program change messages

The precision selection is the same as for the Recording Quantize setting of "Page 1. Realtime recording": HI, 𝅘𝅥𝅯𝄿, 𝅘𝅥𝅰𝄿, 𝅘𝅥𝅯𝄾, 𝅘𝅥𝅰𝄾, 𝅘𝅥𝅯, 𝅘𝅥𝅰, 𝅘𝅥. With a setting of HI, the data will be unaffected. With other settings, the recorded data will be moved to the nearest interval of the specified timing. For details refer to explanation for Recording Quantize in "Page 1. Realtime recording," (☞Page 20 in this manual).

③ When settings are complete, press the [RESET/YES] button.

Page 7. Shift note

This operation shifts the pitch of notes up or down in semitone steps. You can shift the pitches for just a specified range of notes, or for all note data.



① Use the [CURSOR] buttons to move the cursor to the track setting, and use the [TEMPO/VALUE] buttons to specify the track whose note pitches will be shifted. You can select either the keyboard track or extra tracks.

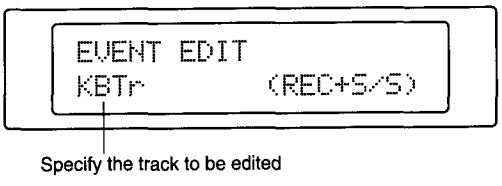
② Move the cursor, and specify the first and last measure in which pitches will be shifted.

③ Specify the amount by which the pitch will be shifted. You can shift note pitches in semitone steps up to a maximum of 2 octaves up or down.

④ When settings are complete, press the [RESET/YES] button.

Page 8. Event edit

This operation allows you to edit individual events such as notes or MIDI control changes.



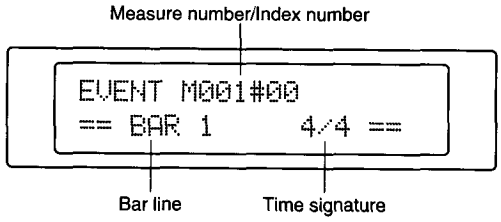
① Use the [TEMPO/VALUE] buttons to select the track to be edited.

② Press the [REC] button, and then press the [START/STOP] button.

③ Use the [CURSOR] buttons to select the parameter, and use the [TEMPO/VALUE] buttons to modify the data values. The type of events that can be used will differ depending on the track being edited.
When you finish editing press the [START/STOP] button to exit the event edit operation.

Event editing for KBTr (keyboard track) or ETr1–8 (extra tracks)

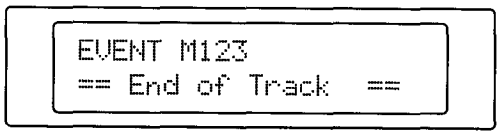
● Bar lines



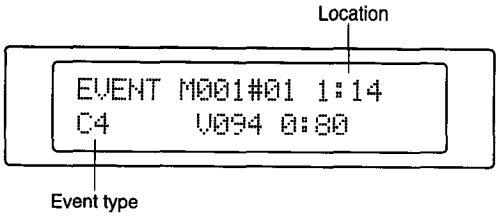
- **Measure number/Index number**
  The index number is a number that indicates the number of the event within the measure. By modifying this number you can step through the various events in the measure. Index number 0 in each measure displays the bar line (the division between measures) and the time signature.

- **Time signature**
  This indicates the time signature of the measure.

● End of track



● Events



- **Location** **[1:00...8:95]**
  This indicates the location within the measure. The value is displayed as the number of quarter notes and 1/96th of a quarter note steps. If this is displayed as TIE, the note has been tied from a note in the previous measure.

- **Event type**

Event type	Values	
C-1...G9 (note data)	V:002...V:126 (velocity)	0:00...4:00 *1 length (beats:clocks)
BEND (pitch bend)	–8192...+8191 *2 (upper/lower values)	
AFTT (aftertouch)	000...127 (value)	
PROG (program change)	000...127: 000...127 *3 (program bank: program number)	
CTRL (control change)	C000...C127 (control change number)	000...127 (control number)
PAFT *4 (polyphonic aftertouch)	C-1...G9 (note number)	000...127 (value)

*1. If connected to a note in the next measure, this will be displayed as TIE.
*2. Use the [CURSOR] buttons to set the upper and lower pitch bend values.
*3. 02 is the drum bank, but the actual drum programs correspond as follows.
000...127 indicate the LSB of the MIDI bank change, and the MSB is 0.
- - - will not transmit the program bank. The previously-specified bank will be used.
*4. MIDI Polyphonic Key Pressure messages will be transmitted. (The ***iX300*** cannot receive this message.)

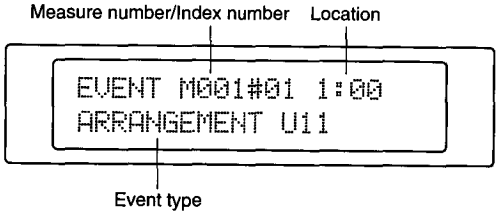
- You can delete the displayed event by pressing the [SPLIT POINT/DEL] button. However it is not possible to delete BAR (bar line) or End of Track (the end-of-track indicator).
- You can insert an event before the displayed event by pressing the [SUSTAIN/INS] button. However this is not possible if the bar line of the first measure is displayed.

Correspondence between Drum Numbers and actual Drum Programs

PROGRAM NUMBER	DRUM PROGRAM
000...015	Dr11:GM Kit
016...023	Dr12:Power Kit
024	Dr17:User 1
025	Dr13:Analog Kit
026...031	Dr17:User 1
032...039	Dr14:Jazz Kit
040...047	Dr15:Brush Kit
048...055	Dr18:User 2
056...063	Dr11:GM Kit
064...071	Dr16:Perc Kit1
072...107	Dr11:GM Kit
108	Dr31:MovieKit
109	Dr32:i1Funky Kit
110	Dr33:LATIN Dr
111	Dr34:LATIN Per
112	Dr35:Steam' in

PROGRAM NUMBER	DRUM PROGRAM
113	Dr36:On'n' OFF!*
114	Dr37:BitMessed*
115	Dr38:16beat Kit
116	Dr41:Bossa Kit
117	Dr42:Samba Kit
118	Dr43:World Kit
119	Dr44:Gypsy Kit
120	Dr21:Dance Kit
121	Dr22:Orch Kit
122	Dr23:Funky Kit
123	Dr24:House Kit
124	Dr25:Rave Kit
125	Dr26:GP Kit
126	Dr27:Latin Kit
127	Dr28:Perc Kit 2

Event editing for CTRL (control track)

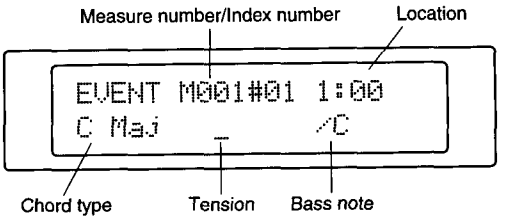


Event type	Values
ARRANGEMENT *	U11–88, A11–88, B11–88
STYLE	A11–88, B11–58, U1–4
STY, ELEMENT (style element)	OFF, VAR1–VAR4, INT1, INT2, END1, END2, FIL1, FIL2
KB ASSIGN (keyboard assign)	SINGLE, LAYER, SPLIT, DRUM
CHORD SCAN (chord scanning)	OFF, LOWER, UPPER, FULL
CHORD HOLD	OFF, ON
BASS INV. (bass inversion)	OFF, ON
TRANSPOSE	–11...–1, 00, +1...+11
DRUM MUTE	PLAY, MUTE
PERC MUTE	
BASS MUTE	
ACC1 MUTE	
ACC2 MUTE	
ACC3 MUTE	
DRUM MAP **	1–8
KB1 PROG (KBD1 program) *	A11–A88, B11–B88, C11–C88, U11–U88, D11–D88, E11–E88, Dr11–Dr44
KB2 PROG (KBD2 program) *	
KBD1 OCT. (KBD1 octave)	–2, –1, 0, +1, +2
KBD2 OCT. (KBD2 octave)	

* These can also be input using the [ARRANGEMENT BANK] and [ARRANGEMENT NUMBER] buttons, and the [PROGRAM BANK] and [PROGRAM NUMBER] buttons.

** These are collections of patterns which replace certain percussion instruments in the drum maps and drum programs with other percussion instrument sounds, and provide a total of 8 types of patterns, for example letting you replace snare drum sounds with side stick sounds, or exchanging hi-hat cymbal sounds and ride cymbal sounds. By changing the drum map, these allow you to create variety while using the same drum programs and same style elements. For the sounds that are replaced for each drum map, refer to the drum map tables in "8. Appendices."

Event editing for CHRD (chord track)



Chord

Specifies the chord that will be input into the chord track.

Tension

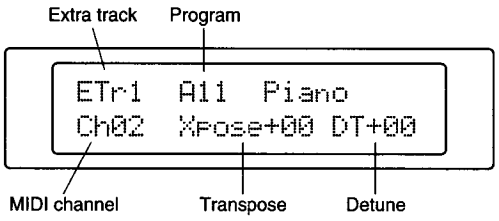
You can specify the tension that will be added to the chord.

Bass note

You can specify a bass note that is independent of the chord root.

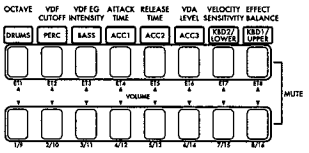
Page 9. Extra track settings 1

Here you can set parameters for the eight extra tracks ETr1–ETr8. In the same way as the keyboard track, transpose or detune can be applied to extra tracks as well. The MIDI channel of each extra track can also be specified here.



Extra track [ETr1...ETr8]

Use the [TRACK/CHANNEL] buttons to select the extra track whose settings you wish to modify.



Program [A11...U88, Dr11...Dr44]

Use the [PROGRAM BANK] buttons and [PROGRAM NUMBER] buttons to specify the program for the extra track.

To select a drum program (Dr 11–44), press the PROGRAM BANK [USER/DRUM] button several times to display Dr, and press a [PROGRAM NUMBER] button.

Ch (MIDI channel) [01G...16]

This sets the MIDI channel of each track. The track will receive MIDI data from the keyboard, from MIDI IN, and from the TO HOST connector on the channel that you specify here.

It is possible to set two or more tracks to the same MIDI channel. Tracks with the same MIDI channel will play in unison. (If data is received on this channel from MIDI IN or TO HOST, all programs will sound.)

Alternatively, you can set two or more tracks to the same MIDI channel and place different musical data in each track. For example one track could be used to record the note data, and another track used to record control data such as volume changes and pitch bend.

Xpose (Transpose) [–24...+24]

This transposes the track in semitone steps up to a maximum of 2 octaves.

With a setting of **0**, the program will sound at its normal pitch.
Since each program has an upper limit to the pitches that it can produce, notes may fail to sound if you set a high transpose setting and play high notes on the keyboard.

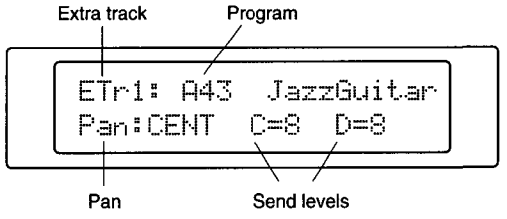
DT (Detune) [-50...+50]

This adjusts the pitch of the selected track in 1-cent steps, up to a maximum of 50 cents (1/2 of a semitone). By detuning two tracks relative to each other and playing them in unison, you can create a richer sound.

In order to produce this effect, set two tracks to the same channel, and record data only in one of the tracks. Set the same detune amount for both tracks (one positive, the other negative).

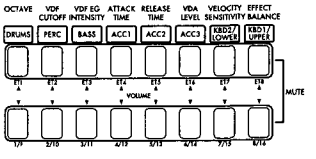
Page 10. Extra track settings 2

In this page you can make settings for each of the 8 extra tracks to specify the program (sound), pan (stereo location), and the volume level that will be sent to the two effect systems (send levels).



Extra track [ETr1...ETr8]

Use the [TRACK/CHANNEL] buttons to select the extra track whose settings you wish to modify.



Program [A11...U88, Dr11...Dr44]

Use the [PROGRAM BANK] buttons and [PROGRAM NUMBER] buttons to specify the program of the extra track.

To select a drum program (Dr11–Dr44), press the PROGRAM BANK [USER/DRUM] button several times to select the Dr display, and use the [PROGRAM NUMBER] buttons.

Pan [OFF, L15...L01, CENT, R01...R15, PROG]

Specifies the stereo panning location for each track. This will determine the levels of channels A and B.

With a setting of **CENT**, that track will be placed in the center. **L** settings will place the sound to the left, and **R** settings to the right. Higher values will place the sound further to the left or right.
With a setting of **OFF**, the track output to channels A and B will be turned off.
With a setting of **PROG**, the pan settings specified by the program itself will be used.

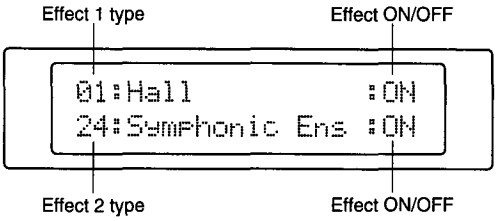
C=/D= (Send levels) [0...9, P]

These settings determine the levels at which the sound of each track will be sent from channels C and D to the effect systems.

With a setting of **P**, the effect send levels specified by the program itself will be used.

Page 11. Effect select

Here you can select the effects, allowing you to add a professional-sounding touch to your own backing sequence.



The *iX300*'s two digital effect processors can be used to apply effects to the backing sequence. The two digital processors allow two different effects to be applied simultaneously, to modify the sound of the programs played by the backing sequence, and greatly enhance the musical expression.

Effect type [00: No Effect...47: Delay/Rotary]

The effect type can be selected independently for Effect 1 and Effect 2.

For details on each effect type, refer to "6. Effects" (☞Page 103 in this manual).

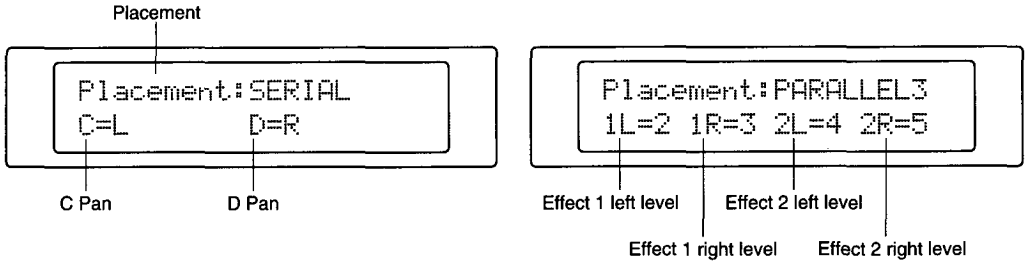
Effect ON/OFF [OFF, ON]

This switches each effect on/off.

The selected effect can also be switched on/off using an optional footswitch, foot pedal, or EC5 external controller. For details refer to Disk/Global mode "Page 7. Assignable pedal settings" and "Page 8. EC5 external controller settings."

Page 12. Effect placement

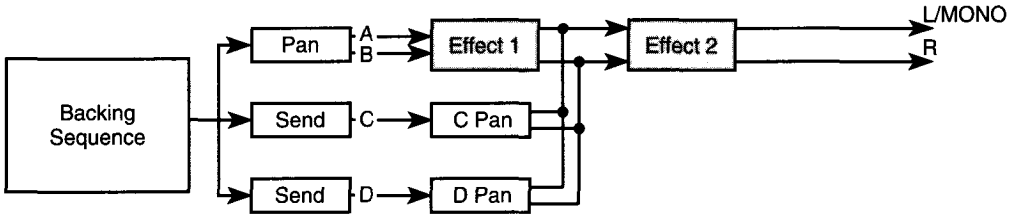
Here you can specify how the two effect processors applied to the backing sequence will be combined (including the pan and level settings for channels C and D).



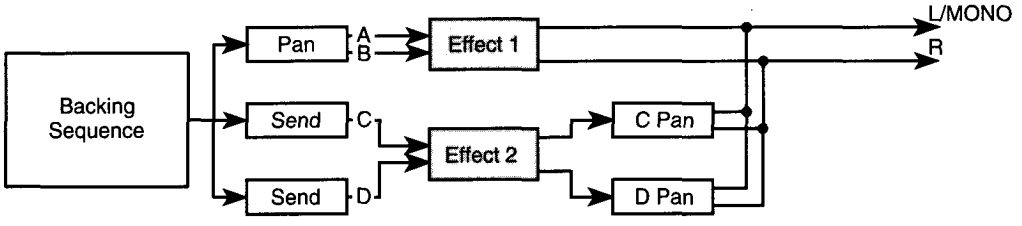
Placement (SERIAL, PARALLEL 1, PARALLEL 2, PARALLEL 3)

Specifies the placement of the two effects and of the C/D pan and L/R level adjustments of channels C and D.
For each track, the pan and send levels to the effects in Arrangement Play mode are set by "Page 3. Track settings 1." (When using extra tracks, these settings are made in Backing Sequence mode "Page 10. Extra track settings 2.")

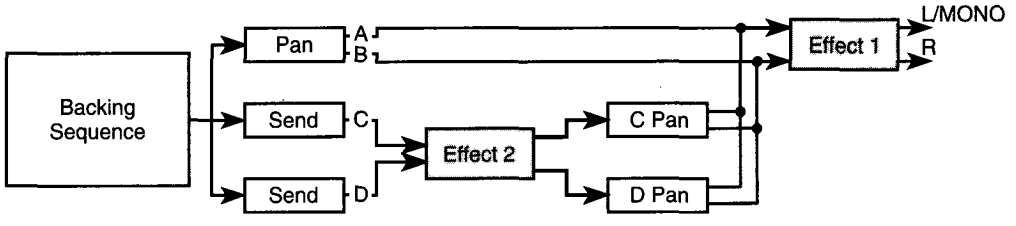
With a setting of **SERIAL**, effects 1 and 2 will apply to channels A and B. Since the signals from channels C and D will be mixed in at the locations specified by C Pan and D Pan after effect 1, only effect 2 will be applied to them.



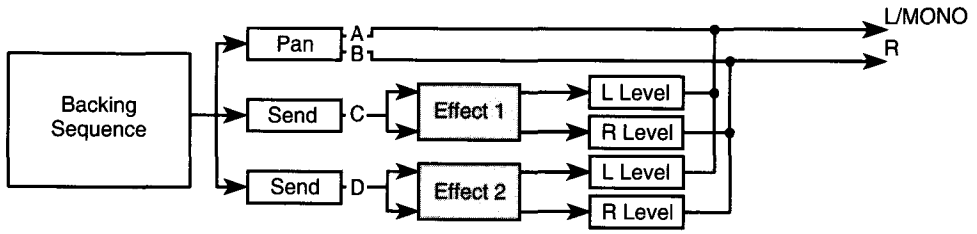
With a setting of **PARALLEL 1**, effect 1 will apply to channels A and B, and effect 2 will apply to channels C and D. After effect 2, the C Pan and D Pan parameters will set the panning. Finally, the signals from the two effects will be mixed.



With a setting of **PARALLEL 2**, effect 2 will apply to channels C and D, and after effect 2 the C Pan and D Pan parameters will set the panning. Then the signal will be mixed with channels A and B and sent through effect 1.



With a setting of **PARALLEL 3**, effect 1 will be applied to channel C, and effect 2 will be applied to channel D. The left/right levels of effect 1 and 2 are specified, and their signals are then mixed with channels A and B. These are the effect send/return settings which mix the dry (unprocessed) sound with the wet (processed) sound.



C (C Pan) [OFF, R, 99:01...01:99, L]

This sets the panning of the signal from channel C.
This setting will appear if a Placement of SERIAL, PARALLEL 1, or PARALLEL 2 is selected.

L places the signal at the left.
R places the signal at the right.
OFF turns off the channel C signal.

D (D Pan) [OFF, R, 99:01...01:99, L]

This sets the panning of the signal from channel D.
This setting will appear if a Placement of SERIAL, PARALLEL 1, or PARALLEL 2 is selected.

L places the signal at the left.
R places the signal at the right.
OFF turns off the channel D signal.

1L/1R (Effect 1 Left/Right Level) [0...9]

This sets the level of the signal from effect 1 that is mixed with channels A and B.
This setting will appear if a Placement of PARALLEL 3 is selected.

As this **value is increased**, the level of the signal mixed with channels A and B will increase.
With a setting of **0** the signal will be off.

2L/2R (Effect 2 Left/Right Level) [0...9]

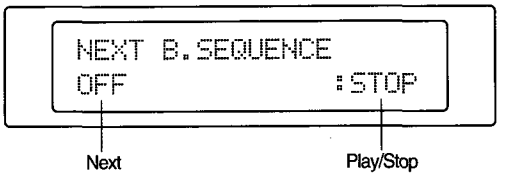
This sets the level of the signal from effect 2 that is mixed with channels A and B.
This setting will appear if a Placement of PARALLEL 3 is selected.

As this **value is increased**, the level of the signal mixed with channels A and B will increase.
With a setting of **0** the signal will be off.

Page 13. Effect 1 parameters
Page 14. Effect 2 parameters

Pages 13 and 14 contain parameter settings for the effects that were selected in "Page 11. Effect select," and allow you to change the effect settings that will be used by the backing sequence. The settings for effects used in other modes are set in the respective mode. The effect parameters that can be set in these pages will depend on the effects that are selected. For details on effect parameters, refer to "6. Effects" (☞Page 103 in this manual).

Page 15. Next backing sequence



Next [OFF, BSEQ0...BSEQ9]

Specifies the backing sequence that will be played when the current backing sequence has finished playing.

With a setting of **OFF**, the backing sequence will not change when playback ends, and playback will simply stop.

Play/Stop [STOP, PLAY]

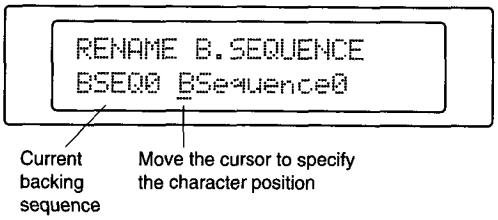
Specifies whether the specified backing sequence will playback or not when the current backing sequence finishes playing.

With a setting of **STOP**, the next backing sequence will be selected, but will not start playing.
With a setting of **PLAY**, the next backing sequence will playback automatically. (However if the Next parameter is OFF, playback will end.)

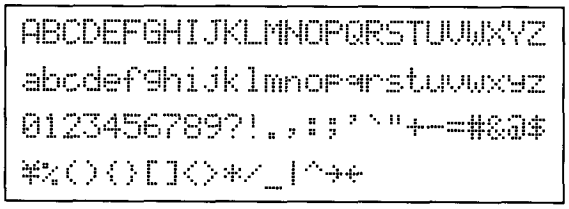
This function allows two or more backing sequences to be automatically played back in succession. If the Next parameter of the final backing sequence is set to the number of the first backing sequence, and if the Play/Stop parameter is set to PLAY for all the backing sequences, the specified backing sequences will playback continuously. For example if you wish to create a loop that repeats backing sequences 0–9, you would set the Next parameter of backing sequence 9 to BSEQ0.

Page 16. Rename backing sequence

This allows you to modify the title of the currently-edited backing sequence.
A title of up to 10 characters can be given to a backing sequence.



The following characters can be used.



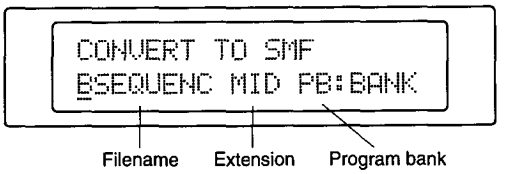
Use the [CURSOR] keys to move the cursor to the location of the character you wish to modify, and use the [TEMPO/VALUE] buttons to modify the character.

Pressing the [SUSTAIN/INS] button will copy the character at the cursor, allowing a character to be inserted at that location.
Pressing the [SPLIT POINT/DEL] button will delete the character at the cursor location.

Page 17. SMF converter

This function converts a backing sequence into a Standard MIDI File.

This allows data created on the ***iX300*** to be loaded and played back on any device that supports Standard MIDI Files.



Insert a floppy disk into the disk drive, and press the [RESET/YES] button. A confirmation message will appear. Press the [RESET/YES] button and the data will be converted to a MIDI file.

The displayed **file name** will consist of the first 8 characters of the backing sequence title. However if any lower-case letters are used in the title, these will be converted into upper-case letters, and characters other than numerals and letters will be converted to an underscore character (_).

You may modify the filename as necessary. The Standard MIDI File **extension** (.MID) will be displayed at the right of the filename.

When a backing sequence is converted, it will be saved as a Standard MIDI File in **Format 0**.

The DRUM, PERC, BASS, ACC1, ACC2 and ACC3 tracks of the ***iX300*** will be assigned the channels that were specified in Disk/Global mode "Page 4. MIDI channel settings 1" and "Page 5. MIDI channel settings 2." Extra tracks will be assigned the channels that were specified in Backing Sequence mode "Page 9. Extra track settings 1."

KBD1 data will be assigned the channel specified in Disk/Global mode page 4. You can also use the MIDI channel parameter in this display page to specify the channel for the KBD2 data. However, be aware that if this channel is set identically with the channel of a another track, it will automatically be re-assigned to an unused channel.

If a backing sequence in which the arrangement or style is switched mid-way is converted into a Standard MIDI File, certain sections of the playback may lag.

PB (Program bank) [NUM, BANK]

With a setting of **NUM**, bank messages will not be added to program change messages. Use this setting when backing sequence data created on the ***iX300*** will be played back by another GM tone generator.
However if programs other than bank A and B programs were used by the arrangement, keyboard timbres, or extra tracks that you used, the sounds will no longer be compatible.
With a setting of **BANK**, bank messages will be added to program change messages. Use this setting when the standard MIDI file will be played back on a Korg *i*-series or *x*-series tone generator.

< About Standard MIDI Files >

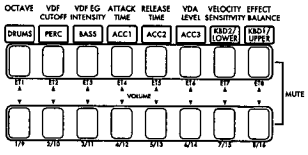
In the past, sequence data created by electronic musical instruments was saved to disk in a format that was different for each manufacturer. This meant that sequence data could be played back only by the same device. "Standard MIDI File" is a format that was developed to solve this problem. Most equipment sold today is compatible with Standard MIDI Files, allowing sequence data to be played back on a wide variety of equipment.

Button settings

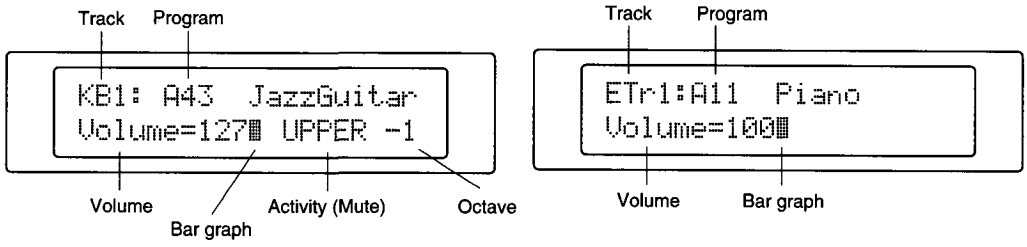
In addition to the parameters that are displayed in the various pages, the *iX300* has a variety of parameters that are accessed by pressing buttons.

[TRACK/CHANNEL] buttons

When page 1 is displayed, these buttons can be used to adjust the volume of the sound program assigned to each of the KBD1, KBD2, ACC1–3, DRUMS, and ET1–8 tracks, and to mute (silence) the track.
To select a KBD1, KBD2, ACC1–3 or DRUMS track, press the corresponding [TRACK/CHANNEL] button, and the settings of the specified track will appear.
To select an extra track ET1–8, press the [BACKING SEQ] button to make the LED blink, and press the appropriate [TRACK/CHANNEL] button to see the settings of the desired track.



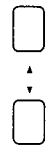
After setting the parameter, press the [EXIT] button to return to the previous display. Alternatively, the previous display will reappear automatically if approximately 7 seconds pass without any operation being performed.



While a KBD1 or KBD2 keyboard track or an ET1–8 extra track is displayed, you can use the [PROGRAM BANK] and [PROGRAM NUMBER] buttons to select the program for that track. However for the ACC1–3, BASS, PERC, and DRUMS tracks, the program that was selected in Arrangement Play mode will be used.

Volume [000...127]

Each time you press the upper (▲) [TRACK/CHANNEL] button for the KBD1, KBD2, ACC1–3, BASS, PERC or DRUMS track, the volume will increase by one step. If you continue pressing the button, the volume will continue increasing.
Each time you press the lower (▼) [TRACK/CHANNEL] button, the volume will decrease by one step. If you continue pressing the button, the volume will continue decreasing.



To adjust the volume of an extra track, press the [BACKING SEQ] button, make sure that the [BACKING SEQ] button LED is blinking, and press the corresponding upper (▲) or lower (▼) [TRACK/CHANNEL] button.

The volume will be displayed as a numeric value and as a bar graph at the right of the value.

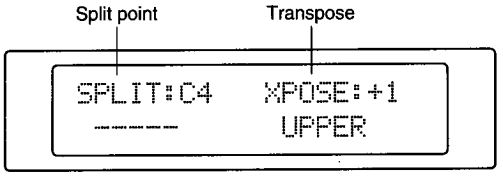
Activity [- - - -, (UPPER/LOWER/PLAY)]

This will appear when the DRUMS, PERC, ACC1–3, KBD1 or KBD2 track is selected.
When both the upper (▲) and lower (▼) [TRACK/CHANNEL] buttons of the track are pressed simultaneously, that track will alternate between muted (silent) and un-muted (normal).

Muted status is indicated by a display of - - - -.
When a track is not muted, the display will indicate **PLAY** (however for the KBD1 track and KBD 2 tracks, the display will be **UPPER** or **LOWER**, respectively).

[TRANSPOSE] buttons

When page 1 is displayed and you need to transpose the music, press the TRANSPOSE [+1] or [–1] buttons to access the transpose setting.



The pitch can be transposed in semitone steps over a range of 11 steps upward or downward. When transpose is modified, not only the sounds played by the keyboard, but also the arrangement track and the chord detection function will be transposed as well.
Simultaneously pressing [+1] and [–1] will reset the setting to 0.
After setting the parameter, press the [EXIT] button to return to the previous display. Alternatively, the previous display will reappear automatically if approximately 7 seconds pass without any operation being performed.

[SPLIT POINT] button

When page 1 is displayed, pressing the [SPLIT POINT] button will display the current split point. The split point and all keys above it are referred to as the UPPER keyboard range, and keys below the split point as the LOWER keyboard range.

To set the split point, hold down the [SPLIT POINT] button and press the key that you wish to be the new split point.

The split point setting is an important factor in how chords you play are detected. For details refer to the explanation of chord name display in "Page 1. Realtime recording" (☞Page 18 in this manual). The area of the keyboard that is muted will also be determined by this split point setting.
When the [KEYBOARD ASSIGN] button has been pressed to make the SPLIT indicator light, the area above (and including) the split point will be the KBD1 track and the area below the split point will be the KBD2 track, and you can specify the sound (keyboard timbre), volume, and mute settings etc. for each of these tracks.
After setting the parameter, press the [EXIT] button to return to the previous display. Alternatively, the previous display will reappear automatically if approximately 7 seconds pass without any operation being performed.

[OCTAVE] buttons

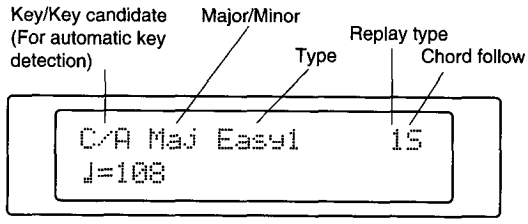
When page 1 is displayed, you can press the OCTAVE [UP] or [DOWN] buttons to set the octave of the KBD1 track. To set the octave of the KBD2 track, use the [TRACK/CHANNEL] buttons to display the KBD2 track, and then press the [OCTAVE] buttons. The pitch of each track can be adjusted in steps of an octave, for a maximum of 2 octaves up or down. With a setting of 0 the program will play at its normal pitch.
Octave can also be adjusted from Arrangement Play mode.
After setting the parameter, press the [EXIT] button to return to the previous display. Alternatively, the previous display will reappear automatically if approximately 7 seconds pass without any operation being performed.

[TAP TEMPO/NO] button

When page 1 is displayed, you can set the tempo by pressing the [TAP TEMPO] button several times at the desired rhythm.

[INTERACTIVE COMP.] button

When page 1 is displayed, you can press the [INTERACTIVE COMP.] button to get the following display.



Key [ANL, C/A, C#/A#, D/B...B/G#]

Specifies the key of the song that you wish to play. The tonic of the major key is displayed at the left of the slash (/), and the tonic of the minor key at the right of the slash.

With a setting of **ANL**, the automatic key analysis function will operate. If you are not sure of the key, this function will automatically find the key for you.
Select **ANL** and then press the [START/STOP] button to start the backing sequence. Play the melody in time with the rhythm. Press the [START/STOP] button to stop the backing sequence, and press the [TEMPO/VALUE] buttons to see the keys that fit the melody you played.

Major/Minor [Maj, Mm, min, mM]

Specifies whether the song you wish to play is in a major or minor key.

Maj (major): The chords will be mostly major.
Mm (major): The chords will be mostly major, with occasional minor chords added.
min (minor): The chords will be mostly minor.
mM (minor): The chords will be mostly minor, with occasional major chords added.

Type [Easy 1–2, General 1–4, Special 1–2]

When the interactive composition function is used to add chords, you can specify the tendency of the chords that will be produced.

With a setting of **Easy**, the easiest and safest chords will be assigned. "2" will produce chords that are somewhat more complex than "1."
With a setting of **General**, conventional chords will be assigned. The selections from 1–4 will produce slightly different tendencies. Try them out, and use the one that is most suitable for your song.
With a setting of **Special**, unique chords will be assigned. "1" and "2" will differ somewhat in the way in which chord tendencies are affected by the major/minor setting. Try them out, and use the one that is most suitable for your song.

Replay type [1, 2, 3, 4]

When the interactive composition function is used to apply chords to a performance recorded in Backing Sequence mode, this setting specifies how the melody will be analyzed and processed.

With a setting of **1**, essentially the same method as for Arrangement Play will be used. However, corrections will be made for inaccuracies of timing before the melody is analyzed. This means that in comparison to realtime, chord processing will be more accurate even for a performance whose timing is somewhat imprecise.
With a setting of **2**, the melody within the measure will be analyzed before chords are assigned to the measure. With this method, chords can be applied more naturally and safely than in realtime, which can analyze only the melody that was played up to that point (i.e., the melody that you have just been playing). However the chord may change twice within a single measure even if the Chord Follow parameter is set to S.

With a setting of **3**, processing will be essentially the same as for 2, but there is the possibility that unnatural chords may occur depending on the melody.
With a setting of **4**, the processing method will be essentially the same as for 2, but the chord changes (chord progression) will be analyzed further, so that the chord progression will as natural and as rich as possible. However the chord may change twice within a single measure even if the Chord Follow parameter is set to S.

Chord follow [S, F]

This specifies the frequency at which the chords assigned to the melody by the interactive composition function will change.

With a setting of **S**, chords will be assigned at the beginning of each measure. I.e., one type of chord will be assigned to each measure.
With a setting of **F**, chords will be assigned at the beginning and the middle of each measure. I.e., up to two types of chord will be assigned to each measure.
Normally there will be no problem with leaving this set to S, but if you are playing a tune that contains large numbers of notes at a slow tempo, you may wish to try a setting of F.

3. Program mode

Functions of Program mode

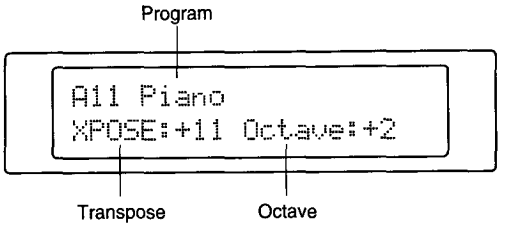
The following table lists the functions of Program mode, showing the title and main contents of each display page, and the manual page for reference.

Display page	Contents	Manual page
1. Program play	Select program, transpose, octave, performance edit	☞P. 48
2. Oscillator basic/Oscillator 2 relative	Oscillator type setting, oscillator 2 relative	☞P. 50
3. Oscillator tone	Oscillator settings, pan, send *	☞P. 51
4. Pitch EG	Pitch EG settings	☞P. 53
5. VDF	Filter settings *	☞P. 55
6. VDF EG	Filter EG settings *	☞P. 56
7. VDF keyboard tracking	Filter EG keyboard tracking settings *	☞P. 57
8. VDF velocity sensitivity	Filter velocity sensitivity settings *	☞P. 59
9. VDA EG	Amp EG settings *	☞P. 61
10. VDA keyboard tracking	Amp EG keyboard tracking settings *	☞P. 62
11. VDA velocity sensitivity	Amp EG velocity sensitivity settings *	☞P. 64
12. Pitch MG	Pitch modulation settings *	☞P. 66
13. Pitch MG controller	Joystick, aftertouch settings *	☞P. 68
14. VDF MG	Filter modulation settings	☞P. 69
15. VDF MG controller/VDA level	Joystick, aftertouch settings	☞P. 70
16. Controllers		☞P. 71
17. Effect select	Effect type, effect on/off	☞P. 72
18. Effect placement	Effect placement, C/D pan, effect 1 and 2 L/R levels	☞P. 73
19. Effect 1 parameters	Effect 1 parameter settings	☞P. 74
20. Effect 2 parameters	Effect 2 parameter settings	☞P. 74
21. Rename program	Modify the program name	☞P. 75
22. Write program	Write a program into memory	☞P. 75

* If you set Oscillator Type to DOUBLE (double oscillator program) in "Page 2. Oscillator basic/Oscillator 2 relative," these pages will display either the oscillator 1 or oscillator 2 parameters. Switch between oscillators 1 and 2 by pressing the VARIATION buttons [1] and [2].

Page 1. Program play

In Page 1 of Program mode you can select the Program that will be played from the keyboard of the *iX300*. You can also use the Performance Edit settings that are shown in this page to perform simple editing.
Press the [PROG] button to enter Program mode, and the following display will appear.



Program [A11...E88, U11...U88, Dr11...Dr44]

The internal memory of the *iX300* contains seven banks of Programs, as follows.

Bank	Number of programs	Contents
A	64	GM programs 1–64 (ROM)
B	64	GM programs 65–128 (ROM)
C, D, E	64 × 3	*iX300* preset programs (ROM)
U	64	User programs (RAM)
Dr	28	Drum programs (ROM: 11–16, 21–28, 31–38, 41–44, RAM: 17–18)

Use the [TEMPO/VALUE] buttons, [PROGRAM BANK] buttons, and [PROGRAM NUMBER] buttons to select the desired Program. To select a Drum Program (Dr11–44), press the PROGRAM BANK [USER/DRUM] button several times to get the Dr display, and then press a [PROGRAM NUMBER] button. The display will show the bank, number, and program name.

You can also select programs using an optional footswitch or an EC5 external controller pedal. For details refer to Disk/Global mode "Page 7. Assignable pedal settings" or "Page 8. EC5 external controller settings."
When you select a program, a MIDI program change message will also be transmitted.

XPOSE (Transpose) [-11...+11]

When you need to transpose (shift the pitch), use the [TRANSPOSE] buttons to set the Transpose setting of each program.

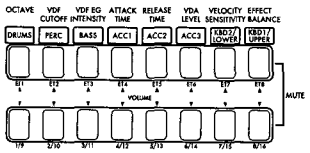
The pitch can be transposed in semitone steps over a range of 11 steps up or down.

Octave [-2...+2]

Use the [OCTAVE] buttons to set the Octave of each program.
With a setting of 0, the program will sound at its standard pitch. The pitch can be shifted in steps of an octave, over a range of 2 octaves up or down.

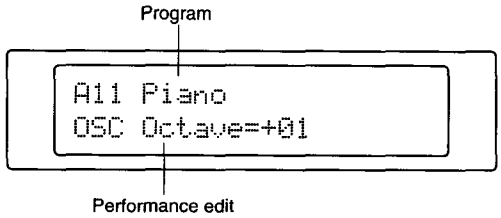
Performance Edit

By pressing one of the [TRACK/CHANNEL] buttons in Page 1, you can perform the Performance Edit operation corresponding to the button that was pressed.
When you finish Performance Editing, press the [EXIT] button to return to the "Page 1. Program Play" display.



Performance edit [-10...+10/-3...+3]

The Performance Edit function of the ***iX300*** allows you to make adjustments to the most important program parameters, without having to bother with detailed editing. This is a convenient way of modifying program parameters during a rehearsal or live performance.



When you press the upper (▲) or lower (▼) [TRACK/CHANNEL] button, the corresponding Performance Edit parameter will be displayed (always with a value of +00), and you can press either button to modify the value.

Performance Edit settings are made with a value of **–10–+10** (**–3–+3** for Octave). This editing adjusts the effect of the corresponding program parameter. However, be aware that this setting does not change the value of the program parameter itself, but is only an adjustment that is relative to that setting. When you modify a Performance Edit parameter, one or more parameters for each oscillator will be affected (except for Dry:Effect Balance).
If the original parameter value is already at its maximum or minimum value, changing the Performance Edit value will have no effect.

OSC Octave adjusts the Octave parameter (☞Page 52 in this manual) of both oscillators, modifying the octave of the program that will sound. This allows 1 octave of change in one-octave steps.

VDF Cutoff modifies the VDF Cutoff parameter (☞Page 55 in this manual) of both oscillators, modifying the tone of the program. Each step will change the parameter value 5 steps.

VDF EG Intensity modifies the VDF EG Intensity parameter (☞Page 55 in this manual) of both oscillators, adjusting the way in which the tone of the program changes over time. Each step will change the parameter value 3 steps.

Attack Time modifies the VDA Attack Time parameter (☞Page 61 in this manual) of both oscillators, adjusting the attack length of the program. Each step will change the parameter value 5 steps.

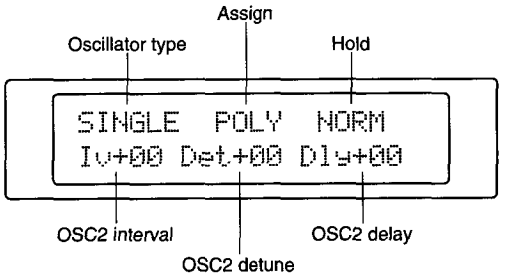
Release Time modifies the VDF and VDA Release Time parameters (☞Page 54, 62 in this manual) of both oscillators, adjusting the release length of the program. Each step will change the parameter value 5 steps.

VDA Level modifies the VDA Level parameter (☞Page 52 in this manual) of both oscillators, adjusting the overall volume of the entire program. Each step will change the parameter value 5 steps.

Velocity Sensitivity modifies the way in which changes in keyboard playing dynamics will affect the sound. The EG Intensity parameter (☞Page 59 in this manual) for VDF Velocity Sensitivity and the VDA Velocity Sensitivity parameter (☞Page 64 in this manual) for VDA Velocity Sensitivity will be modified for both oscillators. Each step will change the parameter value 5 steps.
DRY:FX Balance modifies the Balance parameter between effects 1 and 2, adjusting the balance between the "dry" sound of the program (unprocessed by the effect) and the "wet" sound processed by the effect. Each step will change the parameter value 5 steps.

Page 2. Oscillator basic/Oscillator 2 relative

Here you can select the basic oscillator type: i.e., whether the program will use one or two oscillators, or a drum kit. You can also specify whether the sound of the program will be maintained even after a Note-off message is received, and whether the program will sound monophonically or polyphonically.



Oscillator type [SINGLE, DOUBLE, DRUMS]

This parameter determines the basic structure of the program.

SINGLE (single oscillator program) will cause the program to use only one oscillator. Maximum polyphony will be 32 notes.
DOUBLE (double oscillator program) will cause the program to use two oscillators. This allows more complex sounds to be created, but the maximum polyphony will be limited to 16 notes.
DRUMS (drum program) will assign a drum kit (instead of a multisample) to the program. (For details refer to the explanation for the Multisample/Drum Kit parameter which follows later.)

Assign [MONO, POLY]

This specifies the number of simultaneous notes that the program will sound in response to Note messages received on one MIDI channel.

MONO will cause the program to sound only one note at a time.
POLY will allow the program to play chords.

Hold [HOLD, NORM]

This specifies whether or not a note sounded by the program will stop when you release the *iX300*'s keyboard or when a Note-off message is received.

HOLD causes the sound to continue sounding even after the note is released. This is convenient when playing drum sounds. For other types of program you will usually set this parameter to **NORM**.
Even with a setting of **NORM**, the sound will continue playing forever if the VDA EG Sustain Level parameter (☞Page 62 in this manual) is set to a value other than 0.

Iv (OSC2 Interval) [-12...+12]

This parameter raises or lowers the OSC2 pitch relative to the OSC1 pitch, allowing a program to sound a two-note parallel "chord" for each note. This can be adjusted in semitone steps over a maximum range of 1 octave.

Positive **(+) values** will raise the OSC2 pitch, and negative **(–) values** will lower the OSC2 pitch.

Det (OSC2 Detune) [-50...+50]

This parameter detunes OSC1 and OSC2 in relation to each other, producing a richer sound.

Positive **(+) values** will cause the OSC2 pitch to rise and the OSC1 pitch to fall, and negative **(–) values** will produce the opposite effect.
This setting indicates the pitch difference between OSC1 and OSC2 in one-cent steps, and as shown by the following table, raising the pitch of one oscillator will lower the pitch of the other.

Detune	OSC1 pitch	OSC2 pitch
+50	–25 cents	+25 cents
•	•	•
•	•	•
+0	0 cents	0 cents
•	•	•
•	•	•
–50	+25 cents	–25 cents

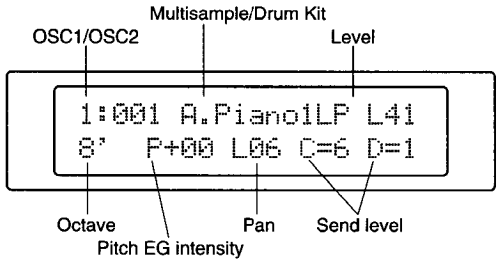
Dly (OSC2 Delay) [00...99]

This parameter delays the onset of the OSC2 sound, so that OSC2 will begin to sound after OSC1.

With a setting of **0**, OSC1 and OSC2 will sound simultaneously.

Page 3. Oscillator tone

In this page you can select the waveform used by the oscillator, and make other oscillator-related settings. Most of these parameters can be set at any time regardless of the type of the selected program, but if in "Page 2. Oscillator basic/Oscillator 2 relative" you have set the Oscillator Type to Drum Program, the panpot parameters will not be displayed at all.



OSC1/OSC2 (Oscillator 1/2)

If in "Page 2. Oscillator basic/Oscillator 2 relative" you have set the Oscillator Type to DOUBLE, this setting specifies which of the two oscillators you will be editing. If Oscillator Type has been set to Drum, this will be displayed as D.
You can also switch between Oscillators 1 and 2 by pressing the VARIATION buttons [1] or [2].

Multisample/Drum Kit

If Oscillator Type was set either to SINGLE or DOUBLE, this selects the basic waveform that the oscillator will use. The number and name of the multisample will be displayed. (Multisamples with an abbreviation of "NT" will produce the same pitch regardless of the key that is played.)

The appendices to the user's guide contains a list of the available multisamples for your reference.

If Oscillator Type is set to DRUM, this will show a Drum Kit name, and you can select a Drum Kit instead of a multisample. Drum programs will use the drum sound assignments and pan settings of the selected drum kit. The other settings are the same as for a single oscillator program.

L (Level) [00...99]

This sets the overall volume that is output by the VDA of the selected oscillator.

High settings of this parameter may cause the sound to distort when chords are played. In this case, lower the setting.

You can make the oscillator output level be affected by the force (velocity) of your keyboard playing. You can also use the VDA EG to make the volume of individual notes change over time. For details refer to "Page 9. VDA EG."

Octave [4', 8', 16', 32']

This sets the basic pitch of the selected oscillator in octave units. The standard pitch of all multisamples is **8'**.

Since each multisample has an upper limit to the pitch that it can produce, setting this parameter to **4'** and in addition using the [OCTAVE] and [TRANSPOSE] buttons to raise the keyboard pitch may, for some sounds, result in no sound when you play upper ranges of the keyboard.

When editing a drum program, be sure to set this parameter to **8'**. Other settings will cause the keyboard assignments of the drum kit to be skewed upward or downward.

P (Pitch EG intensity) [-99...+99]

This specifies the effect that the Pitch EG will have on the pitch of the selected oscillator.

Positive (+) settings will cause a greater pitch change as the value is increased.
Negative (–) settings will invert the direction of the pitch change.
With a setting of **0**, the Pitch EG will not affect the selected oscillator, and the pitch will not change at all.
Pitch EG settings are made in "Page 4. Pitch EG."

Pan [OFF, L15...L01, CNT, R01...R15]

This sets the stereo location of the selected oscillator. This will adjust the level of the oscillator signals that are sent from channels A and B to the effect section.

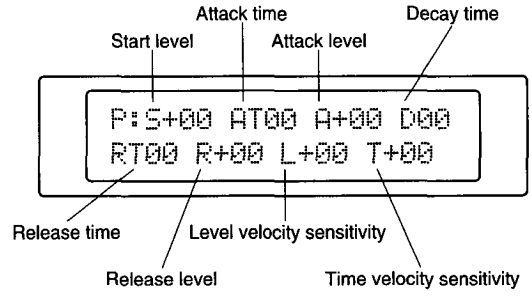
CNT will place the sound produced by the oscillator in the center.
L settings will place the sound toward the right, and **R** settings toward the left. As this value is increased the sound will move further away from the center.
OFF will turn off the oscillator output to channels A and B.
This parameter will not be displayed for a Drum program. The pan settings of each drum kit will be used.

C=/D= (Send levels) [0...9]

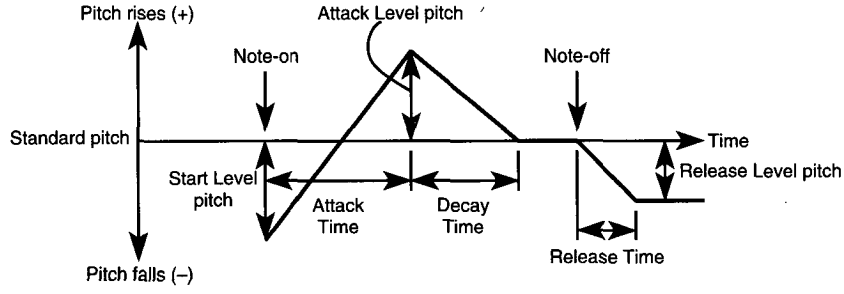
These parameters set the send levels that are sent from channels C and D to the effect section.

Page 4. Pitch EG

The parameters of this page determine the shape of the Pitch EG (envelope generator). The Pitch EG determines how the pitch of the program changes over time in relation to its standard pitch.



For a double oscillator program, both oscillators use the same Pitch EG. However you can separately adjust the sensitivity of each oscillator to the pitch EG.
Be aware that the total pitch change (produced by the pitch EG, pitch bend level, and the pitch MG) is limited to 3 octaves. In addition, some multisamples are limited to a narrower range of pitch change depending on the conditions.



S (Start level) [–99...+99]

Sets the pitch at which the program begins to sound.

Positive (+) settings will raise the pitch above standard pitch, and **negative (–)** settings will lower the pitch below standard pitch. When the Pitch EG Intensity parameter is either +99 or –99, a setting of +99 or –99 for this parameter will produce a rise/fall of approximately 1 octave.
With a setting of **0**, the program will start sounding at the standard pitch.

AT (Attack time) [00...99]

Sets the time over which the pitch will change from the Start Level (S) to the Attack Level (A).

With a setting of **0** the movement will take place instantly, and with a setting of **99** the movement will be the slowest.

A (Attack level) [–99...+99]

Sets the pitch at which the program will arrive after the Attack Time has elapsed.
Set it in the same way as the Start Level parameter.

D (Decay time) [00...99]

Sets the time over which the pitch will change from the Attack Level (A) to the standard pitch.
Set it in the same way as the Attack Time parameter.

RT (Release time) [00...99]

This sets the time over which the pitch will change from the standard pitch to the Release Level (R) after the key is released.
Set it in the same way as the Attack Time parameter.

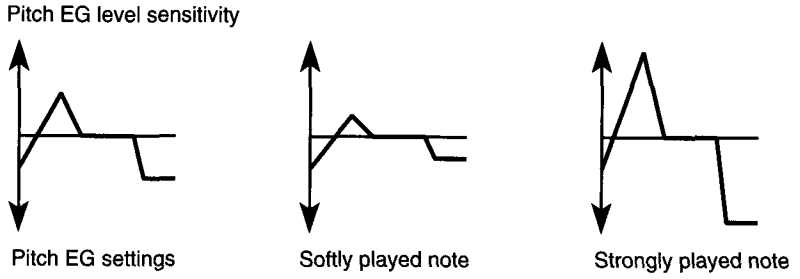
R (Release level) [-99...+99]

This sets the pitch at which the program will arrive after the Release Time has elapsed.
Set it in the same way as the Start Level parameter.

L (Level velocity sensitivity) [-99...+99]

This specifies the depth to which the Pitch EG levels will be affected by note velocity (keyboard dynamics).

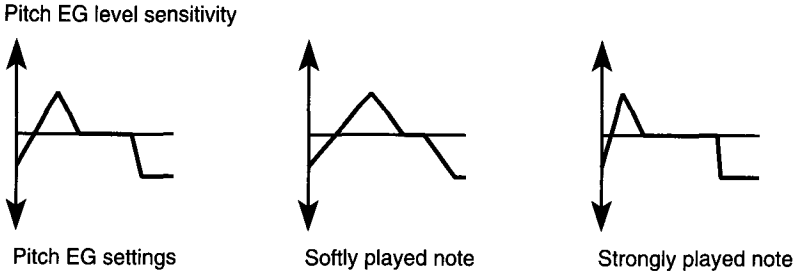
With a setting of **0**, the Pitch EG levels will not be affected by velocity.



T (Time velocity sensitivity) [-99...+99]

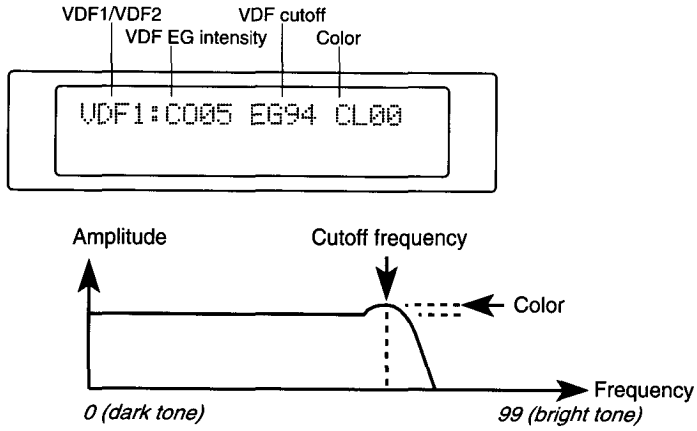
This specifies how the Pitch EG times will be affected by note velocity.

Higher settings of this parameter will cause the pitch change to become faster.
With a setting of **0**, the Pitch EG times will not be affected by velocity.



Page 5. VDF

Here you can change filter settings to adjust the tone.



VDF1/VDF2

When a double oscillator program is selected, this specifies the oscillator whose filter parameters will be edited.
You can also switch between oscillators 1 and 2 by pressing the VARIATION buttons [1] or [2].

CO (VDF cutoff frequency) [00...99]

This specifies the frequency at which the VDF filter will begin to apply.

Lower values will produce a darker and more muted tone.

EG (VDF EG intensity) [00...99]

This specifies the effect that the VDF EG will have on the tone of the oscillator.

Higher values will cause the tone to change more greatly.
With a setting of **0**, the VDF EG will not be used, and the tone will not change over time.
VDF EG settings are made in "Page 6. VDF EG."

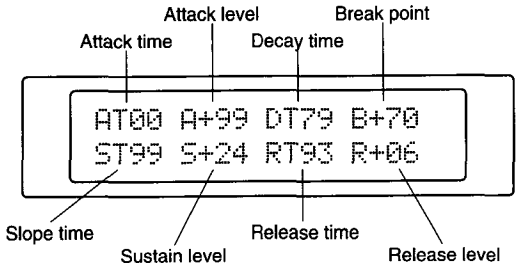
CL (Color) [00...99]

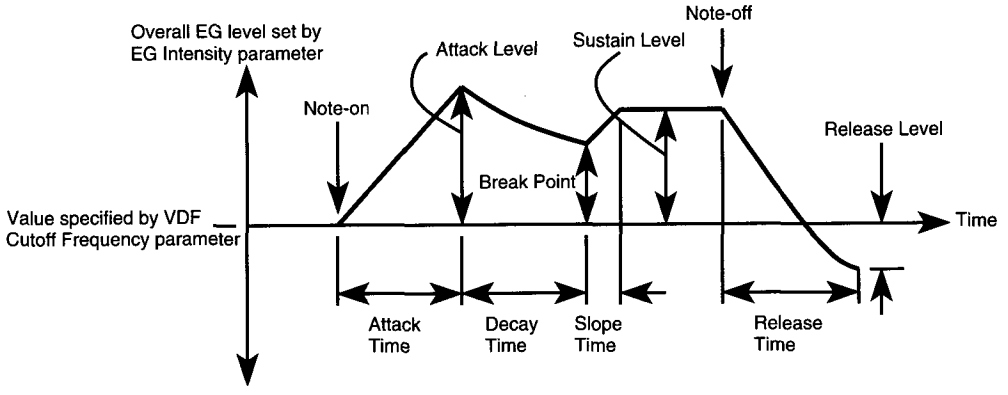
This parameter adds character to the sound.

Higher values will boost the frequency components in the region of the cutoff frequency, causing filter movements produced by the VDF EG or VDF modulation to be more noticeable.

Page 6. VDF EG

Here you can specify the shape of the VDF EG (envelope generator) that will determine how the VDF cutoff frequency will change over time.
In "Page 5. VDF," the EG Intensity parameter allows you to adjust the depth of the effect produced by the oscillator EG. Also, the "Page 7. VDF keyboard tracking" parameter settings allow the EG to be automatically adjusted according to the keyboard position or key velocity.
Switch between oscillators 1 and 2 by pressing the VARIATION buttons [1] or [2].





AT (Attack time) [00...99]

This sets the time over which the cutoff frequency will change from the normal VDF setting to the Attack Level (A).

With a setting of **0** the movement will take place instantly, and with a setting of **99** the movement will be the slowest.

A (Attack level) [-99...+99]

Sets the level at which the cutoff frequency will arrive after the Attack Time has elapsed.

With **positive (+)** settings the Attack Level will be higher than the normal cutoff frequency, and with **negative (–)** settings it will be lower.

DT (Decay time) [00...99]

Sets the time over which the VDF cutoff frequency will change from the Attack Level (A) to the Break Point (B).
Set it in the same way as the Attack Time parameter.

B (Break point) [-99...+99]

Sets the level at which the VDF cutoff frequency will arrive after the Decay Time (DT) has elapsed.
Set it in the same way as the Attack Level parameter.

ST (Slope time) [00...99]

Sets the time over which the VDF cutoff frequency will change from the Break Point (B) to the Sustain Level (S).
Set it in the same way as the Attack Start Time parameter.

S (Sustain level) [-99...+99]

Sets the level at which the VDF cutoff frequency will arrive after the Slope Time (ST) has elapsed.
Set it in the same way as the Attack Level parameter.

RT (Release time) [00...99]

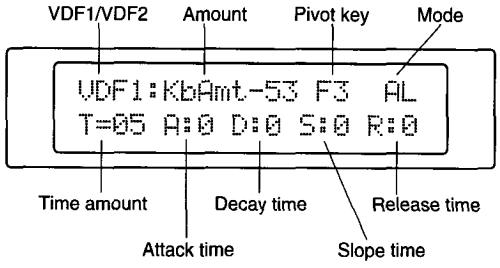
Sets the time over which the VDF cutoff frequency will change from the Sustain Level (S) to the normal cutoff frequency after you release the key.
Set it in the same way as the Attack Time parameter.

R (Release level) [-99...+99]

Sets the level at which the VDF cutoff frequency will arrive after the Release Time (RT) has elapsed.
Set it in the same way as the Attack Level parameter.

Page 7. VDF keyboard tracking

VDF keyboard tracking is a function that adjusts the cutoff frequency according to the keyboard location of the note that is played. On many real-world instruments, higher notes have a brighter tone, and this can be simulated using VDF keyboard tracking.
The effect of the tracking function is determined by the Keyboard Track Amount, Pivot Key, and Mode parameters.
Keyboard tracking can be used to modify VDF EG times, so that the four EG time parameters will be shortened or lengthened depending on the location of the keyboard that you play.



VDF1/VDF2

When a double oscillator program is selected, this selects the oscillator whose filter parameters will be edited.
You can also use the Variation [1] or [2] buttons to switch between oscillators 1 and 2.

KbAmt (Keyboard track amount) [-99...+99]

Specifies how greatly keyboard tracking will affect the cutoff frequency. The way in which this will function is determined by the Mode parameter, explained below.

Positive (+) settings will cause the tone to become brighter as you play above the Pivot Key. Conversely, the tone will become darker as you play below the specified key.
Negative (–) will have exactly the opposite effect.
With a setting of **–50**, the cutoff frequency of the note specified by the Key parameter will be used as the standard cutoff frequency for all notes, meaning that the cutoff fre-

quency will remain the same for all areas of the keyboard.
With a setting of **0**, the cutoff frequency will change in direct correspondence to the pitch. This will produce the same effect as when the following Mode parameter is turned OFF.

Pivot key [C-1...G9]

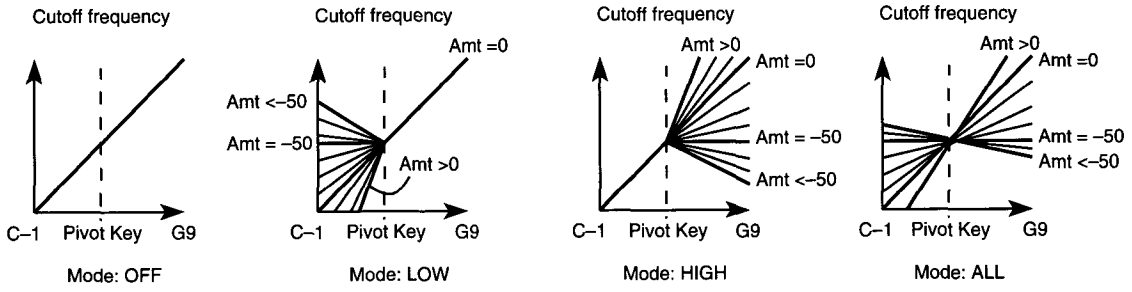
Sets the note which will be used as the center for the keyboard tracking function. The function of this key is determined by the setting of the Mode parameter, below.

Mode [OF, LO, HI, AL]

This determines the range which will be affected by the keyboard tracking function.

OF (OFF) will cause keyboard tracking to be exactly proportional to the keyboard pitch, just as when Keyboard Track Amount is set to 0.
LO (LOW) will cause keyboard tracking to apply to the range below the Pivot note.
HI (HIGH) will cause keyboard tracking to apply to the range above the Pivot note.
AL (ALL) will cause keyboard tracking to adjust the cutoff frequency of all notes, relative to the Pivot note.

Changes in cutoff frequency produced by Keyboard Track Amount (Amt) and Pivot Key settings for each Mode



T (Time Amount) [00...99]

Specifies how deeply keyboard tracking will affect the VDF EG speed.

Higher values will produce a greater change.
With a setting of **0**, EG speed will not be affected.

This parameter only specifies the amount of the effect that the keyboard tracking function has on EG speed. Whether keyboard tracking will length or shorten the various EG times is determined by the following four parameters.

A (Attack time) [–, 0, +]

Specifies the direction of the change that keyboard tracking will cause for Attack Time.

A setting of "+" will cause keyboard tracking to shorten the attack time.
A setting of "–" will cause keyboard tracking to lengthen the attack time.
With a setting of **0**, the attack time will not be affected.

D (Decay time) [–, 0, +]

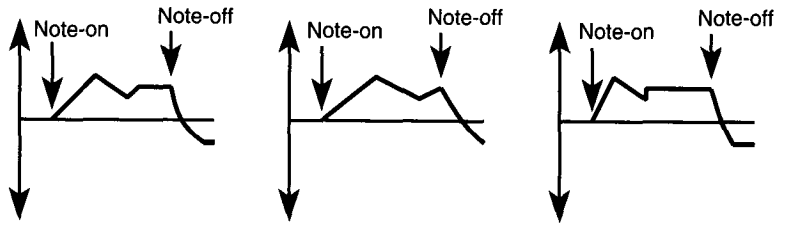
Specifies the direction of the change that keyboard tracking will cause for Decay Time. This setting functions in the same way as the Attack Time parameter.

S (Slope time) [–, 0, +]

Specifies the direction of the change that keyboard tracking will cause for Slope Time. This setting functions in the same way as the Attack Time parameter.

R (Release time) [–, 0, +]

Specifies the direction of the change that keyboard tracking will cause for Release Time. This setting functions in the same way as the Attack Time parameter.



VDF EG Time parameter settings (positive (+) settings for all parameters)

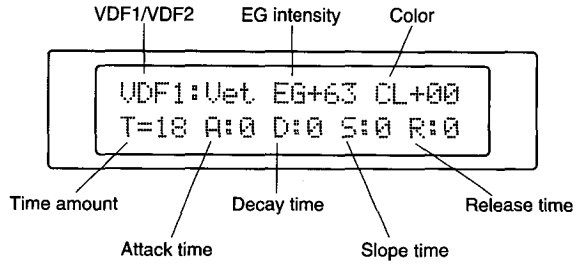
Notes played in a low keyboard range

Notes played in a high keyboard range

Page 8. VDF velocity sensitivity

On the ***iX300***, the VDF EG can be affected by your keyboard playing dynamics or by the velocity values of MIDI Note messages received from an external MIDI device. Instruments such as a piano, on which strongly played notes are brighter, can be easily simulated using this capability. Even when the VDA does not change, using velocity to modify the filter can produce a variety of interesting effects.

You can also use keyboard dynamics to modify the speed of the VDF EG. Note velocity can shorten or length each of the four EG segments.



VDF1/VDF2

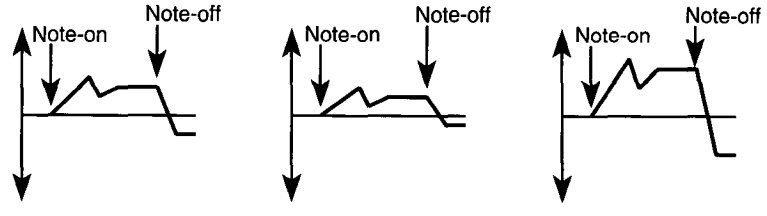
When a double oscillator program is selected, this specifies the oscillator whose filter parameters will be edited.
You can also switch between oscillators 1 and 2 by pressing the VARIATION buttons [1] or [2].

EG (EG intensity) [–99...+99]

Specifies the effect that keyboard dynamics will have on the VDF EG.

Positive (+) settings will cause EG depth to decrease for softly-played notes, causing cutoff frequency to change less.
Negative (–) settings will cause EG depth to decrease for strongly-played notes.
With a setting of **0**, the depth will be as specified by the "Page 5. VDF" EG Intensity parameter.

VDF EG velocity sensitivity (for positive (+) settings)



VDF EG settings

Softly played note

Strongly played note

CL (Color) [-99...+99]

Specifies the effect that keyboard dynamics will have on the Resonance.

Positive (+) settings will cause Resonance to increase for strongly-played notes, and to decrease for softly-played notes.
Negative (–) settings will have the exact opposite result.
With a setting of **0**, the Resonance of all notes will be as specified by the "Page 5. VDF" Color parameter.

T (Time amount) [00...99]

Specifies the amount of the effect that velocity will have on VDF EG speed.

Higher values will produce a greater change.
With a setting of **0**, EG speed will not be affected.

This parameter only specifies the amount of the effect that velocity has on EG speed. Whether velocity will length or shorten the various EG times is determined by the following four parameters.

A (Attack time) [–, 0, +]

Specifies the direction of the change that velocity will cause for Attack Time.

A setting of "+" will cause the attack time to be shortened for strongly played notes.
A setting of "–" will cause the attack time to be lengthened for strongly played notes.
With a setting of **0**, the attack time will not be affected by velocity.

D (Decay time) [–, 0, +]

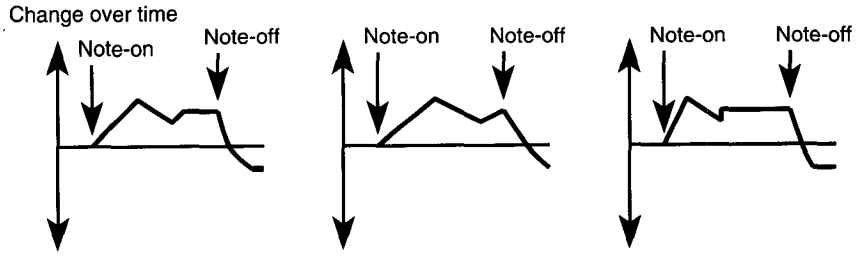
Specifies the direction of the change that velocity will cause for Decay Time.
This setting functions in the same way as the Attack Time parameter.

S (Slope time) [–, 0, +]

Specifies the direction of the change that velocity will cause for Slope Time.
This setting functions in the same way as the Attack Time parameter.

R (Release time) [–, 0, +]

Specifies the direction of the change that velocity will cause for Release Time.
This setting functions in the same way as the Attack Time parameter.



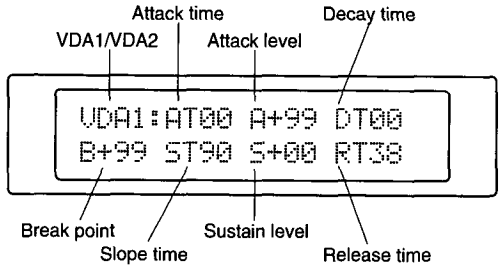
VDF EG Time parameter settings (positive (+) settings for all parameters)

Notes played softly

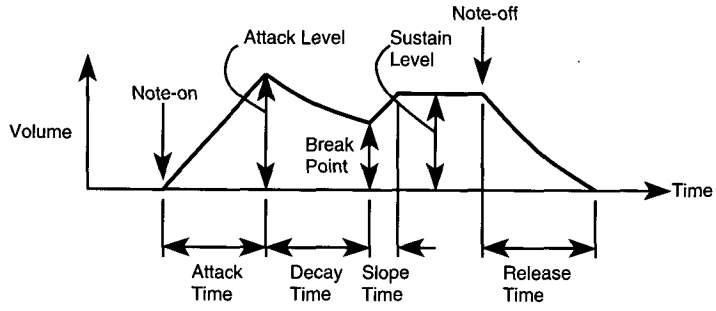
Notes played strongly

Page 9. VDA EG

The settings in this page set the shape of the VDA EG (envelope generator), specifying how the VDA level of the oscillators will change over time.



The parameters in "Page 10. VDA keyboard tracking" allow you to specify how keyboard position or playing dynamics will automatically modify the EG.



VDA1/VDA2

When a double oscillator program is selected, this specifies the oscillator whose VDA parameters are being edited.
You can also use the VARIATION buttons [1] or [2] to switch between oscillators 1 and 2.

AT (Attack time) [00...99]

This sets the time over which the VDA volume will change from 0 to the Attack Level (A).

With a setting of **0** the movement will take place instantly, and with a setting of **99** the movement will be the slowest.

A (Attack level) [+00...+99]

Sets the volume level at which the VDA will arrive after the Attack Time (AT) has elapsed.

As this setting is increased, the Attack Level will be louder, and with a setting of **+0** the volume will be 0, delaying the timing at which the sound will begin to be heard.

DT (Decay time) [00...99]

Sets the time over which the VDA volume will change from the Attack Level (A) to the Break Point (B).
Set it in the same way as the Attack Time parameter.

B (Break point) [+00...+99]

Sets the volume level at which the VDA will arrive after the Decay Time (DT) has elapsed.
Set it in the same way as the Attack Level parameter.

ST (Slope time) [00...99]

Sets the time over which the VDA volume will change from the Break Point Level (B) to the Sustain Level (S).
Set it in the same way as the Attack Time parameter.

S (Sustain level) [+00...+99]

Sets the volume level at which the VDA will arrive after the Slope Time (ST) has elapsed.
Set it in the same way as the Attack Level parameter.

RT (Release time) [00...99]

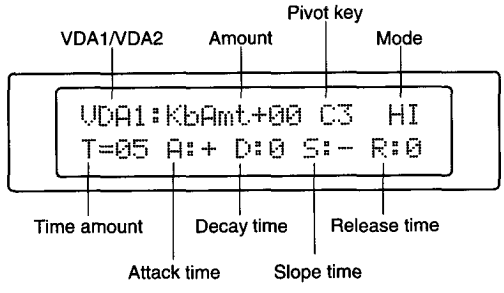
Sets the time over which the VDA volume will change from the Sustain Level (S) to a volume of 0 after you release the key.
Set it in the same way as the Attack Time parameter.

Page 10. VDA keyboard tracking

VDA keyboard tracking is a function that adjusts the oscillator volume according to the keyboard location of the note that is played. On many real-world instruments such as wind instruments, higher notes have a louder volume, and this can be simulated using VDA keyboard tracking.

The effect of the tracking function is determined by the Keyboard Track Amount, Pivot Key, and Mode parameters.

Keyboard tracking can be used to modify VDA EG times, so that the four EG time parameters will be shortened or lengthened depending on the location of the keyboard that you play.



VDA1/VDA2

When a double oscillator program is selected, this selects the oscillator whose amplifier parameters will be edited.
You can also use the Variation [1] or [2] buttons to switch between oscillators 1 and 2.

KbAmt (Keyboard track amount) [-99...+99]

Specifies how greatly keyboard tracking will affect the volume. The way in which this will function is determined by the Mode parameter, explained below.

With a setting of **0**, all notes will have the same volume. (This is the same effect as when the following Mode parameter is turned OFF.)

Pivot key [C-1...G9]

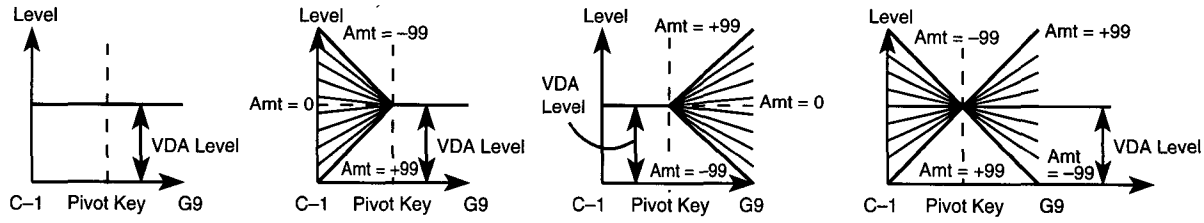
Sets the note which will be used as the center for the keyboard tracking function. The function of this key is determined by the setting of the Mode parameter, below.

Mode [OF, LO, HI, AL]

This determines the range which will be affected by the keyboard tracking function.

OF (OFF) will cause keyboard tracking to be turned off, so that notes in any range of the keyboard will have the same volume.
LO (LOW) will cause keyboard tracking to apply to the range below the Pivot note.
HI (HIGH) will cause keyboard tracking to apply to the range above the Pivot note.
AL (ALL) will cause keyboard tracking to adjust the volume level of all notes, relative to the Pivot note.

Changes in VDA level produced by Keyboard Track Amount (Amt) and Pivot Key settings for each Mode



T (Time Amount) [00...99]

Specifies how deeply keyboard tracking will affect the VDA EG speed.

Higher values will produce a greater change.
With a setting of **0**, EG speed will not be affected.

This parameter only specifies the amount of the effect that the keyboard tracking function has on EG speed. Whether keyboard tracking will lengthen or shorten the various EG times is determined by the following four parameters.

A (Attack time) [–, 0, +]

Specifies the direction of the change that keyboard tracking will cause for Attack Time.

A setting of "+" will cause keyboard tracking to shorten the attack time.
A setting of "–" will cause keyboard tracking to lengthen the attack time.
With a setting of **0**, the attack time will not be affected.

D (Decay time) [–, 0, +]

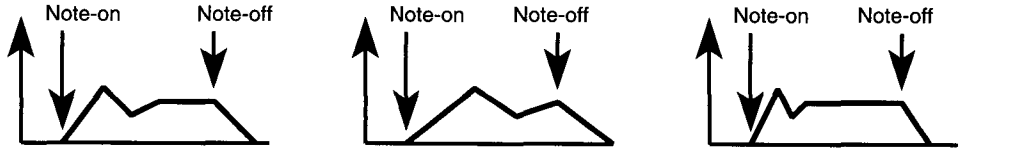
Specifies the direction of the change that keyboard tracking will cause for Decay Time. This setting functions in the same way as the Attack Time parameter.

S (Slope time) [–, 0, +]

Specifies the direction of the change that keyboard tracking will cause for Slope Time. This setting functions in the same way as the Attack Time parameter.

R (Release time) [–, 0, +]

Specifies the direction of the change that keyboard tracking will cause for Release Time. This setting functions in the same way as the Attack Time parameter.

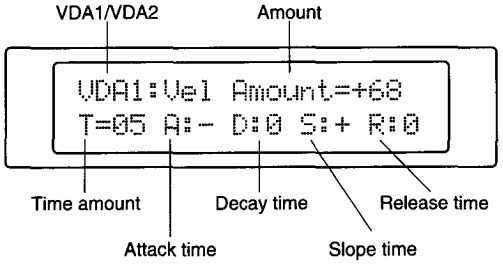


VDA EG Time parameter settings | Notes played below the pivot key | Notes played above the pivot key

Page 11. VDF velocity sensitivity

On the *iX300*, the VDA EG can be affected by your keyboard playing dynamics or by the velocity values of MIDI Note messages received from an external MIDI device. Settings can be made so that strongly played notes will have a more greatly emphasized attack or decay.

The five parameters in the lower line also allow playing dynamics to modify the speed of the VDA EG. Note velocity can shorten or length each of the four EG segments.



VDA1/VDA2

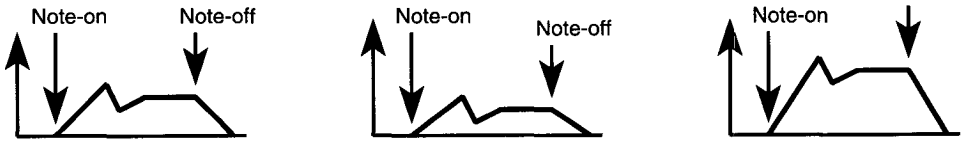
When a double oscillator program is selected, this specifies the oscillator whose amplifier parameters will be edited.
You can also switch between oscillators 1 and 2 by pressing the VARIATION [1] or [2] buttons.

Amount [-99...+99]

Specifies the effect that keyboard dynamics will have on the VDA EG.

Positive (+) settings will cause EG depth to decrease for softly-played notes, causing the volume level to change less.
Negative (–) settings will cause EG depth to decrease for strongly-played notes.
With a setting of **0**, the depth will be as specified by the Attack Time, Decay Time, Slope Time, and Release time parameters.

VDA EG velocity sensitivity (for positive (+) settings)



VDA EG level settings | Softly played note | Strongly played note

T (Time amount) [00...99]

Specifies the amount of the effect that velocity will have on VDA EG speed.

Higher values will produce a greater change.
With a setting of **0**, EG speed will not be affected.

This parameter only specifies the amount of the effect that velocity has on EG speed. Whether velocity will length or shorten the various EG times is determined by the following four parameters.

A (Attack time) [–, 0, +]

Specifies the direction of the change that velocity will cause for Attack Time.

A setting of "+" will cause the attack time to be shortened for strongly played notes.
A setting of "–" will cause the attack time to be lengthened for strongly played notes.
With a setting of **0**, the attack time will not be affected by velocity.

D (Decay time) [–, 0, +]

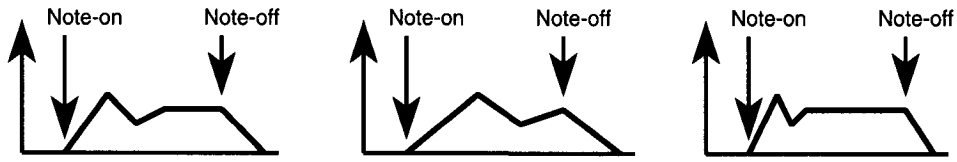
Specifies the direction of the change that velocity will cause for Decay Time.
This setting functions in the same way as the Attack Time parameter.

S (Slope time) [–, 0, +]

Specifies the direction of the change that velocity will cause for Slope Time.
This setting functions in the same way as the Attack Time parameter.

R (Release time) [–, 0, +]

Specifies the direction of the change that velocity will cause for Release Time.
This setting functions in the same way as the Attack Time parameter.

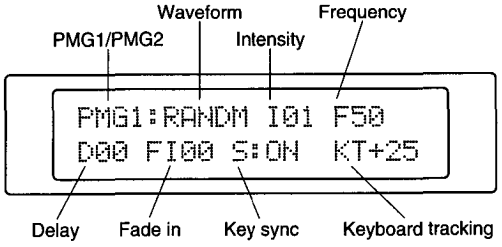


VDA EG Time parameter settings | Notes played softly | Notes played strongly

Page 12. Pitch MG

This page contains settings which control pitch modulation. This function simulates the vibrato effects that can be produced on many acoustic instruments.

For double oscillator programs, the pitch of each oscillator can be modulated independently.



PMG1/PMG2 (Pitch MG1/Pitch MG2)

When a double oscillator program is selected, this specifies the oscillator whose Pitch MG parameter will be edited.
You can also use the VARIATION buttons [1] and [2] to switch between oscillators 1 and 2.

Waveform [TRI...RANDM]

Selects the waveform that will be used to modulate the pitch of the oscillator. The following waveforms are available.

TRI - triangle wave 

SQUAR - square wave 

SAWUP - sawtooth wave (upward) 

RANDM - random 

SAWDN - sawtooth wave (downward) 

I (Intensity) [00...99]

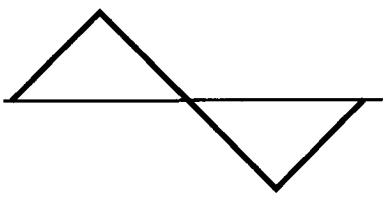
This sets the depth of automatic pitch modulation.

With a setting of **99**, the selected waveform will modulate the pitch over a range of 1–2 octaves.
With a setting of **0**, modulation will not be applied.

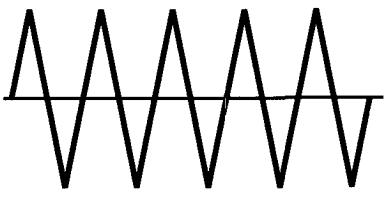
F (Frequency) [00...99]

This sets the speed of pitch modulation.

Higher values will produce faster modulation.



Lower values



Higher values

D (Delay) [00...99]

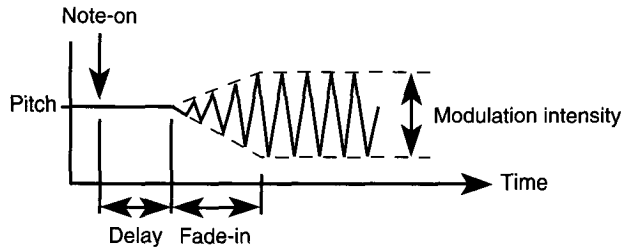
This parameter delays the onset of automatic pitch modulation.

Higher values will produce a greater delay.
With a setting of **0**, modulation will begin to apply as soon as the note begins.

FI (Fade-in) [00...99]

This parameter allows the automatic pitch modulation to be faded-in, so that it will begin with a small amount of modulation and gradually increase to the full depth that is specified by the Intensity parameter.

Higher values will produce a longer fade-in.
With a setting of **0**, there will be no fade-in, and modulation will begin immediately at the depth specified by the Intensity parameter.



S (Key sync) [ON, OFF]

This parameter specifies whether or not the pitch MG will be reset each time you play a note.

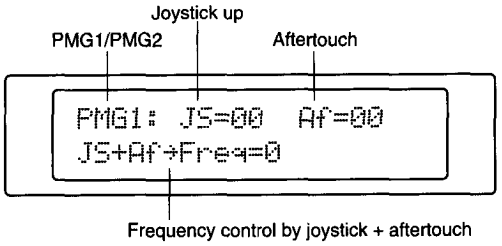
With a setting of **ON**, the modulation waveform will be reset each time you play a note.
With a setting of **OFF**, the modulation waveform of the first-played note will continue at the standard frequency, and will not be affected by subsequently-played notes. We suggest that you set this OFF when playing chords, so that modulation will apply to each note in unison even if you arpeggiate the chord.

KT (Keyboard tracking) [-99...+99]

This parameter adjusts the speed of pitch modulation according to the keyboard location that you play.

Positive (+) settings will cause modulation to become faster as you play above middle C, and slower as you play below middle C.
Negative (–) settings will have the opposite effect.

Page 13. Pitch MG controller



PMG1/PMG2 (Pitch MG1/Pitch MG2)

When a double oscillator program is selected, this specifies the oscillator whose Pitch MG parameters will be edited.
You can also use the VARIATION buttons [1] or [2] to switch between oscillators 1 and 2.

JS (Joystick up) [00...99]

This specifies the maximum depth of the modulation that will occur when the joystick is moved away from you.
This is similar to the "Page 12. Pitch MG" Intensity parameter, but in this case, the specified modulation will not be applied until you move the joystick.

Af (Aftertouch) [00...99]

This specifies the maximum depth of the modulation that will occur when aftertouch is applied.
This is similar to the "Page 12. Pitch MG" Intensity parameter, but in this case, the specified modulation will not be applied until you apply aftertouch.

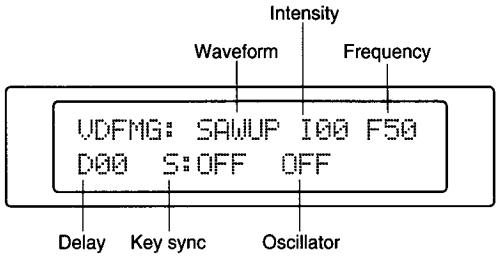
JS+ Af → Freq (Frequency control by joystick + aftertouch) [0...9]

This parameter allows the modulation to be speeded up by moving the joystick away from you or by applying aftertouch.

Higher settings will allow modulation to be speeded up more.
With a setting of **0**, the joystick or aftertouch will not affect the modulation frequency.

Page 14. VDF MG

These parameters let you use the selected waveform to control the filter cutoff frequency. Unlike pitch, VDF is modulated by a single MG even for double oscillator programs.



Waveform [TRI...RANDM]

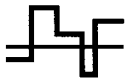
Selects the waveform that will be used to modulate the pitch of the oscillator. The following waveforms are available.

TRI - triangle wave

SQUAR - square wave

SAWUP - sawtooth wave (upward)

RANDM - random



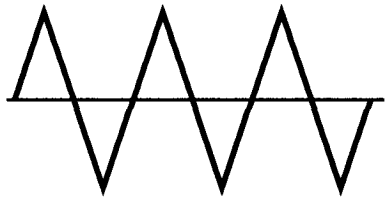
SAWDN - sawtooth wave (downward)

I (Intensity) [00...99]

This sets the depth of automatic VDF modulation.

With a setting of **0**, modulation will not be applied.

Lower values

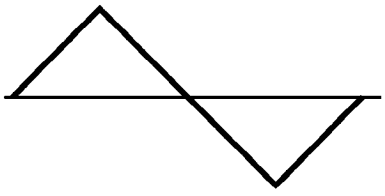


Higher values

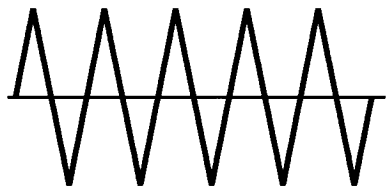
F (Frequency) [00...99]

This sets the speed at which the cutoff frequency will be modulated.

Higher values will produce faster modulation.



Lower values



Higher values

D (Delay) [00...99]

This parameter delays the onset of automatic VDF modulation.

Higher values will produce a greater delay.
With a setting of **0**, modulation will begin to apply as soon as the note begins.

S (Key sync) [ON, OFF]

This parameter specifies whether or not the VDF MG will be reset each time you play a note.

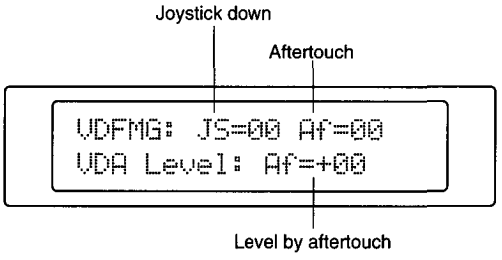
With a setting of **ON**, the modulation waveform will be reset each time you play a note. With a setting of **OFF**, the modulation waveform of the first-played note will continue at the standard frequency, and will not be affected by subsequently-played notes. We suggest that you set this OFF when playing chords, so that modulation will apply to each note in unison even if you arpeggiate the chord.

Oscillator [OFF, OSC1, OSC2, BOTH]

This specifies the oscillator(s) to which VDF modulation will apply. You may modulate the cutoff frequency of OSC1 or OSC2 or both.

If this is turned **OFF**, VDF MG will also be off.

Page 15. VDF MG controller/VDA level



VDFMG (VDF MG controller)

- **JS (Joystick down)** [00...99]
  Specifies the maximum depth of modulation that will be applied when you move the joystick away from you.
  This is similar to the "Page 14. VDF MG" Intensity parameter, but in this case, the specified modulation will not be applied until you move the joystick.

- **Af (Aftertouch)** [00...99]
  This specifies the maximum depth of the modulation that will occur when aftertouch is applied.
  This is similar to the "Page 14. VDF MG" Intensity parameter, but in this case, the specified modulation will not be applied until you apply aftertouch.

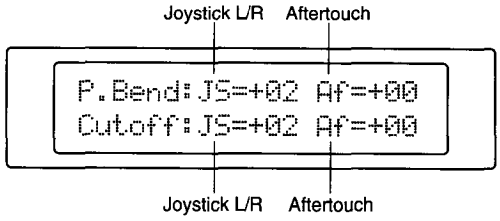
VDA Level

- **Af (Aftertouch)** [-99...+99]
  This specifies the volume change that will be controlled by aftertouch.

  Positive (+) settings will cause the sound to become louder as you press down on the keyboard, and higher settings will allow a greater change in volume.
  Negative (–) settings will cause the sound to become softer as you press down on the keyboard.

Page 16. Controllers

The settings here determine how the joystick and aftertouch will affect the pitch, filter cutoff frequency, and volume of the program. These parameters will directly control the pitch, cutoff frequency, and volume. Unlike the joystick and aftertouch parameters explained in the Pitch MG and VDF MG sections, they do not control the amount or speed of modulation.



P.Bend (Pitch bend)

- **JS (Joystick L/R)** **[-12...+12]**
  This specifies the amount of pitch change that will occur when you move the joystick to left or right, in chromatic steps.

  A setting of **12** will allow a pitch bend effect of 1 octave.
  Positive (+) settings will cause the pitch to rise when the joystick is moved toward the right, and fall when the joystick is moved toward the left.
  Negative (–) settings will produce the opposite effect.
  Depending on the sound or the keyboard location that you play, the pitch may not change in a full ±1 octave range.

- **Af (Aftertouch)** **[-12...+12]**
  This specifies the amount of pitch change that will occur when you apply aftertouch, in chromatic steps.

  A setting of **12** will allow a pitch bend effect of 1 octave.
  Positive (+) settings will cause the pitch to rise when aftertouch is applied.
  Negative (–) settings will cause the pitch to fall when aftertouch is applied.

Cutoff

- **JS (Joystick L/R)** **[-99...+99]**
  This specifies the maximum amount of cutoff frequency change that will occur when you move the joystick to left or right.

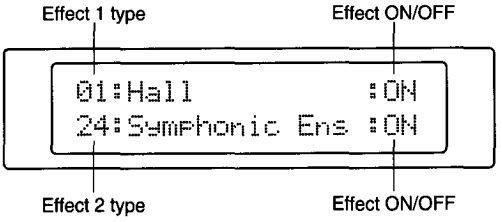
  Positive (+) settings will cause the tone to become brighter when the joystick is moved toward the right, and darker when the joystick is moved toward the left.
  Negative (–) settings will produce the opposite effect.

- **Af (Aftertouch)** **[-99...+99]**
  This specifies the maximum amount of cutoff frequency change that will occur when you apply aftertouch.

  Positive (+) settings will cause the tone to become brighter when aftertouch is applied.
  Negative (–) settings will cause the tone to become darker when aftertouch is applied.

Page 17. Effect select

Here you can select effects, allowing you to add a professional finish to the sound of your Program.



The *iX300*'s two digital effect processors can be used to apply effects to the program. The two digital processors allow two different effects to be applied simultaneously, to modify the sound of the program, and greatly enhance the possibilities of musical expression.

Effect type [00: No Effect...47: Delay/Rotary]

The effect type can be selected independently for Effect 1 and Effect 2.

For details on each effect type, refer to "6. Effects" (☞Page 103 in this manual).

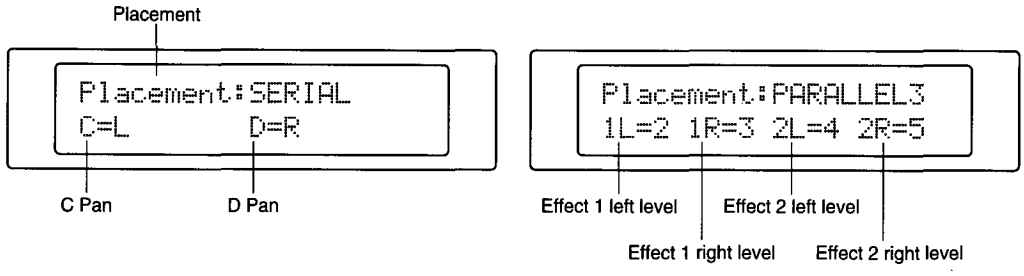
Effect ON/OFF [OFF, ON]

This switches each effect on/off.

The selected effect can also be switched on/off using an optional footswitch, foot pedal, or EC5 external controller. For details refer to Disk/Global mode "Page 7. Assignable pedal settings" and "Page 8. EC5 external controller settings."

Page 18. Effect placement

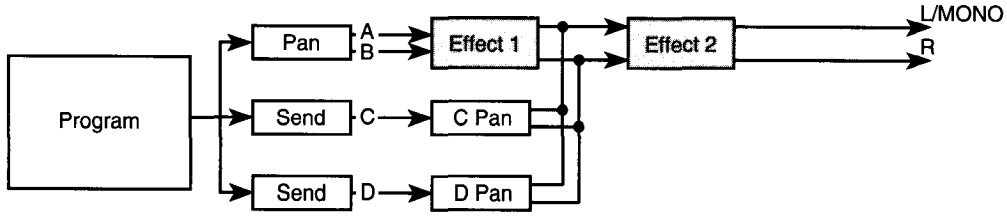
Here you can specify how the two effect processors which apply effects to the program will be combined (including the pan and level settings for channels C and D).



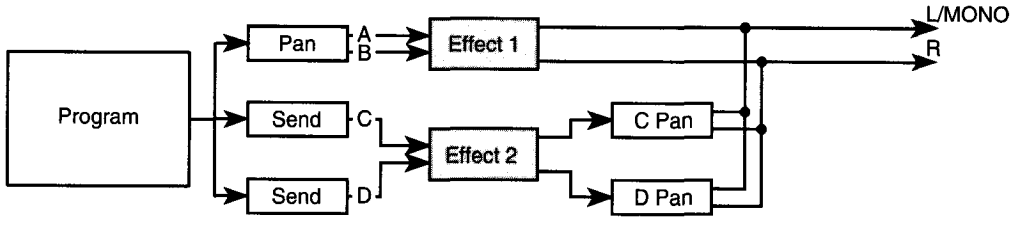
Placement (SERIAL, PARALLEL 1, PARALLEL 2, PARALLEL 3)

Specifies the placement of the two effects and of the C/D pan and L/R level adjustments of channels C and D.
Pan and effect send levels for each program are set in "Page 5. VDF."

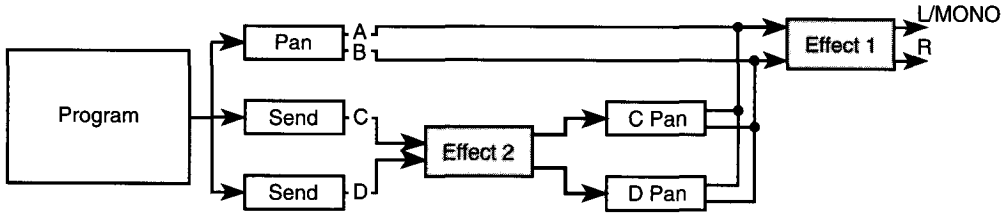
With a setting of **SERIAL**, effects 1 and 2 will apply to channels A and B. Since the signals from channels C and D will be mixed in at the locations specified by C Pan and D Pan after effect 1, only effect 2 will be applied to them.



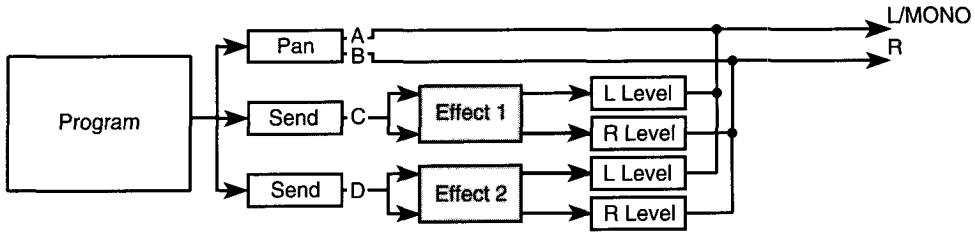
With a setting of **PARALLEL 1**, effect 1 will apply to channels A and B, and effect 2 will apply to channels C and D. After effect 2, the C Pan and D Pan parameters will set the panning. Finally, the signals from the two effects will be mixed.



With a setting of **PARALLEL 2**, effect 2 will apply to channels C and D, and after effect 2 the C Pan and D Pan parameters will set the panning. Then the signal will be mixed with channels A and B and sent through effect 1.



With a setting of **PARALLEL 3**, effect 1 will be applied to channel C, and effect 2 will be applied to channel D. The left/right levels of effect 1 and 2 are specified, and their signals are then mixed with channels A and B. These are the effect send/return settings which mix the dry (unprocessed) sound with the wet (processed) sound.



C (C Pan) [OFF, R, 99:01...01:99, L]

This sets the panning of the signal from channel C.
This setting will appear if a Placement of SERIAL, PARALLEL 1, or PARALLEL 2 is selected.

L places the signal at the left.
R places the signal at the right.
OFF turns off the channel C signal.

D (D Pan) [OFF, R, 99:01...01:99, L]

This sets the panning of the signal from channel D.
This setting will appear if a Placement of SERIAL, PARALLEL 1, or PARALLEL 2 is selected.

L places the signal at the left.
R places the signal at the right.
OFF turns off the channel D signal.

1L/1R (Effect 1 Left/Right Level) [0...9]

This sets the level of the signal from effect 1 that is mixed with channels A and B.
This setting will appear if a Placement of PARALLEL 3 is selected.

As this **value is increased**, the level of the signal mixed with channels A and B will increase.
With a setting of **0** the signal will be off.

2L/2R (Effect 2 Left/Right Level) [0...9]

This sets the level of the signal from effect 2 that is mixed with channels A and B.
This setting will appear if a Placement of PARALLEL 3 is selected.

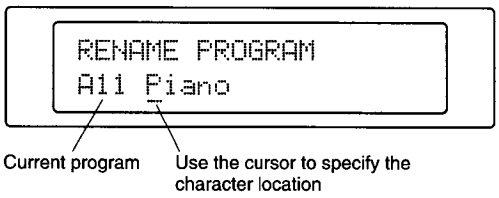
As this **value is increased**, the level of the signal mixed with channels A and B will increase.
With a setting of **0** the signal will be off.

Page 19. Effect 1 parameters
Page 20. Effect 2 parameters

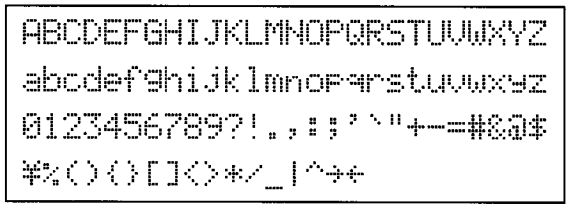
Pages 19 and 20 contain parameter settings for the effects that were selected in "Page 17. Effect select," and allow you to change the effect settings that will be used by the program. The settings for effects used in other modes are set in the respective mode.
The effect parameters that can be set in these pages will depend on the effects that are selected. For details on effect parameters, refer to "6. Effects" (☞Page 103 in this manual).

Page 21. Rename program

Here you can modify the title of the program that is being edited.
A title of up to 10 characters can be assigned to the program.



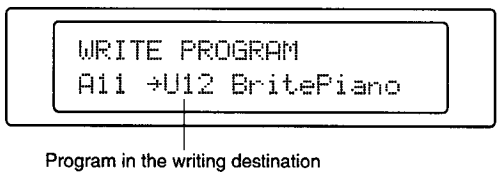
The following characters can be used.



Use the [CURSOR] buttons to move the cursor to the location of the character you wish to modify, and use the [TEMPO/VALUE] buttons to modify the character.
Pressing the [SUSTAIN/INS] button will copy the character at the cursor, allowing a character to be inserted at that location.
Pressing the [SPLIT POINT/DEL] button will delete the character at the cursor location.

Page 22. Write program

This function saves (writes) the edited program into internal memory (U11–88, Dr17–18). You can also access this page by pressing the [REC] button from a different page.



① Use the [TEMPO/VALUE] buttons to display the program number of the desired writing destination (the memory location into which the data will be written).
You can also use the [PROGRAM BANK] buttons and [PROGRAM NUMBER] buttons to input the program number.
When saving a normal program, select U11–88. When saving a drum program, select Dr17 or Dr18. (The selected program will be displayed.)

② If you wish to save the current program into the specified destination, press the [RESET/YES] button.

When you execute the Write Program operation, the data in the writing destination will be lost, and cannot be recovered.

Button settings

In addition to the parameters that are displayed in each page, the ***iX300*** has a variety of parameters that are accessed by pressing buttons.

[VARIATION] buttons [1] and [2]

When the "Page 2. Oscillator basic/Oscillator 2 relative" parameter Oscillator Type is set to DOUBLE (a double oscillator program), the [VARIATION] buttons [1] and [2] can be used to switch between the oscillator 1 and oscillator 2 displays in Page 3 and Pages 5-13.

[REC] button

When the [REC] button is pressed, "Page 22. Write Program" will appear.

[KBD LOCK] button

If you accidentally select a different program without writing your edits, you can press the [KBD LOCK] button (if you have not yet edited the selected program) to bring back the previous program. (Only the sound will be brought back, and the program number will not change.)

4. Song Play mode

Functions of Song Play mode

The following table lists the functions of Song Play mode, showing the title and main contents of each display page, and the manual page for reference.

Display page	Contents	Manual page
1. Performance monitor	Select song, tempo, measure at which playback will begin	☞P. 78
2. Channel settings	Pan, send level	☞P. 80
3. Transpose position	Position at which transpose will be applied, and its effect	☞P. 81
4. Effect select	Effect type, effect on/off	☞P. 82
5. Effect placement	Effect placement, C/D pan and L/R levels to effects 1 and 2	☞P. 83
6. Effect 1 parameters	Effect 1 parameter settings	☞P. 84
7. Effect 2 parameters	Effect 2 parameter settings	☞P. 84

If an error message appears while you are using one of the above functions, refer to the list of error messages given in "8. Appendices," and take the appropriate action. For floppy disk handling, please also read the cautions given on page 13 of the User's Guide.

Output of MIDI program bank messages

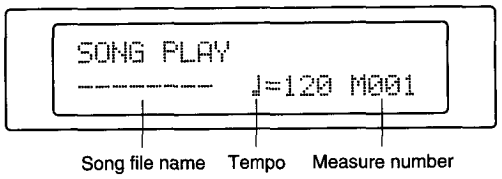
The Disk/Global mode "Page 6. MIDI Filter" Program Filter setting lets you specify how program banks will be output from MIDI. (☞Page 138 in this manual)

When connecting a Korg MIDI device, set this to "o."

If you have connected a MIDI device of another manufacturer, and playback is incorrect, change this setting to "s" or "n."

If "n" is selected, the Program Bank settings will be ignored, and the bank number will not be transmitted from MIDI.

Page 1. Performance monitor



Song file name

If you wish to successively playback all the songs that are on the disk, select "- - - -" in the song file name field, and press the [START/STOP] button. The songs will playback in the order that they appear in the directory.
If you wish to playback a specific song, you can use the TEMPO/VALUE [UP/+] and [DOWN/–] buttons to select the song for playback.
You can also select the song for playback using the [ARRANGEMENT BANK] buttons and the [ARRANGEMENT NUMBER] buttons (☞ User's Guide page 17). The song will start when you press the [START/STOP] button, and will stop when you press the [START/STOP] button once again.
During playback, you can press the [RESET/YES] button to return to the beginning of the song and reset the initial tempo (♩=120).

Unlike format 0 files, Standard MIDI Files in Format 1 require time for the entire file to be loaded. When you press the [START/STOP] button to start a Format 1 Standard MIDI File, a message will appear asking you to "Please wait a moment."

During loading, the [START/STOP] button LED will blink rapidly, indicating that data is being loaded. When the song data has been loaded completely, playback will begin.

In Song Play mode, the Song Edit mode and Backing Sequence mode memory area is used when playing Format 1 Standard MIDI Files. If song data or backing sequence data is being edited, a message will ask you whether it is OK to erase this data from memory: "Ok to erase B.Seq&Song Edit."
If at this point you press the [RESET/YES] button, the backing sequence/song memory will be erased, and the song will begin playing back. If you do not wish to erase the song data or backing sequence data, save the data on a different disk. For details on saving edited song data refer to Song Edit mode "Page 12 Save" (☞Page 100 in this manual), and for saving backing sequence data refer to Disk/Global mode "Page 1. Disk parameters" section 1-2 Save (☞Page 133 in this manual). When you press the [TAP TEMPO/NO] button, the next song will begin loading.

If the size of the file being loaded is larger than the size of the memory buffer (maximum 156 K), a message of "Can't play all track" will appear after the loading operation has ended. If such data is played back, some of the tracks will not playback.
If you press the [RESET/YES] button the data that could be loaded will playback. If you press the [TAP TEMPO/NO] button, the operation will stop.

< If the file cannot be found >

In Song Play mode, only files with an extension of .MID are recognized. If the titles of Standard MIDI Files created on another instrument or computer are not displayed, it is possible that the filename extension is other than .MID.

♩ =(Tempo) [20...250]

This sets the playback tempo of the song. Normally, the song playback will begin at the tempo that was saved in the Standard MIDI File.
The tempo can be adjusted in the range of 20–250. However when using the [TAP TEMPO/NO] button to change the tempo, the range is limited to 40–240. The tempo will be reset to 120 if you stop playback and press the [Reset/YES] button, or if song playback ends.

M (Measure number) [001...999]

You can also specify a desired point in the song and playback from there. This can be done whether the file is playing or stopped.

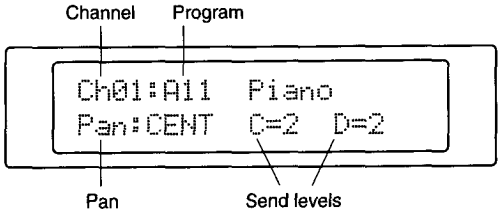
Use the [CURSOR] buttons to select the measure field, and use the [TEMPO/VALUE] buttons to specify the measure. If the song is already playing back when the measure is specified, the [START/STOP] button LCD will blink rapidly while the measure is being searched.

If in normal playback mode you specify a measure number greater than the last measure of the current song, the song will stop at the last measure, and a message of "Measure not exists. Continue?" will appear.
If you now press the [RESET/YES] button, playback will continue with the next song. If you press the [TAP TEMPO/NO] button, playback will stop at the last measure of the current song.

When you move to a measure in a song that contains tempo change or program change data, the tempo setting and the program settings for each channel will be updated to the settings intended for the measure to which you moved. However, settings will not be updated for channels which are muted. If you wish to update the settings for these channels as well, change the channel status from MUTE to PLAY.

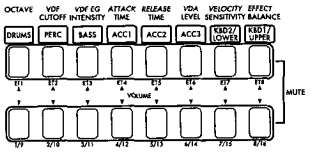
Page 2. Channel settings

While a song file is playing back, the settings for each channel that you make in this page will change to the settings of the Standard MIDI File song. When the song playback ends, the values will be reset.



Ch (Channel) [01...16]

To select channels **1–8**, press a [TRACK/CHANNEL] button.
To select channels **9–16**, press the [SONG PLAY] button once again to make the [SONG PLAY] LED blink, and you can use the [TRACK/CHANNEL] buttons to select channels 9–16.



The sound played by the keyboard will change to the sound of the selected channel.

Program [A11...U88, Dr11...Dr44]

This displays the sound program played by the selected channel.

To change the current program, use the [PROGRAM BANK] buttons and the [PROGRAM NUMBER] buttons.
To select a drum program (Dr11–Dr44), press the PROGRAM BANK [USER/DRUM] button several times to make the display read Dr, and then press a [PROGRAM NUMBER] button.

Channel 10 will always play a DRUM bank program. (If you wish to playback a Standard MIDI File in which channel 10 is other than DRUM, change the sound program here.

Pan [OFF, L15...CENT...R15, PROG]

This sets the stereo location of the sound of each channel. This will be the A and B levels of the stereo channel.

CNT will place the sound of that channel in the center.
L settings will place the sound toward the right, and **R** settings toward the left. As this value is increased the sound will move further away from the center.
OFF will turn off the channel output to channels A and B.
With a setting of **PROG**, the pan settings specified by each program will be used without change.

C=/D= (Send levels) [0...9, P]

These parameters set the send levels of the Standard MIDI File that are sent from channels C and D to the effect section.

With a setting of **P**, the effect send levels specified by each program will used.

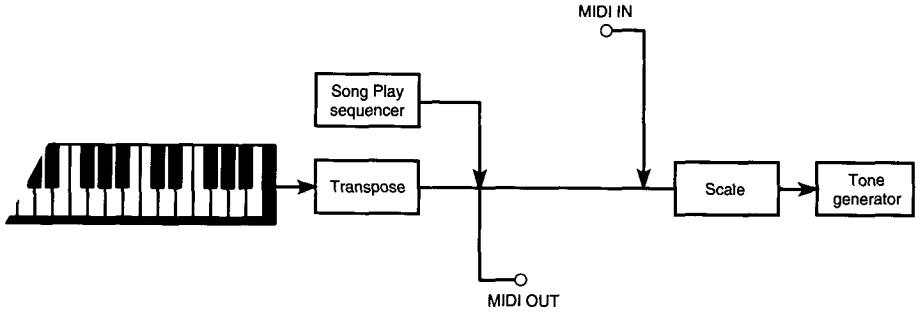
Page 3. Transpose position

Transpose position [KBD/MIDI, ALL/MIDI, ALL/INT]

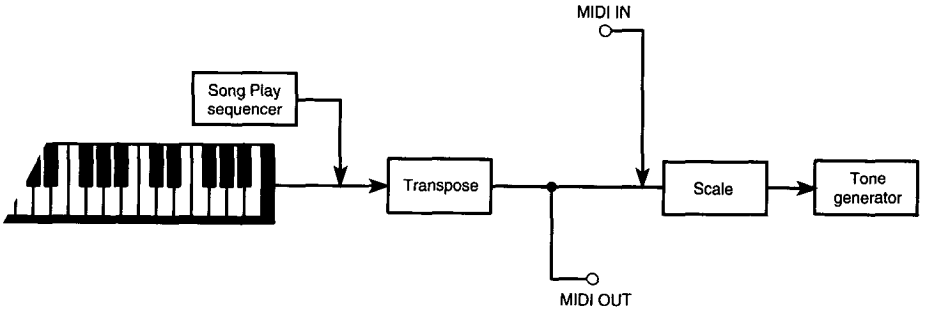
This setting determines whether the setting of the [TRANSPOSE] buttons will apply to the sound played by the keyboard, to the sound that is played back, or to the messages that are transmitted from MIDI OUT.
This setting is valid only in Song Play mode, and in this case, the Transpose Position setting of Disk/Global mode "Page 2. Master tuning/Transpose position" will be ignored.

The [OCTAVE] buttons always apply only to the sound played by the keyboard, and are not affected by this setting.

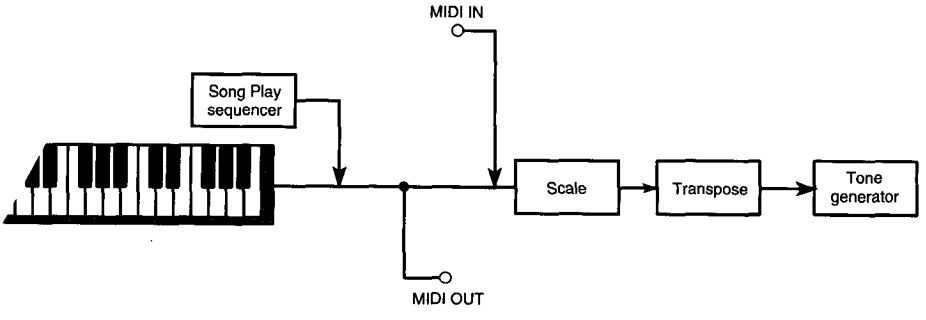
With a setting of **KBD/MIDI**, notes will be transposed when they are produced by the keyboard. This means that notes sounded by the internal tone generator or by an external MIDI tone generator connected to MIDI OUT will be transposed only if the notes were played on the *iX300*'s keyboard. Notes played from the sequencer or notes received from MIDI IN will not be transposed.



With a setting of **ALL/MIDI**, notes played on the keyboard and notes played by the sequencer will both transposed. This means that transposed notes will be sent to the internal tone generator as well as to an external tone generator connected to MIDI OUT. Notes received from MIDI IN will not be transposed.

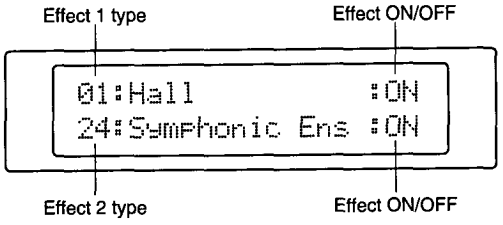


With a setting of **ALL/INT**, notes will be transposed immediately before they enter the tone generator. This means that the transposed sound will be played, but that the notes transmitted from MIDI OUT will not be transposed. Notes received at MIDI IN will be transposed.



Page 4. Effect select

Here you can select effects, allowing you to add a professional finish to the song that is played.



Here you can use the *iX300*'s two digital effect processors to apply effects. The two digital processors allow two different effects to be applied simultaneously to modify the sound of the programs that are played, and greatly enhance the musical expression.

Effect type [00: No Effect...47: Delay/Rotary]

The effect type can be selected independently for Effect 1 and Effect 2.

For details on each effect type, refer to "6. Effects" (☞Page 103 in this manual).

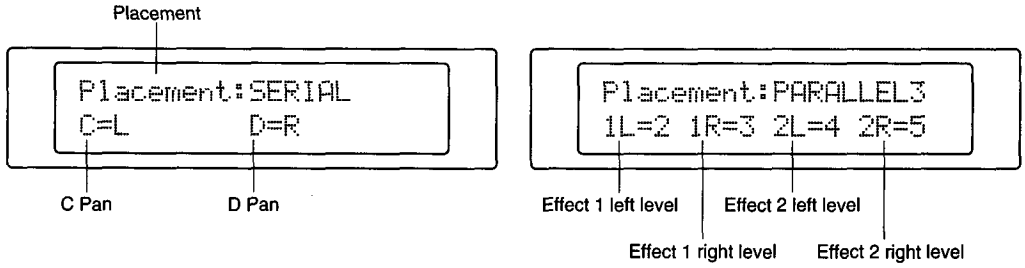
Effect ON/OFF [OFF, ON]

This switches each effect on/off.

The selected effect can also be switched on/off using an optional footswitch, foot pedal, or EC5 external controller. For details refer to Disk/Global mode "Page 7. Assignable pedal settings" and "Page 8. EC5 external controller settings."

Page 5. Effect placement

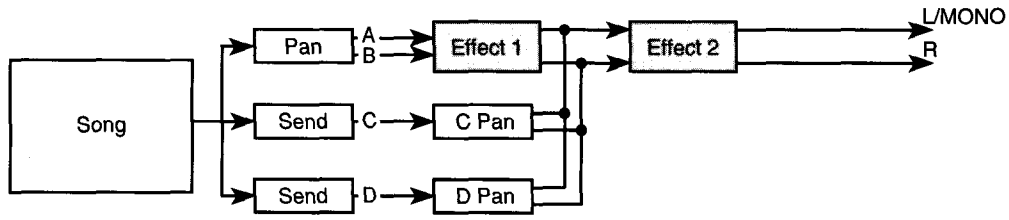
Here you can specify how the two effect processors applied to the song will be combined (including the pan and level settings for channels C and D).



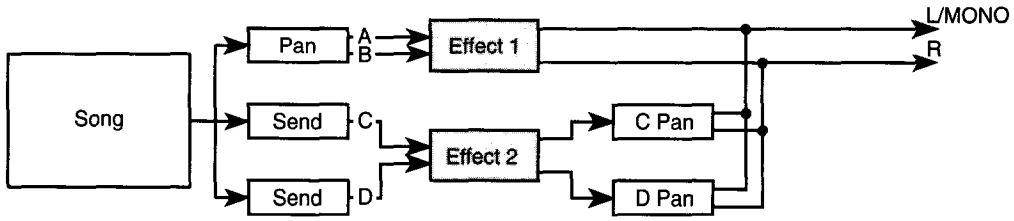
Placement (SERIAL, PARALLEL 1, PARALLEL 2, PARALLEL 3)

Specifies the placement of the two effects and of the C/D pan and L/R level adjustments of channels C and D.
Pan and send levels to the effects are set independently for each channel in "Page 2. Channel settings."

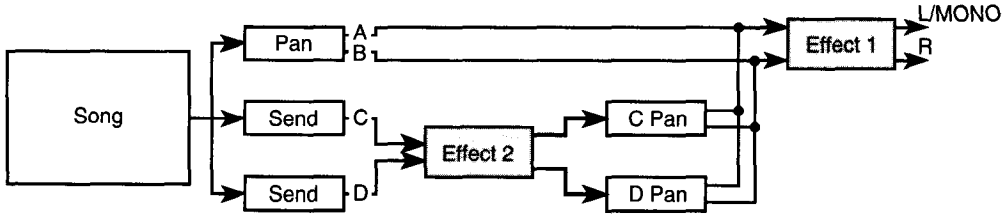
With a setting of **SERIAL**, effects 1 and 2 will apply to channels A and B. Since the signals from channels C and D will be mixed in at the locations specified by C Pan and D Pan after effect 1, only effect 2 will be applied to them.



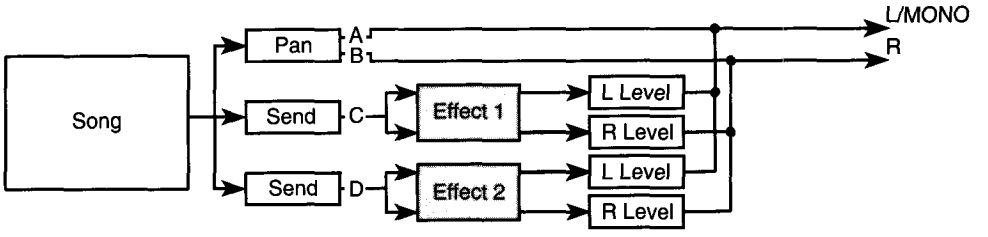
With a setting of **PARALLEL 1**, effect 1 will apply to channels A and B, and effect 2 will apply to channels C and D. After effect 2, the C Pan and D Pan parameters will set the panning. Finally, the signals from the two effects will be mixed.



With a setting of **PARALLEL 2**, effect 2 will apply to channels C and D, and after effect 2 the C Pan and D Pan parameters will set the panning. Then the signal will be mixed with channels A and B and sent through effect 1.



With a setting of **PARALLEL 3**, effect 1 will be applied to channel C, and effect 2 will be applied to channel D. The left/right levels of effect 1 and 2 are specified, and their signals are then mixed with channels A and B. These are the effect send/return settings which mix the dry (unprocessed) sound with the wet (processed) sound.



C (C Pan) [OFF, R, 99:01...01:99, L]

This sets the panning of the signal from channel C.
This setting will appear if a Placement of SERIAL, PARALLEL 1, or PARALLEL 2 is selected.

L places the signal at the left.
R places the signal at the right.
OFF turns off the channel C signal.

D (D Pan) [OFF, R, 99:01...01:99, L]

This sets the panning of the signal from channel D.
This setting will appear if a Placement of SERIAL, PARALLEL 1, or PARALLEL 2 is selected.

L places the signal at the left.
R places the signal at the right.
OFF turns off the channel D signal.

1L/1R (Effect 1 Left/Right Level) [0...9]

This sets the level of the signal from effect 1 that is mixed with channels A and B.
This setting will appear if a Placement of PARALLEL 3 is selected.

As this **value is increased**, the level of the signal mixed with channels A and B will increase.
With a setting of **0** the signal will be off.

2L/2R (Effect 2 Left/Right Level) [0...9]

This sets the level of the signal from effect 2 that is mixed with channels A and B.
This setting will appear if a Placement of PARALLEL 3 is selected.

As this **value is increased**, the level of the signal mixed with channels A and B will increase.
With a setting of **0** the signal will be off.

Page 6. Effect 1 parameters
Page 7. Effect 2 parameters

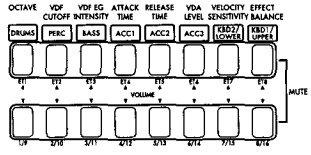
Pages 6 and 7 contain parameter settings for the effects that were selected in "Page 4. Effect select." In these pages you can set parameters for the effects that will be used in Song Play mode. The settings for effects used in other modes are set in the respective mode.
The effect parameters that can be set in these pages will depend on the effects that are selected. For details on effect parameters, refer to "6. Effects" (☞Page 103 in this manual).

Button settings

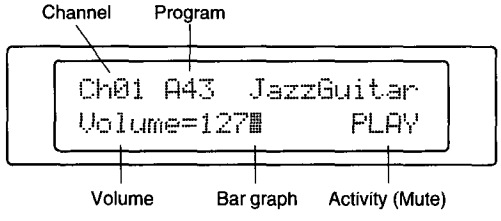
In addition to the parameters that are displayed in the various pages, the ***iX300*** has a variety of parameters that are accessed by pressing buttons.

[TRACK/CHANNEL] buttons

These buttons can be used to adjust the volume of the sound program assigned to each channel, or to mute (silence) the channel.
Press a [TRACK/CHANNEL] button for the desired channel, and the setting display for the corresponding channel 1–8 will appear. To see the setting display for channels 9–16, press the [SONG PLAY] button once again to make the LCD blink, and press a [TRACK/CHANNEL] button to select channels 9–16.



After setting the parameters, press [EXIT] to return to the previous display. Alternatively, the previous display will automatically reappear if 7 seconds pass without any operation being performed.



Volume [000...127]

Each time you press an upper (▲) [TRACK/CHANNEL] button, the volume of the corresponding channel will increase by 1 step. If you continue pressing, the volume will continue to increase.
Each time you press a lower (▼) [TRACK/CHANNEL] button, the volume will decrease by 1 step. If you continue pressing, the volume will continue to decrease.

The volume is displayed as a numeric value and as a bar graph to its right.

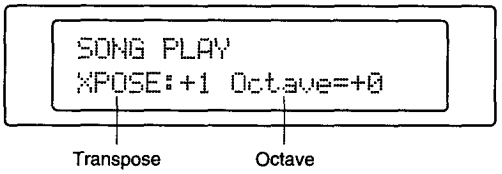
Activity [– – –, PLAY]

Each time you simultaneously press the upper (▲) and lower (▼) buttons for a channel, that channel will alternate between muted (silent) and un-muted (normal) states.

A muted status is indicated by – – –.
When a channel is not muted, the display will show **PLAY**, indicating that it can be played back.

[TRANSPOSE] buttons

If you need to transpose the music, press the TRANSPOSE [+1] or [–1] buttons, and the transpose setting will appear.



The pitch can be transposed in semitone steps over a range of 11 steps upward or downward. When transpose is modified, not only the sounds played by the keyboard, but also all channels of the song play data will be transposed as well. Simultaneously pressing [+1] and [–1] will reset the setting to 0. After setting the parameter, press the [EXIT] button to return to the previous display. Alternatively, the previous display will reappear automatically if approximately 7 seconds pass without any operation being performed.

[OCTAVE] buttons

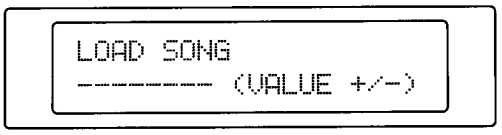
The settings of these buttons will not affect Standard MIDI File playback, but will affect notes played on the ***iX300***'s keyboard. When the OCTAVE [UP] or [DOWN] buttons is pressed, the octave setting page will appear. The pitch can be shifted a maximum of 2 octaves up or down.

5. Song Edit mode

Display page		Contents	Manual page
1. Load		Load a Standard MIDI File	☞P. 88
2. Play & realtime recording		Playback and record song data	☞P. 88
3. Track parameters		Parameter settings for each track	☞P. 90
4. Event edit		Modify individual song data events	☞P. 91
5. Shift note		Transpose song data	☞P. 93
6. Erase song		Erase song data	☞P. 84
7. Edit 1	7-1. Delete measure	Delete measures	☞P. 94
	7-2. Insert measures	Insert measures	☞P. 95
	7-3. Erase measures	Erase data from measures	☞P. 96
8. Effect select		Effect type, effect on/off	☞P. 97
9. Effect placement		Effect placement	☞P. 98
10. Effect 1 parameters		Effect 1 parameter settings	☞P. 99
11. Effect 2 parameters		Effect 2 parameter settings	☞P. 99
12. Save		Save as Standard MIDI File	☞P. 100

Page 1. Load

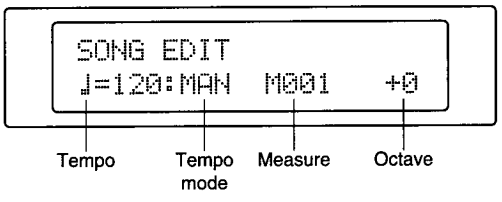
Load Standard MIDI Files.



Insert a disk (3.5 inch MS-DOS format, formatted capacity of 720 Kbytes or 1.44 Mbytes) containing Standard MIDI Files into the disk drive, and press the TEMPO/VALUE [UP/+] or [DOWN/–] button.
Files with a filename extension of .MID will be displayed (in the order in which they are stored on disk). Select the Standard MIDI File that you wish to load.
To load the selected file, press the [RESET/YES] button.
After the data has been loaded, press the [START/STOP] button to move to page 2 and begin playback. If you press the [EXIT] button in this page, you will also enter page 2.

Page 2. Play & realtime recording

Here you can playback the Standard MIDI File that was loaded. The song name will be displayed in the upper line.



Tempo [40...240]

This displays the recording or playback tempo of the song.
If you wish to adjust the tempo manually, set the following Tempo Mode parameter to MAN.

Tempo mode [AUT, MAN, REC]

A setting of **AUT** will cause tempo to follow the tempo track.
A setting of **MAN** will cause the tempo setting above to be used, and the tempo track will be ignored. If you wish to adjust the tempo manually during playback or recording, select MAN.
REC can be selected after the [REC] button is pressed. By selecting **REC** and then pressing the [START/STOP] button, you can record tempo changes to the tempo track. Playback will follow the data of the tempo track.

Measure [001...999]

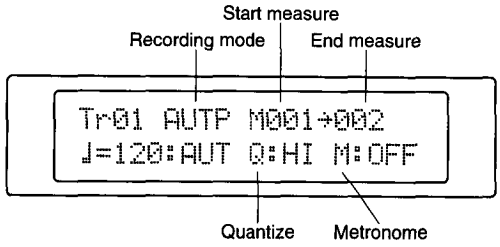
This displays the measure being played back or recorded.

Octave [–2...+2]

This indicates the keyboard octave. Use the [OCTAVE] buttons to modify the setting.

Realtime recording

When you press the [REC] button in page 2, you will enter the track recording page. Use the [TRACK/CHANNEL] buttons to select the track which will be recorded.
Set the various parameters and then press the [START/STOP] button to begin recording. Press it once again to stop recording.



Tr (Track) [0...16]

Selects the track that you wish to record.

Recording mode [OVWR, OVDB, AUTP, MANP]

OVWR (Overwrite recording) will overwrite the newly recorded data onto the track. Any data previously existing on the track will be erased, and replaced by the newly recorded data.
OVDB (Overdub recording) will add the newly recorded data to any previously existing data.
AUTP (Auto punch recording) allows you to specify a Start Measure and End Measure (located at the right in the display) before you begin recording, so that only the specified area of measures will be re-recorded.
MANP (Manual punch recording) lets you manually specify the area to be re-recorded. Playback the data, press the [REC] button at the beginning of the section that you wish to re-record. Recording will begin. When you reach the end of the section to be re-recorded, press the [REC] button once again, and recording will end (normal playback will resume). Instead of pressing the [REC] button, you can also use a pedal which has been assigned to PUNCH IN/OUT. When you press the pedal at the measure from which you wish to re-record, recording will begin. When you press the pedal once again, recording will end. To assign a pedal to PUNCH IN/OUT, refer to Disk/Global mode "Page 7. Assignable pedal settings" or "Page 8. EC5 external control settings."

Q (Recording quantize) [HI, 𝅘𝅥𝅯 ... ♩]

This sets the timing precision at which notes will be recorded.

With a setting of **HI**, notes will be recorded at the exact timing at which they were played. (On the ***iX300***, notes can be recorded at a precision of 1/96th of a quarter note.) With settings other than **HI**, all recorded notes will be moved to the nearest interval of the specified timing. For example if this parameter is set to ♩, all notes will be recorded at the nearest quarter-note interval. Please be aware that if pitch bend or other continuous controller data is recorded at a rough quantize setting, the changes during playback will sound unnatural.

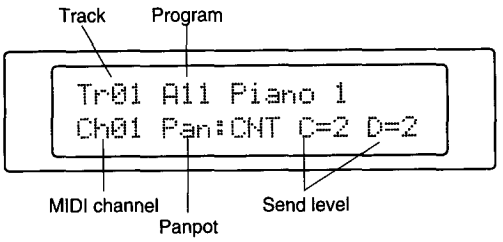
M (Metronome) [OFF, ON, REC]

This turns the metronome on/off.

With a setting of **OFF**, the metronome will sound only during the recording pre-count.
With a setting of **ON**, the metronome will sound during recording and playback.
With a setting of **REC**, the metronome will sound only during recording.

Page 3. Track parameters

Here you can view and modify the parameters of each track.



Tr (Track) [Ch01...Ch16]

To select a track 1–8, press the corresponding [TRACK/CHANNEL] button.
To select a track 9–16, press the [SONG EDIT] button to make the LED blink, and then press a [TRACK/CHANNEL] button.

Program [A11...U88, Dr11...Dr44]

This displays the program specified for the selected track.

To change the current program, use the [PROGRAM BANK] buttons and the [PROGRAM NUMBER] buttons.
To select a drum program (Dr11–Dr44), press the PROGRAM BANK [USER/DRUM] button several times to make the display read Dr, press a [PROGRAM NUMBER] button, and then press the [EXIT] button.

Ch (MIDI channel) [01...16]

This displays the MIDI channel specified for the selected track.
When a song is converted into a Standard MIDI File using "Page 12. Save," the MIDI channels specified here will be used. You may set two or more tracks to the same MIDI channel, but be aware that if Format 0 is used, program change and control data of these tracks will all be mixed together.

Pan [OFF, L15...CNT...R15, PRG]

This sets the stereo location of the sound of each track. This will be the A and B levels of the stereo channel.

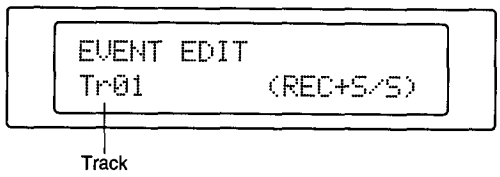
CNT will place the sound of that track in the center.
L settings will place the sound toward the right, and R settings toward the left. As this value is increased the sound will move further away from the center.
OFF will turn off the channel output to channels A and B.
With a setting of **PRG**, the pan settings specified by each program will be used without change.

C=/D= (Send levels) [0...9, P]

These parameters set the send levels of each track that are sent from channels C and D to the effect section.

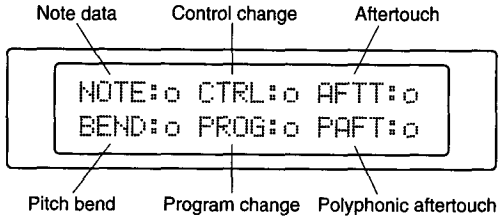
Page 4. Event edit

Here you can perform detailed editing of individual events such as notes or control changes.



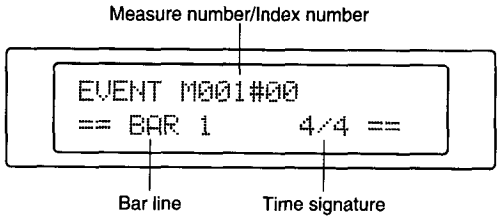
Track [01...16, Tempo]

Selects the track in which you wish to perform event editing.
When you press the [REC] key, the Event Filter setting page will appear.
Select "o" for the types of musical events that you wish to view (and edit) in the event edit display, and select "x" for types of event that you do not wish to view.
For the various types of event, refer to the "Event types" table on the following page.



Press the [START/STOP] button to switch to the Event Edit page.
When you finish editing, press the [START/STOP] button once again.

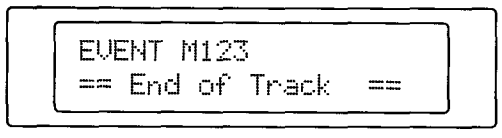
● Bar lines



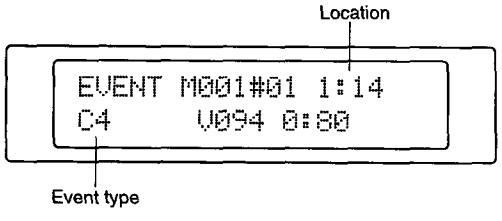
- **Measure number/Index number**
  The index number is a number that indicates the number of the event within the measure. By modifying this number you can step through the various events in the measure. Index number 0 in each measure displays the bar line (the division between measures) and the time signature.

- **Time signature**
  This indicates the time signature of the measure.

● End of track



● Events



- **Location** **[1:00...8:95]**
  This indicates the location within the measure. The value is displayed as the number of quarter notes and 1/96th of a quarter note steps. If this is displayed as TIE, the note has been tied from a note in the previous measure.

- **Event type**

Event type	Values	
C-1...G9 (note data)	V:002...V:126 (velocity)	0:00...4:00 *1 length (beats:clocks)
BEND (pitch bend)	–8192...+8191 *2 (upper/lower values)	
AFTT (aftertouch)	000...127 (value)	
PROG (program change)	000...127: 000...127 *3 (program bank: program number)	
CTRL (control change)	C000...C127 (control change number)	000...127 (control number)
PAFT *4 (polyphonic aftertouch)	C-1...G9 (note number)	000...127 (value)

*1. If connected to a note in the next measure, this will be displayed as TIE.
*2. Use the [CURSOR] buttons to set the upper and lower pitch bend values.
*3. 02 is the drum bank, but the actual drum programs correspond as follows.
000...127 indicate the LSB of the MIDI bank change, and the MSB is 0.
- - - will not transmit the program bank. The previously-specified bank will be used.
*4. MIDI Polyphonic Key Pressure messages will be transmitted. (The ***iX300*** cannot receive this message.)

- You can delete the displayed event by pressing the [SPLIT POINT/DEL] button. However it is not possible to delete BAR (bar line) or End of Track (the end-of-track indicator).
- You can insert an event before the displayed event by pressing the [SUSTAIN/INS] button. However this is not possible if the bar line of the first measure is displayed.

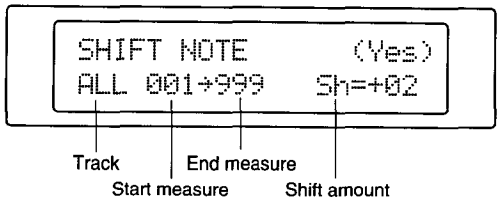
Correspondence between Drum Numbers and actual Drum Programs

PROGRAM NUMBER	DRUM PROGRAM
000...015	Dr11:GM Kit
016...023	Dr12:Power Kit
024	Dr17:User 1
025	Dr13:Analog Kit
026...031	Dr17:User 1
032...039	Dr14:Jazz Kit
040...047	Dr15:Brush Kit
048...055	Dr18:User 2
056...063	Dr11:GM Kit
064...071	Dr16:Perc Kit1
072...107	Dr11:GM Kit
108	Dr31:MovieKit
109	Dr32:i1Funky Kit
110	Dr33:LATIN Dr
111	Dr34:LATIN Per
112	Dr35:Steam' in

PROGRAM NUMBER	DRUM PROGRAM
113	Dr36:On'n' OFF!*
114	Dr37:BitMessed*
115	Dr38:16beat Kit
116	Dr41:Bossa Kit
117	Dr42:Samba Kit
118	Dr43:World Kit
119	Dr44:Gypsy Kit
120	Dr21:Dance Kit
121	Dr22:Orch Kit
122	Dr23:Funky Kit
123	Dr24:House Kit
124	Dr25:Rave Kit
125	Dr26:GP Kit
126	Dr27:Latin Kit
127	Dr28:Perc Kit 2

Page 5. Shift note

This operation shifts the pitch of notes in the specified measures of the selected track up or down in semitone steps.
However if the program in the selected channel is a drum bank program, this will have no effect.
When you finish making settings, press the [RESET/YES] button. You will be asked for confirmation, so press the [RESET/YES] button once again to execute.



Track [Ch01...Ch16, ALL]

Selects the track(s).

If you select **ALL**, notes will be shifted in all tracks.

Start measure [001...999]

Specifies the first measure in which notes will be shifted.

End measure [001...999]

Specifies the last measure in which notes will be shifted.

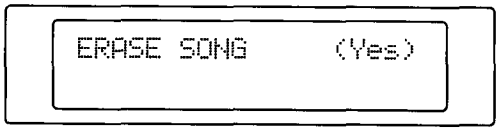
Sh= (Shift amount) [-24...+24]

Specifies the amount of pitch shift.

A setting of **+24** will raise the note pitches by 2 octaves.
A setting of **–24** will lower the note pitches by 2 octaves.
A setting of **+00** will have no effect.

Page 6. Erase song

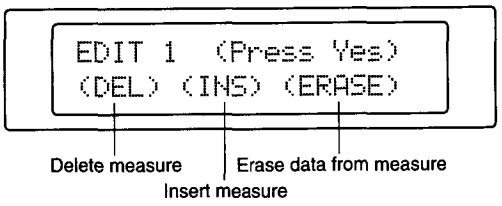
When a song is loaded, the backing sequence capacity will decrease correspondingly, and it may no longer be possible to load a backing sequence file. If this occurs, use this operation to delete the song data. Press the [RESET/YES] button. You will be asked for confirmation, so press the [RESET/YES] button once again to erase the song.



If you wish to keep the song data, use "Page 12. Save" to save it to floppy disk before you erase it.

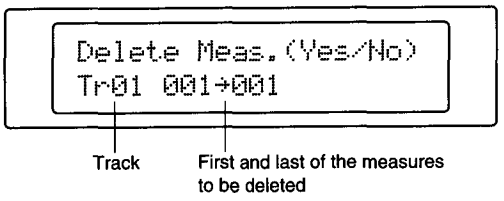
Page 7. Edit 1

In this page you can select one of the following three operations: delete measures (DELETE), insert measures (INSERT), or erase data from measures (ERASE).
Use the [CURSOR] buttons to move the cursor to the desired operation, and press the [RESET/YES] button to access the sub-page in which that operation can be executed.



7-1. Delete measure

This operation deletes measures from the specified track.



① Use the [CURSOR] buttons to move the cursor to the channel, and use the [TEMPO/VALUE] buttons to specify the channel.

② Move the cursor to select the first and last of the measures that are to be deleted. If you wish to delete only one measure, set the same number for each field.

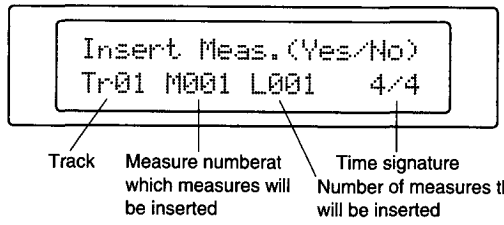
③ After specifying the measures that are to be deleted, press the [RESET/YES] button.

< How the time signature is affected >

The measures that follow the deleted measures will be moved toward the beginning of the song to fill the gap. If you delete measures from a single channel, the subsequent measures that are moved will have the same time signature as other channels.
Measures whose measure number was affected by the delete measure operation may be shortened or lengthened as a result.

7-2. Insert measures

This operation inserts measures into the specified location.



① Use the [CURSOR] buttons to move the cursor to the track, and use the [TEMPO/VALUE] buttons to specify the track. If you specify ALL, measures will be inserted into all tracks (chord track, control track, tempo track etc.).

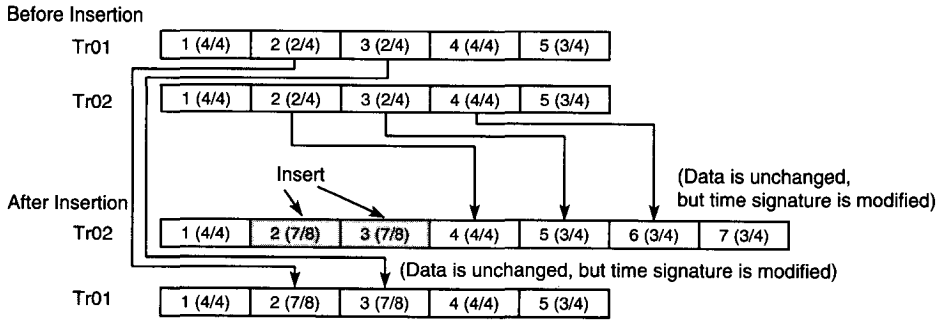
② Move the cursor to specify the measure number at which the measures will be inserted, and the number of measures. You may also specify the time signature of the new measures, but since other tracks will be affected if measures of a different time signature are inserted, refer to the following diagrams before you specify the time signature.

③ After settings are complete, press the [RESET/YES] button.

< If you insert measures of a different time signature >

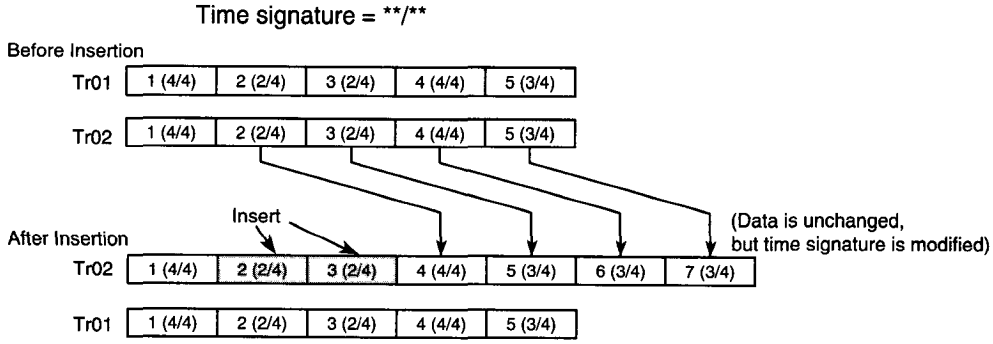
The modified time signature will apply if tempo is set to ♩=AUT.
If a different time signature is selected, the corresponding measures of all tracks will be set to this time signature, meaning that those measures will become either longer or shorter.

Inserting two measures of time signature = 7/8



If you execute the Insert operation with a setting of **/**, the new measures will have the same time signature as the corresponding measures of other tracks which already contain data. If other tracks are all empty, the same time signature as the next appearing measure will be used.

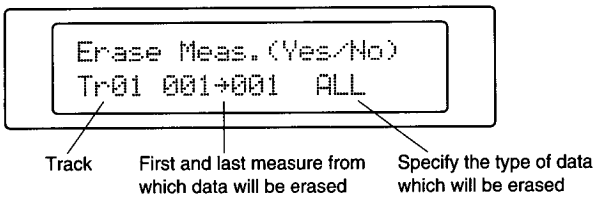
Time signature = **/**



Regardless of whether you select a different time signature or not, the measures which follow the inserted portion will be moved backward (toward the end of the song). If you insert measures into only one track, the measures which are moved backward will be given the same time signature as the corresponding measures of the other tracks.
As a result of the insertion, measures whose numbers have changed may be shortened or lengthened.

7-3. Erase measures

This operation erases part or all of the data from the specified measure(s).



① Use the [CURSOR] buttons to move the cursor to the track, and use the [TEMPO/VALUE] buttons to specify the track.

② Move the cursor to specify the first and last measure numbers from which data will be erased. If you wish to erase data from only one measure, set the same number for both.

Type of data	Erased data
ALL	All data
NOTE	All note messages
CTRL	All control change messages
AFTT	Channel/polyphonic aftertouch messages
BEND	All pitch bend messages
PROG	All program change messages

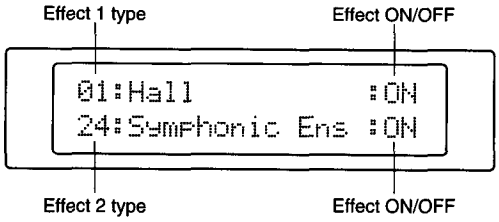
③ After settings are complete, press the [RESET/YES] button.

< Erasing control changes >

For CTRL (control change) messages such as damper switch (and also for pitch bend messages), erasing the message which turns off the effect (or resets the normal pitch bend value) will mean that the effect will be "stuck" on. If this occurs, either erase the remaining messages, or use "Page 4. Event edit" (☞Page 91 in this manual) to correct the data.

Page 8. Effect select

Here you can select the effects, allowing you to add a professional-sounding touch to the song that is played.



The *iX300*'s two digital effect processors can be used to apply effects to the song. The two digital processors allow two different effects to be applied simultaneously, to apply various effects to the playback of the Standard MIDI File, greatly enhancing the musical expression.

Effect type [00: No Effect...47: Delay/Rotary]

The effect type can be selected independently for Effect 1 and Effect 2.

For details on each effect type, refer to "6. Effects" (☞Page 103 in this manual).

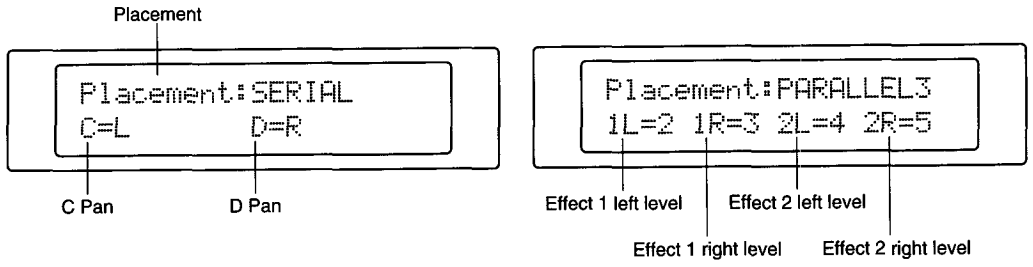
Effect ON/OFF [OFF, ON]

This switches each effect on/off.

The selected effect can also be switched on/off using an optional footswitch, foot pedal, or EC5 external controller. For details refer to Disk/Global mode "Page 7. Assignable pedal settings" and "Page 8. EC5 external controller settings."

Page 9. Effect placement

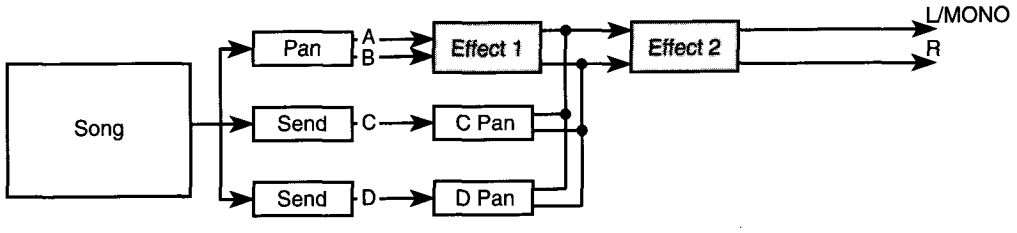
Here you can specify how the two effect processors applied to the song will be combined (including the pan and level settings for channels C and D).



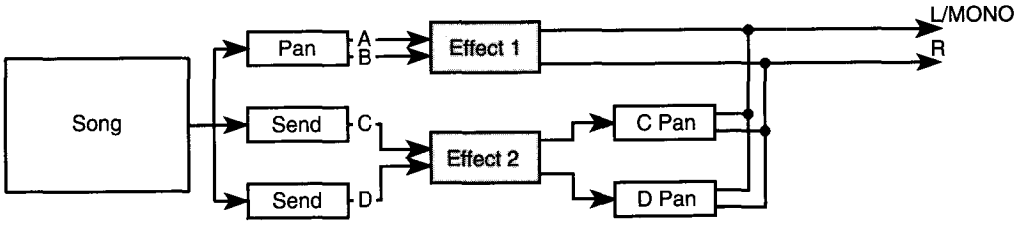
Placement (SERIAL, PARALLEL 1, PARALLEL 2, PARALLEL 3)

Specifies the placement of the two effects and of the C/D pan and L/R level adjustments of channels C and D.
For each channel, the pan and send levels to the effects are set by "Page 3. Track parameters."

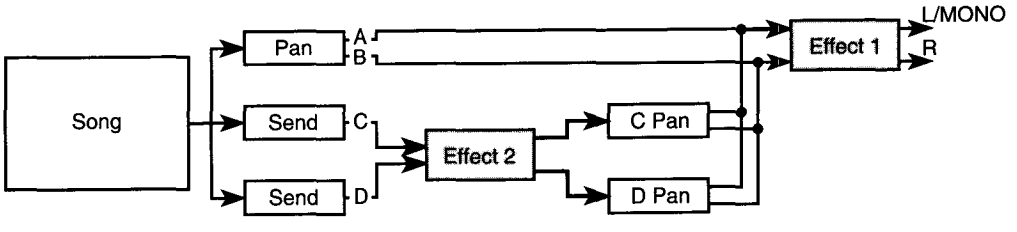
With a setting of **SERIAL**, effects 1 and 2 will apply to channels A and B. Since the signals from channels C and D will be mixed in at the locations specified by C Pan and D Pan after effect 1, only effect 2 will be applied to them.



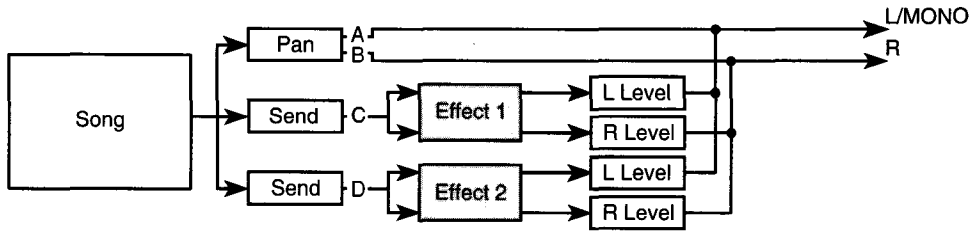
With a setting of **PARALLEL 1**, effect 1 will apply to channels A and B, and effect 2 will apply to channels C and D. After effect 2, the C Pan and D Pan parameters will set the panning. Finally, the signals from the two effects will be mixed.



With a setting of **PARALLEL 2**, effect 2 will apply to channels C and D, and after effect 2 the C Pan and D Pan parameters will set the panning. Then the signal will be mixed with channels A and B and sent through effect 1.



With a setting of **PARALLEL 3**, effect 1 will be applied to channel C, and effect 2 will be applied to channel D. The left/right levels of effect 1 and 2 are specified, and their signals are then mixed with channels A and B. These are the effect send/return settings which mix the dry (unprocessed) sound with the wet (processed) sound.



C (C Pan) [OFF, R, 99:01...01:99, L]

This sets the panning of the signal from channel C.
This setting will appear if a Placement of SERIAL, PARALLEL 1, or PARALLEL 2 is selected.

L places the signal at the left.
R places the signal at the right.
OFF turns off the channel C signal.

D (D Pan) [OFF, R, 99:01...01:99, L]

This sets the panning of the signal from channel D.
This setting will appear if a Placement of SERIAL, PARALLEL 1, or PARALLEL 2 is selected.

L places the signal at the left.
R places the signal at the right.
OFF turns off the channel D signal.

1L/1R (Effect 1 Left/Right Level) [0...9]

This sets the level of the signal from effect 1 that is mixed with channels A and B.
This setting will appear if a Placement of PARALLEL 3 is selected.

As this **value is increased**, the level of the signal mixed with channels A and B will increase.
With a setting of **0** the signal will be off.

2L/2R (Effect 2 Left/Right Level) [0...9]

This sets the level of the signal from effect 2 that is mixed with channels A and B.
This setting will appear if a Placement of PARALLEL 3 is selected.

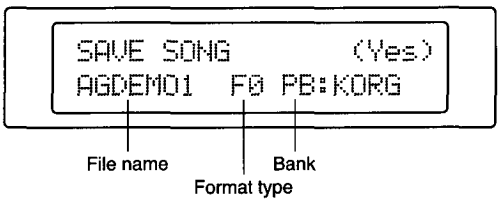
As this **value is increased**, the level of the signal mixed with channels A and B will increase.
With a setting of **0** the signal will be off.

Page 10. Effect 1 parameters
Page 11. Effect 2 parameters

Pages 10 and 11 contain parameter settings for the effects that were selected in "Page 8. Effect select," and allow you to change the effect settings that will be used by the song that is loaded. The settings for effects used in other modes are set in the respective mode. The effect parameters that can be set in these pages will depend on the effects that are selected. For details on effect parameters, refer to "6. Effects" (☞Page 103 in this manual).

Page 12. Save

Here you can save song data to floppy disk as a Standard MIDI File. At the time of saving, you can also modify the filename.
To save the song, press the [RESET/YES] button. You will be asked for confirmation, so press the [RESET/YES] button once again to execute saving.



You can specify a file name of up to 8 characters.
Use the [CURSOR] keys to move the cursor to the location of the character you wish to modify, and use the [TEMPO/VALUE] buttons to modify the character.
Pressing the [SUSTAIN] button will copy the character at the cursor, allowing a character to be inserted at that location. Pressing the [SPLIT POINT] button will delete the character at the cursor location.

Format type [0, 1]

Specifies the format of the Standard MIDI File.
If you will be playing back the file in Song Play mode, saving the data in format **0** will allow playback to begin more quickly, and the song will also occupy less memory.
If two or more tracks of the edited data use the same channel (for example if you have recorded right hand and left hand parts separately, or recorded drum parts on separate tracks), save the data in format **1**.
However if a large amount of data is saved in format 1, some of the tracks may not play back in the ***iX300***'s Song Play mode.

PB (Program bank) [NUM, KORG, SERI]

Specifies whether or not bank select messages will be added.

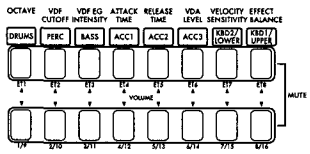
With a setting of **NUM**, bank select messages will not be output. However for channels other than 10, if sounds from banks other than A or B were used, playback will not occur with the correct programs.
With a setting of **KORG**, the Korg bank select messages will be output. Banks A and B and the drum bank will be compatible with other Korg GM-compatible products. However in some cases, there may be no sound on some products of other manufacturers.
With a setting of **SERI**, bank select message will be output as follows: AB=00,00, CU=00,01, Dr=00,02, and DE=00,03.

Button settings

In addition to the parameters that are displayed in the various pages, the ***iX300*** has a variety of parameters that are accessed by pressing buttons.
After setting the parameters, press the [EXIT] button to return to the previous display. Alternatively, the previous page will reappear automatically if no operations are performed for approximately 7 seconds.

[TRACK/CHANNEL] buttons

When page 1 or page 2 is displayed, these buttons can be used to adjust the volume assigned to each track, to mute (silence) the track, and to change the program.
Press a [TRACK/CHANNEL] button, and the setting display for the corresponding track will appear.



When the channel setting is displayed, you can use the [PROGRAM BANK] buttons and [PROGRAM NUMBER] buttons to select the program for each track.

Volume [000...127]

To set the volume of a track 1–8, press the corresponding [TRACK/CHANNEL] buttons.
To set the volume of a track 9–16, press the [SONG EDIT] button to make the LED blink, and then press a [TRACK/CHANNEL] button.
Each time you press an upper (▲) [TRACK/CHANNEL] button, the volume of the corresponding channel will increase by 1 step. If you continue pressing, the volume will continue to increase.
Each time you press a lower (▼) [TRACK/CHANNEL] button, the volume will decrease by 1 step. If you continue pressing, the volume will continue to decrease.

Activity [PLAY, - - - -, ====]

Each time you simultaneously press the upper (▲) and lower (▼) [TRACK/CHANNEL] buttons for a channel, that track will alternate between muted (silent) and un-muted (normal) states.
When a channel is not muted, the display will show **PLAY**, indicating that it can be played back.
A muted status is indicated by - - - -.
If that track has no data, the display will indicate ====.

6. Effects

This chapter explains the effect types that can be used in the various modes of the ***iX300***. In Arrangement Play, Backing Sequence, Program, Song Play, and Song Edit modes, each mode has its own pages in which effect settings can be made. Effects are a very important aspect of the overall sound.
The word "effects" is used referring to a variety of different digital processing methods that are applied to the sound of an instrument (or to the sound of the entire performance) to create an impression of depth or spaciousness, or to add a unique character to the sound. Effects are indispensable to adding the finishing touch to the sound.
The ***iX300*** provides 47 different types of effect, beginning with those essential for any type of music (reverb, chorus, etc.) and including effects such as exciter and enhancer. Simply reading the explanation for each effect may not be enough to give you an idea of the sound. But the best way to understand each effect is to actually listen to it on the ***iX300***, and hear for yourself the unique character that each effect adds to the sound.
Since the ***iX300*** has two independent effect processors, up to 2 types of effect can be applied simultaneously.
In addition, you can use a foot pedal to switch effects on/off while you play.

Effect type

The ***iX300*** has 47 different effects, and these can be classified into the following 25 Types.

Effect number	Effect type
0	No Effect
1–9	Reverb
10–12	Early Reflection
13–14	Stereo Delay
15	Dual Delay
16–18	Multitap Delay
19–20	Chorus
21–22	Quadrature Chorus
23	Harmonic Chorus
24	Symphonic Ensemble
25–27	Flanger
28	Exciter
29	Enhancer
30–31	Distortion
32–33	Phaser
34	Rotary Speaker
35–36	Tremolo
37	Parametric Equalizer
38–39	Chorused/Flanged Delay
40–41	Delay & Reverb
42	Delay & Chorus
43	Delay & Flanger
44–45	Delay & Distortion
46	Delay & Phaser
47	Delay & Rotary Speaker

Dynamic modulation

If an optional Korg XVP-10 or EXP-2 pedal controller is connected to the ASSIGN PDL/SW jack, and you set the Disk/Global mode "Page 7. Assignable pedal settings" (☞Page 139 in this manual) to EFFECT CONTROL, a foot pedal can be used to control the effects in various ways. The aspect of the effect that can be controlled will depend on the effect; for example it might be the balance between the original sound and processed sound, the speed of modulation, or the frequency that is being emphasized.
However for some effect settings, dynamic modulation may not have a noticeable result.
In the LCD, parameters which can be controlled using dynamic modulation while you play are indicated by a "→" symbol (except for 34: Rotary Speaker and 47: Delay & Rotary Speaker). In this manual, such parameters are marked by a D-mod symbol.

Shelving equalizer

Many of the *iX300*'s built-in effects have a two-band shelving-type equalizer that can boost or cut the low and high frequency ranges, and the equalizer will continue functioning even if the switch parameter is used to turn the effect on/off. However the Stereo Delay (13, 14), Stereo Chorus (19, 20), Exciter (28), and Tremolo (35, 36 effects) are exceptions.

If you wish to listen to the un-equalized sound while editing a program, you will have to set the effect selection to 00:No Effect to turn off both effect processors.

Settings for each effect

Explanations for each of the 25 effect types are given below.

00: No Effect

When **00: No Effect** is selected, effects will not be applied to the sound. Select this if you want the sound to be dry, with no effects.

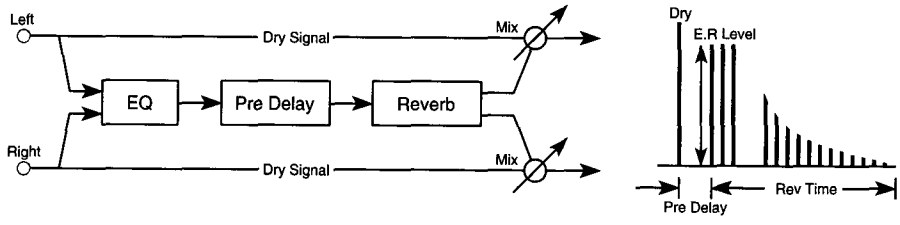
As an alternative to selecting No Effect, you can also turn off the effects by using an optional foot switch. However the foot switch is designed for realtime control while you play, while selecting No Effect is used when no effects are to be applied to the sound at all.

01...09: Reverb

Reverb adds reverberance to the sound, creating a more natural impression. This is the most frequently used effect.
The ***iX300*** provides nine types of reverb effect.

01: Hall simulates the acoustics of a small concert hall, such as might be used by a string quartet or acoustic jazz band.
02: Ensemble Hall is a slightly larger hall, suitable for orchestral or brass ensembles.
03: Concert Hall has greater emphasis on the early reflections, and is suitable for full orchestras.
04: Room reproduces the feeling of a standard room.
05: Large Room simulates a larger room with greater density, and is similar to gated reverb.
06: Live Stage has a sound similar to what you might hear in a gymnasium, and re-creates the atmosphere of a rock concert.
07: Wet Plate and **08: Dry Plate** simulate plate reverbs, devices which are often used to add emphasis to vocals or solo instruments. Wet Plate is heavy, and Dry Plate is light.
09: Spring Reverb simulates a spring reverb device of the type often used in guitar amplifiers.

For each of these, the sound passes through a two-band shelving equalizer located before the reverb effect.
Some of these reverb effects produce a rapid series of initial delays which are known as Early Reflections. The "wash" of reverberation will follow this, and gradually die away.



	Reverb time	Depends on the effect	Set the time over which the reverberation decays
P	Pre delay	0...200 ms	Set the delay from the direct sound until when the early reflections begin. Higher values will cause the reverberation to be more distinct, like an echo.
E	Early reflection level	Depends on the effect	Set the volume of the early reflection components of the reverberation. As this value is increased, the early reflections will be emphasized more greatly, allowing them to be heard clearly.
HD	High damp	0%...99%	Set the degree to which the high frequencies will be attenuated. Higher settings will cause the high frequencies to decay more rapidly.
L	Equalizer low	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region below 1 kHz.
H	Equalizer high	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region above 1 kHz.
→	Dry:Effect balance	DRY, B01...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the reverb sound will be heard. D-mod ☞Page 104 in this manual.

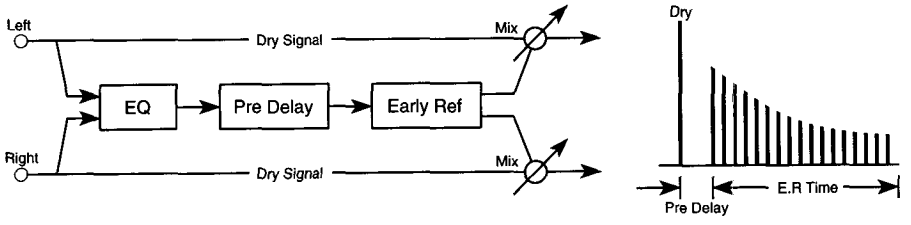
10...12: Early Reflections

These effects simulate just the early reflection component of natural reverberation.

Early reflections play an important role in determining the characteristics of an acoustic environment. They can be used to add solidity to the sound, to create echo-like delays, or to add interesting touches to the sound.

10: Early Ref 1 allows you to boost the low frequency components or produce effects similar to gated reverb. This effect is ideal for drum sounds.
11: Early Ref 2 causes the early reflections to decay more gradually.
12: Early Ref 3 produces reflections which increase instead of decreasing. When applied to a sound with a strong attack, this produces a reverse-tape effect.

Each of these three early reflection effects includes a two-band shelving equalizer.



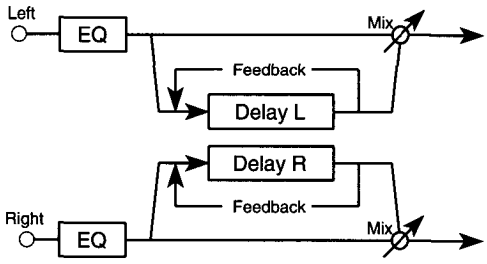
T	Early reflection time	100...800 ms	Set the time over which the early reflections will disappear. As this time is set to a longer value, the early reflections will become more pronounced.
P	Pre delay	0...200 ms	Set the delay from the direct sound until when the early reflections begin. Higher values will cause the reflections to be more obvious, producing a clearer echo sound.
L	Equalizer low	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region below 1 kHz.
H	Equalizer high	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region above 1 kHz.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the early reflection sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

13, 14: Stereo Delay

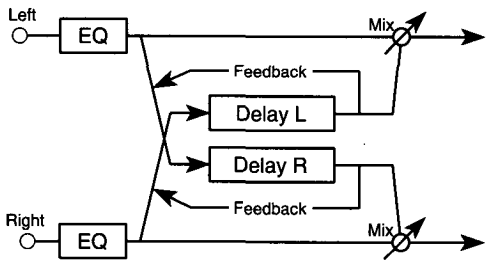
This effect produces a stereo delay (echo pattern). Since it is a stereo effect, you can set different delay times for left and right to pan the echoes in interesting ways. The Hi Damp parameter attenuates the high frequencies, making the delay repeats sound more natural.

13: Stereo Delay applies feedback independently for the left and right channels.
14: Cross Delay sends the delay feedback from the left to the right, and from the right to the left channel, making the sound bounce between the left and right channels.

These two effects route the left and right channels through a two-band shelving equalizer before applying the delay.



Stereo Delay

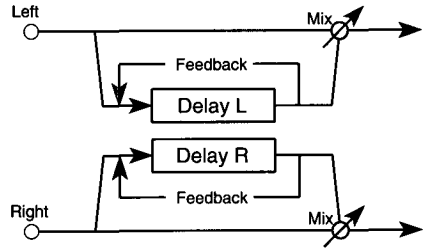


Cross Delay

L	Delay time L	0...500 ms	Set the length of the left channel delay.
R	Delay time R	0...500 ms	Set the length of the right channel delay.
F	Feedback	–99%...+99%	Set the amount of feedback; i.e., the amount of the delayed signal that will be returned to the input of the delay. Higher settings will produce a greater number of delay repeats, and it will take longer for the echoes to die away. Negative settings will invert the phase of the feedback, causing the echoes to have a harder tone quality, and less of a hollow feeling.
HD	High damp	0%...99%	Set the degree to which the high frequencies will be attenuated. Higher settings will cause the high frequencies to decay more rapidly.
L	Equalizer low	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region below 1 kHz.
H	Equalizer high	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region above 1 kHz.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the delayed sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

15: Dual Delay

15: Dual Delay applies an independent mono delay to the left and right input signals.



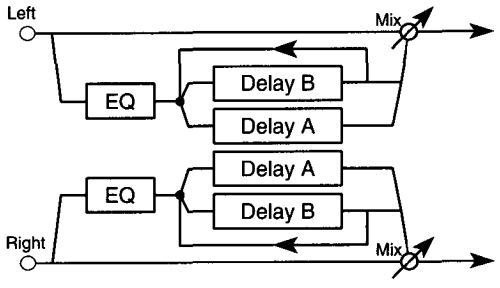
	Delay time L	0...500 ms	Set the delay length of the left channel.
L	Feedback L	–99%...+99%	Set the amount of feedback for the left channel; i.e., the amount of the delayed signal that will be returned to the input of the delay. Higher settings will produce a greater number of delay repeats, and it will take longer for the echoes to die away. Negative settings will invert the phase of the feedback, causing the echoes to have a harder tone quality, and less of a hollow feeling.
HD	High damp L	0%...99%	Set the degree to which the high frequencies of the left channel will be attenuated. Higher settings will cause the high frequencies to decay more rapidly.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX) for the left channel. With a setting of DRY, the effect will be turned off. With a setting of FX, only the echo will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.
	Delay time R	0...500 ms	Set the delay length of the right channel.
R	Feedback R	–99%...+99%	Set the amount of feedback for the right channel. The contents are the same as for the Feedback L parameter.
HD	High damp R	0%...99%	Set the degree to which the high frequencies of the right channel will be attenuated. Higher settings will cause the high frequencies to decay more rapidly.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX) for the right channel. The contents are the same as for the DRY:FX parameter explained above. D-mod ☞Page 104 in this manual.

16...18: Multitap Delay

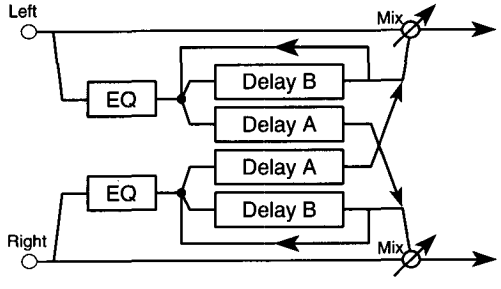
Multitap delay passes the input signals through two independent delays. The multi-echo effect that this produces will create a pair of echoes for each note that is played.

16: Multitap Dly1 is the standard multitap delay.
17: Multitap Dly2 cross-pans the signals, causing the echoed left and right channel signals to change places.
18: Multitap Dly3 exchanges the feedback between channels, causing each pair of echoes to switch between left and right.

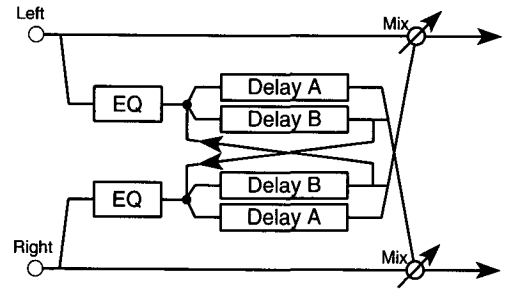
Each of these three effects provides a two-band shelving equalizer for the left and right channels.



Multitap Delay 1

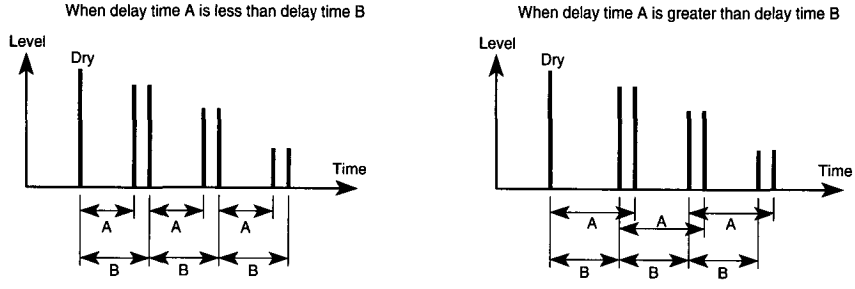


Multitap Delay 2



Multitap Delay 3

Of the two delays, feedback is applied only to one (delay B). This means that the timing of the second and subsequent echoes produced by both delays will be determined by the Delay B parameter, as shown in the following diagrams.



A	Delay time A	0...500 ms	Set the length of Delay A.
B	Delay time B	0...500 ms	Set the length of Delay B.
F	Feedback	–99%...+99%	Set the amount of feedback; i.e., the amount of the Delay B signal that will be returned to the input of the delay. Higher settings will produce a greater number of delay repeats, and it will take longer for the echoes to die away. Negative settings will invert the phase of the feedback, causing the echoes to have a harder tone quality, and less of a hollow feeling.
L	Equalizer low	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region below 1 kHz.
H	Equalizer high	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region above 1 kHz.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the echoes will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

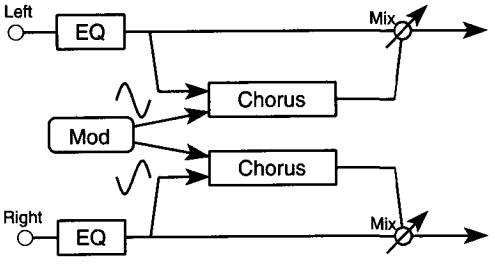
19, 20: Chorus

The chorus effects use an LFO (low frequency oscillator) to modulate the delay time, adding depth to the sound. This delay produces a slight variance in pitch, and when it is combined with the original signal, an effect as though multiple instruments were playing in unison is produced.

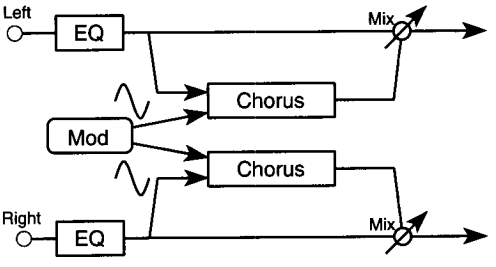
As with reverb, this effect is indispensable for music production using electronic musical instruments. It is especially widely used on synth pads such as strings and vocal chorus, and applying a chorus effect to such sounds will add a character of enveloping spaciousness. However much you may like this, it is still not a good idea to apply chorus to all of your sounds. Although chorus does add spaciousness to the sound, it can also turn sound into un-expressive mush. It is up to you, the musician, to use chorus appropriately for the type of music that you wish to create.

19: Chorus 1 modulates the left and right channel delays in opposite phase, causing the stereo image to sway from side to side.
20: Chorus 2 modulates both channels with the same phase.

For either effect, the left and right channel signals are sent through a two-band shelving equalizer before the chorus effect is applied.



Chorus 1



Chorus 2

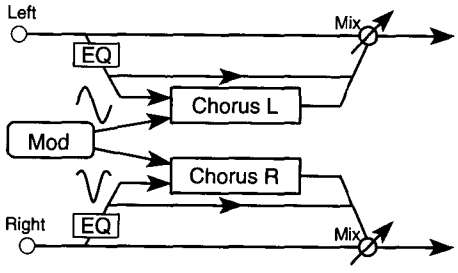
T	Delay time	0...200 ms	Set the basic delay length. Both channels use the same delay time.
S	Modulation speed	0.03...30 Hz	Set the speed of the LFO that modulates the delay. For a standard chorus effect, use a low frequency (approximately 1 Hz).
M	Modulation depth	0...99	Set the depth at which the LFO will modulate the delay time. Higher settings will cause the modulation effect to be more pronounced. With a setting of 0 there will be no chorus effect.
	LFO waveform	SIN, TRI	Select the waveform with which the LFO will modulate the delay time. You can select either sine wave (SIN) or triangle wave (TRI).
L	Equalizer low	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region below 1 kHz.
H	Equalizer high	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region above 1 kHz.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the chorus sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

21, 22: Quadrature Chorus

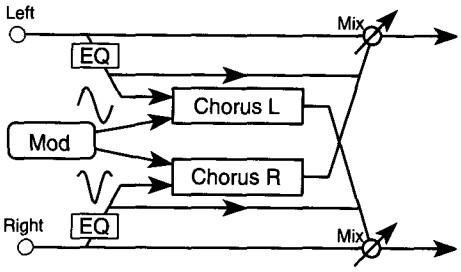
The Quadrature Chorus effect is similar to the previously-described Stereo Chorus. The difference is that the modulation applied by the LFO to the left and right channels is 90 degrees out of phase.

21: Quad Chorus is the standard type, and processes the left and right channels independently.
22: XOver Chorus mixes the chorused signal of each channel with the output of the other channel, producing a cross-over effect.

For either effect, the left and right channel signals are sent through a two-band shelving equalizer before the chorus effect is applied.



Quad Chorus

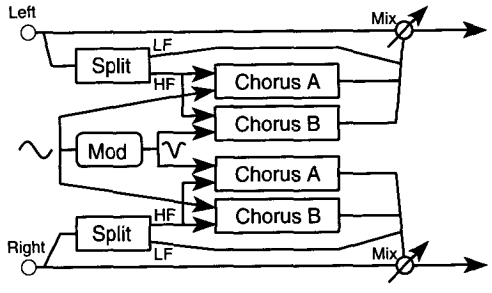


XOver Chorus

L	Delay time L	0...250 ms	Set the basic delay length for the left channel.
R	Delay time R	0...250 ms	Set the basic delay length for the right channel.
→S	Modulation speed	1...99	Set the speed of the LFO that modulates the delay. Higher values will produce faster modulation. D-mod ☞Page 104 in this manual.
M	Modulation depth	0...99	Set the depth at which the LFO will modulate the delay time. Higher settings will cause the modulation effect to be more pronounced. With a setting of 0 there will be no chorus effect.
	LFO shape	T+10...T–10, S–10...S+10	Select the waveform with which the LFO will modulate the delay time. You can select either sine wave (S) or triangle wave (T). The numeric value selects the character of the waveform. Increasingly positive (+) values will cause the peak of the waveform to become broader, and increasingly negative (–) values will cause the peak of the waveform to become sharper.
L	Equalizer low	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region below 1 kHz.
H	Equalizer high	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region above 1 kHz.
	Dry:Effect balance	DRY, 99:1...1:99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the chorus sound will be heard. Other settings set the proportion of the direct sound and effect sound.

23: Harmonic Chorus

23: Harmonic Cho. is a type of quadrature chorus in which a filter is used to divide the input signal into low and high frequency ranges, and two chorus systems are applied only to the high frequency range. It is effective on low frequency range sounds such as bass.



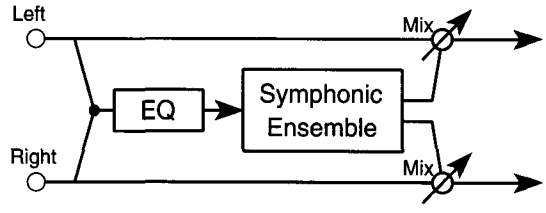
A	Delay time A	0...500 ms	Set the basic delay length for chorus unit A.
B	Delay time B	0...500 ms	Set the basic delay length for chorus unit B.
→S	Modulation speed	1...99	Set the speed of the LFO that modulates the delay. Higher values will produce faster modulation. D-mod ☞Page 104 in this manual.
M	Modulation depth	0...99	Set the depth at which the LFO will modulate the delay time. Higher settings will cause the modulation effect to be more pronounced. With a setting of 0 there will be no chorus effect.
SP	Filter split point	0...18	Specify the frequency at which the filter will divide the input signal into high and low frequency ranges. Higher settings will raise the split point frequency. The chorus effect will apply only to the portion above this frequency. The table below shows the correspondence between this parameter value and the actual frequency.
	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the chorus sound will be heard. Other settings set the proportion of the direct sound and effect sound.

Value	Frequency
0	160 Hz
1	200 Hz
2	250 Hz
3	320 Hz
4	400 Hz
5	500 Hz
6	640 Hz
7	800 Hz
8	1.00 kHz
9	1.25 kHz
10	1.60 kHz
11	2.00 kHz
12	2.50 kHz
13	3.20 kHz
14	4.00 kHz
15	5.00 kHz
16	6.40 kHz
17	8.00 kHz
18	10.0 kHz

24: Symphonic Ensemble

The Symphonic Ensemble effect is essentially identical to the chorus type effects discussed earlier, but is especially effective when used on large-scale ensembles such as orchestral strings.

24: Symphonic Ens. mixes the left and right channel signals before applying the ensemble effect. The signal processed by the effect will be output equally from both channels. A two-band shelving equalizer is applied to the sound of the left and right channels before the ensemble effect is applied.



M	Modulation depth	0...99	Set the depth at which the LFO will modulate the delay time. Higher settings will cause the modulation effect to be more pronounced. With a setting of 0 there will be no ensemble effect.
L	Equalizer low	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region below 1 kHz.
H	Equalizer high	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region above 1 kHz.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the ensemble sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

This Symphonic Ensemble effect cannot be used simultaneously with any one of the following modulation effects.

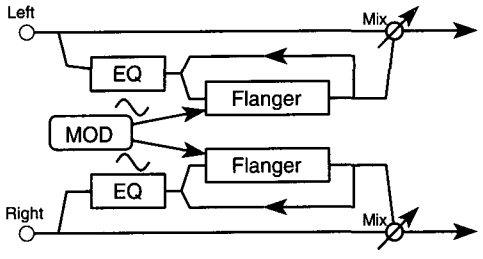
Effect types	
19–20	Chorus
21–22	Quadrature Chorus
23	Harmonic Chorus
24	Symphonic Ensemble
25–27	Flanger
32–33	Phaser
34	Rotary Speaker
35–36	Tremolo
38–39	Chorused/Flanged Delay
42	Delay & Chorus
43	Delay & Flanger
46	Delay & Phaser
47	Delay & Rotary Speaker

25...27: Flanger

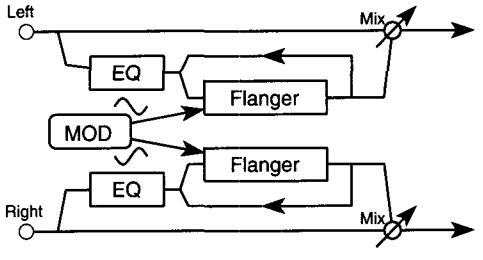
Flanging operates on basically the same principle as chorus-type effects, but adds a feedback loop to the delay output. It produces a chorus-like effect, but can also create a feeling of pitch even on non-pitched sounds. In particular when used on sounds with a rich overtone structure, such as cymbals, flanging can produce very intense effects.

25: Flanger 1 applies modulation to both channels using the same phase.
26: Flanger 2 modulates the two channels in opposite phase, causing the stereo image to move back and forth.
27: XOver Flanger modulates the two channels in opposite phase, and swaps the feedback signal.

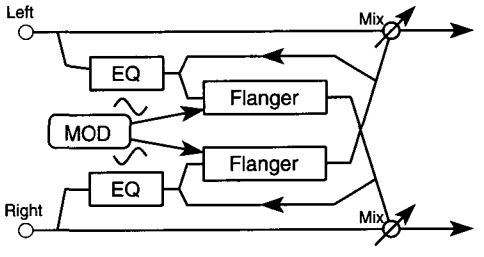
For each of these three flangers, a two-band shelving equalizer is applied to the signals of the right and left channels before the flanging effect is applied.



Flanger 1



Flanger 2



XOver Flanger

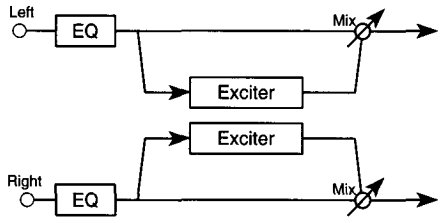
T	Delay time	0...200 ms	Set the basic delay length. Both channels use the same delay time.
M	Modulation depth	0...99	Set the depth at which the LFO will modulate the delay time. Higher settings will cause the modulation effect to be more pronounced. With a setting of 0 there will be no flanger effect.
→S	Modulation speed	1...99	*Set the speed of the LFO that modulates the delay.* For a standard flanger effect, set a low frequency (approximately 1 Hz). D-mod ☞Page 104 in this manual.
F	Feedback	–99%...+99%	Set the amount of feedback; i.e., the amount of the signal that will be returned to the input of the flanger. As this value is increased, the resonance produced by the flanger effect will be increased. Negative values will invert the phase of the feedback, lowering the pitch of the effect sound by 1 octave.
L	Equalizer low	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region below 1 kHz.
H	Equalizer high	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region above 1 kHz.
	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the flanger effect sound will be heard. Other settings set the proportion of the direct sound and effect sound.

28: Exciter

An exciter adds harmonics (overtones) to emphasize a specific frequency region, adding sparkle and definition to the sound. It is most effective when applied to solo instruments such as electric guitar or lead synth, and will push the sound into the foreground.

For example if when playing in an ensemble (whether using the ***iX300*** by itself, or in a band with other instruments) you have ever felt that the ***iX300*** sound you were playing tended to be smothered by the other sounds or by instruments other people were playing (unlikely, since the ***iX300*** is a powerful-sounding instrument with plenty of presence!), you might try using this Exciter effect.

28: Exciter processes the signals of the left and right channels independently.
A two-band shelving equalizer is provided for each channel.

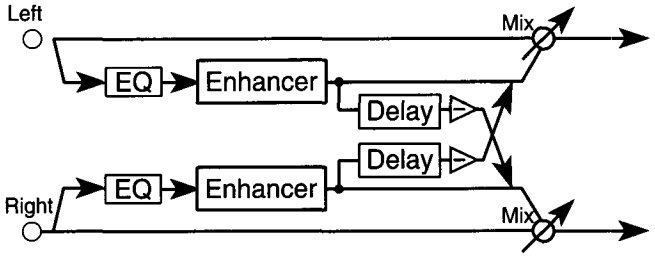


D	Harmonic density	–99...+99	Specify the density of the harmonics. As this value is increased, the exciter effect will be deeper. Negative settings will attenuate the harmonics, producing a thinner sound.
HS	Hot spot	1...10	Specify the center frequency that will be emphasized by the exciter effect. Harmonics will be added around this frequency. Higher settings will raise the frequency at which the emphasis occurs.
L	Equalizer low	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region below 1 kHz.
H	Equalizer high	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region above 1 kHz.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the exciter effect sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

29: Enhancer

The enhancer effect emphasizes the sound by adding harmonics that increase the clarity of the sound and give it greater definition. A short phase-inverted delay is applied to each channel, giving the sound greater spaciousness.

29: Enhancer processes the left and right channel signals separately.
The signals are sent through a two-band shelving equalizer before the exciter effect and delay effect are applied.

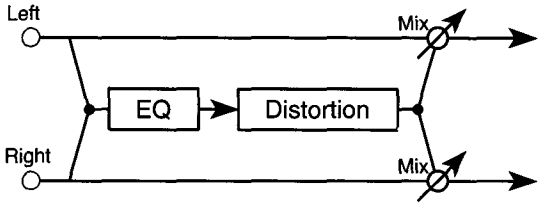


D	Harmonic density	1...99	Specify the density of the harmonics that will be added to the signal. As this value is increased, the exciter effect will be deeper.
HS	Hot spot	1...20	Specify the center frequency that will be emphasized by the exciter portion of the effect. Harmonics will be added around this frequency. Higher settings will raise the frequency at which the emphasis occurs.
SW	Stereo width	0...99	Set the proportion at which the delayed signal of each channel is added to the output of the other channel. Higher settings will widen the stereo image of the delay effect.
T	Delay time	1...99	Set the basic delay length. Both channels use the same delay time.
L	Equalizer low	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region below 1 kHz.
H	Equalizer high	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region above 1 kHz.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the exciter effect sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

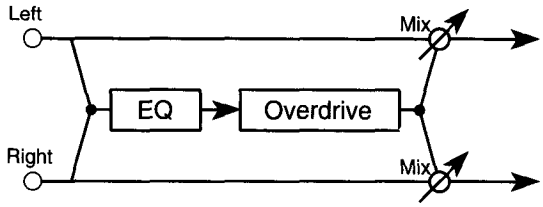
30, 31: Distortion

Distortion effects were originally designed for guitar, and simulate the distortion which occurs in the signal when the input signal gain exceeds the input capacity. Distortion adds depth to individual notes, and is effective on solos. If chords are played with this effect in use, the sound will be muddy, but if you're after a true "rock" atmosphere, it may be just what you want.
This effect passes the left and right channels through a two-band shelving equalizer before applying distortion to create a slight "wah" effect.

30: Distortion produces a hard and solid distortion of the type often used in hard rock or heavy metal. It is particularly effective on solo instruments.
31: Overdrive simulates the warm distortion that occurs on a tube amplifier. Applying it to a guitar or organ sound will produce a bluesy sound.



Distortion



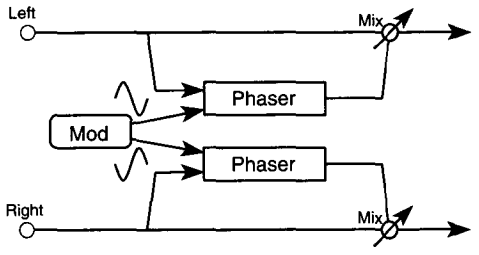
Overdrive

D	Drive	1...111	Set the depth of the distortion effect. Higher settings will raise the distortion level.
→ HS	Hot spot	0...99	Set the center frequency at which the wah filter will be applied. As this value is raised, the wah frequency will rise. D-mod ☞Page 104 in this manual.
R	Resonance	0...99	Set the amount of resonance that is applied by the wah filter. Higher settings will produce a deeper wah effect.
L	Equalizer low	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region below 1 kHz.
H	Equalizer high	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region above 1 kHz.
DL	Distortion level	0...99	Set the output level of the distorted sound. Higher settings will produce more distortion. With a setting of 0 there will be no distortion effect.
	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the distortion effect sound will be heard. Other settings set the proportion of the direct sound and effect sound.

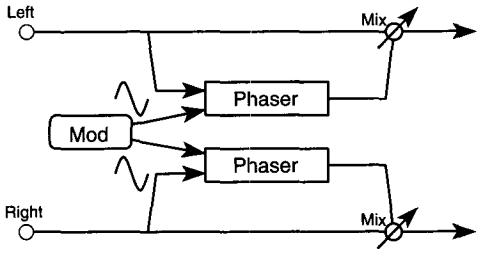
32, 33: Phaser

While chorus and flanger effects modulate the delay time, the phaser effect modulates the phase of the input signal itself, producing a more distinct modulation effect. Phasers (also known more accurately as phase shifters) are especially effective on electric piano and electric guitar sounds.

32: Phaser 1 applies opposite-phase modulation to the signals of the left and right channels, causing the stereo image to move from side to side.
33: Phaser 2 applies same-phase modulation to the left and right channels.



Phaser 1



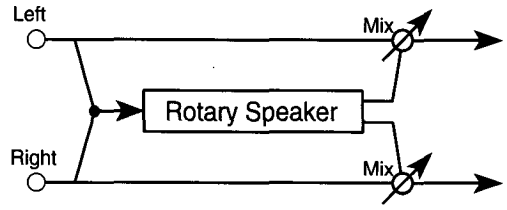
Phaser 2

HS	Hot spot	0...99	Set the center frequency at which the phase shift effect will be applied. Higher settings will raise the frequency that is shifted.
→S	Modulation speed	0.03...30 Hz	Set the speed of the LFO that modulates the delay. Higher settings will produce faster modulation. D-mod ☞Page 104 in this manual.
M	Modulation depth	0...99	Set the depth at which the LFO will modulate the phase shift. Higher settings will cause the modulation effect to be more pronounced. With a setting of 0 there will be no phaser effect.
F	Feedback	–99%...+99%	Set the amount of feedback; i.e., the amount of delayed signal that will be returned to the input of the phaser . As this value is increased, the resonance produced by the phaser effect will be increased. Negative values will invert the phase of the feedback and increase the resonance.
	LFO waveform	SIN, TRI	Select the waveform that the LFO will use to modulate the phase of the signal. You can select either sine wave (SIN) or triangle wave (TRI).
	Dry:Effect balance	DRY, 99:1...1:99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the phaser effect sound will be heard. Other settings set the proportion of the direct sound and effect sound.

34: Rotary Speaker

This effect simulates the sound of the rotary speakers that are popularly used with electric organs. Rotary speakers contain a motor which rotates the high frequency speaker horn at either a high or a low speed. The rotary speaker effect can be used in a variety of ways, but is generally used by changing the rotary speaker's rotational speed from slow to fast at points in the music where the musician wishes to build up or add excitement. This creates an effect of movement as if the sound were being shaken.

34: Rotary Speaker mixes the input signals from the left and right channels, and then creates the rotary effect using a completely independent LFO (low frequency oscillator). The signal of neither channel will be equalized.



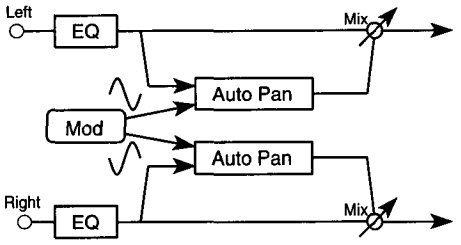
VIB	Vibrato depth	0...15	Set the depth of the vibrato effect. (This corresponds to the diameter of the rotating speaker horn.) Higher values will produce a more definite vibrato effect.
AC	Acceleration	1...15	When dynamic modulation is used to switch the rotational speed, this parameter sets the time required to accelerate from low speed to high speed (or to decelerate from high to low speed). Higher settings will result in faster acceleration or deceleration.
S	Slow speed	1...99	Set the rotational speed for when the LFO is switched to the slow speed. Higher settings will produce faster rotation.
F	Fast speed	1...99	Set the rotational speed for when the LFO is switched to the fast speed. Higher settings will produce faster rotation.
	Dry:Effect balance	DRY, 99:1...1:99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the rotary speaker effect sound will be heard. Other settings set the proportion of the direct sound and effect sound.

You can use dynamic modulation to switch between slow and fast while you play. Use a switch-type controller for this purpose. I.e., even if a continuous controller is moved rapidly, this will not cause the rotational speed to follow the motion, and will not affect the way in which the low and high speeds switch. The rotational speed is not affected by the speed at which the controller is moved, but will change to the new speed at the rate specified by the AC (acceleration) parameter. D-mod ☞Page 104 in this manual.

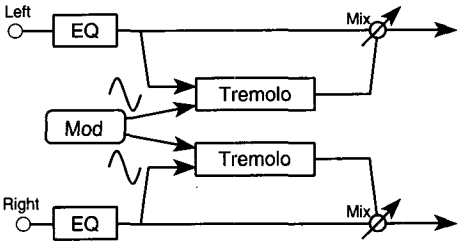
35, 36: Tremolo

Tremolo is an effect that uses an LFO (low frequency oscillator) to modulate the output volume. It is particularly effective on slow melody lines or when playing spacious chords, but is not very suitable when playing rapid phrases.

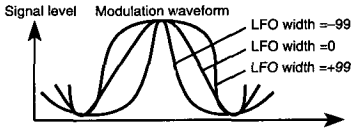
35: Auto Pan applies opposite-phase modulation to the volume of the left and right channels, causing an effect as though the sound were being panned between left and right.
36: Tremolo applies same-phase modulation, producing a standard tremolo effect. For both effects, the sound passes through a two-band shelving equalizer before the tremolo effect is applied.



Auto Pan

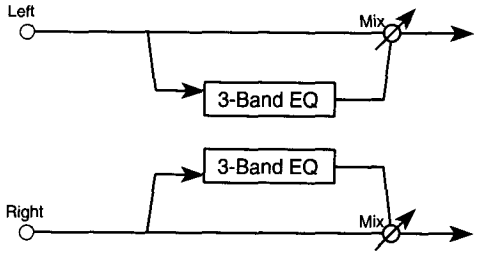


Tremolo

	LFO waveform	SIN, TRI	Select the waveform that the LFO will use to modulate the input level of the signal. You can select either sine wave (SIN) or triangle wave (TRI).
W	LFO width	–99...+99	Adjust the LFO waveform. Increasingly positive settings will cause the peak of the waveform to become broader, and negative settings will cause the peak of the waveform to become narrower and sharper. 
S	Modulation speed	0.03...30 Hz	Set the speed of the LFO that modulates the input level. Higher settings will produce faster modulation.
M	Modulation depth	0...99	Set the depth at which the LFO will modulate the amplitude. Higher settings will cause the modulation effect to be more pronounced. With a setting of 0 there will be no tremolo effect.
L	Equalizer low	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region below 1 kHz.
H	Equalizer high	–12 dB...+12 dB	Set the amount of boost or cut that the shelving type equalizer will apply to the region above 1 kHz.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the tremolo effect sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

37: Parametric Equalizer

37: Parametric Equalizer allows you to modify the tone by adjusting the boost or cut in three frequency bands. This is a useful way to add punch to drums or bass.
For the low, center, and high frequency bands, you can specify the cutoff (center) frequency and the gain.

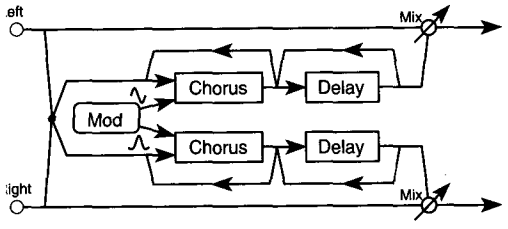


LF	Low frequency	0...29	Set the cutoff frequency of the low frequency filter. Higher settings will raise the cutoff frequency.
G	Low gain	–12 dB...+12 dB	Set the amount of boost or cut that will be applied to the region below the cutoff frequency specified by the LF parameter.
→M	Middle frequency	0...99	Set the center frequency of the mid-range filter. Higher settings will raise the middle frequency. D-mod ☞Page 104 in this manual.
G	Middle gain	–12 dB...+12 dB	Set the amount of boost or cut that will be applied to the region centered at the frequency specified by the M parameter.
W	Middle width	0...99	Set the width of the band affected by the mid-range filter. Higher settings will cause the range being cut or boosted by the filter to be narrower.
HF	High frequency	0...29	Set the cutoff frequency of the high frequency filter. Higher settings will raise the cutoff frequency.
G	High gain	–12 dB...+12 dB	Set the amount of boost or cut that will be applied to the region above the cutoff frequency specified by the HF parameter.
	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the equalized sound will be heard. Other settings set the proportion of the direct sound and effect sound.

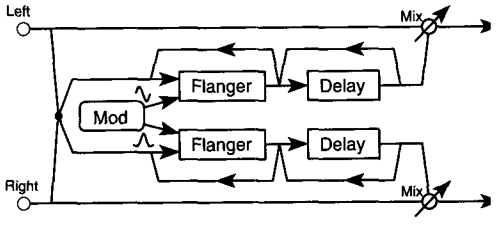
38, 39: Chorused or Flanged Delay

These are dual effects which connect two effects in series. I.e., the sound of the left and right channels is processed first by a mono-in stereo-out chorus or flanger, and then by a stereo delay. This is especially effective when used on solo instruments.

38: Chorus-Delay connects chorus and delay in series.
39: Flanger-Delay connects flanger and delay. Both the chorus and flanger use quadrature modulation; i.e., modulation is applied at a 90 degree phase difference to the left and right channels.



Chorus-Delay



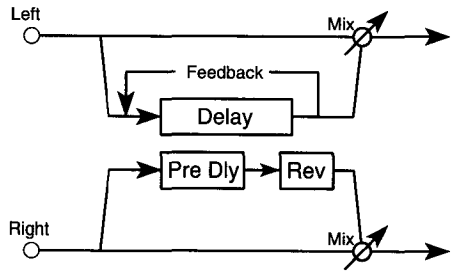
Flanger-Delay

T	Delay time	0...50 ms	Set the basic delay length for the chorus and flanger effects. Both channels use the same delay time.
F	Feedback	–99%...+99%	Set the amount of feedback that will be returned to the input of the flanger. As this value is increased, the resonance produced by the flanger effect will be increased. Negative values will invert the phase of the feedback, lowering the pitch of the effect sound by 1 octave.
S	Modulation speed	1...99	Set the speed of the LFO that modulates the delay of the chorus or flanger. Higher settings will cause faster modulation.
M	Modulation depth	0...99	Set the depth at which the LFO will modulate the delay time. Higher settings will cause the modulation effect to be more pronounced. With a setting of 0 there will be no chorus effect or flanger effect.
T	Delay time	0...450 ms	Set the basic delay length for the delay effect.
F	Feedback	–99%...+99%	Set the amount of feedback that will be returned to the input of the delay. As this value is increased, the number of delay repeats will increase, and it will take longer for the echoes to disappear. Negative values will invert the phase of the feedback, causing the tone of the echo to be harder, and less hollow-sounding.
→	Dry:Effect balance	DRY, 99:1...1:99, FX	For both the chorus or flanger effect and the delay effect, set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the echoed sound processed by the chorus or flanger effect will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

40, 41: Delay & Reverb

These are dual effects which connect a mono delay and a mono reverb.

40: Delay/Hall combines a delay and a hall reverb.
41: Delay/Room combines a delay and a room reverb.
You can use dynamic modulation to control the DRY:FX balance parameters of both the delay and reverb while you play.



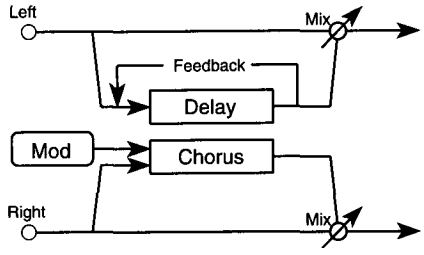
T	Delay time	0...500 ms	Set the basic delay length for the delay effect.
F	Feedback	–99%...+99%	Set the amount of feedback; i.e., the amount of the delayed sound that will be returned to the input of the delay. As this value is increased, the number of delay repeats will increase, and it will take longer for the echoes to disappear. Negative values will invert the phase of the feedback, causing the tone of the echo to be harder, and less hollow-sounding.
HD	High damp	0%...99%	Set the degree to which the high frequency range of the delayed sound will be attenuated. Higher settings will cause more rapid attenuation.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the echoed sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.
	Reverb time	Depends on the effect	Set the time over which the reverberation will decay. Hall-type reverb allows a setting from 0.2–9.9 seconds, and room-type reverb allows a setting from 0.2–4.9 seconds.
P	Pre delay	0...150 ms	This parameter sets the delay from the direct sound until when the early reflections of the reverb are heard. Higher settings will cause the reverberation to be distinct, producing an echo-like sound.
HD	High damp	0%...99%	Set the degree to which the high frequency range of the reverberation will be attenuated. Higher settings will cause more rapid attenuation.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the reverberation will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

42: Delay & Chorus

This effect combines a mono delay and mono chorus in parallel.

42: Delay/Chorus is an effect which connects a mono delay and a mono chorus in parallel.

You can use dynamic modulation to control the DRY:FX parameters of both the delay and chorus effects while you play.



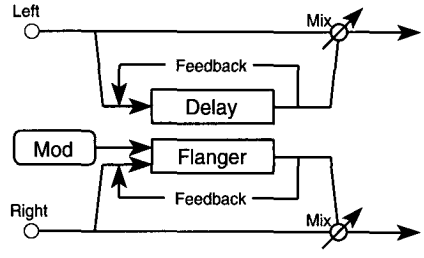
T	Delay time	0...500 ms	Set the basic delay length for the delay effect.
F	Feedback	–99%...+99%	Set the amount of feedback; i.e., the amount of the delayed sound that will be returned to the input of the delay. As this value is increased, the number of delay repeats will increase, and it will take longer for the echoes to disappear. Negative values will invert the phase of the feedback, causing the tone of the echo to be harder, and less hollow-sounding.
HD	High damp	0%...99%	Set the degree to which the high frequency range of the delayed sound will be attenuated. Higher settings will cause more rapid attenuation.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the echoed sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.
	Modulation speed	0.03...30 Hz	Set the speed of the LFO that modulates the delay of the chorus effect. For a standard chorus effect, set a low frequency (approximately 1 Hz).
M	Modulation depth	0...99	Set the modulation depth of the chorus. Higher settings will cause the modulation effect to be more pronounced. With a setting of 0 there will be no chorus effect.
	LFO waveform	SIN, TRI	Select the waveform that the LFO will use to modulate the delay time. You can select either sine wave (SIN) or triangle wave (TRI).
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the chorus sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

43: Delay & Flanger

This effect combines a mono delay and mono flanger in parallel.

43: Delay/Flanger is an effect that connects a mono delay and mono flanger in parallel.

You can use dynamic modulation to control the DRY:FX parameters of both the delay and flanger effects while you play.

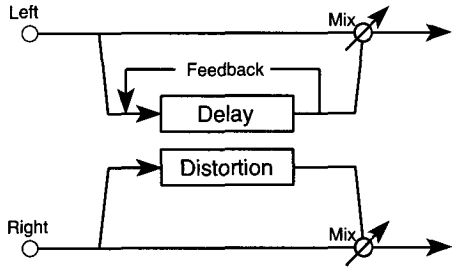


T	Delay time	0...500 ms	Set the basic delay length for the delay effect.
F	Feedback	–99%...+99%	Set the amount of feedback; i.e., the amount of the delayed sound that will be returned to the input of the delay. As this value is increased, the number of delay repeats will increase, and it will take longer for the echoes to disappear. Negative values will invert the phase of the feedback, causing the tone of the echo to be harder, and less hollow-sounding.
HD	High damp	0%...99%	Set the degree to which the high frequency range of the delayed sound will be attenuated. Higher settings will cause more rapid attenuation.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the echoed sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.
	Modulation speed	0.03...30 Hz	Set the speed of the LFO that modulates the delay of the flanger effect. For a standard flanger effect, set a low frequency (approximately 0.18 Hz).
M	Modulation depth	0...99	Set the modulation depth of the flanger. Higher settings will cause the modulation effect to be more pronounced. With a setting of 0 there will be no modulation effect.
F	Feedback	–99%...+99%	Set the amount of feedback that will be returned to the input of the flanger. As this value is increased, the resonance produced by the flanger effect will be increased. Negative values will invert the phase of the feedback, lowering the pitch of the effect sound by 1 octave.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the chorus sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

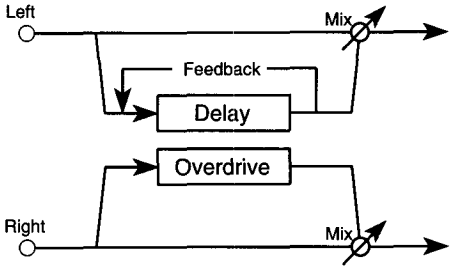
44, 45: Delay & Distortion

This effect combines a mono delay and mono distortion or overdrive in parallel. For example, this can be used to apply delay to a lead synth in one channel, and distortion to a guitar in the other channel.

44: Delay/Dist combines delay and distortion.
45: Delay/Overdrv combines delay and overdrive. Both distortion and overdrive include a wah effect.



Delay/Distortion



Delay/Overdrive

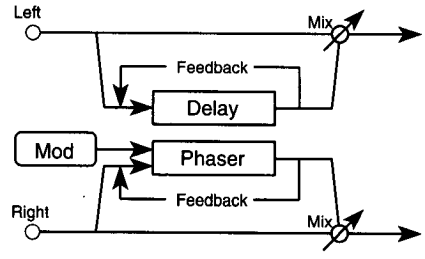
T	Delay time	0...500 ms	Set the basic delay length for the delay effect.
F	Feedback	–99%...+99%	Set the amount of feedback; i.e., the amount of the delayed sound that will be returned to the input of the delay. As this value is increased, the number of delay repeats will increase, and it will take longer for the echoes to disappear. Negative values will invert the phase of the feedback, causing the tone of the echo to be harder, and less hollow-sounding.
	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the echoed sound will be heard. Other settings set the proportion of the direct sound and effect sound.
D	Drive	1...111	Set the depth of the distortion effect. Higher settings will raise the distortion level.
HS	Hot spot	1...99	Set the center frequency at which the wah filter will be applied. As this value is raised, the wah frequency will rise.
R	Resonance	0...99	Set the amount of resonance that is applied by the wah filter. Higher settings will produce a deeper wah effect.
DL	Distortion level	1...99	Set the output level of the distorted sound. Higher settings will produce more distortion. With a setting of 1 there will be no distortion effect.

46: Delay & Phaser

This effect combines a mono delay and mono phase shifter in parallel.

46: Delay/Phaser is an effect that connects a mono delay and mono phaser in parallel.

You can use dynamic modulation to control the DRY:FX parameters of both the delay and phaser effects while you play.

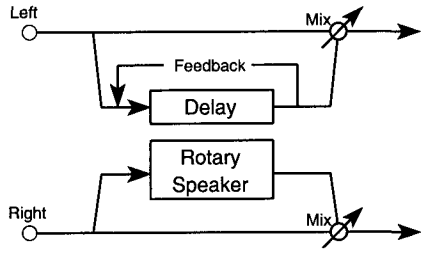


T	Delay time	0...500 ms	Set the basic delay length for the delay effect.
F	Feedback	–99%...+99%	Set the amount of feedback; i.e., the amount of the delayed sound that will be returned to the input of the delay. As this value is increased, the number of delay repeats will increase, and it will take longer for the echoes to disappear. Negative values will invert the phase of the feedback, causing the tone of the echo to be harder, and less hollow-sounding.
HD	High damp	0%...99%	Set the degree to which the high frequency range of the delayed sound will be attenuated. Higher settings will cause more rapid attenuation.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the echoed sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.
	Modulation speed	0.3...30 Hz	Set the speed of the LFO that modulates the phase of the input signal. Higher settings will produce faster modulation.
M	Modulation depth	0...99	Set the depth at which the phase will be modulated. Higher settings will cause the modulation effect to be more pronounced. With a setting of 0 there will be no phaser effect.
F	Feedback	–99%...+99%	Set the amount of feedback; i.e., the amount of the delayed signal that will be returned to the input of the phaser. As this value is increased, the resonance produced by the phaser effect will be increased. Negative values will invert the phase of the feedback and increase the resonance of the effect.
→	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the phaser sound will be heard. Other settings set the proportion of the direct sound and effect sound. D-mod ☞Page 104 in this manual.

47: Delay & Rotary Speaker

This effect combines a mono delay with a mono rotary speaker in parallel.

47: Delay/Rotary provides a mono rotary speaker that produces a heavier tremolo than the stereo rotary speaker (34: Rotary Speaker) effect.



T	Delay time	0...500 ms	Set the basic delay length for the delay effect.
F	Feedback	–99%...+99%	Set the amount of feedback; i.e., the amount of the delayed sound that will be returned to the input of the delay. As this value is increased, the number of delay repeats will increase, and it will take longer for the echoes to disappear. Negative values will invert the phase of the feedback, causing the tone of the echo to be harder, and less hollow-sounding.
	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the echoed sound will be heard. Other settings set the proportion of the direct sound and effect sound.
AC	Acceleration	1...15	When dynamic modulation is used to switch the rotational speed, this parameter sets the time required to accelerate from low speed to high speed (or to decelerate from high to low speed). Higher settings will result in faster acceleration or deceleration.
S	Slow speed	1...99	Set the rotational speed for when the LFO is switched to the slow speed. Higher settings will produce faster rotation.
F	Fast speed	1...99	Set the rotational speed for when the LFO is switched to the fast speed. Higher settings will produce faster rotation.
	Dry:Effect balance	DRY, B1...B99, FX	Set the balance between the direct sound (DRY) and the sound processed by the effect (FX). With a setting of DRY, the effect will be turned off. With a setting of FX, only the rotary speaker effect sound will be heard. Other settings set the proportion of the direct sound and effect sound.

You can use dynamic modulation to switch between slow and fast while you play. Use a switch-type controller for this purpose. I.e., even if a continuous controller is moved rapidly, this will not cause the rotational speed to follow the motion, and will not affect the way in which the low and high speeds switch. The rotational speed is not affected by the speed at which the controller is moved, but will change to the new speed at the rate specified by the AC (acceleration) parameter. D-mod ☞Page 104 in this manual.

7. Disk/Global mode

Functions in Disk/Global mode

The following table shows how the Disk/Global mode of the ***iX300*** is organized, and shows the main contents of each page, and reference pages in this manual.

Display page			Manual page
1. DISK parameters	1-1. Load	Load data from disk	☞P. 130
	1-2. Save	Save data to disk	☞P. 133
	1-3. Utility	Delete data, delete styles, format disk	☞P. 134
2. Master tuning/Transpose position			☞P. 135
3. MIDI local control/MIDI clock source/Host baud rate			☞P. 136
4. MIDI channel settings 1		Global and keyboard track MIDI channels, chord detection from incoming MIDI data	☞P. 137
5. MIDI channel settings 2		Backing track MIDI channels	☞P. 138
6. MIDI filter			☞P. 138
7. Assignable pedal settings			☞P. 139
8. EC5 external controller settings			☞P. 142
9. Damper switch polarity		Damper switch polarity	☞P. 142
10. Sound hold/Velocity curve			☞P. 143
11. Main scale select			☞P. 145
12. Sub scale select			☞P. 145
13. User scale settings			☞P. 146
14. MIDI data dump			☞P. 147
15. Joystick settings		Pitch bend switch	☞P. 148
16. Calibration		Joystick (X, Y)	☞P. 149
		Aftertouch	☞P. 150
		Assignable pedal	☞P. 150

Data stored on disk

Virtually all of the internal data of the ***iX300*** can be stored on a 3.5 inch double-sided double-density (2DD) or double-sided high-density (2HD) floppy disk. Disks are initialized in MS-DOS format, and each disk can contain up to 112 files, up to a maximum of 720 K (2DD) or 1.44 M (2HD) bytes.

The ***iX300*** stores various data in different types of files, which means that each file will contain different types of data. In order to distinguish different types of file, an extension consisting of a period and three characters is added to each filename. The following table shows the filename extensions and the corresponding file type and size.

Data type	Extension	Size (Kbytes)
Arrangement data	.ARR	9
Style data	.STY	64 (maximum)
Backing sequence data	.BSQ	132 (maximum)
Standard MIDI File data	.MID	720 (maximum)
Program/Global data	.PCG	14

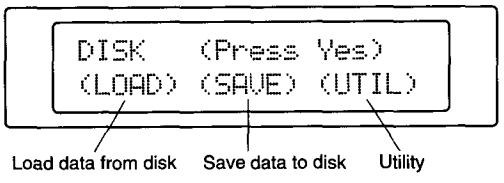
(These filename extensions will be displayed on-screen when you use the "Page 1. Disk parameters" command 1-3 UTILITY to perform the Delete File operation.)
The ***iX300*** is able to create each of these different types of files, and to read data from these files. Utilities are also provided to delete files and to format a disk.

When data created on the ***iX300*** is to be used on the ***i2/i3/i4S/i1/i5S/i5M***, be sure to set the "Page 14. MIDI data dump" (☞Page 147 in this manual) Data Mode parameter to "CMP."

Page 1. DISK parameters

In this page you can select one of the following three disk operations: load (LOAD), save (SAVE), or utility (UTIL).

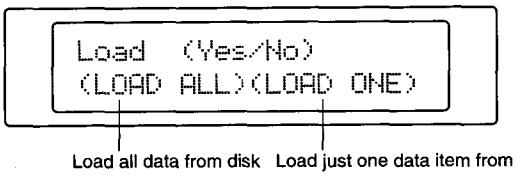
Move the cursor to the function that you wish to access, and press the [RESET/YES] button. For floppy disk handling, please also read the precautions on pgz. 13 & 14 of the User's Guide.



1-1. Load

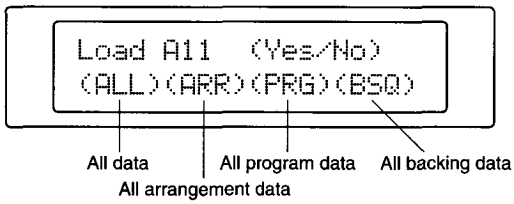
Here you can load data from the selected file into the ***iX300***. The following types of data can be loaded: arrangement (ARR), program (PRG), backing sequence (BSQ), and style (STY).

There are two methods of loading: LOAD ALL and LOAD ONE. Use the [CURSOR] buttons to select one of these, and press the [RESET/YES] button to execute your choice. Whichever function you select in this page, the floppy disk containing the file to be loaded must first be loaded into the disk drive.



1-1-1. Load all

Move the cursor to the desired function, and press the [RESET/YES] button.



Before you load, make sure that the ***iX300*** does not contain any important data. When the new file is loaded, data previously existing in memory will be lost forever. If internal memory contains important data, use "1-2. Save" to save the data to disk before loading different data.

ALL

A complete set of data files will be loaded into the ***iX300***.

Insert the disk containing the data into the drive, and select (ALL). The ***iX300*** will display the file names for program, arrangement, backing sequence, and style data. In this case, the filename extension will not be displayed.

This function is very convenient, since it allows a single load operation to load multiple associated files (an arrangement and the programs and styles used by it, and the backing sequence created using this data). Data saved using the "Page 1 DISK parameters" 1-2 SAVE ALL function can be loaded using this LOAD ALL function.

Use the [TEMPO/VALUE] buttons to select the desired file.
After you have made your selection, press the [RESET/YES] button to load that file.
To cancel loading, press the [TAP TEMPO/NO] button.
If the complete set of the four types of file (program, arrangement, backing sequence, style) is not found, an error message will appear after loading.

ARR (ARRANGEMENT)

This function loads an arrangement file containing data for the 64 arrangements of bank U. If style files of the same filename exist, up to 4 sets of style data will be loaded into the user style memory.

The procedure is the same as for the above-described ALL load function. The LCD will show only the names of the arrangement files on disk.

PRG (PROGRAM)

This function loads a program file containing the data for all 64 of the user programs and two user drum programs Dr 17 and Dr 18. Global parameters including the two user drum kits will also be loaded.

The procedure is the same as for the above-described ALL load function. The LCD will show only the names of the program files on disk.

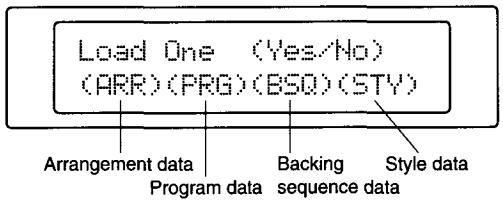
BSQ (BACKING SEQUENCE)

This function loads a backing sequence file containing a set of data for the 10 backing sequences.

The procedure is the same as for the above-described ALL load function. The LCD will show only the names of the backing sequence files on disk.

1-1-2. Load one

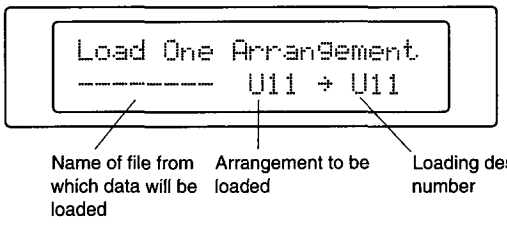
Here you can load a single desired item: an arrangement (ARR), program (PRG), backing sequence (BSQ), or style (STY).
Move the cursor to the desired function, and press the [RESET/YES] button.



Before you load, make sure that the memory of the ***iX300*** does not contain data you wish to keep. When a new program file is loaded, any data previously existing in memory will be lost forever. If internal memory contains important data, use "1-2. Save" to save the data to disk before loading different data.

ARR (ARRANGEMENT)

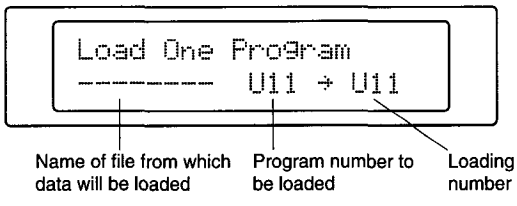
This function loads one arrangement from an arrangement file.



Use the [CURSOR] buttons and the [TEMPO/VALUE] buttons to specify the arrangement number to be loaded, and the number of the loading destination. The screen will show the name of the file from which an arrangement is being loaded.
Use the [ARRANGEMENT NUMBER] buttons to specify the arrangement number of the loading destination.
After making your selection, press the [RESET/YES] button to load the data.

PRG (PROGRAM)

This function loads one program from a program file. However, Global parameters and drum kit settings will not be loaded.
Insert the disk containing data into the drive, and use the [TEMPO/VALUE] buttons to select a program filename. The names of the program files on disk will be displayed consecutively.



Use the [CURSOR] buttons and the [TEMPO/VALUE] buttons to specify the program number to be loaded, and the number of the loading destination.
After making your selection, press the [RESET/YES] button to load the data.

If the program that was loaded uses a user drum kit, that drum kit will automatically be loaded as well. In this case, the previously existing user drum kit will be overwritten.

This function does not load Global data. This means that if you modify the Scale parameters after saving the program data, the program that is loaded may sound with a different scale than originally. In this case, use "Page 13. User scale settings" (☞Page 146 in this manual) to restore the settings that were used when the program was created.

BSQ (BACKING SEQUENCE)

This function loads one backing sequence from a backing sequence file.

Use the [CURSOR] buttons and the [TEMPO/VALUE] buttons to specify the backing sequence to be loaded and the loading destination number. The screen will show the name of the file from which a backing sequence is being loaded.

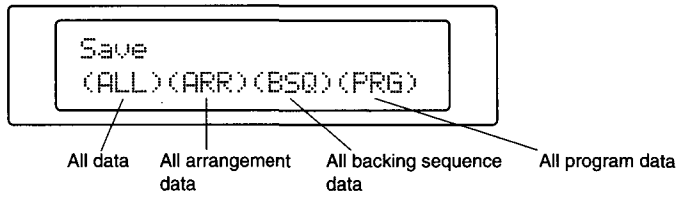
STY (USER STYLE)

This function loads one style from a style file.

The procedure is the same as for the backing sequence load function described above.

1-2. Save

Move the cursor to the function that you wish to use, and press the [RESET/YES] button.



If a file with the same name as the file you are attempting to save already exists on the disk, a message will appear, asking you whether it is OK to replace the old file with the new file. Before you save, make sure that the old file does not contain data you wish to keep. If you fail to do so, this save operation will cause the contents of the identically-named file on disk to be lost forever.

ALL

This function saves a complete set of ***iX300*** data files to disk.

When this function is selected, the LCD will show the most recently entered filename (or a default filename of NEW_FILE). If necessary, you can use the [CURSOR] buttons and the [TEMPO/VALUE] buttons to modify the filename. Up to 8 characters can be used in a filename. Alphabetical characters (uppercase) and numerals (0–9) can be used.

When you finish inputting the filename, press the [RESET/YES] button to save the data to disk.

ARR (ARRANGEMENT)

This function saves an arrangement file containing a set of 64 arrangements and a style file.

The procedure for this function is the same as for the ALL save function described earlier. The arrangement file (extension .ARR) and style file (extension .STY) will be saved with the filename that you input.

BSQ (BACKING SEQUENCE)

This function saves a backing sequence file containing a set of 10 backing sequences.

The procedure for this function is the same as for the ALL save function described earlier. The backing sequence file (extension .BSQ) will be saved with the filename that you input.

PRG (PROGRAM)

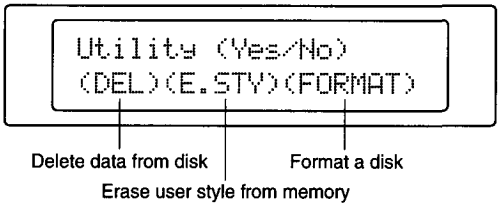
This function saves a program file containing a set of 64 programs and two user drum programs Dr 17 and Dr 18.

Global mode settings are also stored in this file.
The procedure for this function is the same as for the ALL save function described earlier. The program file (extension .PCG) will be saved with the filename that you input.

If you intend to use the saved data on the ***i2/i3/i4S/iI***, be sure to set the data mode in "Page 14. MIDI data dump."

1-3. Utility

Move the cursor to the desired function, and press the [RESET/YES] button.



DEL (Delete file)

This function deletes an unwanted file from disk. Use it when you wish to free up disk space to accommodate new data.

Use the [TEMPO/VALUE] buttons to select the file that you wish to delete. The screen will show the names (and extensions) of the files on disk.
After selecting the file, press the [RESET/YES] button. Be very sure that the file that you are deleting does not contain important data. After the file has been deleted, the data will be gone forever.

E.STY (Erase style)

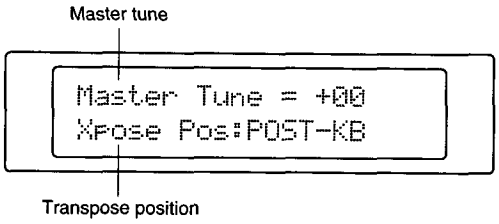
This function deletes a user style from memory.
Use this function if a message of "Not enough memory" appears when you use the Load One Arrangement function to load an arrangement that uses new user styles from disk.

FORMAT (Format disk)

Before a new disk can be used on the ***iX300***, it must first be formatted using this function. This function can also be used to delete all data from a previously used disk by reformatting it.

Insert the disk into the disk drive and press the [RESET/YES] button. Before doing so, make sure that the disk does not contain data that you wish to keep. When a disk is formatted, all data that was on the disk will be lost forever.

Page 2. Master tuning/Transpose position



Master Tune [-50...+50]

This adjusts the overall pitch.
You can raise or lower the tuning a maximum of 50 cents (1/2 semitone) to bring the ***iX300*** into tuning with another instrument.

This pitch adjustment has no effect on the pitch of an external MIDI instrument that is being played by Note messages transmitted from the MIDI OUT connector.

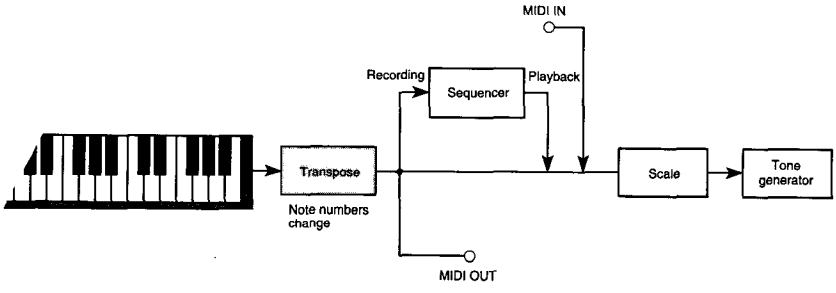
Xpose Pos (Transpose position) [POST-KB, PRE-OSC]

This setting specifies whether the transposition setting of the [TRANSPOSE] buttons is applied before or after notes are transmitted from MIDI OUT.

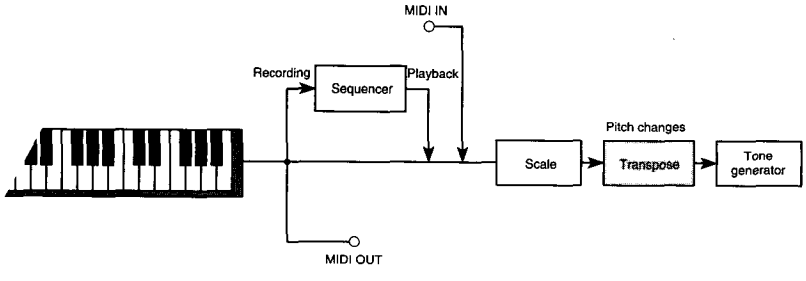
In Song Play mode, the transpose position setting made in "Page 3. Transpose Position" (☞Page 81 in this manual) will be used.

This setting will place the transpose setting either immediately after the keyboard or immediately after the Scale, so if you change the position when the Transpose setting is other than 0, the pitch played by the ***iX300*** will of course change, but the Note messages transmitted from MIDI OUT will also change.

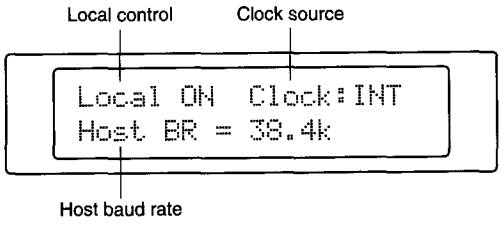
With a setting of **POST-KBD**, pitch information will be transposed immediately after it leaves the keyboard. This means that the transposed notes will be transmitted both to the internal tone generator and to instruments connected to MIDI OUT. The pitch of Note messages received from MIDI IN will not be transposed.
In Program mode, the [OCTAVE] buttons will function as if the Transpose Position were set to POST-KBD.



With a setting of **PRE-OSC**, pitch information will be transposed immediately before it enters the tone generator. This means that you hear the transposed notes, but that the pitches of the Note messages transmitted from MIDI OUT will not be transposed. The pitches of all Note messages received from MIDI IN will be transposed.
In Arrangement Play mode and Backing Sequence mode, the [OCTAVE] buttons will function as if the Transpose Position were set to PRE-OSC.



Page 3. MIDI local control/MIDI clock source/ Host baud rate



Local (Local control) [OFF, ON]

This setting specifies whether the *iX300*'s tone generator will respond to messages from the *iX300*'s own local controllers.

With a setting of **ON**, the *iX300* will respond to its own local controllers as usual. ("Local controllers" refer to the keyboard, and controllers such as the bend wheel, modulation switch, and foot pedal etc.)
With a setting of **OFF**, the *iX300*'s tone generator will be disconnected from the local controllers, and it will not be possible for data from the local controllers to be recorded into the backing sequencer. Also, chord scanning will not be performed in Arrangement Play mode etc.

If you are using the keyboard of the *iX300* only to play other MIDI instruments, you can set this OFF so that the *iX300*'s tone generator does not sound.
When the power is turned on, this setting will always be ON.

Clock (Clock source) [INT, MIDI, HOST]

This setting determines how the *iX300* will synchronize with another MIDI sequencer.

With a setting of **INT**, the *iX300* will use the tempo generated by its own internal clock. Whenever the *iX300* is in a mode that uses the sequencer, MIDI Clock messages will always be transmitted from MIDI OUT, allowing another MIDI sequencer to be synchronized to the *iX300*. Unless another MIDI sequencer is connected to the MIDI IN or TO HOST connector of the *iX300*, set this parameter to INT.
With a setting of **MIDI**, the *iX300* will synchronize to the MIDI Clock messages that it receives from another sequencer connected to the MIDI IN connector. It will also respond to Start, Stop, Continue, Song Select, and Song Position Pointer messages.
With a setting of **HOST**, the *iX300* will synchronize to MIDI Clock messages that it receives from another sequencer connected to the TO HOST connector. It will also respond to Start, Stop, Continue, Song Select, and Song Position Pointer messages.

When this parameter is set to MIDI or HOST, the tempo display will indicate EXT in Arrangement Play mode, Backing Sequence mode and Song Edit mode, and the tempo setting of the *iX300* itself will be ignored. In this state, it will not be possible for the *iX300* to playback sequence data on its own.

When the power is turned on, this setting will always be INT.

In Song Play mode, synchronization will always take place as if this parameter were set to INT, regardless of the actual setting.

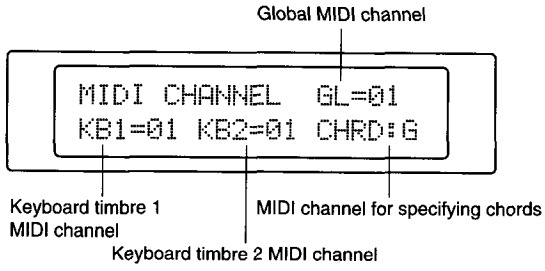
Host BR (Host baud rate) [38.4 k, 31.25 k]

Set the data transmission rate that is appropriate for the personal computer or other device connected to the TO HOST connector.

When connecting the *iX300* to an IBM PC (compatible), select **38.4 k**.
When connecting the *iX300* to an Apple Macintosh, select **31.25 k**.

Page 4. MIDI channel settings 1

There are ten parameters related to MIDI channels, and you can specify the channels on which the *iX300* will transmit and receive MIDI messages. In order for data to be exchanged correctly with other devices connected to the *iX300*, these parameters must be set to match the settings of the other devices.



GL (Global MIDI channel) [01...16]

Selects the Global MIDI channel of the *iX300*.

Unless system exclusive messages are being filtered out by the "Page 6. MIDI filter" settings, system exclusive messages will are received on the Global MIDI channel you specify here. System exclusive messages received on any other channel will be ignored.

In Arrangement Play mode and Backing Sequence mode, the same operations performed using the *iX300*'s own keyboard and controllers can be performed using an external MIDI device connected to the *iX300*. The Global MIDI channel is used for this purpose.

In Arrangement Play mode, the MIDI transmit channel of the keyboard can be set by the following KB1 and KB2 parameters.

In Backing Sequence mode, the *iX300* will transmit messages on this channel if you play the keyboard when the [KEYBOARD ASSIGN] button has a setting other than SPLIT (or if you play the high range of the keyboard when SPLIT is selected).

In Arrangement Play mode, if the Global MIDI channel is set to a channel other than those selected for KB1 or KB2, program change messages on the Global MIDI channel will be used for arrangement selection and transmission.
MIDI transmission and reception in Program mode will use the MIDI channel that you specify here.

KB1 (KBD1 MIDI channel) [01...16]

In Arrangement Play mode, if KB1 is set to a channel other than that selected as the Global MIDI channel or for another timbre, MIDI messages received on this channel will play the KBD1 program.

In Arrangement Play mode if the [KEYBOARD ASSIGN] button has a setting other than SPLIT, this specifies the MIDI channel on which the musical data played on the *iX300*'s keyboard will be transmitted. If SPLIT is selected, this specifies the MIDI channel on which musical data played on the upper range of the keyboard will be transmitted.

In Backing Sequence mode, MIDI transmission and reception will occur on the Global MIDI channel, regardless of the KB1 setting.

KB2 (KBD2 MIDI channel) [01...16]

As with KB1, MIDI messages received on this channel will play the KBD2 program.

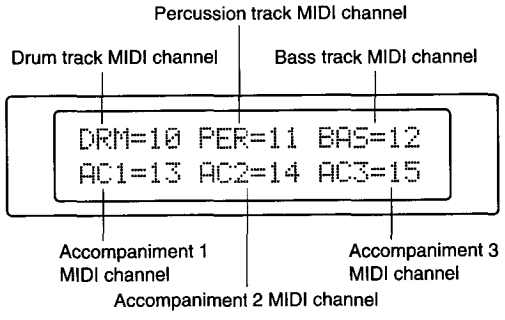
In Arrangement Play mode or Backing Sequence mode if the [KEYBOARD ASSIGN] button has a setting other than SPLIT, this specifies the MIDI channel on which musical data played on the lower range of the keyboard will be transmitted.

CHRD (MIDI channel used for specifying chords) [G, M]

This specifies the channel that will be used when incoming MIDI note data is used to specify chords in Arrangement Play mode and Backing Sequence mode.

With a setting of **G**, the Global MIDI channel will be used. In this case, Note messages received on the Global MIDI channel will have the same function as notes played on the ***iX300***'s own keyboard.
With a setting of **M**, chord detection will be performed on any channels not assigned in Disk/Global mode, in addition to the Global MIDI channel.

Page 5. MIDI channel settings 2



DRM/PER/BAS/AC1/AC2/AC3 (Track MIDI channels) [01...16]

These parameters are valid only in Arrangement Play mode and Backing Sequence mode.
These select the channels on which the drum (DRM), percussion (PER), bass (BAS), and accompaniment (AC) 1–3 tracks will transmit data. Normally, channels 10–15 are used for these tracks.

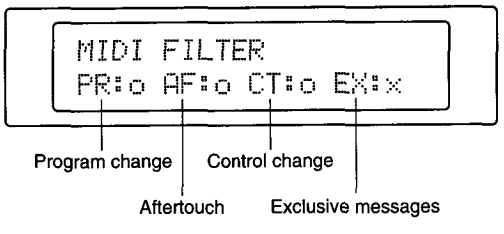
In Arrangement Play mode or Backing Sequence mode, the ***iX300*** will respond to note messages and program change messages etc. received on these channels.

Page 6. MIDI filter

This display page contains four settings which partially restrict (filter) the transmission and reception of MIDI data. By using these filters, you can cause the ***iX300*** to ignore specific types of MIDI data, such as program changes or system exclusive messages.

During recording, this is very convenient when you want to omit messages that consume large amounts of memory, such as aftertouch or control change data.

To filter out a specific type of data, select "x" for the corresponding parameter. Types of data for which "x" is selected will be neither transmitted nor received. However in Backing Sequence mode, data that has already been recorded, or data in a backing track for an arrangement being played, will be transmitted regardless of these filter settings.



PR (Program change) [x, o, n, s]

This specifies how program change messages will be handled.

With a setting of "**o**," program change messages will be handled normally.
With a setting of "**x**," the ***iX300*** will not transmit or receive program change messages on any channel.
With a setting of "**n**," MIDI bank change messages will be ignored.
With a setting of "**s**," banks A and B will be transmitted as [MSB 0, LSB 0], and the DRUM bank will be transmitted as [MSB 0, LSB 0]. Other banks will not be affected.

AF (Aftertouch) [x, o]

This specifies how aftertouch messages will be processed.

With a setting of "**o**," aftertouch will be handled normally.
With a setting of "**x**," aftertouch will not be transmitted or received. During recording, this setting allows unwanted aftertouch messages sent from an external MIDI device to be filtered to conserve memory.

CT (Control change) [x, o]

This specifies how pitch bend, volume, sustain pedal, and control change messages of other controllers will be processed.

With a setting of "**o**," these messages will be handled normally.
With a setting of "**x**," controller messages will not be transmitted or received. During recording, this setting allows unwanted control change messages sent from an external MIDI device to be filtered. Also, the ***iX300*** itself will not transmit control change messages to other devices.

EX (Exclusive) [x, o]

This setting controls the transmission and reception of system exclusive messages (sound data for programs and arrangements etc., and editing operations in Arrangement Play mode and Backing Sequence mode). These messages are used when using a Korg "**ih**" Interactive Vocal Harmony unit or a personal computer to edit (or be edited by) the ***iX300***.

With a setting of "**o**," system exclusive messages will be transmitted and received. If an "**ih**" unit is connected in Arrangement Play mode or Backing Sequence mode, chord data from the ***iX300*** will cause the "**ih**" to operate. (In this case, the chord detection function of the "**ih**" itself will not operate.)
In Song Play mode, the chord detection function of the "**ih**" will function according to the chord scanning area specified on the "**ih**."
With a setting of "**x**," system exclusive messages will not be transmitted or received.

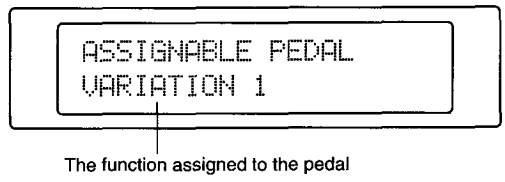
Page 7. Assignable pedal settings

ASSIGNABLE PEDAL [OFF, START/STOP...DATA ENTRY]

On the ***iX300***, a foot switch or expression pedal can be connected to the ASSIGNABLE PEDAL/SW jack located on the rear panel, so that the function assigned by this parameter can be controlled by the switch or pedal in the same way as with the panel buttons. The table on the following page shows the functions which can be assigned to the footswitch or pedal.
While this page is displayed, pressing a panel key whose function can be assigned will select it as the assigned function.

With a setting of **OFF**, the switch or pedal will have no function. If a switch or pedal or not connected, set this OFF.
If you select a setting of **START/STOP–QUARTER TONE**, be sure to connect a foots-

witch to the ASSIGNABLE PEDAL/SW jack. We recommend an optional Korg PS-1 or PS-2.
If you select a setting of **KB VOLUME–DATA ENTRY**, be sure to connect an expression pedal to the ASSIGNABLE PEDAL/SW jack. We recommend an optional Korg XVP-10 or EXP-2.



Functions which can be assigned to a foot switch

Setting	Function
OFF	No function
START/STOP	Same as the [START/STOP] button
SYNC START/STOP	Same as the [SYNCHRO START/STOP] button
RESET	Same as the [RESET/YES] button
TAP TEMPO	Same as the [TAP TEMPO/NO] button
KBD LOCK	Same as the [KBD LOCK] button
INTRO/ENDING 1	Same as the [INTRO/ENDING] button 1
INTRO/ENDING 2	Same as the [INTRO/ENDING] button 2
FILL 1	Same as the [FILL] button 1
FILL 2	Same as the [FILL] button 2
VARIATION 1	Same as the [VARIATION] button 1
VARIATION 2	Same as the [VARIATION] button 2
VARIATION 3	Same as the [VARIATION] button 3
VARIATION 4	Same as the [VARIATION] button 4
CHORD HOLD	Same as the [CHORD HOLD] button
BASS INVERSION	Same as the [BASS INV.] button
SCALE CHANGE	Switch between main scale and sub scale
ARR/STYLE UP	Select the next arrangement or style *
ARR/STYLE DOWN	Select the previous arrangement or style *
PROGRAM UP	Select the next program
PROGRAM DOWN	Select the previous program
VARIATION UP	Select the next variation
VARIATION DOWN	Select the previous variation
PUNCH IN/OUT	Punch-in recording switch
EFFECT 1 ON/OFF	Effect 1 on/off
EFFECT 2 ON/OFF	Effect 2 on/off
DRUM MUTE	Mute the drum track
PERC MUTE	Mute the percussion track
BASS MUTE	Mute the bass track
ACC1 MUTE	Mute the accompaniment track 1
ACC2 MUTE	Mute the accompaniment track 2
ACC3 MUTE	Mute the accompaniment track 3
SOUND HOLD ON/OFF	Same as the [SOUND HOLD] button
SUSTAIN ON/OFF	Same as the [SUSTAIN] button
FADE IN/OUT	Same as the [FADE IN/OUT] button
ENSEMBLE ON/OFF	Same as the [ENSEMBLE] button
QUARTER TONE	Quarter tone switch **

Functions which can be assigned to an expression pedal

KEYBOARD VOLUME	Standard volume of the program or selected track
MASTER VOLUME	Total volume of the sound output from the *iX300*
EXPRESSION	Relative volume of the program or selected track
VDF CUTOFF	VDF cutoff frequency (brightness)
EFFECT CONTROL	Effect dynamic modulation
DATA ENTRY	Input parameter values

* When in Arrangement Play mode "Page 2" you can select styles, and when in other pages you can select arrangements.

** The *iX300* allows you to play the quarter tones (pitch intervals of 50 cents = quarter tone) that are used in oriental scales such as those of middle eastern music. Be sure to use a foot switch with open-type polarity (such as the right jack of a PS-2 pedal, or a PS-1).

In Disk/Global mode "Page 7. Assignable pedal settings" or "Page 8. EC5 external controller settings," you can select QUARTER TONE and use a connected foot switch or EC5 and the [CHORD HOLD] button to specify quarter tones. (In this case, the [CHORD HOLD] button will not perform its usual chord hold function.)

When you specify one note, the pitch of not only that note, but also all corresponding notes that the *iX300* can produce, in octaves above and below that note, will be raised or lowered 50 cents.
Quarter tone settings apply only to the Main Scale. When you are using a foot switch etc. to switch between the main scale and the sub scale, quarter tones will not function when the sub scale is selected.

In Backing Sequence mode, quarter tones apply to the keyboard track. When playing notes received from a connected external MIDI device or when playing back musical data from the sequencer, quarter tones will function for the MIDI channel which is assigned to the keyboard.

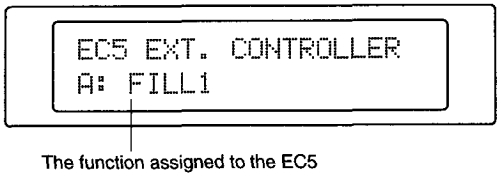
- **Quarter tone settings**

Lowering the specified note by 50 cents
While pressing a connected footswitch or EC5, press the [CHORD HOLD] button. When the [CHORD HOLD] button **LED is off**, press a note (it will not sound), and release the footswitch or EC5 to complete the setting.
The pitch of the specified keyboard note will be lowered by 50 cents.

Raising the specified note by 50 cents
While pressing a connected footswitch or EC5, press the [CHORD HOLD] button. When the [CHORD HOLD] button **LED is lit**, press a note (it will not sound), and release the footswitch or EC5 to complete the setting.
The pitch of the specified keyboard note will be raised by 50 cents.

- **Canceling quarter tone settings**
While setting quarter tones, press and then release the footswitch or EC5 pedal that you are using, and all currently-set quarter tone settings will be canceled. Also, all quarter tone settings will be canceled when you change the pedal assignment in Disk/Global mode "Page 7" or "Page 8," or when the power of the *iX300* is turned off.

Page 8. EC5 external controller settings

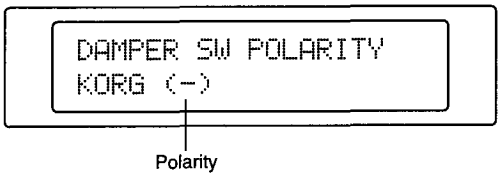


EC5 EXT.CONTROLLER **[A...E]/[OFF, START/STOP...QUARTER TONE]**

A–E correspond to switches A–E of the EC5 external controller. When a Korg EC5 external controller is connected to the rear panel EC5 jack, and functions are assigned to A–E, you can use the A–E switches to control the same functions as the panel buttons. For the functions which can be assigned, refer to the table "Functions which can be assigned to a foot switch" in the "Page 7. Assignable pedal settings" section.

You can use the [TEMPO/VALUE] buttons to select A–E, but you can also press a footswitch A–E while this page is displayed to select the corresponding switch.

Page 9. Damper switch polarity



Polarity **[REVERSE (+), KORG (–)]**

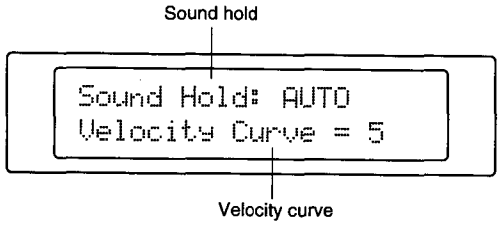
When a foot switch is connected to the DAMPER jack on the *iX300*'s rear panel, it can be used as a sustain pedal. This will have the same effect as the right-most pedal on an acoustic piano, so that if you press this switch before taking your hand off the keyboard, the sound will continue even after the notes are released. However in order to use this effect, the parameter in this page must be set appropriately for the footswitch that you are using.

Most Korg footswitches such as the DS-1 or PS-1 have a normally open polarity. When using one of these footswitches, select **KORG (–)**.

The Korg DS-2 and many pedals made by other manufacturers have a normally closed polarity. In this case, select **REVERSE (+)**.

If you are using a Korg PS-2 pedal as the damper pedal, set the **right jack to KORG (–)** and the **left jack to REVERSE (+)**. If you are not sure of the polarity of your pedal, try one of the settings, and if the sound sustains even when the pedal is not pressed, use the other setting.

Page 10. Sound hold/Velocity curve



Sound Hold [ACTUAL, AUTO, BASS]

With a setting of **ACTUAL**, the [CHORD SCANNING] button will automatically be set to LOWER when the [SOUND HOLD] button is turned ON.
While playback is stopped, playing the LOWER keyboard will cause the chord that is detected by the ***iX300*** to be sounded using the KBD2 program, and at the same time, the root of the chord will be sounded using the BASS track program.
If the [CHORD HOLD] button is also turned ON, the sounds will be sustained as long as the chord is not changed.
While accompaniment is playing, notes played in the lower area will be sustained only if the [CHORD HOLD] button is also ON.

With a setting of **AUTO**, the [CHORD SCANNING] button will automatically be set to LOWER when the [SOUND HOLD] button is turned ON.
While playback is stopped, playing the LOWER keyboard will cause the chord that is detected by the ***iX300*** to be converted into a full chord (with all the component notes) and sounded using the KBD2 program.
As with a setting of "ACTUAL," the root of the detected chord will be sounded using the BASS track program.
If the [CHORD HOLD] button is also turned ON, the sounds will be sustained as long as the chord is not changed.
While accompaniment is playing, notes played in the lower area will be converted into a full chord according to the chord that is detected, and sounded using the KBD2 program.
If the [CHORD HOLD] button is also ON, this full chord will be sustained.

With a setting of **BASS**, if playback is stopped when the [CHORD SCANNING] button is set to LOWER, UPPER or FULL, Sound Hold will function when chords are detected. If you play the keyboard while playback is stopped, the root of the chord detected by the ***iX300*** will be sounded using the BASS track program.

- Since Intro 1 and Ending 1 use a special chord progression which will be different for each arrangement, Sound Hold will automatically be canceled to prevent unnatural-sounding results.
- In Backing Sequence mode, Sound Hold will not function while a backing sequence is playing back.
- While recording a backing sequence, "the settings of the playing accompaniment" will be recorded, meaning that there will be no Sound Hold effect even if this parameter is set to "BASS."
- If the Sound Hold function is used with a setting of ACTUAL or AUTO, the balance may not be appropriate, depending on the KBD1, KBD2 and BASS track volume settings of the arrangement. In this case, adjust the volume balance of these tracks.

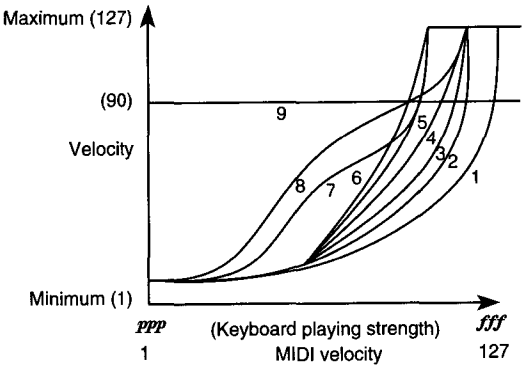
< About the Sound Hold function and backing sequences >

When **ACTUAL** or **AUTO** is selected, sounds that are played on the LOWER keyboard (or sounds played automatically by the ***iX300***) are recorded as normal Note data onto the keyboard track of the backing sequence. Even if you change the Sound Hold parameter setting after recording a backing sequence, this data will not be affected.

Velocity Curve [1...9]

You can select one of nine response curves by which key velocity will affect the volume or tone of a program. The diagram below shows how these response curves relate playing dynamics to the sound of the ***iX300***.

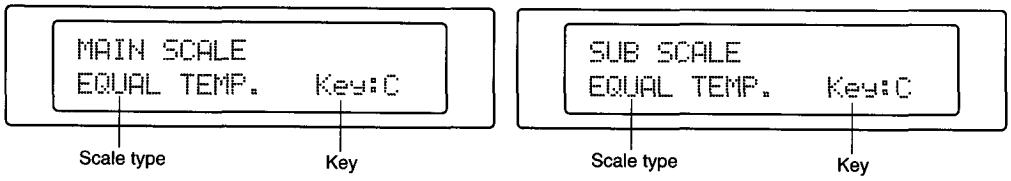
With a setting of **9**, all notes played on the keyboard will be sounded with a velocity value of 90, regardless of the strength with which they were actually played. This setting allows you to turn off the ***iX300***'s velocity sensitivity. However, this setting has no effect on the ***iX300***'s response to the velocity of MIDI Note messages received from an external device.



Page 11. Main scale select
Page 12. Sub scale select

Here you can specify the basic scale for the ***iX300***. You can select main scale and a sub scale, and switch between these using a foot switch, EC5 external controller, or via MIDI.

To select the scale you wish to use, first choose either MAIN SCALE or SUB SCALE. Then select one of the scale types listed below.



Scale type [EQUAL TEMP...USER SCALE]

Selects the scale that will be used as either the main scale or the sub scale. The possible settings are the same for both main and sub scales.

The Key parameter that is shown in the lower right of the display can be set if you have selected a scale for which the principle chords differ by key (tonic).

EQUAL TEMPERAMENT is the most widely used scale, and consists of equally-spaced semitone steps.
EQUAL TEMPERAMENT 2 introduces a slight degree of irregularity to the equal temperament pitches. It is suitable for simulating acoustic instruments whose pitch is naturally inexact.
PURE MAJOR will cause the major chords of the selected key to be perfectly in tune.
PURE MINOR will cause the minor chords of the selected key to be perfectly in tune.
ARABIC reproduces a quarter-tone scale of Arabic music. Set the Key parameter to C for "rast C/bayati D", D for "rast D/bayati E", F for "rast F/bayati G", G for "rast G/bayati A", or A# for "rast B♭/bayati C".
PYTHAGOREAN is a scale based on ancient Greek musical theory, and is suitable for playing melodies.
WERCKMEISTER/KIRNBERGER are classical scales. Werckmeister is an equal-tempered scale used in the latter baroque period. Kirnberger is a harpsichord scale created in the 18th century.
SLENDRO/PELOG are Indonesian gamelan scales in which the octave consists respectively of 5 and 7 notes. SLENDRO uses the C, D, F, G, and A keys. PELOG uses only the white keys (if the Key parameter is set to C), and other keys will produce the same pitches as equal temperament.
USER SCALE is the scale that you create using "Page 13. User scale settings," to adjust each pitch in the range of ±50 cents as desired. You can also use the Master Tune parameter of "Page 2. Master tuning/Transpose position" to adjust each pitch in a ±50 cent range.

When a scale other than Equal Temperament or Equal Temperament 2 is used, the [TRANSPOSE] buttons may cause you to miss the desired principle chords, depending on the Transpose Position setting.

Key [C...B]

Selects the key (tonic) of the principle chords for the selected scale.

< Switching between the Main Scale and Sub Scale >

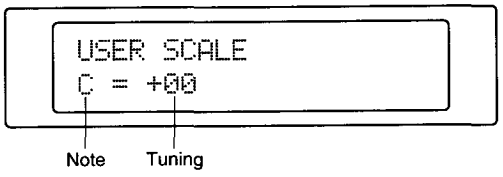
An optional footswitch or MIDI controller messages can be used to switch between the main scale and the sub scale.

In order to use a foot switch, you must first set "Page 7. Assignable pedal settings" to SCALE CHANGE. If you wish to use an EC5 external controller, set "Page 8. EC5 external controller settings" to SCALE CHANGE.

To select scales via MIDI, use MIDI controller number 4. Values from 0–63 will select the main scale, and values from 64–127 will select the sub scale.

Page 13. User scale settings

The parameters in this page allow you to modify the settings of the user scale. In order to use the user scale, you must first select USER SCALE as the scale type in "Page 11" or "Page 12."



Note [C...B]

Selects the note of the scale whose pitch you wish to modify.

Tuning [-50...+50]

Adjusts the tuning of the note selected by the Note parameter.
You can raise or lower the pitch a maximum of 50 cents (i.e., half a semitone) from the equal tempered pitch. This setting will affect each of the corresponding notes in all octaves of the keyboard.

Page 14. MIDI data dump

Select the type of data to be dumped and specify the data mode, and press the [RESET/YES] button to transmit the data dump.

Use this function when you wish to transmit data from the ***iX300***'s internal memory to an external MIDI device. This data dump function allows several ***iX300*** units to share data, or data to be stored on a personal computer or MIDI data filer that is able to receive exclusive data.

While this page is displayed, the ***iX300*** will be able to transmit and receive MIDI data dumps regardless of the settings of Disk/Global mode "Page 6. MIDI filter." So that you will not have problems later, we suggest that you write down the "Page 4. MIDI channel settings 1" Global MIDI channel and MBD 1/2 channel settings. The ***iX300*** will receive a data dump only if these channels are set to the same settings that were in use when the data dump was originally transmitted.

The ***iX300*** will be able to receive data dumps at any time if the above-mentioned Exclusive Filter is set to "o."
For details on the format of exclusive messages, refer to the end of this manual.

Dump Type [ALL DATA, GLOBAL, ARRANGEMENT, BACKING SEQUENCE, PROGRAM]

ALL DATA will transmit all the data types described below.
GLOBAL will transmit all Global parameters except for the Local Control and Clock Source setting.
ARRANGEMENT will transmit the data for the 64 user arrangements.
BACKING SEQUENCE will transmit data for the 10 backing sequences.
PROGRAM will transmit data for the 64 user programs, two drum programs, and the user drum kit data.

Dump type	Size (number of bytes)	Transmission time (seconds)
All data	35166–155274	11.3–48.6
Program	13331	4.3
Global	32	—
Arrangement	14949–84462	4.8–27.1
Backing sequence	2620–185477	0.8–58.0

Data mode [iX, CMP]

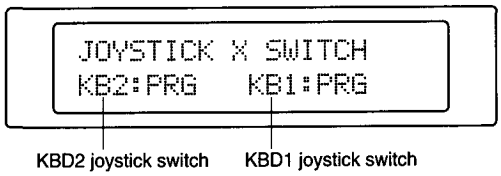
With a setting of **iX**, the data that was saved to disk or dumped can be received only by an ***iX300***.
With a setting of **CMP**, the data that was saved to disk or dumped can be used by other ***i***-series instruments.

Data which uses arrangements (A11–B88), styles, programs (D11–D88, Dr21–Dr44) which are found only on the ***iX300*** will not function on other ***i***-series instruments even if the data is dumped or saved in CMP mode.

If such data is used by the ***i1/i2/i3/i4S/i5S/i5M***, malfunctions may occur during operation, so please exercise caution when data dumped in CMP mode is used on another ***i***-series instrument.

Page 15. Joystick settings

These settings determine whether the joystick of the ***iX300*** will control the pitch of the KB1 and/or KB2 keyboard timbres.
If keyboard assign is set either to SPLIT or LAYER, KB1 and KB2 can be set to ENA for one and DIS for the other, so that the joystick will affect the pitch of only one sound.



KB2 (KB2 joystick switch) [PRG, DIS]

With a setting of **PRG**, the joystick can be used to raise or lower the KB2 pitch. However some programs may be set so that the joystick has no effect, and in this case the joystick will not affect the pitch of the program.
With a setting of **DIS**, the joystick will have no effect.

KB1 (KB1 joystick switch) [PRG, DIS]

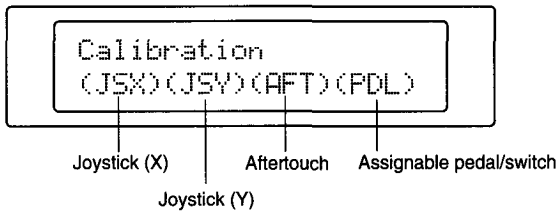
With a setting of **PRG**, the joystick can be used to raise or lower the KB1 pitch. However some programs may be set so that the joystick has no effect, and in this case the joystick will not affect the pitch of the program.
With a setting of **DIS**, the joystick will have no effect.

Page 16. Calibration

As the joystick, keyboard aftertouch, and assignable pedal/switch are used, their actual position may drift slightly out of calibration with the value that they are indicating. If this occurs, perform the calibration adjustment described below.

Use the [CURSOR] buttons to move the cursor to the function that you wish to adjust, and press the [RESET/YES] button to enter the sub-page in which the adjustment is performed.

Be sure to move the joystick until it stops. If repeated attempts produce a display of Invalid Data, it is possible that a malfunction has occurred, so please contact a Korg service center or your dealer.



16-1. Joystick (X) calibration

① Move the joystick as far as it will go toward the left.

② Move it likewise to the right.

③ Take your hand off the joystick.

④ When the joystick returns to the center, press the [RESET/YES] button.

⑤ If the adjustment was performed correctly, the display will ask "Are you sure?," so press the [RESET/YES] button once again. The display will indicate "Completed," and calibration will end.
If the adjustment could not be performed correctly, the display will indicate "Invalid Data." Try the procedure once again from the beginning.

16-2. Joystick (Y) calibration

① Move the joystick as far as it will go away from you.

② Move it likewise toward yourself.

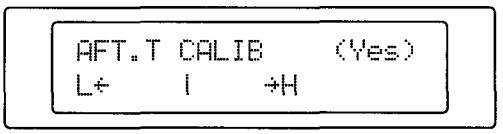
③ Take your hand off the joystick.

④ When the joystick returns to the center, press the [RESET/YES] button.

⑤ If the adjustment was performed correctly, the display will ask "Are you sure?," so press the [RESET/YES] button once again. The display will indicate "Completed," and calibration will end.
If the adjustment could not be performed correctly, the display will indicate "Invalid Data." Try the procedure once again from the beginning.

16-3. Aftertouch calibration

The aftertouch sensitivity differs somewhat between keys. This means that for some keys, it may not be possible to produce the maximum aftertouch effect by pressing down on them. If you notice such a key, perform the calibration procedure given below.



① Press the note (only one note) from which the full aftertouch effect cannot be obtained.

② Take your hand off the keyboard, and press the [RESET/YES] button.

③ If the adjustment was performed correctly, the display will ask "Are you sure?," so press the [RESET/YES] button once again. The display will indicate "Completed," and calibration will end.
If the adjustment could not be performed correctly, the display will indicate "Invalid Data." Try the procedure once again from the beginning.

Perform the adjustment only on the single note from which the full aftertouch effect cannot be obtained.

16-4. Assignable pedal/switch calibration

The depth of an effect controlled by a pedal or footswitch will depend on the type or model of that pedal or switch. Thus, when you start using a different pedal, there may be cases in which the full effect cannot be obtained by depressing the pedal, or conversely that the effect cannot be shut off completely by raising the pedal. If this occurs, perform the following calibration procedure.

① Connect the pedal or footswitch to the ASSIGNABLE PEDAL/SW jack.

② To calibrate a pedal, depress the pedal all the way, and then raise the pedal all the way.

③ Press the [RESET/YES] button.

④ If the adjustment was performed correctly, the display will ask "Are you sure?," so press the [RESET/YES] button once again. The display will indicate "Completed," and calibration will end.
If the adjustment could not be performed correctly, the display will indicate "Invalid Data." Try the procedure once again from the beginning. If the pedal is not depressed sufficiently, correct calibration cannot be performed.

8. Appendices

Messages

In the various page displays of Arrangement Play mode and Backing Sequence mode display settings and parameters, and also when you modify settings such as volume, mute, and transpose, the ***iX300*** will sometimes display "popup" screens that appear only for a few seconds.

In addition to these, you may occasionally see messages that provide warnings, ask for confirmation, or indicate that processing is taking place.

If a warning message is displayed, correct the settings for the measure or filename etc. as necessary, and execute the operation once again.
If a confirmation message is displayed, be aware that executing the operation may cause some or all data to be lost from the ***iX300***'s internal memory or from a floppy disk.

Then, either save the important data to disk or make a backup copy of the file before continuing the procedure. If one of these warning or confirmation messages appears, you should also check to make sure that the type of operation itself that you are attempting to execute is actually the desired operation. (For example, make sure that while intending to execute Rename Arrangement you are not actually selecting the Write Arrangement page.)

????????.??? exists.

The filename ????????.??? that you specified as the name of a new file is already used by a different file on the same disk. Is it OK to replace (overwrite) the old file with the new file? If this is done, the contents of the old file will be lost from the disk.

Already formatted. Continue?

This message notifies you that the disk you are attempting to format is already formatted, and asks whether the operation should be continued. Make sure that you have inserted the correct disk.

Are you sure?

This message is asking whether the operation should be executed. To execute press the [RESET/YES] button. To cancel without executing press the [TAP TEMPO/NO] button.

Battery low.

The voltage of the memory backup battery inside the ***iX300*** is low. If you neglect to replace the battery, the data of internal memory such as arrangements, programs, and user styles etc. will be lost when the ***iX300*** power is turned off. Contact a Korg service center or your Korg dealer to have the battery replaced. Under no circumstances should you attempt to replace the battery yourself.

Can't find file

During an operation such as load, delete or rename, did you exchange disks after specifying a file?
The currently inserted floppy disk does not contain the required file. Thus, the operation that you are attempting cannot be executed. Make sure that the correct disk is inserted.
☞P. 129 "Data stored on disk"

Can't play all track. Continue?

The ***iX300*** does not have enough memory to play all the tracks of the musical data that you specified. If you playback now, some of the tracks will not be heard.

Can't read disk.

The currently inserted floppy disk is a format which the *iX300* cannot use, and the operation that you are currently attempting cannot be executed.
Make sure that the correct disk is inserted. This message may also appear if the current or voltage of your AC power is unstable.
☞ User's Guide "3. About floppy disks"

Can't replace dir.

The filename that you specified is already being used by a directory on that disk. Thus, the operation that you are attempting cannot be executed.
Specify a different filename, and try the operation again.

Can't replace system.

The filename that you specified is already being used by a system file on that disk. Thus, the operation that you are attempting cannot be executed.
Specify a different filename, and try the operation again.

Completed.

Processing has been completed. You may continue operation as desired.

Corrupt SMF.

The specified Standard MIDI File contains damaged data. Thus, this data cannot be played back on the *iX300*.

Corrupt file.

The data in the specified file has been damaged. Thus, the operation that you are attempting cannot be executed.
Make sure that you have selected the correct file.
If you have a backup copy of that file, load the backup file.

Directory full.

No more directories can be created in the currently inserted floppy disk. Thus, the operation that you are attempting cannot be executed.
Either delete unneeded files from the disk, or insert a different disk in which additional files can be created, and try the operation again.

Disk full.

No more data can be written into the currently inserted floppy disk. Thus, the operation that you are attempting cannot be executed.
Either delete unneeded files from the disk, or insert a different disk that has remaining space, and try the operation again.

Disk has ??? file(s). Continue?

The disk that you are attempting to format already contains ??? files. This message asks you whether you still wish to format the disk. If you execute formatting, the files currently existing on disk will all be lost. Make sure that you have inserted the correct disk.

Disk protected.

The write protect tab of the disk is in the open (protect) position. Thus, the operation that you are attempting cannot be executed.
First make sure that the correct disk is inserted. Then, if you are sure that you don't mind for the data on the disk to be rewritten, slide the tab closed and perform the operation once again.

Empty SONG/B.SEQ

The specified backing sequence does not yet contain data. Thus, the operation that you are attempting cannot be executed.

Empty file.

The selected file does not contain data. Thus, the operation that you are attempting cannot be executed.
If disk operations are performed incorrectly, it is possible that such an empty file can be created on disk.
If you find such a file, use the Disk/Global mode "Page 1-3. Utility" (☞Page 134 in this manual) function Delete File (DEL) to delete that file.

Empty measure.

This measure contains no data. Thus, the operation that you are attempting is invalid. Make sure that you have selected the correct measure.

Empty track.

This track does not contain data. Thus, the operation that you are attempting cannot be executed. Make sure that you have selected the correct track.

Erase Other (Yes/No)?

When using the interactive composition function to re-assign the chords of the chord track, there was insufficient memory for the ***iX300*** to use as work area.
In order to allocate the necessary memory area, is it OK to erase the backing sequence data currently stored in the internal memory of the ***iX300***?
If internal memory contains data that you do not wish to loose, use the Disk/Global mode "Page 1-2. Save" (☞Page 133 in this manual) Backing Sequence Save operation to save that data to disk.

File protected.

The selected file has an attribute of read-only. Thus, the operation that you are attempting cannot be executed.
First make sure that you have selected the correct file. The attribute of a file on disk cannot be changed by the ***iX300***, but you can use a personal computer to do so if you need to. If you are sure that it is OK to change the attribute of the file, insert the disk into the disk drive of a personal computer, modify the attribute of that file, insert the disk back into the ***iX300***'s disk drive, and perform the operation once again. For details on file attributes and how to change them, refer to the owner's manual for your personal computer or the manual for your computer's operating system.

Keyboard Track Empty.

Since the keyboard track contains no data, the operation that you are attempting cannot be executed. Either record data, or load data into the track before attempting the operation.

Measure not exists. Continue?

Have you specified the wrong measure? The measure number that you specified does not exist in the data.

Measure overlaps.

With the settings that you specified, the measures that you wish to copy overlap with the copy destination.
It is not possible to make settings so that the copy destination is located within the copy source.
Check the position and length of the copy source measures and the number of copies, and the location of the copy destination.

Measure won't fit.

If measures are copied or inserted as you specified, this track will exceed 999 measures.
The ***iX300*** cannot create more than 999 measures in a track. Check the length of the measures that you wish to copy or insert, the number of copies, and the length of the insert destination track.

Missing Arrangement.

There is no arrangement file in the currently inserted disk.

Missing B.Sequence.

There is no backing sequence file in the currently inserted disk.

Missing some files.

Some of the files are missing from the currently inserted disk.

No disk in drive.

A floppy disk is not inserted in the disk drive. Correctly insert a disk into the drive, and try the operation again.

Not SMF.

The specified file is not a Standard MIDI File. Thus, this data cannot be played back on the ***iX300***. Make sure that you have not specified the wrong file.

Not enough memory.

The *iX300* does not have enough memory for work area. Thus, the operation that you are attempting cannot be executed. In order to allocate memory space, you will need to perform one of the operations described below. However if any of the data in memory is important and must not be lost, use the Disk/Global mode "1-2. Save" or Song Edit mode "Page 12. Save" operation to save the data to floppy disk.

If this message appears when you are in Song Edit mode, Backing Sequence mode, or in Disk/Global mode when you are using LOAD ALL or LOAD ONE to load backing sequence data, you will need to delete backing sequence data or song edit data. If this message appears when you are using the Disk/Global mode operation LOAD ONE to load style data, you will need to delete style data from the user bank.

In the interactive composition function of Backing Sequence mode, memory will still be insufficient even if you delete backing sequence data. Thus, chord re-assignment could not be performed.

Okay to erase B.Seq & Song Edit

The *iX300* does not have enough memory to playback the SMF format 1 data that you specified.
In order to allocate sufficient memory space, is it OK to erase the backing sequence data or the song editing data from internal memory? If internal memory contains data that you do not wish to lose, use the Disk/Global mode "Page 1-2. Save" (☞Page 133 in this manual) backing sequence save operation or the Song Edit mode "Page 12. Save" (☞Page 100 in this manual) operation to save that data to disk.

Replay (Yes/No)?

This message is asking whether the chords in the chord track should be re-assigned by the interactive composition function after recording or when the [START/STOP] button is pressed.
If you select Yes, chords will be re-assigned, and the data will be played.
If you select No, operation will stop as it is.

SMF format 2.

The specified file is a Standard MIDI File in Format 2. Thus, this data cannot be played back by the *iX300*. Make sure that the correct file has been selected.

Source is empty.

If this appears during a Copy Measure operation ...
Are you attempting to copy a measure that contains no data to another measure? It is not possible to copy a measure which contains no data to another measure. Re-specify the correct measure.
Alternatively, it is possible that the track itself contains no data at all. Make sure that you have selected the correct track.

If this appears during a Bounce Track operation ...
Are you attempting to bounce a track containing no data to another track? It is not possible to bounce a track containing no data to another track. Re-specify the correct track.
Check once again that you have selected the correct track.

Wait a moment ...
Now loading ...
Now saving ...
Now formatting ...

These message indicate that a disk-related operation is in progress. Please wait until the operation is completed.

Troubleshooting

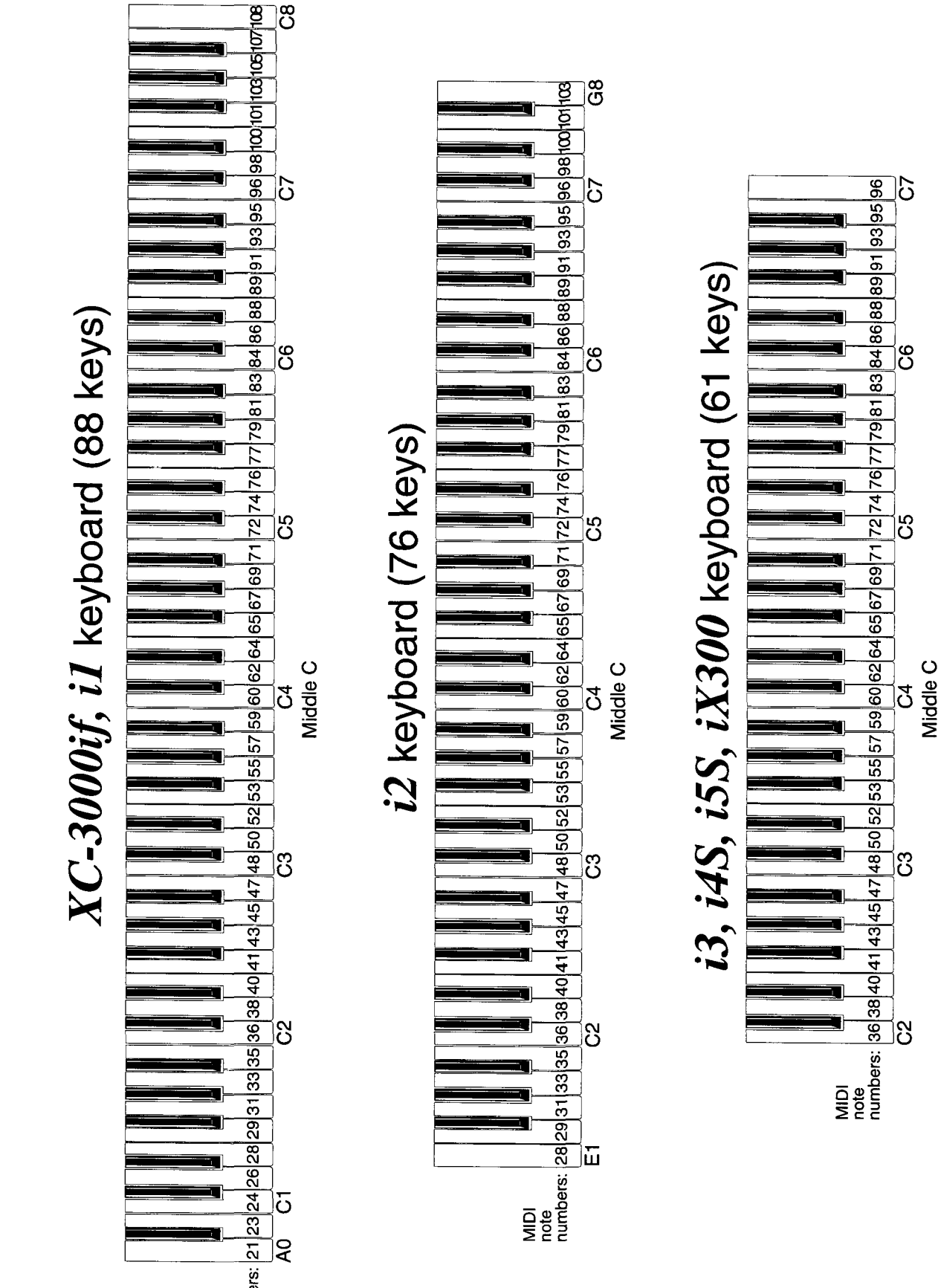
General problems

Problem	Action
Power does not turn on	Is the power cable plugged into an appropriate outlet?
	Is the power switch turned on?
	If the power still does not turn on, contact your Korg dealer or a Korg service center.
No sound	If you are using a sound system, check the connections of your amp and mixer etc.
	If you are using a sound system, check that the power of your amp and mixer is turned on, and that connections are correct.
	Is the MASTER VOLUME slider of the *iX300* raised?
	Is Local Control turned off? Turn it on.
Wrong sounds are heard when playing an arrangement, style, backing sequence, or song etc.	Have the User bank (bank U) programs or the drum programs Dr17 or Dr18 been partially modified? Load the appropriate data.
	Has one of the two user drum kits been partially modified? Load the appropriate data.
	Has the arrangement data been partially modified? Load the appropriate data.
Arrangement or backing sequence does not play the correct song	Does the arrangement or backing sequence use one of the user styles? If so, have you loaded a different style from disk? Load the appropriate data.
Sound does not stop	Make sure that the damper switch polarity parameter is set correctly.
Selected arrangement or backing sequence does not playback	Make sure that the MIDI Clock Source is set to INT. If you are using an external clock source, you must set the MIDI Clock Source parameter to EXT, and set the external device to transmit MIDI Clock messages.
Cannot record in Backing Sequence mode	Make sure that the MIDI Clock Source is set to INT. If you are using an external clock source, you must set the MIDI Clock Source parameter to EXT, and set the external device to transmit MIDI Clock messages.
Does not respond to transmitted MIDI data	Make sure that all MIDI cables are connected correctly.
	Make sure that the *iX300* is receiving MIDI messages on the same channel as they are being transmitted.
	Make settings so that the *iX300* does not filter out the incoming MIDI messages.
Some drum sounds are not played	Check the panpot and effect send level settings.
Specified drum sound does not play when you play the keyboard	Make sure that the Transpose function is set to +00.

Floppy disk related problems

Problem	Action
Cannot format a floppy disk	Are you using a 3.5 inch 2DD or 2HD floppy disk? You must use one of these types.
	Is the disk inserted correctly?
	Is the write protect tab of the disk in the protect position?
Cannot save data to a floppy disk	Is the disk inserted correctly?
	Is the write protect tab of the disk in the protect position?
Cannot load data from a floppy disk	Is the disk inserted correctly?
	Does the disk contain data?

MIDI note number list

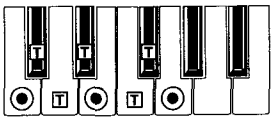


List of detected chords

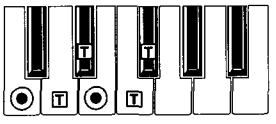
Each of the chords pictured below are shown in root position with a root note of C. In order for the *iX300* to correctly recognize major 6th and minor 6th chords, they must be played in root position as pictured. This is because these chords consist of the same notes as the minor 7th and minor 7th flatted 5th of the relative minor key. (For example, the notes C, E, G, and A could be either C6 or Am7.)

Major

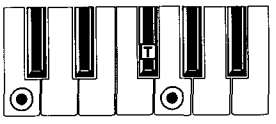
3-note



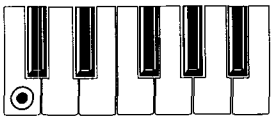
2-note



2-note

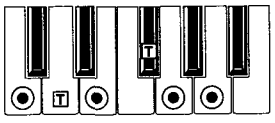


1-note

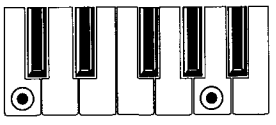


Major 6th

4-note

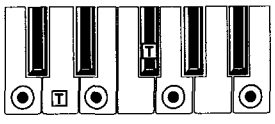


2-note

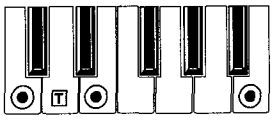


Major 7th

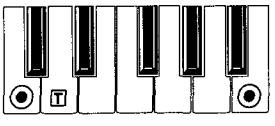
4-note



3-note

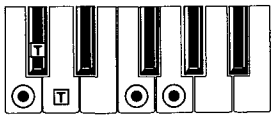


2-note

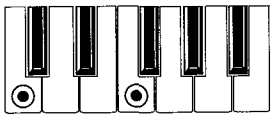


Sus 4

3-note

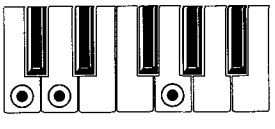


2-note



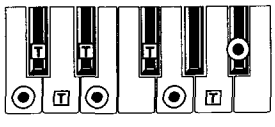
Sus 2

3-note

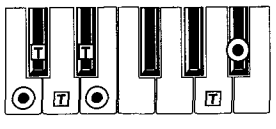


Dominant 7th

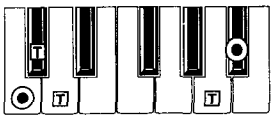
4-note



3-note

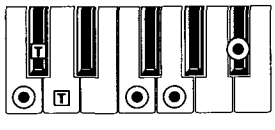


2-note

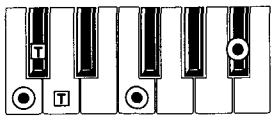


Dominant 7th Sus 4

4-note



3-note

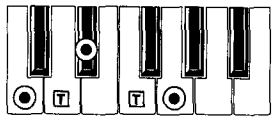


◉ = constituent notes of the chord

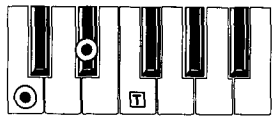
T = can be used as tension

Minor

3-note

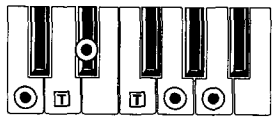


2-note



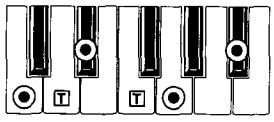
Minor 6th

4-note

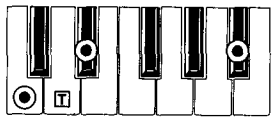


Minor 7th

4-note

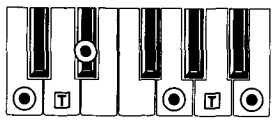


3-note

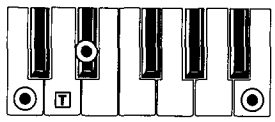


Minor-Major 7th

4-note

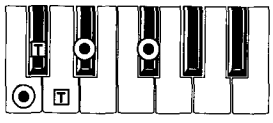


3-note



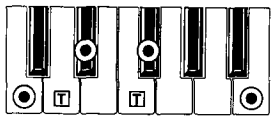
Diminished

3-note



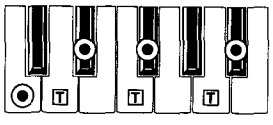
Diminished Major 7th

4-note



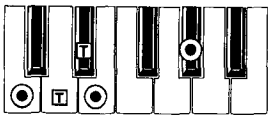
Minor 7th $\flat$5

4-note



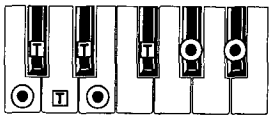
Augmented

3-note



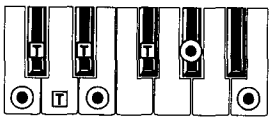
Augmented 7th

4-note



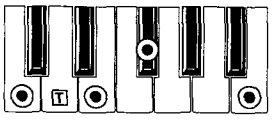
Augmented Major 7th

4-note



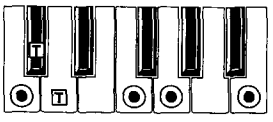
Major 7th $\flat$5

4-note



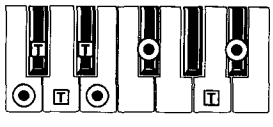
Major 7th Sus 4

4-note



Dominant 7th $\flat$5

4-note



◉ = constituent notes of the chord

T = can be used as tension

Drum Map Tables

These tables show how the specified drum sounds are changed when you select the drum maps. Drum sounds unaffected by the drum maps do not appear here. For this reason, drum map 5 is not listed, as all of the drum sounds remain unaffected when using this map.

Drum Map 1 (percussion)

Original note data	Re-mapped to:
Kick 1 (C2)	Clave
Kick 2 (B1)	Low Woodblock
Kick 3 (G1)	Hi Agogo
Kick 4 (E1)	Hi Bongo
Snare 1 (D2)	Cowbell
Snare 2 (E2)	Castanets
Snare 3 (A1)	Low Agogo
Snare 4 (F1)	Low Bongo
Sidestick (C#2)	Hi Woodblock

Original note data	Re-mapped to:
Snare Roll/Reversed Snare (A#1)	Bongo Slap
Closed Hi-hat (F#2)	Shaker
Accent Hi-hat (F#1)	Tambourine
Open Hi-hat (A#2)	Cabasa
Pedal Hi-hat (G#2)	Maracas
Ride 1 (D#3)	Muted Triangle
Ride 2 (B3)	Maracas
Ride Bell (F3)	Open Triangle
Crash 1 (C#3)	Vibraslap
Crash 2 (A3)	Bell Tree
China Crash (E3)	Bell Tree

Original note data	Re-mapped to:
Splash (G3)	Jingle
Hi Tom 1 (D3)	Hi Bongo
Hi Tom 2 (C3)	Lo Bongo
Mid Tom 1 (B2)	Mute Conga
Mid Tom 2 (A2)	Hi Conga
Low Tom 1 (G2)	Low Conga
Low Tom 2 (F2)	Low Timbale

Drum Map 2 (no snare)

Original note data	Re-mapped to:
Snare 1, 2, 3, 4 (D2, E2, A1, F1)	Pedal Hi-hat
Sidestick (C#2)	Closed Hi-hat
Snare Roll/Reversed Snare (A#1)	Closed Hi-hat

Drum Map 3 (sidestick and hi-hat)

Original note data	Re-mapped to:
Snare 1, 2, 3, 4 (D2, E2, A1, F1)	Sidestick
Sidestick (C#2)	*Snare 1, 2, 3, or 4
Snare Roll/Reversed Snare (A#1)	Sidestick

* The snare sound you hear will be determined by the current arrangement.

Drum Map 4 (sidestick and ride)

Original note data	Re-mapped to:
Snare 1, 2, 3, 4 (D2, E2, A1, F1)	Sidestick
Sidestick (C#2)	*Snare 1, 2, 3, or 4
Snare Roll/Reversed Snare (A#1)	Sidestick
Closed Hi-hat (F#2)	Ride 1
Accent Hi-hat (F#1)	Ride 2
Open Hi-hat (A#2)	Ride Bell

Original note data	Re-mapped to:
Ride 1 (D#3)	Closed Hi-hat
Ride 2 (B3)	Accent Hi-hat
Ride Bell (F3)	Open Hi-hat

* The snare sound you hear will be determined by the current arrangement.

Drum Map 6 (snare and ride)

Original note data	Re-mapped to:
Closed Hi-hat (F#2)	Ride 1
Accent Hi-hat (F#1)	Ride 2
Open Hi-hat (A#2)	Ride Bell

Original note data	Re-mapped to:
Ride 1 (D#3)	Closed Hi-hat
Ride 2 (B3)	Accent Hi-hat
Ride Bell (F3)	Open Hi-hat

Drum Map 7 (open hi-hat)

Original note data	Re-mapped to:
Closed Hi-hat (F#2)	Open Hi-hat
Accent Hi-hat (F#1)	Open Hi-hat
Ride 1 (D#3)	Open Hi-hat
Ride 2 (B3)	Open Hi-hat

Original note data	Re-mapped to:
Ride Bell (F3)	Open Hi-hat

Drum Map 8 (crash)

Original note data	Re-mapped to:
Accent Hi-hat (F#1)	Crash 2
Open Hi-hat (A#2)	Crash 1

MIDI Implementation Chart

Function		Transmitted	Recognized	Remarks	
Basic Channel	Default	1 – 16	1–16	Memorized	
	Changed	1 – 16	1–16		
Mode	Default		3		
	Messages	X	X		
	Altered	**********			
Note Number:		25–107	0–127	When sequencer data is sent: 0 – 127	
	True Voice	**********	0–127		
Velocity	Note On	O 9n, V=1 – 127	O 9n, V=1 – 127	When sequencer data is sent: 2 – 126	
	Note Off	X	X		
Aftertouch	Polyphonic (Key)	O	O	Sequencer data only	*A
	Monophonic (Channel)	O	O		*A
Pitch Bend		O	O		*C
Control Change	0, 32	O	O	Bank Select (MSB, LSB)	*P
	1, 2	O	O	Modulation (pitch, cutoff)	*C
	4, 64	O	O	Pedal (scale, damper)	*C
	6, 38	O	O	Data Entry (MSB, LSB)	*E
	7, 11	O	O	Volume, Expression	*C
	10, 91, 93	O	O	A:B panpot, send C, D	*C
	12, 13	O	O	Effect controller 1, 2	*C
	72, 73, 74	O	O	EG time (Release, Attack), Brightness	*C
	92 ,94	O	O	Effects 1, 2 on/off	*C
	96, 97	O	O	Data Inc, Dec	*E
	100, 101	X	O	RPN (LSB, MSB)	*2
	120, 121	X	O	All sound off, Reset all Cntrls	
	0 – 101	O	O	(Sequencer data)	
Program Change	Variable Range	O 0 – 127	O 0 – 127		*P
		**********	0 – 127		
System Exclusive		O	O		*3*E
System Common	Song Position	O	O		*1
	Song Select	O 0	O 0		*1
	Tune	X	X		
System Real Time	Clock	O	O		*1
	Command	O	O		*1
Aux Messages	Local On/Off	X	O		
	All Notes Off	X	O (123 – 127)		
	Active Sense	O	O		
	Reset	X	X		
Notes	*C, *P, *A, *E: Sent and received when MIDI Filter (Controller, Program Change, Aftertouch, System Exclusive) is set to ENA in Global mode. *1: When clock is set to internal, sent but not received. When set to external, received but not sent. *2: LSB, MSB = 00,00: pitch bend range, =01,00: fine tune, =02,00: course tune *3: Includes Inquiry, GM Mode On, Master Balance, and Master Volume messages.				

Mode 1:OMNI ON, POLY
Mode 2:OMNI ON, MONO
O: Yes
Mode 3:OMNI OFF, POLY
Mode 4:OMNI OFF, MONO
X: No

MIDI IMPLEMENTATION

1. TRANSMITTED DATA

1-1 CHANNEL MESSAGES

Status (Hex)	Second (Hex)	Third (Hex)	Description		ENA
1000 nnnn (8n)	0kkk kkkk (kk)	0100 0000 (40)	Note Off kkk kkkk=25..107	(61Keys+Transpose)	A
1001 nnnn (9n)	0kkk kkkk (kk)	0vvv vvvv (vv)	Note On kkk kkkk=25..107 vvv vvvv=2..127	(61Keys+Transpose)	A
1010 nnnn (An)	0kkk kkkk (kk)	0vvv vvvv (vv)	Poly Key Pressure	(Recorded Seq Data)	T,Q
1011 nnnn (Bn)	0000 0000 (00)	0mmm mmmm (mm)	Bank Select(MSB)	(BANK Key, etc) *1	P
1011 nnnn (Bn)	0000 0001 (01)	0vvv vvvv (vv)	Modulation 1	(Joystick(+Y))	C
1011 nnnn (Bn)	0000 0010 (02)	0vvv vvvv (vv)	Modulation 2	(Joystick(-Y))	C
1011 nnnn (Bn)	0000 0100 (04)	0000 0000 (00)	Foot Pedal	(Select Main Scale)	C
1011 nnnn (Bn)	0000 0100 (04)	0111 1111 (7F)	Foot Pedal	(Select Sub Scale)	C
1011 nnnn (Bn)	0000 0111 (07)	0vvv vvvv (vv)	Volume	(Assign Pedal, etc)	C
1011 nnnn (Bn)	0000 1010 (0A)	0vvv vvvv (vv)	Panpot	(by A:B Panpot)	C
1011 gggg (Bg)	0000 1100 (0C)	0vvv vvvv (vv)	Effect Control	(Assignable Pedal)	C
1011 nnnn (Bn)	0010 0000 (20)	0111 1111 (11)	Bank Select(LSB)	(BANK Key, etc) *1	P
1011 nnnn (Bn)	0100 0000 (40)	0000 0000 (00)	Hold 1 Off	(Damper Pedal)	C
1011 nnnn (Bn)	0100 0000 (40)	0111 1111 (7F)	Hold 1 On	(Damper Pedal)	C
1011 nnnn (Bn)	0ccc cccc (cc)	0vvv vvvv (vv)	Control Data ccc cccc=00..127	(Recorded Seq Data)	C,Q
1100 nnnn (Cn)	0ppp pppp (pp)	---- ----	Program Change	(Prog Change) *1	P
1101 nnnn (Dn)	0vvv vvvv (vv)	---- ----	Channel Pressure	(Aftertouch)	T
1110 nnnn (En)	0bbb bbbb (bb)	0bbb bbbb (bb)	Pitch Bend	(Joystick(X))	C

nnnn : MIDI Channel Number(0-15) Usually Global Channel. When using sequencer, each track's channel.
gggg : Always Global Channel Number(0-15)
vvvv : Value

ENA = A : Always Enabled
C : Enabled when Control Filter in GLOBAL Mode is ENA
P : Enabled when Program Filter in GLOBAL Mode is ENA
T : Enabled when Aftertouch Filter in GLOBAL Mode is ENA
Q : Enabled when sequencer is playing (transmitting) or recording (receiving)
T,Q: T and Q
C,Q: C and Q

*1 : Program : MIDI Out (Hex)

A11..A88:	mm,ll,pp = 38,00,00..3F	Dr31..38: mm,ll,pp =	3E,00,6C..73
B11..B88:	38,00,40..7F	Dr41..44:	3E,00,74..77
C11..C88:	00,01,00..3F		
U11..U88:	00,01,40..7F		
D11..D88:	00,03,00..3F		
E11..E88:	00,03,40..7F		
Dr11 :	3E,00,00		
Dr12 :	3E,00,10		
Dr13 :	3E,00,19		
Dr14 :	3E,00,20		
Dr15 :	3E,00,28		
Dr16 :	3E,00,40		
Dr17 :	3E,00,18		
Dr18 :	3E,00,30		
Dr21..28:	3E,00,78..7F		

1-2 SYSTEN COMMON MESSAGES

Status (Hex)	Second (Hex)	Third (Hex)	Description
1111 0010 (F2)	Osss ssss (ss)	Ottt tttt (tt)	Song Position Pointer sss ssss : Least significant (LSB) *2 ttt tttt : Most significant (MSB) *2
1111 0011 (F3)	0000 0000 (00)	---- ----	Song Select Song Number = 0

Transmited when in Song mode (Internal Clock)

*2 : For Example Time Signature = 4/4, 8/8
tt,ss = 00,10 / Measure

1-3 SYSTEM REALTIME MESSAGES

Status (Hex)	Description	
1111 1000 (F8)	Timing Clock	*3
1111 1010 (FA)	Start	*3
1111 1011 (FB)	Continue	*3
1111 1100 (FC)	Stop	*3
1111 1110 (FE)	Active Sensing	

*3 : Transmits when in Song or Backing Sequence mode (Internal Clock)

1-4 UNIVERSAL SYSTEM EXCLUSIVE MESSAGES (DEVICE INQUIRY REPLY)

Byte (Hex)	Description	
1111 0000 (F0)	Exclusive Status	
0111 1110 (7E)	Non Realtime Message	
0000 gggg (0g)	MIDI Global Channel	(Device ID)
0000 0110 (06)	Inquiry Message	
0000 0010 (02)	Identity Reply	
0100 0010 (42)	KORG ID	(Manufactures ID)
0011 1001 (39)	i-series ID	(Family Code LSB)
0000 0000 (00)		(Family Code MSB)
0000 0100 (08)		(Member Code LSB)
0000 0000 (00)		(Member Code MSB)
0*** **** (**)	Firmware Number	(Minor Version LSB)
0000 0000 (00)		(Minor Version MSB)
0*** **** (**)	Specification Number	(Major Version LSB)
0000 0000 (00)		(Major Version MSB)
1111 0111 (F7)	END OF EXCLUSIVE	

Transmits when INQUIRY MESSAGE REQUEST Received

1-5 STRUCTURE OF KORG SYSTEM EXCLUSIVE MESSAGES

```
[ 1st Byte = 1111 0000 (F0) : Exclusive Status                          ]
[ 2nd Byte = 0100 0010 (42) : KORG   ID                                 ] SysEx Header
[ 3rd Byte = 0011 gggg (3g) : Format ID    g:Global ch.                 ]
[ 4th Byte = 0011 1100 (39 or 48) : i Series ID                         ]
[ 5th Byte = 0fff ffff (ff) : Function Code  (See Func Code List)       ]
[ 6th Byte = 0ddd dddd (dd) : Data                                      ]
[    :          :          :                                           ]
[ LastByte = 1111 0111 (F7) : End of Exclusive ····· EOX                ]
```

1-6 Transmitted Function Code List

Func	Description	R	D	E	C
42	MODE DATA	○			
4E	MODE CHANGE				○*4
4C	ALL PROGRAM PARAMETER DUMP	○			
64	ALL ARRANGEMENT PARAMETER DUMP	○	○		
65	ALL STYLE DATA DUMP	○			
66	ALL BACKING SEQUENCE DATA DUMP	○	○		
51	GLOBAL DATA DUMP	○	○		
52	DRUMS DATA DUMP	○	○		
50	ALL DATA(GLB,DRM,PRG,ARR,STY,SEQ,BSQ)DUMP	○	○		
26	RECEIVED MESSAGE FORMAT ERROR	○		○	
21	WRITE COMPLETED			○	
22	WRITE ERROR			○	
23	DATA LOAD COMPLETED (ACK)			○	
24	DATA LOAD ERROR (NAK)			○	
67	CHORD				

Transmitted when
R : Request message is received
D : Data dump from Global mode (Doesn't respond to Exclusive ENA,DIS)
E : Exclusive message is received
C : Mode or number is changed by switch

Some Request Messages are not received in some modes. See 2-6.

* When transmitting a series of exclusive messages to the iX300, wait until [DATA LOAD COMPLETED] or [WRITE COMPLETED] is received.

*4 : Transmitted when Mode is changed.

2. RECOGNIZED RECEIVE DATA

2-1 CHANNEL MESSAGES

Status (Hex)	Second (Hex)	Third (Hex)	Description	ENA
1000 nnnn (8n)	0kkk kkkk (kk)	0xxx xxxx (xx)	Note Off	A
1001 nnnn (9n)	0kkk kkkk (kk)	0000 0000 (00)	Note Off	A
1001 nnnn (9n)	0kkk kkkk (kk)	0vvv vvvv (vv)	Note On vvv vvvv=1..127	A
1010 nnnn (An)	0kkk kkkk (kk)	0vvv vvvv (vv)	Poly Key Pressure (For Seq.Recording)	T,Q
1011 nnnn (Bn)	0000 0000 (00)	0mmm mmmm (mm)	Bank Select(MSB) *1	P
1011 nnnn (Bn)	0000 0001 (01)	0vvv vvvv (vv)	Modulation1 Depth (Pitch Modulation)	C
1011 nnnn (Bn)	0000 0010 (02)	0vvv vvvv (vv)	Modulation2 Depth (Cutoff Modulation)	C
1011 nnnn (Bn)	0000 0100 (04)	00vv vvvv(<40)	Foot Pedal Off (Select Main Scale)	C
1011 nnnn (Bn)	0000 0100 (04)	01vv vvvv(>3F)	Foot Pedal On (Select Sub Scale)	C
1011 nnnn (Bn)	0000 0110 (06)	0vvv vvvv (vv)	Data Entry (MSB) (For RPN Edit)	C
1011 nnnn (Bn)	0000 0111 (07)	0vvv vvvv (vv)	Volume	C
1011 nnnn (Bn)	0000 1010 (0A)	0vvv vvvv (vv)	*Panpot* (*A:B Panpot*)	C
1011 nnnn (Bn)	0000 1011 (0B)	0vvv vvvv (vv)	Expression	C
1011 gggg (Bg)	0000 1100 (0C)	0vvv vvvv (vv)	Effect Control	C
1011 nnnn (Bn)	0010 0000 (20)	0111 1111 (11)	Bank Select(LSB) *1	P
1011 nnnn (Bn)	0010 0110 (26)	0vvv vvvv (vv)	Data Entry (LSB) (For RPN Edit)	C
1011 nnnn (Bn)	0100 0000 (40)	00xx xxxx(<40)	Hold1 Off (Damper Off)	C
1011 nnnn (Bn)	0100 0000 (40)	01xx xxxx(>3F)	Hold1 On (Damper On)	C
1011 nnnn (Bn)	0100 1000 (48)	0vvv vvvv (vv)	Release Time (Perf. Edit Release Time)*4	C
1011 nnnn (Bn)	0100 1000 (49)	0vvv vvvv (vv)	Attack Time (Perf. Edit Attack Time)*4	C
1011 nnnn (Bn)	0100 1000 (4A)	0vvv vvvv (vv)	Brightness (Perf. Edit Cutoff) *4	C
1011 nnnn (Bn)	0101 1011 (5B)	0vvv vvvv (vv)	Reverb Level (Send C Level)	C
1011 gggg (Bg)	0101 1100 (5C)	0000 0000 (00)	Effect1 Level (Effect1 Off)	C
1011 gggg (Bg)	0101 1100 (5C)	0xxx xxxx(>00)	Effect1 Level (Effect1 On)	C
1011 nnnn (Bn)	0101 1101 (5D)	0vvv vvvv (vv)	*Chorus Level* (*Send B Level*)	C
1011 gggg (Bg)	0101 1110 (5E)	0000 0000 (00)	Effect2 Level (Effect2 Off)	C
1011 gggg (Bg)	0101 1110 (5E)	0xxx xxxx(>00)	Effect2 Level (Effect2 On)	C
1011 nnnn (Bn)	0110 0000 (60)	0000 0000 (00)	DATA Increment (For RPN Edit)	C
1011 nnnn (Bn)	0110 0001 (61)	0000 0000 (00)	DATA Decrement (For RPN Edit)	C
1011 nnnn (Bn)	0110 0100 (64)	0000 00rr (0r)	RPN Parameter Number (LSB) *3	A
1011 nnnn (Bn)	0110 0101 (65)	0000 0000 (00)	RPN Parameter Number (MSB) *3	A
1011 nnnn (Bn)	0111 1000 (78)	0000 0000 (00)	All Sound Off	C
1011 nnnn (Bn)	0111 1001 (79)	0000 0000 (00)	Reset All Controllers	C
1011 nnnn (Bn)	0ccc cccc (cc)	0vvv vvvv (vv)	Control Data (For Seq.Recording) ccc cccc=00..127	C,Q
1011 gggg (Bg)	0111 1010 (7A)	0000 0000 (00)	Local Control Off	A
1011 gggg (Bg)	0111 1010 (7A)	0111 1111 (7F)	Local Control On	A
1011 nnnn (Bn)	0111 1011 (7B)	0000 0000 (00)	*All Notes Off*	A
1011 nnnn (Bn)	0111 110x (7x)	0000 0000 (00)	Omni Mode Off/On (All Notes Off)	A
1011 nnnn (Bn)	0111 1110 (7E)	000m mmmm(<11)	Mono Mode On (All Notes Off) m mmmm=0..16	A
1011 nnnn (Bn)	0111 1111 (7F)	0000 0000 (00)	Poly mode On (All Notes Off)	A
1100 nnnn (Cn)	0ppp pppp (pp)	---- ----	Program Change (Prog,Comb CHG) *1,2	P
1101 nnnn (Dn)	0vvv vvvv (vv)	---- ----	Channel Pressure (Aftertouch)	T
1110 nnnn (En)	0bbb bbbb (bb)	0bbb bbbb (bb)	Bender Change (Pitch Bend)	C

nnnn : MIDI Channel Number(0-15) ····· Usually Global Channel.
When in SONG Mode, each track's channel.
gggg : Always Global Channel Number(0-15)

x : Random

```
*1 :              MIDI In (Hex): Program
     mm,ll,pp = 00,00,00..3F : A11..A88
                00,00,40..7F : B11..B88
                00,01,00..3F : C11..C88
                00,01,40..7F : U11..U88
                00,02,00..0F : Dr11
                00,02,10..17 : Dr12
                00,02,18     : Dr17
                00,02,19     : Dr13
                00,02,1A..1F : Dr17
                00,02,20..27 : Dr14
                00,02,28..2F : Dr15
                00,02,30..37 : Dr18
                00,02,38..3F : Dr11
                00,02,40..47 : Dr16
                00,02,48..77 : Dr11
                00,02,78..7F : Dr21..Dr28
                00,03,00..3F : D11..D88
                00,03,40..7F : E11..E88
                38,xx,00..3F : A11..A88
                38,xx,40..7F : B11..B88
                39,xx,00..3F : A11..A88
                39,xx,40..7F : B11..B88
                3A..3D,xx,xx : OFF
                3E,xx,00..0F : Dr11
                3E,xx,10..17 : Dr12
                3E,xx,18     : Dr17
                3E,xx,19     : Dr13
                3E,xx,1A..1F : Dr17
                3E,xx,20..27 : Dr14
                3E,xx,28..2F : Dr15
                3E,xx,30..37 : Dr18
                3E,xx,38..3F : Dr11
                3E,xx,40..47 : Dr16
                3E,xx,48..6B : Dr11
                3E,xx,6C..73 : Dr31..Dr38
                3E,xx,74..77 : Dr41..Dr44
                3E,xx,78..7F : Dr21..Dr28
                3F,xx,xx     : OFF
xx : Random

*2 : After processing (while Exclusive = ENA) transmits exclusive message [DATA LOAD COMPLETED]
     or [DATA LOAD ERROR].

*3 : rr = 0 : Pitch Bend Sensitivity
       = 1 : Fine Tune ( When Received Ch = Global Ch, Master Tune )
       = 2 : Coarse Tune ( Transpose )

*4 : vv < 40: Fast or Dark
       = 40: No change
       > 40: Slow or Bright
```

2-2 SYSTEM COMMON MESSAGES

Status (Hex)	Second (Hex)	Third (Hex)	Description
1111 0010 (F2)	Osss ssss (ss)	Ottt tttt (tt)	Song Position Pointer
1111 0011 (F3)	000s ssss (ss)	---- ----	Song Select

Received when in SONG mode (External Clock)

2-3 SYSTEM REALTIME MESSAGES

Status (Hex)	Description	
1111 1000 (F8)	Timing Clock	*5
1111 1010 (FA)	Start	*5
1111 1011 (FB)	Continue	*5
1111 1100 (FC)	Stop	*5
1111 1110 (FE)	Active Sensing	

*5 : Received when in SONG mode (External Clock)

2-4 UNIVERSAL SYSTEM EXCLUSIVE MESSAGE (NON REALTIME)

Byte (Hex)	Description	
1111 0000 (F0)	EXCLUSIVE STATUS	
0111 1110 (7E)	NON REALTIME MESSAGE	
Oggg gggg (gg)	MIDI CHANNEL	*6
0000 aaaa (0a)	SUB ID 1	*7
0000 00bb (0b)	SUB ID 2	*7
1111 0111 (F7)	END OF EXCLUSIVE	

```
*6 : gg = 0..F : Received if Global Channel
       = 7F    : Received on any Channel

*7 : a,b = 06,01 : INQUIRY MESSAGE REQUEST
         = 09,01 : GENERAL MIDI MODE ON
                   ( Received anytime except when Seq playing/recording.)
```

2-5 UNIVERSAL SYSTEM EXCLUSIVE MESSAGE (REALTIME)

Byte (Hex)	Description	
1111 0000 (F0)	EXCLUSIVE STATUS	
0111 1111 (7F)	REALTIME MESSAGE	
Oggg gggg (gg)	MIDI CHANNEL	*6
0000 0100 (04)	SUB ID 1	
0000 00bb (0b)	SUB ID 2	*8
Ovvv vvvv (vv)	VALUE(LSB)	*8
Ommm mmmm (mm)	VALUE(MSB)	*8
1111 0111 (F7)	END OF EXCLUSIVE	

```
*8 : b = 01 : MASTER VOLUME  ( mm,vv = 00,00..7F,7F : Min..Max )
       = 02 : MASTER BALANCE ( mm,vv = 00,00..40,00..7F,7F : L..Center..R )
```

2-6 SYSTEM EXCLUSIVE MESSAGES

* Not received when Sequencer is playing, recording.

Function Code List

Func	Description	G	P	A	O	R
12	MODE REQUEST	○	○	○	○	42
1C	ALL PROGRAM PARAMETER DUMP REQUEST	◎	○	○	○	4C
30	ALL ARRANGEMENT PARAMETER DUMP REQUEST	◎	○	○	○	64
31	ALL STYLE DATA DUMP REQUEST	◎	○	○	○	65
32	ALL BACKING SEQUENCE DATA DUMP REQUEST	◎	○	○	○	66
0E	GLOBAL DATA DUMP REQUEST	◎	○	○	○	51
0D	DRUMS DATA DUMP REQUEST	◎	○	○	○	52
0F	ALL DATA(GLB,DRM,PRG,ARR,STY,SEQ,BSQ)DUMP REQ	◎	○	○	○	50
10	PROGRAM PARAMETER DUMP REQUEST		○			40
4C	ALL PROGRAM PARAMETER DUMP	◎	○	○	○	23
64	ALL ARRANGEMENT PARAMETER DUMP	◎	○	○	○	23
65	ALL STYLE DATA DUMP	◎	○	○	○	23
66	ALL BACKING SEQUENCE DATA DUMP	◎	○	○	○	23
40	PROGRAM PARAMETER DUMP	◎	○			23
51	GLOBAL DATA DUMP	◎	○	○	○	23
52	DRUMS DATA DUMP	◎	○	○	○	23
50	ALL DATA(GLB,DRM,PRG,ARR,STY,SEQ,BSQ) DUMP	◎	○	○	○	23
4E	MODE CHANGE	○	○	○	○	23
60	PARAMETER CHANGE		○	○		23
41	ARRANGEMENT PARAMETER CHANGE			○		23

Received when in

G : Global Mode

(◎ Does not respond to Exclusive ENA, DIS on DATA DUMP page)

P : Program Mode

A : Arrangement Mode

O : All Other Mode

R : Reply Function Number

(Transmitted after the message has been received.)

3. MIDI EXCLUSIVE FORMAT (R : Receive, T : Transmit)

See 1-5 'STRUCTURE OF KORG SYSTEM EXCLUSIVE MESSAGES'

(1) MODE REQUEST R

Byte	Description
F0,42,3g,39	EXCLUSIVE HEADER
0001 0010	MODE REQUEST 12H
1111 0111	EOX

Receives this message, and transmits Func=42 message.

(2) ALL PROGRAM PARAMETER DUMP REQUEST R

Byte	Description
F0,42,3g,39(48)	EXCLUSIVE HEADER
0001 1100	ALL PROGRAM PARAMETER DUMP REQUEST 1CH
1111 0111	EOX

Receives this message, and transmits Func=4C or Func=24 message.

(3) ALL ARRANGEMENT PARAMETER DUMP REQUEST R

Byte	Description
F0,42,3g,39(48)	EXCLUSIVE HEADER
0011 0000	ALL ARRANGEMENT PARAMETER DUMP REQUEST 30H
1111 0111	EOX

Receives this message, and transmits Func=64 or Func=24 message.

(4) ALL STYLE DATA DUMP REQUEST R

Byte	Description
F0,42,3g,39(48)	EXCLUSIVE HEADER
0011 0001	ALL STYLE DATA DUMP REQUEST 31H
1111 0111	EOX

Receives this message, and transmits Func=65 or Func=24 message.

(5) ALL BACKING SEQUENCE DATA DUMP REQUEST R

Byte	Description
F0,42,3g,39(48)	EXCLUSIVE HEADER
0011 0010	ALL BACKING SEQUENCE DATA DUMP REQUEST 32H
1111 0111	EOX

Receives this message, and transmits Func=66 or Func=24 message.

(6) GLOBAL DATA DUMP REQUEST R

Byte	Description
F0,42,3g,39(48)	EXCLUSIVE HEADER
0000 1110	GLOBAL DATA DUMP REQUEST 0EH
1111 0111	EOX

Receives this message, and transmits Func=51 or Func=24 message.

(7) DRUMS DATA DUMP REQUEST R

Byte	Description
F0,42,3g,39(48)	EXCLUSIVE HEADER
0000 1101	DRUMS DATA DUMP REQUEST 0DH
1111 0111	EOX

Receives this message,and transmits Func=52 or Func=24 message.

(8) PROGRAM DATA DUMP REQUEST R, T

Byte	Description
F0,42,3g,39(48)	EXCLUSIVE HEADER
0001 0000	PROGRAM DATA DUMP REQUEST 10H
1111 0111	EOX

Receives this message, and transmits Func=40 or Func=24 message.

(9) ALL DATA(GLB,DRM,PRG,ARR,STY,SEQ,BSQ) DUMP REQUEST R

Byte	Description
F0,42,3g,39(48)	EXCLUSIVE HEADER
0000 1111	ALL DATA DUMP REQUEST 0FH
1111 0111	EOX

Receives this message, and transmits Func=50 or Func=24 message.

(10) PROGRAM WRITE REQUEST R

Byte	Description
F0,42,3g,39(48)	EXCLUSIVE HEADER
0001 0001	PROGRAM WRITE REQUEST 11H
Oppp pppp	Write Program Number (0-63:U11-U88, 64-65:Dr17-Dr18)
1111 0111	EOX

Receives this message, and transmits Func=21 or Func=22 message.

(11) PROGRAM PARAMETER DUMP R

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0100 0000	PROGRAM PARAMETER DUMP	40H
0ddd dddd	Data	(NOTE 1,2)
:	:	
1111 0111	EOX	

Receives this message & data, and transmits Func=23 or Func=24 message.
Receives Func=10 message, and transmits this message & data.

(12) ALL PROGRAM PARAMETER DUMP R, T

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0100 1100	ALL PROGRAM PARAMETER DUMP	4CH
0ddd dddd	Data	(NOTE 1,3)
:	:	
1111 0111	EOX	

Receives this message & data, and transmits Func=23 or Func=24 message.
Receives Func=1C message, and transmits this message & data.

(13) ALL ARRANGEMENT PARAMETER DUMP R, T

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0110 0100	ALL ARRANGEMENT PARAMETER DUMP	64H
0ddd dddd	Data	(NOTE1,4)
:	:	
1111 0111	EOX	

Receives this message & data, and transmits Func=23 or Func=24 message.
Receives Func=30 message, and transmits this message & data.
Transmits this message & data when DATA DUMP is executed

(14) ALL STYLE DATA DUMP R, T

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0110 0101	ALL STYLE DATA DUMP	65H
0ddd dddd	Style Header	(NOTE 1,5-1)
:	:	
0ddd dddd	Style Data	(NOTE 1,5-2)
:	:	
1111 0111	EOX	

Receives this message & data, and transmits Func=23 or Func=24 message.
Receives Func=31 message, and transmits this message & data.

(15) ALL BACKING SEQUENCE DATA DUMP R, T

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0110 0110	ALL BACKING SEQUENCE DATA DUMP	66H
Osss ssss	Backing Sequence Data Size	(NOTE 7-1)
:	:	
0ddd dddd	Control Data	(NOTE 1,7-2)
:	:	
0ddd dddd	Backing Sequence Data	(NOTE 1,7-3)
:	:	
1111 0111	EOX	

Receives this message & data, and transmits Func=23 or Func=24 message.
Receives Func=32 message, and transmits this message & data.
Transmits this message & data when DATA DUMP is executed.

(16) GLOBAL DATA DUMP R, T

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0101 0001	GLOBAL DATA DUMP	51H
0ddd dddd	Data	(NOTE 1,8)
:	:	
1111 0111	EOX	

Receives this message & data, and transmits Func=23 or Func=24 message.
Receives Func=0E message, and transmits this message & data.
Transmits this message & data when DATA DUMP is executed.

(17) DRUMS DATA DUMP R, T

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0101 0010	DRUMS DATA DUMP	52H
0ddd dddd	Data	(NOTE 1,9)
:	:	
1111 0111	EOX	

Receives this message & data, and transmits Func=23 or Func=24 messsage.
Receives Func=0D message, and transmits this message & data.
Transmits this message & data when DATA DUMP is executed.

(18) ALL DATA(GLB,DRM,PRG,ARR,STY,SEQ,BSQ) DUMP R, T

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0101 0000	ALL DATA DUMP	50H
Osss ssss	i2/i3 Sequence Data Size	(NOTE 6-1)
:	:	
Osss ssss	Backing Sequence Data Size	(NOTE 7-1)
:	:	
0ddd dddd	Data	(NOTE 1,10)
:	:	
1111 0111	EOX	

Receives this message & data, and transmits Func=23 or Func=24 message.
Receives Func=0F message, and transmits this message & data.
Transmits this message & data when DATA DUMP is executed.

(19) MODE CHANGE R, T

Byte	Description	
F0,42,3g,39	EXCLUSIVE HEADER	
0100 1110	MODE CHANGE	4EH
0000 mmmm	Mode Data	(NOTE 11)
1111 0111	EOX	

Receives this message & data, changes the Mode, and transmits Func=23 or Func=24.
When the mode is changed by switch, this message & data is transmitted.

(20) ARRANGEMENT PARAMETER CHANGE R

Byte	Description	
F0,42,3g,48	EXCLUSIVE HEADER	
0100 0001	PARAMETER CHANGE	41H
Oppp pppp	Parameter Number	(TABLE 8)
Ovvv vvvv	Value (LSB bit6-0)	(NOTE 12)
Ovvv vvvv	Value (MSB bit13-7)	(NOTE 12)
1111 0111	EOX	

Receives this message & data, and transmits Func=23 or Func=24 message.
When the parameter No. is changed by switch, this message & data is transmitted.

(21) PARAMETER CHANGE R

Byte	Description	
F0,42,3g,48	EXCLUSIVE HEADER	
0110 0000	PARAMETER CHANGE	60H
Oppp pppp	Parameter Page Number	(TABLE 9)
0000 Oppp	Parameter Position Number	(TABLE 9)
Ovvv vvvv	Parameter Value (LSB bit6-0)	(NOTE 12)
Ovvv vvvv	Parameter Value (MSB bit13-7)	(NOTE 12)
1111 0111	EOX	

(22) MODE DATA T

Byte	Description	
F0,42,3g,39	EXCLUSIVE HEADER	
0100 0010	MODE DATA	42H
0000 mmmm	Mode Data	(NOTE 11)
0000 0000		
1111 0111	EOX	

Receives Func=12 message, and transmits this message & data.

(23) MIDI IN DATA FORMAT ERROR T

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0010 0110	MIDI IN DATA FORMAT ERROR	26H
1111 0111	EOX	

Transmits this message when there is an error in the MIDI IN message (for example, if data length is other than expected).

(24) DATA LOAD COMPLETED (ACK) T

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0010 0011	DATA LOAD COMPLETED	23H
1111 0111	EOX	

Transmits this message when DATA LOADING and PROCESSING have been completed.

(25) DATA LOAD ERROR (NAK) T

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0010 0100	DATA LOAD ERROR	24H
1111 0111	EOX	

Transmits this message when DATA LOADING and PROCESSING have not been completed (for example, if memory is protected).

(26) WRITE COMPLETED T

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0010 0001	WRITE COMPLETED	21H
1111 0111	EOX	

Transmits this message when DATA WRITE via MIDI has been completed.

(27) WRITE ERROR T

Byte	Description	
F0,42,3g,39(48)	EXCLUSIVE HEADER	
0010 0010	WRITE COMPLETED	22H
1111 0111	EOX	

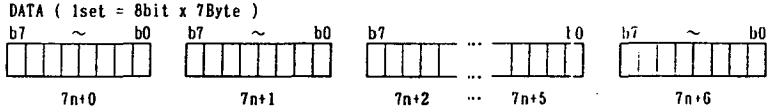
Transmits this message when DATA WRITE via MIDI has not been completed.

(28) CHORD T

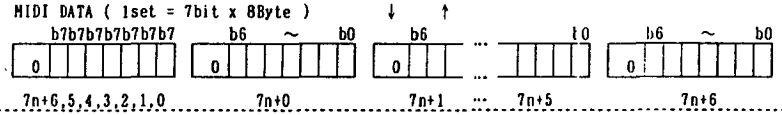
Byte	Description		
F0,42,3g,39	EXCLUSIVE HEADER		
0110 0111	CHORD		67H
0000 rrrr	Root (C=0)		
0000 bbbb	Bass (C=0)		
Occc cccc	Chord type	(LSB)	(NOTE 15)
000c cccc	Chord type	(MSB)	(NOTE 15)
Ottt tttt	Tension note(s)	(LSB)	(NOTE 16)
000t tttt	Tension note(s)	(MSB)	(NOTE 16)
1111 0111	EOX		

NOTE 1 :
DUMP DATA CONVERT n=0～ for NOTE 2, 3, 4, 5-1, 5-2, 6-2, 6-3, 7-2, 7-3, 8, 9, 10

DATA (1set = 8bit x 7Byte)



MIDI DATA (1set = 7bit x 8Byte)



NOTE 2 : PROGRAM PARAMETER DUMP FORMAT (See TABLE 1, NOTE 1)
[Parameter No.00],……,[Parameter No.163]
164Byte = 7x23+3 → 8x23+(1+3) = 188Byte

NOTE 3 : ALL PROGRAM PARAMETER DUMP FORMAT (See TABLE 1, NOTE 2)
[Prog.D11(164Byte)],……,[Prog.D88(1G4Byte)],
[Prog.Dr7(164Byte)], [Prog.Dr8(164Byte)]
164x(64+2)Byte = 7x1546+2 → 8x1546+(1+2) = 12371Byte (4.0Sec)

NOTE 4 : ALL ARRANGEMENT PARAMETER DUMP FORMAT (See TABLE 5, NOTE 1)
[ARR11(131Byte)],……,[ARR88(131Byte)]
131x64Byte = 7x1197+5 → 8x1197+(1+5) = 9582Byte (3.1Sec)

NOTE 5 : ALL STYLE DATA DUMP FORMAT

5-1: Style Header (24Byte) (See TABLE 6-3, NOTE 1)

5-2: Style Data (3328～65496Byte) (See TABLE 6-1, TABLE 6-2, NOTE 1)
∴ MIN= 24+3328Byte = 7x478+6 → 8x478+(1+6) = 3831Byte
MAX= 24+65496Byte = 7x9360+0 → 8x9360 = 74880Byte (1.2～24.0Sec)

NOTE 6 : ALL iX300 SONG DATA DUMP FORMAT

6-1: Sequence Data Size (2Byte) 4Step(16Byte)/1Size (See 6-3)
[Data Size (bit6～0)],
[Data Size (bit13～7)]

6-2: Control Data Dump Format (3702Byte) (See TABLE 4-1, NOTE 1)
[Control Data (Song Size(296) x 10 = 2960Byte)],
[Pattern Data (200Byte)],
[Song0-Tr.1 Addr (2Byte)],…,[Song0-Tr.16 Addr],[Song0-Tempo Track Addr],
[Song1-Tr.1 Addr],…,[Song9-Tr.16 Addr],[Song9-Tempo Track Addr] (340Byte),
[Pattern0 Addr (2Byte)],…,[Pattern99 Addr] (200Byte),
[Pattern End Addr(2Byte)]

6-3: Sequence Data Dump Format (See TABLE 4-2, NOTE 1)
[Sequence 1st Data(4Byte)],……,[Seq.nth Data]
n : Seq.Data Step = 0 ～ 40000
3702Byte+4x[Seq.Data Step]Byte = 7xA+B → 8xA+(1+B)Byte
∴ 6-1,6-2,6-3 = 2+8xA+(1+B)Byte (1.3～58.5Sec)

NOTE 7 : ALL BACKING SEQUENCE DATA DUMP FORMAT

7-1: Backing Sequence Data Size (2Byte) 4Step(16Byte)/1Size (See 7-3)
[Data Size (bit6～0)],
[Data Size (bit13～7)]

7-2: Control Data Dump Format (2292Byte) (See TABLE 7-1, NOTE 1)
[Control Data (BSQ Size(195) x 10 = 1950Byte)],
[BSQ0-Tr.1 Addr (2Byte)],…,[BSQ0-Tr.16 Addr],[BSQ0-Tempo Track Addr],
[BSQ1-Tr.1 Addr],…,[BSQ9-Tr.16 Addr],[BSQ9-Tempo Track Addr] (340Byte),
[End Addr (2Byte)]

7-3: Backing Sequence Data Dump Format (See TABLE 7-2, NOTE 1)
[B.Sequence 1st Data(4Byte)],…,[BSQ nth Data]
n : BSQ Data Step = 0 ～ 40000
2292Byte+4x[BSQ Data Step]Byte = 7xA+B → 8xA+(1+B)Byte
∴ 7-1,7-2,7-3 = 2+8xA+(1+B)Byte (0.8～58.0Sec)

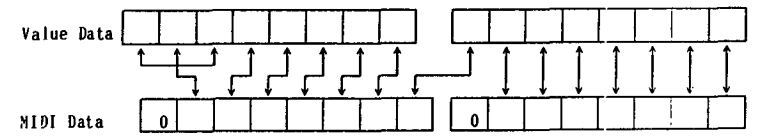
NOTE 8 : GLOBAL DATA DUMP FORMAT (See TABLE 2, NOTE 1)
[Global Data (28Byte)]
28 = 7x4+0 → 8x4 = 32Byte

NOTE 9 : DRUMS DATA DUMP FORMAT (See TABLE 3, NOTE 1)
[Drum Kit Data (7x60x2Byte)]
840Byte = 7x120+0 → 8x120 = 960Byte (0.3Sec)

NOTE 10 : ALL DATA (GLB,DRM,PRG,ARR,STY,SEQ,BSQ) DUMP FORMAT (See NOTE 1)
[Global Data], (See NOTE 8)
[Drums Data], (See NOTE 9)
[All Program Parameters], (See NOTE 3)
[All Arrangement Parameters], (See NOTE 4)
[All Style Data], (See NOTE 5)
[All iX300 SONG Data] (See NOTE 6-2, 6-3)
[All Backing Sequence Data] (See NOTE 7-2, 7-3)
28+840+10824+8384+sty+3702+4x[Seq.Data Step]Byte+2292+4x[BSQ Data Step]
= 7xC+D → 8xC+(1+D)Byte (10.5～90.0Sec)

NOTE 11 : mmmm = 4 : GLOBAL 5 : SONG EDIT 2 : PROGRAM
10 : ARRANGEMENT 11 : BACKING SEQUENCE 6 : SONG PLAY

NOTE 12 : VALUE DATA FORMAT (Use with PARAMETER CHANGE,DRUM KIT PARAMETER CHANGE)
Bit15-13 of Value Data is the Sign Flag, and each bit has the same value



NOTE 13 : kk = 00: Drum Kit 1
01: Drum Kit 2

NOTE 14 : CHORD TYPE

Type	MSB	LSB
No Chord	0000 0000	0000 0000
dim	0000 0000	0100 1001
sus2	0000 0001	0000 0101
m	0000 0001	0000 1001
major	0000 0001	0001 0001
sus4	0000 0001	0010 0001
aug	0000 0010	0001 0001
m6	0000 0101	0000 1001
6	0000 0101	0001 0001
m7b5	0000 1000	0100 1001
7b5	0000 1000	0101 0001
m7	0000 1001	0000 1001
7	0000 1001	0001 0001
7sus4	0000 1001	0010 0001
aug7	0000 1010	0001 0001
dimM7	0001 0000	0100 1001
M7 5	0001 0000	0101 0001
mM7	0001 0001	0000 1001
M7	0001 0001	0001 0001
M7sus4	0001 0001	0010 0001
augM7	0001 0010	0001 0001

NOTE 15 : TENSION NOTE(S)

Tension	MSB	LSB
b9	0000 0000	0000 0010
9	0000 0000	0000 0100
♯9	0000 0000	0000 1000
11	0000 0000	0010 0000
♯11	0000 0000	0100 0000
b13	0000 0010	0000 0000
13	0000 0100	0000 0000

PROGRAM PARAMETERS (TABLE 1)

No.	PARAMETER	DATA(Hex) : VALUE
00 : 09	PROGRAM NAME (Head) : PROGRAM NAME (Tail)	20～7F : ' ' ～'←'
	OSCILLATOR	
10	OSCILLATOR MODE	0,1,2 *1
11	ASSIGN	bit0=0:POL, =1:NON
	HOLD	bit1=0:OFF, =1:ON
12	OSC-1 M/D.SOUND(LSB)	0～???? : 0～????
13	OSC-1 M/D.SOUND(MSB)	*14
14	OSC-1 OCTAVE	FE～01 : 32' ～4'
15	OSC-2 M/D.SOUND(LSB)	0～???? : 0～????
16	OSC-2 M/D.SOUND(MSB)	*14
17	OSC-2 OCTAVE	FE～01 : 32' ～4'
18	INTERVAL	F4～0C : -12～12
19	DETUNE	CE～32 : -50～50
20	DELAY START	00～63 : 00～99
	PITCH EG	
21	START LEVEL	9D～63 : -99～99
22	ATTACK TIME	00～63 : 00～99
23	ATTACK LEVEL	9D～63 : -99～99
24	DECAY TIME	00～63 : 00～99
25	RELEASE TIME	00～63 : 00～99
26	RELEASE LEVEL	9D～63 : -99～99
27	TIME VELOCITY SENSE	9D～63 : -99～99
28	LEVEL VELOCITY SENSE	9D～63 : -99～99
	CUTOFF MG	
29	WAVEFORM	bit0～2 : 0～5 *2
	OSC-1 MG ENABLE	bit5=0:OFF, =1:ON
	OSC-2 MG ENABLE	bit6=0:OFF, =1:ON
	KEY SYNC	bit7=0:OFF, =1:ON
30	FREQUENCY	00～63 : 00～99
31	DELAY	00～63 : 00～99
32	INTENSITY	00～63 : 00～99
	AFTERTOUCH	
33	PITCH BEND RANGE	F4～0C : -12～12
34	VDF CUTOFF	9D～63 : -99～99
35	VDF MG INT	00～63 : 00～99
36	VDA AMPLITUDE	9D～63 : -99～99
	JOYSTICK	
37	PITCH BEND RANGE	F4～0C : -12～12
38	VDF SWEEP INT.	9D～63 : -99～99
39	VDF MG INT.	00～63 : 00～99
	OSC-1 PITCH EG	
40	PITCH EG INT	9D～63 : -99～99
	OSC-1 PITCH MG	
41	WAVEFORM	bit0～2 : 0～5 *2
	KEY SYNC	bit7=0:OFF, =1:ON
42	FREQUENCY	00～63 : 00～99
43	DELAY	00～63 : 00～99
44	FADE IN	00～63 : 00～99
45	INTENSITY	00～63 : 00～99
46	FREQ MOD BY KBD TRK	9D～63 : -99～99
47	INTENSITY MOD BY AT	00～63 : 00～99
48	INTENSITY MOD BY JS	00～63 : 00～99
49	FREQ MOD BY AT+JS	00～09 : 0～9

	VDF-1	
50	CUTOFF VALUE	00～63 : 00～99
51	KBD TRACK KEY	00～7F : C-1～G9
52	CUTOFF KBD TRACK	9D～63 : -99～99
53	EG INTENSITY	00～63 : 00～99
54	EG TIME KBD TRACK	00～63 : 00～99
55	EG TIME VEL.SENSE	00～63 : 00～99
56	EG INT.VE..SENSE	9D～63 : -99～99
	VDF-1 EG	
57	ATTACK TIME	00～63 : 00～99
58	ATTACK LEVEL	9D～63 : -99～99
59	DECAY TIME	00～63 : 00～99
60	BREAK POINT	9D～63 : -99～99
61	SLOPE TIME	00～63 : 00～99
62	SUSTAIN LEVEL	9D～63 : -99～99
63	RELEASE TIME	00～63 : 00～99
64	RELEASE LEVEL	9D～63 : -99～99
	VDA-1	
65	OSCILLATOR LEVEL	00～63 : 00～99
66	KBD TRACK KEY	00～7F : C-1～G9
67	AMP. KBD TRACK INT.	9D～63 : -99～99
68	AMP. VELOCITY SENSE	9D～63 : -99～99
69	EG TIME KBD TRACK	00～63 : 00～99
70	EG TIME VEL.SENSE	00～63 : 00～99
	VDA-1 EG	
71	ATTACK TIME	00～63 : 00～99
72	ATTACK LEVEL	00～63 : 00～99
73	DECAY TIME	00～63 : 00～99
74	BREAK POINT	00～63 : 00～99
75	SLOPE TIME	00～63 : 00～99
76	SUSTAIN LEVEL	00～63 : 00～99
77	RELEASE TIME	00～63 : 00～99
	OSC-1 EG TIME KBD TRACK, VEL. SW & POLARITY	
78	F.EG TIME K.T SW&POL	bit0～7 *3
79	F.EG TIME VEL.SW&POL	bit0～7 *3
80	A.EG TIME K.T SW&POL	bit0～7 *3
81	A.EG TIME VEL.SW&POL	bit0～7 *3
	OSC-1 SEND	
82	D SEND LEVEL	bit0～3 : 0～9
	C SEND LEVEL	bit4～7 : 0～9
	COLOR-1	
83	INTENSITY	00～63 : 00～99
84	VELOCITY SENSE	9D～63 : -99～99
	VDF-1, VDA-1 KBD TRACK MODE	
85	F-1, A-1 KBD TRACK MODE	*4
	OSC-1 PANPOT	
86	A:B PAN	00～1E,FF *5
	OSC-2 PARAMETER	
87 : 133	SAME AS OSC-1(40～86)	
134	(RESERVE)	00
	EFFECT PARAMETER	
135 : 163		*20

GLOBAL PARAMETERS (TABLE 2)

No.	PARAMETER	DATA(Hex) : VALUE
	GLOBAL PARAMETER	
00	MASTER TUNE	CE～32 : -50～50
01	KEY TRANSPOSE	F4～0C : -12～12
02	DAMPER POLARITY	00 : , 01 :
03	ASSIGNABLE PEDAL 1	00～2B *8
04	ASSIGNABLE PEDAL 2	00～2B *8
05	MAIN SCALE TYPE	00～0A *9
06	MAIN SCALE KEY	00～0B : C～B
07 ⋮ 18	USER SCALE	CE～32 : -50～50
19	VELOCITY CURVE	0～7 : 1～8
20	AFTER TOUCH CURVE	0～7 : 1～8
21	SUB SCALE TYPE	00～0A *9
22	SUB SCALE KEY	00～0B : C～B
23 ⋮ 27	RESERVE	00

*1 : 0 : SINGLE
1 : DOUBLE
2 : DRUMS

*2 : 0 : TRIANGLE
1 : UP SAW
2 : DOWN SAW
3 : SQUARE1
4 : RANDOM
5 : SQUARE2

*3 : bit0 : ATTACK TIME SW =0:OFF, =1:ON
bit1 : DECAY TIME SW 〃
bit2 : SLOPE TIME SW 〃
bit3 : RELEASE TIME SW 〃
bit4 : ATTACK TIME POLARITY =0:-,=1:0,=2:+
bit5 : DECAY TIME 〃 〃
bit6 : SLOPE TIME 〃 〃
bit7 : RELEASE TIME 〃 〃

DRUM PARAMETERS (TABLE 3)

No.	PARAMETER	DATA(Hex) : VALUE
	DRUM KIT 1-INDEX#0	
00	INST NO.	00:OFF, 01～:INT
01	KEY	0C～73 : C0～G8
02	A:B PAN	bit0～4 *10
	EXCLUSIVE ASSIGN	bit5～7 *10
03	TUNE	88～78 :-120～120
04	LEVEL	9D～63 : -99～99
05	DECAY	9D～63 : -99～99
06	D SEND LEVEL	bit0～3: 0～9
	C SEND LEVEL	bit4～7: 0～9
	DRUM KIT 1-INDEX#1 ～ DRUM KIT 2-#59	
07 ⋮ 839	SAME AS DRUM KIT 1-#0(00～06)x(60x2-1)	

*4 : bit0,1 ··· VDF
bit4,5 ··· VDA
0 : OFF
1 : LOW
2 : HIGH
3 : ALL

*5 : 00 : L15
⋮ ⋮
0F : CNT
⋮ ⋮
1E : R15
1F : PRG (When in SONG Mode)
FF : OFF

*6 : A11 ～A88 : 00～3F
B11 ～B88 : 40～7F
Dr11～Dr16: 80～85
C11 ～C88 : 86～C5
U11 ～U88 : 00～3F
Dr17～Dr18: 40～41

*7 : bit0 : PROGRAM CHANGE =0:DIS, =1:ENA
bit1 : DAMPER 〃
bit2 : AFTERTOUCH 〃
bit3 : CONTROL CHANGE 〃

bit7=1 : A11 ～A88
: B11 ～B88
: Dr11～Dr16
: C11 ～C88
=0 : U11 ～U88
: Dr17～Dr18

Program is selected by *6 and *7(bit7)

i Series SEQUENCER CONTROL DATA (TABLE 4-1)

No.	PARAMETER	DATA(Hex) : VALUE
	SONG 0 CONTROL DATA	
00 ⋮ 15	MIDI Channel(Tr.1) ⋮ MIDI Channel(Tr.16)	00～0F : 1～16
16 ⋮ 31	STATUS (Tr.1) ⋮ STATUS (Tr.16)	*11
32 ⋮ 47	BEND RANGE (Tr.1) ⋮ BEND RANGE (Tr.16)	00～0C : 00～12
48	BEAT	*12
49	TEMPO	00～D2 : 40～240
50	PROTECT (Tr.1) ⋮ PROTECT (Tr.8)	bit0=0:OFF, =1:ON ⋮ bit7
51	PROTECT (Tr.9) ⋮ PROTECT (Tr.16)	bit0=0:OFF, =1:ON ⋮ bit7
52	NEXT SONG NO.	*13
53 ⋮ 62	SONG NAME (Head) ⋮ SONG NAME (Tail)	20～7F : ' ' ～'←'
63	(RESERVE)	00
64 ⋮ 92	EFFECT PARAMETER	*20
	TRACK 1 CONTROL DATA	
93	PROGRAM NO.	*6
94	OUTPUT LEVEL	00～7F : 00～127
95	KEY TRANSPOSE	E8～18 : -24～24
96	DETUNE	CE～32 : -50～50
97	A:B PAN	00～1E,1F,FF *5
98	D SEND LEVEL C SEND LEVEL	bit0～3 : 0～9,PRG bit4～7 : 0～9,PRG
99	KEY WINDOW TOP	00～7F : C-1～G9
100	KEY WINDOW BOTTOM	00～7F : C-1～G9
101	VEL WINDOW TOP	01～7F : 01～127
102	VEL WINDOW BOTTOM	01～7F : 01～127
103	CONTROL FILTER	*7
104	MIDI CHANNEL	00～0F : 1～16
	TRACK 2～16 CONTROL DATA	
105 ⋮ 284	SAME AS TRACK 1(93～104) x 15	
285～290	(RESERVE)	00
291	METRONOME LEVEL	00～63 : 0～99
292	METRONOME PAN	00～1E *5
293	METRONOME LEAD IN	0～2 : 0～2
294	TEMPO TRACK ON/OFF	0:OFF, 1:ON
295	(RESERVE)	00
	SONG 1～9 CONTROL DATA	
296 ⋮ 2959	SAME AS SONG 0 (00～295) x 9	

	PATTERN 0 PARAMETERS	
2960	BEAT	*12
2961	LENGTH	01～63 : 1～99
	PATTERN 1～99 PARAMETERS	
2962 ⋮ 3159	SAME AS PATTERN 0(2960,2961) x 99	
	SONG 0, TRACK 1 DATA ADDRESS	
3160	DATA ADDRESS(LSB)	0000 (Start Addr)
3161	〃 〃 (MSB)	
	SONG 0, TRACK 2 ～ TRACK 16 DATA ADDRESS	
3162 ⋮ 3191	SAME AS SONG 0, TRACK 1 ADDRESS(3160,3161) x 15	
	SONG 0, TEMPO TRACK DATA ADDRESS	
3192	DATA ADDRESS (LSB)	
3193	〃 〃 (MSB)	
	SONG 1～9 TRACK DATA ADDRESS	
3194 ⋮ 3499	SAME AS SONG 0 TRACK ADDRESS(3160～3193) x 9	
	PATTERN 0 DATA ADDRESS	
3500	DATA ADDRESS (LSB)	
3501	〃 〃 (MSB)	
	PATTERN 1 ～ PATTERN 99 DATA ADDRESS	
3502 ⋮ 3699	SAME AS PATTERN 0(3500,3501)	
3700	End Pattern Addr(L)	
3701	〃 〃 〃 (H)	

iX300 SEQUENCE DATA (TABLE 4-2)

No.	PARAMETER	DATA(Hex) : VALUE
	SEQUENCE DATA 1	
3702	DATA (1-L)	*15
3703	DATA (1-H)	*15
3704	DATA (2-L)	*15
3705	DATA (2-H)	*15
	SEQUENCE DATA 2 ～	
3706 ⋮	SAME AS SEQUENCE DATA 1(3702～3705)	

*8 : 0 : OFF
1 : START/STOP
2 : SYNC START/STOP
3 : RESET
4 : INTRO/ENDING 1
5 : INTRO/ENDING 2
6 : FILL 1
7 : FILL 2
8 : VARIATION 1
9 : VARIATION 2
A : VARIATION 3
B : VARIATION 4
C : CHORD HOLD
D : BASS INVERSION
E : SCALE CHANGE
F : ARRANGEMENT UP
10 : ARRANGEMENT DOWN
11 : PROGRAM UP
12 : PROGRAM DOWN
13 : VARIATION UP
14 : VARIATION DOWN
15 : PUNCH IN/OUT
16 : EFFECT 1 ON/OFF
17 : EFFECT 2 ON/OFF
18 : DRUM MUTE
19 : PERC MUTE
1A : BASS MUTE
1B : ACC1 MUTE
1C : ACC2 MUTE
1D : ACC3 MUTE
1E : KB VOLUME
1F : EXPRESSION
20 : VDF CUTOFF
21 : EFFECT CONTROL
22 : DATA ENTRY
23 : Inhibit
24 : Inhibit
25 : KBD LOCK
26 : TAP TEMPO
27 : SOUND HOLD ON/OFF
28 : SUSTAIN ON/OFF
29 : FADE IN/OUT
2A : ENSEMBLE ON/OFF
2B : MASTER VOLUME
2C : QUARTER TONE

*9 : 0 : EQUAL TEMP
1 : EQUAL TEMP 2
2 : PURE MAJOR
3 : PURE MINOR
4 : ARABIC
5 : PYTHAGOREAN
6 : WERKMEISTER
7 : KIRNBERGER
8 : SLENDRO
9 : PELOG
A : USER SCALE

*10 : bit0~4 = 00 : L15
:
0F : CNT
:
1E : R15
1F : OFF

bit5~7 = 0 : EX Off
1 : EX Group1
:
6 : EX Group6
7 : Self

*11 : bit0,1= 0 : OFF
1 : INT
2 : EXT
3 : BOTH
bit2,3= 0 : Play, = 1 : Mute, = 2 : Solo

*12 : bit0~5 10~18 : 1/4 ~ 9/4
20~2F : 1/8 ~ 16/8
30~3F : 1/16 ~ 16/16
bit7 = 0 : High Resolution
1 : Low Resolution

*13 : bit0~6 = 0 : Song0

7F : OFF
bit7 = 0/1 → Auto Start OFF/ON

*14 : When set to Single/Double Mode
000 : A.Piano 1
:
342 : A.Piano4

When set to Drum Mode
00 : User Kit 1
:
27 : Gypsy kit

*15 : SEQUENCE DATA FORMAT

DATA(1-H)	DATA(1-L)	DATA(2-H)	DATA(2-L)
↓	↓	↓	↓

*15-1 NOTE ON/OFF

1vvv vvv t	ttt. tttt	kkkk kkk g	gggg gggg
Velocity	Event Time	Key No.	Length

t = 30 : t = 1FE : Tie from previous bar
g = 30 : g = 1FE : Tie to next bar

*15-2 PITCH BEND

0001 000 t	ttt. tttt	0 vvv vvvv	0 vvv vvvv
	Event Time	Value(H)	Value(L)

*15-3 AFTER TOUCH

0010 000 t	ttt. tttt	0000 0000	0 vvv vvvv
	Event Time		Value

*15-4 PROGRAM CHANGE

0011 000 t	ttt. tttt	0000 00bb	0ppp pppp
	Event Time	Bank	Program No.

b = 00~02
p = 00~7F

*15-5 CONTROL CHANGE

0100 000 t	ttt. tttt	0vvv vvvv	0ccc cccc
	Event Time	Value	Control No.

c = 00~65 : Same as MIDI Control Change
= 66 : Assignable Pedal

*15-6 POLY KEY PRESSURE

0101 000 t	ttt. tttt	0 vvv vvvv	0 kkk kkkk
	Event Time	Value	Key No.

*15-7 BAR

0110 00bb	bbbb bbbb	xx ss ssss	0ppp pppp
	Bar No.	Type Beat	Pattern No.

x = 00 : Pattern not used
= 10 : Pattern continued
= 11 : Pattern start
s = 10~18 : 1/4~9/4
= 20~2F : 1/8~16/8
= 30~3F : 1/16~16/16

*15-8 TRACK END

0111 000 t	ttt. tttt	0000 00bb	bbbb bbbb
	Event Time	Last Bar No.	

ARRANGEMENT PARAMETERS

No.	PARAMETER	DATA(Hex) : VALUE
00 : 09	ARRANGE NAME (Head) : ARRANGE NAME (Tail)	20～7F : ' ' ～'←'
10	SYTLE NO.	00～37 : 11～68
11		: 71～84
12 : 13	INITIAL VARIATION	00～03 : VAR 1～4
14	INITIAL TEMPO	0A～D2 : 40～240
15	KEYBOARD ASSIGN	00～03 : *16
16	SPLIT POINT	24～60 : C2～C7
17	OCTAVE	FE～02 : -2～+2
18	TRANSPOSE	F5～0B : -C#～+B
19	MANUAL DRUM KIT	00～07 : Dr1～Dr8
SWITCHES		
20	DYNAMIC VELOCITY	bit0=0:OFF, =1:ON
	TEMPO LOCK	bit1=0:OFF, =1:ON
	KBD1 DAMPER ENABLE	bit2=0:OFF, =1:ON
	KBD2 DAMPER ENABLE	bit3=0:OFF, =1:ON
CHORD SCANNING TYPE		
21	CHORD SCAN LOW	bit0=0:OFF, =1:ON
	CHORD SCAN HIGH	bit1=0:OFF, =1:ON
	BASS INVERSION	bit2=0:OFF, =1:ON
	CHORD HOLD	bit3=0:OFF, =1:ON
	CHORD LATCH	bit4=0:OFF, =1:ON
22 : 25	DEFAULT DRUM MAPPING	00～07 : Dr1～Dr8
26 : 29	RESERVE	00
30 : 31	FILL1	00～0C :OFF～DOWN
32 : 33	FILL2	00～0C :OFF～DOWN
DRUM PARAMETERS		
34	PROG	*17
35	BANK	
36	VOL	00～7F : 0～127
37	PAN	*5
38	C SEND LEVEL	bit0～3 : 0～9,PRG
	D SEND LEVEL	bit4～7 : 0～9,PRG
39	OCTAVE	FE～02 : -2～+2
40	OUT STATUS	*11
41	WRAP-AROUND	FF～0B : STY～11
PERCUSSION PARAMETERS		
42 : 49	SAME AS DRUMS	
BASS PARAMETERS		
50 : 57	SAME AS DRUMS	

(TABLE 5)

ACC 1～3 PARAMETERS		
58 : 81	SAME AS DRUMS	
KBD 1～2 PARAMETERS		
82 : 97	SAME AS DRUMS	
KBD1 VELOCITY WINDOW		
98	TOP	01～7F : 1～127
99	BOTTOM	01～7F : 1～127
KBD2 VELOCITY WINDOW		
100	TOP	01～7F : 1～127
101	BOTTOM	01～7F : 1～127
102 : 130	EFFECT PARAMETERS	*20

*16 : 00 : SINGLE
01 : LAYER
02 : SPLIT
03 : M.DRUMS

*17 : BANK = 00, PROG = 00～7F : A11～A88～B88
= 01, = 00～7F : C11～C88～U88
= 02, = 00～0F : Dr11～Dr28
= 02, = 10～18 : Dr31～Dr38
= 02, = 19～1C : Dr41～Dr44
= 03, = 00～7F : D11～E88

STYLE CONTROL DATA

No.	PARAMETER	DATA(Hex) : VALUE
00 : 09	STYLE NAME (Head) : STYLE NAME (Tail)	20～7F : ' ' ～'←'
10	SYTLE TYPE	0.USER CREATED
		1.BUILT-IN
		2.CARD OR DISK
11	TEMPO	0A～D2 : 40～240
12	TIME SIGNATURE	Hi Res only *12
NOTE RETRIGGER SWITCH		
13	BASS	bit2=0:OFF, =1:ON
	ACC1	bit3=0:OFF, =1:ON
	ACC2	bit4=0:OFF, =1:ON
	ACC3	bit5=0:OFF, =1:ON
NOTE SHIFT UP RANGE		
14	BASS	00～0B : 0～11
15	ACC1	00～0B : 0～11
16	ACC2	00～0B : 0～11
17	ACC3	00～0B : 0～11
TENSION AVAILABLE		
18	ACC1	bit3=0:OFF, =1:ON
	ACC2	bit4=0:OFF, =1:ON
	ACC3	bit5=0:OFF, =1:ON
19 : 37	RESERVE	00
DRUM PARAMETERS		
38	PROG	*17
39	BANK	
40	VOL	00～7F : 0～127
41	PAN	*5
PERCUSSION PARAMETTERS		
42 : 45	SAME AS DRUMS	
BASS PARAMETERS		
46 : 49	SAME AS DRUMS	
ACC 1～3 PARAMETERS		
50 : 61	SAME AS DRUMS	
VARIATION1, CHORD VARIATION1 PARAMETERS		
62	KEY	*18
63	LENGTH	00～10 : 0～16
VARIATION1 CHORD VARIATION2～6 PARAMETERS		
64 : 73	SAME AS VARIATION1 CHORD VARIATION1	
VARIATION 2～4 PARAMETERS		
74 : 109	SAME AS VARIATION1	

(TABLE 6-1)

INTRO1 CHORD VARIATION1 PARAMETERS		
110	KEY	*18
111	LENGTH	00～10 : 0～16
INTRO1 CHORD VARIATION2 PARAMETERS		
112	KEY	*18
113	LENGTH	00～10 : 0～16
INTRO2 PARAMETERS		
114 : 117	SAME AS INTRO1	
ENDING 1～2 PARAMETERS		
118 : 125	SAME AS INTRO1	
FILL 1～2 PARAMETERS		
126 : 133	SAME AS INTRO1	
VARIATION 1 CHORD VARIATION TABLE		
134	Major	00～05 : 1～6
135	M6	00～05 : 1～6
136	M7	00～05 : 1～6
137	M7 5	00～05 : 1～6
138	sus4	00～05 : 1～6
139	sus2	00～05 : 1～6
140	M7sus4	00～05 : 1～6
141	minor	00～05 : 1～6
142	m6	00～05 : 1～6
143	m7	00～05 : 1～6
144	m7 5	00～05 : 1～6
145	mM7	00～05 : 1～6
146	7th	00～05 : 1～6
147	7 5	00～05 : 1～6
148	7sus4	00～05 : 1～6
149	dim	00～05 : 1～6
150	dimM7	00～05 : 1～6
151	aug	00～05 : 1～6
152	aug7	00～05 : 1～6
153	augM7	00～05 : 1～6
VARIATION 2～4 CHORD VARIATION TABLE		
154 : 213	SAME AS VARIATION1	

*18 : 00 : C MAJOR
01 : C MINOR
02 : C#MAJOR
03 : C#MINOR
:
16 : B MAJOR
17 : B MINOR

INTRO1 CHORD VARIATION TABLE			
214	Major	00~01	: 1~2
215	M6	00~01	: 1~2
216	M7	00~01	: 1~2
217	M7 5	00~01	: 1~2
218	sus4	00~01	: 1~2
219	sus2	00~01	: 1~2
220	M7sus4	00~01	: 1~2
221	minor	00~01	: 1~2
222	m6	00~01	: 1~2
223	m7	00~01	: 1~2
224	m7 5	00~01	: 1~2
225	mM7	00~01	: 1~2
226	7th	00~01	: 1~2
227	7 5	00~01	: 1~2
228	7sus4	00~01	: 1~2
229	dim	00~01	: 1~2
230	dimM7	00~01	: 1~2
231	aug	00~01	: 1~2
232	aug7	00~01	: 1~2
233	augM7	00~01	: 1~2
INTRO2 CHORD VARIATION TABLE			
234 ⋮ 253	SAME AS INTRO1		
ENDING 1~2 CHORD VARIATION TABLE			
254 ⋮ 293	SAME AS INTRO1		
FILL 1~2 CHORD VARIATION TABLE			
294 ⋮ 333	SAME AS INTRO1		
PATTERN 0 CONTROL DATA			
334	BEAT	:	*12
335	LENGTH	01~63	: 1~99
PATTERN 1~99 CONTROL DATA			
336 ⋮ 533	SAME AS PATTERN 0		
VARIATION1 ACC1 DATA ADDRESS			
534	DATA ADDRESS (LSB)		
535	DATA ADDRESS (MSB)		
VARIATION1 ACC 2~3 DATA ADDRESS			
536 ⋮ 539	SAME AS VARIATION1 ACC1 DATA ADDRESS		
VARIATION1 BASS, DRUMS, PERC. DATA ADDRESS			
540 ⋮ 545	SAME AS VARIATION1 DATA ADDRESS		

VARIATION 2~4 DATA ADDRESS		
546 ⋮ 581	SAME AS VARIATION1 DATA ADDRESS	
ENDING 1~2 DATA ADDRESS		
582 ⋮ 605	SAME AS VARIATION1 DATA ADDRESS	
FILL 1~2 DATA ADDRESS		
606 ⋮ 629	SAME AS VARIATION1 DATA ADDRESS	
PATTERN 0 DATA ADDRESS		
630	DATA ADDRESS (LSB)	
631	DATA ADDRESS (MSB)	
PATTERN 1~99 DATA ADDRESS		
632 ⋮ 829	SAME AS PATTERN 0	
830	END PATTERN ADDR(L)	
831	END PATTERN ADDR(H)	

STYLE DATA (TABLE 6-2)

No.	PARAMETER	DATA(Hex) : VALUE
STYLE 1 DATA		
0	DATA (1-L)	*15
1	DATA (1-H)	*15
2	DATA (2-L)	*15
3	DATA (2-H)	*15
STYLE 2 DATA ~		
4 ⋮	SAME AS STYLE1	

STYLE HEADER (TABLE 6-3)

No.	PARAMETER	DATA(Hex) : VALUE
STYLE 1		
0 ⋮ 3	STYLE1 ADDRESS	
4 5	STYLE1 SIZE	
STYLE 2~4		
6 ⋮ 23	SAME AS STYLE1	

BACKING SEQUENCE CONTROL DATA (TABLE 7-1)

No.	PARAMETER	DATA(Hex) : VALUE
BSEQ 0 CONTROL DATA		
00 ⋮ 09	BSEQ NAME (Head) ~ BSEQ NAME (Tail)	20~7F : ' ' ~ '←'
10 11	ARRANGEMENT NO.	00~3F : 11~88
12 13	STYLE NO.	00~37 : 11~68 71~84
14 15	VARIATION	00~03 : VAR 1~4
16	TEMPO	0A~D2 : 40~240
17	KEYBOARD ASSIGN	*16
	CHORD SCANNING TYPE	
18	CHORD SCAN LOW	bit0=0:OFF, =1:ON
	CHORD SCAN HIGH	bit1=0:OFF, =1:ON
	BASS INVERSION	bit2=0:OFF, =1:ON
	CHORD HOLD	bit3=0:OFF, =1:ON
	CHORD LATCH	bit4=0:OFF, =1:ON
19	KBD1 PROGRAM NUMBER	*17
20	KBD1 PROGRAM BANK	
21	KBD1 OCTAVE	FE~02 : -2~+2
22	KBD2 PROGRAM NUMBER	*17
23	KBD2 PROGRAM BANK	
24	KBD2 OCTAVE	FE~02 : -2~+2
25	KEYBOARD TRK STATUS	*21-1
26	CONTROL TRK STATUS	*21-1
27	CHORD TRK STATUS	*21-1
28	AUTOTEMPO	0A~D2 : 40~240
29	BEAT	Hi Res only *12
30	SPLIT POINT	24~60 : C2~C7
31	TRANSPOSE	F5~0B :-C#~+B
	SWITCHES	
32	DYNAMIC VELOCITY	bit0=0:OFF, =1:ON
33 ⋮ 39	RESERVE	00
40	METRONOME SWITCH	*21-2
41	METRONOME LEVEL	00~63 : 0~99
42	METRONOME PAN	*5
43	METRONOME LEAD-IN	0~2 : 0~2
44	NEXT BSEQ NUMBER	*21-3
45	AUTO START	*21-4

*21-1 : Track Status

00 : MUTE
01 : PLAY

*21-2 : Metronome Switch

00 : OFF
01 : ON
02 : REC

EXTRA TRACK 1 CONTROL DATA		
46	PROGRAM NUMBER	*17
47	PROGRAM BANK	
48	VOLUME	00~7F : 0~127
49	PANPOT	*5
50	C SEND LEVEL	bit0~3 : 0~9,PRG
	D SEND LEVEL	bit4~7 : 0~9,PRG
51	TRACK STATUS	*11
52	BEND RANGE	00~0C : 00~12
53	KEY TRANSPOSE	E8~18 : -24~24
54	DETUNE	CE~32 : -50~50
55	PROTECT	: OFF/ON
56	MIDI CHANNEL	00~0F : 1~16
57	VELOCITY WINDOW TOP	01~7F : 1~127
58	VELOCITY WIN. BOTTOM	01~7F : 1~127
59	KEY WINDOW TOP	00~7F : C-1~G9
60	KEY WINDOW BOTTOM	00~7F : C-1~G9
EXTRA TRACK 2~8 CONTROL DATA		
61 ⋮ 165	SAME AS TRACK 1	
166 ⋮ 194	EFFECT PARAMETER	*20
BSEQ 1~9 CONTROL DATA		
195 ⋮ 1949	SAME AS BSEQ 0	
BSEQ TRACK1 DATA ADDRESS		
1950	DATA ADDRESS (LSB)	
1951	DATA ADDRESS (MSB)	
BSEQ0 TRACK 2~16 DATA ADDRESS		
1952 ⋮ 1981	SAME AS BSEQ0 TRACK1 DATA ADDRESS	
BSEQ0 TEMPO TRACK DATA ADDRESS		
1982 1983	SAME AS BSEQ0 TRACK1 DATA ADDRESS	
BSEQ 1~9 DATA ADDRESS		
1984 ⋮ 2289	SAME AS BSEQ0 TRACK DATA ADDRESS	
2290	END ADDRESS (LSB)	
2291	END ADDRESS (MSB)	

*21-3 : Next B.Seq Number

FF : OFF
00 : BSeq 0
⋮
09 : BSeq 9 ar.

*21-4 : Auto Star.

00 : OFF
01 : ON

B. SEQUENCE DATA (TABLE 7-2)

No.	PARAMETER	DATA(Hex) : VALUE
BACKING SEQUENCE DATA 1		
0	DATA (1-L)	*19
1	DATA (1-H)	*19
2	DATA (2-L)	*19
3	DATA (2-H)	*19
BACKING SEQUENCE DATA 2~		
4 : :	SAME AS BACKING SEQUENCE DATA 1 (0~3)	

*19 : BACKING SEQUENCE DATA FORMAT

DATA(1-H) DATA(1-L) DATA(2-H) DATA(2-L)

*19-1 : BACKING CONTROL EVENT

10ii iii t	tttt tttt	vvvv vvvv	vvvv vvvv
EventID	EventTime	Value 2	Value 1

EventID		Value	
0	Arrangement	0~195	*19-1-1
1	Style	0~55	*19-1-2
2	Variation	0~9	*19-1-3
3	Keyboard Assign	0~3	*19-1-4
4	Chord Scan	0~3	*19-1-5
5	Chord Hold	0/1	OFF/ON
6	Bass Inversion	0/1	OFF/ON
7	Transpose	-11~+11	
8	Drum Mute	0/1	MUTE/PLAY
9	Perc.Mute	0/1	MUTE/PLAY
10	Bass Mute	0/1	MUTE/PLAY
11	ACC1 Mute	0/1	MUTE/PLAY
12	ACC2 Mute	0/1	MUTE/PLAY
13	ACC3 Mute	0/1	MUTE/PLAY
14	Drum Map	0~7	1~8
15	KBD1 Program	V1=NUMBER	V2 = BANK
16	KBD2 Program	V1=NUMBER	V2 = BANK
17	KBD1 Octave	-2~+2	
18	KBD2 Octave	-2~+2	

*19-1-1 : 0~195: U11~U88, A11~88, B11~B88

*19-1-2 : 0~55 P11~P68, U1~U4, C1~C4

*19-1-3 : 0 : Variation1
3 : Variation4
4 : Intro1
5 : Intro2
6 : Ending1
7 : Ending2
8 : Fill
9 : Fill2

*19-1-4 : 0 : SINGLE
1 : LAYER
2 : SPLIT
3 : M.DRUM

*19-1-5 : 0 : OFF
1 : LOWER
2 : UPPER
3 : FULL

*19-2 : CHORD EVENT

11ii iii t	tttt tttt	nnnn nnnn	bbbb rrrr
ChordID	EventTime	TensionNote	Bass Root

ChordID = 0 : No Chord
1 : Major
2 : Major 6th
3 : Major 7th
4 : Major 7th Flatted 5th
5 : Suspended 4th
6 : Suspended 2nd
7 : Major 7th Suspended 4th
8 : Minor
9 : Minor 6th
10 : Minor 7th
11 : Minor 7th Flatted 5th
12 : Minor Major 7th
13 : Dominant 7th
14 : 7th Flatted 5th
15 : 7th Suspended 4th
16 : Diminished
17 : Diminished Major 7th
18 : Augmented
19 : Augmented 7th
20 : Augmented Major 7th

TensionNote = 0000 0001 : Flatted 9th
0000 0010 : 9th
0000 0100 : Sharped 9th
0000 1000 : 11th
0001 0000 : Sharped 11th
0010 0000 : Flatted 13th
0100 0000 : 13th

Bass = 0~11 (C~B)
Root = 0~11 (C~B)

*20 EFFECT PARAMETERS

No.	PARAMETER	DATA(Hex) : VALUE
(00)	Effect 1 Type Number	0,1~2F:OFF,1~47
(01)	Effect 2 Type Number	0,1~2F:OFF,1~47
(02)	Effect1 L-Ch Balance	00~64 : 00~100
(03)	Effect1 R-Ch Balance	00~64 : 00~100
(04)	Effect2 L-Ch Balance	00~64 : 00~100
(05)	Effect2 R-Ch Balance	00~64 : 00~100
(06)	Output 3 Panpot	00,01~65 *20-1
(07)	Output 4 Panpot	00,01~65 *20-1
(08)	Effect I/O	bit5~0 *20-2
(09) : (16)	Effect 1 Parameters	*20-3
(17)	Effect 1 Mod.Source	04 *20-4
(18)	Effect 1 Mod.Amount	F1~0F : -15~15
(19) : (26)	Effect 2 Parameters	*20-3
(27)	Effect 2 Mod.Source	04 *20-4
(28)	Effect 2 Mod.Amount	F1~0F : -15~15

*20-1 : 00 : Off *20-2 :
01 : R bit0=0:FX1 L-Ch Off,=1:On
02 : 01:99 bit1=0:FX1 R-Ch Off,=1:On
bit2=0:FX2 L-Ch Off,=1:On
64 : 99:01 bit3=0:FX2 R-Ch Off,=1:On
65 : L bit4,5=0:Serial
1:Parallel
2:Parallel 2
3:Parallel 3

*20-3 : Effect Parameters (8Byte) 47 Types

offset	PARAMETER	DATA(Hex) : VALUE
1~3:Hall, (4,5:Room, 6:Live Stage)		
(00)	Reverb Time	00~61(2F):0.2~9.9(4.9)
(01)	(NUL)	00
(02)	High Damp	00~63 : 00~99
(03)	Pre Delay	00~C8 : 00~200
(04)	E.R Level	00~63 : 00~99
(05)	(NUL)	00
(06)	EQ High	F4~0C : -12~12
(07)	EQ Low	F4~0C : -12~12
NUL not listed from here on, Value must be 00.		
7:Wet Plate, 8:Dry Plate, 9:Spring		
(00) (01)	Pre Delay	00~C8 : 00~200 (Little endian)
(02)	E.R Level	01~0A : 01~10
(03)	Reverb Time	00~63 : 00~99
(04)	High Damp	00~63 : 00~99
(06)	EQ Low	F4~0C : -12~12
(07)	EQ High	F4~0C : -12~12
10~12:Early Reflection 1,2,3		
(00)	E.R Time	00~46 : 100~800
(01)	Pre Delay	00~C8 : 00~200
(06)	EQ High	F4~0C : -12~12
(07)	EQ Low	F4~0C : -12~12

13:Stereo Delay, 14:Cross Delay

(00) (01)	Delay Time L	00~1F4 : 00~500 (Little endian)
(02)	Feedback	9D~63 : -99~99
(03)	High Damp	00~63 : 00~99
(04) (05)	Delay Time R	00~1F4 : 00~500 (Little endian)
(06)	EQ High	F4~0C : -12~12
(07)	EQ Low	F4~0C : -12~12

15:Dual Delay

(00) (01)	Delay Time L	00~1F4 : 00~500 (Little endian)
(02)	Feedback L	9D~63 : -99~99
(03)	High Damp L	00~63 : 00~99
(04) (05)	Delay Time R	00~1F4 : 00~500 (Little endian)
(06)	Feedback R	9D~63 : -99~99
(07)	High Damp R	00~63 : 00~99

16~18:Multitap Delay 1,2,3

(00) (01)	Delay Time A	00~1F4 : 00~500 (Little endian)
(02) (03)	Delay Time B	00~1F4 : 00~500 (Little endian)
(04)	Feed back	9D~63 : -99~99
(06)	EQ Low	F4~0C : -12~12
(07)	EQ High	F4~0C : -12~12

19,20:Stereo Chorus 1,2

(00)	Modulation Depth	00~63 : 00~99
(01)	Modulation Speed	00~D8 *20-3-2
(02)	MG Status *20-3-3	bit0=0:Sin, =1:Tri bit1 ← 1 bit2 ← 0
(04)	Delay Time	00~C8 : 00~200
(06)	EQ High	F4~0C : -12~12
(07)	EQ Low	F4~0C : -12~12

21:Quadrature Chorus, 22:X Over Chorus

(00)	Delay Time L	00~FA : 00~250
(01)	Delay Time R	00~FA : 00~250
(02)	Modulation Speed	01~63 : 01~99
(03)	Modulation Depth	00~63 : 00~99
(04)	Modulation Waveform	EB~14 *20-3-4
(06)	EQ Low	F4~0C : -12~12
(07)	EQ High	F4~0C : -12~12

23:Harmonic Chorus

(00) (01)	Delay Time A	00~1F4 : 00~500 (Little endian)
(02) (03)	Delay Time B	00~1F4 : 00~500 (Little endian)
(04)	Modulation Speed	01~63 : 01~99
(05)	Modulation Depth	00~63 : 00~99
(06)	Filter Split Point	00~12 : 00~18

24:Symphonic Ensemble

(00)	Modulation Depth	00~63 : 00~99
(06)	EQ High	F4~0C : -12~12
(07)	EQ Low	F4~0C : -12~12

25,26:Flanger1,2, 27:X Over Flanger

(00)	Delay Time	00~C8 : 00~200
(01)	Modulation Depth	00~63 : 00~99
(02)	Modulation Speed	01~63 : 01~99
(03)	Feedback	9D~63 : -99~99
(06)	EQ Low	F4~0C : -12~12
(07)	EQ High	F4~0C : -12~12

28:Exciter

(00)	Harmonic density	9D~63 : -99~99
(01)	Hot Spot	00~09 : 01~10
(06)	EQ High	F4~0C : -12~12
(07)	EQ Low	F4~0C : -12~12

29:Enhancer

(00)	Harmonic Density	01~63 : 01~99
(01)	Hot Spot	01~14 : 01~20
(02)	Stereo Width	00~63 : 00~99
(03)	Delay	01~63 : 01~99
(06)	EQ Low	F4~0C : -12~12
(07)	EQ High	F4~0C : -12~12

30:Distortion, 31:Over Drive

(00)	Drive	01~6F : 01~111
(01)	Hot Spot	00~63 : 00~99
(02)	Resonance	00~63 : 00~99
(03)	Distortion Level	00~63 : 00~99
(06)	EQ Low	F4~0C : -12~12
(07)	EQ High	F4~0C : -12~12

32,33:Phaser 1,(2)

(00)	Modulation Depth	00~63 : 01~99
(01)	Modulation Speed	00~D8 : *20-3-2
(02)	MG Status *20-3-3	bit0=0:Sin, =1:Tri bit1 ← 1,(0) bit2 ← 0
(03)	Feedback	9D~63 : -99~99
(04)	Hot Spot	00~63 : 00~99

34:Rotary Speaker

(00)	Vibrato Depth	00~0F : 00~15
(01)	Acceleration	01~0F : 01~15
(02)	Slow Speed	01~63 : 01~99
(03)	Fast Speed	01~63 : 01~99

35:Auto Pan, (36:Tremolo)

(00)	Depth	00~63 : 00~99
(01)	Speed	00~D8 : *20-3-2
(02)	MG Status *20-3-3	bit0=0:Sin, =1:Tri bit1 ← 1, (0) bit2 ← 0
(03)	Shape	9D~63 : -99~99
(06)	EQ High	F4~0C : -12~12
(07)	EQ Low	F4~0C : -12~12

37:Parametric EQ

(00)	Low Frequency	00~1D : 00~29
(01)	Low Gain	F4~0C : -12~12
(02)	Mid Frequency	00~63 : 00~99
(03)	Mid Gain	F4~0C : -12~12
(04)	Mid Width	00~63 : 00~99
(05)	High Frequency	00~1D : 00~29
(06)	High Gain	F4~0C : -12~12

38:Chorus-Delay, 39:Flanger-Delay

(00)	Delay Time	00~32 : 00~50
(01)	Modulation Speed	01~63 : 01~99
(02)	Modulation Depth	00~63 : 00~99
(03)	Feedback	9D~63 : -99~99
(04)	Delay Time	00~E1 : 00~450
(05)	Feedback	9D~63 : -99~99

40:Delay / Hall

(00) (01)	Delay Time	00~1F4 : 00~500 (Little endian)
(02)	Feedback	9D~63 : -99~99
(03)	High Damp	00~63 : 00~99
(04)	Reverb Time	00~61 : 0.2~9.9
(06)	High Damp	00~63 : 00~99
(07)	Pre Delay	00~96 : 00~150

41:Delay / Room

(00) : (03)	Delay Parameter	*20-3-1
(04)	Reverb Time	00~2F : 0.2~4.9
(06)	High Damp	00~63 : 00~99
(07)	Pre Delay	00~96 : 00~150

42:Delay / Chorus, (43:Delay / Flanger)

(00) : (03)	Delay Parameter	*20-3-1
(04)	Depth	00~63 : 00~99
(05)	Speed	00~D8 *20-3-2
(06)	MG Status *20-3-3	bit0=0:S,=1:T(←0) bit1 ← 0 bit2 ← 0, (←1)
(07)	Feedback	0,(9D~63:-99~99)

44:Delay / Distortion, 45:Delay / Over Drive

(00) (01)	Delay Time	00~1F4 : 00~500 (Little endian)
(02)	Feedback	9D~63 : -99~99
(03)	Drive	01~6F : 01~111
(04)	Hot Spot	01~63 : 01~99
(05)	Resonance	00~63 : 00~99
(06)	Distortion Level	01~63 : 01~99

46:Delay / Phaser

(00) : (03)	Delay Parameter	*20-3-1
(04)	Depth	00~63 : 00~99
(05)	Speed	00~D8 *20-3-2
(06)	Feedback	9D~63 : -99~99

47:Delay / Rotary Speaker

(00) (01)	Delay Time	00~1F4 : 00~500 (Little endian)
(02)	Feedback	9D~63 : -99~99
(03)	Acceleration	01~0F : 01~15
(04)	Slow Speed	01~63 : 01~99
(05)	Fast Speed	01~63 : 01~99

3-1 : Delay Parameter
Same as 40-(00)～(03)

3-2 : Data(Hex) Value[Hz]
00～63 0.03～ 3.00 (0.03step)
64～C7 3.1 ～13.0 (0.1 step)
C8～D8 14 ～30.0 (1 step)

3-3 : MG Status
bit0 : Waveform =0:Sin, =1:Tri
bit1 : Phase =0:0° , =1:180°
bit2 : Wave Shape =0: Normal
=1: for Flanger

3-4 : Waveform
EB : T+10
:
FF : T-10
00 : S-10
:
14 : S+10

4 : Dynamic Modulation Source
4 : Assignable Pedal

ARRANGEMENT PARAMETERS (TABLE 8)

No.	TRACK	PARAMETER	VALUE
0	----	TEMPO	40..240
1	----	CHORD LATCH	0..1
2	----	SPLIT POINT	0..127
3	----	TRANSPOSE	-11..11
4	----	VARIATION BY FILL 1	0..12
5	----	VARIATION BY FILL 2	0..12
6	----	EFFECT 1 TYPE	0..47
7	----	EFFECT 1 LEVEL	0..100
8	----	EFFECT 2 TYPE	0..47
9	----	EFFECT 2 LEVEL	0..100
10	DRUM	PROGRAM	*1
11	DRUM	VOLUME	0..127
12	DRUM	PANPOT	-1..31
13	DRUM	C LEVEL	0..10
14	DRUM	D LEVEL	0..10
15	DRUM	MUTE	0..1
16	----	----	----
17	DRUM	OUTPUT STATUS	0..3
18	----	----	----
19	----	----	----
20	PERC	PROGRAM	*1
21	PERC	VOLUME	0..127
22	PERC	PANPOT	-1..31
23	PERC	C LEVEL	0..10
24	PERC	D LEVEL	0..10
25	PERC	MUTE	0..1
26	----	----	----
27	PERC	OUTPUT STATUS	0..3
28	----	----	----
29	----	----	----
30	BASS	PROGRAM	*1
31	BASS	VOLUME	0..127
32	BASS	PANPOT	-1..31
33	BASS	C LEVEL	0..10
34	BASS	D LEVEL	0..10
35	BASS	MUTE	0..1
36	BASS	OCTAVE	-2..2
37	BASS	OUTPUT STATUS	0..2
38	BASS	WRAP AROUND POINT	-1..11
39	----	----	----
40	ACC1	PROGRAM	*1
41	ACC1	VOLUME	0..127
42	ACC1	PANPOT	-1..31
43	ACC1	C LEVEL	0..10
44	ACC1	D LEVEL	0..10
45	ACC1	MUTE	0..1

*1 : 0..63 = A11..A58
64..127 = B11..B58
128..191 = C11..C58
192..255 = U11..U88
256..319 = D11..D88
320..383 = E11..E88
384..399 = Dr11..Dr28
400..407 = Dr31..38
408..411 = Dr41..44

46	ACC1	OCTAVE	-2..2
47	ACC1	OUTPUT STATUS	0..3
48	ACC1	WRAP AROUND POINT	-1..11
49	----	----	----
50	ACC2	PROGRAM	*1
51	ACC2	VOLUME	0..127
52	ACC2	PANPOT	-1..31
53	ACC2	C LEVEL	0..10
54	ACC2	D LEVEL	0..10
55	ACC2	MUTE	0..1
56	ACC2	OCTAVE	-2..2
57	ACC2	OUTPUT STATUS	0..3
58	ACC2	WRAP AROUND POINT	-1..11
59	----	----	----
60	ACC3	PROGRAM	*1
61	ACC3	VOLUME	0..127
62	ACC3	PANPOT	-1..31
63	ACC3	C LEVEL	0..10
64	ACC3	D LEVEL	0..10
65	ACC3	MUTE	0..1
66	ACC3	OCTAVE	-2..2
67	ACC3	OUTPUT STATUS	0..3
68	ACC3	WRAP AROUND POINT	-1..1
69	----	----	----
70	KBD1	PROGRAM	*1
71	KBD1	VOLUME	0..127
72	KBD1	PANPOT	-1..31
73	KBD1	C LEVEL	0..10
74	KBD1	D LEVEL	0..10
75	KBD1	MUTE	0..1
76	KBD1	OCTAVE	-2..2
77	----	----	----
78	----	----	----
79	KBD1	DAMPER ENABLE	0..1
80	KBD2	PROGRAM	*1
81	KBD2	VOLUME	0..127
82	KBD2	PANPOT	-1..31
83	KBD2	C LEVEL	0..10
84	KBD2	D LEVEL	0..10
85	KBD2	MUTE	0..1
86	KBD2	OCTAVE	-2..2
87	----	----	----
88	----	----	----
89	KBD2	DAMPER ENABLE	0..1

PROGRAM PAGE AND POSITION TO PARAMETER ADDRESS (TABLE 9)

Example

12-13: 12th byte to 13th byte (see TABLE1 No. item)

14.1-3: bit 1 to bit 3 of 14th byte

15.0/4: bit 0 and bit 4 of 15th byte

PAGE			POSITION								
#	DESCRIPTION	OSC	0	1	2	3	4	5	6	7	8
1	OSC BASIC	-	10	11.0	11.0	18	19	20	-	-	-
2	OSC TONE	1	OSC	12-13	65	14	40	86	82.0-3	82.4-7	-
2	OSC TONE	2	OSC	15-16	112	17	87	133	129.0-3	129.4-7	-
3	PITCH EG	-	21	22	23	24	25	26	28	27	-
4	VDF/SEND	1	OSC	50	53	83	-	-	-	-	-
4	VDF/SEND	2	OSC	97	100	130	-	-	-	-	-
5	VDF EG	1	57	58	59	60	61	62	63	64	-
5	VDF EG	2	104	105	106	107	108	109	110	111	-
6	VDF KBD TR.	1	OSC	52	51	85.0-1	54	78.0/4	78.1/5	78.2/6	78.3/7
6	VDF KBD TR.	2	OSC	99	98	132.0-1	101	125.0/4	125.1/5	125.2/6	125.3/7
7	VDF VELOCITY	1	OSC	56	84	55	79.0/4	79.1/5	79.2/6	79.3/7	-
7	VDF VELOCITY	2	OSC	103	131	102	126.0/4	126.1/5	126.2/6	126.3/7	-
8	VDA EG	1	OSC	71	72	73	74	75	76	77	-
8	VDA EG	2	OSC	118	119	120	121	122	123	124	-
9	VDA KBD TR.	1	OSC	67	66	85.4-5	69	80.0/4	80.1/5	80.2/6	80.3/7
9	VDA KBD TR.	2	OSC	114	113	132.4-5	116	127.0/4	127.1/5	127.2/6	127.3/7
10	VDA VELOCITY	1	OSC	68	70	81.0/4	81.1/5	81.2/6	81.3/7	-	-
10	VDA VELOCITY	2	OSC	115	117	128.0/4	128.1/5	128.2/6	128.3/7	-	-
11	PITCH MG	1	OSC	41.0-2	45	42	43	44	41.7	46	-
11	PITCH MG	2	OSC	88.0-2	92	89	90	91	88	93	-
12	PMG CONTROL	1	OSC	48	47	49	-	-	-	-	-
12	PMG CONTROL	2	OSC	95	94	96	-	-	-	-	-
13	VDF MG	-	29.0-2	32	30	31	29.7	29.5-6	-	-	-
14	VDF MG/AFTT	-	39	35	36	-	-	-	-	-	-
15	CONTROLLER	-	37	33	38	34	-	-	-	-	-
16	EFFECT TYPE	-	135	137-138	136	139-140	-	-	-	-	-
17	FX PLACEMENT	-	143	141	142	-	-	-	-	-	-
18	FX1 PARAM.	-	144-151								
19	FX2 PARAM.	-	154-161								

*OSC =0 : 1 ,=1 : 2

NOTICE

KORG products are manufactured under strict specifications and voltages required by each country. These products are warranted by the KORG distributor only in each country. Any KORG product not sold with a warranty card or carrying a serial number disqualifies the product sold from the manufacturer's/distributor's warranty and liability. This requirement is for your own protection and safety.

KORG INC.
15 - 12, Shimotakaido 1 - chome, Suginami-ku, Tokyo, Japan.

0811 CTH *Printed in Japan*