KORG

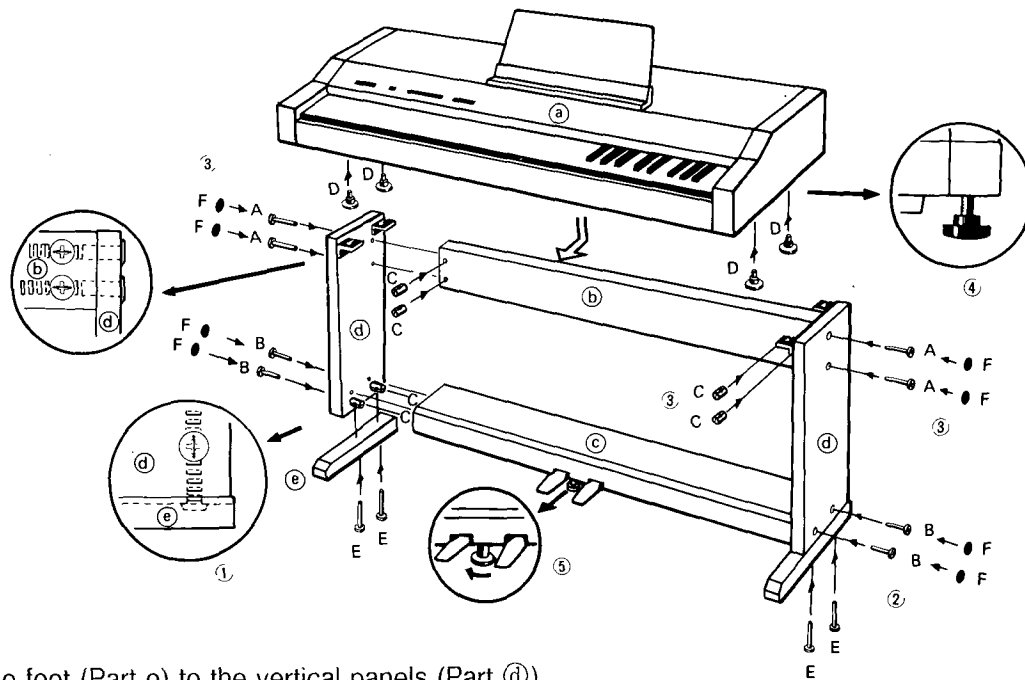## CONCERT-5500

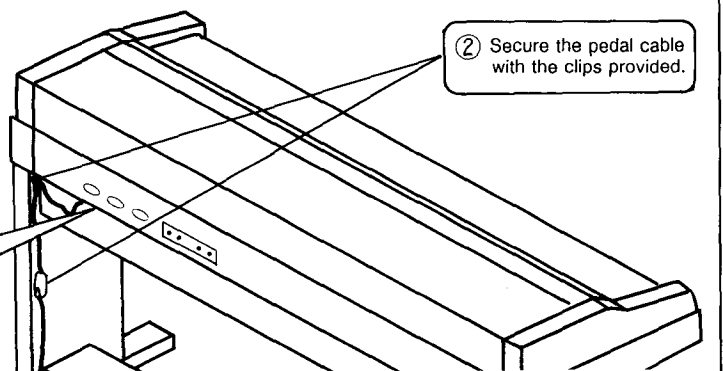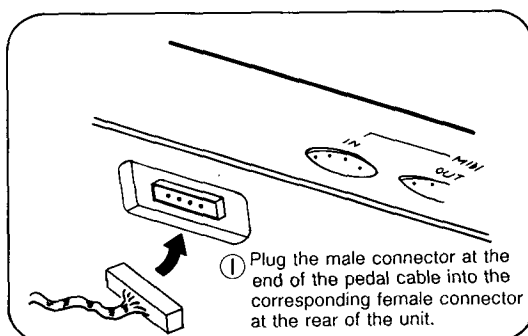## CONCERT-4000

OWNER'S MANUAL
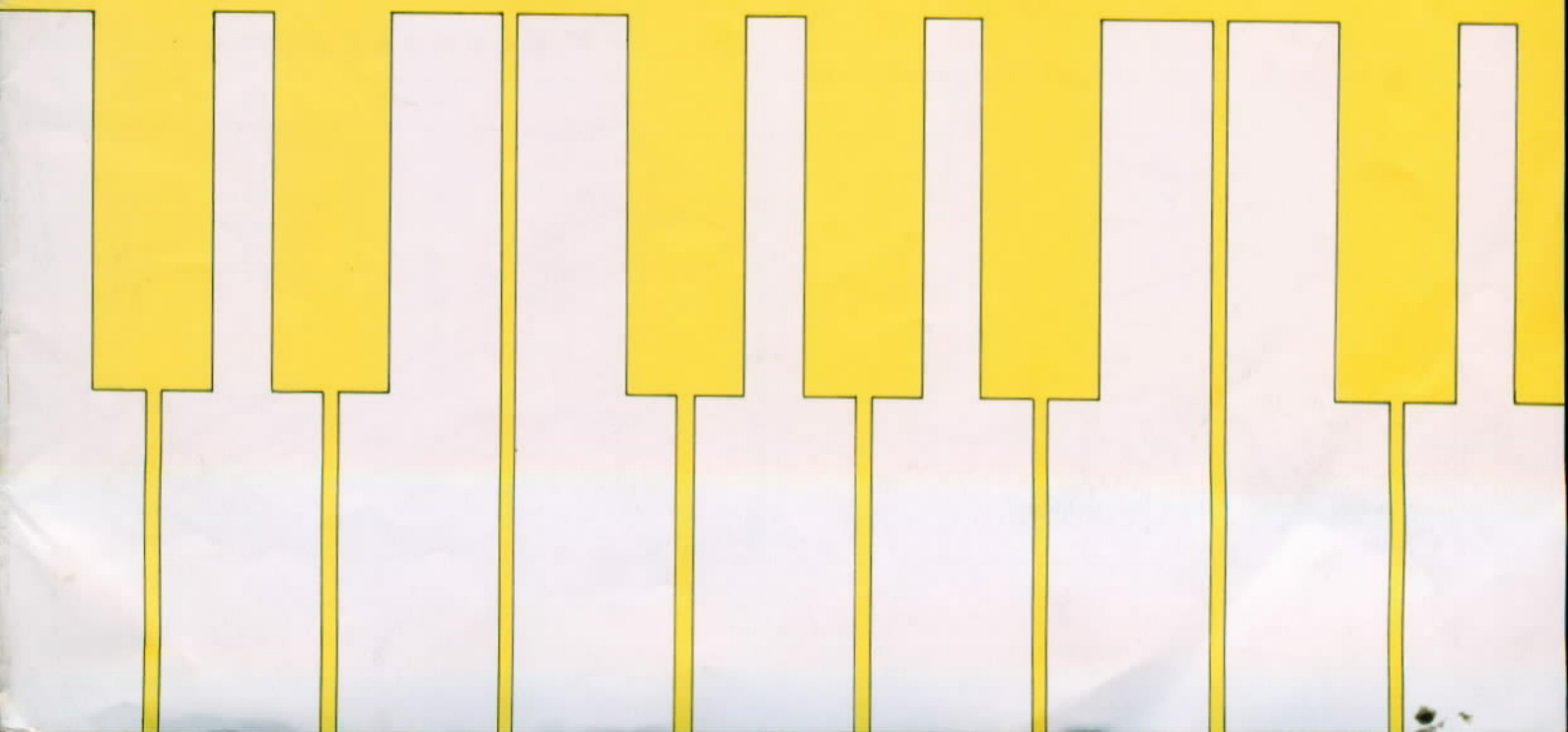
Assembling the Stand

① Attach the feet (Part e) to the vertical panels (Part ⓓ).
Insert two joint connectors (Part ©) into the holes at the bottom of the panel, rotate them so that the arrows on their end faces are vertical--that is, parallel to the long sides of the panel (See Detail.)--and then use two of the longer Phillips head screws (Part ⓔ) to secure the foot.

② Attach the vertical panels to the base (Part ©) with the shorter Phillips head screws (Part ⓑ).

③ Attach the cross support (Part ⓑ) to the vertical panels.
Insert two joint connectors into the holes at the end of the panel, rotate them so that the arrows on their end faces are horizontal--that is, parallel to the long sides of the panel (See Detail.), and then use two of the longer Phillips head screws (Part ⓔ) to secure.

④ Attach the unit.
Place the unit on the stand with the holes on the underside over the slots in the metal brackets, attach lightly with the four knob bolts (Part ⓓ), slide the unit fully forward, and tighten the knob bolts to secure.

⑤ Rotate the knob under the pedals (See Detail.) until it touches the floor.
Note: Leaving a gap can result in excessive vibration.

A /// ⊕ [blank]	Long screws (black finish, slotted head)	4
B //// ---	Short screws (black finish, Phillips head)	4
C ฿฿฿฿฿฿฿฿ --	Joint connectors	8
D ⚎⚎⚎⚎ ------	Knob bolt	4
E //// ⊕ [blank]	Long screws (black finish, Phillips head)	4
F ●●●●●●●●	Screw caps	8

Attaching the Pedal Cord

② Secure the pedal cable with the clips provided.

① Plug the male connector at the end of the pedal cable into the corresponding female connector at the rear of the unit.

Contents

Before You Begin

■ Location
To prevent damage to the unit's electronics, do not use or store it for extended periods where it may be exposed to:
- direct sunlight.
- temperature or humidity extremes.
- sand or dust.
- excessive vibration.

■ Power Supply
- Use only the AC adapter included with the unit. Use only electrical outlets matching the specifications on the name plate of the adapter.
  Note: If necessary, add the appropriate step-up or step-down transformer. Using the wrong polarity or voltage can irreparably damage the unit.
- To help prevent noise and degraded sound quality, avoid connecting the unit to the same electrical circuit as motors and other heavy loads.
- For the same reasons, never overload the electrical circuit with excessive extension cords branching to other equipment.
- Always start with the volume low and gradually raise it-- especially when the unit is connected to external equipment.

■ Interference
To minimize the risk of radio frequency interference:
- Keep the unit away from fluorescent light fixtures and other sources of radio-frequency noise that may disrupt operation of the microprocessor at

- Never use the unit in the immediate vicinity of a radio, television set, or similar equipment as the equipment may pick up radio-frequency noise from the microprocessor.
- If operation becomes erratic or unpredictable or the unit fails to respond, reset the microprocessor by turning off the unit, waiting a few seconds, and then turning it back on.

■ Rear Connections
Use only pin jacks and connectors matching the corresponding
sockets and connectors available at the rear of the unit.

■ Handling
- Never apply excessive force to keys, switches, terminals, and other components.
- Avoid dropping the unit or subjecting it to sudden impact.

■ Cleaning
- Wipe the exterior of the unit with a clean, dry cloth to remove dust and dirt.
- Never use harsh cleansers, organic solvents, or flammable polishes.

■ Warranty
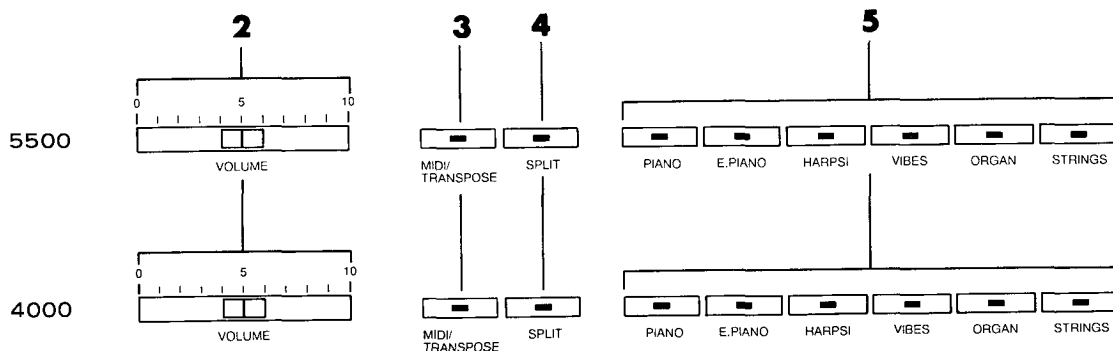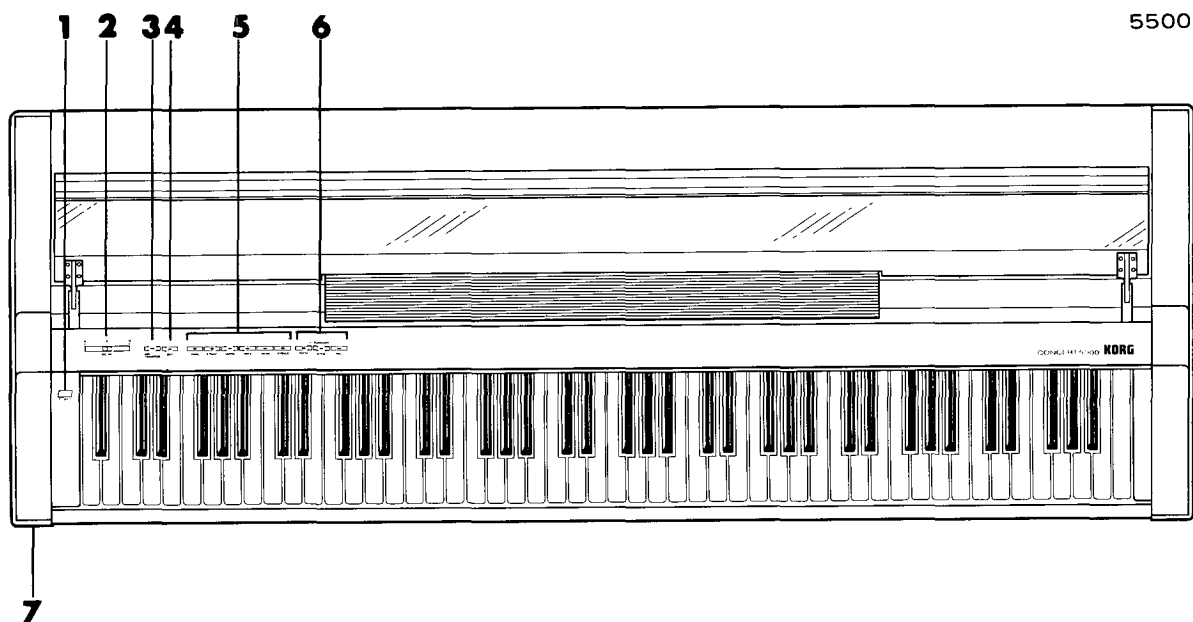Have your warranty certificate validated by the vendor and keep it in a safe place until the warranty period expires.

■ Manual
This manual is your guide to using the unit properly and effectively. Keep it in a safe place.

Function of Controls

Front Panel

	2	**3** **4**	**5**

5500

```
0        5          10
|I|I|I|I|I|I|I|I|I|
        VOLUME
```

MIDI/TRANSPOSE   SPLIT   PIANO E.PIANO HARPSI VIBES ORGAN STRINGS

4000

```
0        5          10
|I|I|I|I|I|I|I|I|I|
        VOLUME
```

MIDI/TRANSPOSE   SPLIT   PIANO E.PIANO HARPSI VIBES ORGAN STRINGS

1. **POWER** . . . . This switch controls power to the unit.

2. **VOLUME** . . . . This sliding switch controls the level of the stereo outputs: built-in speakers, PHONES, MIDI OUT, and AUX OUT.

3. **MIDI/TRANSPOSE** . . . . Combinations of this switch with various keys, pedals, and other switches control a wide variety of different functions.
   - Keys between F5# and F6 transpose keyboard output up to half an octave up or down in halftone steps.
   - The VOICE SELECTOR switches control the MIDI functions.
   - The SOFT/SOSTENUTO pedal switches the pedal's effects.
   - The DAMPER pedal switches the pedal's assignments to the voices in two-voice modes.

4. **SPLIT** . . . . Pressing this switch so that the LED inside it lights splits the keyboard so that the keys on either side of the selected dividing line sound different voices. (See p. 6.)
   **Note:** Press the switch to turn off the LED and return the keyboard to normal, single-voice operation.

5. **VOICE SELECTOR** . . . . The primary function of these switches is to determine the current voice-- or, for the LAYER and SPLIT modes, voices. (See p. 13.) Combined with the MIDI/TRANSPOSE switch, they have a wide variety of other functions as well--controlling MIDI operation, for example. (See "MIDI Controls" on p. 12).
   Note: When the power is first applied, the unit always starts with the PIANO voice.

6. SURROUND . . . .   (Concert 5500 only) This switch turns the SURROUND effect, which adds reverberation to add extra "live" presence to the output, on and off.
Note: When the power is first applied, the unit always starts with the SURROUND effect OFF for all voices.

7. PHONES . . . .   This jack accepts stereo headphones for private listening at full volume without disturbing neighbors or even those in the same room.
Note: Plugging in headphones automatically disables output to the speakers.
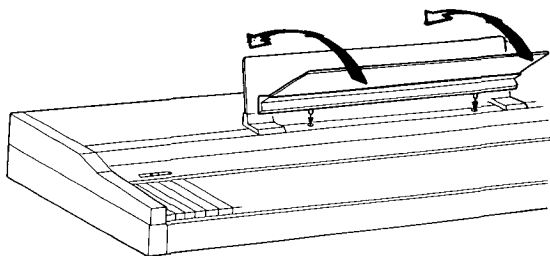
Rear Panel
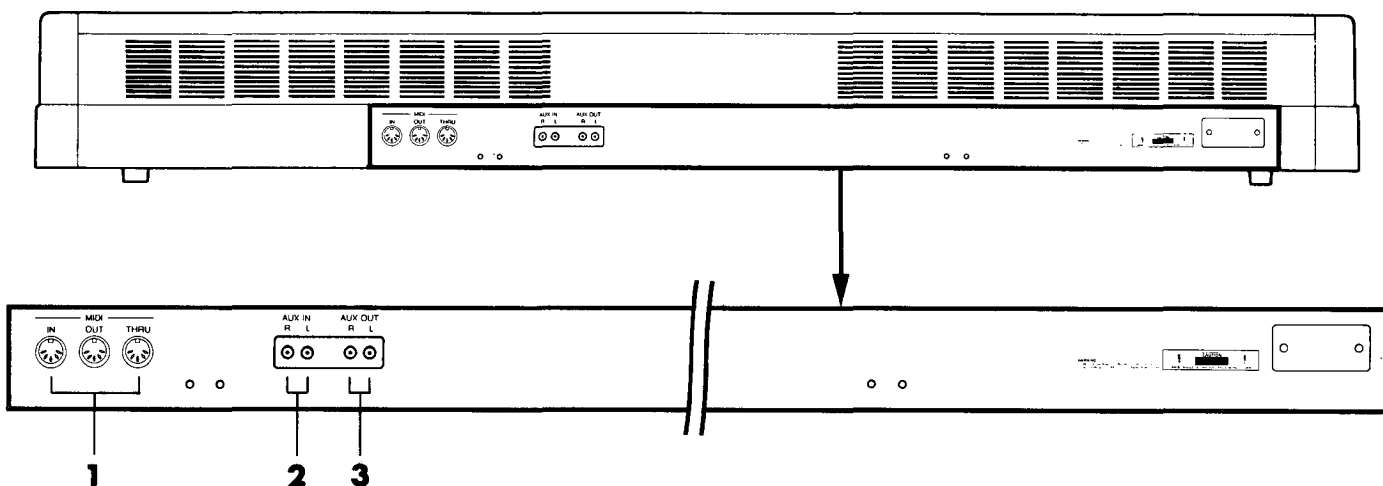
1. MIDI (IN/OUT/THRU) . .   These DIN connectors accept the optional MIDI cables for connecting the unit to synthesizers, sequencers, and other MIDI devices for exchanging performance and other types of data.

2. AUX IN (L/R) . . . .   These pin jacks are for connecting audio signals from synthesizers, drum machines, and other equipment to the unit's built-in speakers.
Note: The only volume controls are those on the originating equipment.

3. AUX OUT (L/R) . . . .   These pin jacks are for connecting the unit to the AUX (or LINE) IN jacks on mixers, tape recorders, or home audio systems--for routing output to a different speaker system, for example.
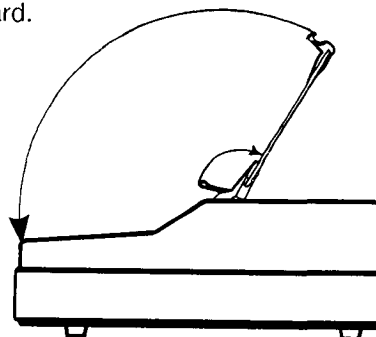**Note:** The VOLUME switch controls the output level.

| Music Stand (Concert 4000)	Keyboard Cover (Concert 5500)
To install the music stand, insert the pins into the holes provided and rotate the stand into position.	The keyboard cover folds down to cover the entire keyboard.

① Always grasp the cover in the middle when lifting.
② Never force the cover up or down.
③ Lifting the cover requires some effort because the hinge mechanism locks in place.
④ Always fold up the music stand before closing the cover.
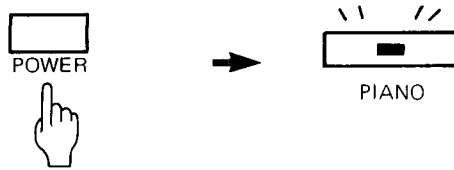
4

Trying Out the Unit

1. Plug in the unit.
Plug the AC power supply cord into the receptacle at the rear of the unit and an appropriate power outlet.
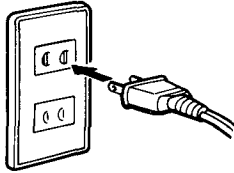
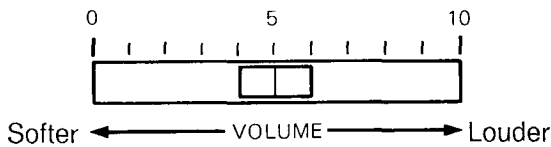## 2. Press the POWER switch and wait three seconds.
Note: When the power is first applied, the unit always starts with the PIANO voice.

3. Adjust the volume.
Slide the control left to lower the output level and to the right to raise it.
Note: This switch controls the level of the stereo outputs: built-in speakers, PHONES, MIDI OUT, and AUX OUT.

Softer ◄──────── VOLUME ────────► Louder

4. Try the different voices.
Changing voices is as easy as pressing the VOICE SELECTOR switches.

	Characteristics
PIANO	Strong, lively acoustic piano sound.
E. PIANO	Light, translucent electric piano sound. Subsequent presses on the switch turn a CHORUS effect on and off. (Concert 5500 only.)
HARPSI	General harpsichord sound with classical air.

| VIBES	Full, mellow vibraphone sound. Subsequent presses on the switch turn a TREMOLO effect on and off. (Concert 5500 only.)
ORGAN	Magnificent pipe organ sound.
STRINGS	String ensemble

The Concert 5500 CHORUS and TREMOLO effects are not available in the LAYER and SPLIT modes.

5. Add a SURROUND effect. (Concert 5500 only.)
The SURROUND effects add measured amounts of reverberation to simulate the ambience of particular performance environments.

	Effect
ROOM	Intimate "live" space.
STAGE	Small hall or auditorium stage.
HALL	Dramatic concert hall presence.

Note: Pressing the same switch alternately turns the SURROUND effect on and off.
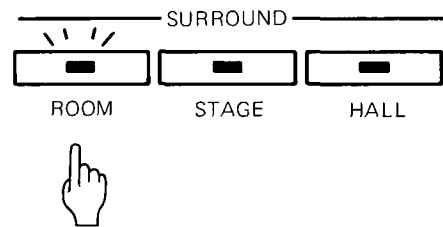
Note: The individual SURROUND settings for each voice remain in effect through all subsequent voice changes until you either change them or turn off the unit. When the power is first applied, the unit always starts with the SURROUND effect OFF for all voices.

One- and Two-Voice Modes

The piano provides three voice modes, two of which, LAYER and SPLIT, simultaneously use two different voices at the same time:

●SINGLE: This, the normal mode, uses the same voice for all keys on the keyboard.

●LAYER: This mode simultaneously uses the two selected voices for every key on the keyboard, producing a rich, layered effect.

●SPLIT: This mode divides the keyboard in two, using one voice on each side of the user-specified dividing line to simulate separate instruments for the treble (melody) and bass (accompaniment) parts.

Note: Since LAYER mode notes simultaneously use two voices, they count double when the piano allots notes to the sixteen sound sources available.
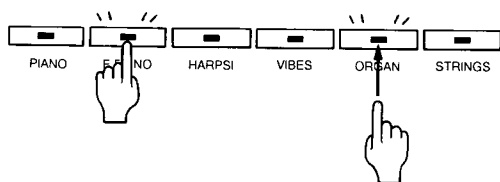
Note: The LEDs in the switches light to indicate which voice or voices are currently in use.

● Changing Modes

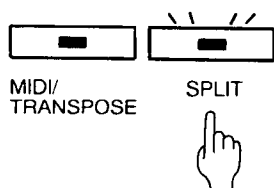**SINGLE:** Press a single VOICE SELECTOR switch to switch all keys to the same voice.

Note: The LED inside the selected switch lights to indicate the current voice.

LAYER: Hold down one VOICE SELECTOR switch and press another to switch all keys to the same two voices.

Note: The LEDs inside the selected switches light to indicate the current voices.

SPLIT: Press the VOICE SELECTOR switch for the upper half of the keyboard and then press the SPLIT switch to switch the lower half of the keyboard to ELECTRIC BASS, an internal voice not directly accessible from the panel.

Note: If necessary, press a single VOICE SELECTOR switch to switch the keyboard from the LAYER to the SINGLE mode.

**Note:** To change this setting, use the procedure under "Changing Mode Voices".

● Canceling Modes

• To switch out of the LAYER or SPLIT mode, simply specify a different mode.

• To cancel the SPLIT mode and return to the SINGLE mode, press the SPLIT switch to turn off the LED inside it.

Note: The keyboard returns to the voice currently in effect for the upper half of the keyboard.

● Changing Mode Voices

• To change voices in the LAYER or SPLIT mode, simply select a new voice or pair of voices, respectively.
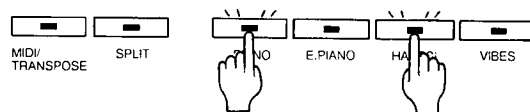
• To change only the voice for the upper half of the keyboard in the SPLIT mode, simply press the desired VOICE SELECTO switch.

• To change both voices in the SPLIT mode, hold down the VOICE SELECTOR switch for the upper half of the keyboard and then press the switch for the lower half.
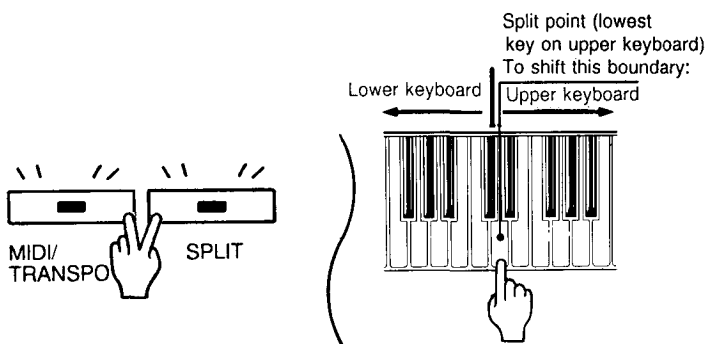
●Changing the Split Point

The split point marks the boundary between the upper and lower halves of the keyboard. You specify its position by pressing the lowest key for the upper half.

1. Switch to the SPLIT mode--if not already there.
2. If necessary, change the voice for the lower half of the keyboard.
   Note: This step is sometimes necessary because the split point and volume balance cannot be changed when the lower half is using the internal ELECTRIC BASS voice, the initial setting for the lower keyboard voice.
3. Hold down the MIDI/TRANSPOSE switch, add the SPLIT switch, and then press the key corresponding to the new split point.

Split point (lowest key on upper keyboard)
To shift this boundary:
Lower keyboard / Upper keyboard

MIDI/TRANSPO   SPLIT

Note: Any changes that you make affect only the current voice.
The new split point and volume balance settings remain in effect through all subsequent voice changes until you change them--or turn off the unit. When the power is first applied, the unit always starts with the split point at middle C (C5) and the split volume balance at 50:50.

●Adjusting the Relative Volume

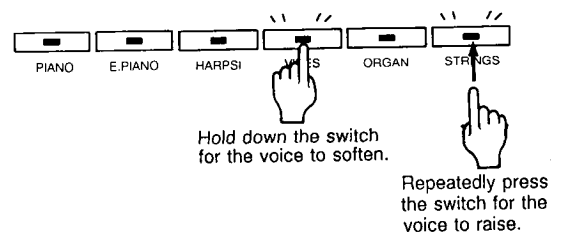Since the LAYER and SPLIT modes both use two voices, you may wish to adjust the relative loudness of the two:

1. Switch to the SPLIT mode--if not already there.
2. If necessary, change the voice for the lower half of the keyboard.
   Note: This step is sometimes necessary because the split point and volume balance cannot be changed when the lower half is using the internal ELECTRIC BASS voice, the initial setting for the lower keyboard voice.
3. Hold down the VOICE SELECTOR switch corresponding to the voice that you wish to make softer.
4. Make the other voice louder by pressing the corresponding VOICE SELECTOR switch as often as necessary to achieve the desired balance.
   Note: Any changes that you make affect only the current voice.
   The new split point and volume balance settings remain in effect through all subsequent voice changes until you change them--or turn off the unit. When the power is first applied, the unit always starts with the split point at middle C (C5) and the split volume balance at 50:50.
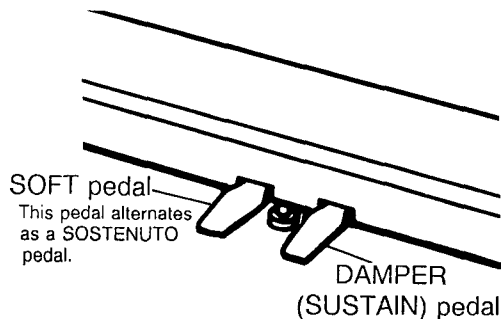

PIANO   E.PIANO   HARPSI   S   ORGAN   STRINGS

Hold down the switch for the voice to soften.

Repeatedly press the switch for the voice to raise.

Using the Pedals

Pedal Effects
The two pedals SOFT/SOSTENUTO and DAMPER provide three effects:

SOFT pedal
This pedal alternates as a SOSTENUTO pedal.

DAMPER (SUSTAIN) pedal

DAMPER:
This pedal produces an effect similar to that of the pedal with the same name on an acoustic piano. On an acoustic piano, releasing a key normally causes a soft pad, or damper, to press against the corresponding strings and accelerate ("damp") the rate at which the vibrations die out. Pressing the damper pedal, however, disables this mechanism, allowing all strings--including ones not struck by hammers--to freely resonate and thus produce a fuller, richer sound.

SOFT:
This pedal produces a softening effect similar to that produced by the pedal with the same name on an acoustic piano.

SOSTENUTO:
Pressing this alternate setting for the SOFT pedal produces a damper effect, expanding notes to their full nominal value, but only for those notes currently pressed.
The effect does not apply to additional notes played while the pedal is down.

Switching Between SOFT and SOSTENUTO Effects
To switch the SOFT/SOSTENUTO pedal between the two effects:
● Switch to the SPLIT mode--if not already there.
● If necessary, change the voice for the lower half of the keyboard.
Note: This step is sometimes necessary because the split point and volume balance cannot be changed when the lower half is using the ELECTRIC BASS voice, the initial setting for the lower keyboard voice.

● Hold down the MIDI/TRANSPOSE switch.
● Press the SOFT/SOSTENUTO pedal.
Note: When the power is first applied, the SOFT/SOSTENUTO pedal always starts with the SOFT setting.
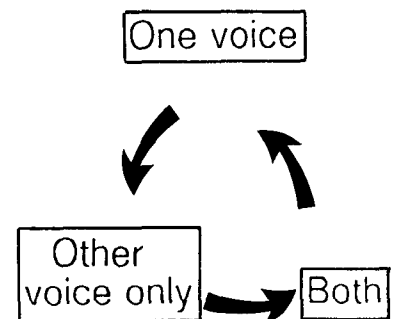
●Using Pedals with Two-Voice Modes
In the LAYER and SPLIT modes, the damper pedal may be used with just one voice or with both. To change between the three possible pedal settings:
1. Hold down the MIDI/TRANSPOSE switch.

MIDI/
TRANSPOSE
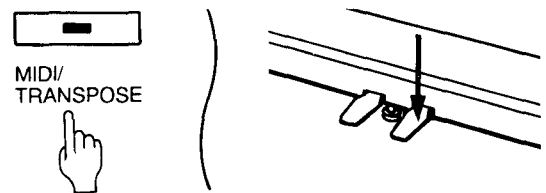
2. Press the pedal.
Note: The changes are cyclic. (See Figure.)

Note: The LEDs in the VOICE SELECTOR switches for the two voices light to indicate that the voice uses the pedal.

Note: The individual pedal settings for the LAYER and SPLIT modes remain in effect through all subsequent mode changes until you change them--or turn off the unit. When the power is first applied, the pedals always start with the BOTH setting for both the LAYER and SPLIT modes.

What is Temperament?

Musical instruments do not use the mathematically perfect pure scale, but compromises called tempered scales or temperaments.

The piano and other modern instruments use even temperament, a 12-tone scale that uses the same frequency ratio for each semitone. This temperament has dominated European music since the middle of the 18th century because it combines both practicality--easier transposition, in particular--and a greater range of expression that allows use of all 24 major and minor keys. (Other temperaments sound better in some keys than in others.) Large amounts of older music for the harpsichord and other piano predecessors, however, assume markedly different tuning. The harpsichord voice on this unit therefore supports two alternate temperaments:
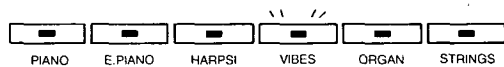
- Kirnberger
- Werckmeister

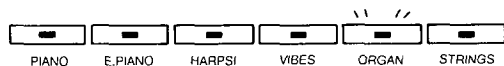## ● Changing the Harpsichord Temperament

Note: The temperament setting applies only to the harpsichord voice. All other voices use even temperament at all times.

1. Hold down the MIDI/TRANSPOSE switch to display the current harpsichord temperament from the lighted LEDs in the VIBES and ORGAN keys.

VIBES only Kirnberger temperament

| PIANO | E.PIANO | HARPSI | VIBES | ORGAN | STRINGS |

ORGAN only Werckmeister temperament

| PIANO | E.PIANO | HARPSI | VIBES | ORGAN | STRINGS |

Neither Even temperament



| PIANO | E.PIANO | HARPSI | VIBES | ORGAN | STRINGS |

2. Hold down the MIDI/TRANSPOSE switch.

- Switch to the corresponding classical harpsichord temperament from even harpsichord temperament.
- Switch from the current classical harpsichord temperament back to even harpsichord temperament.
- Switch to the corresponding classical harpsichord temperament from the other (current) classical harpsichord temperament.

Note: Pressing a temperament switch alternates its LED between ON and OFF. Pressing the unlighted one automatically turns off the other because the current model has no harpsichord temperament for the ON-ON combination. (Future models may vary.)

Note: The temperament setting remains in effect through all subsequent uses of the harpsichord voice until you change it--or turn off the unit. When the power is first applied, the unit always starts with the even harpsichord temperament.

Changing Pitch: TRANSPOSE and TUNE

TUNE trigger keys (A0-B0)

Pitch control (TUNE) keys (C4-B4)

Key control (TRANSPOSE) keys (F6#-F7)
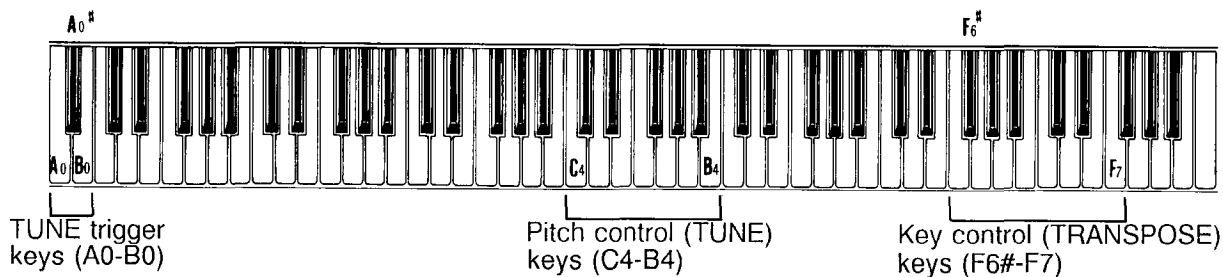
The TRANSPOSE and TUNE functions both shift the pitches of all keys on the keyboard up or down by a specified amount, but use separate shift units to achieve two different effects.

Note: When the power is first applied, the unit always starts with the standard key (C) and pitch (A4 = 440 Hz).

- The TRANSPOSE function changes the key or key signature, shifting the keyboard pitch up or down in semitones. The range is up to half an octave on either side--a range that covers all possible key signatures. The function eliminates the need to change fingering when changing keys--to match the vocal range of a singer, for example.

- The TUNE function, which uses a much smaller unit measured in cents, is primarily for fine-tuning the output pitch to match that of other instruments in an ensemble. The range is 40 cents on either side of the standard pitch.

TRANSPOSE Function

To transpose the keyboard:
1. Hold down the MIDI/TRANSPOSE switch.
2. Press a key between F6# and F7 on the keyboard to specify the new key whose output will be C7.
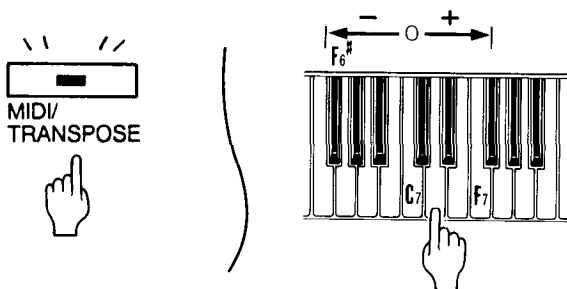

Note: The difference between that key and C7 becomes the new transposition amount. A negative result means transposition down.

Note: The LED in the MIDI/TRANSPOSE switch remains lit while the keyboard is in any key other than the original.

To cancel the transposition and restore the original key (C), just press the MIDI/TRANSPOSE and release.

Example: Transposing up one tone: Pressing D7 transposes the keyboard up one tone so that a piece in C major sounds in D major.


Cmajor

Dmajor
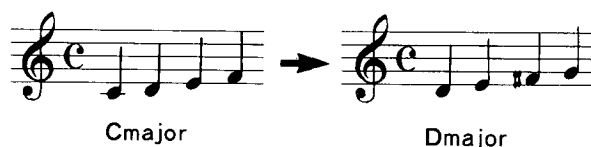
TUNE Function

To fine-tune the keyboard:
1. Specify the tuning direction--up or down--by holding down the appropriate key combination at the lower end of the keyboard with your right hand:
   UP Lowest two white keys (A0 and B0).
   DOWN Lowest white and lowest black keys (A0 and A0#).
2. Press any key between C4 and B4 on the keyboard with your left hand to shift the pitch one step in the specified direction.

Note: One step is approximately 1.2 cents.
Repeat the above two steps as often as necessary.
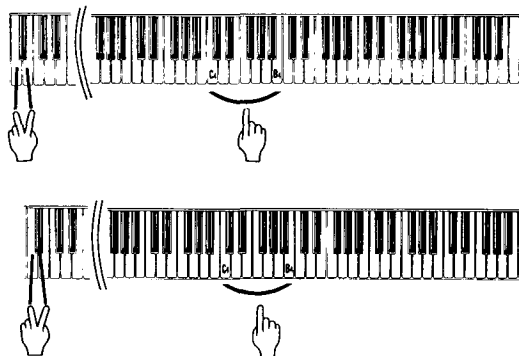
- To cancel the fine-tuning and restore the original pitch (A4 = 440 Hz), press a tuning direction key combination and release.

Using the MIDI Functions

What is MIDI?

MIDI stands for Musical Instrument Digital Interface, an internationally recognized standard for connecting electronic musical instruments, personal computers, and other electronic equipment so that they may communicate with one another and thus work together as a single MIDI network.

The iscussion below is a brief description of just two of the many possibilities. For further details, consult the manuals included with your synthesizer, drum machine, or other MIDI equipment or any of the fine reference materials now available.

What can I do with MIDI?

●The unit's MIDI functions allow you to:
- Play a Korg M1 synthesizer or other MIDI instrument from the unit's keyboard.
- Play the unit from a Korg M1 synthesizer or other MIDI keyboard.
- Synchronize the unit with an external sequencer.

- Record a performance on the unit on an external sequencer, personal computer, or other similarly equipped MIDI device.
- Play the unit from an external sequencer, personal computer, or other similarly equipped MIDI device.

Playing Other Instruments from the Same Keyboard

The accompanying illustration shows how the unit can be used to control other MIDI instruments--to add the Korg Symphony Voice Module's STRINGS voice to the unit's PIANO voice for a piano concerto sound, for example.
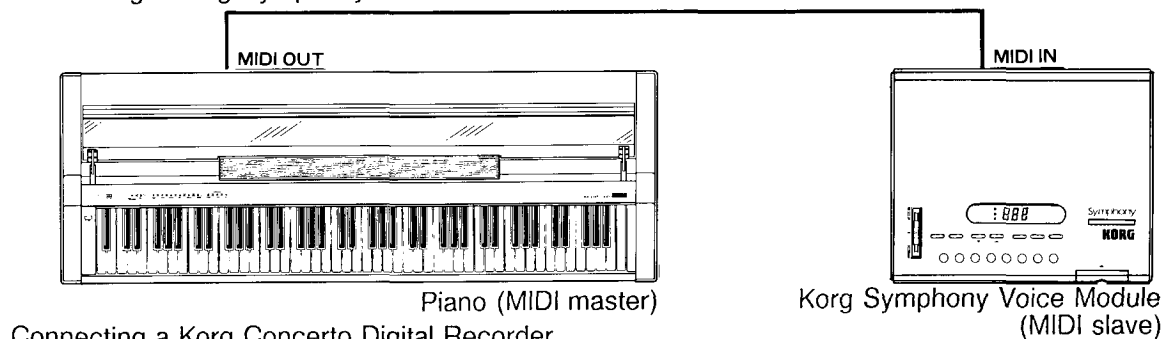
Simply plug one end of a standard MIDI cable into the unit's MIDI OUT socket and the other into the voice module's MIDI IN socket, set the channels and other MIDI parameters, and play.

Recording and Playing Back Performances

The accompanying illustration shows a MIDI network with two MIDI cables connecting the unit to a Korg Concerto Digital Recorder, the digital equivalent of a tape recorder, so as to permit the two-way communication necessary to record a performance on the recorder and then play the MIDI data back to control the unit.
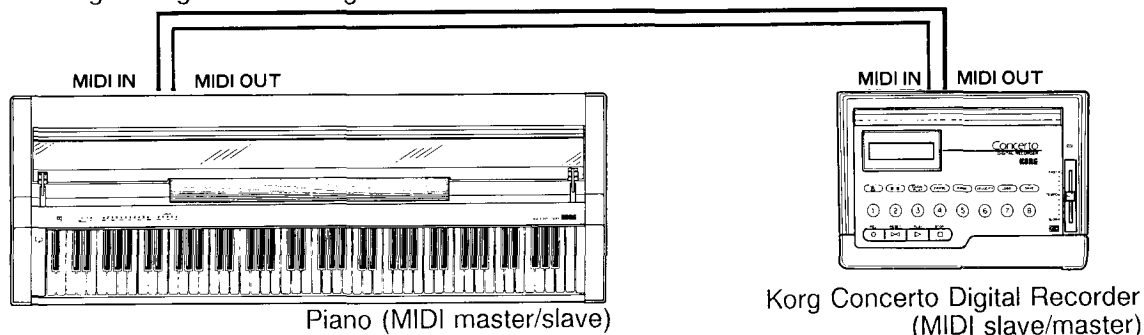
One application would be to record a difficult piece at a leisurely pace and play it back at the desired speed; another, to record the left hand part of a piece, play it back, and practice just the right hand part. For further details, consult your Korg Concerto Digital Recorder's Owner's Manual.
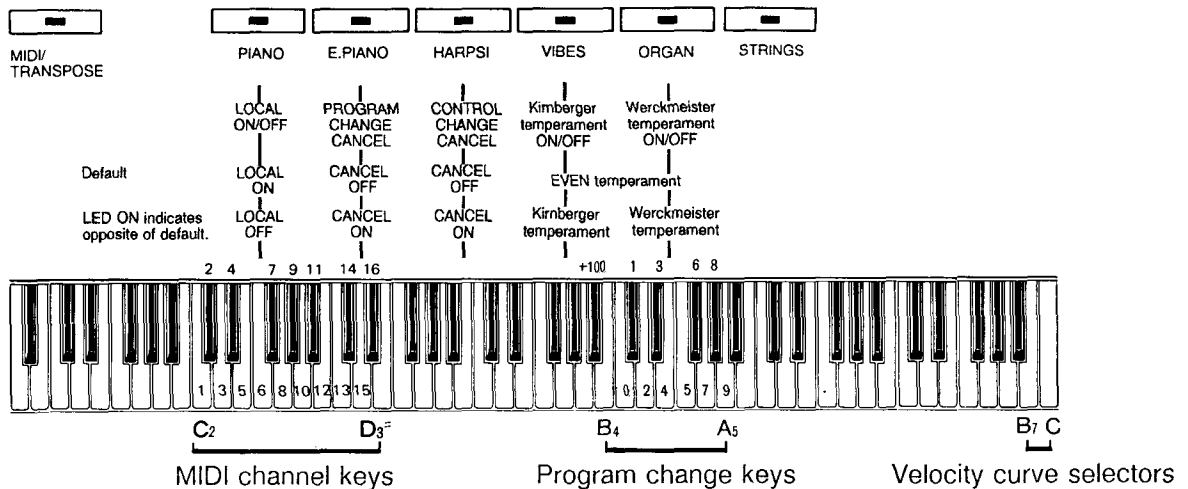
Connecting a Korg Symphony Voice Module

Piano (MIDI master)

Korg Symphony Voice Module
(MIDI slave)

Connecting a Korg Concerto Digital Recorder

Piano (MIDI master/slave)

Korg Concerto Digital Recorder
(MIDI slave/master)

MIDI Controls

	PIANO	E.PIANO	HARPSI	VIBES	ORGAN	STRINGS
MIDI/ TRANSPOSE	LOCAL ON/OFF	PROGRAM CHANGE CANCEL	CONTROL CHANGE CANCEL	Kimberger temperament ON/OFF	Werckmeister temperament ON/OFF	
Default	LOCAL ON	CANCEL OFF	CANCEL OFF	EVEN temperament		
LED ON indicates opposite of default.	LOCAL OFF	CANCEL ON	CANCEL ON	Kirnberger temperament	Werckmeister temperament	

2 4 7 9 11 14 16   +100   1 3   6 8

1 3 5 6 8 10 12 13 15   0 2 4 5 7 9

C2   D3#   B4   A5   B7 C

MIDI channel keys   Program change keys   Velocity curve selectors

Holding down the MIDI/TRANSPOSE switch changes the functions of the VOICE SELECTOR switches and certain keys on the keyboard to the MIDI and other functions shown in the accompanying Figure.

Note: The VIBES and ORGAN switches do not control MIDI functions.
Together, they control the harpsichord temperament. (See p. 9.)

Note: The LEDs give the current settings.

MIDI Defaults
When the power is first applied, the unit always starts with the MIDI settings or defaults shown in the accompanying Table.

MIDI receiving channel   1 (See "MIDI MULTI Function" below.)
LOCAL   ON
PROGRAM CHANGE CANCEL   OFF
CONTROL CHANGE CANCEL   OFF

Changing the MIDI Channel
The MIDI standard provides 16 separate channels for performance data. MIDI masters can therefore control up to 16 individual slaves (or groups of slaves acting in unison) by sending them channel messages. Performance data messages always include a channel number. Each device on the network reads all messages, but only acts on those with channel numbers matching its particular receiving channel.

Note: There are also system messages, which have no channel numbers because they are intended for all devices. The most important are the timing messages that synchronize the network.

Note: Sequencers and similar recording devices also have an OMNI mode which allows them to simultaneously receive performance data on all channels.

To change the MIDI transmission channel, hold down the MIDI/TRANSPOSE switch and press the appropriate key between C2 and D3#. (See Figure.)

Note: When the power is first applied, the unit always starts with MIDI transmission channel 1.

Changing LOCAL ON/OFF Setting
The LOCAL ON/OFF setting determines whether notes played on the keyboard produce sound on the unit as well as the slave devices.

To change the setting, hold down the MIDI/TRANSPOSE switch and press the PIANO switch.
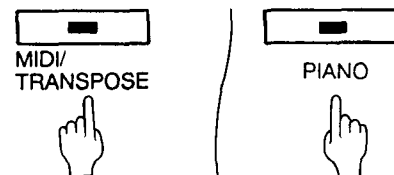
Note: When the power is first applied, the unit always starts with the LOCAL keyboard ON.

Sending a PROGRAM CHANGE Request
A PROGRAM CHANGE request is a channel message that asks devices on that channel to change "programs"--that is, voice and other performance parameters.

PIANO ·············· 0

E·PIANO ············ 1

HARPSI ··········· 2

VIBES ·············· 3

ORGAN ··········· 4

STRINGS ··········· 5

MIDI Controls

Note: The definition of "program" varies widely between MIDI devices. Consult the instruction manual for the particular device.

Pressing a VOICE SELECTOR switch automatically transmits a MIDI channel message requesting a change to the following program numbers:

Most synthesizers offer more than five programs, however, so it becomes necessary to use the PROGRAM CHANGE section of the keyboard to specify the program number for the message:
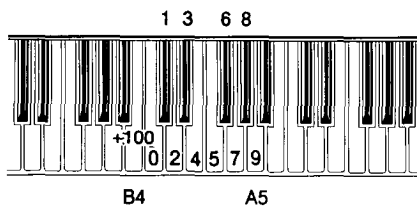
1. Hold down the MIDI/TRANSPOSE switch.
2. If the number is greater than 99, press the "100" key (B3#).

Note: The highest possible program number is 127.

3. Specify the two digits with the keys C4 through A5.
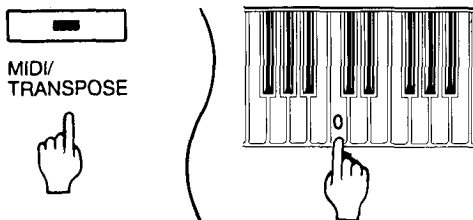
Examples: Program numbers

Program #0   ⓪, ⓪

Program #1   ⓪, ①

....

Program #99   ⑨, ⑨

Program #100   +100, ⓪, ⓪

Program #101   +100, ⓪, ①

....

Program #127   +100, ②, ⑦

Note: The above procedure always transmits a PROGRAM CHANGE request—regardless of the PROGRAM CHANGE CANCEL setting.
(See "Suppressing PROGRAM CHANGE Requests" below.)

PROGRAM CHANGE Requests: LAYER Mode

- Changing to the two-voice LAYER mode or changing voices within that mode (See p. 8.) transmits a PROGRAM CHANGE request for only the second VOICE SELECTOR switch pressed.
- A PROGRAM CHANGE request from another MIDI device affects only the voice whose VOICE SELECTOR switch appears first on the panel (when reading from the left).

Note: Requests for program numbers outside the unit's range (0-5) are ignored.

Note: A request for the same program number as the right VOICE SELECTOR switch is not ignored, but instead produces a "fatter" layered sound involving a single voice.

PROGRAM CHANGE Requests: SPLIT Mode

- Changing to the two-voice SPLIT mode or changing voices within that mode (See p. 8.) transmits a PROGRAM CHANGE request for only the upper (melody) half of the keyboard. If the new voice combination leaves the upper half of the keyboard with either one of the old voices, no request is transmitted.
- A PROGRAM CHANGE request from another MIDI device affects only the voice for the upper half of the keyboard.

Note: Requests for program numbers outside the unit's range (0-5) are ignored.

Note: A request for the same program number as the left VOICE SELECTOR switch is ignored.

Suppressing PROGRAM CHANGE Requests

When activated, the PROGRAM CHANGE CANCEL function suppresses all incoming PROGRAM CHANGE requests and those generated by the VOICE SELECTOR switches. (See p. 3.)

Note: The function does not affect requests from the keyboard. To switch the function on and off, hold down the MIDI/TRANSPOSE switch and press the E. PIANO switch.

Note: When the power is first applied, the unit always starts with the PROGRAM CHANGE CANCEL function OFF.

Suppressing CONTROL CHANGE Requests

When activated, the CONTROL CHANGE CANCEL function suppresses all incoming CONTROL CHANGE requests and those generated by the pedals.

To switch the function on and off, hold down the

MIDI Controls

MIDI/TRANSPOSE switch and press the HARPSI switch.

• When the power is first applied, the unit always starts with the CONTROL CHANGE CANCEL function OFF.

• Always release the pedal when setting CONTROL CHANGE.

• External CONTROL CHANGE is always valid for both tones in LAYER and SPLIT modes independently from current pedal setting (see p. 8, Using the Pedals).
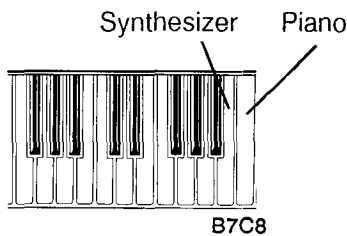
Changing the MIDI Velocity Curve

Velocity curves determine how the volume and tone profiles of notes depend on velocity, the force used to press the keys.

Since the piano has a curve much different from other instruments, the unit offers a choice of two curves for MIDI output:

Piano: Curve duplicating the one for an acoustic piano

Synthesizer: Curve for other instruments on other MIDI sound sources

Note: This setting affects only other MIDI sound sources. The unit always uses the PIANO velocity curve for its own voices.
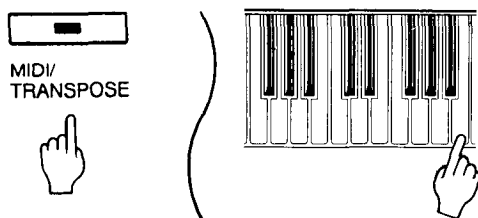

B7C8

To change the MIDI velocity curve, hold down the MIDI/TRANSPOSE switch and press the appropriate key at the right end of the keyboard:

B7 Synthesizer-like velocity curve
C8 Piano-like velocity curve
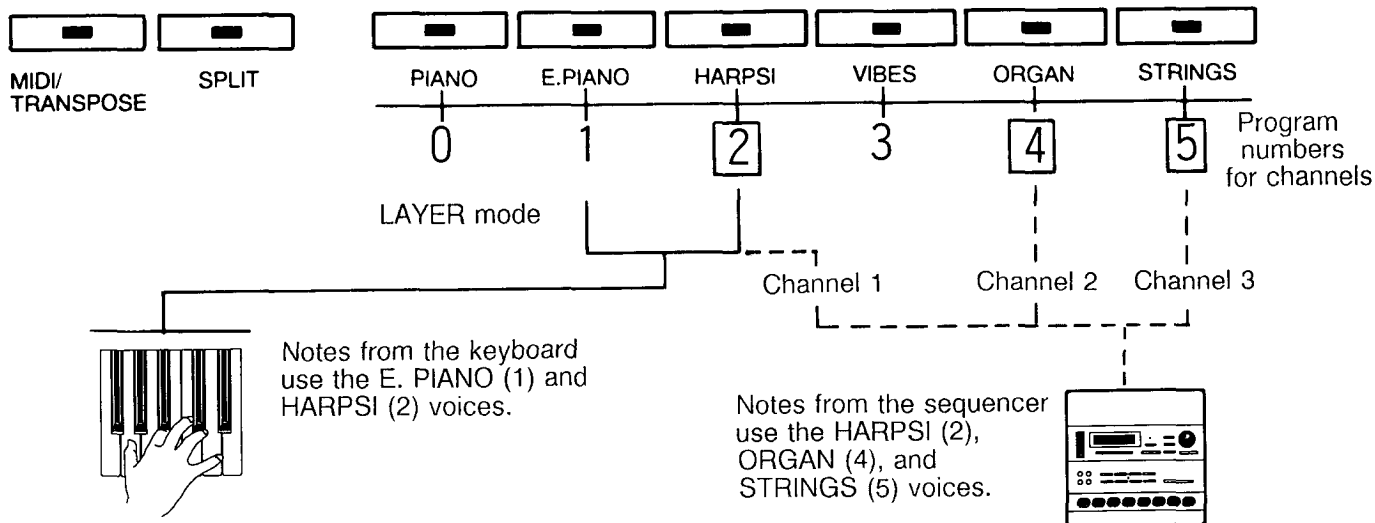
MIDI transmission channel 1

MIDI/
TRANSPOSE

Note: When the power is first applied, the unit always starts with the PIANO velocity curve.

MIDI MULTI Function

Although keyboard notes can use at most one voice, there is no such restriction on notes from external MIDI sources.
The latter can use as many of the piano's built-in voices as they wish. (See Figure.)

Notes from the keyboard use the E. PIANO (1) and HARPSI (2) voices.

Notes from the sequencer use the HARPSI (2), ORGAN (4), and STRINGS (5) voices.

Note: The total number of notes sounding at any given time must not exceed the total number of sound sources (16) available on the piano. LAYER mode notes count double because they simultaneously use two voices.

Note: The piano gives higher precedence to the notes played first--that is, ignores additional notes until the older ones are released. Synthesizers, in contrast, drop older 40,41 notes in favor of newer ones.

The accompanying Figure shows a four-part ensemble performance adding a LAYERed keyboard part mixing two voices to three parts previously recorded on a sequencer. The sequencer starts by sending PROGRAM CHANGE requests for program numbers 2, 4, and 5 over MIDI channels 1 through 3. The result is a rich blend of four of the six available voices.

Even further variations are possible:

• Each channel operates independently not only for note and voice messages, but for pedal movements and other CONTROL CHANGE messages as well.

• Channel 1 always uses the voice--or, with the LAYER or SPLIT modes, voices--specified on the panel.

When the power is first applied, the unit always starts with the following voice assignments for each channel:

Default Channel Voice Assignments

CHANNEL 1	CHANNEL 2	CHANNEL 3	CHANNEL 4	CHANNEL 5	CHANNEL 6	CHANNEL 7	CHANNEL 8
(Front panel setting)	PIANO	E. PIANO	HARPSI	VIBES	ORGAN	STRINGS	PIANO
CHANNEL 9	CHANNEL 10	CHANNEL 11	CHANNEL 12	CHANNEL 13	CHANNEL 14	CHANNEL 15	CHANNEL 16
E. PIANO	HARPSI	VIBES	ORGAN	STRINGS	PIANO	E. PIANO	HARPSI

C-550/4000 Implementation Chart

Function		Transmitted	Recognized	Remarks	
Basic channel	Default	1			
	Changed	1-16	1-16		
Mode	Default	×	3		
	Message's	×	×		
	Altered	*************			
Note number		15-113	0-127		
	: True voice	*************	21-108		
Velocity	Note ON	1-127	1-127		
	Note OFF	×	×		
After touch	Key's	×	×		
	Channel's	×	×		
Pitch bender		x	○	*1	
Control change	6	×	○	Data enrty (MSB)	*2
	7	×	○	Volume	*3
	38	×	○	Data entry (LSB)	*2
	64	○	○	Damper Pedal	*3
	66	○	○	Sostenuto Pedal	*3
	67	○	○	Soft pedal	*3
	96	×	○	Data increment	*2
	97	×	○	Data decrement	*2
	100	×	○	LSB	*2
	101	×	○	MSB	*2
Program change		0-127	0-5	*4	
	: True #	*************	0-5		
System exclusive		○	○	Data Inquiry	
System common	: Song pos	×	×		
	: Song sel	×	×		
	: Tune	×	×		
System Realtime	: Clock	×	×		
	: Commands	×	×		
Aux Messages	: Local ON/OFF	×	○		
	: All notes OFF	×	○ 123-127		
	: Active sensing	○	○		
	: Reset	×	×		

Notes *1 Range will be changed 0-1200 cent by Pitch bend sensitivity of RPC.
       *2 Pitch bend sensitivity, Master tune fine
       *3 Transmit/receive if CONTROL CHANGE set to ENABLE
       *4 Transmit/receive if PROGRAM CHANGE set to ENABLE

Mode 1 : OMNI ON, POLY   Mode 2 : OMNI ON, MONO   ○ :Yes
Mode 3 : OMNI OFF, POLY   Mode 4 : OMNI OFF, MONO   × : No

Specifications

Keyboard:	88 keys (A-1 through C7) with INITIAL TOUCH function
Voices:	Piano, Electric Piano, Harpsichord, Pipe Organ, Vibes, Strings (PIANO, E. PIANO, HARPSI, ORGAN, VIBES, STRINGS)
Effects:	SURROUND (ROOM/STAGE/HALL) DAMPER, SOFT, SOSTENUTO pedals (Concert 5500 only)
Controls:	POWER switch, Sliding VOLUME Control, MIDI/TRANSPOSE Switch, SPLIT Switch.
Connectors:	HEADPHONES, AUX OUT (L & R), AUX IN (L & R), MIDI IN, MIDI OUT, MIDI THRU
Main Amplifier:	20 W × 2 channels
Speakers:	16 cm × 2, 5 cm x 2
Power Supply:	V AC, 50/60 Hz
Power Consumption:	47 W
Exterior Dimensions:	1384 × 473 × 176 mm
Stand:	1390.1 × 412.5 × 643.5 mm
Height on stand:	801.5 mm
Weight:	Concert 5500: 37.0 kg Concert 4000: 34.5 kg Stand: 13.7 kg
Accessories:	AC power cord, Music stand (Concert 4000 only), ST-5500 stand
Note:	Design and specifications are subject to change without prior notice.B

THE FCC REGULATION WARNING

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instrictions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are desighed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the equipment with respect to the receiver.
- Move the equipment away from the receiver.
- Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpfull. "How to Identify and Resolve Radio – TV Interference Problems". This booklet is available from the US Government Printing Office, Washington, D.C.20402, stock No.004 – 000 – 0003454.

CANADA

THIS APPARATUS COMPLIES WITH THE "CLASS B" LIMITS FOR RADIO NOISE EMISSIONS SET OUT IN RADIO INTERFERENCE REGULATIONS.

CET APPAREIL EST CONFORME AUX NORMES "CLASSE B", POUR BRUITS RADIOELECTRIQUES.TEL QUE SPECIFIER DANS LE REGLEMENT SUR LE BROUILLAGE RADIOELECTRIQUE.

VAROITUS

Paristo voi rajahtaa, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan · suosittelemaan tyyppiin. Havita kaytetty paristo valmistajan ohjeiden mukaisesti.

ADVARSEL!

Lithiumbatteri – Eksplosionsfare ved fejlagtig handtering.
Udskiftning má kun ske med batteri af samme fabrikat og type.

ADVERSEL

Lithiumbatteri – Eksplosjonsfare.
Ved utskifting benyttes kun batteri som anbefalt av apparatfabrikanten.
Brukt batteri returneres apparatleverand ø ren.

VARNING

Explosionsfara vid felaktigt batteribyte.
Anvand samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren.
Kassera anvant batteri enligt fabrikantens instruktion.

KORG® **KORG INC.**

15-12, Shimotakaido 1-chome, Suginami-ku, Tokyo, Japan

Ⓔ