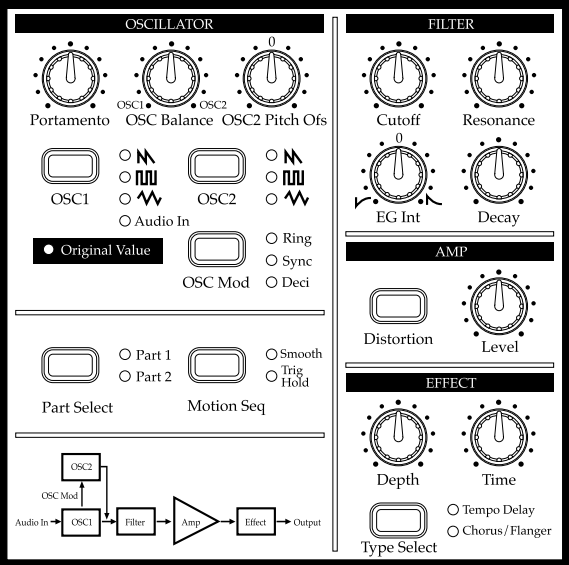
ELECTRIBE A

ANALOG MODELING SYNTHESIZER

EA-1
Owner's Manual



Thank you purchasing the Korg ELECTRIBE·A EA-1. In order to enjoy long and trouble-free use, please read this manual carefully and use the instrument correctly.

KORG

Ⓔ②

To ensure long, trouble-free operation, please read this manual carefully.

Precautions

Location

Using the unit in the following locations can result in a malfunction.

- In direct sunlight
- Locations of extreme temperature or humidity
- Excessively dusty or dirty locations
- Locations of excessive vibration

Power supply ⊕◉⊖

Please connect the designated AC adaptor to an AC outlet of the correct voltage. Do not connect it to an AC outlet of voltage other than that for which your unit is intended.

Interference with other electrical devices

This product contains a microcomputer. Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

Handling

To avoid breakage, do not apply excessive force to the switches or controls.

Care

If the exterior becomes dirty, wipe it with a clean, dry cloth. Do not use liquid cleaners such as benzene or thinner, or cleaning compounds or flammable polishes.

Keep this manual

After reading this manual, please keep it for later reference.

Keeping foreign matter out of your equipment

- Never set any container with liquid in it near this equipment. If liquid gets into the equipment, it could cause a breakdown, fire, or electrical shock.
- Be careful not to let metal objects get into the equipment. If something does slip into the equipment, unplug the AC adaptor from the wall outlet. Then contact your nearest Korg dealer or the store where the equipment was purchased.

THE FCC REGULATION WARNING (for U.S.A.)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful 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 or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the user's authority to operate this equipment.

CE mark for European Harmonized Standards

CE mark which is attached to our company's products of AC mains operated apparatus until December 31, 1996 means it conforms to EMC Directive (89/336/EEC) and CE mark Directive (93/68/EEC). And, CE mark which is attached after January 1, 1997 means it conforms to EMC Directive (89/336/EEC), CE mark Directive (93/68/EEC) and Low Voltage Directive (73/23/EEC).
Also, CE mark which is attached to our company's products of Battery operated apparatus means it conforms to EMC Directive (89/336/EEC) and CE mark Directive (93/68/EEC).

Contents

1. Introduction

Thank you for purchasing the **Electribe·A EA-1**.
The **Electribe·A EA-1** is a unique and easy-to-use synthesizer that uses DSP synthesis technology to help anyone from beginners to hard-core users to produce truly original sounds and phrases.
By using the front panel knobs and keys, you can create analog synthesizer sounds intuitively, and easily create phrases using these sounds.
The EA-1 is the ideal tool for the musician, DJ, sound creator, or desktop-music user who is looking for originality in their music.

Main features

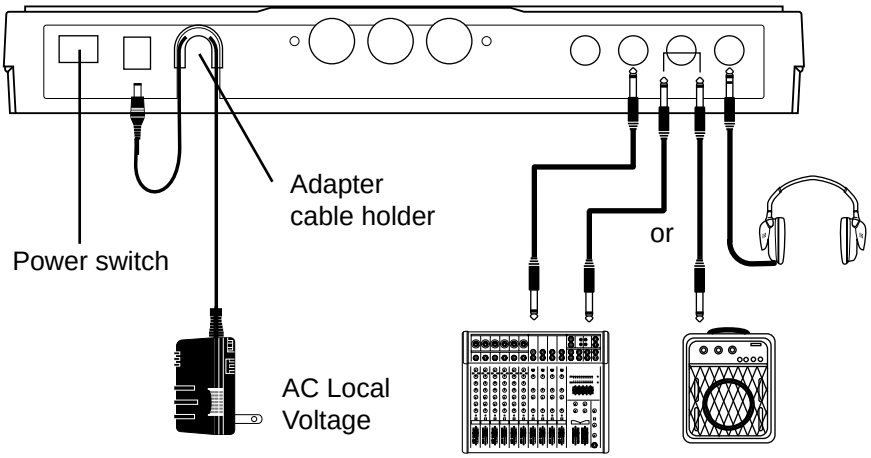
- The EA-1 features analog synthesizer-like operation that lets you create a versatile range of sounds using two parts (each part with 2 OSC, 1 Filter, 1 Amp, and 3 Effects). By combining the two synthesizer parts you can create unique sequenced phrases
- By using an external input as an oscillator, you can use the EA-1 as a filter bank with powerful resonance. Ring, Sync, and Decimator functions allow oscillators to modulate each other.
- The Motion Sequence function lets you record and loop knob movements, and these can be memorized separately for each part of a pattern.
- You can quickly modify sounds or phrases to change your performance while you play.
- You can create Pattern consisting of a sound for each part and a sequence phrase (up to 64 steps long), and store up to 256 of these patterns in memory. Furthermore, you can arrange patterns in the desired playback order and add knob movements etc. to create Songs, and store up to 16 of these songs in memory.
- Distortion, delay, and chorus / flanger effects are provided for each part.
- A Keyboard function lets you use the sixteen step keys as a keyboard on which to perform.
- Pattern Set Play lets you register sixty-four patterns in the sixteen step keys, and switch patterns as you perform.
- Tap tempo and MIDI Clock can be used to synchronize the EA-1's performance with an external sequencer or turntable etc.
- The EA-1 can be controlled from an external sequencer or keyboard etc., and used as a MIDI expansion tone generator.
- The MIDI Dump function lets you save data on a computer or external sequencer etc.

About the data you create on the EA-1

Patterns and songs that you create on the EA-1 by editing will return to their un-edited state if you select a different pattern or song, or turn off the power before performing the Write operation.
If you wish to save an edited pattern, song, or global data, be sure to perform the Write operation.
Even after Writing the edited data, it is still possible to restore all songs and patterns etc. to the factory settings. (Refer to p.45 "Restoring the factory set data.")

Make connections and play!

Example connections



Preparing to play

Be sure to turn off the power before making connections. Careless operation may damage your speaker system or cause malfunctions.

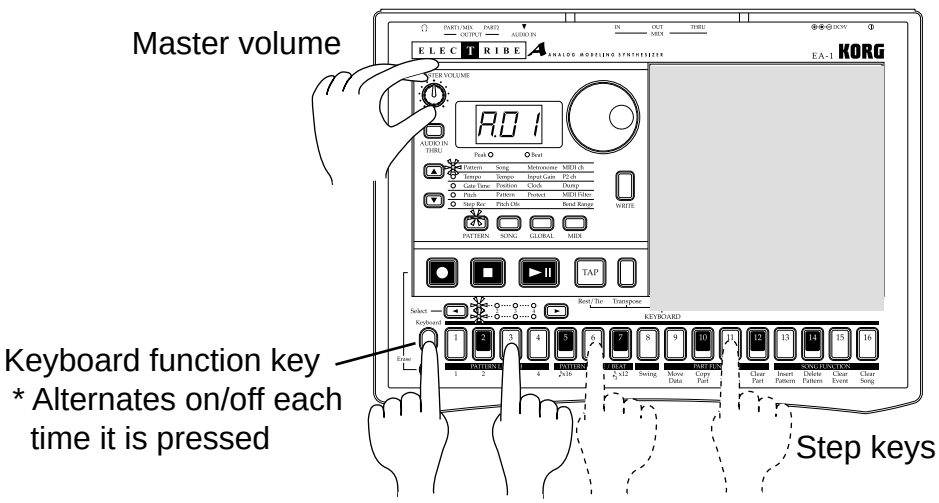
1. Connect the included AC adapter to the **DC 9V** jack, and plug the adapter into an AC outlet.

As shown in the above diagram, hook the AC adapter cable around the adapter cable holder. When removing the cable from the holder, do not use excessive force.

2. Connect one end of your audio cables to the Part output jacks of the **EA-1** (**PART1/MIX, PART2**), and connect the other end to your mixer. The output of the **EA-1** is not stereo, but is independent for each part, so you will need to make pan adjustments on your mixer. If you wish to mix the two parts for output, connect your powered monitor speaker (amplified speaker) to the **PART1/MIX** jack.

3. If you will be using headphones, connect them to the headphone jack. The headphone output is monaural.

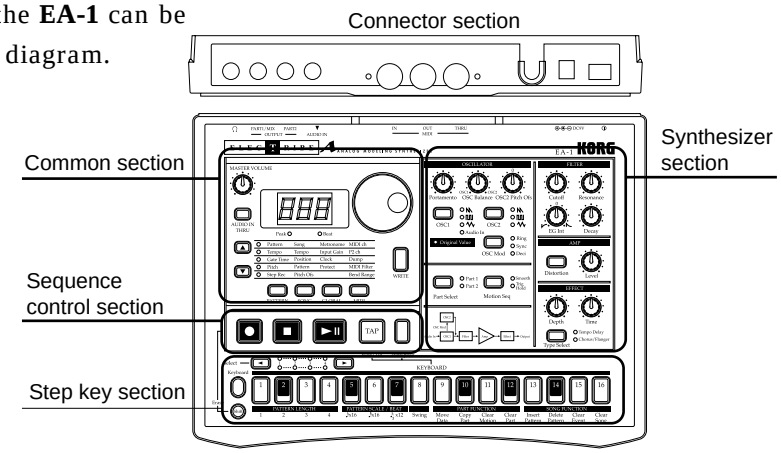
The output from the Part output jacks will not be switched off even if headphones are plugged in.



4. When you have finished making connections, turn on the power. Slightly raise the master volume of the **EA-1**, and press the Keyboard function key. Press the step keys to produce sound and verify that connections have been made correctly. Use the master volume of the **EA-1** and the gain and fader controls of your mixer or powered monitor system to adjust the volume to an appropriate level.

2. Front and rear panel

The controls and other parts of the **EA-1** can be broadly grouped as shown in the diagram.



Common section

1. MASTER VOLUME

This knob adjusts the volume that is output from the Part output jacks and the headphone jack.

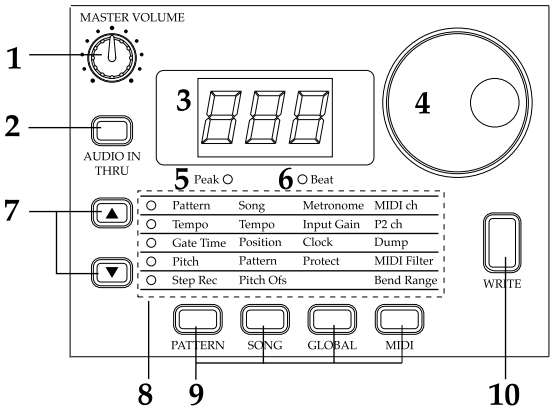
2. AUDIO IN THRU

This key allows the external audio input to be output directly from the Part output jacks and the headphone jack.

When this key is on, the **Audio In** of **OSC1** will have no effect.

3. Display

This shows the value of the currently selected parameter, and various messages.



4. Dial

Use this to modify the value shown in the display.

5. Peak LED

This indicates the peak level for the input signal from the audio in jacks. Adjust the output level of your external device so that the LED lights only at the maximum level.

6. Beat LED

This will blink at quarter-note intervals to indicate the tempo.

7. [▲][▼] (cursor keys)

In each mode, use these keys to select parameters from the matrix shown in the display.

8. Matrix

The parameters that will appear in the display are listed here for each mode. Use the cursor keys to make the desired parameter select LED light.

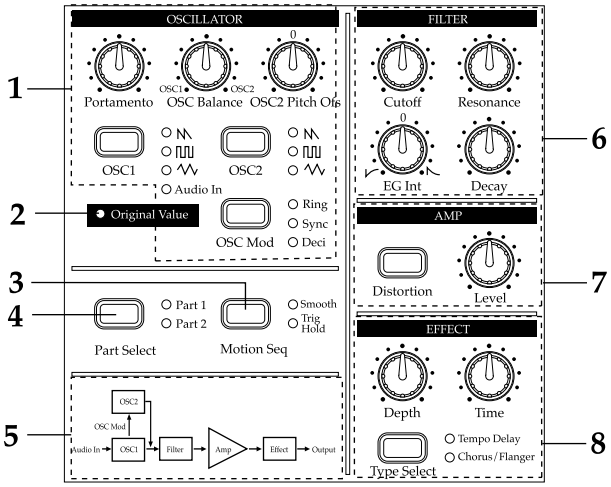
9. Mode keys

Use these keys to move to the desired mode: Pattern, Song, Global, or MIDI.During playback you can move to Global mode, but not to MIDI mode.

10. WRITE key

Use this key when you wish to save settings that you modified in **Pattern**, **Song**, **Global**, or **MIDI** mode, or to save Pattern Set data.

Synthesizer section



1. OSCILLATOR

This produces the basic waveform.

- **Portamento**
  This smoothly connects changes in pitch.
- **OSC Balance** (oscillator balance)
  Adjust the level balance of the two oscillators.
- **OSC2 Pitch Offset** (oscillator 2 pitch offset)
  Adjust the pitch difference between **OSC1** and **OSC2**.
- **OSC1 Wave** (oscillator 1 wave)
  Select the waveform for **OSC1**.
- **OSC2 Wave** (oscillator 2 wave)
  Select the waveform for **OSC2**.
- **OSC Mod** (oscillator modulation)
  Specify the type of oscillator modulation. The modulated sound will be output from the **OSC2** side.

2. Original Value LED

This will light when the knob you are currently moving reaches the value of the original saved sound of the pattern.

3. Motion Seq (motion sequence)

This function allows you to loop knob movements. Each time you press this key, the setting will alternate between Off (dark), Smooth, and Trig Hold.

4. Part Select key

Each time you press this key, **Part 1** and **Part 2** will alternate as the part selected for editing.

5. Synthesis diagram

This is a block diagram for the synthesizer section of the EA-1.

6. FILTER

These controls let you adjust the brightness of the sound or add a distinctive tonal character.

- **Cutoff**: Adjust the cutoff frequency of the filter.
- **Resonance**: Adjust the resonance of the filter.
- **EG Int** (EG intensity): Adjust the depth of the filter envelope.
- **Decay**: Adjust the decay speed of the filter envelope.

7. AMP

Here you can adjust the volume level and the distortion effect.

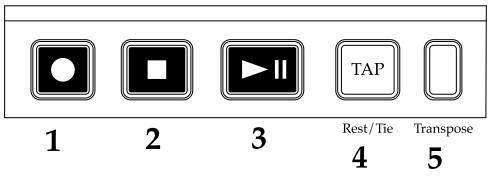
- **Distortion**: Switch distortion on / off.
- **Level**: Adjust the volume level.

8. EFFECT

Here you can add effects to the sound.

- **Depth**: Adjust the depth of the effect (tempo delay, chorus / flanger).
- **Time**: Adjust the delay time, or the speed of the chorus / flanger LFO.
- **Type Select**: Choose the effect (tempo delay or chorus / flanger) that will be adjusted by the Depth and Time controls.

Sequence Control section



1. Rec key

Use this key to record phrases and movements of the knobs etc. If you press this key during recording, recording will end, and playback will continue.

2. Stop/Cancel key

This key stops playback of a pattern or song, or cancels an operation.

3. Play/Pause key

This key begins / pauses playback of a pattern or song.

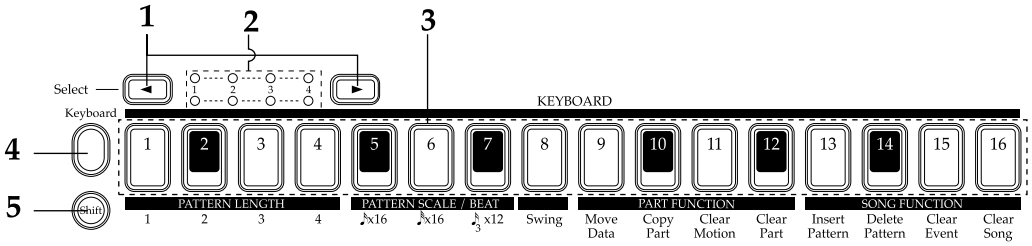
4. TAP, Rest/Tie key

Use this key to enter a tap tempo. During step recording, use this key to input a rest or a tie.

5. Transpose key

Use this key to transpose a phrase.

Step Key section



1. Select keys

By pressing these keys to turn the Select LEDs on or off, you can use the sixteen step keys below as up to 64 step keys.

When the Keyboard function is on, these keys are used to switch the octave.

In Song mode, these keys function as rewind and fast-forward keys. When the Pattern Set function is on, they are used to switch Pattern Set groups.

2. Select LEDs

The upper row of LEDs (green) indicates the location (length 1...4) within the pattern of the currently-playing phrase pattern.

The lower row of LEDs (red) indicates the location (length 1...4) of the phrase pattern indicated by the step keys. When the Pattern Set function is on, these LEDs indicate the pattern set group. When the Keyboard function key is on, these LEDs indicate the octave position.

3. Step keys 1...16

Use these keys to modify and audition the phrase pattern of each part.

When the Keyboard function key is on, these keys function as a keyboard, allowing you to play sounds. When the Pattern Set function is on, use these keys to select patterns that you registered.

4. Keyboard function key

This makes the sixteen step keys function as a keyboard. Each time you press this key, the setting will alternate on / off. By holding down this key and pressing one of the step keys, you can switch to the pattern that you assigned to that key (Pattern Set function).

5. Shift key

This key is used in conjunction with other keys. When held down, it gives an additional function to another key.

Shift + Play/Pause key:Playback from the beginning of the pattern.

Shift + Rec key:During playback, erase triggers from the pattern.

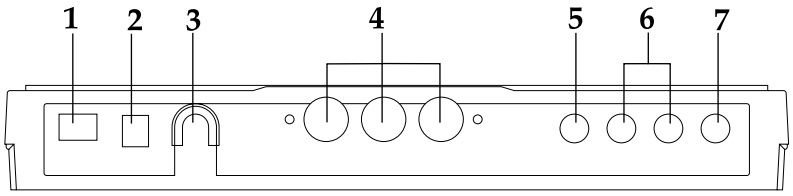
Shift + Step keys:Execute the function shown below each step key.

Shift + dial: If the Shift key is held down as you rotate the dial, the value in the dis play will change in steps of ten.

Shift + Select key:In Pattern mode, the target step will be advanced by one.

For other Shift key combinations, refer to the explanation of each parameter.

Connector section



1. Power switch

This switch turns the power on / off. Each time you press it, the power will alternate on or off.

2. DC 9V

Connect the included AC adapter here.

3. Adapter cable holder

Hook the adapter cable around this so that it will not be disconnected accidentally.

4. MIDI connectors

IN MIDI data is received at this connector to control the EA-1 from an external MIDI device or to receive a data dump.

OUT MIDI data is transmitted from this connector to control an external MIDI de vice or to transmit a data dump.

THRU MIDI data received at the **MIDI IN** connector is re-transmitted without change from this connector. This is used to "daisy-chain" multiple MIDI devices.

5. AUDIO IN jack

This jack receives the signal that will be used for **Audio In** of **OSC1**. The sound that is input here will be used as the sound of **OSC1**.

6. PART1/MIX, PART2 (part output jacks)

Connect your audio cables from these jacks to send the sound of Parts 1 and 2 separately to your mixer or powered monitor system (powered speakers) etc. If you wish to output the sound of Parts 1 and 2 together, make connections to the **PART1/MIX** jack.

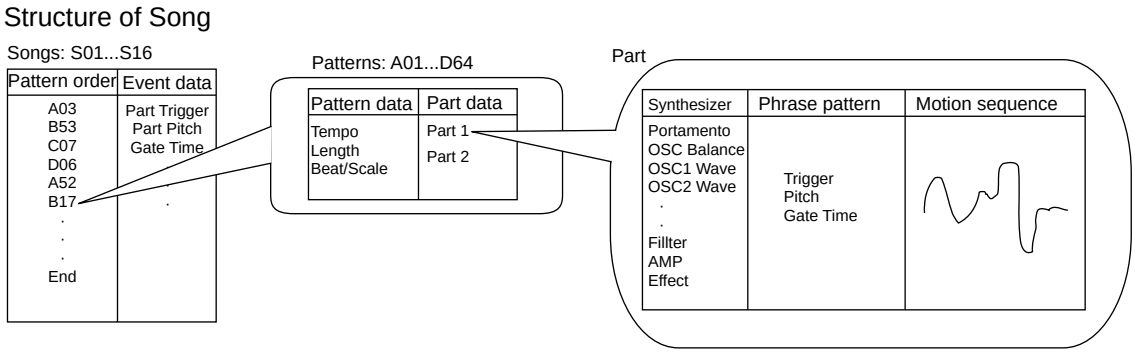
7. (headphone jack)

A set of stereo headphones fitted with a stereo jack plug can be connected here.
The output is monaural.

3. Basic operation (Quick Start)

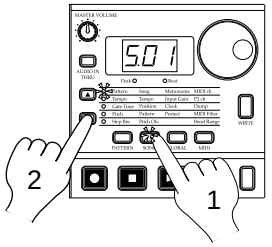
Conceptual diagram of the EA-1

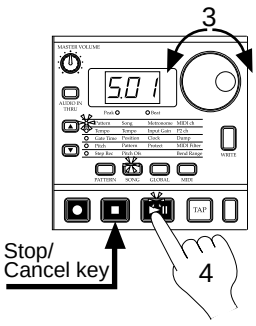
On the **EA-1**, a song consists mainly of Patterns (which consist of Parts and delay settings) and event data (refer to p.37 "Recording knob movements or your performance in a song (Event Recording)").



Listening to a Song

1. Press the Song Mode key to enter Song mode (the key will light).
2. Use the cursor [▲][▼] keys to make the parameter select LED indicate **Song** (the top LED).
3. Rotate the dial to select the desired song (**S01...S16**).
4. Press the Play / Pause key to playback the song (the key will light). When the song ends, playback will stop automatically (the key will go dark).



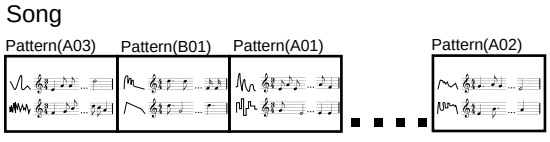


To pause during playback, press the Play / Pause key (the key will blink). To resume playback, press the Play / Pause key once again (the key will light). To stop playback, press the Stop / Cancel key.

It is not possible to change songs during playback.

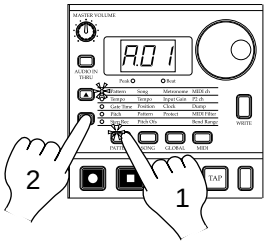
What is a Song?

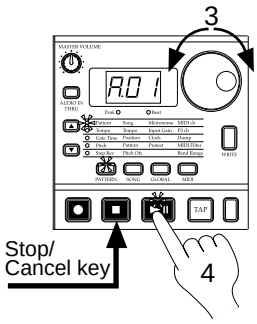
On the **EA-1**, a song is musical data consisting of Patterns arranged in the desired playback order. The **EA-1** lets you create and store up to sixteen songs. In each song you can arrange up to 256 patterns, and phrase and knob movements can also be recorded in addition to the playback. (Refer to p.34 "Song mode.")



Listening to Patterns

1. Press the Pattern mode key to enter Pattern mode (the key will light).
2. Use the cursor [▲][▼] keys to make the parameter select LEDs indicate **Pattern** (top).
3. Rotate the dial to select the desired pattern (**A01...A64, b01...b64, C01...C64, d01...d64**).
4. Press the Play / Pause key to playback the pattern (the key will light). When pattern playback ends, the pattern will return to the beginning, and continue playing repeatedly.

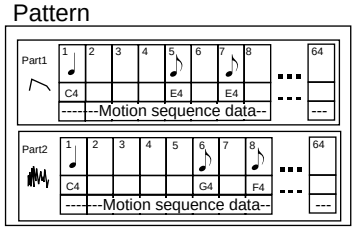




To pause during playback, press the Play / Pause key (the key will blink). To resume playback, press the Play / Pause key once again (the key will light). To stop playback, press the Stop / Cancel key.
You can rotate the dial to select patterns when playback is stopped or even during playback.

When you change patterns during playback, the change will actually occur at the end of each pattern. (Refer to p.22 "The timing at which patterns will change.")

Pattern



What is a Pattern?

A pattern is a unit of musical data consisting of sounds arranged in a phrase. On the **EA-1** you can create and save 256 patterns.
Each pattern consists of two parts (refer to p.14). In addition to the sounds of each part, you can also record phrases and knob movements (refer to p.22 "Pattern mode").

Trying out the functions

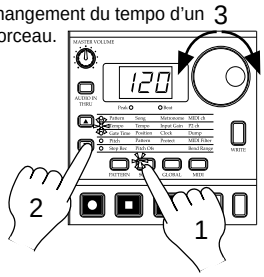
Changing the tempo of a song or pattern

There are two ways to change the tempo.
The tempo that you change here will return to the original tempo when you stop playback and switch to a different pattern or song.

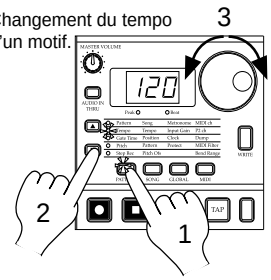
• Using the dial to change the tempo

1. Press the Mode key to enter Song mode or Pattern mode.
2. Use the cursor [▲][▼] keys to set the parameter select LED to **Tempo**.
3. Rotate the dial to change the tempo.

Changement du tempo d'un morceau.

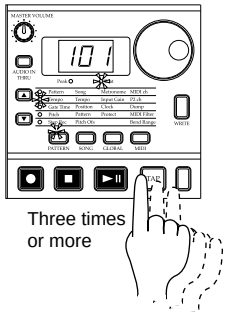


Changement du tempo d'un motif.

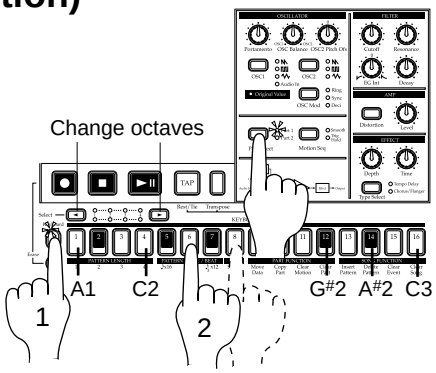


• Using the Tap Tempo key to change the tempo

While a song or pattern is playing, press the Tap key three times or more at the desired tempo. The ER-1 will detect the interval at which you pressed the Tap key, and will set the tempo accordingly. The tempo can also be changed in this way even if the **EA-1** is not currently playing a song or pattern.
Use the cursor [▲][▼] keys to make the parameter select LEDs indicate **Tempo**, and the tempo you modified will appear in the display.



Striking keys to play sounds (Keyboard function)



1. Turn on the Keyboard function key (the key will light).
2. Use the step keys as a keyboard.
3. You can use the Part Select key to switch the part that you play.

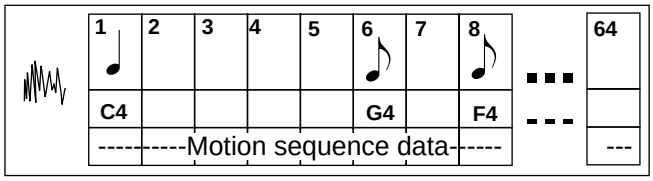
The sound of a part will differ depending on the pattern. Rotate the dial to change the pattern, and try out the wide variety of sounds.
To change the octave, use the Select keys.
The select LEDs (lower row, red) will light to indicate the octave as follows.

LED(s) lit	1	1,2	1,2,3	2,3,4	3,4	4
Pitch range	A0...C2	A1...C3	A2...C4	A3...C5	A4...C6	A5...C7

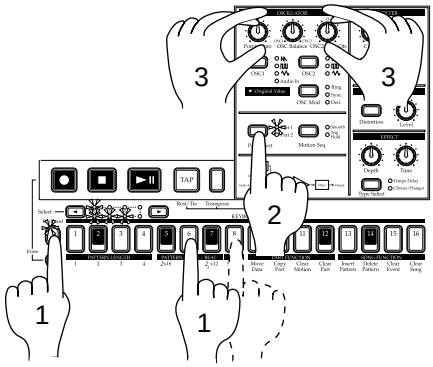
What is a Part?

A Part consists of a synthesizer sound, a phrase pattern (trigger, pitch, gate time), and motion sequence. Each part is a monophonic synthesizer, and cannot play two or more notes simultaneously (polyphonically). (Refer to p.22 "Pattern mode.")
You are free to modify the sound of each part, and a phrase pattern and motion sequence can be stored independently for each part (refer to p.23 "Editing the sound of a part").

Part



Modifying (editing) the sound



1. Turn on the Keyboard function key, and then press the step keys to play the sound.
2. Press the Part Select key to select the part whose sound you wish to edit.
3. Use the knobs of the Synthesizer section to edit the sound. The Original Value LED will light to indicate the position of the knobs for the original settings of the sound.

Refer to the example sounds (p.46) and try creating your own sounds.
The pattern sound that you modify here can be saved by the Write operation (p.17 "Saving a pattern that you create").

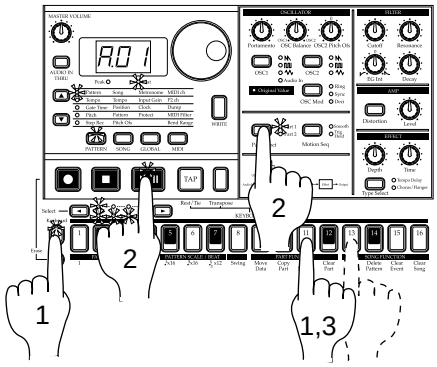
If a motion sequence is controlling a knob, it may be difficult to edit the sound as you intend. If so, turn the motion sequence off while you are editing (refer to p.29 "Motion sequences").

What is the synthesizer section?

This is the section where the parameters assigned to the panel knobs and keys work together to "synthesize" (produce) the sound of each part. (Refer to p.23 "Editing the sound of a part.")

Playing the sound of a part along with a song or pattern

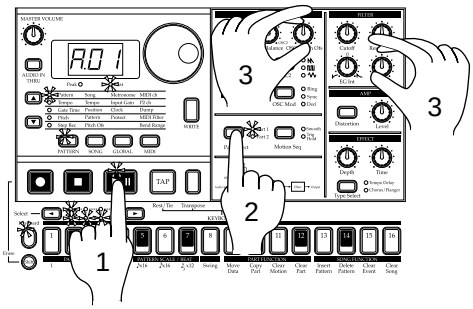
1. Turn on the Keyboard function key, and press the step keys to play the sound.
2. In Song mode or Pattern mode, press the Play / Pause key to begin playback. Use the Part Select key to select the part that you wish to play.
3. As you listen to the song or pattern, strike the step keys to play along.



Each part is a monophonic synthesizer. It is not possible for a single part to sound two or more notes simultaneously.

Modify (edit) the sound along with a song or pattern

1. In Song mode or Pattern mode, press the Play / Pause key to begin playback.
2. Press the Part Select key to select the part whose sound you wish to edit.
3. Use the knobs and keys of the Synthesizer section to modify the sound. The sound of the part that is playing will be modified as you move the knobs or keys.



To save the pattern sounds that you modify here, use the Write operation (refer to p.17 "Saving a pattern that you create").
If you re-select a pattern or turn off the power without performing the Write operation, the sound will return to its unedited state.

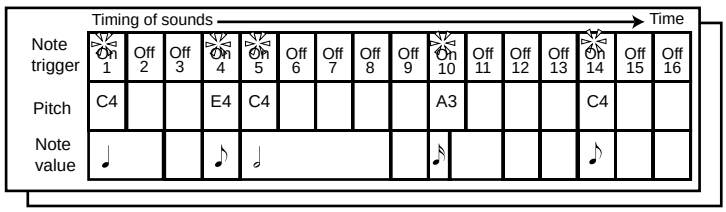
It is not possible to write the sounds you edit in a Song. Only in a Pattern can you write the edited sounds.

Modifying (editing) a phrase pattern

What is a Phrase Pattern?

A phrase pattern consists of a trigger (note location), pitch, and gate time (note length) at each step. You can modify the phrase pattern for each part by using the sixteen step keys (or by realtime input along with the playback). (Refer to p.22 "Pattern mode.")

Phrase pattern

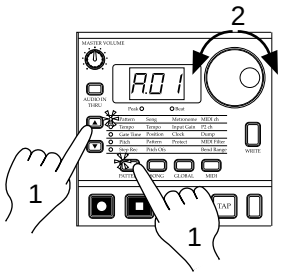


A phrase pattern can be edited in three ways.

- Realtime recording
  While you playback a pattern, use the Keyboard function to record a new phrase along with the playback.
- Step recording
  With pattern playback stopped, input pitches one at a time to create a phrase.
- Event editing
  Edit the data (trigger, pitch, gate time) for individual steps to create a phrase.

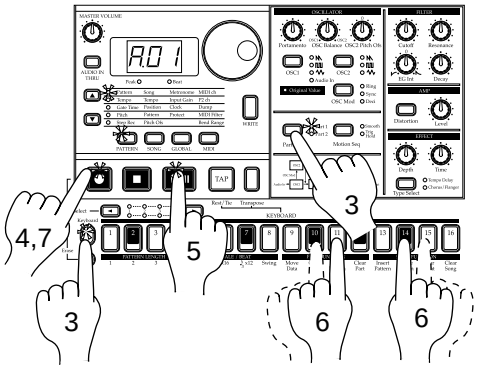
In the following pages we will explain how to perform Realtime Recording and Step Recording. For details on Event Editing, refer to Event Editing (p.28) in "Pattern mode."

• Realtime recording (using the Keyboard function to create a phrase)



If you wish to listen to the metronome as you record, refer to p.39 "Metronome settings."

1. Press the Pattern mode key (the key will light). Use the cursor [▲][▼] keys to make the parameter select LEDs indicate Pattern.
2. Rotate the dial to select the pattern that you wish to edit.
3. Turn on the Keyboard function (the key will light). Use the Part Select key to select the part that you wish to record.
4. Press the Rec key to enter record-ready mode. (The Rec key will light, and the Play / Pause key will blink.)
5. Press the Play / Pause key to start the pattern. (The Play / Pause key will light.)
6. At the timing that you wish to input the notes of the phrase, press the step keys to record the notes. The pattern will playback repeatedly, and you can continue recording additional notes as long as the Rec key is lit. If you wish to record the other part as well, use the Part Select key to switch parts, and continue recording.
7. Press the Stop / Cancel key to stop recorded. (The Rec key and the Play / Pause key will go dark.) Alternatively, you can press the Rec key (instead of pressing the Stop / Cancel key) to stop recording but continue playback. (The Rec key will go dark, and the Play / Pause key will light.)



If you input a note by mistake, hold down the Shift key while the pattern continues to play, and then hold down the Rec key. Note triggers will be erased from the selected part (whose key is lit) while you hold down these keys.

If you wish to save the completed pattern, press the Write key. (Refer to p.17 "Saving a pattern that you create.")

• Step Recording (using the Step keys to create a phrase)

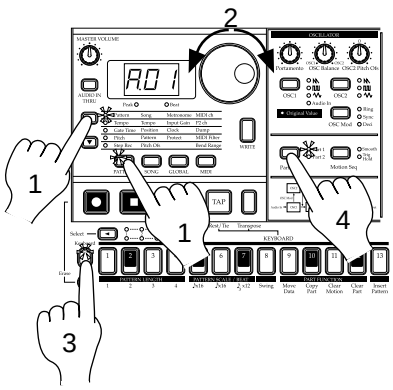
1. Press the Pattern mode key (the key will light).

   Use the cursor [▲][▼] keys to make the parameter select LEDs indicate **Pattern**.
2. Rotate the dial to select the pattern that you wish to edit.
3. Turn on the Keyboard function (the key will light).
4. Use the Part Select key to select the part that you wish to edit.
5. Use the cursor [▲][▼] keys to make the parameter select LEDs indicate **Step Rec**. (The display will indicate the target step.)

6. Press the Rec key to enter recording mode. At this time, pressing the PLAY key will not start playback.

7. Use the step keys to input the pitch for each note of the phrase. (The target step will automatically advance by one step each time you do so.)

8. Recording will end when you input the last step or press the Stop / Cancel key (the Rec key will go dark).

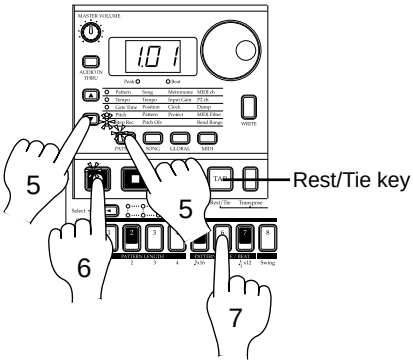


To input a rest, press the Rest / Tie key. To enter a tie, continue holding down the step key (the sound will continue) and press the Rest / Tie key.

During recording, you can rotate the dial to move the target step forward or backward. You can jump to a specific step by holding down the Shift key and pressing the desired step key.

If you wish to save the completed pattern, press the Write key. (Refer to p.17 "Saving a pattern that you create.)
In step recording, the trigger and pitch are recorded simultaneously, but it is not possible to make detailed settings for the gate time. If you wish to create a pattern in more detail, use Event Edit (refer to p.28 "Event editing") to re-adjust the trigger and pitch, or to adjust the gate time.

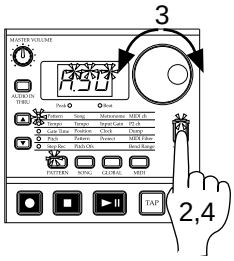
For details on the target step, refer to p.27 "Target step."



Saving a pattern that you create

With the factory settings, memory protect will be on, and it will not be possible to save data. Before you save data, you must turn off the Memory Protect settings in Global mode. (Refer to p.40 "Protect settings.")

Please be aware that when you save data, the pattern in the save destination will be overwritten.



1. Edit a pattern as described in "Modifying the sound" or "Modifying (editing) a phrase pattern."

2. Press the Write key once (the key will blink). The display will blink to indicate the pattern number.

3. Rotate the dial to select the pattern number in which the data will be saved (i.e., the "save destination").

4. Press the Write key once again to begin saving the data. While the data is being saved, the key will blink. When saving is complete, the key will go dark.

If you decide to cancel, press the Stop / Cancel key. If you do not wish to save the pattern you created, simply select a different pattern without performing the Write operation.

Never turn off the power while data is being saved to memory (i.e., while the Write key is lit). Doing so may damage the data.

It is not possible to Write data during playback or recording.

Using a Motion Sequence

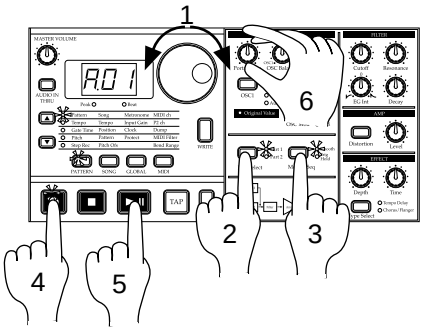
What is a Motion Sequence?

For each part, you can record the changes you make to the synth parameters using the knobs, and loop them for playback. The looped data for the knob movements is called a Motion Sequence (refer to p.29 "Recording a motion sequence").

A "motion sequence" allows you to record movements of any one of the parameters of the Synthesizer section for an individual part.

As an example, here's how to record the Portamento parameter in a motion sequence.

1. In Pattern mode, select the pattern that you wish to edit.



2. Press the Part Select key to select the part that you wish to edit.
3. Press the Motion Sequence key to select either **Smooth** or **Trig Hold**.
4. Press the Rec key to enter record-ready mode (the Rec key will light, and the Play / Pause key will blink).
5. Press the Play / Pause key to start the pattern (the Rec key and Play / Pause key will light).
6. Move the Pitch knob to create various changes while the pattern makes one cycle (16 steps x length, or 12 steps x length).
7. When the pattern has completed one cycle after you began moving the knob, the Rec key will automatically go dark and you will return to Play mode so that you can listen to the motion sequence that you just recorded.

After pressing the Stop / Cancel key to stop playback, perform step numbers 2 and following for "Saving a pattern that you create" to save the pattern that contains the motion sequence you just recorded.

There are two types of motion sequence (**Smooth** and **Trig Hold**). During playback, switch between these to hear the difference. (Refer to p.29 "Playing a motion sequence.")

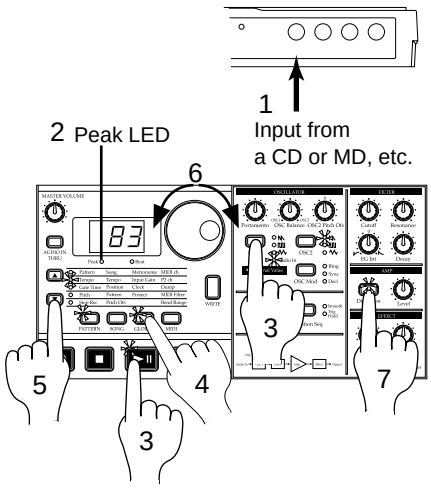
It is not possible to modify a motion sequence after it has been recorded. If the results are not as desired, please re-record your motion sequence.

For each part, only one knob can be recorded as a motion sequence. If you move two or more knobs when recording a motion sequence for a part, the effect of the previously-moved knob will be lost. (Refer to p.29 "Recording a motion sequence.")

Connecting various sources to the audio input

Let's try connecting various types of audio device (radio, or MD or CD player) or tone generator to the audio input jack.

Try out various types of sounds or music. Depending on the content, you may discover unexpectedly interesting results.



1. Connect an audio device etc. to the audio input of the EA-1. The input jack is monaural, so you may need to use a stereo-mono adapter plug, depending on the device you are connecting.
2. Adjust the output level of the connected device so that the peak LED lights only at the maximum levels. At this time you can turn on the Audio In Thru key (the key will light) to hear the input sound.
3. Select the pattern or song whose volume you wish to adjust, press the **OSC1** key to select **Audio In**, and begin playback.
4. Press the mode key to enter Global mode.
5. Use the cursor [▲][▼] keys to set the parameter select LED to **Input Gain**.
6. Rotate the dial to adjust the input volume to create a balance with the volume of the other part.
7. Move the knobs and keys of the Synthesizer section to apply filtering or effects to the input signal.

If you wish to use the audio input for the OSC1, you must turn the Audio In Thru key off (key is dark).
Line-level input is recommended for the audio input. It is not possible to directly connect a mic or turntable etc.
If the Input Gain setting is too high, the sound may be distorted.

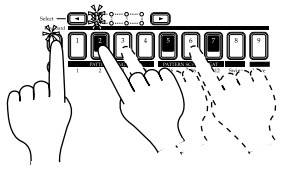
Playing with Pattern Set

What is Pattern Set?

Pattern Set is a function that lets you register a favorite pattern to each of the sixteen step keys, and use the step keys to switch patterns. You can use this function to play a performance simply by selecting patterns one after the other.

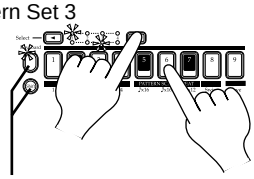
When you hold down the Keyboard function key (the key will blink) and press one of the sixteen step keys, the pattern registered for that key will be selected. At this time you can use the Select keys to change the pattern set group indicated by the red select LEDs (lower line) 1--4, to use 16 x 4 (total of 64) pattern sets.

Pattern Set 1



If during playback you hold down the Keyboard function key and press another step key, the pattern assigned to that key will begin playing when the currently-playing pattern finishes playing. (Refer to p.32 "Pattern Set.")

Pattern Set 3



Hold down the Shift key and press the Keyboard function key to hold the Pattern Set function.

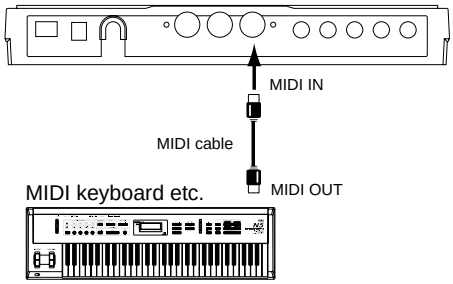
While the Keyboard function key is blinking, it will control the Pattern Set function.

If you hold down the Shift key and press the Keyboard function key, the Pattern Set function will be held. (The Keyboard function key will blink.) To defeat this "hold" condition, press the Keyboard function key once again.
You can assign new pattern sets. (Refer to p.32, "Registering a pattern for Pattern Set.")

If you switch patterns during playback, the change will occur when each pattern finishes playing. (Refer to p.22 "The timing at which patterns will be switched.")

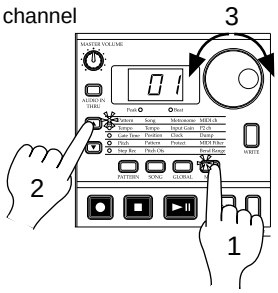
Using the EA-1 as a tone generator module

Read this section when you wish to use the EA-1 with other connected MIDI equipment. Use a MIDI cable to connect the MIDI OUT connector of your MIDI keyboard etc. to the MIDI IN connector of the **EA-1**.



1. Press the MIDI mode key to enter MIDI mode.
2. Use the cursor [▲][▼] keys to make the parameter select LEDs indicate **MIDI ch**.
3. Set the channel of the transmitting device to match the channel of the **EA-1**. (Refer to p.41 "Setting the MIDI channel of part 1.")

Set the MIDI channel



4. Play the connected MIDI keyboard etc., and the sound of part 1 will be heard.

If you are connecting a multi-track MIDI sequencer, use the cursor [▲][▼] keys to make the parameter select LEDs indicate **P2 ch**, and set the MIDI channel for part 2 as you did for part 1. (Refer to p.41 "Setting the MIDI channel of part 2.") Set each part to the MIDI channel of the track that you want it to play, and start playback on your sequencer to hear the sound.

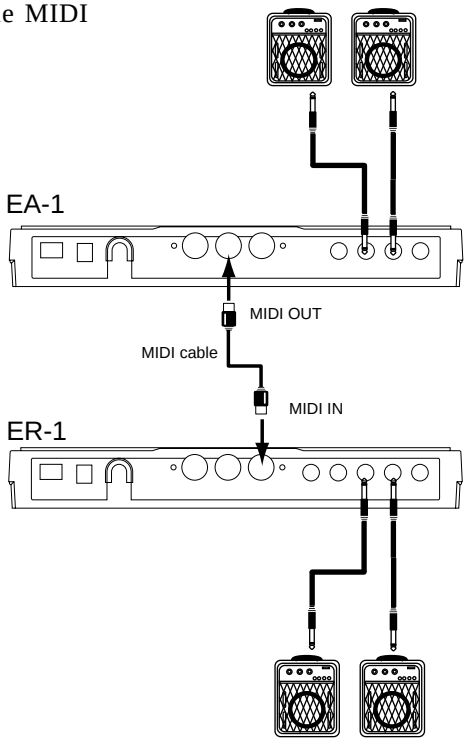
For details on the EA-1's MIDI functionality, refer to p.43 "About MIDI."

If you wish to save the settings of MIDI mode or Global mode, you must perform the Write operation in either of these modes. (Refer to p.40 "Saving the settings you modify in Global mode ," or p.42 "Saving the settings you modify in MIDI mode.")

Synchronized playback with the ER-1

By synchronizing the **Electribe EA-1** and **ER-1** you can enjoy even greater performance possibilities. Here's how you can make the **ER-1** playback in synchronization with the tempo of the **EA-1**.
Use a MIDI cable to connect the **MIDI OUT** connector of the **EA-1** to the **MIDI IN** connector of the ER-1. Connect the part output jacks of the **EA-1** and the line output jacks of the **ER-1** to your mixer or powered monitor system (amplified speakers).

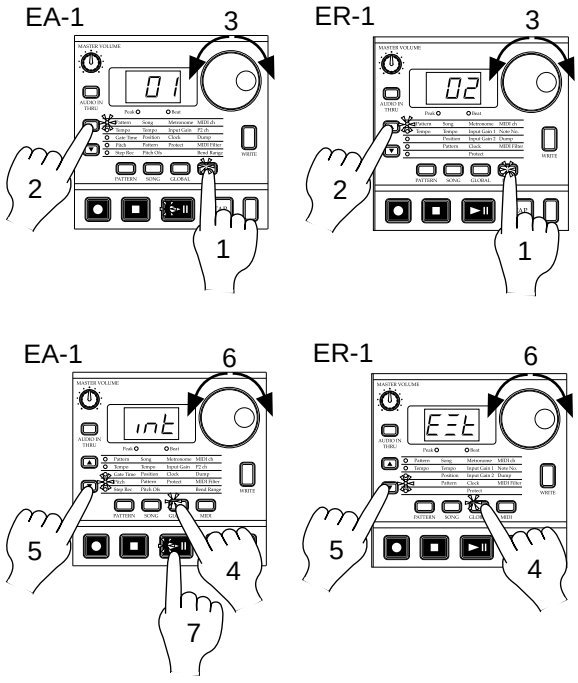
1. Press the MIDI mode key to move to MIDI mode.
2. Use the cursor [▲][▼] keys to make the parameter select LEDs indicate **MIDI ch**.
3. Set the **EA-1** channel to "**01**," and the **ER-1** channel to "**10**." (Refer to p.41 "Setting the MIDI channel of part 1.", "Setting the MIDI channel of part 2.")
4. Press the Global mode key to move to Global mode.
5. Use the cursor [▲][▼] keys to make the parameter select LEDs indicate **Clock**.
6. Set the **EA-1** to "**int**," and the **ER-1** to "**Ext**." (Refer to p.39 "Synchronizing the EA-1 with external MIDI device.")
7. Press the Play / Pause key of the **EA-1** to start a pattern or song. (The Play / Pause key will light.) The **ER-1** will play the pattern in synchronization with the tempo of the **EA-1**.



If you want the **EA-1** and **ER-1** to play the identically-numbered pattern in synchronization, make the following settings.

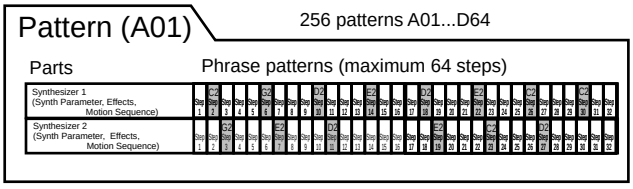
- Synchronizing the **ER-1** to the **EA-1** as master.(Set the **EA-1** to "**int**," and the **ER-1** to "**Ext**.")
- Set the **EA-1** and **ER-1** to the same MIDI channel (for example, set both to "**01**").
- On the **EA-1** and **ER-1**, set the MIDI filter setting "**P**" to "**O**" (refer to p.42 "MIDI filter settings").
- On the **ER-1**, set the MIDI note number setting to **C-1...A-1** or **A#8...G9**. (This will prevent the **ER-1** from being sounded unintentionally when note-on messages are received.

It is also easy to make the **EA-1** playback in synchronization by connecting it to a sequencer or synthesizer that can transmit and receive MIDI Clock messages.



4. Pattern mode

In this mode you can play patterns, or edit them to make new patterns.
Press the Pattern mode key to enter Pattern mode.



Selecting a pattern

Pattern **A01…d64**

Use the cursor keys to make the parameter select LEDs indicate **Pattern**.
Rotate the dial to select one of the 256 patterns: **A01...A64**, **b01...b64**, **C01...C64**, and **d01...d64**. By holding down the Shift key as you rotate the dial, you can change the pattern number in steps of ten.

Setting the playback tempo

Tempo **20…300**

• Using the dial to change the tempo

Use the cursor keys to make the parameter select LEDs indicate **Tempo**. Rotate the dial to modify the tempo.

• Using the Tap Tempo key to change the tempo

While the pattern is playing, press the Tap key three times or more at the desired tempo. The **EA-1** will calculate the interval at which you pressed the Tap key, and will change the tempo accordingly. You can change the tempo in the same way even when playback is stopped.
When you use the cursor keys to make the parameter select LEDs indicate **Tempo**, and the tempo you modified will appear in the display.

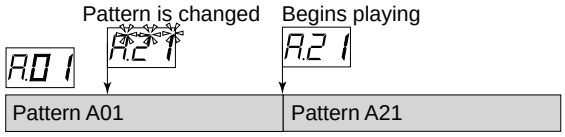
If you switch to a different pattern without writing the pattern whose tempo you modified, the pattern tempo will return to the previous value. If you wish to keep the modified tempo, you must perform the Write operation (refer to p.33 "Saving a pattern").

Playing a pattern (Pattern Play)

Use the cursor keys to make the parameter select LEDs indicate **Pattern**. Press the Play / Pause key to start pattern playback. When the pattern finishes playing, it will return to the beginning and continue playing.
While listening to a pattern, you can strike the step keys along with the phrase, or move the knobs to modify the sound.
By taking advantage of the various functions of Pattern mode as part of your performance technique, you can enjoy even wider possibilities.

The timing at which patterns will change

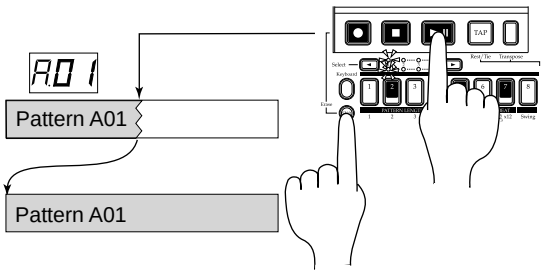
When you switch patterns during playback, the change will occur when the currently playing pattern finishes its last step. Until the pattern actually changes, the pattern number selected in the display will blink.



Playing from the beginning of a pattern (Reset & Play)

If you hold down the Shift key when pressing the Play / Pause key, the playback will be forced to playback from the beginning. By using this function in conjunction with setting the tempo by the Tap key, you can synchronize the playback without using MIDI.

In order to ensure that the phrase always matches, you will need to perform this adjustment each time.



About the tempo when the pattern is changed

When you switch patterns during playback, the tempo of the previous pattern will always be maintained. If you wish to use the tempo that is stored in the newly selected pattern, press the Stop / Cancel key to stop playback, and then start playback once again. The pattern's own tempo will be applied from the point at which the pattern was stopped.

Selecting a pattern

You can use the Part Select key to switch the part that will be edited or played using the Keyboard function.
When you select a Part, the LED for that part will light, and you can edit it in the Synthesizer section, or edit a phrase pattern. At this time if the Keyboard function key is off (dark), the step keys will indicate the trigger locations (refer to p.28) of the phrase pattern for that part.

If the Keyboard function key is on (lit) while a pattern is playing back, the step keys will light in succession to indicate the pitch that the currently selected part is sounding. If the Keyboard function key is off (dark), the step keys will indicate the trigger locations for the phrase pattern of the currently selected part, and the step that is currently playing.

Creating a pattern

There are two ways to create a pattern. You can start with a pattern that is similar to the desired result and then edit it, or you can create a sound and phrase pattern for each part from scratch. Either way, the **EA-1** makes it easy for you to create your own original patterns.

If you wish to save a pattern you create, you must perform the Write operation before you select a different pattern or turn off the power.

Editing the sound of a part

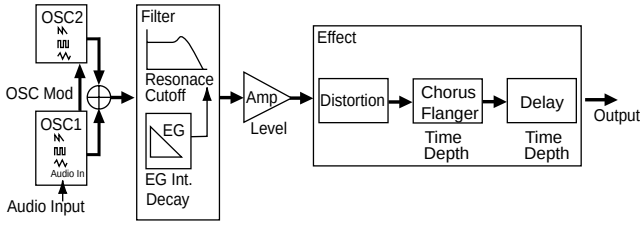
Select a pattern that is close to what you have in mind (or a pattern which contains no sound or phrase). Use the Part Select key to select the part that you wish to edit. Then operate the knobs and keys to edit the sound. At this time, the Original Value LED will light when the knob etc. that you are currently moving reaches the same value as the original sound of the pattern. Referring to the example sounds in the appendix (p.46) will help you learn how to create your own sounds.
You can also edit while playing back a pattern. It is also possible to use an external MIDI device to control the value of each knob (refer to p.43 "About MIDI").

If the sound does not change when you rotate a knob or switch the setting of a key, either another knob or key has been set so that the parameter you are attempting to adjust has no effect, or the Motion Sequence function (p.29 "Motion Sequence") is operating.

Synthesizer parameters

OSCILLATOR

This specifies the basic waveform and pitch of the sound.



Portamento 0...100

This parameter creates a smooth change in pitch from one note to the next. As this knob is turned further toward the right, the pitch will change more slowly.
If portamento is raised excessively, a certain amount of time will elapse before the destination pitch is reached.

OSC Balance (oscillator balance)

OSC1...OSC2

Adjust the volume balance between the two oscillators. Rotating the knob all the way to one side will cause the level of the other oscillator to be 0. If you wish to hear the result of **OSC Mod**, set this knob in the **OSC2** position.

OSC2 Pitch Ofs (OSC2 pitch offset)

–1 octave ... 4 octaves

Specify the pitch of **OSC2** relative to the pitch of **OSC1**. The pitch of **OSC2** can be adjusted in the range of –1 octave to 4 octaves from the pitch of **OSC1**.

The pitch of OSC1 will be the pitch that sounds when you use the keyboard function or the pitch specified for a phrase pattern.

OSC1 Wave

...Audio In

Specify the basic waveform of **OSC1**.

(sawtooth wave)

This waveform is rich in overtones, and is suitable for bass or synth lead sounds.

(square wave)

This waveform contains only the odd-numbered har monics, and produces a tone typical of electronically produced sound.

(triangle wave)

This waveform is more mellow than the sawtooth wave or square wave, and is suitable for sub-bass sounds etc.

Audio In

The audio signal input from the audio input jack will be used as **OSC1**.

So that they will be particularly suitable for bass sounds, the waveforms of **OSC1** have a slightly heavier sound (fundamental) than the waveforms of **OSC2**.

OSC2 Wave

, ,

Specify the basic waveform of **OSC2** (refer to OSC1 Wave).

When OSC Mod is set to Deci, the basic waveform selection will have no effect.

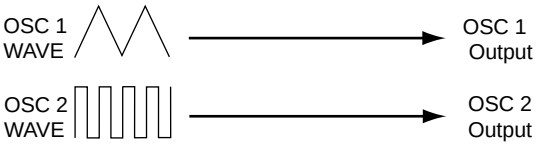
OSC Mod (oscillator modulation)

off, Ring, Sync, Deci

Select the type of modulation that will occur between the oscillators. Since **OSC2** will be modulated (i.e., it will be the slave), the results of the modulation will be output from **OSC2**.

For either of the types of oscillator modulation, using a motion sequence etc. to change the pitch of **OSC2** will produce timbral changes.

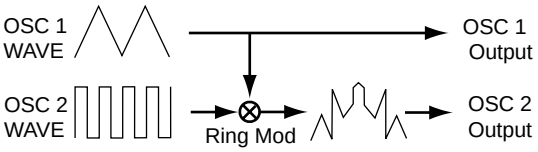
• **Off (When the OSC Mod LED is dark)**



When **OSC Mod** is off, the oscillators will not modulate each other.

By using **OSC2 Pitch Ofs** to create a slight difference in pitch between the oscillators, you can produce a spacious detune effect. Setting a one-octave difference in pitch is effective when you wish to create thick synth-bass sounds etc.

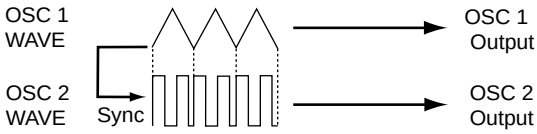
• **Ring Modulation**



This type of modulation generates a frequency consisting of the sum and difference of the **OSC1** and **OSC2** frequencies. When you move the **OSC2** pitch offset knob the timbre will change, producing metallic sounds or sound effects. The modulated sound will be output from **OSC2**

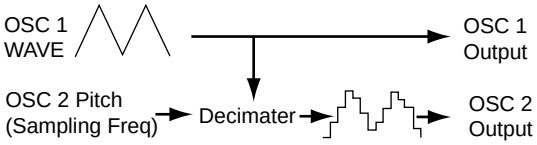
The tone and volume of Ring Modulation may vary depending on the phase difference between OSC1 and OSC2.

• **Oscillator Sync**



This type of modulation forcibly resets the **OSC2** waveform by synchronizing its pitch to the pitch of **OSC1**. Moving the pitch of **OSC2** will produce the popular "sync lead" sound. The modulated sound will be output from **OSC2**. Differences in the **OSC1** waveform will not affect the output of **OSC2**.

• **Decimator**



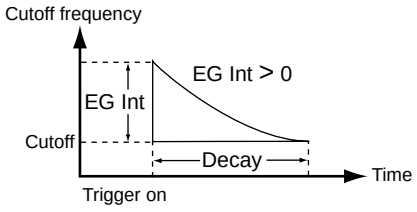
This type of modulation reproduces the **OSC1** waveform at the sampling frequency of **OSC2**. The digitized **OSC1** waveform will be output from **OSC2**. This is effective when creating electric bass sounds etc.

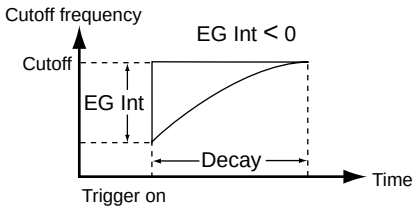
If OSC1 is a square wave, Decimator will have little effect.

When OSC Mod is set to Decimator, the basic waveform of OSC2 will be ignored.

Filter

The filter processes the sound produced by the oscillator to make it less bright, etc.





Cutoff

0 Hz ... 20,000 Hz

Set the cutoff frequency of the low-pass filter. Overtones higher than the cutoff frequency will be cut, making the sound more mellow.

If Cutoff and EG Int are set to 0, you will hear virtually no sound.

Resonance 0...100

This parameter adds character to the sound by boosting the region around the cutoff frequency. If you raise the resonance and turn the **Cutoff** knob (or adjust **EG Int** and **Decay**), you will hear the typical "meow-ing" sound typical of analog synthesizers.

If the resonance is raised, the sound may be distorted depending on the cutoff frequency or on the pitch that you play.

EG Int (EG intensity) –100...0...100

Specify the depth and direction of the effect that the EG (envelope generator) will have on the cutoff frequency. The EG will start when trigger-on occurs (the instant you play the keyboard). If this knob is in the center position, the EG will have no effect.

If the gate time length of a step extends beyond the point at which the next step is sounded, the EG will not be re-triggered for the next step.

Decay 0 msec ... 10 sec

Specify the time over which the EG will decay. In conjunction with the **Cutoff** and **EG Int** parameters, this controls the way in which the sound will change over time. If EG Int is set to a negative (–) setting, Decay Time can be used in place of Attack Time.

AMP

These parameters adjust the volume level and distortion effect.

Distortion On, Off

Turn distortion on / off. Distortion is an effect that intentionally distorts the sound to produce a hard sound even from a mellow waveform. It is highly effective to raise the resonance and use distortion.

Level 0...100

Adjust the volume.

Effect

Here you can apply effects to the sound.

Type Select Tempo Delay, Chorus/Flanger

The **Depth** and **Time** knobs will edit the effect that is selected by **Type Select**.

Tempo Delay settings

Set the **Type Select** button to **Tempo Delay**, and adjust the delay. Delay is an effect that plays back a time-delayed version of the original signal, and is also known as "echo." **Tempo Delay** is a delay that can automatically synchronize the delay time to the tempo of a pattern. If the MIDI Clock parameter is set to "**Ext**" (external), the delay time can also be synchronized to the clock of an external device. (Refer to p.39 "Synchronizing the EA-1 and an external MIDI device.")

• Depth (delay depth) 0...100

Adjust the depth of the delay and the amount of feedback (the number of delay repeats). Rotating the knob toward the right will increase the level of the delayed sound and the amount of feedback.

Raising the Depth excessively may cause the sound to distort.

• Time (delay time) 1/4...8

Set the delay time. Rotating the knob toward the right will lengthen the delay time.

If you have selected Tempo Delay as the effect type, this parameter will let you set the tempo in terms of sixteen different multiples of the step: 1 / 4, 1 / 3, 1 / 2, 2 / 3, 3 / 4, 1, 1.33, 1.5, 2, 2.5, 3, 4, 5, 6, 7, or 8.

Depending on the tempo setting, it may be impossible to set the delay time. In such cases, set the delay time to half the desired value.

Chorus/Flanger settings

Set the **Type Select** button to **Chorus/Flanger**, and adjust the chorus / flanger. Chorus creates minute differences in the pitch to produce an ensemble effect, and Flanger adds a "swooshing" modulation to the sound.

• Depth (chorus/flanger depth) 0...100

Adjust the depth of the chorus / flanger effect. Rotating the knob toward the right will change from a chorus effect to a flanger effect.

Raising the depth excessively may cause the sound to distort.

Time (LFO rate) 0.2 Hz ... 5,000 Hz

Adjust the LFO speed of the chorus / flanger. Rotating the knob toward the right will speed up the LFO.

Length, Scale/Beat settings

You can set the length (the length of the entire pattern) and the basic beat (time signature).The Length and Scale / Beat you specify here will affect the correspondence between step keys and note values, and the maximum number of steps as shown in the following diagram.
While you hold down the Shift key, the step keys will light to indicate the length and beat of the current pattern.
To change the Length, hold down the Shift key and press a Step Key 1...4.
To change the Beat / Scale, hold down the Shift key and press a Step Key 5...7.

It is not possible to view or change the Length or Beat/ Scale during playback or recording, or during Pattern Set Play.

· If you select triplets (𝅘𝅥𝅯₃ x 12) for Beat / Scale, step keys 13...16 will have no function.

Length	Maximum number of steps	
	𝅘𝅥𝅯 x 16 or 𝅘𝅥𝅯 x 16	𝅘𝅥𝅯₃ x 16
1 Shift + step key 1	16	12
2 Shift + step key 1	32	24
3 Shift + step key 1	48	36
4 Shift + step key 1	64	48

Scale/Beat	Correspondence between step keys and note values
𝅘𝅥𝅯 x 16 Shift + step key 5	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
𝅘𝅥𝅯 x 16 Shift + step key 6	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
𝅘𝅥𝅯₃ x 12 Shift + step key 7	1 2 3 4 5 6 7 8 9 10 11 12

What is Length?

In this context, "Length" refers to the length of the rhythm pattern.
The "Length" of the pattern will be either 16 steps or 12 steps, depending on the Scale and Beat settings of the pattern. A rhythm pattern in triple meter will be shown in triplets. Depending on the Length and Beat settings, a single pattern can have up to 64 steps.

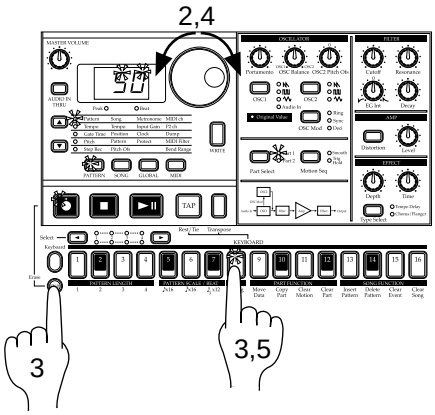
Swing settings

By adjusting the Swing settings you can offset the note timing of the steps. For example, you can change a straight 16-beat by adding a slight "bounce" or shuffle. The Swing value can be adjusted from **50** to **75** (%), and will affect the note timing of even-numbered steps. A setting of **50** will produce a perfect 16-beat, and a setting of **66** will produce a shuffle.

1. If a pattern is playing back, press the Stop / Cancel key to stop playback.
2. Rotate the dial to select the pattern for which you wish to make Swing settings.
3. Hold down the Shift key, and press step key 8 (**Swing**). Key 8 will light.
4. A value will blink in the display. Rotate the dial to set the Swing value.
5. Once again press step key 8 to execute the Swing setting (key 8 will go dark).

If you decide to cancel without making the setting, press the Stop / Cancel key.

If the Length and Beat/Scale settings are set to triplets (𝅘𝅥𝅯₃ x 12), the Swing setting has no effect.
It is not possible to view or adjust the Swing parameter during playback or recording, or during Pattern Set Play.



Creating a phrase pattern

There are three ways to create a phrase pattern.

Realtime recording
: Use the Keyboard function to play the step keys at the exact timing you wish to record them.

Step recording
: Use the Keyboard function to specify the pitch of the note for each target step to create the phrase.

Event editing
: Edit the data (trigger, pitch, gate time) for each step to create the phrase.

If you wish to erase the phrase of each part before you create your own rhythm data, refer to p.29 "Erasing phrase data from a part."

Realtime recording

Please refer to "Realtime recording (Using the Keyboard function to create a phrase)" (p.16) in chapter 3. Basic operation (Quick Start).

Step recording

Please refer to "Step recording (Using the step keys to create a phrase)" (p.16) in chapter 3. Basic operation (Quick Start).

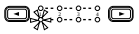
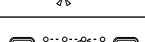
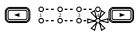
About the Target Step

Target Step 1.01...4.16

The value shown in the display when the parameter select LEDs indicate Step Rec is called the "target step." The value shown in the display indicates the location of a certain step in the phrase pattern. To change the target step, you can use the dial or press one of the sixteen step keys. Alternatively, you can hold down the Shift key and use the Select keys to move forward or backward in single steps.

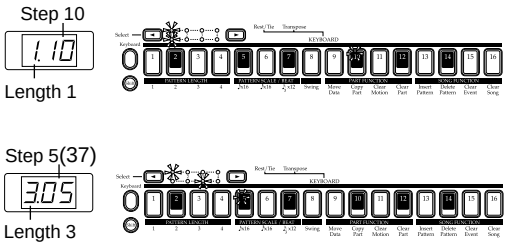
The maximum number of steps will depend on the length and scale/beat settings.

In the case of a pattern with a length of 2 or greater, you can use the Select keys to move the select LED in the lower line (red) in order to change the length that is shown by the step keys, and verify or modify the trigger locations.

Length	Select LED display	Area shown by the step keys	
		For ♪ x 16, 𝅘𝅥𝅯 x 16	For ♪3 x 12
1		Steps 1...16	Steps 1...12
2		Steps 17...32	Steps 13...24
3		Steps 33...48	Steps 25..36
4		Steps 49...64	Steps 37...48

When the Keyboard function key is on, the step keys will not indicate the target step. When the Keyboard function is off, the step key corresponding to the target step will blink.

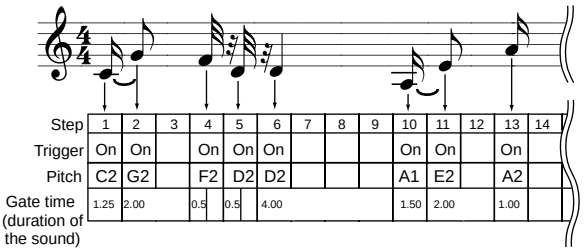
Example display



Event editing

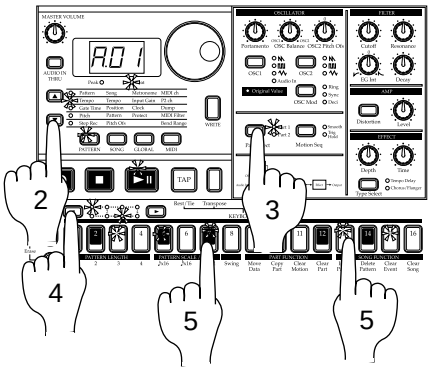
A phrase pattern consists of the following three data items for each step. For each step, you can set these three items.

- Trigger: Whether or not a note will sound
- Pitch: The pitch that will be sounded
- Gate time: The duration of the sound



Changing the trigger settings

1. Turn off the Keyboard function key (the key will be dark).
2. Use the cursor keys to make the parameter select LEDs indicate either **Pattern**, **Tempo**, or **Step Rec**.
3. Use the Part Select key to select the part that you wish to edit.
4. For a pattern with a pattern length of 2 or more, you can use the Select keys to move the red select LEDs to left or right to change the length location that you will edit.
5. The step keys will light to indicate the trigger locations of the pattern for that part. You can press each key to switch the trigger on / off for that step. Each time you press a step key, the trigger will alternate on (lit) and off (dark).

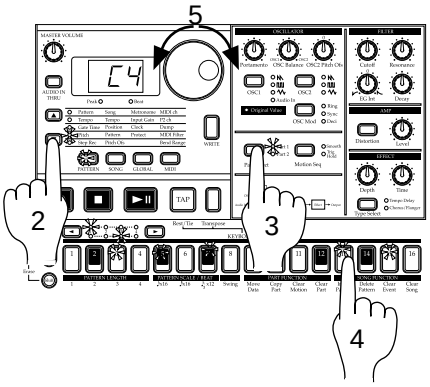


Changing the pitch

Pitch C-1...G9

1. Turn off the Keyboard function key (the key will go dark).
2. Use the cursor keys to make the parameter select LEDs indicate **Pitch**.
3. Use the Part select key to select the part that you wish to edit.
4. The step keys will light to indicate the trigger locations of the pattern for that part. Press the step key for the step whose pitch you wish to edit (the key will blink). By pressing a step key where a trigger exists, you can audition its pitch.
5. Rotate the dial to modify the pitch of that step.

When the display is showing the **Pitch**, pressing a step key will not switch its trigger on / off.
Changing the pitch of a step whose trigger is off will have no effect. If you turn that trigger on, the specified pitch will be used. If you wish to transpose the pitch for one part of the entire pattern, refer to p.30 "Changing the pitch data of a part (Pitch Shift)."



The pitch will be shown in the display as follows.

Display for A#3 

Display for B4 

Display for D#–1 

Changing the gate time

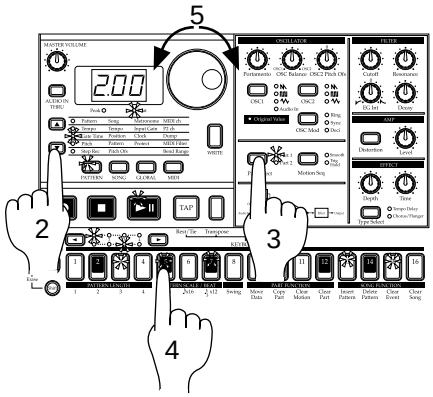
Gate Time 0.25...64.0

1. Turn off the Keyboard function key (the key will go dark).
2. Use the cursor keys to make the parameter select LEDs indicate **Gate Time**.
3. Use the Part select key to select the part that you wish to edit.
4. The step keys will light to indicate the trigger locations of the pattern for that part. Press the step key for the step whose gate time you wish to edit (the key will blink). By pressing a step key where a trigger exists, you can audition its pitch.
5. Rotate the dial to modify the gate time of that step.

The value shown in the display is the gate time length in units of a step. For example if the gate time is set to **1.0**, the gate time will be exactly as long as one step.

If the gate time length extends into the timing of the next note, the filter EG of the next note will not be retriggered.

When the display is showing the **Gate Time**, pressing a step key will not switch its trigger on / off.
Changing the gate time of a step whose trigger is off will have no effect. If you turn that trigger on, the specified gate time will be used.



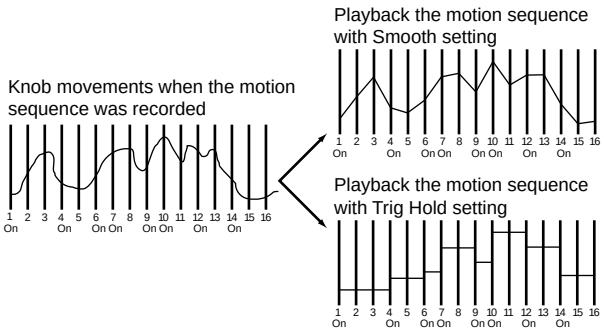
Motion sequence

Playing a motion sequence

A motion sequence can be played back in one of the following two ways, and you can select the playback method independently for each part.

Smooth: Knob values will be connected smoothly, and the sound will change smoothly.

Trig Hold (trigger hold): The value of the motion sequence knob will be held at the note timing of that part.



There will be no effect when the Motion Sequence LED is dark (off).

Recording a motion sequence

You can record knob movements (motion sequence) for each part. When recording a motion sequence, only one knob is valid for each part. If you record a motion sequence on the same part using a different knob, the effect of the previously recorded knob will disappear.

For the recording procedure, refer to p.18 "Using a motion sequence" in section 3. Basic operation (Quick Start).

Motion sequences are recorded in realtime while you listen to the playback. It is not possible to partially modify a motion sequence after it has been recorded. You will need to keep trying until you record a motion sequence to your liking. (Refer to p.31 "Erasing motion sequence data from a part.")

Checking motion sequence data

Hold down the Shift key and press the Motion Sequence key. If motion sequence data has been recorded in the selected part, step keys 1, 2, 3, 4 will light.

It is not possible to check for motion sequence data during playback, recording, or Pattern Set Play.

Convenient functions for editing patterns

If you wish to save the pattern you edit using these functions, you must perform the Write operation before selecting a different pattern or turning off the power.

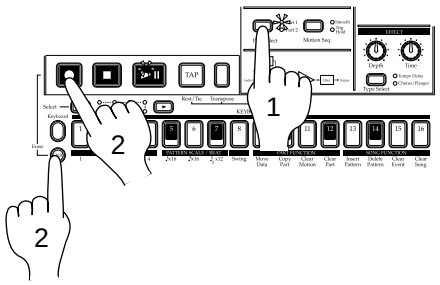
Erasing phrase pattern data from a part

To erase the phrase pattern data for the selected part, you can use one of the following two methods in addition to turning each of the sixteen step keys off.

Erasing data during playback or recording (Erase)

1. Press the Part key to select the part from which you wish to erase data.
2. During playback or recording, hold down the Shift key and press the Rec key. As long as you continue holding these keys, trigger data will be automatically be erased from the selected part.

Performing this operation will not affect the pitch and gate time data.



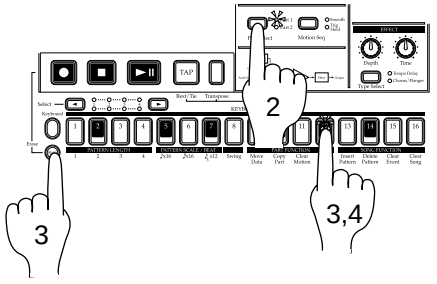
Erasing all data from a part (Clear Part)

This operation erases all phrase pattern and motion sequence data at once.

1. If the pattern is playing, press the Stop / Cancel key to stop playback.
2. Press the Part key to select the part whose data you wish to erase.
3. Hold down the Shift key and press step key 12 (**Clear Part**). (Key 12 will blink.)
4. Once again press step key 12 to clear the data.

To cancel without clearing the data, press the Stop / Cancel key.

When you perform this operation, the pitch of all steps will be set to "C4," and the gate time to "1.00."



Transposing a phrase (Transpose)

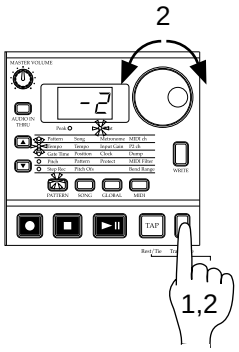
Transpose –24...24

This operation lets you transpose a phrase.

1. While you continue pressing the Transpose key, the display will indicate the current transposition status.
2. While holding down the Transpose key, rotate the dial to transpose the phrase in semitone steps. **+/–1** transposes the pitch by a semitone, **+/–2** by a whole tone, **+/–7** by a fifth, and **+/–12** by one octave.

While holding down the Transpose key you can also use the step keys or Select keys to transpose.
When you hold down the Transpose key and use the step keys to specify the transposition, step key 4 will correspond to the **C** pitch.

To transpose an individual part, use the Pitch Shift operation described below.
When you transpose the pitch, the Transpose key will light. If the value is set to 0, the key will go dark.
The Transpose value is not saved. The next time that the power is turned on, the value will be 0.



Moving data within a part (Move Data)

The Move Data operation lets you move the phrase pattern and motion sequence data of a part backward or forward, or to shift the pitch of an entire part.

Move Data –16...16

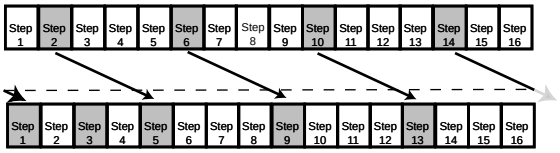
Use this when you want to change the starting location of a pattern.

1. If the pattern is playing, press the Stop / Cancel key to stop playback.
2. Hold down the Shift key and press step key 9 (**Move Data**). (Key 9 will blink.)
3. Turn off the Transpose key (the LED will go dark).
4. Use the Part select key to select the part whose data you wish to move. If you wish to select both parts 1 and 2, press the key several times to make both LEDs blink.
5. A number will blink in the display. Rotate the dial to select the number of steps and the direction (positive or negative) in which the data will be moved.
6. Press the blinking step key 9 to execute the Move Data operation.

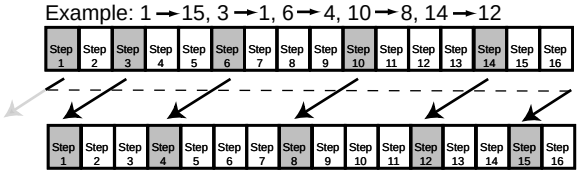
To cancel without executing, press the Stop / Cancel key.

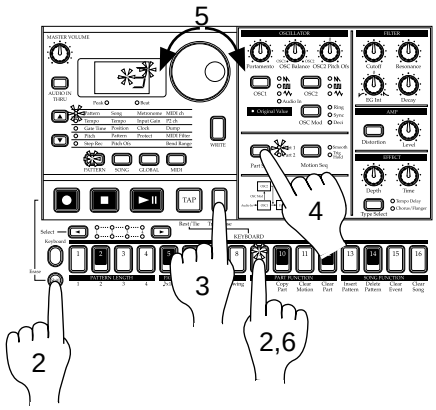
The Move Data operation applied to all steps of the selected part. Data that is moved beyond the last step of the pattern will "wrap around" to the first step. For example if 64-step data is moved for "**5**" steps, the data that was in steps 60 through 64 will be moved to steps 1 through 5. Likewise, data that is moved earlier than the first step of the pattern will "wrap around"to the last step. For example if 48-step data is moved for "**–3** " steps, the data that was in steps 1 through 3 will be moved to steps 46 through 48.

With a setting of 3
The data of each step will be moved three steps toward the end of the pattern.
Example: 2→5, 6→9, 10→13, 14→1



With a setting of –2
The data of each step will be moved two steps toward the beginning of the pattern.
Example: 1→15, 3→1, 6→4, 10→8, 14→12



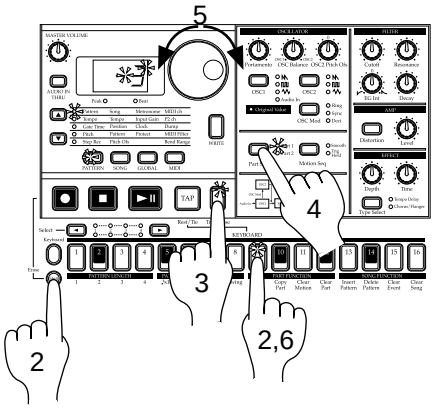


Pitch Shift –24...24

Use this when you want to shift the pitch data of all steps in a part.

1. If the pattern is playing, press the Stop / Cancel key to stop playback.
2. Hold down the Shift key and press step key 9 (**Move Data**). (Key 9 will blink.)
3. Turn on the Transpose key (the LED will blink).
4. Use the Part select key to select the part whose pitch you wish to shift. If you wish to select both parts 1 and 2, press the key several times to make both LEDs blink.
5. A number will blink in the display. Rotate the dial to select the amount of pitch shift. **+/–1** transposes the pitch by a semitone, **+/–2** by a whole tone, **+/–7** by a fifth, and **+/–12** by one octave.
6. Press the blinking step key 9 to execute the Move Data operation.

To cancel without executing, press the Stop / Cancel key.



Copying a part (Copy Part)

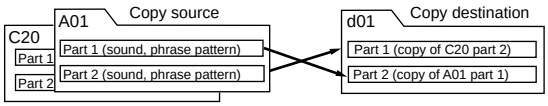
You can copy the sound settings and phrase pattern data (including motion sequence) from a selected part to another part.

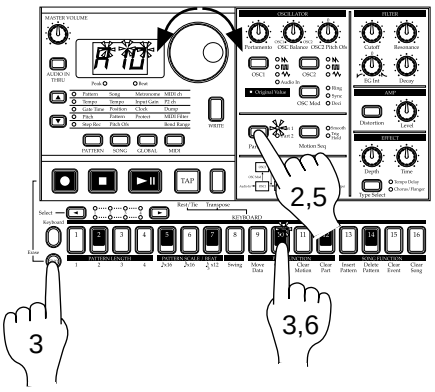
1. If the pattern is playing, press the Stop / Cancel key to stop playback.
2. Press the Part key to select the copy destination part (the LED will light).
3. Hold down the Shift key and press step key 10 (**Copy Part**). (Key 10 will blink.) The display will begin blinking.
4. Rotate the dial to select the copy source pattern number.
5. Use the part key to select the copy source part. (The copy source LED will blink, and the copy destination LED will be dark.)
6. Press step key 10 once again to execute the Copy Part operation.

To cancel, press the Stop / Cancel key.

For details on data copy within the same part, refer to the following section "Data Copy within a part."

Example





Data Copy within a pattern

Phrase pattern data (including motion sequence data) that you create for a pattern of length 1 can be copied to the steps of lengths 2...4. This function is a convenient way to create a pattern that uses similar phrases repeatedly.

1. Create a pattern with a length of 1, and Write it into memory. (Refer to p.32 "Saving a pattern.")
2. At this point, the same data as in length 1 will automatically be copied to the steps of lengths 2...4.
3. Change the pattern length to the desired length. (Refer to p.26, "Length, Scale / Beat settings.")
4. The steps of lengths 2...4 will contain the same data as length 1. Now you can edit the data of lengths 2...4 to complete the pattern.

The data will be copied in a similar way when the pattern length is 2 or 3 (refer to the table below). If you shorten a pattern you create, the data will be copied according to the shortened length.

Copy Pattern data

Pattern length	Pattern data before writing	Pattern data after writing
1	A — — —	A A A A
2	A B — —	A B A B
3	A B C —	A B C C

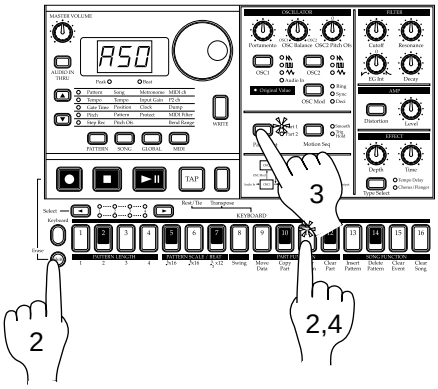
The data that is copied automatically when you Write a pattern does not force the pattern length (1--4) to change. If the length is 4, data will not be copied within the pattern.

Erasing motion sequence data from a part (Clear Motion)

This operation erases all the motion sequence data of a part.

1. If the pattern is playing, press the Stop / Cancel key to stop playback.
2. Hold down the Shift key and press step key 11 (**Clear Motion**). (Key 11 will blink.)
3. Use the Part Select key to select the part whose motion sequence you wish to erase.
4. Press step key 11 once again to clear the motion sequence data.

To cancel, press the Stop / Cancel key.



Pattern Set

Pattern Set is a function that lets you assign your favorite patterns to each of the sixteen step keys, and switch them at the touch of a key.
During playback, you can successively switch patterns to perform a song.
By using the Select key in conjunction with this to switch pattern set groups, you can register and select 16 x 4 (total of 64) patterns.

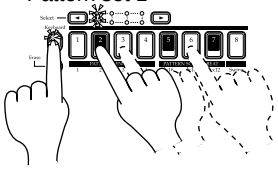
Using Pattern Set to perform (Pattern Set Play)

Press the Play / Pause key to begin playback.
Hold down the Keyboard function key and press a step key to switch to the pattern that was assigned to that step key.
By holding down the Keyboard function key and pressing a Select key, you can switch to a different group of registered pattern sets. The pattern set group will be indicated by the lower line of the Select LEDs (red).
By holding down the Shift key and pressing the Keyboard function key, you can hold the Pattern Set function (the key will light).
To defeat the Hold condition, press the Keyboard function key once again (the key will go dark).

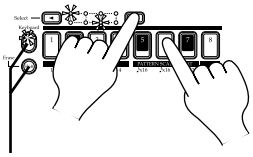
Example

Step key / Select LED	1	2	3	4	5		14	15	16
1	A01	A20	B03	B04	A51		A20	B43	B61
2	C21	C23	C56	C64	C28		C21	A07	A08
3	B01	B02	B04	B62	A01		A05	A45	A64
4	D01	D02	D03	D04	D05		D07	D08	D09

Pattern set 1



Pattern set 3



Hold down the Shift key and press the Pattern Set key to hold the function

In Pattern Set Play, the timing at which patterns will change, tempo adjustment, and functions such as Reset & Play etc. are the same as for Pattern Play.

Pattern Set cannot be used during recording. When you enter recording (ready) mode, Pattern Set will be cancelled.

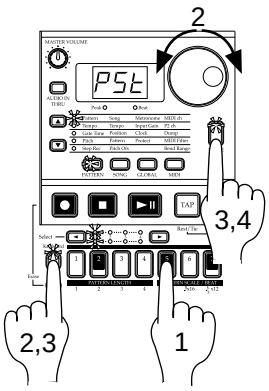
Registering a pattern for Pattern Set

1. With playback stopped, press and hold the Keyboard function key and press the step key for the location that you wish to assign a pattern.
2. While continuing to press the Keyboard function key (or while Hold is still in effect), rotate the dial to select the pattern number that you wish to assign. Release the Keyboard function key (or defeat Hold) to complete the registration process.
3. To save the pattern set registrations, press the Stop / Cancel key to stop playback. Continue pressing the Keyboard function key, and press the Write key (the Write key will blink).
4. The display will blink "**PSt**." Press the Write key once again to save the data.

To cancel, press the Stop / Cancel key.

If the Global mode Memory Protect setting is on, it will not be possible to write the data. In this case, turn off the Global mode Memory Protect setting before you execute the Write operation.

Never turn the power off during the Write operation. This may damage the data.



Saving a pattern (Write)

If you wish to keep the pattern data that you create, you must perform this Write operation. When you perform the Write operation, "Data Copy within a pattern" (p.31) will occur automatically, depending on the pattern length.
If you intentionally want to discard your edits and revert to the original pattern data, simply select a different pattern without Writing.

1. If the pattern is playing, press the Stop / Cancel key to stop playback. Use the cursor keys to make the parameter select LEDs indicate **Pattern**.

2. Press the Write key once (the key will blink). The pattern number will blink in the display.

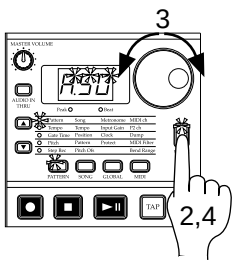
3. Rotate the dial to select the writing destination pattern number.

4. Press the Write key once again to write the data.

To cancel, press the Stop / Cancel key.

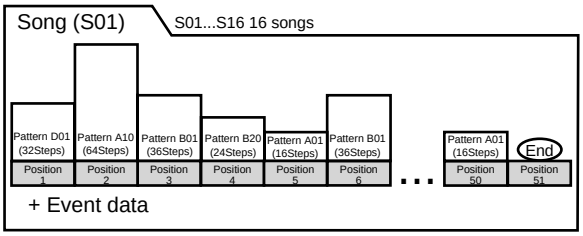
If the Global mode Memory Protect setting is on, it will not be possible to Write. In this case, you must turn off the Global mode Memory Protect setting before you execute the Write operation.

Never turn off the power during the Write operation. This can damage the data.



5. Song mode

A song consists of patterns arranged in the desired order of playback.
You can create and save up to sixteen songs in the internal memory of the **EA-1**. In addition to pattern playback, songs can also record phrases and knob movements.
Press the Song mode key to enter Song mode.



Selecting a song

Song **S01...S16**

Use the cursor keys to make the parameter select LEDs indicate **Song**.
Rotate the dial to select one of the sixteen songs **S01** to **S16**.

Setting the playback tempo

Tempo **20...300**

• Using the dial to set the tempo

Use the cursor keys to make the parameter select LEDs indicate **Tempo**. Rotate the dial to set the tempo.

• Using the tap tempo key to set the tempo

While the song is playing, strike the Tap key three times or more in succession at the desired tempo. The **EA-1** will calculate the interval at which the Tap key was pressed, and will set the tempo accordingly. The tempo can be set in the same way even when playback is stopped.

When you use the cursor keys to make the parameter select LEDs indicate **Tempo**, and the tempo you modified will appear in the display.

If you modify the tempo of a song but then switch to another song without Writing, the first song will return to its original tempo. If you wish to keep the tempo setting you modified, you must perform the Write operation (refer to p.38 "Saving a song").

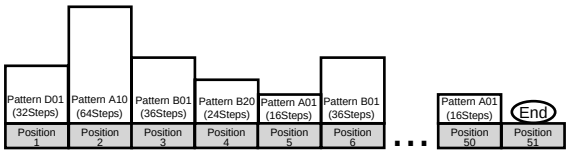
Playing a song (Song Play)

Press the Play / Pause key to begin playing the song. The song will begin playing from the pattern of the currently selected position. When the song ends, playback will automatically stop.

It is not possible to save edited sounds in a song. Please use Pattern mode to edit sounds.

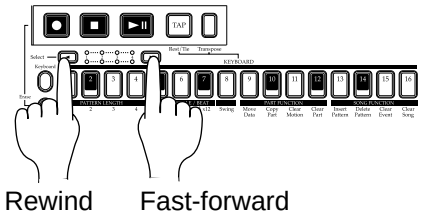
What is Position?

"Position" refers to the playback or recording order of the patterns within the song, and is the unit by which you edit a song.



Fast-forward or rewind a song

During song playback, you can use the select keys to fast-forward or rewind. To fast-forward, press the [►] select key. To rewind, press the [◄] select key.



Switching songs

It is not possible to switch songs during playback, but it is possible to select the song number beforehand. If you select a song number during playback, the display will blink to indicate the selected number. When the currently playing song ends, playback will stop, and the newly selected number will now be steadily lit. Press the Play / Pause key to playback the selected song.

Playing from the beginning of a position or song (Reset & Play)

While a song is playing, you can hold down the Shift key and press the Play / Pause key to start playback from the beginning of the pattern specified for the currently-playing position. In addition, you can press the Play / Pause key while a song is playing to pause the playback, and then hold down the Shift key and press the Play / Pause key to playback from the beginning of the song.

Creating a song

Creating a song from scratch

Here's how to create a song by placing patterns in the desired order.

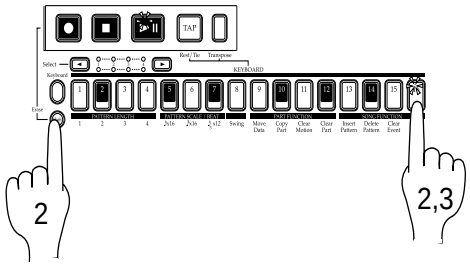
If you switch to a different song while editing a song, your edited data will be lost. If you wish to keep the edited song, you must perform the Write operation to save the song data.

Erasing song data (Clear Song)

1. If the song is playing, press the Stop / Cancel key to stop playback. Then select the song that you wish to erase.
2. Hold down the Shift key and press step key 16 (**Clear Song**). (Key 16 will blink.)
3. Press step key 16 once again to erase the song data.

To cancel, press the Stop / Cancel key.

If you erase the song data by mistake, rotate the dial to re-select the song before you save it. This will restore the data to its original condition.



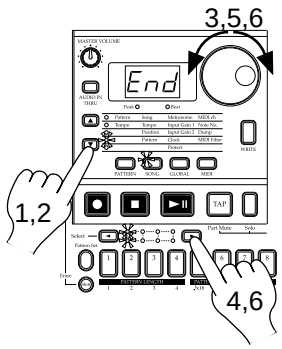
Specifying a pattern for each position

Position	001...256
Pattern	A01...d64

Specify a pattern for each position. When doing this, please turn the Keyboard function key off (the key will go dark).

1. Use the cursor keys to make the parameter select LEDs indicate **Position**. Notice that the display indicates "**001**."
2. Use the cursor keys to make the parameter select LEDs indicate **Pattern**.
3. Rotate the dial to select the pattern that you wish to assign to position "**001**."
4. Press the select [▶] key to advance to the next position. The display will indicate "**End**."
5. Rotate the dial to select the pattern. The pattern you select here will be the pattern for position "**002**."
6. When you select a pattern for the "**End**" position, the "**End**" will move to the next position. Repeat steps 4 and 5 to assign as many patterns as you wish.

To playback the completed song from the beginning, press the Play / Pause key once, and then press the Stop / Cancel key. Alternatively, use the cursor keys to make the parameter select LEDs indicate **Position**, and rotate the dial or use the select keys to set the position to "**001**." Then press the Play / Pause key.



If you wish to view the order of patterns in the song, or to re-select the pattern for a specific position, make the parameter select LEDs indicate **Pattern**. Each time you press a select key, you will move to the next or previous position. You can use the dial to change the pattern number that is displayed.

Use the select keys to move through the positions,
and use the dial to select patterns

Pattern A01 - - A13 - - A22 - - b01 - - b30 - - b60 - - End

Alternatively, you can make the parameter select LEDs indicate **Position**, and use the dial or select key to select the position you wish to check. Then make the parameter select LEDs indicate Pattern, and view or change the **pattern**.

At the Position setting use the select keys or dial to move;
then select Pattern and use the dial to select or view the pattern.

Position	001	002	003	004	005	006	007
Pattern	A01	A13	A22	b01	b30	b60	End

Specifying the pitch of each pattern

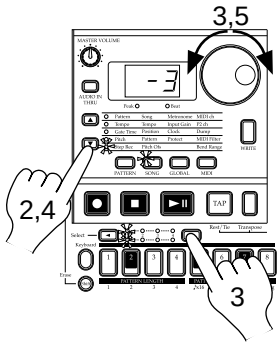
Pitch Offset –24...24

This function offsets the pitch of the pattern at the specified position within the song.

Pitch Offset simply offsets the pitch within the song. It does not affect the pitch data of the pattern itself.

1. If the song is playing, press the Stop / Cancel key to stop playback.
2. Use the cursor keys to make the parameter select LEDs indicate **Position**.
3. Use the dial or Select keys to select the position whose pitch you wish to offset.
4. Use the cursor keys to make the parameter select LEDs indicate **Pitch Offset**.
5. Use the dial to specify the desired pitch offset. **+/–1** offsets the pitch by a semitone, **+/–2** by a whole tone, **+/–7** by a fifth, and **+/–12** by one octave.

Even when the parameter select LEDs indicate **Pitch Offset**, you can use the Select keys to move the position forward or backward in single steps.



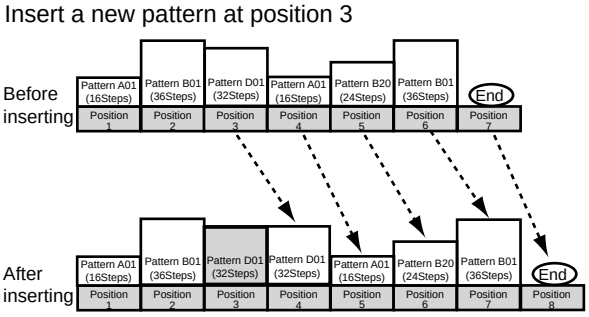
Editing a song

You can insert a new pattern into a song, or delete an existing pattern. You can also add knob movements or your own performance to a song.

If you wish to keep the edited song, you must perform the Write operation. If you select a different song or turn off the power without performing the Write operation, the song will return to the state in which it was before you edited it.

Inserting a pattern at a specified position (Insert Pattern)

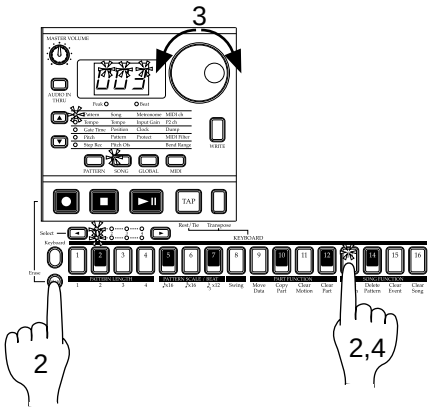
You can insert a pattern at a specified position, and subsequent patterns will be moved backward (toward the end of the song).



1. If the song is playing, press the Stop / Cancel key to stop playback.
2. Hold down the Shift key and press step key 13 (**Insert Pattern**). (The 13 key will blink.)
3. The position indication in the display will blink. Rotate the dial to select the position at which you wish to insert a pattern. (For example if you wish to insert a pattern into position 3. make the display blink "**003**.")
4. Press step key 13 once again, and a pattern will be inserted in front of that position. (The key will go dark.)

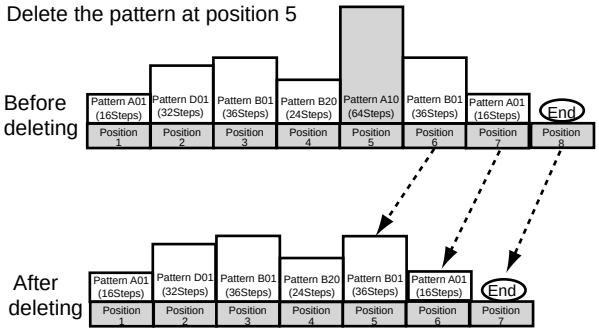
To cancel, press the Stop / Cancel key.

The pattern that is inserted will be the pattern which had previously been at that position. Now you can specify the desired pattern for the position that was inserted.
Data following the inserted pattern will be moved backward.



Deleting a pattern from a specified position (Delete Pattern)

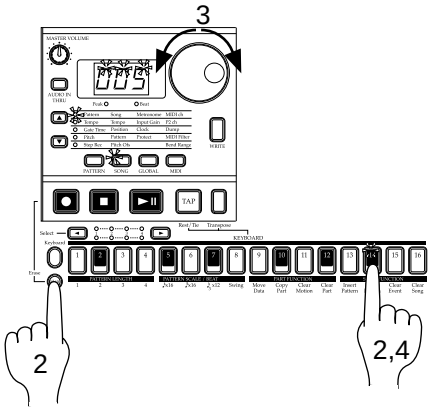
You can delete a pattern from a specified position, and subsequent patterns will be moved forward (toward the beginning of the song).



1. If the song is playing, press the Stop / Cancel key to stop playback.
2. Hold down the Shift key and press step key 14 (**Delete Pattern**). (The 14 key will blink.)
3. The position indication in the display will blink. Rotate the dial to select the position from which you wish to delete the pattern. (For example if you wish to delete the pattern from position 5. make the display blink "**005**.")
4. Press step key 14 once again, and the pattern will be deleted.

To cancel, press the Stop / Cancel key.

When you delete a pattern, the event data (refer to the following page) at that position will also be deleted.
Data following the inserted pattern will be moved forward.



Changing the pattern for a specific position

1. If you are playing back, press the Stop / Cancel key to stop playback.
2. Use the cursor keys to make the parameter select LEDs indicate **Position**.
3. Use the dial to select the position that you wish to modify.
4. Use the cursor keys to make the parameter select LEDs indicate **Pattern**.
5. Use the dial to select the pattern that you wish to assign to the selected position.

If you wish to audition the patterns as you select one, press the Pattern mode key to enter Pattern mode, and listen to the playback. To return to Song mode, press the Stop / Cancel key to stop playback, and then press the
Song mode key.

Recording knob movements or your performance in a song (Event Recording)

In addition to placing patterns in a desired playback order, Song mode also lets you record your realtime performance on the step keys using the Keyboard function, and knob movements you perform.
Recording this type of performance in Song mode is referred to as "event recording."
Event recording lets you record the following three types of performance data (event data).

- Your performance using the Keyboard function
- Your performance using the knobs and switches (only for the selected part)
- Tempo

Event recording allows you to record two or more types of events in the same area, as long as the events are played at the same time.

Event recording always rewrites the previous data ("replace recording"), and when you record your performance, any event recording data previously in that area will be erased. (It is not possible to layer event recording over the same area.)

1. Select the song on which you wish to record events.
2. Use the cursor keys to make the parameter select LEDs indicate **Position**.
3. Use the dial or the Select keys to move to the position at which you wish to begin recording.
4. Press the Rec key, and then press the Play / Pause key to begin event recording.
5. Use the part keys and / or the knobs to perform.
6. Press the Stop / Cancel key to stop event recording.

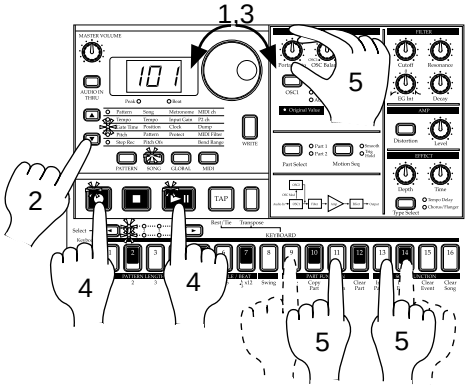
If the musical data of the song coincides with the event-recorded data, the song data will be given priority during playback.

Knob movements that are event-recorded in Song mode will always playback in a way that corresponds to the **Smooth** type motion sequence setting (and not the **Trig Hold** type).

If you wish to save the event recording, you must perform the Write operation. If you switch songs or turn off the power without performing the Write operation, the data that was recorded will be lost.

If during playback you operate a knob that had been event-recorded, playback of the events of that knob will be cancelled until it reaches the next position. However if you modify the tempo that was event-recorded, the tempo will be cancelled until the end of the song.

After rewinding a song, it may not be possible to playback exactly according to the event data.

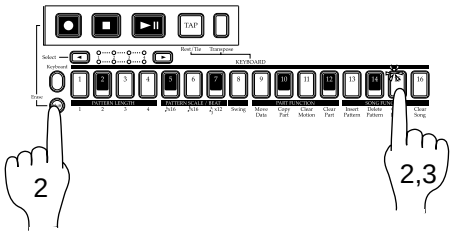


Deleting event data from a song (Clear Event)

This operation deletes all event data from the selected song.

1. If the song is playing, press the Stop / Cancel key to stop playback.
2. Hold down the Shift key and press step key 15 (**Clear Event**). (The 15 key will blink.)
3. Press step key 15 once again to clear the data.

To cancel, press the Stop / Cancel key.



Checking for song event data

If event data has been recorded in a song, holding down the Shift key and pressing the Motion Sequence key will make step keys 13 through 16 light.

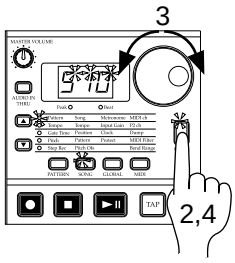
It is not possible to check for event data during playback or recording.

Saving a song (Write)

If you wish to save a song that you create, you must perform this Write operation.
If you decide not to save the song data you create, simply switch songs without performing the Write operation.

1. If the song is playing, press the Stop / Cancel key to stop playback. Use the cursor keys to make the parameter select LEDs indicate **Song**.
2. Press the Write key once (the key will blink). The song number will blink in the display.
3. Rotate the dial to select the writing destination song number.
4. Press the Write key once again to save the data. (The key will light, and then go dark.)

To cancel, press the Stop / Cancel key.



If the Global mode Memory Protect setting is on, it will not be possible to write the data. In this case, turn off the Global mode Memory Protect setting before you execute the Write operation.

Never turn the power off during the Write operation. This may damage the data.

6. Global mode

In Global mode you can set parameters such as Metronome or Protect. Press the Global mode key to enter Global mode.
To execute Global mode, press a different mode key.

The settings you make in Global mode will be cancelled if you turn off the power without Writing. If you wish to save the settings you make, you must perform the Write operation (refer to p.40 "Saving the settings you modify in Global mode").

Metronome settings

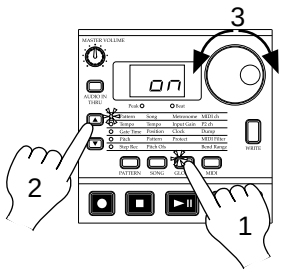
Metronome oFF, r-0, r-1, r-2, on

Specify how the metronome will function. If you will be using realtime recording to create a pattern from scratch, it is convenient to use the metronome. The metronome will sound at quarter-note timing.

oFF: The metronome will not sound.
r-0: The metronome will sound only during recording (when the Rec and Play / Cancel keys are lit).
r-1: When recording, a one-measure count will be sounded before recording begins. The metronome will sound only during recording.
r-2: When recording, a two-measure count will be sounded before recording begins. The metronome will sound only during recording.
on: The metronome will sound during playback and recording. There will be no count before recording begins.

1. Use the cursor keys to make the parameter select LEDs indicate **Metronome**.
2. Rotate the dial to make the metronome setting.
3. Press the Pattern or Song key to return to the previous mode.

The metronome setting cannot be written. When you turn on the power, it will always be "oFF."



Adjusting the volume of the Audio In

Input Gain 0...100

These parameters adjust the volume that is input to the Audio In jacks. For the procedure, refer to p.19 "Connecting various sources to the audio inputs" in section 3. Basic Operation (Quick Start).

Synchronizing the EA-1 with external MIDI devices (MIDI Clock)

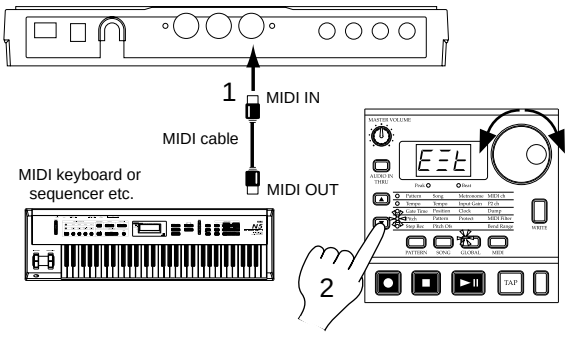
Clock int, Ext

The Global mode **Clock** setting allows the tempo of the **EA-1** to be synchronized with the tempo of an external MIDI device that is able to send or receive MIDI Clock messages.
For details on synchronization settings of your external MIDI device, refer to the owner's manual for your device.

Even if you set Clock to Ext, the EA-1 will operate with its own internal clock if no MIDI Clock messages are being received at its MIDI IN connector.

Synchronizing the EA-1 to a master external MIDI device (Ext)

1. Use a MIDI cable to connect the **MIDI IN** connector of the **EA-1** to the MIDI OUT connector of the external MIDI device (sequencer or synthesizer etc.).
2. Use the cursor keys to make the parameter select LEDs indicate **Clock**.
3. Rotate the dial to select "**Ext**" (external clock).
4. Make settings on the external MIDI device (master) so that it will transmit MIDI Clock messages.
5. Return to Pattern mode or Song mode.
6. When you start the sequencer of the external MIDI device, the **EA-1** will simultaneously begin playback.
7. If MIDI Clock data is being received at the **MIDI IN** connector, you can make the **EA-1** playback in synchronization with the external MIDI device by pressing the **EA-1**'s Play / Pause key.



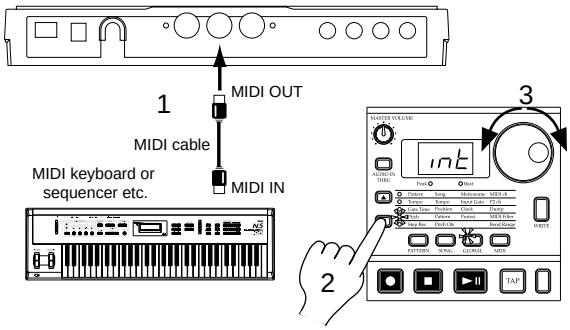
If the MIDI Clock parameter is set to "Ext" and the EA-1 is synchronized to the external MIDI clock, it will synchronize to the tempo of the external sequencer, and it will not be possible to change the tempo on the EA-1.

If a MIDI Start message is received while the EA-1 is already playing in synchronization with MIDI Clock, the EA-1 will begin playback from the beginning of the currently playing pattern (or in the case of a song, from the beginning of the pattern that was playing when the Start message was received).

Synchronizing an external MIDI device to the EA-1 as master (int)

1. Use a MIDI cable to connect the **MIDI OUT** connector of the **EA-1** to the MIDI IN connector of the external MIDI device (sequencer or synthesizer etc.).
2. Use the cursor keys to make the parameter select LEDs indicate **Clock**.
3. Rotate the dial to select "**Int**" (internal clock).
4. Make settings on the external MIDI device (slave) so that it will receive MIDI Clock messages.
5. When you start playback on the **EA-1**, the external MIDI device will begin playback in synchronization.

When you perform the Reset & Play operation to begin playback from the beginning of the pattern, the EA-1 will transmit only a MIDI Start message.



Protect settings (Memory Protect)

Protect **on, oFF**

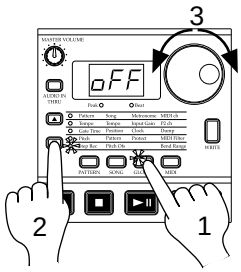
This is the memory protect setting for Pattern mode and Song mode. When protect is "**on**," the Write key will not function, and it will not be possible to rewrite data or to receive MIDI data dumps.
If you wish to save data you edited or to receive a data dump, you must turn protect "**oFF**."

1. Press the Stop / Cancel key to stop playback.
2. Use the cursor keys to make the parameter select LEDs indicate **Protect**.
3. Rotate the dial to turn Protect "**on**" or "**oFF**."

If you wish to save the Protect setting, perform the Global mode Write operation.

This setting applies to Pattern mode and Song mode. In Global mode and MIDI mode, it is always possible to Write data regardless of the Protect setting.

With the factory settings, this will be "on."



Saving the settings you modify in Global mode (Write)

When you perform the Write operation in either Global mode or MIDI mode, the modified settings of both modes will be saved.

Here's how to save the Global mode settings. If you wish to save the settings you modify, you must perform this Write operation. Each time you turn on the power, those settings will be in effect. Conversely, if you do not wish to save the modified settings, simply turn off the power without performing the Write operation.

1. Press the Stop / Cancel key to stop playback.
2. Press the Global mode (or MIDI mode) key.
3. Press the Write key once (the key will blink). The display will indicate "**---**."
4. Press the Write key once again to write the data.

To cancel, press the Stop / Cancel key.

In Global mode or MIDI mode, it is always possible to execute the Write operation, regardless of the Protect settings (see the previous section).

Never turn off the power while data is being written to memory. This may damage the data.

7. MIDI mode

In MIDI mode you can make MIDI-related settings, and dump exclusive data. To enter MIDI mode, press the MIDI mode key. To leave MIDI mode, press a different mode key.

If you turn off the power without Writing, the settings you made in MIDI mode will be lost. If you wish to keep the modified settings, you must execute the Write operation (refer to p.42 "Saving the settings you modify in MIDI mode").

Setting the MIDI channel of part 1 (MIDI ch)

MIDI ch **1...16**

This sets the MIDI channel of part 1. The same MIDI channel is used for both transmission and reception. With the factory settings this will be "**1**."

1. Use the cursor keys to make the parameter select LEDs indicate **MIDI ch**.
2. Rotate the dial to select the channel.

Program changes and exclusive data will be transmitted and received on the MIDI channel you specify here.

Setting the MIDI channel of part 2 (P2 ch)

P2 ch **1...16**

This sets the MIDI channel of part 2. The same MIDI channel is used for both transmission and reception. With the factory settings this will be "**2**."

1. Use the cursor keys to make the parameter select LEDs indicate **P2 ch**.
2. Rotate the dial to select the channel.

If part 1 and part 2 are set to the same channel, the sounds of part 1 and part 2 will be heard simultaneously when controlled from an external MIDI device.

Transmit/receive dump data (MIDI Data Dump)

Dump **Ptn, SnG, ALL**

Transmission

Here's how system exclusive data (pattern data, song data, or Global mode settings) can be transmitted from the **EA-1** to an external MIDI data filer or computer connected to the **MIDI OUT** connector.

1. Connect the **MIDI OUT** connector of the **EA-1** to the MIDI IN connector of an external MIDI device that is able to receive MIDI data dumps (another **EA-1**, or a computer that is running a MIDI data filer program or editing program, etc.).
2. Set the MIDI channel of the external MIDI device and the **EA-1** to match. However when transmitting to a data filer, it is not normally necessary to match the MIDI channel.
3. Use the cursor keys to make the parameter select LEDs indicate **Dump**.
4. Rotate the dial to select the data that you wish to transmit.
   Ptn: All pattern data
   SnG: All song data
   ALL: All data (pattern data, song data, Global data)
5. Press the Play / Pause key to transmit the data dump.

Reception

Here's how **EA-1** system exclusive data can be received from an external MIDI data filer or computer connected to the **MIDI IN** connector.

1. Connect the **MIDI IN** connector of the **EA-1** to the MIDI OUT connector of the external MIDI device that will transmit the MIDI data dump (another **EA-1**, or a computer that is running a MIDI data filer program or editing program, etc.).
2. Set the MIDI channel of the external MIDI device and the **EA-1** to match. However when transmitting from a data filer, it is not normally necessary to match the MIDI channel.
3. Use the cursor keys to make the parameter select LEDs indicate **Dump**.
4. Transmit the data dump from the external MIDI device.

Details on data dumps are provided in the MIDI implementation chart of the EA-1.
Consult your local Korg distributor for more information on MIDI implementation

Do not touch the keys of the EA-1 while a data dump is in progress.

When the parameter select LEDs indicate Dump, system exclusive data can be transmitted or received even if the MIDI Filter parameter "E" is set to "-."
If the MIDI Filter parameter "E" is set to "O," system exclusive data can be transmitted or received in any mode.

MIDI filter settings

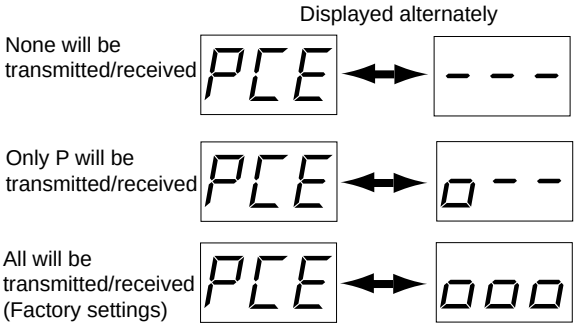
Here you can select the types of MIDI message that will be transmitted and received.
For each character "**PCE**" in the display, select "**O**" if you want that type of message to be transmitted and received, or select "**-**" if you do not want that type of message to be transmitted or received.

1. Use the cursor keys to make the parameter select LEDs indicate **MIDI Filter**.
2. Rotate the dial to select the combination of message types that will be transmitted and received; "O" allows transmission and reception, and "-" disables it.

   P: Transmission / reception of Program Change, Bank Select, and Song Select messages.

   C: Transmission / reception of Control Change messages.

   E: Transmission / reception of Exclusive data. However when the parameter select LEDs indicate **Dump**, Exclu sive data can be transmitted / received regardless of this setting.



Adjusting the pitch bend range

You can adjust the range of the pitch bend that will occur when MIDI Pitch Bend messages are received.

Bend Range –12...12

1. Use the cursor keys to make the parameter select LEDs indicate **Bend Range**.
2. Rotate the dial to select the bend range. **+/–1** will allow a bend range of a semitone, **+/–2** a whole tone, **+/–7** a fifth, and **+/–12** an octave.

On some sounds, it may not be possible to bend the pitch upward a full octave.

Saving the settings you modify in MIDI mode (Write)

When you perform the Write operation in either MIDI mode or Global mode, the modified settings of both modes will be saved.

Here's how to save the MIDI mode settings. If you wish to save the settings you modify, you must perform this Write operation. Each time you turn on the power, those settings will be in effect. Conversely, if you do not wish to save the modified settings, simply turn off the power without performing the Write operation.

1. Press the Stop / Cancel key to stop playback.
2. Press the MIDI mode (or Global mode) key.
3. Press the Write key once (the key will blink). The display will indicate "**---**."
4. Press the Write key once again to write the data.

To cancel, press the Stop / Cancel key.

In Global mode or MIDI mode, it is always possible to execute the Write operation, regardless of the Protect settings (see the previous section).

Never turn off the power while data is being written to memory. This may damage the data.

8. Appendices

About MIDI

1. MIDI channels

Similarly to a television, data can be received when the channel of the receiving device matches the channel on which the data is being transmitted.
The transmit / receive channel of the EA-1 is set by the MIDI channel setting in MIDI mode.

2. Note-on/off

When you use the Keyboard function and press a step key, the note number assigned to that step key will be transmitted as a Note-on message [9n, kk, vv] (n: channel, kk: note number, vv: velocity) on the MIDI channel specified for that part. On the EA-1, the vv: velocity value is fixed at 64H (100). When you release the step key, a note-off message [8n, kk, vv] is transmitted. However, most devices do not transmit note-off velocity, and neither does the EA-1. When note-on / off messages are received on the MIDI channel assigned to a part, that part will sound.
Note-on / off messages are transmitted and received on the MIDI channels that you specify for part 1 and part 2 in MIDI mode.

3. Switching patterns

When you switch patterns, Program Change and Bank Select messages [Bn, 00, mm] (control change #00), [Bn, 20, bb] (control change #32) (mm: bank number upper byte, bb: bank number lower byte, together allowing 16,384 banks to be selected) will be transmitted.
If a Program Change is received on the MIDI channel of the EA-1, patterns will be switched within the same group (e.g., from A01 to A02). After a Bank Select has been received, the next-received Program Change will be able to switch to a pattern of a different group (e.g., from A01 to C01).
Transmission and reception of Program Change messages can be controlled by the MIDI mode MIDI Filter setting.

Bank Select			
MSB	LSB	Program Change	Pattern number
00	00	0...127	A01...b64
00	01	0...127	C01...d64

4 Applying pitch bend

Pitch bend messages [En, vv, vv] (vv, vv: lower and upper bytes of the value, together expressing 16,384 steps, where 8192 (vv, vv = 00H, 40H) is the center value) are not transmitted, but can be received to apply a pitch bend effect. The range of pitch bending is specified by the Pitch Bend Range setting of MIDI mode.

5. Using NRPN messages to edit

NPRN (Non Registered Parameter No.) messages are messages to which manufacturers are free to assign their own functions. On the EA-1, NRPN messages are assigned to all knobs and keys of the Synthesizer section other than Motion Seq.
To edit, first use NRPN (LSB) [Bn, 62, rr] and NRPN (MSB) [Bn, 63, mm] (control change #98 and 99) (rr, mm: lower and upper bytes of the parameter no.) to select the parameter. Then transmit Data Entry (MSB) [Bn, 06, mm] and Data Entry (LSB) [Bn, 26, vv] (control change #06 and 38) (mm, vv: upper and lower bytes of the value, together expressing 16,384 steps) to set the value. The EA-1 uses only the MSB value (128 steps) of the Data Entry message.

6. If "stuck notes" occur

If for some reason a note fails to stop sounding, you can usually switch modes to stop the sound. If a note played via MIDI fails to stop, you can simultaneously press the Shift key and the Stop / Cancel key to perform a MIDI Reset.

7. About synchronization

Two or more sequencers can be connected via MIDI and made to playback in synchronization. Messages used for synchronization (realtime messages) include Timing Clock [F8], Start [FA], Continue [FB], and Stop [FC].
In a synchronized system, one synthesizer (the master) will transmit these messages, and the other sequencer(s) (the slave(s)) will receive these messages. The slave devices will playback according to the tempo specified by the Timing Clock messages transmitted by the master. Twenty-four Timing Clock messages are transmitted for each quarter note. When the EA-1's Global mode parameter Clock is set to INT, it will be the master device, and will transmit these realtime messages. When Clock is set to EXT, it will be the slave device, and will receive these realtime messages. However even when Clock is set to EXT, the EA-1 will operate according to its own internal clock if no Timing Clock messages are being received. The Start message specifies when playback will begin. When the Start / Pause key is pressed on the master device, it will transmit a Start message. Slave devices that receive this Start message will synchronize to the Timing Clock messages subsequently received, and will begin playback from the beginning. If the Start / Pause key is pressed on the master devices when it is paused, the master will transmit a Continue message. When a slave device receives the Continue message, it will resume playback from the point where it is currently stopped. If the Stop key is pressed during playback, the master will transmit a Stop message. Slave devices will stop playback when they receive a Stop message.

8. Synchronization in Song mode

In Song mode, the EA-1 can transmit and receive Song Select and Song Position Pointer messages. When you switch songs, a Song Select [F3 ss] message will be transmitted (ss: song number, where one of 128 songs can be selected. On the EA-1 you can select 16 songs.) If the EA-1 receives a Song Select message in Song mode, it will switch songs. Transmission and reception of Song Select messages can be restricted by the MIDI Filter settings of MIDI mode. If you change the current position on the master device (i.e., the device whose Clock is set to INT) when the song is stopped, a Song Position Pointer message [F2 pp pp] will be transmitted. (pp: the number of MIDI beats from the beginning of the song; i.e., the number of Timing Clocks divided by six.) Song Position Pointer indicates the location at which the sequencer is currently stopped. When Song Position Pointer is received in Song mode by a slave device (i.e., a device whose Clock is set to EXT), it will change the location at which its song is currently stopped to match the location of the master. However on the EA-1, the length of each pattern may be different, so the master and slave will not necessarily be in

the same location. When the Start / Pause key is pressed on the master device, a Continue message is transmitted, and the song will begin playback from the currently selected position. When the slave device receives the Continue message, it will synchronize to the Timing Clock messages and begin playback from the current point in the song. In the same way as synchronizing the playback from the beginning of the song, you can specify the location at which playback will start, and then playback in synchronization. If you use the dial or Select keys to fast-forward or rewind while the song is playing, Song Position Pointer messages will not be transmitted. Be aware that if you perform these operations during synchronized playback, the synchronization will be lost. Also, even if Song Position Pointer messages are received during playback, the playback location will not change.

9. About system exclusive messages

Manufacturers are free to use system exclusive messages in any way they choose, and these messages are used mainly to transmit and receive parameters that are specific to particular devices, such as sound data and editing data.
The system exclusive message format of the EA-1 is [F0, 42, 3n, 51, ... F7] (n: exclusive channel).
However, some system exclusive messages have been defined for use in a specific way, and these are called "universal system exclusive messages."
Of the several different universal system exclusive messages, the EA-1 supports the following one.
- When an Inquiry Message Request [F0, 7E, nn, 06, 01, F7] is received, the EA-1 will transmit an Inquiry Message [F0, 7E, nn, 06, 02, (nine bytes), F7] that means "I am a Korg EA-1 and my system version is ..."

10. Transmitting sound setting data (Data Dump)

Song, Pattern, or All (song, pattern, global) data can be transmitted as MIDI exclusive data, and stored on an external device. This data is transmitted by the MIDI mode Dump command. The channel used for transmission and reception of this data is set by the MIDI mode MIDI ch setting. Data dumps are also transmitted when a Data Dump Request message is received.

11. Editing sounds etc.

By sending MIDI exclusive data dumps, you can rewrite all patterns or individual programs. By using NRPN messages in Pattern mode, you can edit the knobs that are active for each part.

Troubleshooting

The display does not light up when I press the Power switch!

- Is the AC adapter connected?
- Is the AC adapter plugged into an AC outlet?

No sound!

- Is your amp, mixer, or headphones connected to the correct jack? (Can you playback a pattern? If so, the connections are correct.)
- Are your amp or mixer powered-on and set correctly?
- Is the master volume knob of the EA-1 raised?

Sound does not stop!

- When a pattern is played back, it will continue playing repeatedly. When you are finished listening to a pattern, press the Stop / Cancel key (p.13).

Sounds or operations are different than when I edited!

- Did you perform the Write operation after editing? (p.33, 38) After you have edited, you must perform the Write operation before switching songs or patterns, or turning off the power.
- Did you edit the selected pattern or song after writing it?

Can't control via MIDI!

- Is the MIDI cable or special cable connected correctly?

When playing the EA-1 from an external device

- Has the EA-1 been set to receive MIDI data on the channel on which the data is being transmitted? (p.41)
- Is the MIDI mode MIDI Channel parameter set to the desired channel? (p.41)
- Are the MIDI mode MIDI Filter settings set appropriately? (p.42)

When playing an external device from the EA-1

- Does the MIDI channel of the EA-1 match the MIDI channel of the receiving device? (p.41)

Cannot write a pattern or song!

- Is the Global mode Protect setting turned "**on**"? (p.40)

Playing the step keys does not sound the specified sound!

- After editing the sound of a part, did you perform the Write operation? (p.33)
- Is the Keyboard function turned on?
- Is a motion sequence being used? (p.29)

Error messages

Er.1 Data could not be written.

Er.2 When writing a song to a different song number, the maximum number of recordable events was exceeded. Use the Clear Event operation to erase unwanted events from the song.

Er.9 Protect was turned "**on**" for the memory into which you attempted to write data. In Global mode, turn the Protect setting "**oFF**" (p.40).

Full When event-recording on a song, event data memory has filled up. If you attempt to record additional events, the "memory full" message will appear immediately. Either use Clear Event to delete unwanted events from a song, or record blank data to clear the memory.

Restoring the factory set data

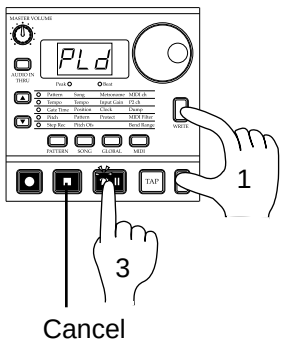
The pattern and song data with which the **EA-1** is shipped from the factory is referred to as the "preloaded data," and you can restore this preloaded data back into the memory of the **EA-1**. When you do this, the patterns you created and the songs which use these patterns will be erased, and replaced by the preloaded data. If you wish to keep the patterns and songs you created, you must save the data on a data filer etc. before you load the preloaded data.

1. While simultaneously pressing the **Transpose** key and the **Write** key, turn on the power.
2. The display will indicate "**PLd**," and the Play / Pause key will blink.
3. To load the factory preloaded data, press the blinking Play / Pause key.

This will require apporoximately 15 seconds.
To cancel, press the Stop / Cancel key.

When loading is complete, the **EA-1** will return to its initial state. After several seconds the display will indicate pattern number "**A01**," and the **EA-1** will be in Pattern mode.

Never turn off the power during the Load process. The data may be damaged.



Specifications

System: Analog modeling

Number of parts: 2 parts

Memory capacity: 256 patterns, 16 songs

Effects: Distortion, Tempo Delay, Chorus / Flanger

Sequencer: Pattern
- Maximum 64 steps per part
- Motion sequence
- One parameter for each part, 64 events

Song
- Maximum 256 patterns per song
- Maximum approximately 65,500 events for event recording

Connectors: PHONES
- Stereo phone plug
- Nominal level: 21 mW + 21 mW (32 ohms)

OUTPUT (PART1 / MIX, PART2)
- Phone jacks: mono x 2
- Nominal output level: -10 dBu
- Output impedance: 1 k-ohms

AUDIO IN (phone jack: mono x 1)
- Nominal input level: -10 dBu
- Input impedance: 47 k-ohms

MIDI (IN, OUT, THRU)

Power supply: DC 9 V (AC adapter included)

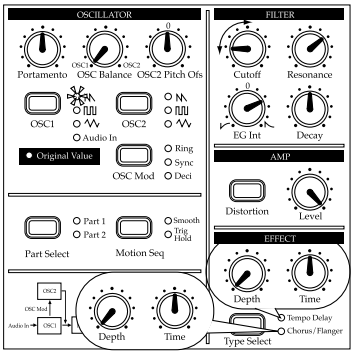
Power consumption: 8 W

Dimensions: 300 (W) x 222.5 (D) x 53.4 (H) mm (with rubber feet)

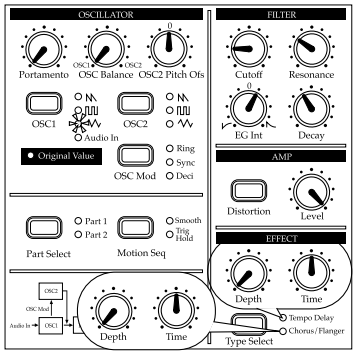
Weight: 1.25 kg

Example sounds

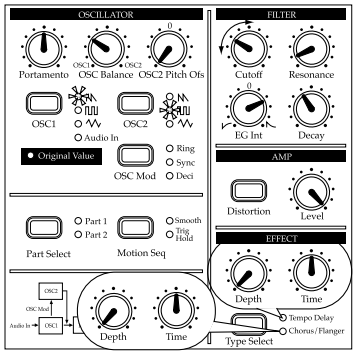
Saw Bass



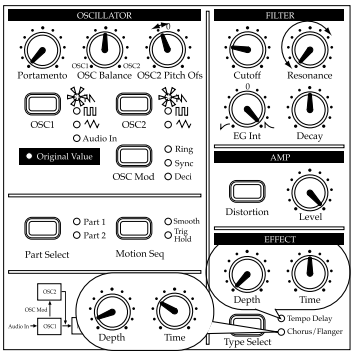
Sub Bass



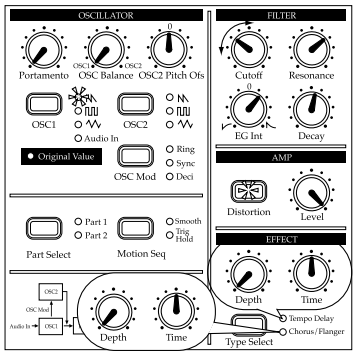
Octave Bass



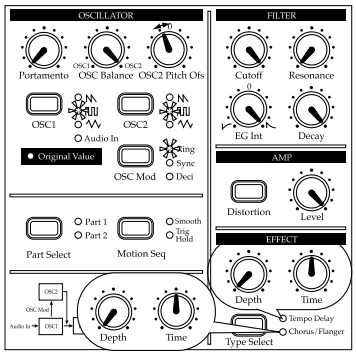
Detuned Saw



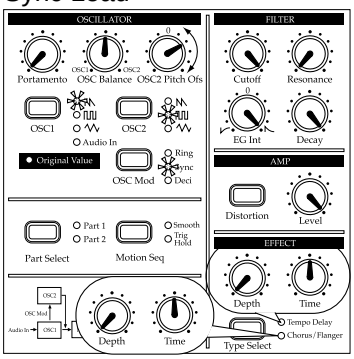
Distortion Lead/Bass



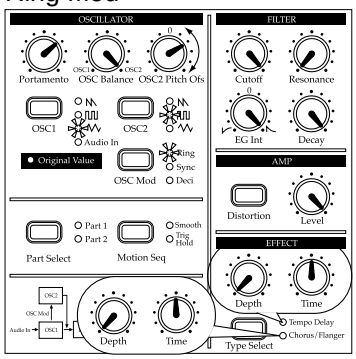
Pulse Width Mod



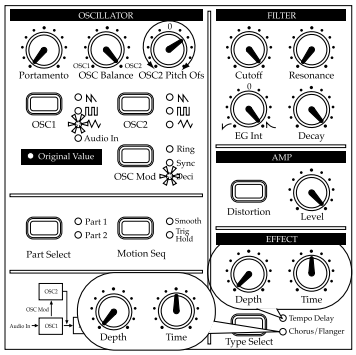
Sync Lead



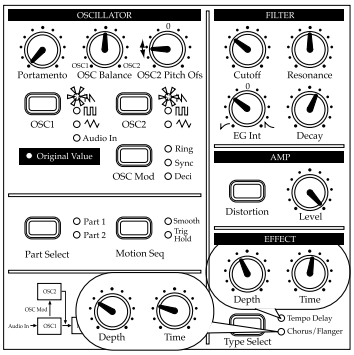
Ring Mod



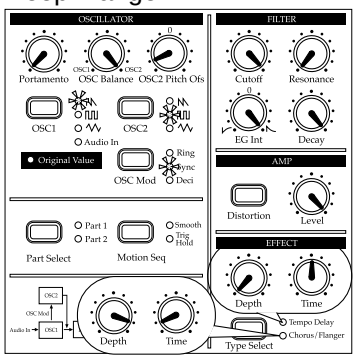
Decimator



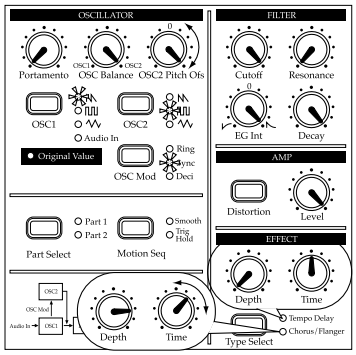
5th Pad



Deep Flange

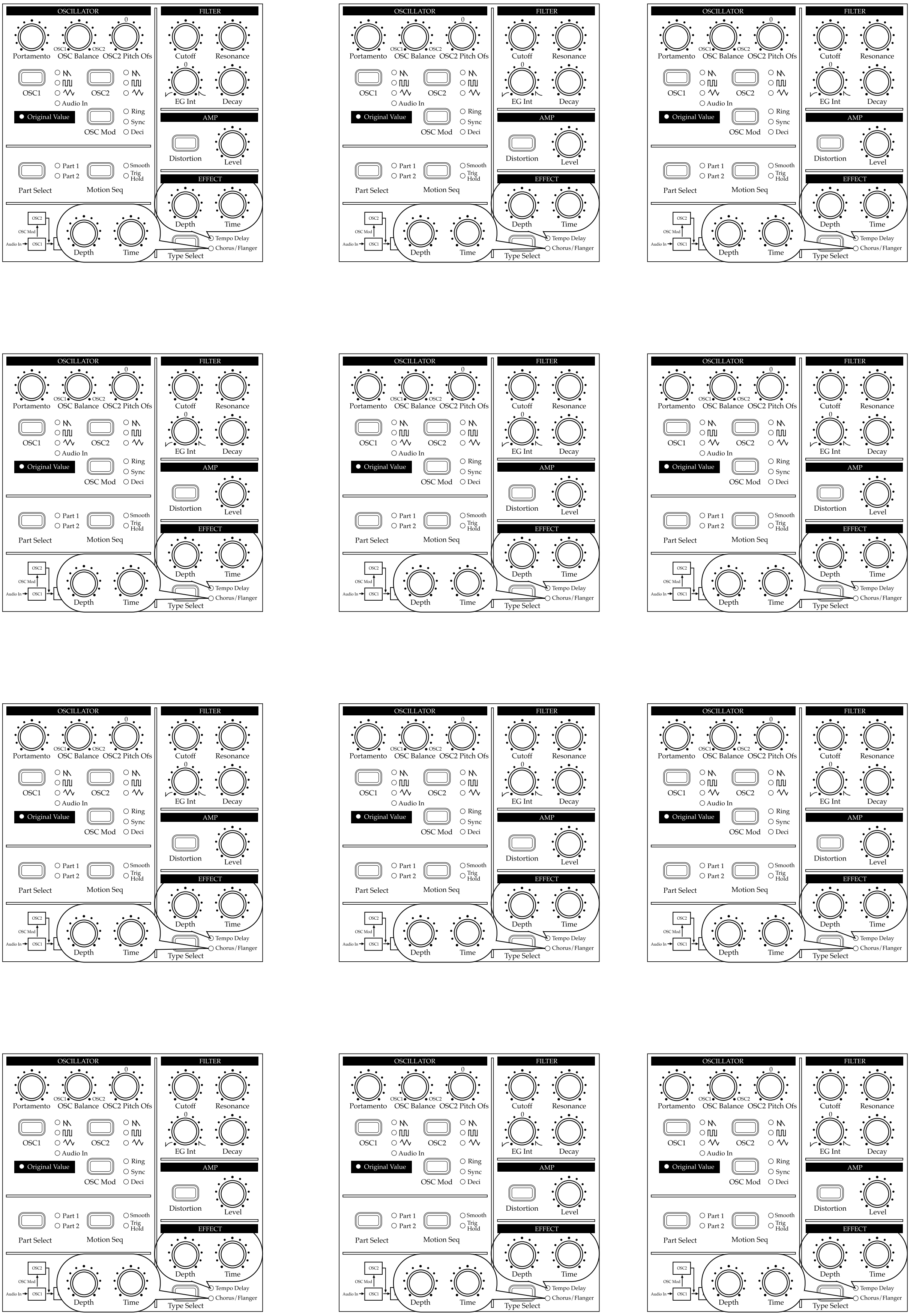


Beam



Blank Chart

When you have created a sound that you like, you can store the knob and key locations in this page.



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Pattern Name List

* Patterns and initial data for the demo song are assigned to bank D.
* The 'A' in the Style column indicates that this pattern uses Audio In for oscillator 1.
* The first pattern of each style is assigned to step keys 1...16 of the Pattern Set function.

A Bank

No.	Pattern Name	Style	Tempo
A01	Goa Trance 1	Techno	135
A02	Goa Trance 2	Techno	135
A03	Enter the Tribesmen	Techno	125
A04	Analog Seq	Techno	130
A05	Filter Sweep & A.Seq	Techno 'A'	130
A06	Z Scale 1	Techno	130
A07	Z Scale 2	Techno	130
A08	Z Scale 3	Techno	130
A09	AUDIO in Minimal	Techno 'A'	130
A10	Detroit	Techno	135
A11	Goa Trance 3	Techno	140
A12	Hypno Trance	Techno	139
A13	Electrick	Techno	140
A14	Bleeps N' Blips	Techno	160
A15	The Aliens Have Landed	Techno	125
A16	Long Life	Techno	140
A17	Haunting Melody	Techno	135
A18	Like to Move?	Techno	135
A19	The Longing	Techno	135
A20	Trancy Force 1	Techno	140
A21	Trancy Force 2	Techno	140
A22	Trancy Force 3	Techno	140
A23	Trancy Force 4	Techno	140
A24	Trancer	Techno	120
A25	The Law	Techno	120
A26	Acid Tek 1	Techno	140
A27	Acid Tek 2	Techno	140
A28	Waterfall	Techno	135
A29	Arp Harp	Techno	120
A30	PortaTek	Techno	135
A31	Prevision	Techno	120
A32	Drivin'	Techno	120
A33	Minimal	Techno	120
A34	Ninja Trance 1	Techno	120
A35	Ninja Trance 2	Techno	120
A36	Rolling Qube 1	Techno	120
A37	Rolling Qube 2	Techno	120
A38	OliverTwist 1	Techno	100
A39	OliverTwist 2	Techno	100
A40	Turbo Charge	Techno	120
A41	Talking Bass	Techno	135
A42	AUDIO and Stabs	Techno 'A'	135
A43	Alarms	Techno	135
A44	Emergency	Techno	130
A45	Space Accordeon	Techno	130
A46	Hello Stella!	Techno	130
A47	Blue Pig	Techno	128
A48	A Night with U	Techno	120
A49	Komputer Musik 1	Techno	120
A50	Komputer Musik 2	Techno	120
A51	Web Site	Techno	124
A52	Bell Ring	Techno	124
A53	Phat Bass Man	Techno	120
A54	Electro Sequence	Techno	124
A55	SQ-10	Techno	120
A56	Tek Boom	Techno	130
A57	Classic Aceeed	Techno	120
A58	Nasty	Techno	135
A59	Motion on Top	Techno	137
A60	Ladders	Techno	145
A61	Fallen Angel	Techno	110
A62	Mysterious Seq	Techno	108
A63	AUDIO Logic	Techno 'A'	100
A64	Beijing Duck	Techno	100

B Bank

No.	Pattern Name	Style	Tempo
B01	AUDIO in House	House 'A'	134
B02	Soulful House	House	130
B03	Chicago House	House	130
B04	Ambient 1	House	120
B05	Ambient 2	House	120
B06	House Chord 1	House	120
B07	House Chord 2	House	120
B08	Str8 outta Brooklyn	House	120
B09	Warp House	House 'A'	140
B10	Sweaky	House	140
B11	Raver	House	130
B12	Bad Jazz	House	140
B13	Happy Hardcore	House	135
B14	Hit Me Twice!	House	140
B15	Handbag	House	135
B16	Sell Out	House	130
B17	Almost Cute...	House	125
B18	Shake It!	House	130
B19	House X	House	128
B20	Face' it	House	128
B21	Housey	House	120
B22	Garage House	Garage	134
B23	Gissa Kiss	Garage	134
B24	Speed Garage 1	Garage	134
B25	Underground	Garage	134
B26	The Beady Eye	Garage	130
B27	Num Nums	Garage	130
B28	Pork Scratchin'	Garage	130
B29	Two Step 1	Garage	134
B30	Two Step 2	Garage	134
B31	Speed Garage 2	Garage	130
B32	Speed Garage 3	Garage	130
B33	Organ Bass 1	Garage	134
B34	Organ Bass 2	Garage	134
B35	Chocolate Groove	HipHop/R&B	96
B36	Pea Funk 1	HipHop/R&B	100
B37	Pea Funk 2	HipHop/R&B	100
B38	Phunky Bop	HipHop/R&B	104
B39	Typical Hip Hop	HipHop/R&B	80
B40	AUDIO in Hip Hop	HipHop/R&B 'A'	90
B41	Daytime R&B	HipHop/R&B	90
B42	Swing Beat	HipHop/R&B	90
B43	Sub Woofer	HipHop/R&B	96
B44	Troy Town	HipHop/R&B	110
B45	Lil' Jimmy's Swing	HipHop/R&B	100
B46	Funky Jamma	HipHop/R&B	102
B47	Rainy Funk	HipHop/R&B	100
B48	Star Boots 1	HipHop/R&B	80
B49	Star Boots 2	HipHop/R&B	80
B50	War Head	BigBeat/Rock	122
B51	Sensation	BigBeat/Rock	122
B52	Icecream	BigBeat/Rock	122
B53	Hook	BigBeat/Rock	130
B54	Big Beat 1	BigBeat/Rock	110
B55	Big Beat 2	BigBeat/Rock	110
B56	Big Beat Trance	BigBeat/Rock	115
B57	Drift Beat 1	BigBeat/Rock	96
B58	Drift Beat 2	BigBeat/Rock	96
B59	Enemy	BigBeat/Rock	105
B60	Monster's Coming Home	BigBeat/Rock	135
B61	Wake Up	BigBeat/Rock	136
B62	Hysterical Spy	BigBeat/Rock	135
B63	Jump Up 1	Drum'n'Bass	170
B64	Jump Up 2	Drum'n'Bass	166

C Bank

No.	Pattern Name	Style	Tempo
C01	DNB Chord Seq1	Drum'n'Bass	166
C02	DNB Chord Seq2	Drum'n'Bass	166
C03	Drum n' Bass	Drum'n'Bass	170
C04	n' Bass 1	Drum'n'Bass	166
C05	n' Bass 2	Drum'n'Bass	166
C06	DNB Party	Drum'n'Bass	160
C07	TechStep	Drum'n'Bass	180
C08	Jump Up 3	Drum'n'Bass	185
C09	Electribe Vox 1	Drum'n'Bass	160
C10	Electribe Vox 2	Drum'n'Bass	160
C11	Medicine Manic	Drum'n'Bass	170
C12	Party Dip	Drum'n'Bass	153
C13	Jump Up 4	Drum'n'Bass	165
C14	Drum'n It	Drum'n'Bass	165
C15	Red Zone	Drum'n'Bass	163
C16	Start it UP!	Drum'n'Bass	161
C17	Darkness 1	Trip Hop	80
C18	Darkness 2	Trip Hop	80
C19	Tripwire	Trip Hop	85
C20	Cold Stone	Trip Hop	90
C21	Trip Hop (Shadow)	Trip Hop	84
C22	Trip Hop (Light)	Trip Hop	84
C23	Psycokinesis	Trip Hop	87
C24	Breakdown	Trip Hop	90
C25	Chorus Bass	Trip Hop	90
C26	Neo Bossa 1	Other	110
C27	Neo Bossa 2	Other	110
C28	Dark Lounge 1	Other	100
C29	Dark Lounge 2	Other	100
C30	Loyal ROBOT	Other	131
C31	Jamaican Dreams	Other	134
C32	A Farytale	Other	131
C33	Raggamuffin	Other	163
C34	Raggalicious	Other	110
C35	Reggae	Other	124
C36	SLOW to GO	Other	75
C37	Luna On Snow	Other	130
C38	Still Dancing?	Rhythmic	150
C39	4 and More...	Rhythmic	150
C40	Tribal Drums	Rhythmic	164
C41	Rapid River	Rhythmic	162
C42	5:16 A.M.	Rhythmic	160
C43	Hurry Up!!	Rhythmic	146
C44	Oddball	Rhythmic	135
C45	Nu Skool Lead	Rhythmic	130
C46	Warble	Rhythmic	130
C47	Lunatic	Rhythmic	130
C48	Water Drops	Rhythmic	125
C49	War Drumz	Rhythmic	124
C50	Water Logged Drumz	Rhythmic	120
C51	Alien Tribe	Rhythmic	120
C52	Nuclear Bugs	Rhythmic	110
C53	Influx 1	Rhythmic	115
C54	Bad Trip	Rhythmic	90
C55	Influx 2	Rhythmic	180
C56	Phat 16's	Rhythmic	88
C57	Black Hole	S.E	83
C58	Robot Monks	S.E	80
C59	Transceiver	S.E 'A'	122
C60	Submarine	S.E 'A'	120
C61	Heaven No.13	S.E	120
C62	Out of Time	S.E	120
C63	Living Forest	S.E	120
C64	Calling Mars	S.E	140

Song Name List

S08...S16**:** Blank

S01: Electribe Remix Part1
S02: Electribe Remix Part2
S03: STATION X Troyster Mix
S04: Bass Burn
S05: Macrocaustic
S06: Elect-Rave
S07: Dugan's Midnight X-press

[Synthesizer]

ELECTRIBE A·EA-1 MIDI Implementation Chart

1999.2.3

Function ...		Transmitted	Recognized	Remarks
Basic channel	Default	1 – 16	1 – 16	Memorized
	Changed	1 – 16	1 – 16	
Mode	Default		3	
	Messages	×	×	
	Altered	**********		
Note number :	True voice	0– 127	9n, v=1– 127	
		**********		
Velocity	Note ON	×	×	
	Note OFF	×	×	
After Touch	Polyphonic	×	×	
	Channel	×	×	
Pitch Bender		×	O	*C
Control Change	0,32	O	O	Bank Select(MSB,LSB) *P
	98, 99	O	O	NRPN(LSB,MSB) *C
	8	O	O	Data Entry(MSB) *C
	121	×	O	Reset All Controllers
Program Change :	True#	O 0 – 127	O 0 – 127	Transmitted / received in Pattern mode *P
		**********	0 – 127	
System Exclusive		O	O	Can always be transmitted / received in the MIDI Dump page *2 *E
System Common	: Song Pos	O	O	Transmitted / received in Song mode *1
	: Song Sel	O 0 – 15	O 0 – 15	*P
	: Tune	×	×	
System Realtime	: Clock	O	O	*1
	: Commands	O	O	*1
Aux Messages	: Local ON / OFF	×	O	
	: All Notes OFF	×	O123-127	
	: Active Sense	O	O	
	: Reset	×	×	
Notes		*P, *C, *E: Sent and received when MIDI mode MIDI Filter (P, C, E) respectively are set to "O" *1: Sent but not received when Global mode Clock is "Int."When set to "Ext," received but not sent. *2: In addition to Korg exclusive messages, also responds to Inquiry messages.		

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO O : Yes

Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO × : No

❋ Consult your local Korg distributor for more information on MIDI IMPLEMENTATION.

ELECTRIBE·A EA-1 Owner's Manual

NOTICE

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KORG INC.
15 - 12, Shimotakaido 1 - chome, Suginami-ku, Tokyo, Japan.

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