

AKAI

professional

XE8

MIDI DRUM EXPANDER

WARNING

To prevent fire or shock hazard, do not expose this appliance to rain or moisture.

Operator's Manual

Warning

Power requirements

Power requirements for electrical equipment differ from area to area. Please ensure that your machine meets the power requirements in your area.

If in doubt, consult a qualified electrician.

220V, 50Hz for Europe except UK

240V, 50Hz for UK and Australia

120V, 60Hz for U.S.A. and Canada

What you should know to protect yourself and the Akai XE8.

Watch out! You might get an electric shock.

- Never touch the plug with wet hands.
- Always pull out by the plug and never the cord.
- Only let a qualified professional repair or reassemble the Akai XE8. An unauthorized person might touch the internal parts and receive a serious electric shock.
- Never allow a child to put anything, especially metal, into the Akai XE8.

Let's protect the Akai XE8 too.

- Use only a household AC power source. Never use a DC power source.
- If water is spilled on the Akai XE8, disconnect the power and call your dealer.
- Make sure that the Akai XE8 is well ventilated and away from direct sunlight.
- To avoid damage to the internal circuits and the external surface, keep away from heat (stoves, etc.)
- Avoid using spray type insecticide near the Akai XE8. It can damage the finish and might ignite suddenly.
- To avoid damaging the finish, never use denaturated alcohol, paint thinner or other similar chemicals to clean the Akai XE8.
- Place the Akai XE8 on a flat and solid surface.

To enjoy the Akai XE8 for a long time, please read this operator's manual thoroughly.

Should a problem persist, write down the model and serial numbers and all pertinent data regarding warranty coverage as well as a clear description of the existing trouble. Then, contact your nearest authorized Akai Service Station, or the Service Department of Akai Electric Co., Ltd., Tokyo, Japan.

Lithium battery

This product is equipped with a lithium battery for memory back-up. The lithium battery should only be replaced qualified service personnel. Improper handling may cause risk of explosion.

Precautions

FOR CUSTOMERS IN THE UK

IMPORTANT FOR YOUR SAFETY

The flex supplied with your machine will have two wires as shown in the illustration.

TWO CORE FLEX IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

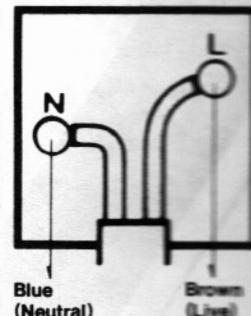
Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

* Do not connect any wire to the larger pin marked E or \perp when wiring a plug. Ensure that all terminals are securely tightened and that no loose strands of wire exist.



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

Reorient the receiving antenna

Relocate the computer with respect to the receiver

Move the computer away from the receiver

Plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems"

This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

TABLE OF CONTENTS

Chapter 1. IntroductionP. 2

- 1. 1 Features
- 1. 2 Before operating the unit
- 1. 3 Major specifications

Chapter 2. Name of Each Section and Its FunctionsP. 4

- 2. 1 Front panel
- 2. 2 Rear panel

Chapter 3. How to Connect the UnitP. 6

Chapter 4. How to Play the UnitP. 7

- 4. 1 Try getting the sound out
- 4. 2 Setting memory protection to prevent programs from being destroyed
- 4. 3 MIDI connection and setting MIDI ch/Key note
- 4. 4 How to expand the sound

Chapter 5. How to Make Original Drum SoundsP. 12

- 5. 1 About the parameter guide
- 5. 2 About the sound source
- 5. 3 Procedure to set pitch-related parameters
- 5. 4 Procedure to set volume parameters
- 5. 5 How to use individual out

Chapter 6. Program Copy and Data DumpP. 20

- 6. 1 How to copy the program
- 6. 2 About the XE8 setting check
 - Program Data (basic program data sheet)
 - Program Data Sheet (make A duplicate copies for using)
 - Parameter Guide/Sampled Sound List
 - MIDI Implementation Chart
 - Examples of application by connecting with other models

Chapter 1. Introduction

1.1 Features

AKAI XE8 is a rack-mount type, Programmable Sample Sound Module/MIDI Drum Expander. XE8 was designed as an expansion sound source for drum sequencers, synthesizers, MIDI sequencers and MIDI master keyboards. Various functional features of XE8 include the following: XE8 is a rhythm sound source with 16 basic internal sounds (memory capacity 1 MB) and 32 external sounds (EXTERNAL CARD 1, 2), which means total memory can be expanded to 3 MB. A custom-designed IC made it possible to put the quality of a 16 bit machine and hardware necessary for music production in a simple EIA 1U size. XE8 is can also store up to 32 programs of diverse parameters so that subtle sound nuance can be expressed.

One program consists of sounds 1 - 16. Each sound can be processed by changing the parameters of the sample sound. Not only can you play, those sounds separately, but you can play as many as eight sounds with one key note by setting the sounds to that MIDI key note.

In other words, you can play up to eight sounds at the same time with one key or one pad. You can also mix a sample sound with different parameters.

When you change the program, the unit switches to the new program without cutting off the sound on the previous program. Therefore, you can use all sounds in the unit by making skillful use of a program change in the middle of tunes.

1.2 Before operating the unit

The following items are very important. Please be sure to observe them.

- ◆ **Never attempt to open casing of the XE8. Please refer servicing to qualified personnel only.**
- ◆ **Please do not block the air vents of the XE8.**
- ◆ **For XE8 to function in optimum condition, do not use XE8 in the following places.**
 1. Places exposed to heat and direct sunlight.
 2. Places with high humidity (be particularly careful with rain or liquid spill) or excessive dust.
 3. Places likely to be influenced by mechanical vibration or shock.
 4. Places with poor air circulation.
 5. Extremely cold places. (You need to warm up the unit when using it in a very cold place.)

- ◆ **If you drop any liquid on XE8, turn off the power immediately and contact with the Akai Service Station or your local retail store.**

In addition, do not touch the XE8 with wet hands.

- ◆ **Remove stains and dust on the unit with a soft, dry cloth.**

For strong stains, put a small portion of diluted dish soap or detergent on a soft cloth and wipe off. Please do not use industrial alcohol, paint thinner and other similar chemical products for cleaning this unit as they will damage the surface of XE8.

- ◆ **Be careful with aerosol bombs as it may damage or deteriorate the unit surface.**

- ◆ **Changing the built-in lithium battery.**

XE8 uses a lithium battery to back-up the programming data. The life of the lithium battery is about 3 years in this unit. Be sure to contact the place of purchase or Akai service station for replacement of the lithium battery. The memory will be lost when replacing the lithium battery. Please write down your important data on the program chart supplied with this owner's manual on page 24 (make duplicate copies for more charts), and input the data again after replacing the lithium battery.

- ◆ **Remodeling is dangerous. Furthermore, XE8 will not be able to fully demonstrate its functions.**

1.3 Major Specifications

XE8 MIDI DRUM EXPANDER

Sound format: Digital sampling 16 bit linear/32kHz or 44kHz PCM sound source

Number of notes generated simultaneously: 8

Display:
DATA: 7 segment LED (two-digit)
SOUND NO: 7 segment LED (two-digit)

Internal memory: Battery back-up type/program memory 16 sounds × 32 programs

Sound source:
Internal: ROM (16 sounds)
Expanded: IC card ROM × 2 slots
Note) Number of sounds on IC card ROM varies by card.

Functions:
POWER: Power switch
S-SEL: Sampled sounds select switch (INT, EX1, EX2)
P-SEL: Parameter's group select switch (P1, P2, P3)
SHOT: One shot play key
PLAY/EDIT SELECT: UTILITY, NOTE, TUN-MOD, TUNE, PROGRAM, PLAY, OUTPUT
VCA-MOD, VCA-ENV, SW-RANGE, SW-TIME
DATA/SOUND NO: Data entry (Parameter's value), Sample Sound select knob
VOLUME/VELOCITY: Output volume, Velocity value control knob

Connection terminal: MIDI IN (DIN 5 Pins)
MIDI OUT (DIN 5 Pins)
MIDI TURN (DIN 5 Pins)
OUTPUT: MIX (6.3mm phone jack) × 1
INDIVIDUAL (6.3mm phone jack) × 8
PHONE: (6.3mm stereo phone jack) × 1
EXTERNAL SLOT: 2 slots (1 each on front and rear)

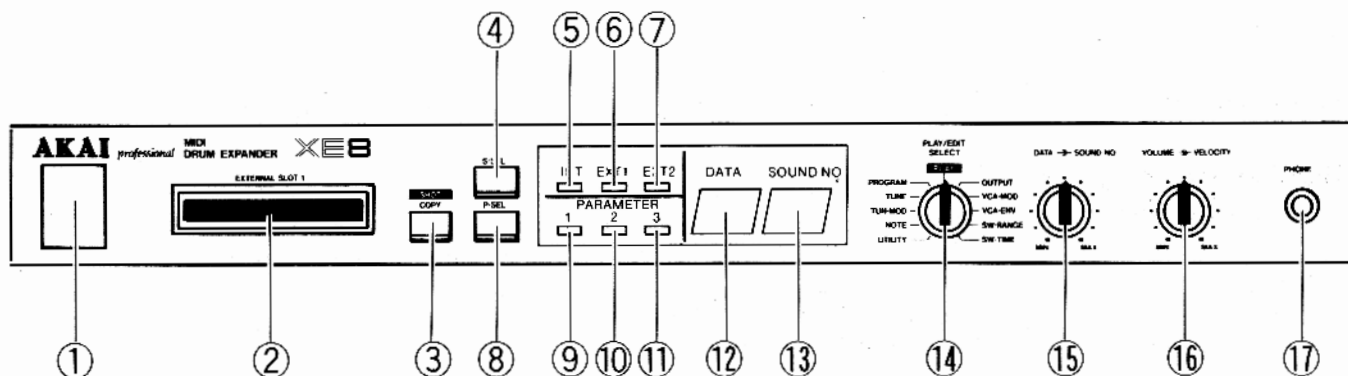
Dimensions: 483W × 44.1H × 300D

Weight: 3.6kg

* Specifications and appearance subject to change without notice for improvement.

Chapter 2. Names of Each Section and Its Functions

2.1 Front panel

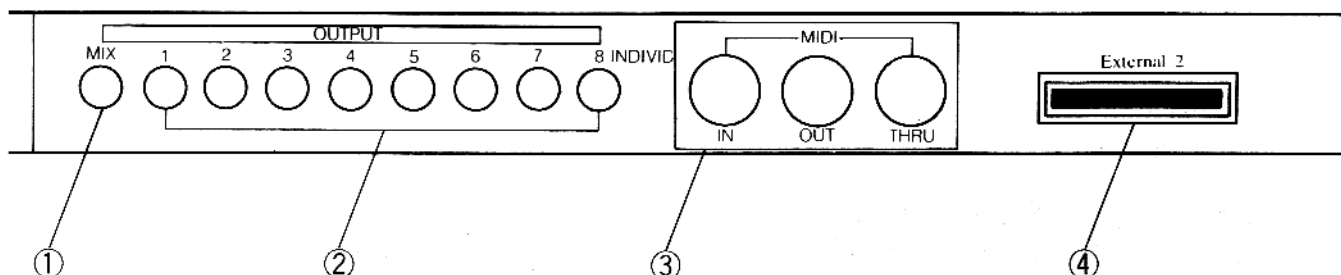


- ① **POWER:**
Switch to turn the power on and off.
- ② **EXTERNAL SLOT 1:**
Slot for inserting the expanded sound source IC card which is available as an option.
- ③ **SHOT/COPY:**
“One shot key” for to monitor the sound. Use this key to select the sound source and check the sound you have edited. Also used in “Program copy” operation.
- ④ **S-SEL:**
Used when selecting either internal sound, expanded sound source IC card 1 or IC card 2. LEDs ⑤ to ⑦ will go on in turn every time this key is pressed.
- ⑤ **INT:**
If this LED goes on when the [S-SEL] key is pressed, you can select sampled sounds from internal sound.
- ⑥ **EXT1:**
If this LED goes on when the [S-SEL] key is pressed, you can select sampled sounds from the expanded sound source IC card which is inserted in EXTERNAL SLOT 1 on the front panel.
- ⑦ **EXT2:**
If this LED goes on when the [S-SEL] key is pressed, you can select sampled sounds from the expanded sound source IC card which is inserted in EXTERNAL SLOT 2 on the rear panel.
- ⑧ **P-SEL:**
This is a key to set the parameter group. LEDs ⑨ to ⑪ will go on in turn every time this key is pressed.
- ⑨ **PARAMETER 1:**
Press the [P-SEL] key, and you can edit the parameter you have selected with “PLAY/EDIT SELECT”.
- ⑩ **PARAMETER 2:**
Press the [P-SEL] key, and you can edit the parameter you have selected with “PLAY/EDIT SELECT”.
- ⑪ **PARAMETER 3:**
Press the [P-SEL] key, and you can edit the parameter you have selected with “PLAY/EDIT SELECT”.

Note) Please refer to the diagram on Parameter Guide for information on parameters in each parameter group.

- ⑫ **DATA:**
Changes the program number and value of each parameter.
- ⑬ **SOUND NO.:**
Changes the sound number.
- ⑭ **PLAY/EDIT SELECT:**
Used to set parameters during editing. Set this switch to PLAY position when playing the unit.
- ⑮ **DATA/SOUND NO.:**
The inner knob is used to set the value of each parameter. The outer knob is used to select the sound number.
- ⑯ **VOLUME/VELOCITY:**
The inner knob is used to set the output level (mixed out). The headphone volume is also adjusted with this knob. The volume of each sound is set in the program. The outer knob is used for adjust the velocity when using the [Shot] Key.
- ⑰ **PHONES:**
This is a "jack" for connecting headphones. However, the output is monaural (mixed out).

2.2 Rear panel



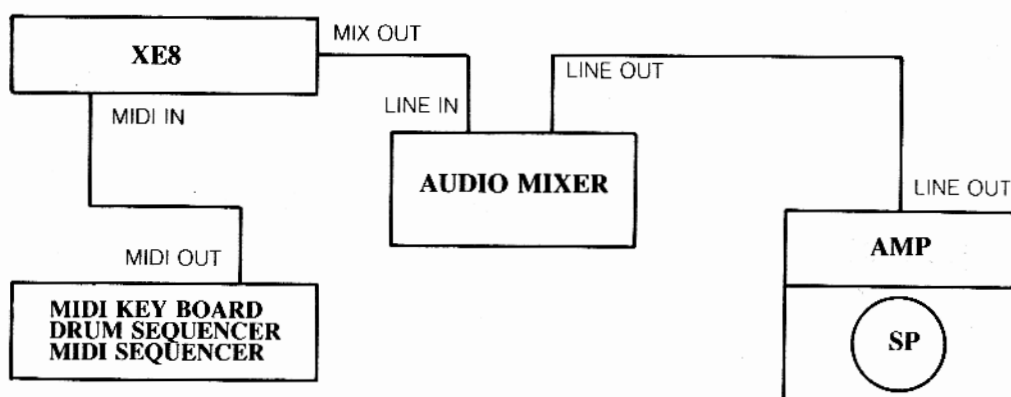
- ① **OUTPUT (MIX):**
All 16 sounds are mixed and outputted.
- ② **OUTPUT (INDIVIDUAL):**
16 sounds are separated into 8 groups and are outputted from these jacks. Therefore, by using an audio mixer, you can pan each sound in stereo and put each sound through different effects.
- ③ **MIDI:**
 - IN:** Terminal to receive external MIDI data from MIDI keyboards and MIDI sequencers. Connect this terminal with the "MIDI OUT" of these units.
 - OUT:** Terminal to send out data programmed by this unit. Connect this terminal with the "MIDI IN" of other MIDI units.
 - THRU:** Terminal to send the data received at "MIDI IN" as it is. Connect with the "MIDI IN" of external MIDI keyboards, MIDI sequencers and MIDI effectors.
- ④ **EXTERNAL SLOT 2:**
Slot for inserting the expanded sound source IC card.

Chapter 3. How to Connect the Unit

Connection with your system

Connect XE8 to your system by following the procedure below.

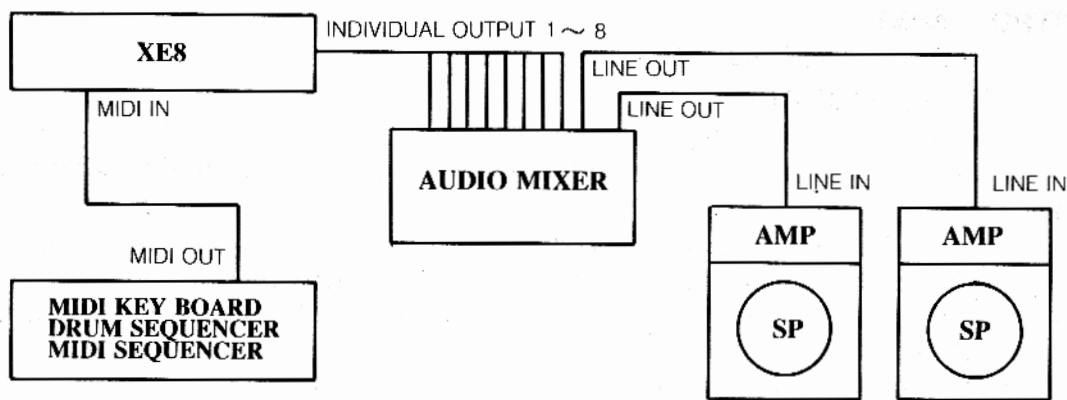
- 1) First, connect the MIDI cables. Be sure to turn off the power on your system and XE8 when making the connection.
- 2) Connect XE8's **[MIDI IN]** with the "MIDI OUT" of your drum sequencer, MIDI sequencer or MIDI keyboard.
- 3) Then connect XE8's **[MIX OUT]** to the "LINE IN" of your audio mixer or amplifier.



- 4) If you want to monitor with your headphones, connect your stereo headphones to the **[PHONES]** jack on the front panel.

Connection using "INDIVIDUAL OUTPUT"

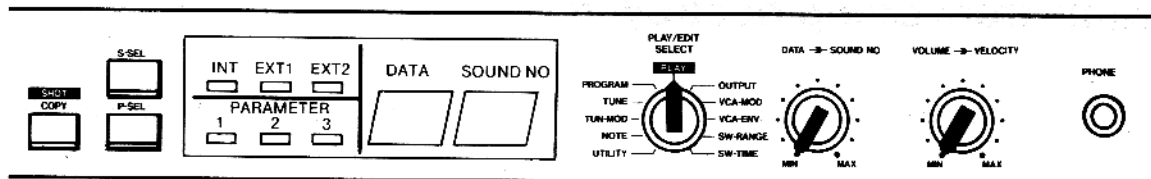
To get each sound separately out from the eight "INDIVIDUAL OUTPUTS", the connection should be made as follows.



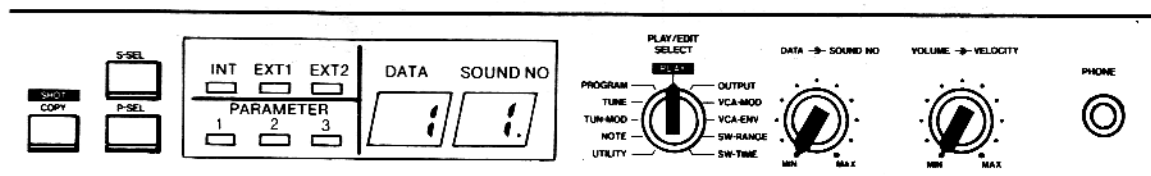
Chapter 4. How to Play the Unit

4.1 Try getting the sound out

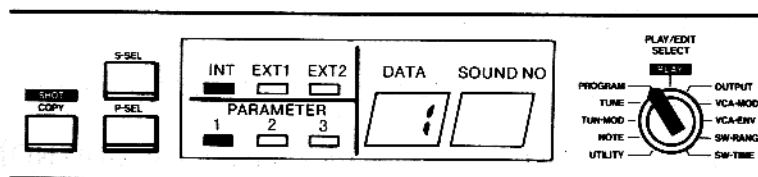
- 1) Make preparations to listen to the sound by either connecting **[MIX OUT]** on the rear panel with your amplifier or connecting your headphones to the **[PHONES]** jack on the front panel.
- 2) Set the **[PLAY/EDIT SELECT]** knob on **[PLAY]**. Turn the **[DATA]** knob, **[SOUND NO]** knob, **[VOLUME]** knob and **[VELOCITY]** knob fully counterclockwise.



- 3) Turn on the power switch. All displays will go on as the figure below.



- 4) Turn the **[VELOCITY]** knob on the front panel to maximum. Slowly turn the **[VOLUME]** knob clockwise and press the **[SHOT KEY]**. A kick sound comes out every time you press the key. Set the volume to the proper level. Now, let us listen to the 16 sounds in the basic set (Program 1).
- 5) Slowly turn the **[SOUND NO]** knob clockwise and press the **[SHOT KEY]**. Sound changes with the number at **[SOUND NO]** on the display. You have heard all the sounds in Program No1. Now, let us listen to the sounds in all programs.
- 6) Set the **[PLAY/EDIT SELECT]** knob to **[PROGRAM]** and use the **[P-SEL]** switch to set to **[PARAMETER 1]**.



The **[DATA]** number on the display refers to the current program number.

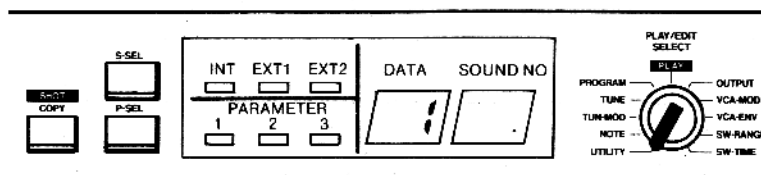
- 7) Turn the **[DATA]** knob and select a new program. A new program number will appear on **[DATA]** on the display.
- 8) Set the **[PLAY/EDIT SELECT]** knob to **[PLAY]** and listen to each sound in the new program by following the procedure at 5) above.

Now you have learned how to change the programs and sounds.

4.2 Setting memory protection to prevent your important programs from being destroyed

XE8 is equipped with a memory protect function to prevent important program from being cleared by mistake.

- 1) Set the **[PLAY/EDIT SELECT]** knob to **UTILITY** and use the **[P-SEL]** switch to call **[PARAMETER 1]**. (Diagram below)



DATE section on the display will show whether the protection is on or off. It will display "ON" when the protection is on and "OFF" when it is off. At the same time, the LED which indicates whether the protection is on or off will go on at the lower right part of **[SOUND NO]** on the display.

- 2) Set ON/OFF by turning **[DATE]** knob.

* XE8 memory protection is set to "ON" at the time of shipment from the factory.

4.3 MIDI connection and setting MIDI ch/Key note

Here's how to get the sound out from XE8 using a keyboard or a sequencer. Connect the **[MIDI OUT]** of each unit to the **[MIDI IN]** of XE8.

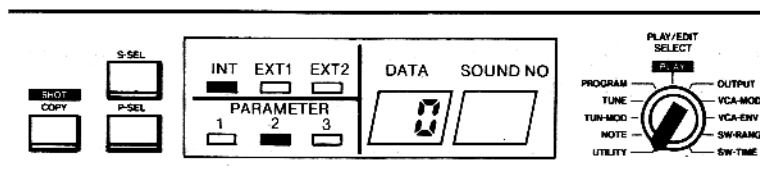
XE8 is set to "Omni 1 mode" (receives all MIDI channels) at the time of shipment from the factory.

If the MIDI channel is correct, the MIDI indicator at the center of **[SOUND NO]** of the display will go on when the signal is received.

As the note number of XE8's program is set to keyboards with 61 keys, sound will come out by pressing the keys in this condition.

〈Setting MIDI channels〉

- 1) Turn off memory protection.
- 2) Set the **[PLAY/EDIT SELECT]** knob to **[UTILITY]** and use the **[P-SEL]** switch to call **[PARAMETER 2]**.

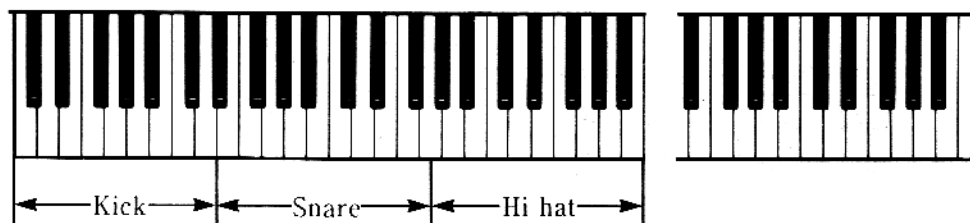


The **[DATA]** number on the display refers to the current MIDI channel.
 “0” stands for “Omni ON” mode, and figures 1-16 indicate MIDI channel number.

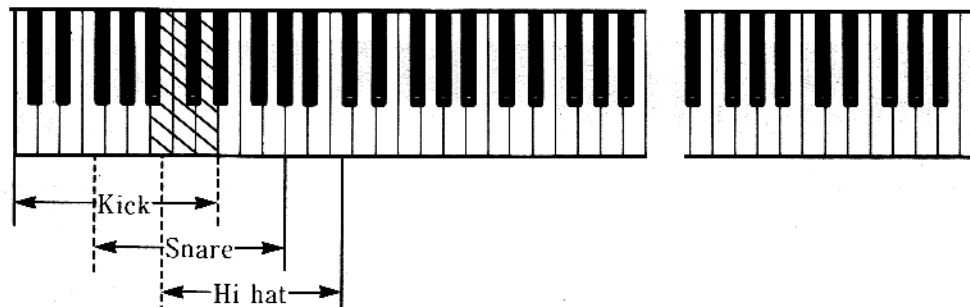
- 3) Turn the **[DATA]** knob and set the desired MIDI channel.
- 4) Turn on memory protection.

〈Setting key notes〉

Key notes can be selected from key numbers 0 - 127. Up to 16 keys can be assigned to one sound.



A key note can be set independently for each sound of each program. Therefore, you can set the key note to play as many as eight sounds at the same time with one key.

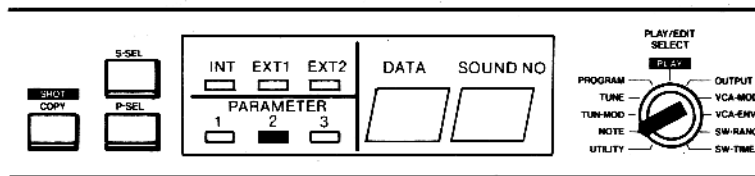


For instance, by setting your unit to the setting in the above diagram, three sounds (kick, snare, hi-hat) will come out simultaneously by playing the keys where three sounds overlap, i.e. keys with oblique lines. Please refer to the figure for the key note numbers at the end of this section on page 10. Similarly, when you are playing drum pads, you can play three sounds at the same time with

one drum pad by assigning the same note number for kick, snare and hi-hat. However, you will need to use AKAI ME35T (AUDIO/MIDI TRIGGER) because you can not connect the drum pad directly to XE8.

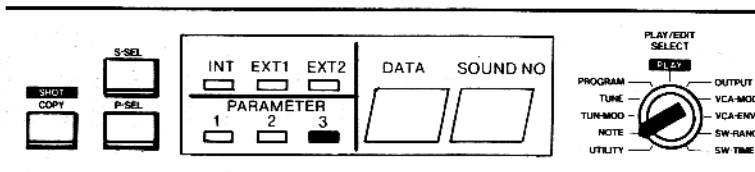
Here's an explanation on how to set key notes.

- 1) Turn off memory protection.
- 2) Call the key note number to the sound you want to edit.
- 3) Set the **[PLAY/EDIT SELECT]** knob to **NOTE** and use the **[P-SEL]** switch to call **[PARAMETER 2]**. (Diagram below)



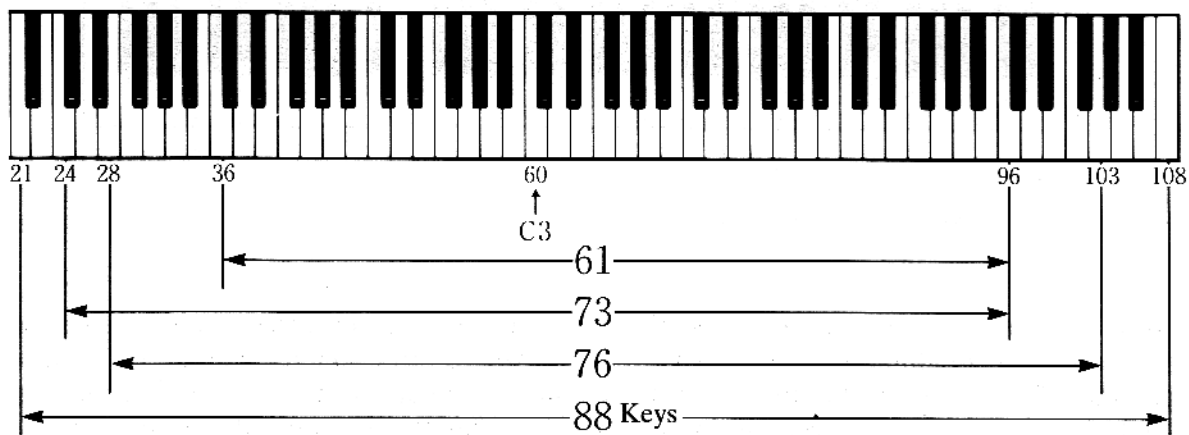
The **[DATA]** number on the display refers to the lower limit of the key number for this sound.

- 4) Turn the **[DATA]** knob and set it to the desired key note number.
- 5) Use **[P-SEL]** switch to call **[PARAMETER 3]**.



The **[DATA]** number on the display refers to the upper limit of key number for this sound.

- 6) Turn the **[DATA]** knob and set it to the desired key note number. This completes the setting of the key note number. Turn on memory protection.



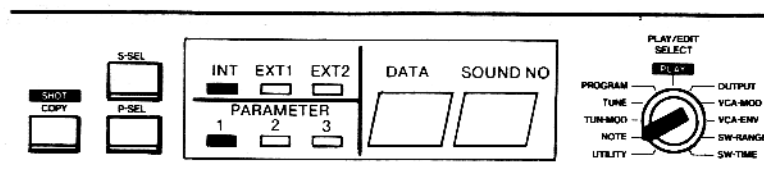
4.4 How to expand the sound

This section explains the procedure for installing an expanded sound source IC card which is available as an option.

- 1) After turning off the power, insert the expanded sound source IC card into EXTERNAL SLOT 1 on the front panel or EXTERNAL SLOT 2 on the rear panel.

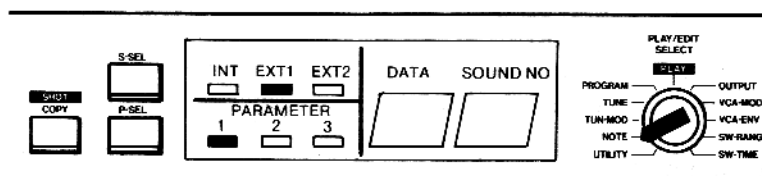
Note) Please do not insert or pull out the expanded sound source IC card while the power is on. It can cause a malfunction or damage.

- 2) Turn on the power and turn OFF memory protection.
- 3) Set the program number and sound number to which you want to load the sound from the expanded sound source IC card. For procedure from here onward, refer to Section 4.1 "Let's get the sound out."
- 4) Set the [PLAY/EDIT SELECT] knob to [NOTE] and use the [P-SEL] switch to call [PARAMETER 1]. (Diagram below)



illust

- 5) Use [S-SEL] to set the unit to [EXT1] or [EXT2]. The expanded sound source IC card on the front panel is [EXT1] and the external sound source IC card on the rear panel is [EXT2]. The figure below shows the display when the external sound source IC card is inserted into the front panel.



illust

- 6) Press the [SHOT] key and listen to the sounds on the expanded sound source IC card.
- 7) Slowly turn the [DATA] knob and press the [SHOT] key.
Sound will be changed with the number at DATA on the display.

* Although a maximum of 16 sounds are on the card, some cards may not have 16 sounds due to the length of sounds on the card. **Sound is not outputted if no sound number is displayed by the operation at 7).**

Chapter 5. How to Create Your Original Drum Sound

〈Let's create your own sound〉

As shown in the block diagram, editing of a sample sound can be roughly divided into pitch editing and volume editing. Not only by changing volume and pitch, but also you can modulate the sound by using real-time MIDI performance information (MIDI Key Note or Velocity). That is, you can control volume and pitch by the range of keyboard or touch. Before starting the work, refer to the Sound List and Parameter Guide and use the **[SOUND NO]** knob to choose the sound you are going to edit. Then check the sounds with the **[PLAY/EDIT SELECT]** knob and the **[SHOT]** key and decide which sample sound to use for that sound.

Note) Be sure to turn off memory protection before starting the editing process.

5.1 About the parameter guide

Please refer to **[PARAMETER GUIDE]** in the separate table.

One parameter group contains three parameters (PARAMETER 1, 2 & 3). Parameter groups are selected using the **[PLAY/EDIT SELECT]** knob which is on the right side of the display, while each parameter (PARAMETER 1, 2 & 3) is selected with the **[P-SEL]** key.

In both cases, the value inside parentheses indicates the range value that can be set. Values are set by using **[DATA]** knob. In the XE8, these values are displayed by a two-digit 7 segment LED. Therefore, the following display method is used when setting three-digit values.

☐ When setting three-digit values ☐

100 → 00. 110 → 10.
101 → 01. 127 → 27.

5.2 About the sound

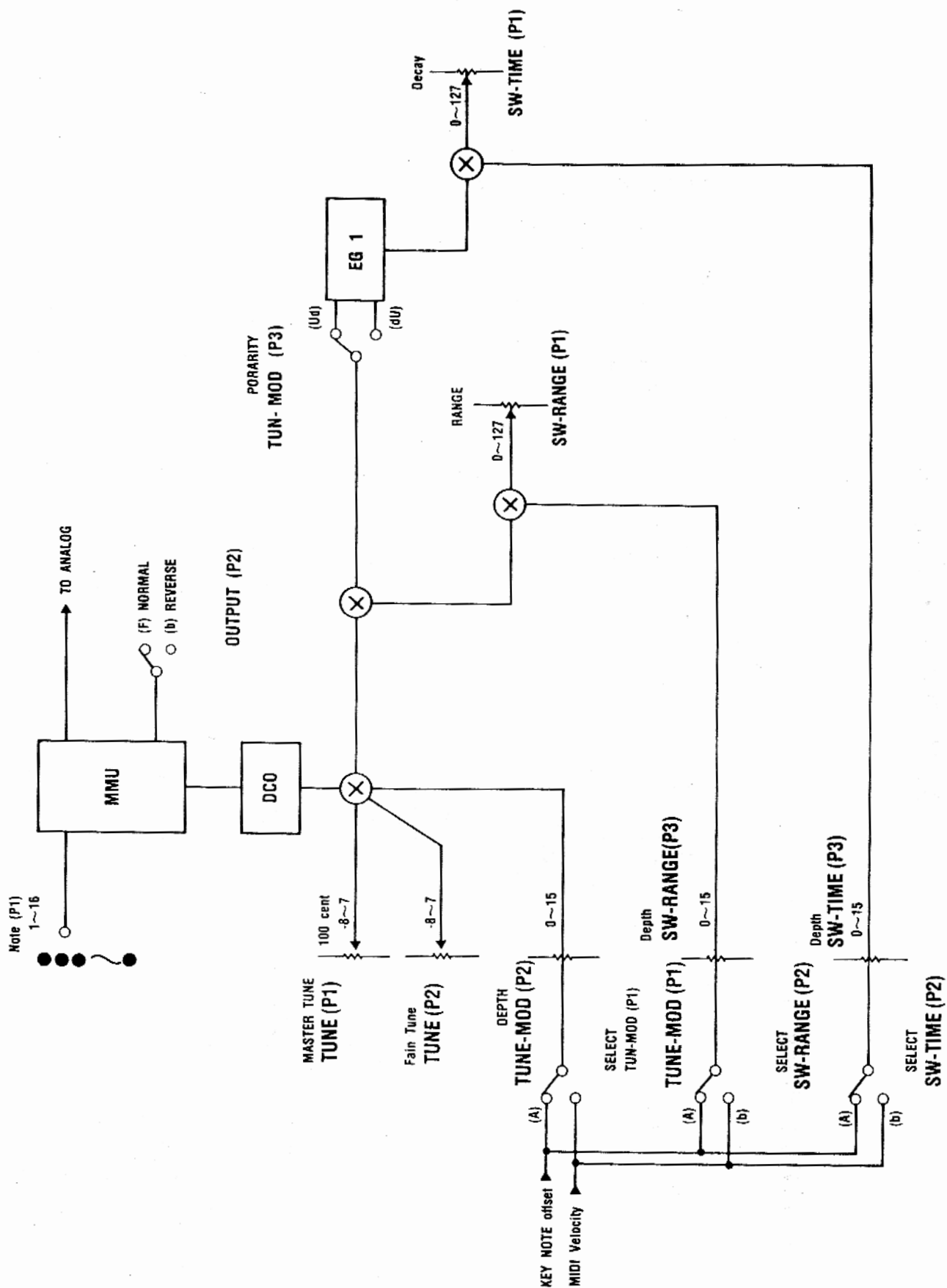
XE8 has 16 internal sounds. In addition, you can get a wide variety of sounds by using the "Exclusive XE8 external sound source IC card."

☐ List of sounds in internal ROM ☐

- | | |
|--------------------------|----------------------------|
| 1. KICK0 (Kick Drum 0) | 9. SNARE1 (Snare Drum 1) |
| 2. KICK1 (Kick Drum 1) | 10. SNARE2 (Snare Drum 2) |
| 3. KICK2 (Kick Drum 2) | 11. TOM0 (Tom Tom 0) |
| 4. KICK3 (Kick Drum 3) | 12. TOM1 (Tom Tom 1) |
| 5. HIHT0 (High Hat 0) | 13. CRASH (Crash Cymbal) |
| 6. HIHT1 (High Hat 1) | 14. JAZZ RID (Ride Cymbal) |
| 7. HIHT2 (High Hat 2) | 15. CLAP (Hand Clap) |
| 8. SNARE0 (Snare Drum 0) | 16. PERC (Percussion) |

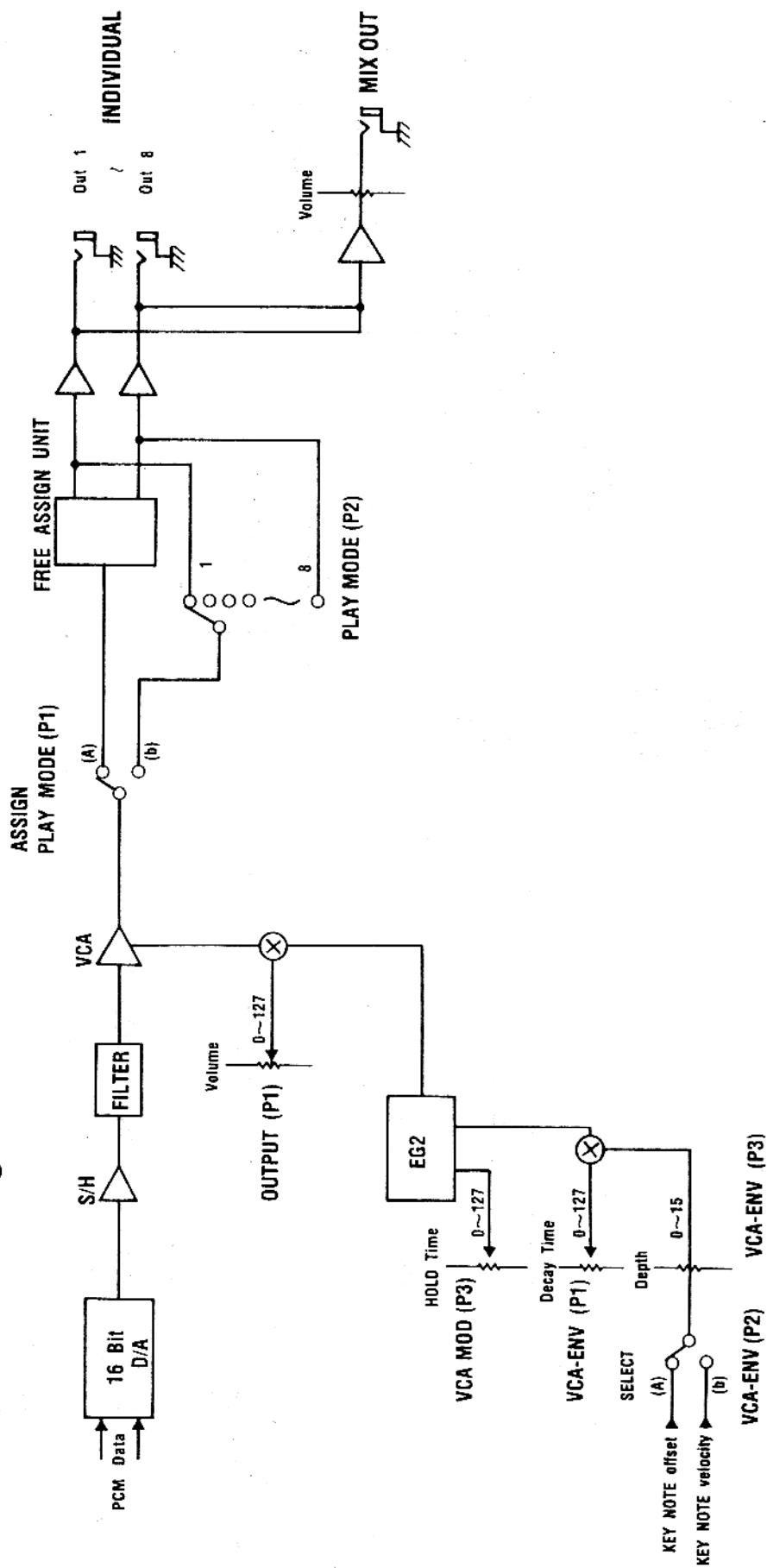
You can also find this sound list in **[SAMPLED SOUND LIST (reverse side of PARAMETERS GUIDE)]**. In addition, this list contains sounds that are stored in the "Exclusive XE-8 external sound source IC card"

TUNING Block Diagram



OUTPUT Block Diagram

OUTPUT Block Diagram



5.3 Procedures to set pitch-related parameters

Tuning edit

- 1) Set the **[PLAY/EDIT SELECT]** knob to TUNE and use the **[P-SEL]** switch to set to **[PARAMETER 1]**. The figure at (DATA) on the display refers to the value of the current master tuning.
- 2) Slowly turn **[DATA]** knob, press the SHOT key and set the tuning to the desired level by listening to the sound. Variable range is in 16 steps, from -8 to 7. (-8~0~7)
- 3) Use the **[P-SEL]** switch to set the parameter to **[PARAMETER 2]**. The figure at **[DATA]** on the display refers to the value of the current fine tuning.
* Fine tuning is a tuning between "half steps" in the 12 equal temperament.
- 4) Follow the procedure described at 2) to get the desired tuning.
 - ① Setting tuning
 - ② Setting tuning modulation via MIDI information
 - ③ Setting tuning envelope
 - ④ Setting the direction of sampled sound playback (forward, reverse)

① Set tuning

Basic tuning of sampled sound is decided here. Follow the procedure for "Tune EDIT" described above. Before starting the work, select the sound you are going to edit with the **[SOUND]** knob.

② Setting tuning modulation via MIDI information

Set the **[PLAY/EDIT SELECT]** knob to **[TUN-MOD]**.

Decide at **[PARAMETER 1]** whether to modulate at **[Key Note]** or **[Velocity]** of MIDI information. Modulation will change by Key Note OFFSET when "K" is on display, by velocity when "V" is on display.

Then set to **[PARAMETER 2]** and determine the depth of MIDI information selected above. When the value is 15, the maximum depth will be 12 equal temperament (at Key Note OFFSET). Please listen to the sound by changing the depth.

③ Setting tuning envelope

- a) Setting the value of envelope depth
- b) Setting sweep time
- c) Setting the direction of envelope (from high to low, or from low to high)

a) Setting the value of envelope depth

The amount of sweep on the basic pitch which was determined at TUNE (range of pitch) is decided here.

The amount of sweep can also be changed by MIDI information (Key Note or Velocity). Set the **[PLAY/EDIT SELECT]** knob to **[SW-RANGE]** and select **[PARAMETER 1]**.

The value of envelope depth displayed indicates the amount of sweep. Turn the **[DATA]** knob to change the value and listen to the sound.

Then check how deep the above set value sweeps by MIDI information (Key Note or Velocity).

Decide at **[PARAMETER 2]** whether to modulate by Key Note or by Velocity. Modulation will change by Key Note OFFSET when “**Я**” is on display, by Velocity when “**б**” is on display.

Turn the **[DATA]** knob to select.

Then set to **[PARAMETER 3]** and determine the depth of MIDI information selected above. Maximum value is 15 and touching the key softly (or Low Key of Key Note) will set basic sweep to 0 (no sweep on the pitch).

b) Setting sweep time

Let us set sweep time (envelope decay) here. Set the **[PLAY/EDIT SELECT]** knob to **[SW-TIME]** and select **[PARAMETER 1]**.

The data displayed indicates the sweep time.

Turn **[DATA]** knob, change the value and listen to the sound. Then check how long the above set value lasts by MIDI information (Key Note or Velocity).

Decide at **[PARAMETER 2]** whether to modulate by Key Note or by Velocity. Modulation will change by Key Note OFFSET when “**Я**” is on display, by velocity when “**б**” is on display.

Turn the **[DATA]** knob to select.

Then set to **[PARAMETER 3]** and determine the depth of MIDI information selected above. Maximum value is 15 and touching the key softly (or Low Key of Key Note) will shorten the sweep time.

c) Direction of tune envelope

Here, you decide whether to sweep the pitch from high to low or from low to high. Set the **[PLAY/EDIT SELECT]** knob to **TUN-MOD** and select **[PARAMETER 3]**. Sweep will be from high to low when “**Ъъ**” is on display, from low to high when “**дд**” is on display.

Turn the **[DATA]** knob to select.

④ Direction of sampled sound playback

Set the **[PLAY/EDIT SELECT]** knob to **[OUTPUT]** and select **[PARAMETER 2]**. Playback will be forward when “**Ф**” is on display, reverse when “**б**” is on display. Listen to the sound by playing back hi-hat and cymbal in reverse. You will surely come up with new phrases.

The above was an explanation of tune sweep. Sweeping a tom sound from high to low will give you a sound similar to electric tom. Try doing some research by using different sounds. You can definitely create wonderful sounds that are completely unique.

5.4 Setting volume-related parameters

Method for controlling output level is explained here.

- ① Setting the volume of each sound
- ② Setting the envelope of each sound

① Setting the volume of each sound

Volume is controlled by output level and MIDI information (Key Note or Velocity). Set the **[PLAY/EDIT SELECT]** knob to **[OUTPUT]** and use the **[P-SEL]** switch to select **[PARAMETER 1]**.

The value of **[DATA]** at this time will become the highest volume of this sound 127 (255). Please keep in mind that no sound will come out at minimum volume (0). Turn the **[DATA]** knob to the desired volume.

Then determine the amount to be controlled by MIDI information (Key Note or Velocity) against the volume you have chosen above.

Set the **[PLAY/EDIT SELECT]** knob to **[VCA-MOD]** and select **[PARAMETER 1]**.

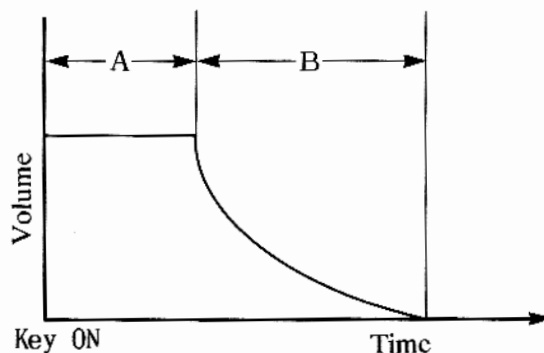
Volume will change by Key Note OFFSET when "8" is on **[DATA]** display, by Velocity when "b" is on the display. Select using the **[DATA]** knob.

Note) When using a sequencer or a keyboard that does not support MIDI velocity information, you can control the volume by selecting Key Note OFFSET.

Select **[PARAMETER 2]** while the **[PLAY/EDIT SELECT]** knob is still on VCA-MOD. The value displayed at **[DATA]** at this time indicates the amount of modulation. When the value is 0, you cannot control the volume by MIDI information. Make your choice by turning the **[DATA]** knob.

② Setting the envelope of each sound

HOLD TIME is available for volume-related envelopes. Part A of the diagram shows HOLD TIME and Part B shows Decay Time.



Setting HOLD TIME

Set the [PLAY/EDIT SELECT] knob to [VCA-MOD] and use the [P-SEL] switch to select [PARAMETER 3]. The value displayed at [DATA] at this time indicates HOLD TIME. (0~27., 1 step 4 msec)

For instance, if [DATA] is 10, HOLD TIME will be 40 msec.

Setting Decay Time

The method for changing the length of decay time is explained here.

- 1) Set the [PLAY/EDIT SELECT] knob to [VCA-ENV] and use the [P-SEL] switch to select [PARAMETER 1].

The currently displayed value indicates the decay value. Lowering the value will shorten the decay time. Turn the [DATA] knob to obtain the desired value.

Note) Please do not set the decay value longer than necessary. Assigner of XE8 assigns new sound to the output channel by checking the smallest decay level. If the decay level is remaining even when a sound is not coming out, it will think which sound is still there and may be wasting a channel with sound in it and cut off the reverberation of its sound.

Now, let's try to modulate the above decay value by MIDI information (Key Note or Velocity). Select [PARAMETER 2] while the [PLAY/EDIT SELECT] knob is still on [VCA-ENV].

Decay will change by Key Note OFFSET when "K" is on [DATA] display, by Velocity when "V" is on the display.

Select using the [DATA] knob.

Then select [PARAMETER 3] while the [PLAY/EDIT SELECT] knob is still on [VCA-ENV].

The value displayed now is the depth value of modulation by MIDI information. When the key is played hardest (127), the decay level become the standard value.

For instance, playing the open hi hat sound hard will give you open hi-hat, while playing it soft will give you closed hi hat sound. You can make a distinction between a snappy and not snappy snare sound. Try it for yourself.

5.5 How to utilize individual outputs

XE8 has two modes: Free assign which puts a new sound into small volume output, and fixed assign which assigns the sound to a designated output.

Free assign can be used to express snare rolls. Fixed assign can be used if you want to put this through equalization or echo in a recording.

Here's how to set them.

First, turn off memory protection and call the desired program.

See 4.2 to know how to use the memory protection.

- 1) Set the **[PLAY/EDIT SELECT]** knob to **[PLAY]** and select **[PARAMETER 1]**.
The current assign mode is shown at DATA on display. 1 stands for Free Assign, 2 stands for Fixed Assign.
- 2) Turn the **[DATA]** knob and select 2.
This switches the assign mode. Then assign the channel number of individual out for each sound.
- 3) Set to **[PARAMETER 2]**.
- 4) Turn the **[SOUND NO]** knob and select the sound you want to edit.
The number at DATA on display indicates the channel number of individual out.
- 5) Turn the **[DATA]** knob and set the output channel.
Output channels can be assigned for every program. However, as 16 sounds are assigned to 8 outputs, there will be cases where 2 sounds are assigned to 1 output channel. Since 2 sounds cannot be outputted simultaneously, the new sound will replace the previous sound.

Chapter 6. About Program Copy and Setting Check

6.1 How to copy the program

XE8 is equipped with a copy function to copy from a desired program number to another program number. For instance, the procedure for copying Program 1 to Program 2 is as follows.

- 1) Set the **[PLAY/EDIT SELECT]** knob to **[PROGRAM]** and select **[PARAMETER 1]**.
- 2) Turn the **[DATA]** knob and call Program 1.
- 3) Set to **[PARAMETER 2]**, turn the **[DATA]** knob and call Program 2.
- 4) Press the **[SHOT/COPY]** key (Sound will not be outputted at this time).

This completes the copy from Program 1 to Program 2.

Here's how to return the program whose parameters you have changed back to the content at the time of factory shipment.

- 1) Set **[PLAY/EDIT SELECT]** knob to **[PROGRAM]** and use **[P-SEL]** switch to set to **[PARAMETER 1]**.
- 2) Turn **[DATA]** knob and call the desired program number.
- 3) Set to **[PARAMETER 3]**, turn DATA knob and call program number at the time of factory shipment.
- 4) Press **[SHOT/COPY]** key (Sound will not be outputted).

This changes the content of desired program number to the content at the time of factory shipment.

●PLAY (PARAMETER 3) MIDI MONITOR

First and last two digits of Key Note No. from **[MIDI IN]** will be displayed in the sequence of sounds generated.

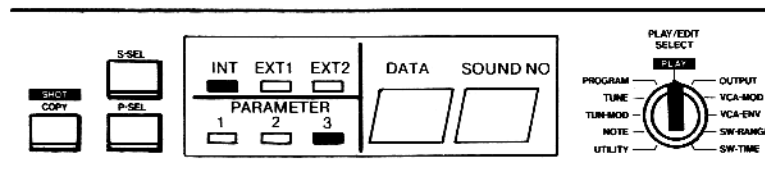
●UTILITY (PARAMETER 3) MIDI EXCLUSIVE

Outputs the content of program from **[MIDI OUT]**. Please inquire the AKAI Electronic Musical Instruments Division Sales Dept. about the content of EXCLUSIVE.

6.2 About the XE8 setting check

To set your XE8 quickly without error for a live performance etc., you can see the selected sound from MIDI Key Note and its Note.

Set the **[PLAY/EDIT SELECT]** knob to **[PLAY]** and use the **[P-SEL]** switch to set to **[PARAMETER 3]**.



illust

At this setting, Key Note number will be displayed at **[DATA]**. (Not accepted when the MIDI channel is wrong.) Sound number (1-16) output at Key Note above will be displayed at Sound No. In a setting where 2 or more sounds will come out from 1 Key Note, both sound numbers will be displayed alternately.

Sound number 0 is displayed when nothing is assigned from Key Note.

PROGRAM DATA (Program No1)

PROGRAM No. _____			TITLE: _____			MIDI RECEIVE CHANNEL No. _____												DATE: _____							
Sound number: _____			1 KICK 0			2 KICK 1			3 KICK 2			4 KICK 3			5 HIHT 0			6 HIHT 1			7 HIHT 2			8 SNARE 0	
Sound name: _____			KICK 0			KICK 1			KICK 2			KICK 3			HIHT 0			HIHT 1			HIHT 2			SNARE 0	
Sound source group: _____			KICK 0			KICK 1			KICK 2			KICK 3			HIHT 0			HIHT 1			HIHT 2			SNARE 0	
PARAMETERS			P	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____		
NOTE			1	36	38	2	39	41	3	42	44	4	45	47	5	54	56	6	58	59	7	8	48	49	
TUNE			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PLAY MODE P2			1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	8		
OUTPUT			127	F	127	F	127	F	127	F	127	F	127	F	127	F	127	F	127	F	127	F	127		
TUNE-H00			A	15	dU	A	15	dU	A	15	dU	A	15	dU	A	15	dU	A	15	dU	A	13	dU		
VCA-H00			b	15	0	b	15	0	b	15	0	b	15	0	b	15	0	b	15	0	b	15	0		
VCA-ENV			90	b	0	90	b	0	100	b	0	100	b	0	90	b	0	100	b	0	127	b	0		
SW-RANGE			0	b	0	0	b	0	0	b	0	0	b	0	0	b	0	0	b	0	0	0	0		
SW-TIME			0	b	0	0	b	0	0	b	0	0	b	0	0	b	0	0	b	0	0	0	0		

Sound number:	9 SNARE 1						10 SANRE 2						11 TOM 0						12 TOM 1						13 CRASH						14 JAZZ RIDE						15 CLAP						16 PERC																																																					
Sound name:	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
Sound source group:	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1												CRASH												JAZZ RIDE												CLAP												PERC											
	SNARE 1												SANRE 2												TOM 0												TOM 1																																																											

PROGRAM DATA SHEET

PROGRAM No. _____ TITLE: _____ MIDI RECEIVE CHANNEL No. _____ DATE: _____

Sound number:	Sound name:	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____
Sound source group:	P												
PARAMETERS													
NOTE													
TUNE													
PLAY MODE P2													
OUTPUT													
TUNE-MOD													
VCA-MOD													
VCA-ENV													
SW-RANGE													
SW-TIME													

Sound number:	Sound name:	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____	INT	CARD No. _____
Sound source group:	P												
PARAMETERS													
NOTE													
TUNE													
PLAY MODE P2													
OUTPUT													
TUNE-MOD													
VCA-MOD													
VCA-ENV													
SW-RANGE													
SW-TIME													

Parameter Guide

Parameters	Parameter Group	PARAMETER 1	PARAMETER 2	PARAMETER 3
UTILITY		Memory protect (00, 0F)	MIDI Receive channel number (0=Omni on, 1~15)	Program data dump(MIDI EXCLUSIVE) (1~32)
NOTE		Sampled source number (INT: 1~15, EXT: 1or2)	MIDI Note number / LOW (0~127 → 0~99, 00~27.)	MIDI Note number / Hi (0~127 → 0~99, 00~27.)
TUN-MOD		MOD KEY / VEL R:KEY Offset b:VELOCITY	P1 Depth (0~15)	Sweep Range Polarity (44, 44)
TUNE		Master tuning (-8~0~7)	Fine tuning (-8~0~7)	
PROGRAM		Program number (1~32)	Program Copy (1~32)	Initialize Copy (1~15)
PLAY		PLAY MODE Select (1~2)	PLAY MODE 1 Use Out No (1~8)	MIDI Monitor
OUTPUT		Output level (0~27.)	REPLAY (F/b) Forward / Back	
VCA-MOD		MOD Key / VEL (R/b)	P1 Depth (0~15)	Hold time 0~27.
VCA-ENV		Decay time (0~27.)	MOD Key / VEL (R/b)	P2 Depth (0~15)
SW-RANGE (Sweep range)		ENV Depth (0~27.)	MOD Key / VEL (R/b)	P2 Depth (0~15)
SW-TIME (Seep time)		Decay level (0~27.)	MOD Key / VEL (R/b)	P2 Depth (0~15)

Sampled Sound List

INTERNAL

Sampled Sound No.	1	KICK - 0
2	KICK - 1	
3	KICK - 2	
4	KICK - 3	
5	HIHAT - 0	
6	HIHAT - 1	
7	HIHAT - 2	
8	SNARE - 0	
9	SNARE - 1	
10	SNARE - 2	
11	TOM - 0	
12	TOM - 1	
13	CRASH	
14	JAZZ RID	
15	CLAP	
16	PERC	

SL801R

Sampled Sound No.	1	KICK - 4
2	SNARE - 3	
3	RIM SHOT - 0	
4	HIHAT CLOSE - 0	
5	HIHAT OPEN - 0	
6	TOM - 2	
7	TOM - 3	
8	TOM - 4	
9	TOM - 5	
10	CYMBAL - 0	
11	CYMBAL - 1	
12	PERCUSSION - 0	
13	PERCUSSION - 1	
14	PERCUSSION - 2	
15	PERCUSSION - 3	
16	ORCHESTRA HIT - 0	

SL802R

Sampled Sound No.	1	KICK - 5
2	SNARE - 4	
3	RIM SHOT - 1	
4	HIHAT CLOSE - 1	
5	HIHAT OPEN - 1	
6	TOM - 6	
7	TOM - 7	
8	TOM - 8	
9	TOM - 9	
10	CYMBAL - 2	
11	CYMBAL - 3	
12	CYMBAL - 4	
13	PERCUSSION - 4	
14	PERCUSSION - 5	
15	PERCUSSION - 6	
16	PERCUSSION - 7	

SL803R

Sampled Sound No.	1	KICK - 8
2	SNARE - 7	
3	RIM SHOT - 3	
4	TOM - 13	
5	TOM - 14	
6	TOM - 15	
7	CYMBAL - 9	
8	CYMBAL - 10	
9	CYMBAL - 11	
10	HIHAT OPEN - 3	
11	HIHAT CLOSE - 3	
12	GATE SNARE	
13	GATE KICK	
14	CYMBAL - 12	

SL804R

Sampled Sound No.	1	KICK - 6
2	SNARE - 5	
3	RIM SHOT - 2	
4	TOM - 10	
5	TOM - 11	
6	TOM - 12	
7	HIHAT CLOSE - 2	
8	HIHAT OPEN - 2	
9	CYMBAL - 5	
10	CYMBAL - 6	
11	CYMBAL - 7	
12	CYMBAL - 8	
13	KICK - 7	
14	SNARE - 6	

Exclusive External Sounds Source IC card

SL801R	Standard Accessory
SL802R	Standard Accessory
SL803R	OPTION
SL804R	OPTION

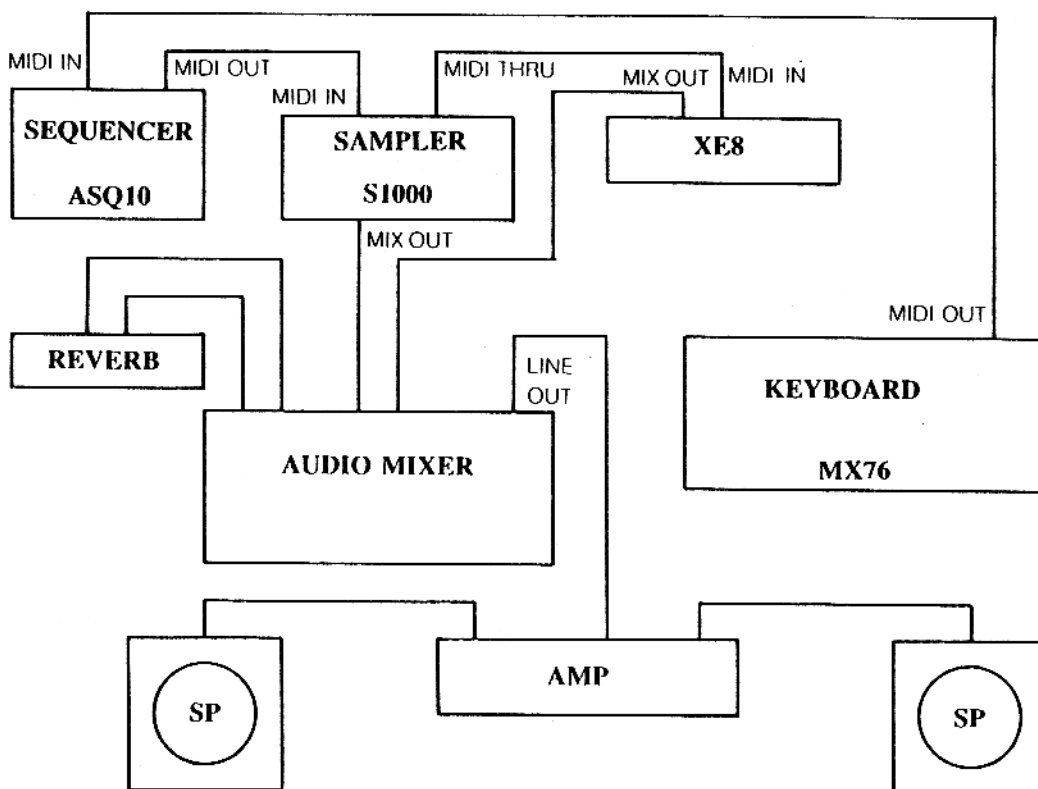
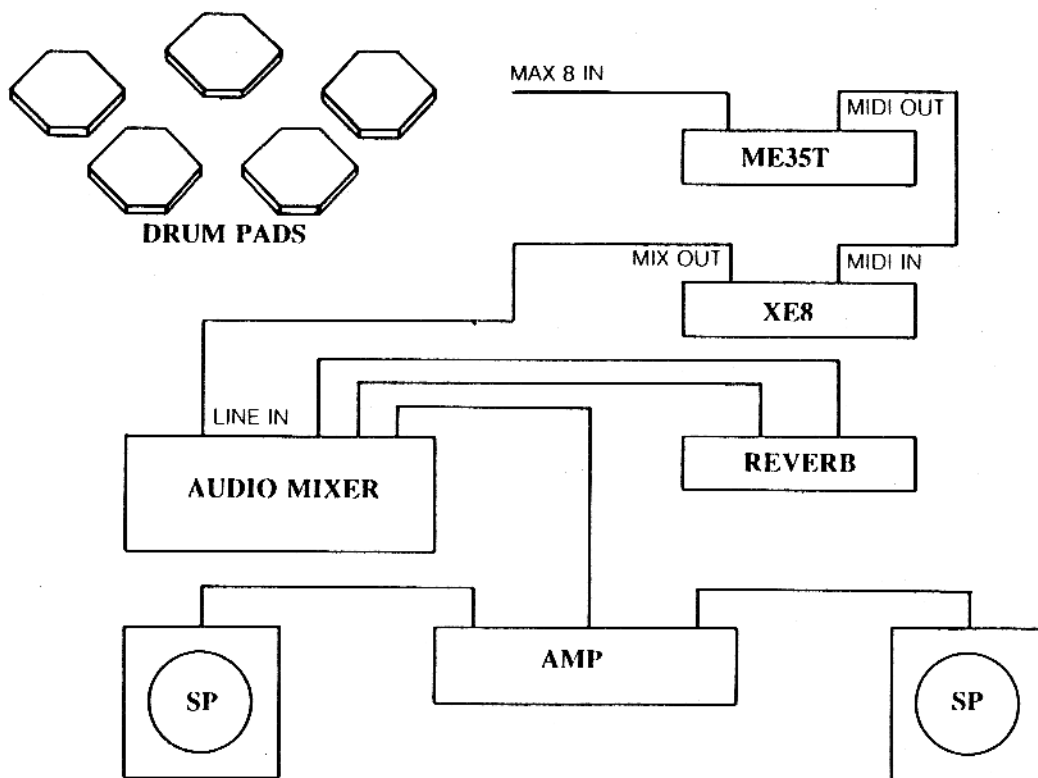
MIDI Implementaion Chart

FUNCTION	TRANSMITTED	RECOGNIZED	REMARKS
Basic Default Channel Changed	×	1 ~16 1 ~16	Memorized Memorized
Mode Default Messages Altered	×	Mode 1 Mode 1 ~ 4 ×	Memorized Memorized
Note Number : True voice	×	0 ~127 0 ~127	
Velocity Note ON Note OFF	×	○ 9n V=1~127 ×	
After Key's Touch Ch's	×	×	
Pitch Bender	×	×	
Control 1 Change 7 64	×	×	
Prog Change : True #	×	1 ~128 1 ~ 32	by Preset Note Number value
System Exclusive	○	○	AKAI ID: 47H XE8 ID: 4AH
System : Song Pos : Song Sel Common : Tune	×	×	
System :Clock Real Time :Commands	×	×	
Aux :Local ON/OFF :All Notes OFF Mes- :Active Sense sages:Reset	×	×	

Mode 1 : OMNI ON, POLY
Mode 3 : OMNI OFF, POLY

Mode 2 : OMNI ON, MONO
Mode 4 : OMNI OFF, MONO

○ : Yes
× : No





©881005
881005-250
As of 88 006
Printed in Japan