OWNER'S MANUAL

DIGITAL MULTI-DIMENSIONAL
SYNTHESIZER
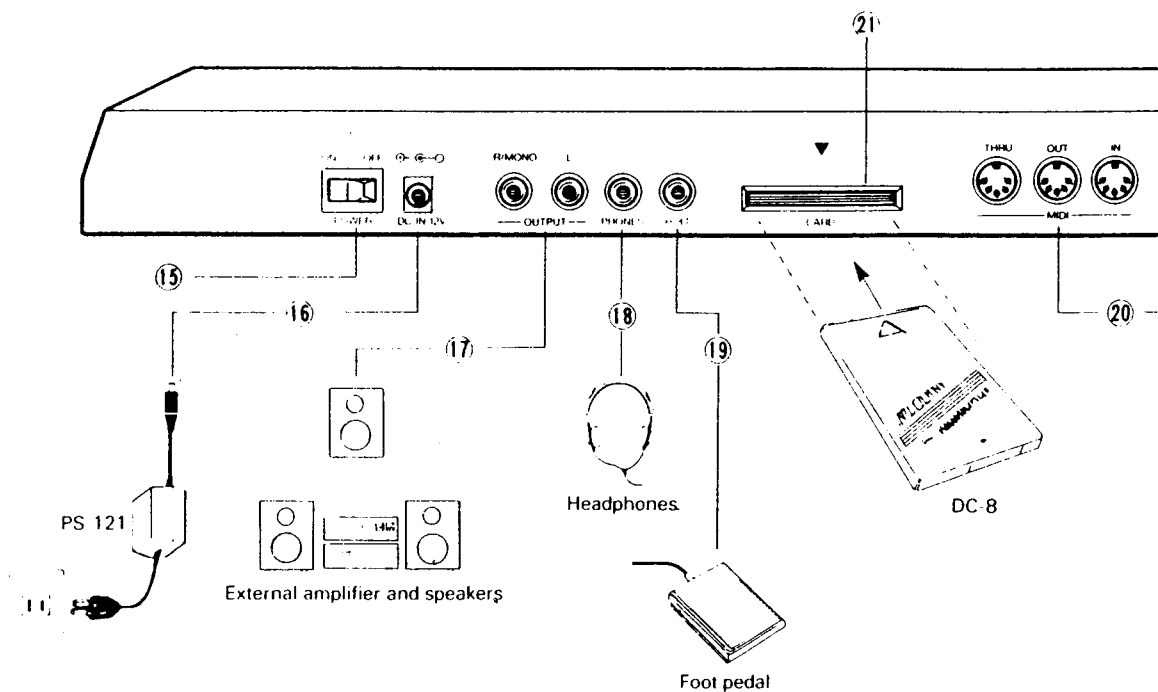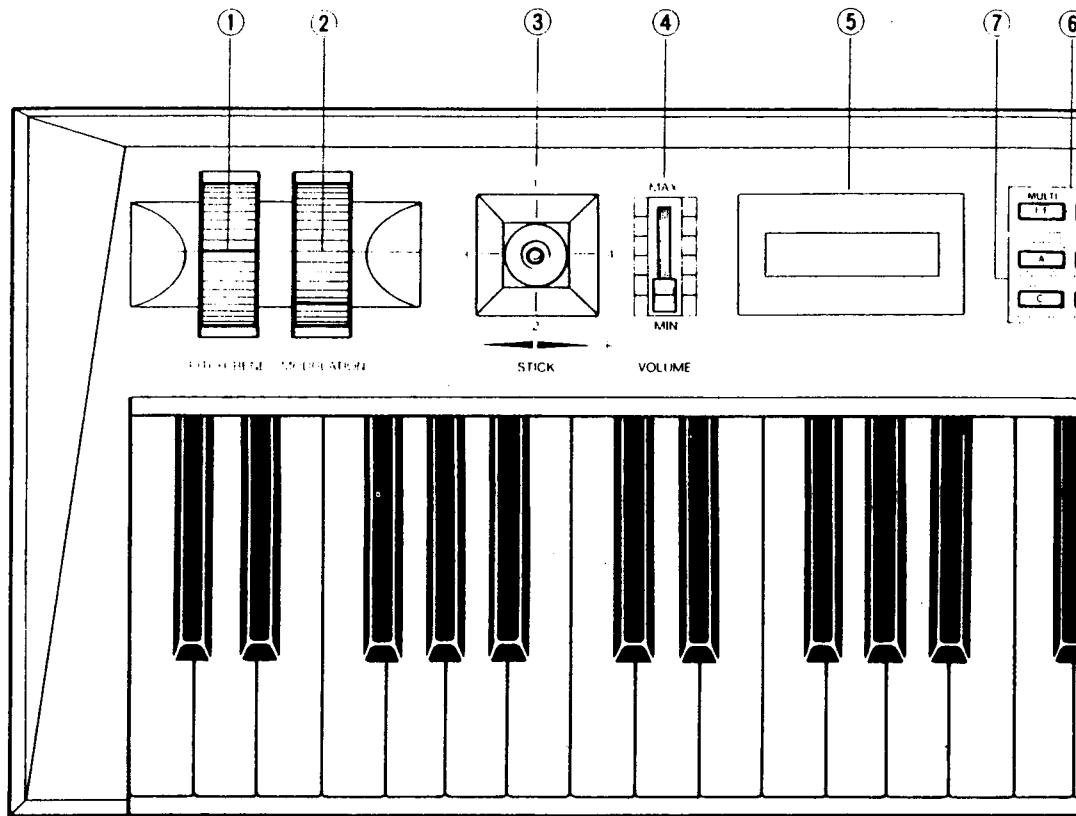# K1 II

KAWAI

Introduction

The Kawai K1II digital synthesizer offers 16-voice (max.) polyphonic output from Kawai's VM additive synthesis tone generator.
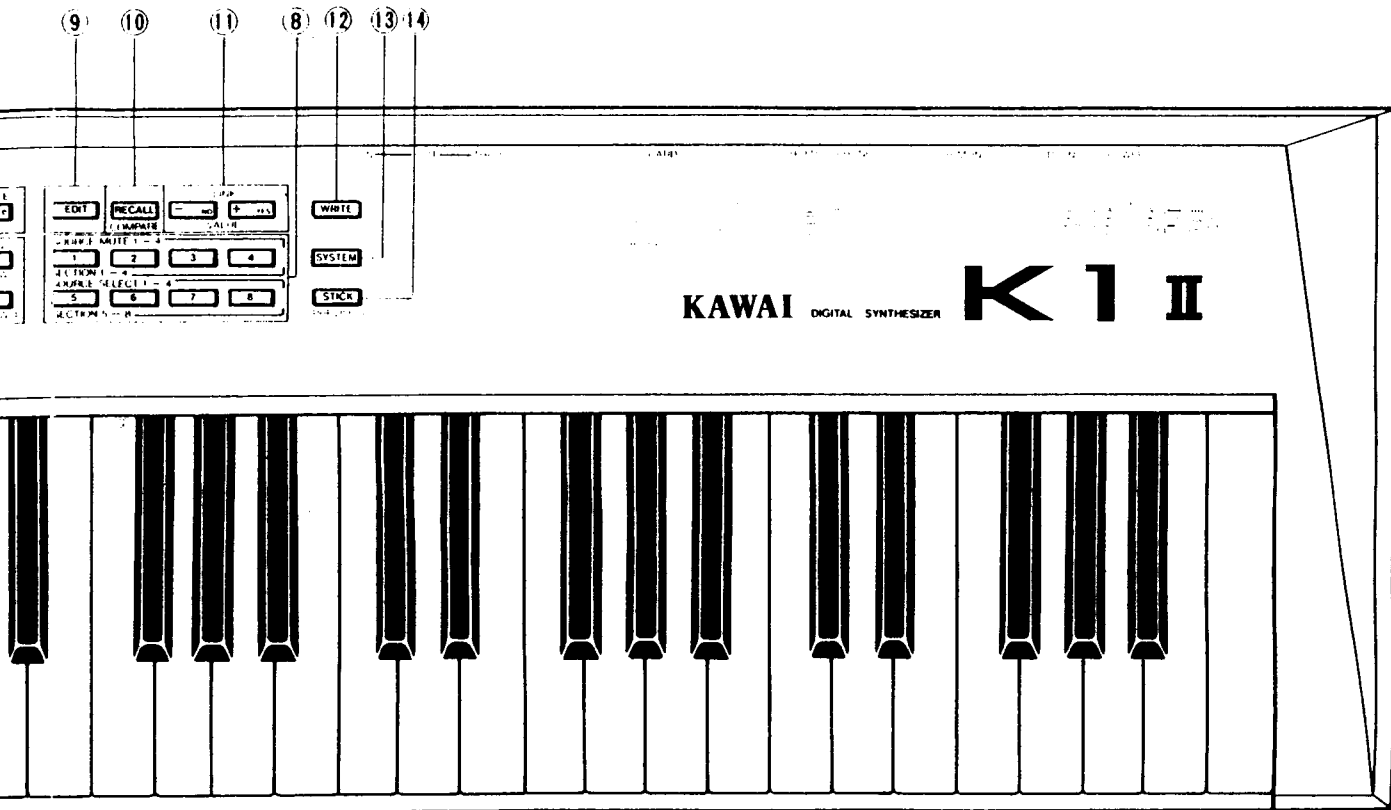
Features

★ **VM tone generator**
The K1II built-in sound generator offers a selection of 256 basic waveforms using the two most advanced approaches to sound synthesis: 204 formed by the additive synthesis of the first 128 harmonics; 52 recorded with PCM sampling. You can freely mix up to four of these waveforms to produce an entirely new sound: a crisp digital sound, a rich analog sound, or any combination in between.

★ **AM (Ring modulation)**
The addition of ring modulation expands the K1II range to include overloaded sounds of the type that digital waves alone cannot reproduce.

★ **Rich selection of tone patches**
The K1II leaves the factory with 64 SINGLE patches and 32 MULTI patches alrealdy stored in its internal memory bank. The K1II's full editing capabilities and DC-8 memory cards (available as extra cost options) allow you to build up your own library of original sounds.

★ **Built-in effects (REVERB/DELAY)**
Sixteen built-in effects simulate the reverberations of a variety of spaces — concert hall to intimate studio — or add stereo or cross delays.

★ **Separate drum section**
This track, which offers a selection of 32 percussion instruments, is completely separate from the eight multi-timbre patches. This independent rhythm section may be assigned its own MIDI channel which is not affected by the OMNI ON mode.

★ **Superb touch response**
The K1II keyboard supports both velocity, the force with which you hit the key, and aftertouch, the pressure that you apply as you hold the key down.

★ **Joystick for real-time control**
The joystick provides real-time control over the balance between the four SOURCEs of a SINGLE patch or between four SECTIONs in a MULTI patch. During editing, it provides a rapid means of changing parameter values.

★ **Multi-tone patch LINKs**
The K1II LINK function allows you to link up to eight tone patches — SINGLE or MULTI, INTERNAL or EXTERNAL — from the 192 available and then step through the series during a performance simply by pressing the LINK switches.

★ **MULTI patches**
The K1II's MULTI patches go far beyond the DUAL or SPLIT functions of other synthesizers in that they allow you to assign up to eight different SINGLE patches to different ranges on the keyboard and divide the key velocity as well.

★ **Variable multi-timbre operation**
This function helps maximize the use of the K1II's 16-voice polyphonic capabilities by automatically redistributing unused capacity from one section to another.

★ **Full MIDI implementation**
Since each sound source can be assigned a different MIDI channel, each K1II MULTI patch can simultaneously serve as up to eight (or nine, using DRUM SECTION) different MIDI sound sources. For further flexibility, the K1II allows the musician to choose whether each sound source responds to notes received on the MIDI channel, those played on the keyboard, or both.

★ **Interchangeability of tone data with K1, K1m, and K1r**
Since the K1II has interchangeability of tone data (SINGLE, MULTI patch) with those instruments of the K1, K1m, and K1r, the K1II can use the tone card for the K1, K1m, and K1r, or exchange the data among those instruments.

Care and Maintenance

☐ **Proper Care**
Your K1II synthesizer is a delicate musical instrument. To prevent breakdowns and ensure years of reliable, trouble-free service, shield it from:
● Direct sunlight and exposure to the elements
● Extremes in temperature or humidity
● Dusty environments
● Vibration — especially during transport

☐ **Power Supply**
● Use only the AC adapter shipped with the K1II and connect it only to a power supply with a voltage within the limits stated on the ratings plate on the back.
● Make sure that all power switches are off before changing equipment connections.
● Check all equipment connections before applying the power.
● Do not connect to the same circuit as a heavy load or equipment that generates line noise.

☐ **Line Noise Reset**
● The high-speed microprocessor at the core of the K1II is extremely sensitive to line noise and sudden fluctuations in the supply voltage. Should it "lock up" under such conditions, simply turn it off for a few seconds and then reapply the power.

☐ **Cleaning**
● Clean the instrument with a soft cloth, a mild detergent, and lukewarm water.
● Never use harsh or abrasive cleansers or organic solvents.

☐ **Battery Backup**
● The lithium battery that protects the memory contents while the power to the unit is off is good for more than five years of normal use. We recommend, however, that you have your nearest authorized service representative replace it promptly after five years.

☐ **Repairs**
● Always save the INTERNAL tone patches to a memory card before taking the unit in for repairs or servicing. Otherwise, they may be lost in the course of testing.

☐ **Memory Cards**
● The K1II uses Kawai DC-8 memory cards for external data storage. These cards are available from your nearest authorized Kawai dealer. Kawai DC-16 or DC-32 cards can also be used.

① ②　　　③　　④　　　⑤　　　⑦　⑥

PITCH BEND　MODULATION　　STICK　VOLUME　MULTI

MAX　MIN

②

THRU　OUT　IN

R/MONO　L

—OUTPUT—　PHONE　　CARD　　—MIDI—

DC IN 12V

POWER

⑮ ⑯　　⑰　　　⑱　⑲　　　　⑳

PS 121

External amplifier and speakers

Headphones

Foot pedal

DC-8

[Front Panel]

EDIT | RECALL | - NO | + YES

WRITE

SYSTEM

STICK

KAWAI DIGITAL SYNTHESIZER K 1 Ⅱ

KAWAI K 1 Ⅱ

[Rear Panel]

DI cable

Names of Parts

① PITCH BEND wheel
Shifts the pitch of all notes. (See p.8.)

② MODULATION wheel
Controls the amount of VIBRATO. (See p.8.)

③ Joystick
Performance: Provides real-time control over the balance between the four SOURCEs of a SINGLE patch or between four SELECTIONs in a MULTI patch. (See p.9.)
Editing: Changes the value of the current parameter.

Note: Setting the STICK parameter to OFF disables this function and prevents accidental movement of the joystick from changing the balance during a performance.

④ VOLUME slider
Controls the output levels for the PHONES jack as well as the OUTPUT (R/MONO and L) jacks.

⑤ Display
Performance: Indicates the number and name of the tone patch in use.
Editing: Indicates parameter name and current value.

⑥ Tone patch selector switches, I.Block (MULTI & SINGLE)
Switch between the SINGLE and MULTI sets of tone patches.

⑦ Tone patch selector switches, II.Bank (A, B, C, & D)
Performance: Select the tone patch bank.
Editing: Select parameters for editing. (See p.16.)

⑧ Tone patch selector switches, III.Number (1-8)
Performance: Select the tone patch number.
Editing: Switch SOURCEs on and off (SOURCE MUTE/SOURCE SELECT) for SINGLE patches and select SECTIONs for MULTI patches.
(See p.17/33.)

⑨ EDIT switch
Activates the tone patch editing functions.

⑩ RECALL/COMPARE switch
Performance: Switches to (RECALLs) the tone patch last edited.
Editing: Switches between (COMPAREs) the current state of the tone patch and the state that it was in at the beginning of the editing session. (See p.15.)

⑪ LINK/VALUE switches
Performance: Switch to the next tone patch in the linked series.
Editing: Change the value of the current parameter.

⑫ WRITE/LINK switch
Editing: Overwrites the original tone patch with the edited version.
Linking: Adds the current tone patch to the chain. (Max. 8 per chain)

⑬ SYSTEM switch
SYSTEM: Changes the unit's pitch (TUNE or TRANSPOSE). (See p.39.)
MIDI: Changes the MIDI receive (RCV) or transmit (TRS) parameters. (See p.41-43.)
REV/DLY: Changes and adjusts the type and depth of REVERB/DELAY effect. (See p.44.)
DRUM: Changes the parameters of DRUM SECTION.(See p.45-46.)

⑭ STICK/PREVIOUS switch
Performance: Switches the joystick on and off. (See note under entry for joystick above.)
Editing: Backs up to the preceding parameter. (See p.14.)

⑮ POWER switch
Controls the power to the unit.

Note: Check all connections BEFORE turning on the power.

⑯ DC IN jack
Accepts the plug from the PS-121 adapter.

⑰ OUTPUT jacks
Connect the unit to a KM-20 keyboard amplifier, public address system, audio amplifier, or similar equipment.

Note: The K1 II contains no amplifier or speakers. Either use headphones or connect it to an external amplifier.

⑱ PHONES jack
Serves for stereo headphones.

⑲ HOLD pedal jack
When connected to a Kawai F-1 (optional) or similar foot pedal, produces a damper pedal effect similar to that of an acoustic piano.

⑳ MIDI connectors
Accept standard cables for connecting the unit to other MIDI instruments.

㉑ CARD slot
Accepts DC-8 memory cards (optional).

Note: Insert the card so that the arrow on it lines up with the one on the unit.
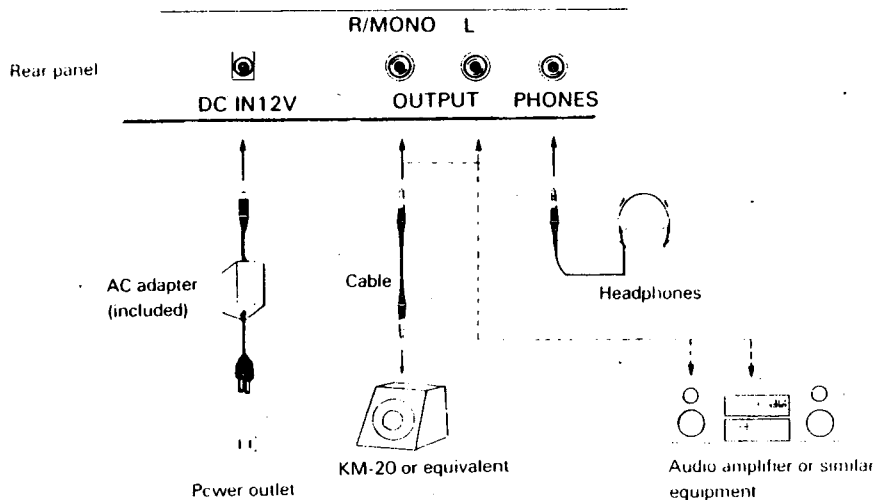
I. Playing the Factory Tone Patches

The K1II comes with a complete set of built-in tone patches. The best way to familiarize yourself with the instrument's capabilities is to experiment with these tone patches and examine the contents of their parameters.

1. Get sound

(1) Connect the instrument using the diagram below as your guide.

Note: Add a MIDI keyboard if you are using the K1II as a synthesizer module.

Rear panel

R/MONO   L

DC IN12V   OUTPUT   PHONES

AC adapter
(included)

Cable

Headphones

Power outlet

KM-20 or equivalent

Audio amplifier or similar
equipment

Note: The K1II contains no amplifier or speakers. Either use headphones or connect it to an external amplifier — a keyboard amplifier, radio-cassette player, or audio amplifier, for example.

(2) Shift the POWER switch (located on the rear panel) to its ON position.
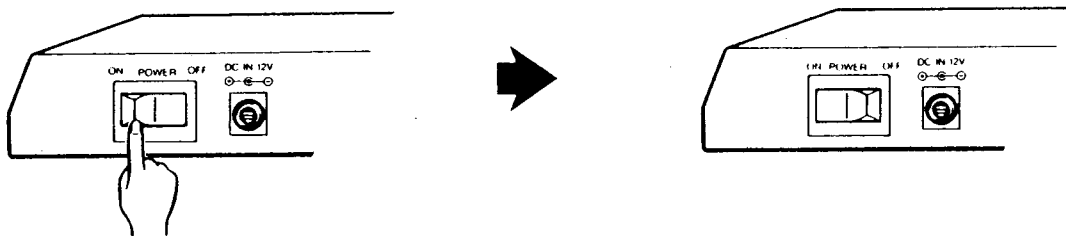
(3) Wait for the tone patch display.

```
* K A W A I   K — 1 II *
S Y N T H E S I Z E R
```
(This display lasts only a few seconds.)

```
S I N G L E
I A — 1     V o i c e   A h h
```
(The unit is now ready to play.)

Note: The tone patch names and numbers used in this manual are not necessarily the same as those on your K1II or later versions.

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II.   See the Appendices "SINGLE Patch Parameters" and "MULTI Patch Parameters" for a brief overview of the K1 II sound generation system.

III.1 See the Appendices "SINGLE Patch Parameters" and "MULTI Patch Parameters" for a brief summary of the editing process.

III.3 See the Appendix "SINGLE Patch Parameters" for a brief summary of the editing process for "SINGLE patches.

III.5 See the Appendix "MULTI Patch Parameters" for a brief summary of the editing process for MULTI patches.

VI.   See the AUX Parameter Chart for a summary of the SYSTEM and MIDI function.

VII.   See the AUX Parameter Chart for a summary of the EFFECT (REVERB/DELAY).

VIII. See the AUX Parameter Chart for a summary of the DRUM SECTION.

(4) Press a key and gradually raise the volume to a comfortable listening level.
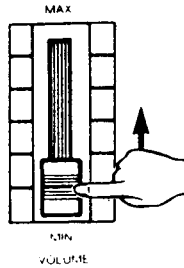
(5) Play.

Note: If raising the volume to its maximum fails to produce any output, check all connections and amplifier settings.

2. Choose a tone patch.

The K1II offers a selection of 64 SINGLE patches and 32 MULTI patches based on them.

The two-line display indicates which tone patch is currently in effect. The first line tells whether it is a SINGLE or MULTI patch; the second gives its tone patch number and name.

The tone patch number consists of three fields: I Block (SINGLE or MULTI/I, i, E, or e), II Bank (A, B, C, or D), and III Number (1~8).
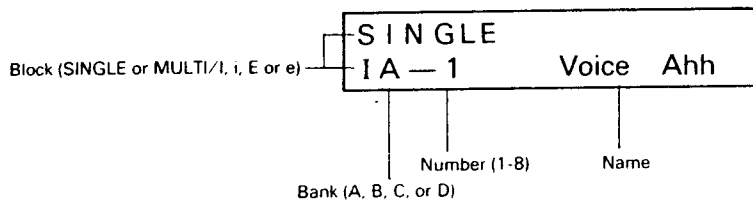
The tone patch selector switches Groups I-III change these three fields.

These switch between MULTI and SINGLE patches and then between the internal (I and i) and external (E and e) blocks.

These switch between the four banks available for each block.

These select the tone patch number within the bank.

7

```
┌─────────────────────────┐
│ S I N G L E             │
│ I A — 1      V o i c e  A h h │
└─────────────────────────┘
```

↓

(1) ┌──────────┐
    │ I, i/E, e │
    └──────────┘
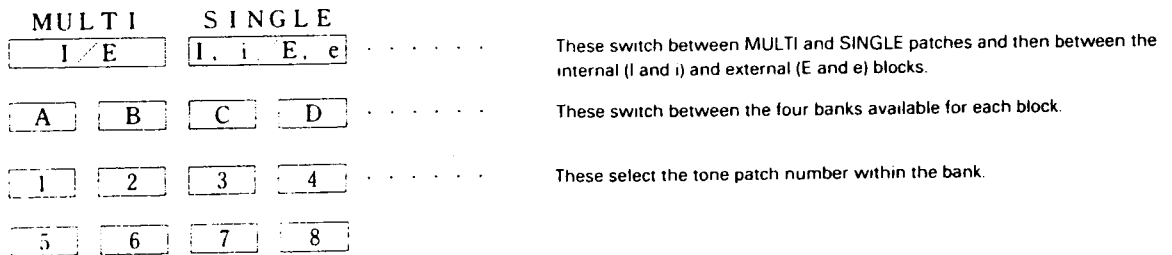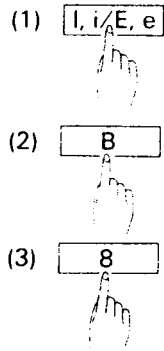
```
┌─────────────────────────┐
│ S I N G L E             │
│ i A — 1      T e n o r   S a x │
└─────────────────────────┘
```

↓

(2) ┌──────────┐
    │   B   │
    └──────────┘

```
┌─────────────────────────┐
│ S I N G L E             │
│ i B — 1              S i t a r │
└─────────────────────────┘
```

↓

(3) ┌──────────┐
    │   8   │
    └──────────┘

```
┌─────────────────────────┐
│ S I N G L E             │
│ i B — 8      P i z z i c a t o │
└─────────────────────────┘
```

Note: The above three steps can be in any order.

Note: The unit will not allow you to change the block to E or e unless there is a card firmly in place in the slot.

3. Try the extra features.

The K1 II provides a wide range of additional features that you can exploit to enhance your performance.

(1) PITCH BEND wheel

Rotating this wheel away from you raises the pitch of the unit; rotating it towards you lowers the pitch.

Note: It is also possible to adjust the amount of pitch bend. (See p.21.)

Higher / Lower
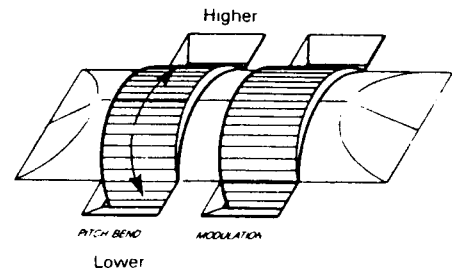
(2) MODULATION wheel

Rotating this wheel away from you adds the vibrato effect.

More vibrato
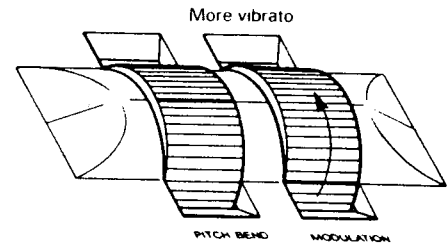
(3) HOLD pedal

Connecting an optional Kawai F-1 or equivalent foot pedal to the HOLD jack on the rear panel provides an effect similar to that of a damper pedal on an acoustic piano. When the pedal is pressed, a sound continues even after the key is released.

Rear panel

(Optional) Kawai F-1 foot pedal (or equivalent)
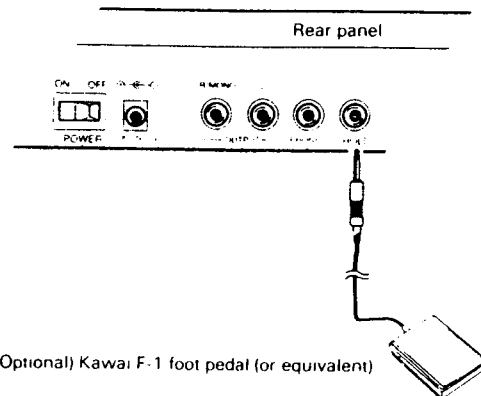
(4) Joystick

A SINGLE patch can use up to four separate SOURCEs. This joystick provides real-time control over the volume balance between them. It also provides similar control for the four SECTIONs in a MULTI patch.

SOURCE/SECTION 3   SOURCE SECTION 1

SOURCE/SECTION 2   SOURCE/SECTION 4
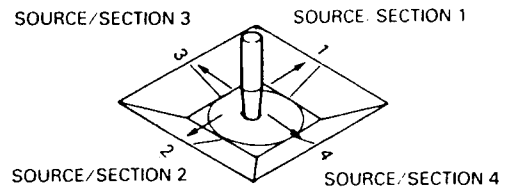
Note: The STICK switches this control function ON and OFF.

Procedure:
  ① Press the [STICK] switch.

  ② Press the [+YES] switch for ON and the [−NO] switch for OFF.

[STICK]	S T I C K C O N T R O L = O F F
[+YES]	S T I C K C O N T R O L = B A L
[−NO]	S T I C K C O N T R O L = O F F
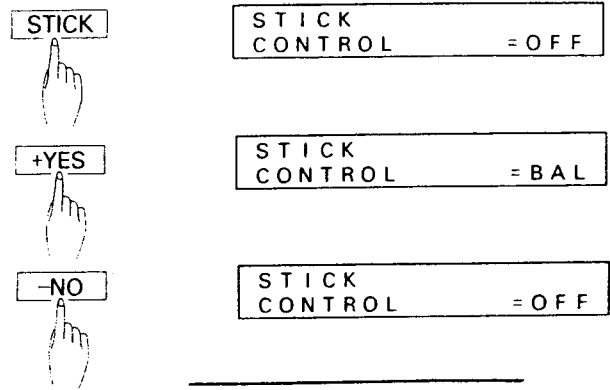
(5) CARD slot

In addition to the 96 internal tone patches, each optional DC-8 memory card provides storage for 64 SINGLE patches and 32 MULTI patches in blocks E and e (for external).

Note: Before storing data on the card, you must first format it for use with the K1II. (See p. 39.)
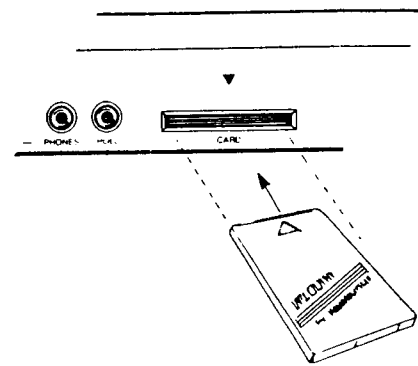
(6) MIDI jacks
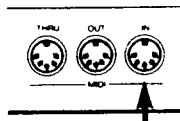
The three MIDI jacks on the rear panel are your gateway to the world of MIDI music. You can, for example, play your K1II from another keyboard, a Kawai Q-80, or other sequencer, or even another K1II.

Sample Setups

(a) Playing the K1II from a digital piano

MIDI OUT ┌──────────────────┐ MIDI IN

| Digital piano | K1II |

(b) Playing the K1II from a sequencer

MIDI OUT ┌──────────────────┐ MIDI IN

| Sequencer (Q-80) or computer | K1II |

(c) Playing the K1II from another K1II

MIDI OUT ┌──────────────────┐ MIDI IN

| K1II | K1II |
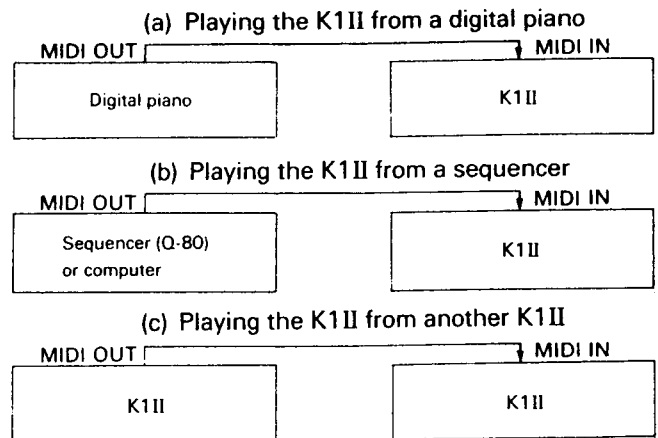
(7) LINK function

The K1II LINK function allows you to link up to eight tone patches — SINGLE or MULTI, INTERNAL or EXTERNAL —from the 192 available and then step through the series simply by pressing the LINK switches. This function saves valuable time during a live performance. (See p.38.)
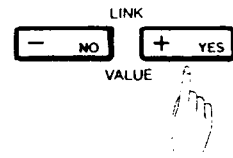
Note: The upper right corner of the LCD screen keeps track of the position in the series. For example, **LINK:8-7** indicates that the synthesizer is currently using the seventh tone patch of an eight-member series

```
LINK
┌─────┐ ┌─────┐
│ NO  │ │ YES │
└─────┘ └─────┘
 VALUE
```

```
┌───────────────────────────┐
│ S I N G L E    L I N K : 8 — 7 │
│ I A — 8     1 K e y  B e a t 1 │
└───────────────────────────┘
```
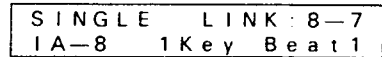
4. Look over the construction of SINGLE or MULTI patch.

The K1II contains a total of 96 built-in tone patches — sets of complex waveform/parameter combinations.
Two-thirds (64) of these are SINGLE patches. Each SINGLE patch is divided into four (or two) SOURCEs. Each SOURCE consists of a waveform chosen from the 256 basic waveforms available plus pitch, volume, and various other parameters for modifying it.
The remaining 32 tone patches are MULTI patches. Each MULTI patch is divided into eight SECTIONs. Each SECTION consists of a SINGLE patch plus various parameters that tie sound generation to key velocity and keyboard range.
In other words, the synthesizer merges four waveforms to produce a SINGLE patch and then merges eight SINGLE patches to form a MULTI patch. Certain built-in tone patches illustrate some of the ways in which you can exploit this capability.

(1) Splitting the keyboard.
One application would be to split the entire keyboard into various zones, assigning a different SINGLE patch to each zone: BASS to the lower third, PIANO to the middle, and STRINGS to the upper third, for example. The only limit is on the number of zones (max. 8). The K1II otherwise gives you complete freedom to divide the keyboard as you wish.

Example:


```
BASS    PIANO    ELECTRIC   STRINGS
                  PIANO
```
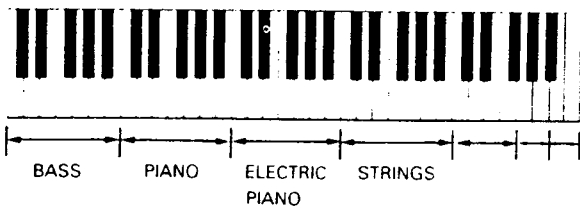
(2) Linking sound to velocity.
Another way to divide SINGLE patches would be to make the SINGLE patch dependent on the key velocity, the force with which you strike the key: STRINGS for light strokes and BRASS for heavier strokes, for example.

Example:

| STRINGS | → Light strokes |
| BRASS | → Heavy strokes |
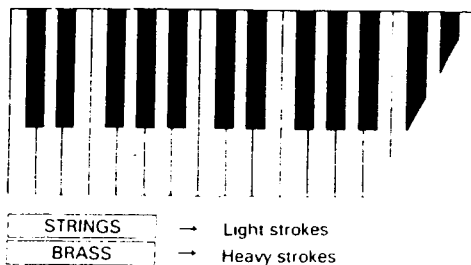
(3) Layering sounds.

Overlapping SINGLE patches with slightly different tunings or with complementary tones produces a richer, fuller sound.

Example:

```
|←————————— STRINGS —————————→|
|←————————— STRINGS —————————→|  ←— SINGLE patches with slightly different tunings
|←————————— STRINGS —————————→|
```
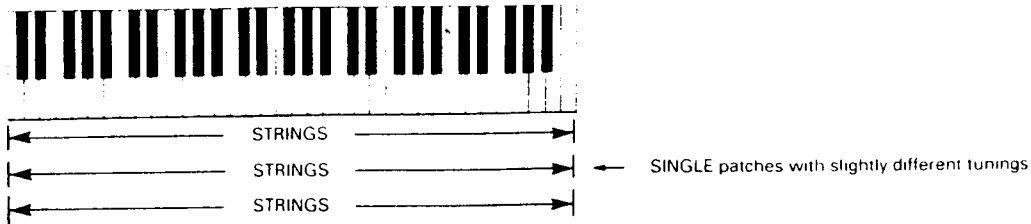
(4) Using the K1II as MIDI sound sources.

If you assign a different MIDI receive channel to each SINGLE patch in the MULTI patch, the K1II simultaneously performs as eight (or nine, using DRUM SECTION) different MIDI sound sources. Since these can include the K1II's built-in DRUM SECTION and percussion sounds, a sequencer or other external controller can use a single K1II for everything from rhythm to harmony.

Example:

```
                    MIDI channel 1  STRINGS
                    MIDI channel 2  PIANO
[ Sequencer ]       MIDI channel 3  BASS
                    MIDI channel 4: DRUM SECTION
                    MIDI channel 5  BRASS
```
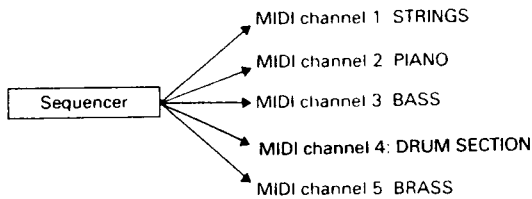
(5) Playing one tone patch on the K1II keyboard while a MIDI sequencer plays another.

```
                    MIDI IN ——————[ MIDI sequencer ]

                    K1II
```

(6) Combinations of the above

The K1II gives you complete freedom to combine SINGLE patches any way you wish.

Example:

```
    Bass      Piano      Flute
              Brass      Vibraphone
```

11
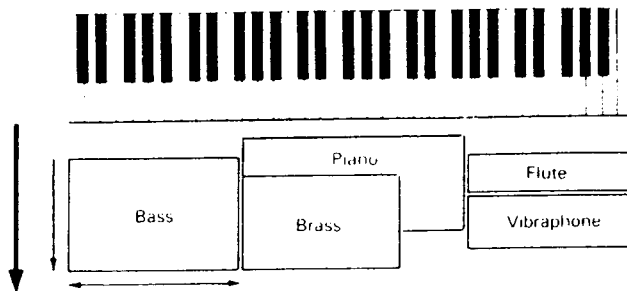
II. K1II Sound Sources

1. VM Tone Generator

The K1II allows you to combine up to four different SOURCEs, each with its own frequency, waveform, and envelope.

The K1II also supports AM (Ring modulation), allowing you to use the output from one SOURCE to modulate the output from another.

(SINGLE PATCH)
Block Diagram
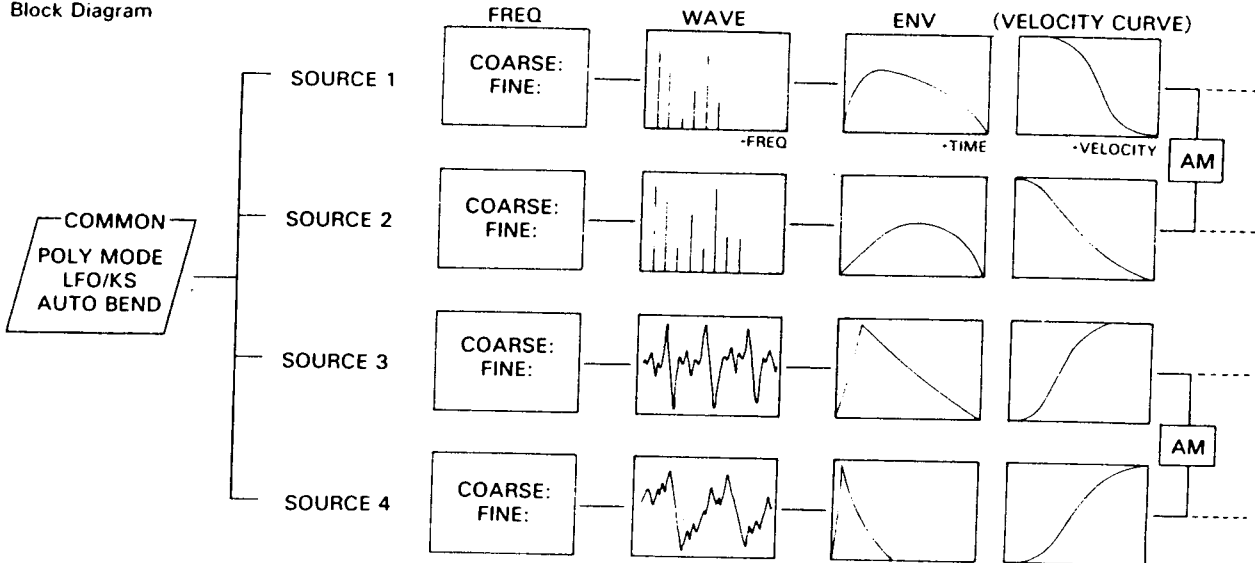
2. Digital Sound vs. Natural Sounds

If you listen carefully to a singer or a musical instrument, you will notice that each note exhibits at least three distinct phases: (1) a rapid rise in volume (ATTACK), (2) a relatively long constant phase (SUSTAIN), and (3) a gradual fading out (DECAY). You will also notice that blowing harder into a horn, plucking a string harder, or shouting changes the tonal quality, making the result brighter or distorted.

The ATTACK phase is particularly difficult to duplicate because it has a complicated harmonic distribution that changes rapidly with time. The K1II therefore uses PCM recordings of actual instruments to provide the most faithful reproduction.

A SINGLE patch on the K1II consists of up to four SOURCEs drawn from the 52 PCM waveforms and 204 VM waveforms available — a total of 256 — with a separate frequency and envelope for each.

The result is a combination that accurately reproduces the complex changes in total quality with time and velocity.

12

STRIKE HARDER
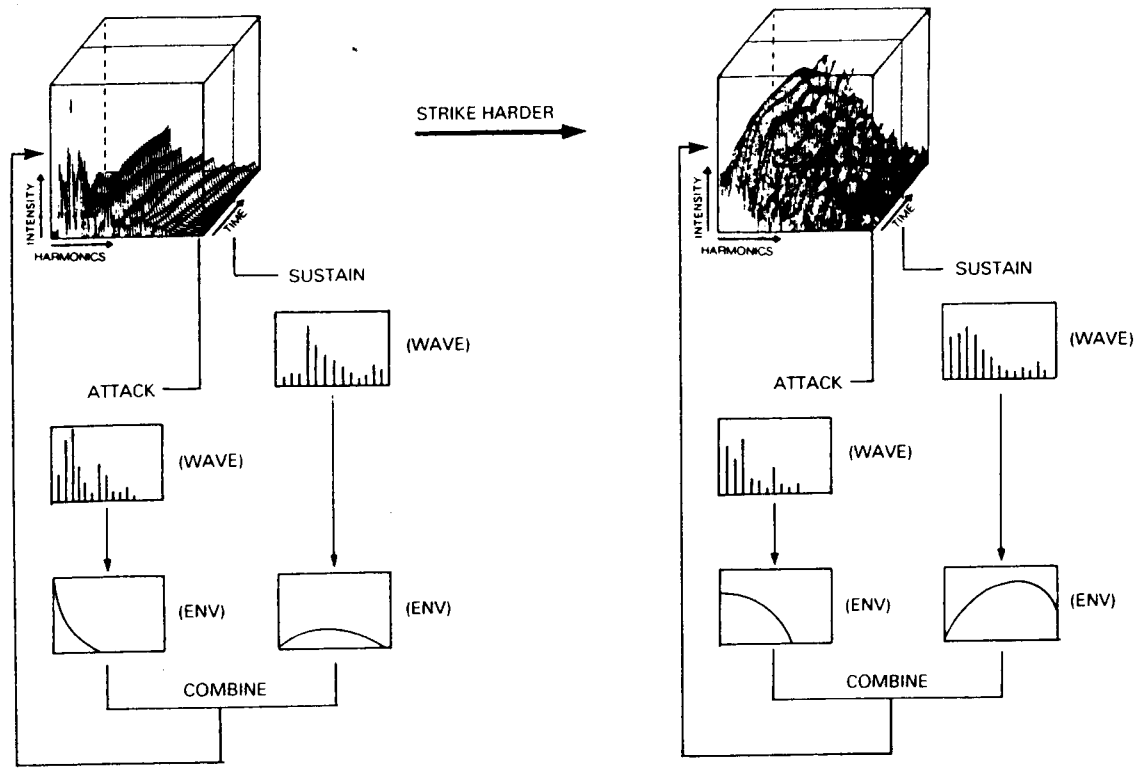
III. Editing Tone Patches

1. Basics

(1) EDIT mode

Besides its PLAY mode, the K1II features an EDIT mode which allows you to modify SINGLE and MULTI patches. To enter this mode, use the normal procedure to select the tone patch and then press the [EDIT] switch. To return to the PLAY mode, simply press either the MULTI or SINGLE switch.

```
S I N G L E
I A — 8     1 K e y   B e a t 1
```

```
S I A — 8   1 K e y   B e a t 1
V O L U M E             = 1 0 0
```

```
M U L T I
I A — 8            S Y M P H O N Y
```

```
M I A — 1          S Y M P H O N Y
V O L U M E             = 1 0 0
```

(2) Parameters and values

In the EDIT mode, the display gives two types of information: the name of the current parameter and its value. SINGLE patches list these pairs in four parameter groups; MULTI patches divide among four windows. Although the names differ, the basic procedure is the same: Select the group (SINGLE) or window (MULTI) with one of the four switches marked with the letters A, B, C, and D.

Note: The labels above these switches — COMMON, FREQ, WAVE, and ENV — give the group names for SINGLE patches; the ones below, the window names for MULTI patches.

Once you have selected a particular group or window, further presses on the same switch cycle through the list of parameters for that group or window. Pressing the STICK/PREVIOUS switch cycles through the same list, but in the reverse direction.

Example:
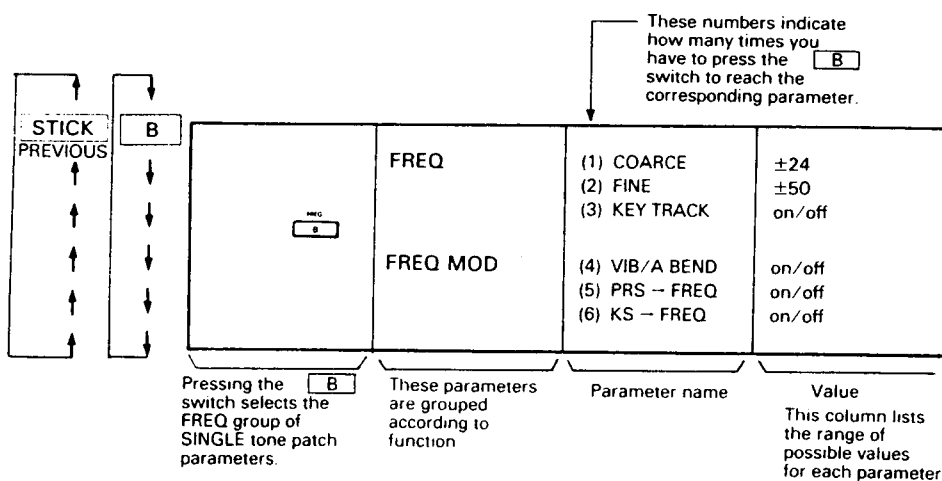
After you have selected a particular parameter, change its value with the [-NO] / [+YES] switches or the joystick. Moving the joystick to the left decreases the value and moving it to the right increases the value.
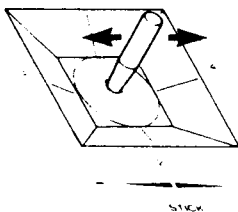
(3) Storing the new tone patch

When you edit a tone patch, you work with a temporary copy that disappears when you turn off the power. If you wish to save the tone patch for later use, you must store it in the K1II internal memory or on a memory card using the WRITE function. (See p.37.)

(4) RECALL and COMPARE functions

* RECALL

This function returns you to the last SINGLE or MULTI patch that you edited so that you can continue editing. It is most useful when you have accidentally left the EDIT mode by pressing the wrong switch.

Note: When you turn off the power, RECALL function is not available.

This function actually remembers two tone patch numbers: one for SINGLE and one for MULTI. Pressing the switch selects the one matching the tone patch currently in use — in other words, the most recently edited SINGLE patch if the word SINGLE is on the first line of the display and the most recently edited MULTI patch otherwise.

```
┌─────────────────────────────┐
│ S I N G L E                 │
│ I A — 8   1 K e y   B e a t 1│
└─────────────────────────────┘
              ↓
┌─────────────────────────────┐
│         R E C A L L         │
│                             │
└─────────────────────────────┘
```
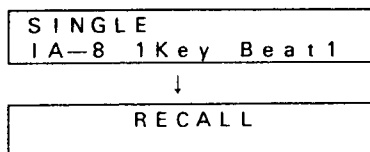
To resume editing, press the [EDIT] switch.

```
┌─────────────────────────────┐
│         R E C A L L         │
└─────────────────────────────┘
              ↓
┌─────────────────────────────┐
│ S I A — 8   1 K e y   B e a t 1│
│ V O L U M E   = 1 0 0       │
└─────────────────────────────┘
EDIT mode
```
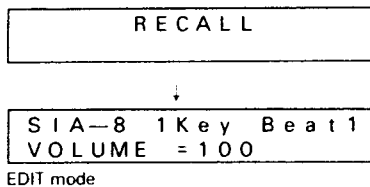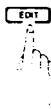
* COMPARE

This function allows you to compare the temporary copy that you are working on with the original tone patch. Pressing the COMPARE switch redisplays the original tone patch.

```
┌─────────────────────────────┐
│ W A V E         P V - P     │
│ S E L E C T     = 2 3 5     │
└─────────────────────────────┘
              ↓
┌─────────────────────────────┐
│ W A V E         P V - P     │
│ S E L E C T     = 2 5 6     │
└─────────────────────────────┘
Value before editing
```
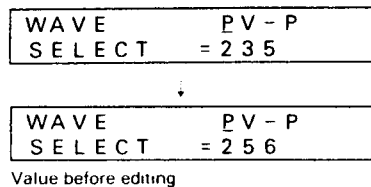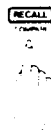
Pressing it a second time returns you to the edited version.

```
┌─────────────────────────────┐
│ W A V E         P V - 8     │
│ S E L E C T     = 2 3 5     │
└─────────────────────────────┘
```
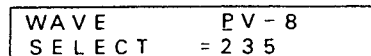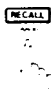
Note: You cannot edit while using the compare function.

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2. Editing a SINGLE Patch

(1) Basic approach

The K1II SINGLE patch uses either two or four SOURCEs.
Because it would take too much time to construct a tone patch completely from scratch, the usual approach is to select the closest tone patch and then edit it.

(2) Procedure

① In the PLAY mode, select the SINGLE patch that best approximates the desired sound.

```
S I N G L E
I A — 8    1 K e y   B e a t 1
```

② Press the [EDIT] key.

```
S I A — 8  1 K e y   B e a t 1
V O L U M E    = 1 0 0
```

③ Select the parameter to be edited.

or [EDIT] or [STICK]
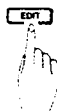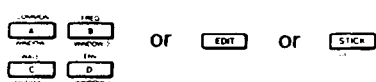
```
W A V E          P V - P
S E L E C T   = 2 5 6
```

(3) EDIT display

The EDIT display provides four different types of information.
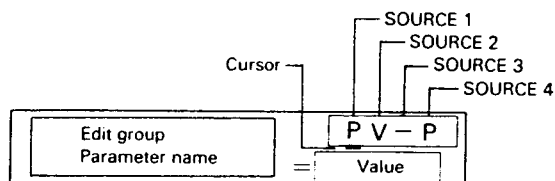
* Edit parameter name: This indicates the parameter being edited. Change with the letter switches (A, B, C, or D) or the PREVIOUS switch.

* Parameter value: This gives the current value for the parameter. Change with the [+YES] / [−NO] switches or the joystick.

* SOURCEs: These indicate, from left to right, the current statuses of SOURCEs 1-4.

Note: Use the SOURCE MUTE (numbers 1-4) switches to turn the individual SOURCEs on and off.

Status	Source
P	PCM waveform
V	VM waveform
—	Mute

* Cursor   This underline tells which SOURCE is being edited.

(4) Selecting a SOURCE to be edited

Press the corresponding SOURCE SELECT (numbers 5-8) switch. The cursor shifts to the appropriate symbol.

(S1) (S2) (S3) (S4)

```
W A V E          P V - P
S E L E C T   = 2 5 6
```
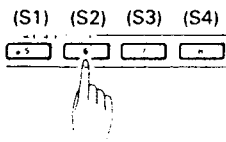
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3. SINGLE Patch Parameters

(1) EDIT switch

There are two parameters that you can edit before proceeding to the ones grouped under the letter switches (A, B, C, and D):

EDIT -1 VOLUME

Determines the volume for the SINGLE patch.

Normally, this should be the maximum (100), but it may be necessary to adjust the balance between tone patches with this parameter.

Note: The parameter D -1 LEVEL adjusts the relative balance between the SOURCEs used in the tone patch.

```
S I A—1    V o i c e   A h h
V O L U M E  = 1 0 0
```

Value	Effect
1	Minimum
.	.
100	Maximum

EDIT -2 NAME

Assigns a 10-character name for the tone patch.

This name may mix any of the following 96 characters.

Procedure:

① Use the +YES / −NO switches or the joystick to modify the current character.
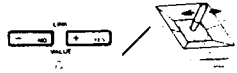
```
S I A—1    V o i c e   A h h
N A M E      1 S T  =   V
```

② Press the EDIT key to move from character to character.
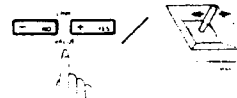
```
S I A—1    V o i c e   A h h
N A M E      2 N D  =   o
```

③ Repeat the above steps as often as necessary.

Valid name characters

```
■ !  "  #  $  %  &  '  (  )  *  +  ,  −  .  /
0  1  2  3  4  5  6  7  8  9
:  ;  <  =  >  ?  @
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
[  ¥  ]   ^    —   `
a b c d e f g h i j k l m n o p q r s t u v w x y z
↑  ↓  |  →  ←
```

(2) Group A — COMMON

The parameters in this group affect all four SOURCEs equally.

A -1 SOURCE

Determines whether the tone patch uses all four SOURCEs or only two. Choosing the former makes the K1II an eight-voice polyphonic instrument — that is, limited to sounding a maximum of eight notes at a time; the latter makes it sixteen-voice polyphonic.

Note: Sources 3 and 4 are not available when this parameter is set to 2.

Muting Sources 3 and 4 is not the same as changing this parameter to 2. The unit remains eight-voice polyphonic.

```
C O M M O N            P V – P
S O U R C E S  2 / 4 =    4
```

Value	Effect
2	The unit uses only SOURCES 1 and 2
4	The unit uses all four SOURCEs.

A -2 VIBRATO DEPTH

Determines the amount by which the vibrato effect alters the pitch above and below the note pitch.
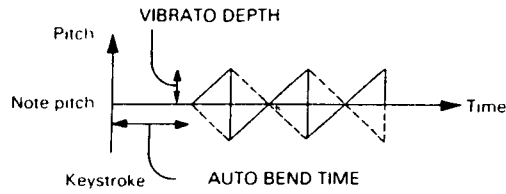
Note: B -4 VIBRATO/AUTO BEND determines whether the individual SOURCEs use the vibrato effect. A -8 VIBRATO/AUTO BEND TIME determines the delay before the start of the vibrato effect.

```
V I B R A T O          P V - P
D E P T H              = ± 5 0
```

Value	Effect
+50	Maximum vibrato with normal waveform
0	No vibrato
-50	Maximum vibrato with inverted waveform

A -3 VIBRATO SPEED

Determines the vibrato rate.

Leisurely vibrato   Rapid vibrato
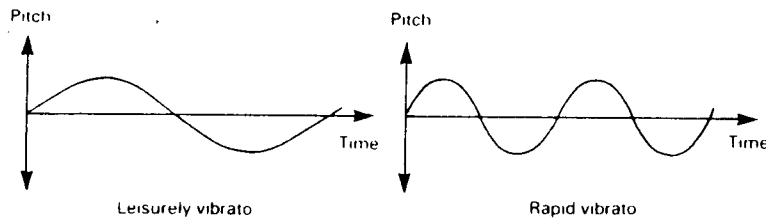
```
V I B R A T O          P V - P
S P E E D              = 1 0 0
```

Value	Effect
0	Leisurely vibrato
100	Rapid vibrato

A -4 VIBRATO SHAPE

Determines the waveform for the vibrato effect.

Sawtooth (SAW)   Square (SQR)
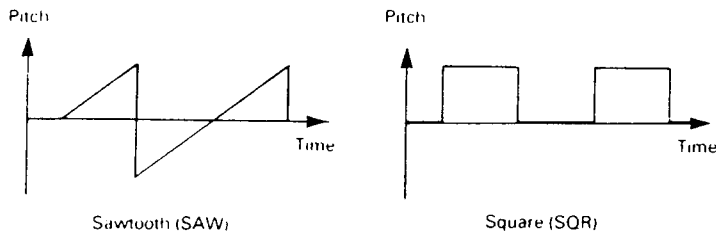
```
V I B R A T O          P V - P
S H A P E              = S A W
```

Value	SHAPE	
TRI		Triangle
SAW		Sawtooth
SQR		Square
RND	Random variation	

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A -5 PRS VIBRATO

Links the amount of vibrato to aftertouch, the amount of pressure on the key.

```
V I B R A T O          P V - P
P R S - D E P T H    = ± 5 0
```


+50

Original vibrato

Accentuated vibrato (increased pressure)
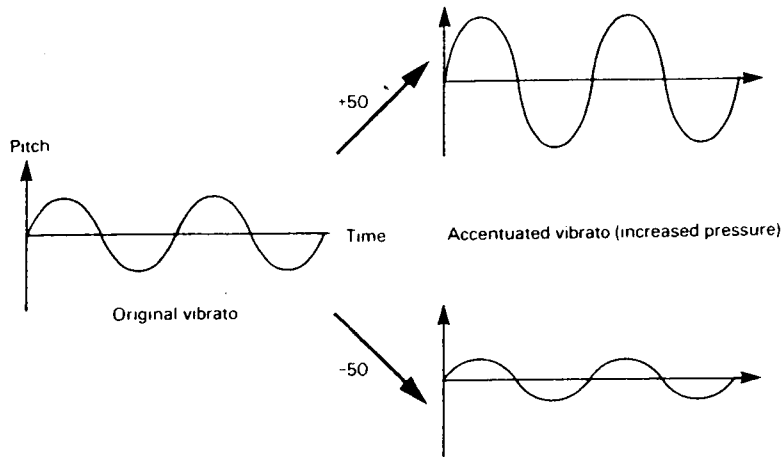
-50

Value	Effect of increasing pressure
+50	Increased vibrato
0	No effect
-50	Decreased vibrato

A -6 WHEEL VIBRATO ASSIGN

Determines whether the MODULATION wheel controls vibrato depth or speed.

```
V I B R A T O          P V - P
W H E E L              = D E P
```

Value	Effect
DEP	Depth (amplitude)
SPD	Speed (rate)

A -7 AUTO BEND DEPTH

Determines how the pitch alters as each key is struck — the AUTO BEND effect.

```
A U T O   B E N D      P V - P
D E P T H              = ± 5 0
```


Positive depth

Negative depth
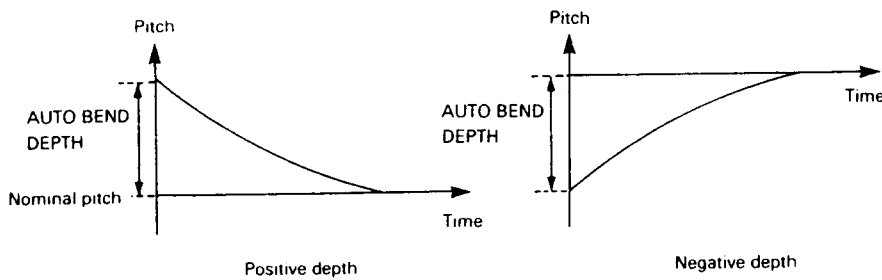
Value	Effect
+50	Pitch drops to nominal value
0	No effect
-50	Pitch rises to nominal value

Note: B -4 VIBRATO/AUTO BEND determines whether the individual SOURCEs use this effect.

$\boxed{A}$-8 AUTO BEND TIME

Determines the time for the automatic bend function ($\boxed{A}$-7 above) and the delay before the start of the vibrato effect ($\boxed{A}$-2 above).

```
AUTO   BEND      PV-P
TIME             =100
```

Value	Effect
0	No effect
100	Maximum period
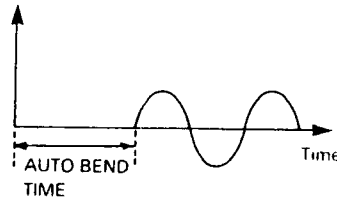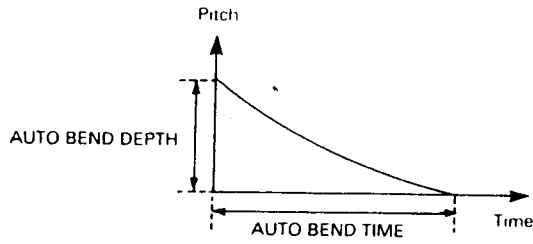
$\boxed{A}$-9 AUTO BEND VEL DEP

Uses $\boxed{D}$-7 VEL CURVE to link the depth of the AUTO BEND effect to key velocity.

```
AUTO   BEND      PV-P
VEL→DEPTH        =±50
```

Value	Effect
+50	Depth increases with velocity
0	No effect
-50	Depth decreases with velocity

Higher velocity

(For positive depth)
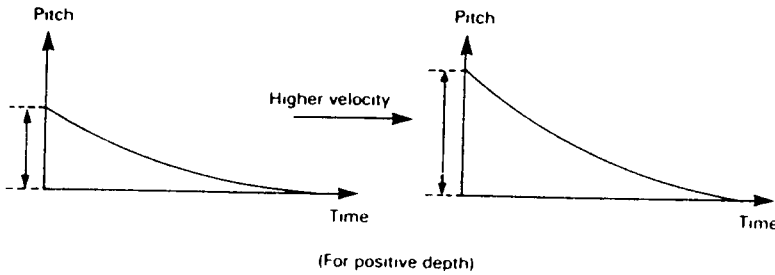
[A]-10 AUTO BEND KS-TIME

Uses [A]-13 KS CURVE to link the AUTO BEND time to key position.
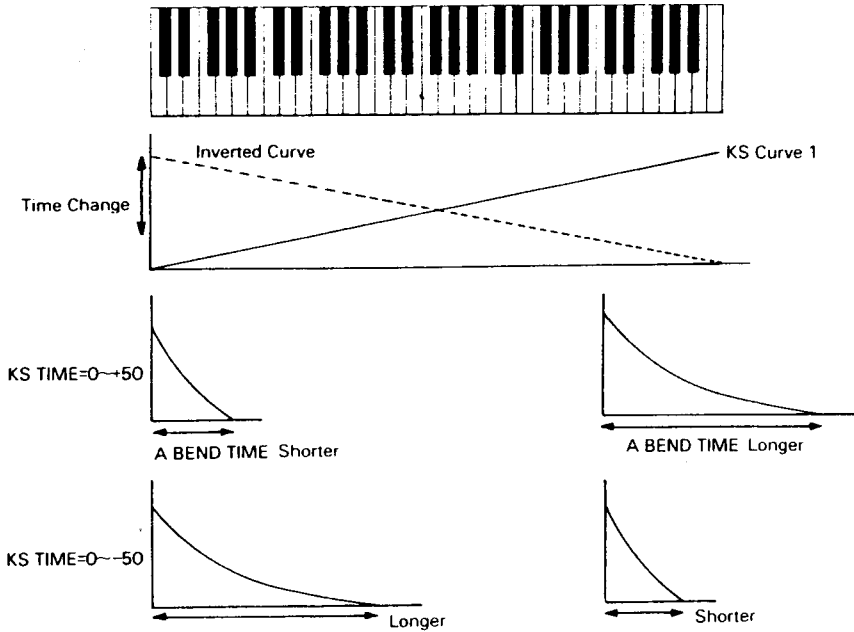
AUTO BEND	P V – P
K S → T I M E	= ± 5 0

Value	Effect
+50	Maximum effect with normal KS curve
0	No effect
50	Maximum effect with inverted KS curve

Inverted Curve   KS Curve 1

Time Change

KS TIME=0→+50

A BEND TIME Shorter   A BEND TIME Longer

KS TIME=0~–50

Longer   Shorter

[A]-11 PRS FREQ

Links key frequency (pitch) to aftertouch, the amount of pressure on the key.

[B]-5 PRS FREQ determines whether the individual SOURCEs use this effect.

COMMON	P V – P
P R S → F R E Q	= ± 5 0

Value	Effect
+50	Pitch increases with pressure.
0	No effect
-50	Pitch decreases with pressure.

[A]-12 PITCH BEND

Determines the PITCH BEND wheel range in semitones.
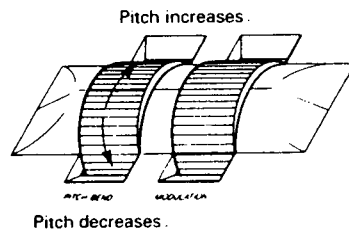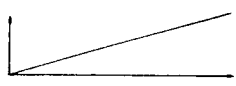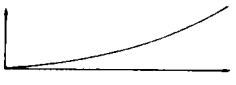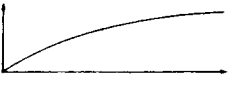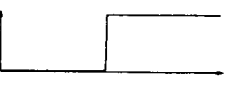
COMMON	P V – P
P I T C H B E N D	= 1 2

Value	Effect
0	No effect
12	Range of one octave

Pitch increases

Pitch decreases.

A -13 KS CURVE

Determines the shape of the keyboard scaling curve, a curve that other parameters use to make volume, note length, pitch, and other variables a function of key position.

| COMMON | PV - P |
| KS CURVE | = 5 |

Value	Effect
1	
2	
3	
4	
5	

A -14 POLY MODE

Selects the voice assignment mode.

POLY 1 — Striking the key a second time cuts off the previous note.

Second stroke cuts off first.

Keystroke
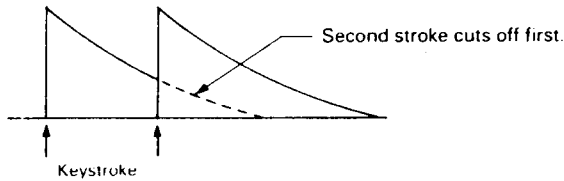
| COMMON | PV - P |
| POLY MODE | = PL2 |

Value	Effect
PL1	Second stroke cancels first.
PL2	Second stroke overlaps first.
SOLO	One note at a time

POLY 2 — The first note continues to die out even after the key is struck a second time.

Second stroke overlaps first

Keystroke
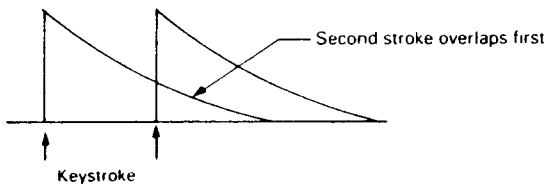
SOLO — The keyboard sounds only one note at a time.

Note: If you hold down one key and strike another, the second note will replace the first, but the first note will reappear when you release the second key.

(3) Group B — FREQUENCY

The parameters in this group determine the pitch.

B -1 COARSE

Determines the relative pitch of the SOURCE in semitones when B -3 KEY TRACK is ON.

```
F R E Q U E N C Y        P V – P
C O A R S E         = ± 2 4
```

Value	Effect
+24	Two octaves higher
0	Normal pitch
–24	Two octaves lower

B -1 FIXED KEY

Determines the pitch used when B -3 KEY TRACK is OFF.

Note: When B -3 KEY TRACK is ON, COARSE appears; when it is OFF, FIXED KEY appears.

```
F R E Q U E N C Y        P V – P
F I X E D   K E Y     = C # — 4
```

Value	C-4 ~ G6

B -2 FINE

Provides precise pitch adjustment.

```
F R E Q U E N C Y        P V – P
F I N E           = ± 5 0
```

Value	Effect
+50	1 semitone higher
0	Normal pitch
–50	1 semitone lower

B -3 KEY TRACK

Switches tracking function on and off. When tracking is ON, each key produces a note of a different pitch. When it is OFF, all keys produce the same note, the one selected by B -1 FIXED KEY.

```
F R E Q U E N C Y        P V – P
K E Y   T R A C K    = O F F
```

Value	Effect
ON	Normal keyboard pitch
OFF	Monotone pitch

B-4 VIBRATO/AUTO BEND

Switches the vibrato and AUTO-BEND functions defined with parameters A-2 through A-10 on and off for the individual SOURCEs.

```
F R E Q   M O D       P V - P
V I B / A   B E N D   = O F F
```

Value	Effect
ON	Vibrato and AUTO-BEND on
OFF	Vibrato and AUTO-BEND off

B-5 PRS-FREQ

Switches the pressure-frequency link defined with parameter A-11 on and off for the individual SOURCEs.

```
F R E Q   M O D       P V - P
P R S - F R E Q   =   O N
```

Value	Effect
ON	Pressure-frequency on
OFF	Pressure-frequency off

B-6 KS-FREQ

Adjusts the pitch according to the keyboard scaling curve selected by A-13.

```
F R E Q   M O D       P V - P
K S - F R E Q     = ± 5 0
```
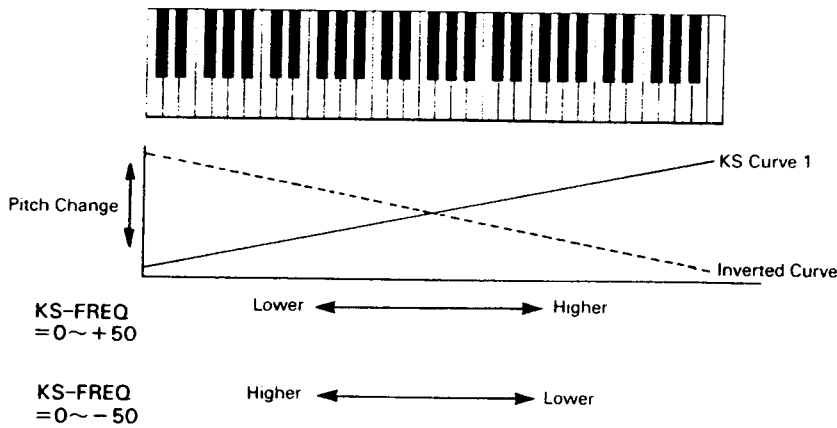
Value	Effect
+50	Maximum effect with normal KS curve
0	No effect
-50	Maximum effect with inverted KS curve

Example

Pitch Change

KS Curve 1

Inverted Curve

KS-FREQ
=0~+50
Lower ←——————→ Higher

KS-FREQ
=0~-50
Higher ←——————→ Lower

(4) Group C — WAVE

The parameters in this group determine the waveform.

WAVE	P V - P
S E L E C T	= 2 5 6

Value	Waveform
1~204	VM waveform
205~256	PCM waveform

[C]-1 WAVE SELECT

Determines the waveforms for the individual SOURCEs.

Note: You may select any four from the 52 PCM waveforms and 204 VM waveforms available on the K1II. (See the Wave List)

[C]-2/[C]-3 AM (Ring Modulation)

Uses one SOURCE to modulate the output from another. (See illustration.) This type of modulation produces overloaded sounds that are difficult to produce with harmonic synthesis alone.

Note: The size of the effect depends on the ENV LEVEL for the modulating SOURCE.

AM	P V - P
S 1 S 2	= 2 > 1

Value	Effect
OFF	No AM. (Both SOURCEs sound.)
2 > 1	SOURCE 2 modulates SOURCE 1
REV	SOURCE 1 modulates SOURCE 2
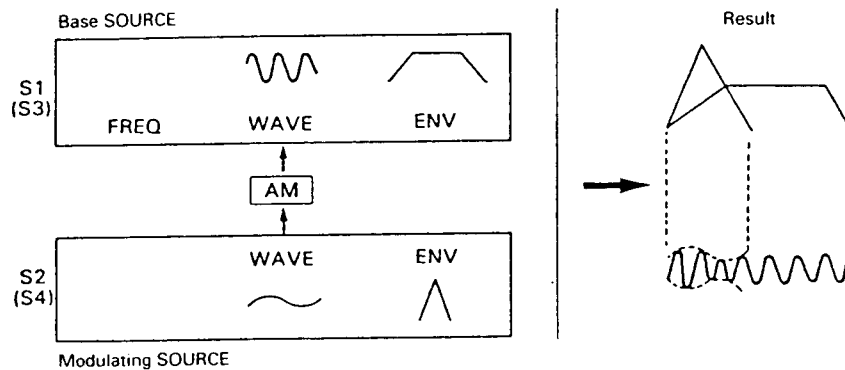
AM	P V - P
S 3 S 4	= 4 > 3

Value	Effect
OFF	No AM. (Both SOURCEs sound.)
4 > 3	SOURCE 4 modulates SOURCE 3
REV	SOURCE 3 modulates SOURCE 4

Note: Even if the base SOURCE is muted, it will still sound if the envelope for the modulating SOURCE is large enough.

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$\boxed{C}$-4 COPY FROM

Copies a block of data (FREQ, WAVE, or ENV) for a SOURCE in the current tone patch to a SOURCE in another tone patch.

Note: This function is useful for mixing parameters from, for example, a PIANO tone patch and a STRINGS tone patch.

```
COPY                    PV-P
FROM  SINGLE = I A—8
```

Envelope for Piano

Envelope for Strings
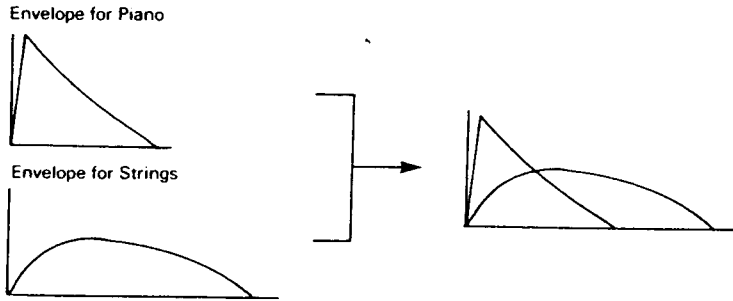
Procedure:

① Use the number switches (5-8) to select the SOURCE number for the destination.

```
COPY                    PV-P
FROM  SINGLE = I A—8
```
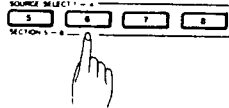
② Use the $\boxed{+\ \text{YES}}$ / $\boxed{-\ \text{NO}}$ switches or the joystick to select the tone patch number for the SOURCE to be copied.

```
COPY                    PV-P
FROM  SINGLE = e A—6
```
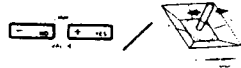
③ Press the $\boxed{C}$ switch to change to the SOURCE display.

```
COPY                    PV-P
FROM  SOURCE = S4
```

④ Use the $\boxed{+\text{YES}}$ / $\boxed{-\text{NO}}$ switches or the joystick to select the SOURCE to be copied.

```
COPY                    PV-P
FROM  SOURCE = S1
```
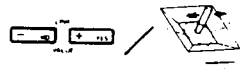
⑤ Press the $\boxed{C}$ switch to change to the confirmation display.

```
COPY
FROM      EXEC? = ←  →
```

⑥ Press the $\boxed{+\text{YES}}$ switch to proceed.

```
COPY
FROM      SURE? = ←  →
```

⑦ Press the $\boxed{+\text{YES}}$ switch to complete.
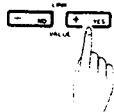
```
                    COMPLETED!
```

Press the $\boxed{-\text{NO}}$ switch to cancel.

```
                    CANCELED!
```

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(5) Group D — ENVELOPE

The parameters in this group determine the envelope, the way the volume of a sound changes with time. For example, a note on a piano begins to fade immediately after you strike it, but one on an organ stays at the same volume until you release the key. The graph below defines the five phases of the envelope.
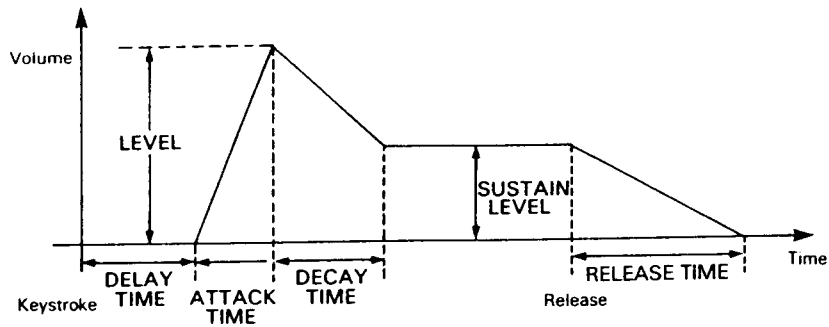
D -1   LEVEL

Determines the overall envelope volume.

Note: These settings affect the balance between individual SOURCEs and the size of the amplitude modulation effect.
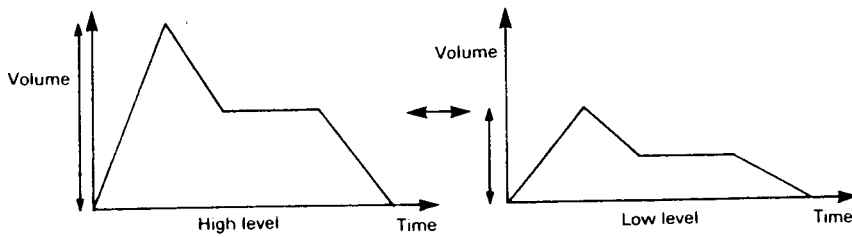
ENVELOPE	P V − P
L E V E L	= 1 0 0

Value	Effect
0	No output (mute)
⎰	⎰
100	Maximum level

D -2   DELAY

Determines the time that elapses before the keystroke begins producing a sound.
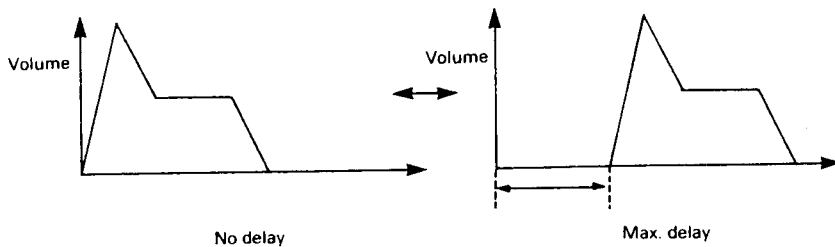
ENVELOPE	P V − P
D E L A Y	= 1 0 0

Value	Effect
0	0
⎰	⎰
100	Max. delay

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D -3 ATTACK
Determines the time that the sound takes to peak.

Long attack (leisurely rise) Time   Short attack   Time
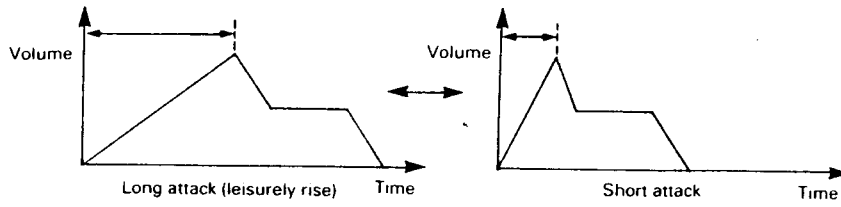
| ENVELOPE | PV – P |
| ATTACK | = 1 0 0 |

Value	Effect
0	Short attack (instantaneous rise)
100	Long attack (leisurely rise)

D -4 DECAY
Determines the time that the sound takes to fall from the peak to the SUSTAIN level.

Long decay   Short decay
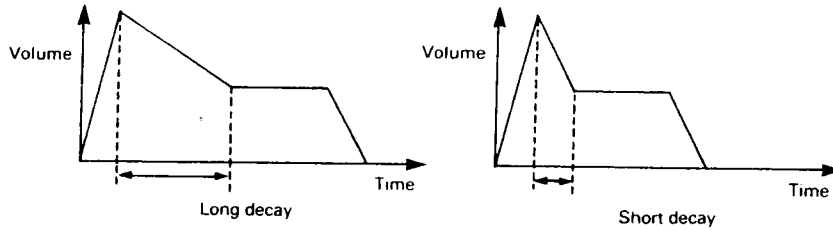
| ENVELOPE | PV – P |
| DECAY | = 1 0 0 |

Value	Effect
0	Instantaneous drop
100	Gradual drop

D -5 SUSTAIN
Determines, relative to the peak, the volume when the key is held down.

High sustain level (e.g. organ)   Low sustain level (e.g. piano)
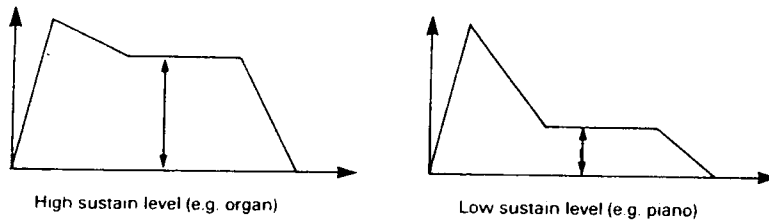
| ENVELOPE | PV – P |
| SUSTAIN | = 1 0 0 |

Value	Volume
0	No sustain (mute)
100	Max sustain

D -6 RELEASE
Determines the time the sound takes to die out after the key is released.

Long release time   Short release time
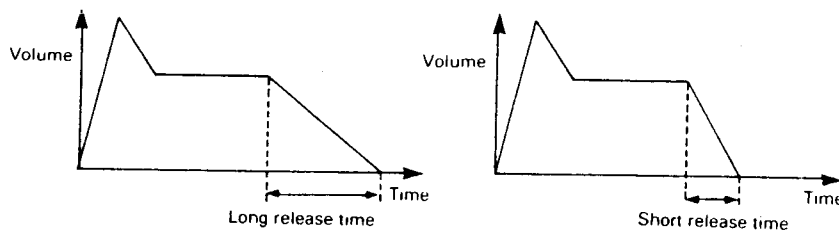
| ENVELOPE | PV – P |
| RELEASE | = 1 0 0 |

Value	Effect
0	Sound dies instantly after release
100	Sound gradually dies out

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⬚D⬚-7 VEL CURVE

Determines the curve that ⬚D⬚-8 VEL ENV LEVEL and ⬚D⬚-11 VEL ENV TIME use to adjust the overall volume and length, respectively, of the envelope for velocity, the initial force on the key.
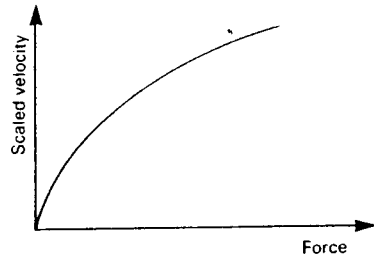
VELOCITY		P V – P	
CURVE		=	8

Value	Curve	Value	Curve
1		5	
2		6	
3		7	
4		8	

⬚D⬚-8 VEL-ENV LEVEL

Uses ⬚D⬚-7 VEL CURVE to adjust the overall volume of the envelope.

Example: Velocity curve 1
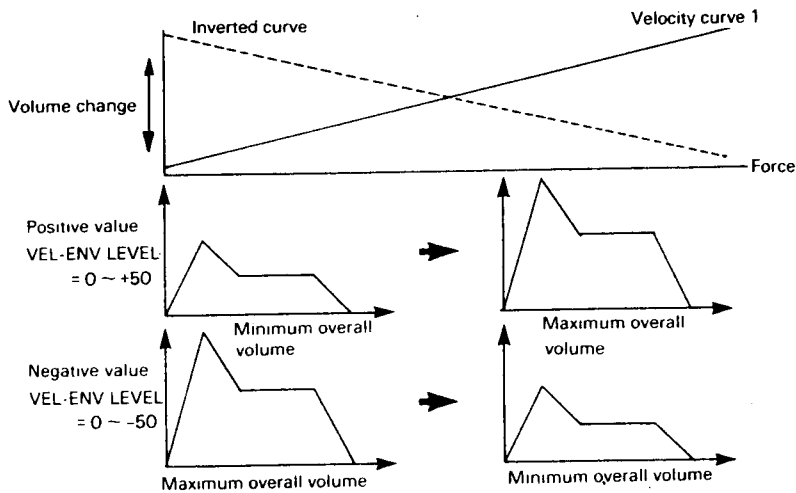
LEVEL MOD	P V – P
V E L	= ± 5 0

Value	Effect
+50	Maximum effect
/	
0	No effect
/	
–50	Maximum effect with inverted velocity curve

⬚D⬚-9 PRS ENV LEVEL

Links the overall volume to aftertouch, the amount of pressure on the key.

LEVEL MOD	P V – P
P R S	= ± 5 0

Value	Effect
+50	Maximum effect
0	No effect
–50	Maximum effect, but volume decreases with aftertouch

D-10 KS-ENV LEVEL

Uses A-13 KS CURVE to link the overall volume to key position.

Example: KS curve 1
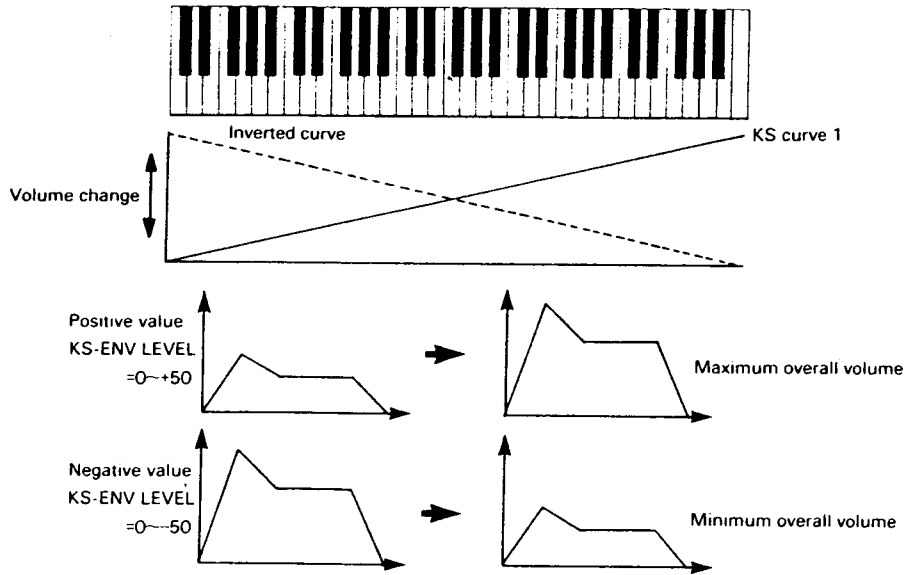
LEVEL MOD	PV-P
KS	=±50

Value	Effect
+50	Maximum effect with normal KS curve
0	No effect
-50	Maximum effect with inverted KS curve

Inverted curve   KS curve 1

Volume change

Positive value
KS-ENV LEVEL
=0~+50   →   Maximum overall volume

Negative value
KS-ENV LEVEL
=0~-50   →   Minimum overall volume

D-11 VEL-ENV TIME

Uses D-7 VEL CURVE to link the attack time to velocity.

Example: Velocity curve 1
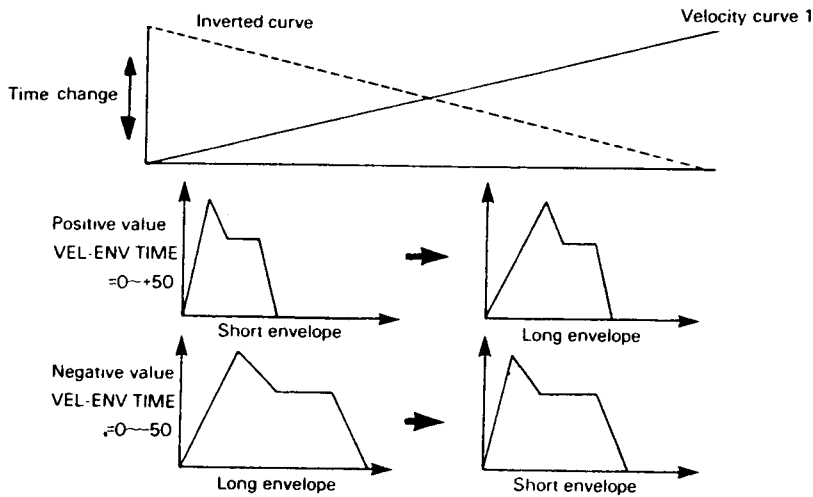
TIME MOD	PV-P
VEL	=±50

Value	Effect
+50	Maximum effect with normal velocity curve
0	No effect
-50	Maximum effect with inverted velocity curve

Inverted curve   Velocity curve 1

Time change

Positive value
VEL-ENV TIME
=0~+50
Short envelope   →   Long envelope

Negative value
VEL-ENV TIME
=0~-50
Long envelope   →   Short envelope

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D -12 KS-ENV TIME

Uses A -13 KS CURVE to link the attack and decay time to key position.
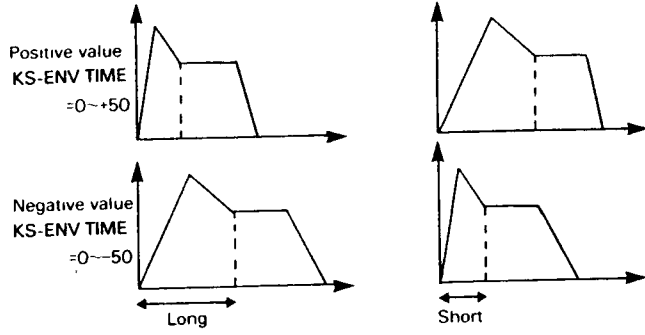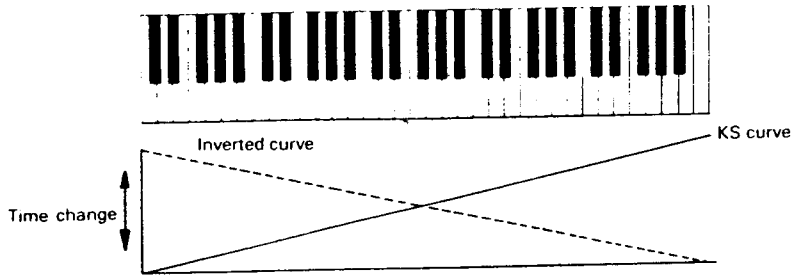
TIME	MOD	PV – P
KS		= ± 5 0

Value	Effect
+50	Maximum effect with normal KS curve
0	No effect
-50	Maximum effect with inverted KS curve

Inverted curve

KS curve

Time change

Positive value
KS-ENV TIME
=0~+50

Negative value
KS-ENV TIME
=0~-50

Long

Short

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4. Editing MULTI Patches

(1) Basic approach

The K1 II MULTI patch consists of from one to eight SECTIONs, each consisting of a SINGLE patch with additional control information. Because it would take too much time to construct a tone patch completely from scratch, the usual approach is to select the closest MULTI patch and then edit it.
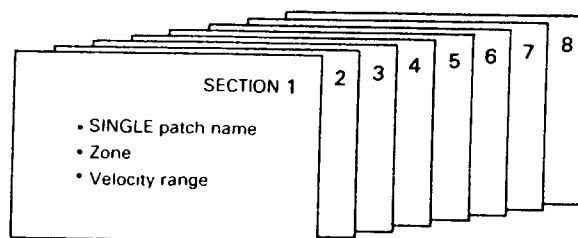
(2) Procedure

① In the PLAY mode, select the MULTI patch that best approximates the desired sound.

```
MULTI
I A—1          SYMPHONY
```

② Press the EDIT switch.


```
M I A—1        SYMPHONY
VOLUME            = 1 0 0
```

③ Select the parameter to be edited.

 or or
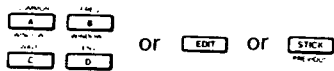
```
TRANS      2 16 5 4 – 3 8 15
SYMPHONY        = ± 2 4
```

(3) Edit display

The EDIT display provides five different types of information.
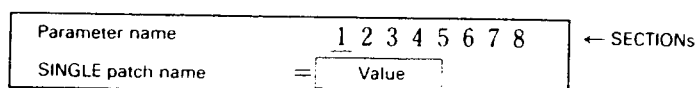
* **Parameter name** This indicates the parameter being edited. Change with the letter switches (A, B, C, or D) or the PREVIOUS switch.

* **Parameter value** This gives the parameter value for the SECTION indicated by the cursor. Change with the +YES / –NO switches or the joystick.

* **Sections** These indicate the current status of the eight possible SECTIONs. A number (1-16) indicates the SECTION's MIDI receive channel and "—" tells that the number of the SECTION's polyphonic voices is 0.

* **Cursor** This underline tells which SECTION is being edited. Use the SOURCE SELECT switches (numbers 1-8) to change SECTIONs.

* **SINGLE patch name** This gives the name of the SINGLE patch currently assigned to this SECTION.

5. MULTI Patch Parameters

(1) [EDIT] switch

There are two parameters that you can edit before proceeding to the ones grouped under the letter switches (A, B, C, and D):

[EDIT]-1 VOLUME

Determines the volume for the MULTI patch.

Normally, this should be the maximum (100), but it may be necessary to adjust the balance between MULTI patches with this parameter.

Note: The parameter [D]-3 LEVEL adjusts the relative balance between the SECTIONs used in the tone patch.

```
M I A—1        S Y M P H O N Y
V O L U M E          = 1 0 0
```

Value	Effect
1	Minimum
	(
100	Maximum

[EDIT]-2 NAME

Assigns a 10-character name for the tone patch.
This name may mix any of the 96 characters.

The procedure is the same as that for SINGLE patch. (See p.17.)

```
M I A—1        S Y M P H O N Y
N A M E        1 S T   =   S
```

(2) Group [A] — WINDOW 1

This group assigns the SINGLE patches to SECTIONs.

[A]-1 SINGLE ASSIGN

Determines the SINGLE patches for each SECTION.

Note: The K1II will not allow you to mix internal (I/i) and external (E/e) tone patches. You cannot use an internal SINGLE patch in an external MULTI patch or an external SINGLE patch in an internal MULTI patch, for example.

The MULTI patch remembers only the tone patch number and not tone patch contents. Editing a SINGLE patch will therefore automatically affect all MULTI patches using it as well.

```
S I N G L E    2 16 5 4 - 3 8 15
S t r   E n s        = I A—8
```

Procedure:

① Select SECTION

□ □ □ □
□ □ □ □
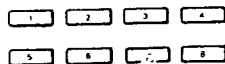
```
S I N G L E    2 16 5 4 - 3 8 15
S t r   E n s        = I A—1
```

② Select the SINGLE patch to be assigned.

[- NO] [+YES] /
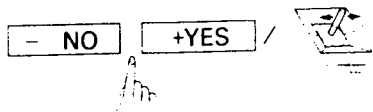
```
S I N G L E    2 16 5 4 - 3 8 15
O r c h e s t r a    = I A—5
```

Group [B] — WINDOW 2

The parameters in this group determine the keyboard zone for the SECTION.

[B]-1 ZONE LO

Determines the lower limit (between C-2 and G8) for the SECTION.

```
Z O N E   L O  2 16 5 4 - 3 8 15
V o i c e   A h h    = C # — 2
```

B -2 ZONE HI

Determines the upper limit (between C-2 and G8) for the SECTION.

```
ZONE  HI   21654 - 3815
Voice  Ahh      =G 3
```

Note: The above two parameters serve to divide the K1II's effective keyboard range into zones.

Examples:

1 Split

2 Layer

3 Split + Layer

Sounds overlap here.

4 Split
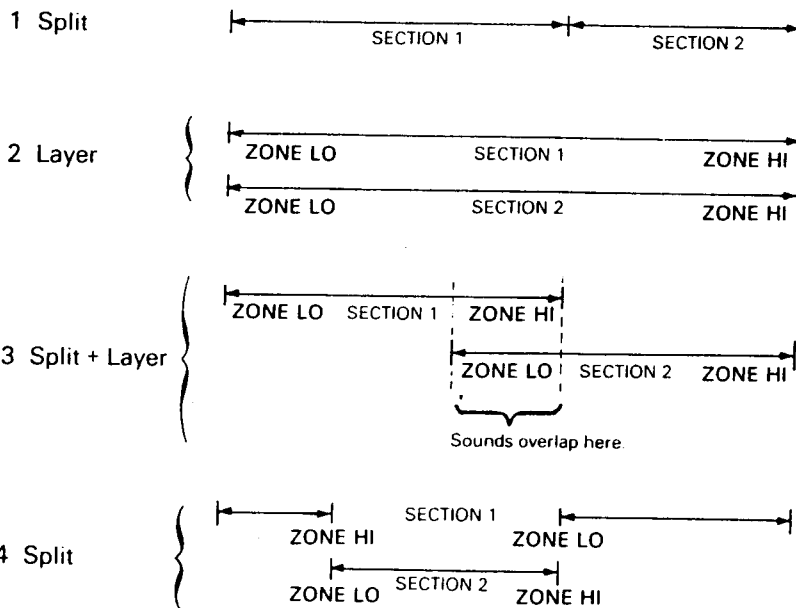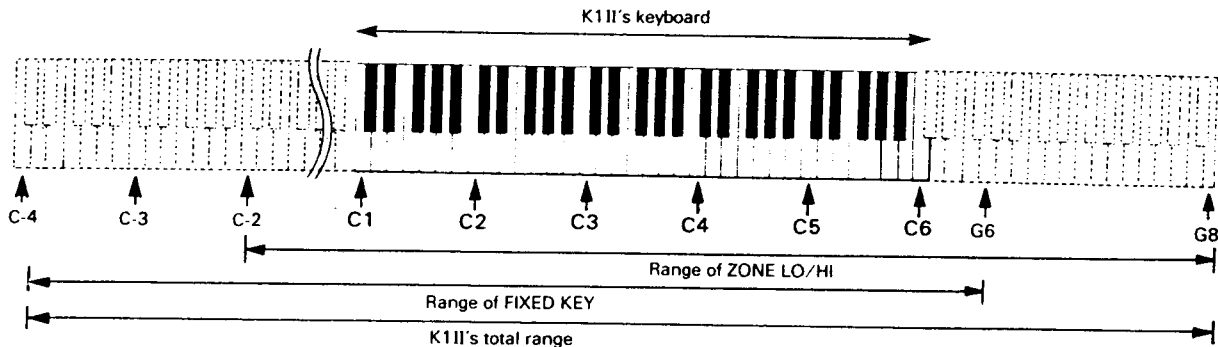
B -3 VELOCITY SW

Determines how the SECTION reacts to changes in key velocity.

```
VEL   SW    2164 - 41815
Mellow  EP       =LOUD
```


Increasing velocity

SOFT (Weak pressure produces a strings sound, for example.)

LOUD (Higher pressure produces a brass sound, for example.)

ALL
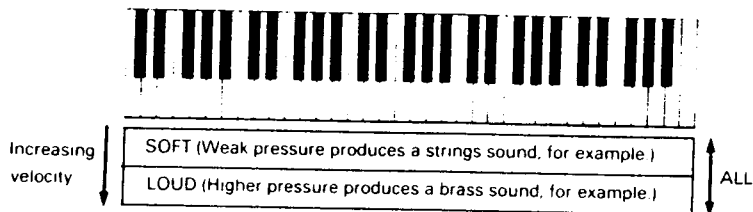
Value	Effect
ALL	All strikes produce a sound.
SOFT	Only weak strike produces a sound.
LOUD	Only hard strike produces a sound.

(4) Group 〔 C 〕 — WINDOW 3

The parameters in this group determine the number of polyphonic voices and the MIDI channel assignments.

〔 C 〕-1 POLY

Determines the maximum number of polyphonic voices available for each SECTION. This can be a number, 0-8, or VR (variable). In the latter case, the K1 II automatically redistributes voices that are not in use.

Note: The K1 II assigns priority to the most recently struck keys.

The VR setting introduces greater flexibility when the K1 II is driven by a sequencer, computer, or similar device.

```
POLY        2 16 5 4 – 3 8 15
S t r    E n s         =  V R
```

Value	Effect
0	None (mute)
1 - 8	Limit
VR	Variable (All available)

Example:

SECTION 1 Melody

SECTION 2 Piano

SECTION 3 Strings

SECTION 4 Bass

No. of simultaneous voices 6   2   7

Consider the following four-part segment. Taken separately, the SECTIONs seem to require 1+3+3+2=9 voices, one more than the eight available. A closer look, however, reveals that the maximum number of notes at any given time is only seven.

Since the second and third SECTIONs do not simultaneously require three voices each, they can share. (Alternatively, since the maximum is within the limit, all four SECTIONs can be made variable.)

SECTION	Max.	Option 1	Option 2
1	1	1	VR
2	3	VR	VR
3	3	VR	VR
4	2	2	VR

〔 C 〕-2 MODE

Determines whether the SECTION accepts keyboard input, MIDI input, or both. This function allows the simultaneous use of the K1 II as a local keyboard and as a remote voices under sequencer control.

```
MODE        2 16 5 4 – 3 8 15
S t r    E n s         = K Y B D
```

Value	Effect
KYBD	Voice available only to keyboard
MIDI	Voice available only to external MIDI devices
MIX	Voice available to both

Example:

```
              IN ┌──── MIDI ────┐ OUT
              K1 II   ┌──────────────────┐
                      │ Sequencer or     │
                      │ equivalent       │
                      └──────────────────┘
```

SECTION 1 M O D E = K Y B D ···Voice for keyboard
        2   M I D I ⎫
        3   M I D I ⎬ Voices only available to sequencer or equivalent
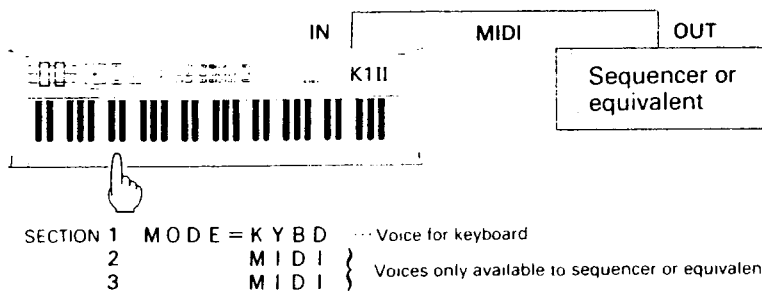
〔 C 〕-3 RCV CH

Assigns MIDI receive channels to SECTIONs so that a sequencer or other external device can use the K1 II as up to eight different MIDI sound sources.

Note: The channel numbers appear in the upper right corner of the display.

MIDI receive channel of DRUM SECTION is assignable separately from SECTIONs of Multi Patch. (See p.45.)

```
RCV  CH     2 16 5 4 – 3 8 15
S t r    E n s         =     5
```

Value	Effect
1	MIDI receive channel number 1
⋮	⋮
16	MIDI receive channel number 16

(5) Group ☐D☐ — WINDOW 4

The parameters in this group affect SECTION pitch and level.

☐D☐-1 TRANSPOSE

Shifts SECTION pitch up or down in increments of a semitone. Combining a SECTION with normal pitch (value=0) with one transposed up 7 or 12 semitones, for example, creates a perfect fifth or octave, respectively.

```
T R N S        2 16 5 4 - 3 8 15
S t r   E n s           = ± 2 4
```

Value	Effect
+24	Two octaves higher
0	Standard pitch
-24	Two octaves lower

☐D☐-2 TUNE

Shifts SECTION pitch up or down by small amounts.
Combining SECTIONs with slightly different pitches adds depth to the sound.

```
T U N E        2 16 5 4 - 3 8 15
S t r   E n s           = ± 5 0
```

Value	Effect
+50	Semitone higher
0	Standard pitch
-50	Semitone lower

☐D☐-3 LEVEL

Determines the relative volume for each SECTION.

Note: If the value is zero, the SECTION's portion of the upper right corner of the display changes to a dash (–).

```
L E V E L       2 16 5 4 - 3 8 15
S t r   E n s           = 1 0 0
```

Value	Effect
0	Min. (mute)
100	Max.

☐D☐-4 OUTPUT

Determines whether the SECTION output goes to the left channel, right channel, or both. The value "BYPS" (BYPASS) determines the SECTION output to go to both channels without REVERB/DELAY effect in the K1 II. (See p.44.)

Note: If there is only one keyboard amplifier, connect it to the R/MONO jack. The K1 II will then mix both channels to produce a monaural output.

```
O U T P U T      2 16 5 4 - 3 8 15
S t r   E n s           = L + R
```

Value	Channel	Effect
R	Right	Yes
L	Left	Yes
L+R	Both	Yes
BYPS	Both	No

IV. WRITE — Storing Edited Tone Patches

1. Definition

When you edit a tone patch, you work with a temporary copy that disappears when you turn off the power. If you wish to save the tone patch for later use, you must store it in the K1II's internal memory or on a DC-8 memory card with the WRITE function.

It is also possible to copy a tone patch from one location to another and to copy all tone patches from the internal memory to a card (SAVE) or in the opposite direction (LOAD). (See p.40.)

Note: Copying data from one location to another involves erasing all data that was formerly at the destination. One way to avoid accidentally erasing valuable data is to keep backup copies on cards.

2. Procedure

To store the tone patch that you are currently editing:

① Disable the WRITE PROTECT function.

For an internal tone patch, press the
SYSTEM switch four times and the
-NO switch once. (See p.39.)

SYSTEM four times + - NO

```
SYSTEM
INT  PROTECT = ON
```

```
SYSTEM
INT  PROTECT = OFF
```

For an external tone patch, press the
SYSTEM switch five times and the
-NO switch once. (See p.39.)

SYSTEM five times + - NO

```
CARD
     PROTECT = ON
```

```
CARD
     PROTECT = OFF
```

② Press the WRITE switch.

WRITE

```
WRITE   MEA-8
TO      EXEC?  = ←  →
```

③ Select the destination.
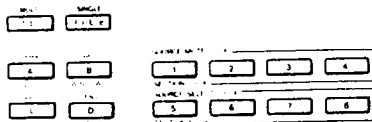
```
WRITE   MIB-1
TO      EXEC?  = ←  →
```

④ Press the +YES switch to display the
SURE? prompt.

+ YES

```
WRITE   MIB-1
TO      SURE?  = ←  →
```

⑤ Press the +YES switch to complete.

+ YES

```
              COMPLETED!
```

Or press the -NO to cancel.

- NO

```
              CANCELED!
```

V. LINK Function

1. Definition

The LINK function allows you to link up to eight tone patches — SINGLE or MULTI, INTERNAL or EXTERNAL — from the 192 available and then step through the series during a performance simply by pressing the LINK switches.

2. Procedure

① Press the [WRITE] switch twice.

Two times

```
┌─────────────────────────────┐
│ L I N K         S I A — 8   │
│ 1 S T                       │
└─────────────────────────────┘
```

② Select a tone patch of the series.
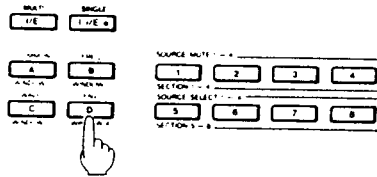
```
┌─────────────────────────────┐
│ L I N K         S I D — 7   │
│ 1 S T                       │
└─────────────────────────────┘
```

③ Press the [WRITE] switch and go back to Step2 to select the next tone patch in the series.

```
┌─────────────────────────────┐
│ L I N K         M I B — 2   │
│ 2 N D                       │
└─────────────────────────────┘
```

④ Repeat steps ② and ③ another seven times.

Note: If there are fewer than eight tone patches in the series, press the [– NO] switch at step 2 to terminate.

```
┌─────────────────────────────┐
│ L I N K          O F F      │
│ 5 T H                       │
└─────────────────────────────┘
```

VI. SYSTEM — System and MIDI Parameters

1. SYSTEM Parameters

Pressing the [SYSTEM] switch activates the K1II's [SYSTEM] mode. Subsequent presses then cycle through the parameters, the values of which may be changed with the [+YES] / [—NO] switches or the joystick.

```
SYSTEM/MIDI
              = S Y S
```

[SYSTEM]-2 TUNE
Adjusts the K1II's master tuning.

```
SYSTEM
TUNE          = ± 5 0
```

Value	Effect
+50	Semitone higher
⎰	⎰
0	Normal pitch
⎰	⎰
-50	Semitone lower

[SYSTEM]-3 TRANSPOSE
Shifts the pitch of all notes up or down in increments of a semitone.

```
SYSTEM
TRANSPOSE     = ± 1 2
```

Value	Effect
+12	One octave higher
⎰	⎰
0	Normal pitch
⎰	⎰
-12	One octave lower

[SYSTEM]-4 INT PROTECT
Controls the WRITE PROTECT function for the K1II's internal memory. It must be OFF for a LOAD operation.

```
SYSTEM
INT PROTECT =   ON
```

[SYSTEM]-5 CARD PROTECT
Controls the WRITE PROTECT function for the memory card.

Note: You should normally keep the preceding two parameters ON to prevent accidental erasure of valuable data.

```
CARD
        PROTECT =   ON
```

[SYSTEM]-6 CARD FORMAT
Prepares a DC-8 memory card (option) for the first use with the K1II.

Note: Proceed with caution. This procedure erases any data that may be on the card.

Procedure:

① Insert the card in the slot.

```
CARD  FORMAT
        E X E C ? = ←  →
```

② Press the [+YES] switch to proceed to the **SURE?** prompt

[+ ₙYES]

```
CARD  FORMAT
        S U R E ? = ←  →
```

③ Press the [+YES] switch to complete the operation.

[+ ₒYES]

```
        COMPLETED !
```

Or press the [—NO] to cancel.

[— ₒNO]

```
        CANCELED !
```

SYSTEM -7 SAVE

Copies all data from the internal memory (including EFFECT and DRUM SECTION) to a card.

Set SYSTEM -5 CARD PROTECT to OFF beforehand.

Note: Proceed with caution. This procedure erases any data that may be on the card.

Procedure:

① Insert the card in the slot.

```
SAVE
        EXEC? = ←   →
```

② Press the +YES switch to proceed from the EXEC? prompt to the SURE?.

+ YES

```
SAVE
        SURE? = ←   →
```

③ Press the +YES switch to complete the operation.

+ YES

```
                COMPLETED!
```

or press the −NO switch to cancel.

− NO

```
                CANCELED!
```

SYSTEM -8 LOAD

Copies all data from a card to the internal memory (including EFFECT and DRUM SECTION).

Set SYSTEM -4 INT PROTECT to OFF beforehand.

Note: Proceed with caution. This procedure erases any data that may be on the card.

Even if the data saved on the card which does not have the EFFECT and DRUM section copied on it (the card to which no saving is made by the K1 II) is loaded, the settings of the EFFECT and DRUM section in the main unit of the K1 II will not be changed.

Procedure:

① Insert the card in the slot.

```
LOAD
        EXEC? = ←   →
```

② Press the +YES switch to proceed from the EXEC? prompt to the SURE?.

+ YES

```
LOAD
        SURE? = ←   →
```

③ Press the +YES switch to complete the operation.

+ YES

```
                COMPLETED!
```

Or press the −NO switch to cancel.

− NO

```
                CANCELED!
```

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2. MIDI Transmission Parameters

Press the ⌈SYSTEM⌉ switch and then use the ⌈+YES⌉ / ⌈−NO⌉ switches or the joystick to change from SYS to TRS. Subsequent presses of the ⌈SYSTEM⌉ switch then cycle through the parameters, the value of which may be changed with the ⌈+YES⌉ / ⌈−NO⌉ switches or the joystick.

```
SYSTEM/MIDI
              =SYS
```

⌈SYSTEM⌉ TRS-2   TRS CH

Determines the MIDI channel (1-16) on which the K1II keyboard transmits MIDI data.

```
SYSTEM/MIDI
              =TRS
```
```
MIDI
TRS      CH      = 16
```

⌈SYSTEM⌉ TRS-3   PGM

Determines whether the K1II transmits program change data.

```
MIDI
TRS      PGM     = ON
```

⌈SYSTEM⌉ TRS-4   PRS

Determines whether the K1II transmits pressure (aftertouch) data.

```
MIDI
TRS      PRS     =OFF
```

⌈SYSTEM⌉ TRS-5   BEND

Determines whether the K1II transmits PITCH BEND data.

```
MIDI
TRS      BEND    = ON
```

⌈SYSTEM⌉ TRS-6   MOD

Determines whether the K1II transmits MODULATION data.

```
MIDI
TRS      MOD     =OFF
```

⌈SYSTEM⌉ TRS-7   HOLD

Determines whether the K1II transmits HOLD pedal data.

```
MIDI
TRS      HOLD    = ON
```

⌈SYSTEM⌉ TRS-8   DATA DUMP

Transmits tone patch data from one K1II to another — either one tone patch at a time or as one block consisting of 32 tone patches.

```
MIDI
DUMP     EXEC? =—  →
```

Value	Effect
PACH	One tone patch is transmitted at a time.
BLOK	One block is transmitted at a time.

Procedure:

① Connect the two units as shown.

On the receiving unit, set ⌈SYS⌉-4, 5 INT/CARD PROTECT to OFF and ⌈RCV⌉-11 EXCL to ON beforehand.

```
MIDI OUT          ▼MIDI IN
 K1II (TRS)        K1II (RCV)
```
INT/CARD PROTECT = OFF, RCV EXCL = ON

② Select the tone patch or block to send.

Example

```
MULTI
IA—8    MARCH BAND
```

③ Press the ⌈SYSTEM⌉ switch and shift to the DATA DUMP display.

```
MIDI
DATA     DUMP  =BLOK
```

④ Use the ⌈+YES⌉ / ⌈−NO⌉ switches or the joystick to select PACH or BLOCK.

```
−  NO    +  YES   /
```

```
MIDI
DATA     DUMP  =PACH
```
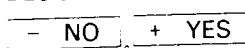
⑤ Press the ⌈SYSTEM⌉ switch to display the **EXEC?** prompt.

⌈SYSTEM⌉
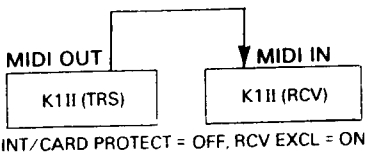
```
MIDI
DUMP     EXEC? =—  →
```

⑥ Press the `+YES` switch to proceed to the **SURE?** prompt.

`+ YES`

```
M I D I
D U M P    S U R E ? = _  _
```

⑦ Press the `+YES` switch to complete the dump.

`+ YES`

```
               COMPLETED !
```

Or press the `–NO` switch to cancel.

`– NO`

```
               CANCELED !
```

3. MIDI Receive Parameters

Press the `SYSTEM` switch and then use the `+YES` / `–NO` switches or the joystick to change from SYS to RCV. Subsequent presses of the `SYSTEM` switch then cycle through the parameters, the value of which may be changed with the `+YES` / `–NO` switches or the joystick.

```
S Y S T E M / M I D I
                = S Y S
```

```
S Y S T E M / M I D I
                = R C V
```

`SYSTEM` **RCV-2   RCV CH**

Determines the MIDI channel (1-16) on which the K1II receives.

Note: The SECTIONs in a MULTI patch receive on independent channels.

```
M I D I
R C V    C H      =  1 6
```

`SYSTEM` **RCV-3   OMNI ON/OFF**

Determines whether the K1II monitors all MIDI channels.

`SYSTEM` **RCV-4   PGM**

Determines how the K1II acts on program change data.

```
M I D I
O M N I            = O F F
```

```
M I D I
R C V    P G M    = N O R M
```

There are four possibilities: (See accompanying chart.)

OFF	The synthesizer ignores all incoming program change commands.
NORM (Normal)	A program change command between 0 and 63 changes the synthesizer to a SINGLE patch; one between 64 and 95, to a MULTI patch;
SECT (Section)	A program change command between 0 and 63 changes the SINGLE patch for the SECTION with the same MIDI channel; one between 64 and 95, changes to a MULTI patch.
LINK	A program change command changes the synthesizer to the next tone patch in the series.

Notes:
- For NORM and SECT, the synthesizer chooses the same bank (INT/EXT) as the patch currently on the display.
- A program change command between 96 and 127 changes the effect number of the K1II.

Value PGM No.	OFF	NORM		SECT		LINK	Transmitting	
		INT	EXT	INT	EXT	LINK	INT	EXT
0—31	Nothing recognized	SIA-1 ~SID-8	SEA-1 ~SED-8	SIA-1 ~SID-8	SEA-1 ~SED-8	No.1—No.8	SIA-1 ~SID-8	SEA-1 ~SED-8
32—63	Nothing recognized	SiA-1 ~SiD-8	SeA-1 ~SeD-8	SiA-1 ~SiD-8	SeA-1 ~SeD-8	No.1—No.8	SiA-1 ~SiD-8	SeA-1 ~SeD-8
64—95	Nothing recognized	MIA-1 ~MID-8	MEA-1 ~MED-8	MIA-1 ~MID-8	MEA-1 ~MED-8	No.1—No.8	MIA-1 ~MID-8	MEA-1 ~MED-8
96—111	Nothing recognized	EFFECT MODE 1~16	EFFECT MODE 1~16	EFFECT MODE 1~16	EFFECT MODE 1~16	EFFECT MODE 1~16	EFFECT MODE 1~16	EFFECT MODE 1~16
112—127	Nothing recognized	EFFECT MODE 1~16	EFFECT MODE 1~16	EFFECT MODE 1~16	EFFECT MODE 1~16	EFFECT MODE 1~16	Nothing transmitted	Nothing transmitted

[SYSTEM] RCV-5 PRS

Determines whether the K1II acts on pressure (aftertouch) data.

```
M I D I
R C V    PRS    = O F F
```

[SYSTEM] RCV-6 BEND

Determines whether the K1II acts on PITCH BEND data.

```
M I D I
R C V    BEND   =  ON
```

[SYSTEM] RCV-7 MOD

Determines whether the K1II acts on MODULATION data.

```
M I D I
R C V    MOD    = O F F
```

[SYSTEM] RCV-8 VOL

Determines whether the K1II acts on VOLUME data.

```
M I D I
R C V    VOL    =  ON
```

[SYSTEM] RCV-9 HOLD

Determines whether the K1II acts on HOLD pedal data.

```
M I D I
R C V    HOLD   = O F F
```

[SYSTEM] RCV-10 VEL

Determines whether the K1II acts on VELOCITY data.

```
M I D I
R C V    VEL    =  ON
```

[SYSTEM] RCV-11 EXCL

Determines whether the K1II acts on SYSTEM EXCLUSIVE data.

```
M I D I
R C V    EXCL   = O F F
```

Note: MIDI RCV INDICATOR

Every time the K1II receives MIDI data, the sign appears at the upper left corner.

┌── MIDI RCV INDICATOR
```
■ I N G L E
I A — 1    V o i c e   A h h
```

VII. EFFECTS (REVERB/DELAY)

Press the | SYSTEM | switch and then use the | +YES | / | -NO | switches or
the joystick to change from SYS to EFF.

Subsequent presses of the | SYSTEM | switch then cycle through the para-
meters, the values of which may be changed with the | +YES | / | -NO |
switches or the joystick.

```
┌─────────────────────┐
│ S Y S T E M / M I D I │
│                 = S Y S │
└─────────────────────┘
```

```
┌─────────────────────┐
│ S Y S T E M / M I D I │
│                 = E F F │
└─────────────────────┘
```

| SYSTEM | EFF-1 MODE

Determines the effect used. The number in the lower right corner of the
screen is the effect number. (See Chart.)

No.	Name	Contents
1*	HALL REVERB (STEREO)	Concert Hall
2	HALL REVERB (MONO)	Mono version of #1
3*	PLATE REVERB	Short Plate Setting
4*	ROOM REVERB	Large Room
5*	LOFT	Smaller than #4, but more live
6*	EARLY REFLECTION 1	First reflection reverb — long predelay, short decay
7	DELAY REVERB	Hall reverb with approx. 300ms pre-delay
8*	EARLY REFLECTION 2	Smoother version of #6
9*	STEREO DELAY	Independent delays with feedback — Left: 230ms, Right: 320ms
10*	STEREO PANPOT DELAY 1	Panning delay with feedback, approx. 240ms
11*	STEREO PANPOT DELAY 2	Panning delay with feedback, approx. 300ms
12	DELAY 1	Delay with feedback, approx. 230ms
13	DELAY 2	Delay with feedback, approx. 500ms
14	DELAY 3	Short single delay, approx. 40ms
15	DELAY 4	Single right-channel delay, approx. 360ms
16*	RANDOM DELAY	Stereo delay with varying time and level for each repeat

* In order to raise up the effect to its maximum, the EFFECT whose value number is marked * must be
output from both the right and left terminal pins in stereos.

* By making use of the program change of the MIDI, the mode can be switched through the external
equipment. The modes from 1 to 16 correspond to the MIDI program numbers from 96 to 111 (112 to
127).

| SYSTEM | EFF-2 DEPTH

Determines the effect's depth — that is, balance (%) relative to the original
output, and assignable for each MODE separately.

Note: The EFF settings are not stored with the patch. MULTI patches and
the drum section, however, allow the musician to turn off the effect
for individual sections or instruments. (See p.36,46.) To turn it off for
a single effect, set the depth to zero.

```
┌─────────────────────┐
│ E F F E C T      #  1 6 │
│ D E P T H      = 1 0 0 │
└─────────────────────┘
```

Value	Effect
0	No effect added to output
⁞	
100	Maximum effect

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VIII. DRUM SECTION

The Drum Section is a separate programmable section of the K1II, independent from any Single or Multi patch. Drum sounds are programmed for each note on the keyboard's two lowest octaves (C1-C3). These sounds can be played from the K1II keyboard when in DRUM mode, and are also available on their own independent MIDI channel, for use with a sequencer or other MIDI device.

Any of the 32 drum sounds can be programmed to any key in the C1-C3 range, with independent settings for Tuning, Pan, and Effect on/off for each key. These are set using the parameters below.

Procedure:
Press the ⌈SYSTEM⌉ switch and then use the ⌈+YES⌉ / ⌈-NO⌉ switches or the joystick to change from SYS to DRUM.
Subsequent passes of the ⌈SYSTEM⌉ switch then cycle through the parameters, the values of which may be changed with the ⌈+YES⌉ / ⌈-NO⌉ switches or the joystick.

```
SYSTEM/MIDI
            =SYS
```

```
SYSTEM/MIDI
            =DRUM
```

⌈SYSTEM⌉ DRUM-2 RCV CH
Determines the MIDI channel (1-16) on which the drum section receives.

Note: This setting is totally independent of the MIDI channel settings for the system and individual patch sections and is not overridden by the OMNI ON setting.

```
DRUM
RCV CH        =16
```

Manual Drum

Note: From the keyboard above C3, the sound of the patch selected before setting the DRUM section can be produced.
It is only C1 to C3 that can assign the DRUM sound.

⌈SYSTEM⌉ DRUM-3 VOLUME
Determines the volume of the drum section relative to those of SINGLE and MULTI patches.

Note: The parameter ⌈SYSTEM⌉ DRUM-8 LEVEL determines the individual output levels for the instruments on the drum section.

```
DRUM
VOLUME        =100
```

Value	Effect
1	Minimum
↓	
100	Maximum

⌈SYSTEM⌉ DRUM-4 VELO DEPTH
Determines what effect key velocity has on volume and the sustain time for all instruments on the drum section.

```
DRUM
VELO DEPTH =-50
```

Value	Effect
-50	Volume decreases with velocity
↓	
0	No effect
↓	
+50	Volume increases with velocity

Parameters DRUM-5 through 9 control the individual percussion instruments assigned to MIDI note numbers C1 through C3. Use SYSTEM DRUM-5 KEY to select a key — its name (note number) then appears in the upper right corner — SYSTEM DRUM-6 INST to select an instrument, and the others to complete or modify the assignment.

SYSTEM DRUM-5 KEY

Selects the key to be assigned.

Note: The key name (note number) appears in the upper right corner.

```
DRUM            C   1
KEY            = C   1
```

SYSTEM DRUM-6 INST

Selects the number (1-32) of the percussion instrument to be assigned to the key. (See the DRUM SECTION Instrument chart, which lists the instruments' numbers and factory assignments.)

```
DRUM            C   1
INST           =   3 2
```

SYSTEM DRUM-7 TUNE

Adjusts the pitch, up to approximately an octave on either side of the standard value.

```
DRUM            C   1
TUNE           = - 5 0
```

Value	Effect
-50	Approx. an octave lower
?	
0	Standard pitch
?	
+50	Approx. an octave higher

SYSTEM DRUM-8 LEVEL

Adjusts the output level for the selected instrument.

Note: The parameter SYSTEM DRUM-3 VOLUME determines the output level of the drum section relative to those of SINGLE and MULTI patches.

```
DRUM            C   1
LEVEL          = 1 0 0
```

Value	Effect
0	No sound
?	
100	Maximum level

SYSTEM DRUM-9 OUTPUT

Determines whether the output goes to the left channel, right channel, or both and, in the last case, whether it bypasses the effect.

* The routing of the effect output depends both on the output channel assignment (L/R/L+R) and on the particular effect. (See VII. EFFECTS (REVERB/DELAY).) In the majority of cases, it is to both left and right channels.

```
DRUM            C   1
OUTPUT         = L + R
```

Value	Channel	Effect
R	Right	Yes*
L	Left	Yes
L+R	Both	Yes
BYPS	Both	No

Note: To return to the factory-set parameters, turn the POWER switch on while pressing "WRITE" switch. This resets the K1II's DRUM SECTION to its original parameter setting.

IX. Error Messages

(1) PROTECTED

The WRITE PROTECT parameter for the destination (internal memory or card) is ON. Turn it OFF. (See p.39.)

```
|                                    |
|              PROTECTED !           |
|                                    |
```

(2) NO CARD

The card is not correctly inserted.
Insert it firmly.

```
|                                    |
|              NO  CARD !            |
|                                    |
```

(3) ID ERROR

The card is not ready for use with the K1II/K1/K1m/K1r. Format it.
(See p.39, 40.)

```
|                                    |
|              I D   ERROR !         |
|                                    |
```

■ EFFECT, DRUM SECTION and card

The EFFECT and DRUM SECTION are set by storing them in the main unit and the card separately.

When the card is in the K1II card slot and a patch marked "E" and "e" (external) is selected, the settings of the EFFECT and DRUM SECTION will be switched automatically to the values stored in the card.
When you select a patch marked "I" and "i" (internal), the setting stored in the main unit will be automatically recalled.

When a patch stored in the DC-8 RAM card that is prepared by the K1, K1m or K1r (and does not have the settings of the EFFECT and DRUM SECTION) is selected, these settings will be switched automatically to the values of the Factory Assignment (default). And you can change these settings by shifting the values on the K1II panel and store them in the RAM card without any other procedure.
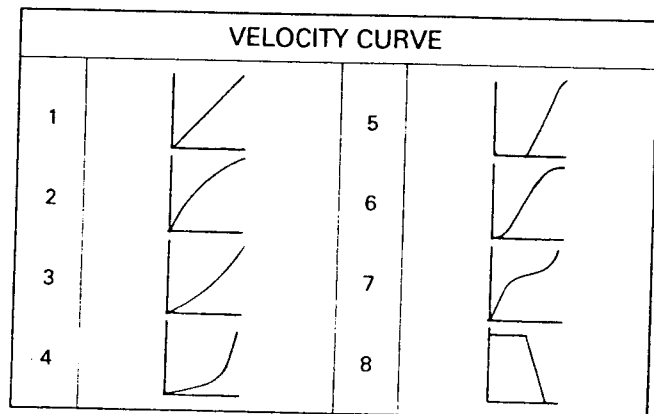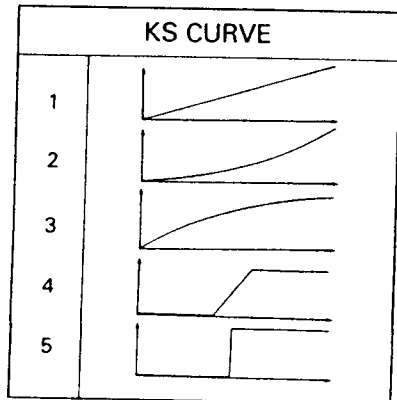
When you use a ROM card (such as A1-01, E1-01 and others), the values changed on the K1II panel may not be stored.

X. Appendices

1. SINGLE Patch Parameters

K1II SINGLE PARAMETERS

EDIT	1 VOLUME	1-100	2-11 NAME	10 characters		
COMMON A	1 SOURCES -VIBRATO- 2 DEPTH 3 SPEED 4 SHAPE 5 PRS→DEPTH 6 WHEEL	2/4 ±50 0-100 TRI/SAW/SQR/ RND ±50 DEP/SPD	-AUTO BEND- 7 DEPTH 8 TIME 9 VEL→DEPTH 10 KS-TIME	 ±50 0-100 ±50 ±50	11 PRS→FREQ 12 PITCH BEND 13 KS CURVE 14 POLY MODE	±50 0-12 1-5 PL1/PL2/SOLO

SW	PARAMETER		S1	S2	S3	S4
FREQ B	FREQ FREQ MOD	1 COARSE (FIXED KEY) 2 FINE 3 KEY TRACK 4 VIBRATO/AUTO BEND 5 PRS-FREQ 6 KS-FREQ	±24 C-4~G6 ±50 on/off on/off on/off ±50	KEY TRACK=ON KEY TRACK=OFF		
WAVE C	WAVE AM COPY	1 WAVE SELECT 2 AM S1.S2 3 AM S3.S4 4 COPY FROM	1-256 off/2>1/REV off/4>3/REV 1A-1~eD-8 S1~S4			
ENV D	ENVELOPE VEL CURVE LEVEL MOD TIME MOD	1 LEVEL 2 DELAY 3 ATTACK 4 DECAY 5 SUSTAIN 6 RELEASE 7 VELOCITY CURVE 8 VEL→ENV LEVEL 9 PRS→ENV LEVEL 10 KS→ENV LEVEL 11 VEL→ENV TIME 12 KS→ENV TIME	0-100 0-100 0-100 0-100 0-100 0-100 1-8 ±50 ±50 ±50 ±50 ±50			

KS CURVE	
1	
2	
3	
4	
5	

VELOCITY CURVE			
1		5	
2		6	
3		7	
4		8	

2. MULTI Patch Parameters

K1Ⅱ MULTI PARAMETERS

EDIT	1 VOLUME 2-11 NAME	1~100 10 characters							
SW	PARAMETER	SC1	SC2	SC3	SC4	SC5	SC6	SC7	SC8
WINDOW 1	1 SINGLE (assign)	IA-1~iD-8 (name)							
WINDOW 2	1 ZONE LO 2 ZONE HI 3 VEL SW	C-2~G8 C-2~G8 ALL/SOFT/LOUD							
WINDOW 3	1 POLY 2 MODE 3 RCV CH	VR/0~8 KYBD/MIDI/MIX 1~16							
WINDOW 4	1 TRANSPOSE 2 TUNE 3 LEVEL 4 OUTPUT	±24 ±50 0~100 R/L+R/L/BYPS							

AUX Parameters

K1Ⅱ AUX PARAMETERS

SW	PARAMETER	VALUE
WRITE	1 WRITE 2 LINK 1ST 3 LINK 2ND ↓ ↓ 9 LINK 8TH	select with panel sw select with panel sw select with panel sw ↓ select with panel sw
SYSTEM	1 SYSTEM/MIDI/EFFECT/DRUM SECTION	SYS/TRS/RCV/EFF/DRUM

SYS		TRS		RCV	
2 SYSTEM TUNE	±50	2 MIDI trs CH	1~16	2 MIDI rcv CH	1~16
3 TRANSPOSE	±12	3 PGM	on/off	3 OMNI	on/off
4 INT PROTECT	on/off	4 PRS	on/off	4 PGM	OFF/NORM /SECT/LINK
5 CARD PROTECT	on/off	5 BEND	on/off	5 PRS	on/off
6 CARD FORMAT EXEC		6 MOD	on/off	6 BEND	on/off
7 SAVE EXEC		7 HOLD	on/off	7 MOD	on/off
8 LOAD EXEC		8 MIDI DATA DUMP EXEC	BLOCK/PATCH	8 VOL	on/off
				9 HOLD	on/off
				10 VEL	on/off
				11 EXCL	on/off

EFF		DRUM	
2 EFFECT MODE	1~16	2 DRUM rcv CH	1~100
3 DEPTH	0~100	3 VOLUME	1~100
		4 VELO DEPTH	±50
		5 KEY NO.	C1~C3
		6 INST	1~32
		7 TUNE	±50
		8 LEVEL	0~100
		9 OUTPUT	R/L+R/L/BYPS

STICK	STICK CONTROL	OFF/BAL

3. DRUM SECTION Instrument Chart

(1) Instrument's Numbers

INST #	INSTRUMENTS
1	BASS DRUM 1 (NORMAL)
2	BASS DRUM 2 (ROOM)
3	BASS DRUM 3 (ELECTRIC)
4	BASS DRUM 4 (Old Rhythm – Box)
5	SNARE 1 (NORMAL)
6	SNARE 2 (TIGHT)
7	SNARE 3 (Gated REVERB)
8	SNARE 4 (ELECTRIC)
9	SNARE 5 (Old Rhythm – Box)
10	X'stick
11	RIM SHOT (Old Rhythm – Box)
12	TOM 1 (NORMAL)
13	TOM 2 (POWER)
14	TOM 3 (ELECTRIC)
15	TOM 4 (Old Rhythm – Box)
16	HH Closed 1 (NORMAL)
17	HH Open
18	HH Closed 2 (Old Rhythm – Box)
19	CRASH CYMBAL 1 (NORMAL)
20	CRASH CYMBAL 2 (Muted)
21	RIDE CYMBAL
22	COWBELL
23	HAND CLAPS
24	TAMBOURINE
25	CONGA
26	BONGO
27	AGOGO
28	TRIANGLE
29	Jazz BRUSH 1 (Long)
30	Jazz BRUSH 2 (Short)
31	CASTANET
32	SHAKER

(2) Factory Assignment

NOTE NUMBER	KEY #	INST #	INST NAME	TUNE	LEVEL	OUTPUT
36	C1	1	BASS DRUM 1	0	77	BYPS
37	C#1	10	X'STICK	0	50	L + R
38	D1	6	SNARE 2	0	93	L + R
39	D#1	23	HAND CLAPS	0	80	L + R
40	E1	8	SNARE 4	0	60	L + R
41	F1	13	TOM 2	–19	92	L
42	F#1	16	HH CLOSED 1	0	50	L
43	G1	12	TOM 1	–20	90	L
44	G#1	18	HH CLOSED 2	0	50	L
45	A1	13	TOM 2	0	80	L + R
46	A#1	17	HH OPEN	0	50	L
47	B1	12	TOM 1	–8	80	L + R
48	C2	13	TOM 2	17	80	R
49	C#2	19	CRASH CYMBAL 1	0	80	L
50	D2	12	TOM 1	16	80	R
51	D#2	21	RIDE CYMBAL	0	71	R
52	E2	19	CRASH CYMBAL 1	–10	69	R
53	F2	28	TRIANGLE	0	54	L + R
54	F#2	24	TAMBOURINE	0	80	L + R
55	G2	19	CRASH CYMBAL 1	28	80	L
56	G#2	22	COWBELL	0	80	L + R
57	A2	20	CRASH CYMBAL 2	0	80	L + R
58	A#2	5	SNARE 1	1	80	L + R
59	B2	27	AGOGO	28	47	L + R
60	C3	25	CONGA	0	65	L + R

* RCV CH = 10, VOLUME = 100, Vel – Depth = 27

(3) Blank Chart for User's Assignment

NOTE NUMBER	KEY #	INST #	INST NAME	TUNE	LEVEL	OUTPUT
36	C1					
37	C#1					
38	D1					
39	D#1					
40	E1					
41	F1					
42	F#1					
43	G1					
44	G#1					
45	A1					
46	A#1					
47	B1					
48	C2					
49	C#2					
50	D2					
51	D#2					
52	E2					
53	F2					
54	F#2					
55	G2					
56	G#2					
57	A2					
58	A#2					
59	B2					
60	C3					

MIDI Implementation Chart

Synthesizer
MODEL K1 II

Function ...		Transmitted	Recognized	Remarks
Basic Channel	**Default**	1—16	1—16	Memorized
	Changed	1—16	1—16	
Mode	**Default**	—	1, 3	Memorized
	Messages	×	OMNI on/off	MONO ignored
	Altered	* * *		
Note Number		24—108	0—127	
	: True voice	* * *	0—127	
Velocity	**Note ON**	*	*	
	Note OFF	×	×	
After Touch	**Key's**	×	×	
	Ch's	*	*	
Pitch Bender		*	*	
Control Change	1	*	*	Modulation
	7	×	*	Volume
	64	*	*	Hold 1
	100, 101	* (0, 1)	* (0, 1)	RPC
	6	*	*	Data entry
Prog Change		*	*	112—127—96—111
	: True #	* * *	0—111	(96—111 REVERB)
SystemExclusive		*	*	
System Common	**: Song Pos**	×	×	
	: Song Sel	×	×	
	: Tune	×	×	
System Real Time	**: Clock**	×	×	
	: Commands	×	×	
Aux Messages	**: Local ON/OFF**	×	×	
	: All Notes OFF	○ (123)	○ (123~127)	
	: Active Sense	○	○	
	: Reset	×	×	

Notes		* Can be set to ○ or ×
		  Memorized even after turning off the power
		RPC #0=Pitch Bender sensitivity
		  #1=Master fine tuning
		  Values are given by Data entry		

Mode 1 : OMNI ON, POLY   Mode 2 : OMNI ON, MONO   ○ : Y
Mode 3 : OMNI OFF, POLY   Mode 4 : OMNI OFF, MONO   × : N

4. Specifications

K1Ⅱ

Number of keys	61
Voices	16 max. (32 SOURCES)
Tone patches	96 internal (64 SINGLE, 32 MULTI)
	96 external (64 SINGLE, 32 MULTI) per DC-8 card (available separately)

SINGLE EDIT	EDIT	: VOLUME, NAME
	A COMMON	: SOURCE 2/4
	(Shared by all SOURCEs)	VIBRATO DEPTH·SPEED·SHAPE·PRS→DEPTH, WHEEL ASSIGN,
		AUTO BEND DEPTH·TIME·VEL→DEPTH·KS→TIME,
		PRS→FREQ, PITCH BEND, KS CURVE, POLY MODE
	B FREQ	: COARSE (FIXED KEY), FINE, KEY TRACK,
	(For each SOURCE)	VIBRATO/AUTO BEND on off, PRS→FREQ on off, KS→FREQ on off
	C WAVE	: WAVE SELECT, AM S1.S2 AM S3.S4, COPY FROM
	(For each SOURCE)	
	D ENV	: LEVEL, DELAY, ATTACK, DECAY, SUSTAIN RELEASE,
	(For each SOURCE)	VEL CURVE, LEVEL MOD VEL·PRS·KS, TIME MOD VEL·KS
MULTI EDIT	EDIT	: VOLUME, NAME
	A WINDOW1	: SINGLE ASSIGN
	B WINDOW2	: ZONE LO·HI, VEL SW
	C WINDOW3	: POLY, MODE, RCV CH
	D WINDOW4	: TRANSPOSE, TUNE, LEVEL, OUTPUT
WRITE		WRITE
		LINK 1ST~8TH
SYSTEM	SYS	: TUNE, TRANSPOSE, INT PROTECT, CARD PROTECT,
		CARD FORMAT, SAVE, LOAD
	TRS	: CH, PGM, PRS, BEND, MOD, HOLD, DATA DUMP
	RCV	: CH, OMNI, PGM, PRS, BEND, MOD, VOL, HOLD, VEL, EXCLUSIVE
	EFF	: MODE, DEPTH
	DRUM	: (COMMON) RCV CH, VOLUME, VELO DEPTH
		(EACH KEY) KEY NO., INST, TUNE, LEVEL, OUTPUT
STICK	STICK CONTROL	
Controls	PITCH BEND WHEEL, MODULATION WHEEL, VOLUME, PATCH SELECT Switch,	
	WRITE Switch, SYSTEM Switch, STICK Switch, POWER Switch, DC IN, OUTPUT R/MONO·L,	
	PHONES JACK, CARD SLOT, MIDI IN·OUT·THRU	
Display	16 × 2 LCD back lit	
Dimensions (W × D × H)	936 mm (36.9") × 260 mm (10.3") × 80 mm (3.2")	
Weight	6.9 kg	
Power consumption	4w	
Accessories	AC adaptor Owner's Manual Data format Audio cable	

Note: Appearance and specifications subject to change without prior notice.

KAWAI