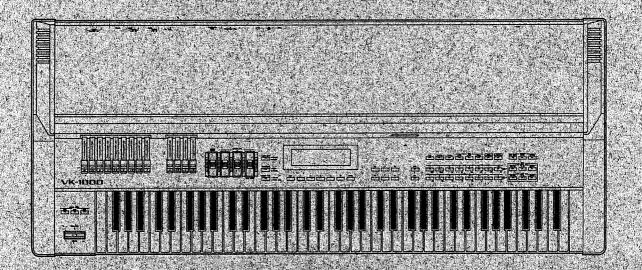


# OWNER'S MANUAL







CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



The lightning tlash with arrowhead symbol, within an equilateral frangle; is intended to alert the user to the presence of uninsulated: "dangerous voltage" within the product's enclosure That may be of sufficient magnitude to constitute a risk of electric shock to persons



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

## IMPORTANT SAFETY INSTRUCTIONS

WARNING — When using electric products, basic precautions should always be followed, including the following:

- 1. Read all the instructions before using the product.
- Do not use this product near water for example, near a bathtub, washbowl, kitchen sink, in a wel basement, or near a swimming pool, or the like.
- 3. This product should be used only with a cart or stand that is recommended by the manufacturer.
- This product, either alone or in combination with an amplifier and headphones of speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an
- The product should be located so that its location or position does not interfere with its proper ventilation.
- 6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat
- 7. Avoid using the product where it may be effected by
- The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.

- 9. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
- 10. Do not tread on the power-supply cord.
- 11. Do not pull the cord but hold the plug when unplugging.
- 12. When setting up with any other instruments, the procedure should be followed in accordance with instruction manual.
- Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings
- The product should be serviced by qualified service personnel when
  - The power-supply cord or the plug has been damaged;
  - "Objects have fallen, or liquid has been spilled into the product; or
  - The product has been exposed to rain; or
  - D: The product does not appear to operate normally or exhibits a marked change in performance; or
  - The product has been dropped, or the enclosure damaged.
- 15. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

## SAVE THESE INSTRUCTIONS

For the U.K.

THIS APPARATUS MUST BE EARTHED WARNING:

THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE GREEN-AND-YELLOW: EARTH, BLUE: NEUTRAL, BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying

the terminals in your plug proceed as follows:

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK The wire which is coloured BROWN must be connected to the terminal which is marked with the letter Lor coloured RED.

The product which is equipped with a THREE WIRE GROUNDING TYPE AC PLUG must be grounded

# INTRODUCTION ~

Thank you and congratulations on your choice of the Rhodes VK-1000 Organ.

Rhodes proprietary Adjustable SA, multi-timbral sound source creats "classic" organ sounds as well as new digital textures. The newly-designed REVO effect provides the real classic organ sounds without the need to transport cumbersome rotary speakers. In addition to being equipped with unique harmonic bar mechanism that allow for direct control over waveform synthesis, the unit also provides numerous assignable controllers which can be used for control over the internal sound source or multi-effects parameters. The musical demands of the organist are thus well satisfied, since sound can be manipulated as much as desired while playing. Moreover, the instrument features with a comprehensive range of functions, making it a full-fledged keyboard controller worthy of filling the pivotal role in a MIDI-based system.

In order to enjoy reliable performance for many years to come, please take the time to read this manual in its entirety.

COPYRIGHT ©1991 ROLAND CORPORATION

Copying or transferral of this manual, in part or in whole, is prohibited.

# **FEATURES**

- ●The VK-1000 sound source employs the Adjustable SA (Structured Adaptive Synthesis) Process, developed as the result of a dedicated strive toward more sensitive, realistic sounds. An amazing range of editing possibilities are afforded, thanks to the control over waveform synthesis provided by the harmonic bars. The VK-1000 allows you to edit such things as the unique fluctuations in pitch and volume which occur during the attack portions of electronic organ sounds; or the infinitesimal changes in volume or timbre that occur over time with pipe organs. As a result, almost any desired sound, from bright and hard to warm and pleasing can be created.
- A large backlit screen provides allows for convenient, immediate display of settings for multiple parameters at once. Additionally, graphic representation of settings for the harmonic bars and zones is provided, making real—time editing easier.
- •When needed, up to four zones can be setup on the VK-1000's keyboard. And two adjacent zones can be conveniently layered together as well (two zones play the internal multi-timbral sound source, and the other two are for external sound sources). In addition, independent settings for MIDI channels, Program Change, Velocity Curve, etc. can be made for each
- After dividing the keyboard into upper and lower zones, and connecting a Dynamic Pedal (optionally available:PK-5) Via MIDI, the three-part multi -timbral internal sound source can play three different sounds simltaneously. Additionally, if a MIDI sequencer is employed, one VK-1000 can be used to create a three-part ensemble.

- ●9 feet harmonic bars and 4 percussion harmonic bars greatly facilitate editing of the 8 fundamental waveforms, referred to as "sources" (2 organ, 1 pipe organ, 1 bass organ, 1 lead, 1 electric piano, 1 vibraphone, 1 chime). A broad range of sound creation possibilities can be enjoyed, since even with the harmonic bars at the same settings, a totally different sound is produced as a result of differences in the waveform of the source that is selected. Each source can be edited as desired, and a maximum of 192 Tones can be stored for later use (64 Tones x 3 multi-timbral parts).
- ●The VK-1000 can store a total of 64 Patches. Patches contain the settings for the internal sound source and internal multi-effects. In addition, such data can also be stored on optionally available memory cards, or in an external sequencer (in the form of MIDI System Exclusive data).
- •Multi-effects are provided onboard, and include: wah, overdrive, 3-band equalization, a rotary effect (REVO), and reverberation. The "REVO" effect produced by the rotary effect digitally simulates the sound of rotary speakers. Simply by connecting the unit to a stereo or listening through headphones, allows you to enjoy the "sound space" created by the REVO effect. In addition, the REVO effect can be edited to produce flanger/ phaser effects.
- •While the settings for all five effects can be stored within Patches, the unit also allows you to switch overdrive, rotary effects, and reverb on/off in real-time using switches on the panel. In addition, the pitch bender or a footswitch can be used to change the revolution speed of the rotary effect (slow/fast/off).
- Equipped with a comprehensive range of controllers, to which MIDI Control Changes or sound source section parameters can be assigned. On the panel there are sliders for three controllers, and the rear panel has three controller input jacks (for footswitches or foot volume pedals accepted) these controllers provide a wide range of real-time control. Moreover, settings for these controllers can be stored in a Patch and recalled whenever needed.

#### Note:

Various display screens are printed and refferred to in this manual, but the displayed data not necessarily correspond to the factory set data.

# **IMPORTANT NOTES**

◆In addition to the precautions appearing inside the front cover, please take note of the following.

## [Power Supply]

- •When making any connections with other devices, always turn off the power to all equipment first; this will help prevent damage or malfunction.
- Do not use this unit on the same power circuit with any device that will generate line noise, such as a motor or variable lighting system.

## [Placement]

- Using the unit near power amplifiers (or other equipment containing large transformers) may induce hum.
- This unit may interfere with radio and television reception. Do not use this unit in the vicinity of such receivers.
- ●Do not expose this unit to temperature extremes (eg. direct sunlight in an enclosed vehicle can deform or discolor the unit) or install it near devices that radiate heat.

## [Maintenance]

- For everyday cleaning wipe the unit with a soft, dry cloth (or one that has been slightly dampened with water). To remove stubborn dirt, use a mild neutral detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- ●Never use benzine thinners, alcohol or solvents of any kind, to avoid the risk of discoloration and / or deformation.

## [Additional Precautions]

- Protect the unit from strong impact.
- •Never strike or apply strong pressure to the display.
- A small amount of heat will radiate from the unit, and thus should be considered normal.
- Before using the unit in a foreign country, consult with qualified service personnel.
- A small amount of noise may be heard from the display, and thus should be considered normal.

## [Memory Backup]

- ●The unit contains a battery which maintains the contents of memory while the main power is off. The expected life of this battery is 5 years or more. However, to avoid the unexpected loss of memory data, it is strongly recommended that you change the battery every 5 years.
- Please be aware that the actual life of the battery will depend on the physical environment (especially temperature) in which the unit is used. When it is time to change the battery, consult with qualified service personnel.
- ◆The unit's battery functions during normal operation as well as maintaining the contents of memory when the main power supply is turned off. When the battery becomes weak, there is a risk of losing the contents of the memory. To avoid the unexpected loss of memory data, replace the battery before it becomes weak.
- •When the battery becomes weak, the following message will appear in the display: "Battery Low!". Please change battery as soon as possible to avoid the loss of memory data.
- ◆Please be aware that the contents of memory may at times be lost; when the unit is sent for repairs or when by some chance a malfunction has occurred. Important data should be stored on a Memory Card (M-256E:sold separately), or written down on paper. During repairs, due care is taken to avoid the loss of data. However, in certain cases, (such as when circuitry related to memory itself is out of order) we regret that it may be impossible to restore the data.

# **GUIDE TO THIS MANUAL**

This manual follows the organization outlined below

#### Chapter 1 AUDIO CONNECTIONS

Getting ready to play

#### Chapter 2 OVERVIEW

This chapter explains how the VK-1000 is organized, and the basic features it offers

#### Chapter 3 USER INTERFACE

This chapter provides a guide to operation of the unit, and use of its system of display "pages".

\*Please make certain you read this chapter before turning the power on. That way you can feel confident in obtaining the best the VK-1000 has to offer, and avoid most of the common difficulties.

#### Chapter 4 BASIC PROCEDURES

This chapter takes you step by step through the basic procedures. Please read it carefully.

#### Chapter 5 GUIDE MAP

A functional index of chapter 6 "REFERENCE".

#### Chapter 6 REFERENCE

Here the functions and controls of each of the parameters are explained on an individual window basis. Refer to this chapter as necessary.

#### Chapter 7 SUPPLEMENTAL INFORMATION

This chapter includes as well as helpful charts, the MIDI implementation, etc.

\* An index is provided at the back of this manual to allow you to quickly find the location of any explanation for a feature or term that is unclear.

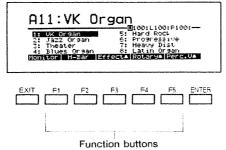
# CONVENTIONS USED IN THIS MANUAL

In the interest of clarity and conciseness, this manual employs the symbols below.

- ●Letters or symbols enclosed with ☐ refer to the names of panel buttons.
  - Ex.) PLAY:Play Button



- •Where two buttons are shown with a "+" between them, it means you should hold down the first one while you press the second. Always carefully observe the order.
  - Ex.) EDIT + PATCH: Hold down the EDIT button while pressing the PATCH button.
- ●Wherever an outline font enclosed with refer to a selection label appearing in the display. Press the function button corresponding to the label.



# **CONTENTS**

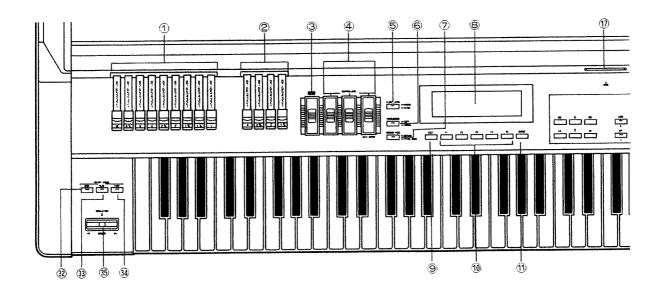
INTRODUCTION	313334343536373839
■ GUIDE TO THIS MANUAL	333434353637383940
■ GUIDE TO THIS MANUAL   3	333434353637383940
■ Exit Buttons  ■ PANEL DESCRIPTIONS  1-1 Precautions  1-2 Connecting the VK-1000  2. OVERVIEW OF THE VK-1000  2-1 The Structure of the VK-1000  3-2-1 The Structure of the VK-1000  3-3 Cold Boot  2-4 Patch Selection  3-5 Moving Harmonic Bars  3-6 Turning Effect On and off  3-7 Adjusting the Level of a Part  3-8 Editing a Sound on an External Device  3-9 Adjusting the Contrast  3-10 Master Tune  3-10 Master Tune  3-11 Fitch Control  3-12 Timbre Control  3-13 Cold Boot  4-2 Power off  4-3 Cold Boot  4-4 Patch Selection  4-5 Moving Harmonic Bars  5-1 Adjusting the Level of a Part  4-8 Editing a Sound on an External Device  4-9 Adjusting the Contrast  4-10 Master Tune  5-1 Pitch Control  5-2 Timbre Control	34 34 35 36 37 38 39 40
### PANEL DESCRIPTIONS 6    1.MAKING THE CONNECTIONS 9	34 35 36 37 38 39 40
1.MAKING THE CONNECTIONS       9       4. BASIC PROCEDURE         1-1 Precautions       9       4-1 Power on         1-2 Connecting the VK-1000       10       4-2 Power off         2. OVERVIEW OF THE VK-1000       13       4-4 Patch Selection         2-1 The Structure of the VK-1000       13       4-5 Moving Harmonic Bars         In Sound Module Section       13       4-6 Turning Effect On and off         In Keyboard Controller Section       13       4-7 Adjiusting the Level of a Part         In Multi Effects Section       14       4-8 Editing a Sound on an External Device         2-2 Sound structure       15       4-9 Adjusting the Contrast         In Patch       15       4-10 Master Tune         In Tone       15       5-1 Pitch Control         In Tones and Patches       16       5-1 Pitch Control         2-3Memory and Temporary Area       16       5-2 Timbre Control	34 35 36 37 38 39 40
1-1 Precautions       9       4-1 Power on         1-2 Connecting the VK-1000       10       4-2 Power off         4-3 Cold Boot       4-3 Cold Boot         2. OVERVIEW OF THE VK-1000       13       4-4 Patch Selection         2-1 The Structure of the VK-1000       13       4-5 Moving Harmonic Bars         Sound Module Section       13       4-6 Turning Effect On and off         Keyboard Controller Section       13       4-7 Adjusting the Level of a Part         Multi Effects Section       14       4-8 Editing a Sound on an External Device         2-2 Sound structure       15       4-9 Adjusting the Contrast         Patch       15       4-10 Master Tune         Tone       15         Source       16       5. GUIDE MAP         Tones and Patches       16       5-1 Pitch Control         2-3Memory and Temporary Area       16       5-2 Timbre Control	34 35 36 37 38 39 40
1-2 Connecting the VK-1000	35 36 37 38 39 40
2. OVERVIEW OF THE VK-1000 13 4-4 Patch Selection 4-5 Moving Harmonic Bars  I Sound Module Section 13 4-6 Turning Effect On and off 4-7 Adjusting the Level of a Part  I Multi Effects Section 14 4-8 Editing a Sound on an External Device 4-9 Adjusting the Contrast 4-10 Master Tune  I Tone 15  I Source 16 5-1 Pitch Control  2-3 Memory and Temporary Area 16 5-2 Timbre Control	36 37 38 39 40
2-1 The Structure of the VK-1000 13 4-5 Moving Harmonic Bars  Sound Module Section 13 4-6 Turning Effect On and off  Keyboard Controller Section 13 4-7 Adjusting the Level of a Part  Multi Effects Section 14 4-8 Editing a Sound on an External Device 15 4-9 Adjusting the Contrast  Patch 15 4-10 Master Tune 15  Tone 15  Source 16 5-1 Pitch Control 2-3Memory and Temporary Area 16 5-2 Timbre Control	37 38 39 40
2-1 The Structure of the VK-1000 13 4-5 Moving Harmonic Bars  Sound Module Section 13 4-6 Turning Effect On and off  Keyboard Controller Section 14 4-8 Editing a Sound on an External Device 15 4-9 Adjusting the Contrast 4-10 Master Tune 15  Tone 15  Source 16 5-1 Pitch Control 16  2-3Memory and Temporary Area 16 5-2 Timbre Control	38 39 40
■Sound Module Section 13 4-6 Turning Effect On and off  ■Keyboard Controller Section 13 4-7 Adjusting the Level of a Part  ■Multi Effects Section 14 4-8 Editing a Sound on an External Device 15 4-9 Adjusting the Contrast 4-10 Master Tune 15 4-10 Master Tune 15 5-6 GUIDE MAP  ■Tone 16 5-1 Pitch Control 16 5-2 Timbre Control 16 5-2 Timbre Control 17 Timbre Control 17 Timbre Control 17 Timbre Control 18 Timbre Control 19 Tim	40 41
■Keyboard Controller Section 13 4-7 Adjusting the Level of a Part   ■Multi Effects Section 14 4-8 Editing a Sound on an External Device   2-2 Sound structure 15 4-9 Adjusting the Contrast   ■Patch 15 4-10 Master Tune   ■Tone 15   ■Source 16 5. GUIDE MAP   ■Tones and Patches 16 5-1 Pitch Control   2-3Memory and Temporary Area 16 5-2 Timbre Control	40 41
■Multi Effects Section       14       4-8       Editing a Sound on an External Device         2-2 Sound structure       15       4-9       Adjusting the Contrast         ■Patch       15       4-10       Master Tune         ■Tone       15         ■Source       16       5. GUIDE MAP         ■Tones and Patches       16       5-1       Pitch Control         2-3Memory and Temporary Area       16       5-2       Timbre Control	41
2-2 Sound structure	41
■Patch       15       4-10       Master Tune         ■Tone       15         ■Source       16       5. GUIDE MAP         ■Tones and Patches       16       5-1       Pitch Control         2-3Memory and Temporary Area       16       5-2       Timbre Control	
■Tone	42
■Source	
■Tones and Patches······16 5-1 Pitch Control ······2-3Memory and Temporary Area·····16 5-2 Timbre Control ······	43
2-3Memory and Temporary Area	43
2 dividition and remperary river	43
MACOOCT	43
■Temporary Area ············17 5-4 Zone Control ······	43
■Note on editing	44
2-4 Controllers	44
■Keyboard ······18 5-7 Effect Control ·····	44
■Harmonic Bars······19 5-8 Controllers ·····	44
■Pitch Bend / Modulation Lever21 5-9 Paramete Arrangement	44
■Expression Pedal22 5-10 MIDI Control	45
Assignable Controllers	45
■Effect On / Off Buttons ········23	
Rotary Stop/Slow/Fast buttons23 6. REFERNCE MANUAL	46
■Function Buttons24 6-1 PATCH PLAY MODE	
6-1-1 How the Function Buttons work in the Play	
3. USER INTERFACE25 6-1-2 Monitor	
3-1 The VK-1000's 6 Modes25 6-2-3 Hamonic Bars	55
3-2 How to proceed editing28 6-2 MIDIOUT Out Mode	
3-3 How to use the screen	6
■Display ·······28 6-2-2 MIDI Out Transmit Program Change L	pper62
■Cursor ······29 6-2-3 MIDI Out Transmit Channel Lower·····	
Cursor Buttons	
3-4 Editing a Parameter	
■INC/DEC Buttons	
■Controller 3 Slider(Data entry Slider) ········30 6-3-2 System MIDI Setting ····································	
■Exit Button	
Finter Button	6

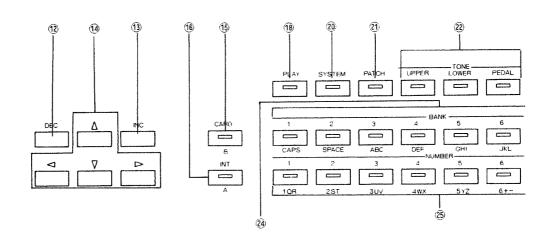
## **CONTENTS**

	Assignment Parameters ·····71	6-4-2
7-1 ERROR Messages ·····114	Part Parameters74	6-4-3
7-2 Troubleshooting116	Effect Parameters77	6-4-4
7-3 MIDI Settings118	Name Edit85	6-4-5
7-4 CONTROL CHANGE TABLE119	ONE EDIT MODE87	6-5 TO
	Tone Edit88	6-5-1
■ROLAND EXCLUSIVE MESSAGES······120	RITE MODE ·····94	6-6 WR
MIDI IMPLEMENTION122	Write96	6-6-1
■MIDI IMPLEMENTION CHART ······127	Copy98	6-6-2
■SPECIFICATIONS ······128	INITIALIZATION104	6-6-3
<b>■INDEX</b> 129	BACKUP108	6-6-4

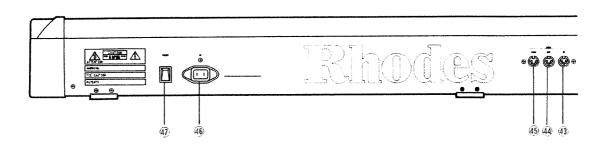
# PANEL DESCRIPTIONS

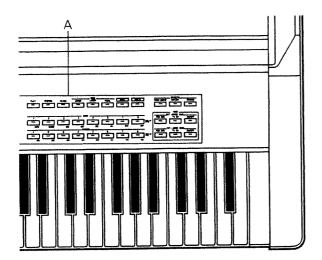
## **(Front Panel)**

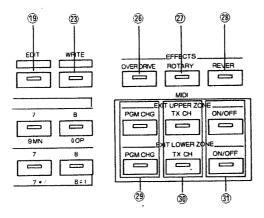




# (Rear Panel)







# 

#### (1) Feet Harmonic Bars

Provide adjustment of the organ or other sounds, thus allowing a great deal of variety to be created.

### (2) Percussion Harmonic Bars

Provide adjustment of the percussive sounds. Percussion adds the attack portion characteristic of organ sounds.

#### (3) Master Volume Slider

Adjusts the overall volume.

## (4) Controller 1/2/3 Sliders

When assigned various functions, these sliders the instrument's sound source, or an external MIDI unit (when in the Play mode).

\*When in the Edit mode, Controller 3 Slider is used as a Data entry slider to alter the values assigned to parameters.

## **⑤ Harmonic Bar Level Switch (H-BAR LEVEL)**

Selects the manner in which Patches will sound.
When lit (MANUAL), Patches sound in accord with the settings made using the panels Harmonic bars. When not lit (PATCH), Patches sound according to the settings stored in memory.

## **6** Percussion Switch (PERCUSSION)

Selects the level of the Harmonic Bars.

When lit (SOFT), the Harmonic Bar level stays at the raised state. When not lit (NORMAL), the Harmonic Bar level is lowered, and the Percussion sound becomes more prevalent. In either state, the Percussion level remains the same.

## 7) Bender Switch (BENDER FUNC)

Determines how the Bender will function.

When lit, the bender controls the rotary speed.

When out, it functions normally as a pitch bend/modulation lever.

## (8) Display (LCD)

Displays a variety of information useful in operating and playing the unit. Since it is backlit, it is easy to read even on dark stages.

#### 

Pressed when wishing to return to the level that is one above where you are, or to cancel a procedure.

## **10** Function Buttons (F1-F5)

Ordinarily they are used to switch the screens that are selected for display. When in the Play screen, they act as control switches which select the functions assigned (fixed) to them. (☞P.46)

## (f) Enter Button

Used only when performing the Write procedure.

#### **12** DECrement Button

Shifts a value in the negative direction.

## (13) INCrement Button

Shifts a value in the positive direction.

#### (4) Cursor Buttons

Move the displays cursor up, down, left or right.

#### (15) Card Button

Pressed in order to read in Patches or Tones stored on a memory card. Also, it is pressed when wishing to call Program Numbers in the B group (64-127).

#### (6) INTernal Button

Pressed in order to read in Patches or Tones contained in the instruments memory. Also, it is pressed when wishing to call Program Numbers in the A group (0-64).

## **Memory Card Slot**

Accepts insertion of memory cards

## ®Play Button

Switches the unit to the Play mode.

#### 19 Edit Button

Hold this button down while you then press a desired button to enter the Edit mode for the corresponding item.

## 20 System Button

Pressed to obtain the System Setting mode.

## (21) Patch Button

Pressed to call up a Patch.

## 22 Tone Select Buttons (Upper/Lower/Pedal)

When selecting Tones, you need to press the appropriate Part button.

#### 23 Write Button

Pressed to select the Write mode

#### 24 Bank Buttons

Employed to select the Bank of a Patch or Tone (1-8); or to specify the MIDI channel or Program Number.

### 25 Number Buttons

Employed to select the Number of a Patch or Tone (1-8); or to specify the MIDI channel or Program Number.

\* While editing a name, the Bank/Number buttons provide selection of the desired letters.

#### 26 Overdrive On / Off Button

Turns the Overdrive effect on and off.

## ②ROTARY On/Off Button

Turns the Rotary effect on and off.

### 28 REVERB On / Off Button

Turns the Reverd effect on and off.

#### 29 Program Change (PGM CHG) Buttons

Pressed and lit when wishing to send Program Changes to the desired sound module, whether under the control of the External Upper Zone or External Lower Zone.

## 30 MIDI Transmit Channel (TX CH)

When pressed and thus lit, you will then be able to change the MIDI channel on which MIDI messages are sent.

#### (3) External Upper ON/OFF Button

External Lower ON/OFF Button

Select whether or not to link any external sound modules to the External Zones (Upper/Lower).

ON (LED lit)...The External Zone (Upper/Lower) will be linked to the external sound module.

OFF (LED out)···The External Zone (Upper/Lower) will not be linked to the external sound module. Convenient for turning off externally produced sound in order to check what is produced by this instrument.

#### 32 Rotary Stop Button

Stops the rotation of the Rotary effect.

## **39 Rotary SLOW Button**

Switches the Rotary Speed to slow.

## **34**Rotary FAST Button

Switches the Rotary Speed to fast

#### 35Bender (Pitch Bend/Modulation Lever)

Ordinarily it is used to raise or lower the pitch, and to control the amount of modulation.

When both the Berider switch and the Rotary button are lighted, the Bender is used to change the speed of rotation.

### 36 Balanced Out Connector (L/R)

Accepts connection of XLR type connectors.(XLR-3-31)

#### 37 Headphone Jack

Accepts stereo headphones

## 38 Line Out Jacks (L(MONO)/R)

Provides unbalanced output.

## 39 Line In Jacks (L(MONO)/R)

Audio signals arriving at the Line In Jacks are mixed with the signals produced by the instrument, and then output from the Balanced Out Connector and Line Out Jacks.

## 40 Input Level Selector (H/M/L)

Used to select the appropriate input level for a connected device. L:-20 dBm (audio input level)

M:-10 dBm (instrument input level)

H:+4 dBm (professional audio equipment input level)

## (4) Expression Pedal Jack

Accepts connection of an expression pedal (EV-5/10; optionally available). An expression pedal will provide control over the VK-1000's overall volume.

## 42 Assignable Pedal Jacks (1/2/3)

The three controller jacks accept connection of footswitches (DP-2R/6R, FS-5U; optionally available) or expression pedals (EV-5/10; optionally available). They then can be used for pedal control over a variety of functions which can be assigned as desired.

#### 43 MIDI IN Connector

Accepts incoming MIDI data.

#### **44MIDI OUT Connector**

Transmits the units MIDI data.

### **45 MIDI THRU Connector**

Transnimits a copy of all data arriving at MIDI IN.

#### 46AC Inlet

To connect with household AC current, use the supplied power cord.

#### 47 Power Switch

# **1.MAKING THE CONNECTIONS**

## 1-1 Precautions

This instrument cannot be played by simply turning on its power. It must first be connected properly using the items listed below.

## **E**Amplifier and Speakers

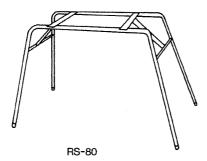
The VK-1000 is not equipped with an amplifier or speakers. For this reason, you will need to make use of separate audio reproduction equipment, such as an amplifier and speakers. If you should desire an even greater sound, a keyboard amp or PA equipment will be needed.

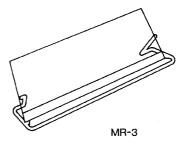
## **E**Connecting Cables

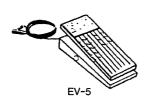
An audio cable (PJ-1M) is included with the unit, however, in order to take full advantage of the VK-1000, we suggest that you use two audio cables (optionally available: PJ-1M etc.), and use a stereo output. Alternately, when connecting with devices which employ balanced inputs such as PA equipment, use balanced cables (optionally available: DRC-5), which use XLR connectors.

## **■**Optional Accessories for the VK-1000

You can use optional goods such as a stand (RS-80), music rest (MR-3), expression pedal (EV-5/EV-10) or pedal switch (DP-2R/DP-6R) for more successful performance.









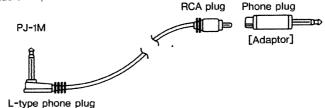
## 1-2 Connecting the VK-1000

Before making any connections, make sure that all the units are switched off. If you make connections with any of the unit being switched on, the speakers or other units may be damaged.

For MIDI applications, see "MIDI settings" ( \*\* P.118)

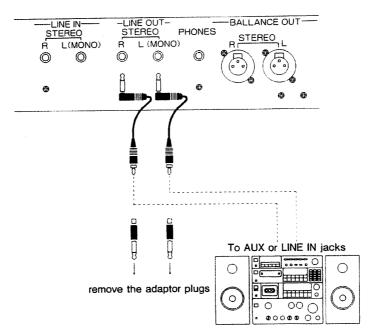
## [Audio Equipment]

You can play the VK-1000 through your home stereo setup. Remove the adaptor plug from the supplied cable (PJ-1M) and connect the VK-1000 to the RCA jack AUX IN or LINE IN input of an audio amplifier.



\* The supplied cable included has an RCA plug and a phone plug adaptor.

Connect the Line Out jack on the rear of the VK-1000 to the input jack (e.g. AUX IN or LINE IN) on the amplifier or radio cassette player. For monaural output, connect to the L (MONO) jack.

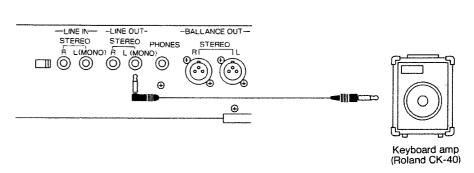


When using audio equipment with the VK-1000, be careful not to damage the speaker with an excessive volume level.

## **(Keyboard Amplifier)**

Connect the VK-1000 to a keyboard amplifier using the PJ-1M cable. In this case, do not remove the adaptor plug.

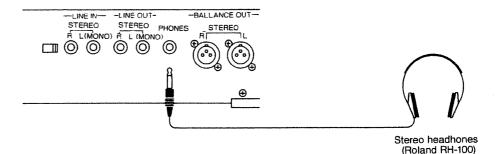
Connect the Line Out jack on the rear of the VK-1000 to the input jack on the keyboard amplifier. To output in monaural, connect to the L (MONO) input.



\* To obtain the best results from your instrument, the use of a keyboard amp (or other full-range system) is recommended.

## [Headphones]

When using headphones (RH-12/RH-100: optional), connect them to the Headphone jack on the rear of the VK-1000. Adjust the headphone volume with the Master Volume.

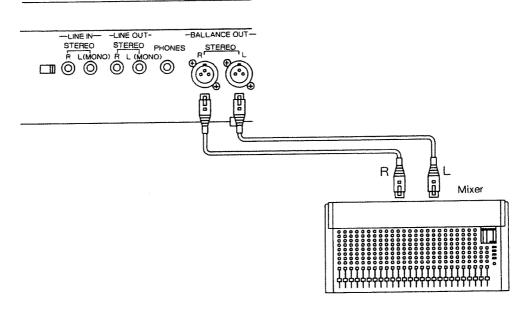


Be sure to use stereo headphones. Using monaural headphones may cause the unit breakdown.

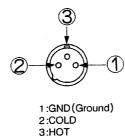
## [PA Equipment]

Since the VK-1000 features Balanced Out Connectors (XLR type) as well as standard Line Out (unbalanced output) jacks, it can be connected to PA equipment with balanced input connectors. The balance cable is durable and resistant to externally induced noise.

Also, it features the plug lock mechanism that locks the plug when it is inserted into a socket.



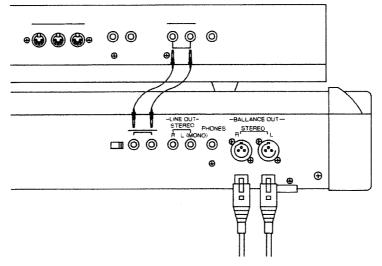
The pin assignments for the XLR connectors are as follows:



Before making any connections, confirm pin assignment compatibility with all other devices.

## [External keyboard]

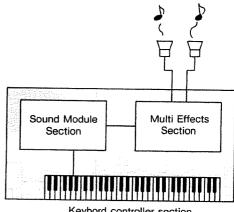
The top panel of the VK-1000 is designed to a acommodate another keyboard (such as a Rhodes model 660 or model 760). When the VK-1000 receives signals sent from a connected keyboard via the Line In jacks, the signals are mixed with the VK-1000s own signal then output through the Balanced Out connectors (the same signals are output from the Line Out jack), therefore, the connection on the rear panel will be much simpler.



# 2. OVERVIEW OF THE VK-1000

## 2-1 The Structure of the VK-1000

The VK-1000 consists of the following three sections:

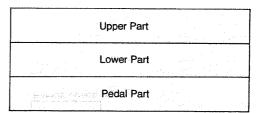


Keybord controller section

## **Sound Module Section**

This is a 3 Part multi-timbral sound module that adopts the Adjustable SA system. Having these multi-timbral Parts allows you to use the sound module as three independent sound

The three Parts are Upper, Lower and Pedal, can be controlled by setting a different MIDI channel for each part to receive specific MIDI messages.



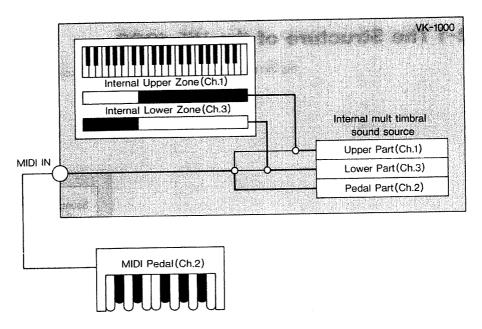
Multi Timbral Sound Module

The sound module section of the VK-1000 can be used as three independent sound modules. Such a sound module, that can play different sounds individually at the same time just like three independent sound modules, a Multi Timbral sound module.

## Keyboard Controller Section

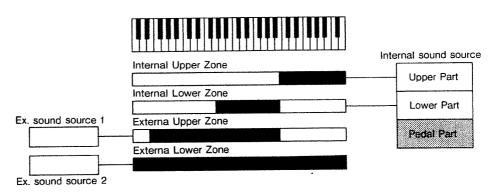
This section allows you to set different sounding ranges (Zones) to control not only the Parts of the internal sound module, but of external MIDI sound modules.

Up to 4 different Zones can be set on the keyboard controller. Two of them (Internal Upper Zone and Internal Lower Zone) are for the internal sound module.



The Pedal Part can only be controlled by external MIDI messages (which can not be controlled by the Zones on the VK-1000s keyboard).

The other two (External Upper Zone and External Lower Zone) are for external sound modules.



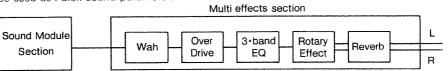
\*The Pedal Part can only be controlled by external MIDI messages.

## **■**Multi Effects Section

The VK-1000 includes five different digitally controlled effects processors; Wah, Overdrive, 3 Band Equalizer, Rotary Effect and Reverb which. These effects can only be used with the internal sound source.

The Rotary Effect includes several other types in addition to Revo (rotary speaker effect), such as Phaser and Flanger. The Reverb can be used as a Multi tap delay as well. However, you can't use two types of effectors in the same group at the same time, such as Revo + Phaser

Parameters in the Multi Effects section can be set differently for each Patch and therefore can be used as Patch sound parameters.



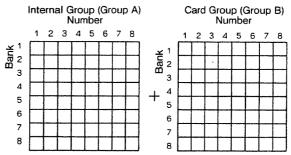
## 2-2 Sound Structure

## **Patch**

A Patch is created by the combination of each section's parameters - Sound Source Section, Keyboard Controller Section and Multi Effects Section.

64 different Patches can be stored in the internal memory and on a Memory Card. With a Memory Card in serted in the MEMORY CARD slot, you can access 128 Patches from the VK -1000's panel.

A collection of 64 Patches are called a Group. A Patch can be selected from either type of a Group - Internal Group (Group A) or Card Group (Group B). The Patches in each group are organized into eight banks (BANK) with eight numbers (NUMBER) in each bank, for a total of 64 (8×8) Patches.



In the display, the Patches in the internal memory and on a Memory Card can be distinguished by A and B respectively.

To select a Patch, first press either INTernal or CARD, then the appropriate Bank button 1-8 and then a Number button 1-8;

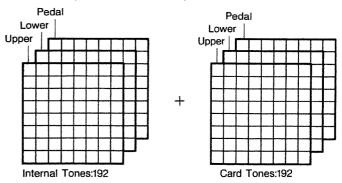
Group ...Internal(A) / Card(B)

Bank ---1-8

Number---1-8

## Tone

A tone is the block where you set parameters related to the sound in each Part determining the sound character. Up to 64 different Tones can be stored in each Part, for a total of 192 Tones in the internal memory and 192 on a Memory Card.



In the display, the Tones in the internal memory and on a Memory Card can be distinguished by A and B respectively. The Tones in each Part can be distinguished by U(Upper)/L (Lower)/P(Pedal).

e.g.; "B:L24" means the Tone in the Lower Part on the Memory Card.

## **Source**

Source is one of 8 different waveforms. Selecting a Source is the single most important decision when creating a Tone.

ORGAN 1 Organ I (mechanical type electric organ)
ORGAN 2 Organ II (mechanical type electric organ)

PIPE ORGAN Pipe Organ (Positive type)

ORGAN BASS (Bass of a mechanical type electric organ)
LEAD (Synthesizer sounds for solo performance)

E.PIANO (Rhodes electric piano )

VIBRAPHONE CHIME

## **■**Tones and Patches

A Tone is the basic unit of sound. Patch is made of Tones and performance controlling parameters that determine how a Tone should be played, e.g. the suitable sound range, how to use the Multi Effects processor, etc. In other words, by selecting a Patch, you can play the Tones included in that Patch in the best performance condition. When you copy a Patch, the three Tones in the Patch and performance controlling functions set for each Tone will all be copied.

\*The Tone of each Part to be written in a Patch is not a name or number, but simply Tone program data.

A Tone can be assigned to each Upper, Lower or Pedal Part. It is possible to copy a Tone in the same Part group and use it in more than one Patch. For example, you can use a Bass Tone on its own or with a Pipe Organ Tone at the same time in different keyboard zones, or you could mix (layer) it with a Lead Tone, for example.

## 2-3 Memory and Temporary Area

The VK-1000 has two different memory types - permanent memory (MEMORY) that retains the data even after the unit is switched off and temporary memory (TEMPORARY AREA) that retains the data only while the unit is on. That is, the Memory is where data is written and the Temporary Area is where data is called from the Memory to be played or edited.

## Memory

Memory is the area where data is preserved even after the unit is switched off. The VK-1000 has two Memory areas, Internal memory (INT) and Card memory (CARD).

\* When a Memory Card is not connected to the Card Slot, only the Internal memory is available and therefore can store up to 64 Patches.

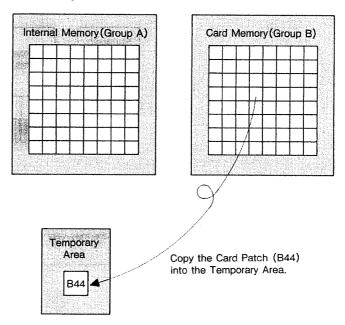
## **Temporary Area**

The VK-1000 does not allow you to edit or play Patch data written (stored) in the Internal or Card memory. In order to edit or play a Patch it must be called into the Temporary Area.

Selecting a Patch simply copies it from memory into the Temporary Area.

The Temporary Area, however, can only hold one Patch at a time. Therefore, the Patch currently in the Temporary Area will be erased when a new Patch is called.

Changing Patches one after another in live performance actually is copying new data one after another erasing old data as many times as copying.



## **A** Note on editing

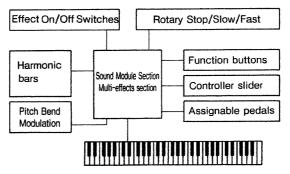
Editing data in the Temporary Area does not affect the source data in memory at all. What we must note is that the data in the Temporary Area is overwritten each time you call a new Patch. That is, even if you create a Patch which you really like, it will be erased the moment you switch off the unit or select a different Patch. To avoid erasing edited data which you do not want to lose, make it a rule to use the Write All procedure each time you create data.

\* The System Mode parameters (:\*:P.64) have been directly written into the VK-100ós system software. Therefore, you do not need to write it. (It is retained even after the unit is switched off.)

## **Controllers**

A controller is a device that sends the performance information created by a player to the sound module in real-time, increasing the performance effect. You can set how each controller should work with the Function Parameters.

The controllers can be controlled by not only the internal sound module but also by an external MIDI sound module. You can write the setting of the Function Parameters into a Patch.



#### Note

Controllers assignment for each Patch has been preprogrammed from the manufacturer. The function of each controller (and the actual effect created) is set differently depending on the types of sounds, and therefore may vary according to the Patch selected and may have no affect at all.

## Keyboard

The 76-note keyboard can be split into Zones, allowing you to play different sounds, from different areas of the keyboard.

### ●Velocity

Play velocity changes the volume or timbre of the sound depending on how hard you press



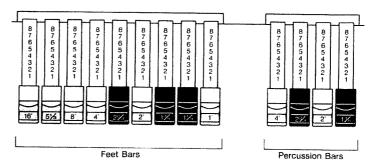
Press lightly to get a faint sound Press strongly to get a loud sound.

A different velocity curve can be set for each Zone. By mixing two Zones which have different velocity curve settings, two sounds can be controlled by changing the strength of your playing.

## Harmonic Bars

These bars work similarly to stop knobs on a pipe organ. By pulling and pushing each bar, various sounds can be produced. There are two types of Harmonic bars, Feet and Percussion bars

The bars are numbered 1 through 8 which can be used effectively to set the bar to the desired position.

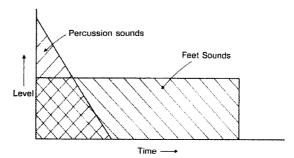


#### Feet Bars

Each of the 9 Feet Bars represents a different pitch range. By pulling and pushing these bars, you can create the basic sound.

#### Percussion Bars

The Percussion sounds rise quickly then decay quickly, while the Harmonic bar sound remain as long as the key pressed

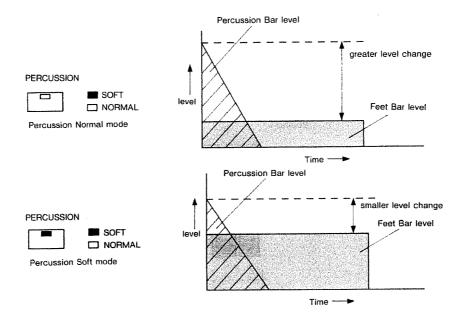


By adding Percussion bar sound to the Harmonic bar sound, a crispy sound can be obtained.

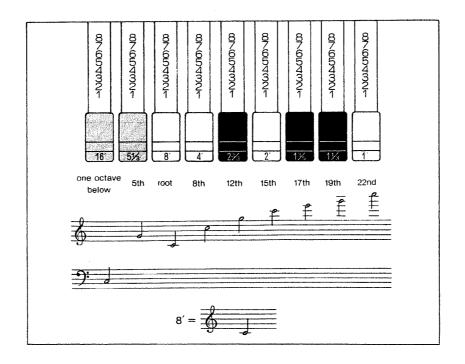
Pressing PERCUSSION will turn the VK-1000 to the Percussion Soft mode (the LED will be on).

This mode increases the level of the Feet Bar output.

Pressing PERCUSSION again will turn the VK-1000 to the Percussion Normal mode (the LED will be off). This mode decreases the level of the Feet Bar output without changing the level of the Percussion Bar output. In this mode, the percussion component of the overall sound is accentuated.



The following shows the pitch relation of the Harmonic Bars (This pitch relation applies to the Organ 1 and Organ 2).



\*The pitch relation can be clearly recognized by moving each Harmonic Bar while holding middle C down.

Each Harmonic Bar has the following characteristic.

White (8', 4', 2', 1')

The white bar on the far left (8') produces the basic pitch. The pitch increases in one octave step from the 8' bar on the left to the 1' bar on the right. By accentuating harmonic content in the range with these Harmonic Bars, you can make the sound brighter.

Black (2%', 1%', 11/3')

These are higher than the standard pitch by a 1oct+5th, 2oct+3rd and 2oct+5nd respectively

Brown (16', 51/3')

The Harmonic Bar is one octave lower than the standard pitch the right one is higher by 5th. Both add richness to the sound.

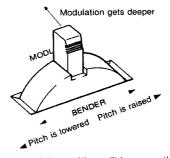
#### Column:

Each bar has "feet" marked on it, originating from the pipe length of pipe organs. The pipe length given to each key is normally 8' (when the pipe is open). When the pipe length is halved, the pitch is on octave higher, when the pipe length is doubted, the pitch is one octave lower. That is, 16' (16 feet) creates a pitch one octave lower, 4' creates a pitch one octave higher and 2' creates a pitch two octaves higher than the basic pitch of an 8'.

## **■**Pitch Bend / Modulation Lever

Moving the Pitch Bend / Modulation lever will change the pitch from one extreme to the other or creates some other effect.

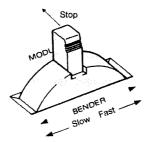
The Pitch Bend lever "always returns to its center position as soon as it is released".



Moving the lever to the extreme right position will increase the pitch, and moving it to the left will decrease the pitch drastically. Also, pushing the lever forward will create a modulation effect.

The depth of the pitch change or modulation on how it is set for each Patch.

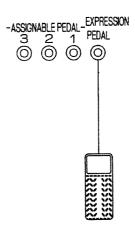
If you press [BENDER FUNC] (the indicator lights up), the Pitch Bend / Modulation lever can be used for changing the speed of the Rotary Effect.



The lever to the extreme right selscts Fast, and to the extreme left selscts slow. Pushing the lever forward stops the Rotary effect.

## **E**expression Pedal

By connecting an expression pedal (EV-5 or EV-10: optional) to the Expression Pedal jack on the rear of the unit, the overall volume can be controlled.

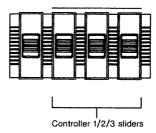


## **■**Assignable Controllers

The VK-1000 features 6 Assignable Controllers; 3 pedals type and 3 sliders. By assigning the VK-1000's parameters or MIDI control numbers, etc, various nuances can be created. Each Patch can have a different controller assignment.

## Controller 1/2/3 Sliders

These are continuously variable controllers.

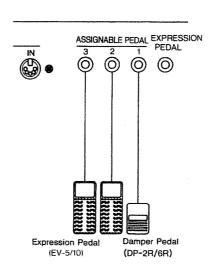


A slider control access digital information and therefore may not change the value when only being moved by a small amount. If this happens, move the slider up and down once and then set the value.

When the Editmode is selected, the function you have assigned to a slider controller in the Play mode will be erased.

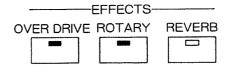
Assignable Pedals (Pedal Controllers)

Depending on the function assigned to a pedal, you can connect a foot volume (for continuous controlling) or pedal switch (for On/Off selection). This allows you to control the function with your feet, leaving your both hands free for playing.



## **■**Effect On/Off Button

These three buttons the three effects on and off.

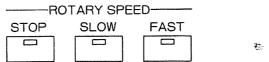


When the indicator is lit, the effect is on.

#### -65

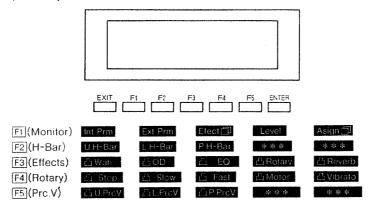
## ■Rotary Stop/Slow/Fast buttons

These switches control the rotary speed when the rotary effect is on (the indicator of the Rotary Effect button is lit).



## Function Buttons (F1 - F5)

These function buttons are normally used for changing display screens. In the Play screen ( $^{\text{co}}$ P.34), however, they can be used as switch-type controllers that change the function previously set. For a detailed explanation, see page 46.



You can check the on/off status of a switch type controller with the Label indication.

eg ; Eqalizer On······ 凸 EO Eqalizer Off ······ 凸 EO

# 3. USER INTERFACE

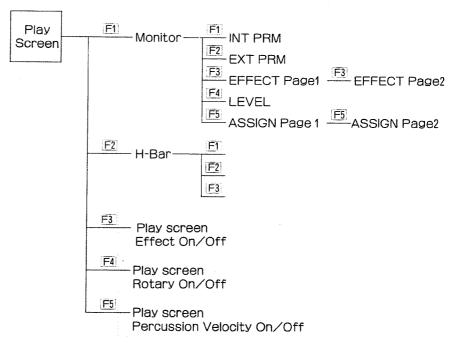
The following describes the operational structure of the VK-1000.

## 3-1 The VK-1000's 6 Modes

The VK-1000's parameters are divided into 6 modes (operational conditions) Each mode includes many different parameter groups that contains various parameters in a systematic arrangement. This kind of data programming system is called "Tree Structure" and ideal for spontaneous sound creation.

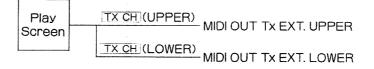
#### OPatch Play Mode

This mode is to monitor or edit the parameters before playing. Switching the unit on will automatically select this mode. This may be equivalent to adjusting registration on an organ.



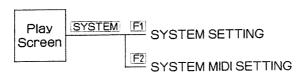
## OMIDI OUT Mode

In this mode, the VK-1000 can change the timbre or effect settings on the external sound module.



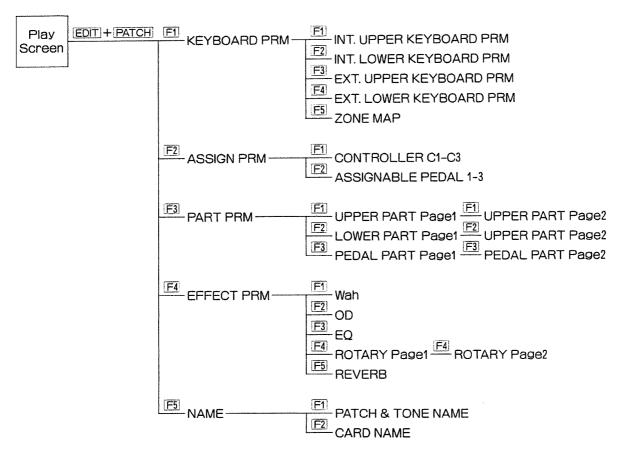
### **OSystem Setting Mode**

This mode allows you to set the parameters related to the overall system of the VK-1000 or external MIDI instrument. These System parameters are retained in memory even if you switch off the unit without using the Patch Write procedure.



### OPatch Edit Mode

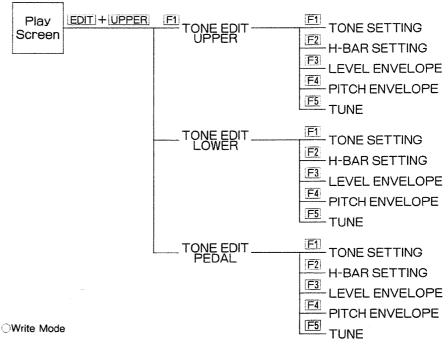
This mode allows you to edit a Patch.



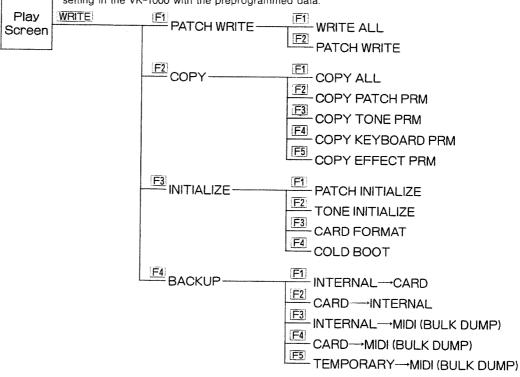
When the Patch Edit mode is selected, the control slider assignment you have set in the Play mode will be erased.

#### OTone Edit Mode

This mode allows you to edit a Tone.



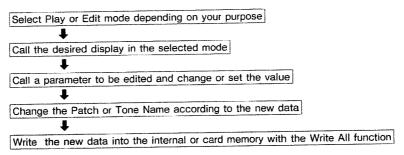
The Write mode includes the Write All operation that allows you to store data in the internal memory (INT) or onto a memory card (CARD). The Backup operation allows you to transfer data between the VK-1000 and a card or external MIDI device, the Copy operation allows you to copy the Patch or Tone data and the Initialize operation allows you to replace the entire setting in the VK-1000 with the preprogrammed data.



# 3-2 How to proceed editing

The VK-1000 allows you to call a parameter to the display and edit it by changing the values. You can edit various kinds of parameters, such as performance control, effects or timbre parameters. The edited parameter value, is erased when a different Patch is selected or the unit is switched off. If you wish to retain the data, you must write it into the internal memory (INT) or onto a memory card (CARD) using the Write All function in the Write mode.

The following shows the sequence necessary for editing and writing Patch data.



By repeating the above procedure, you can increase your own sound libraries.

## 3-3 How to use the screen

The display can be effectively used for calling a desired screen or editing a parameter.

## Display

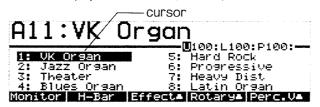
Each display shows the relevant parameters of performance information. It is back-lit for readability even on dark stages.

The screen is divided into two parts; "Operation area" and "Labels".



## **Cursor**

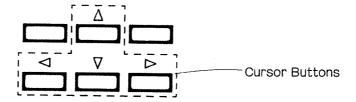
In general, the area of the display where the characters or numerals are reversed is called the "cursor", and indicates the place where you can input data. Each of the "Labels" located below the display is also reversed, however, this is not a cursor.



To modify the settings and data of the VK-1000, move the cursor to the parameter you wish to change, and modify the data value.

## **E**Cursor Buttons

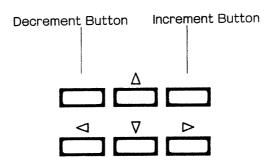
The four buttons located to the right of the display are used for moving the cursor.



# 3-4 Editing a Parameter

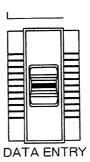
## ■INC/DEC Buttons

You can use these buttons to change the value at the cursor position. Pressing INC increases the value by one step and holding the button down increases the value continuously. Pressing DOWN decreases the value in the similar way as INC.



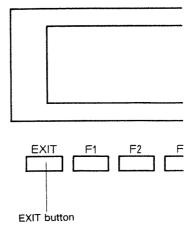
## ■Controller 3 Slider (Data entry slider)

In an editing mode, you can use the Controller 3 slider to change the value of a parameter in addition to using INC and DEC. This slider allows you to enter data more quickly.



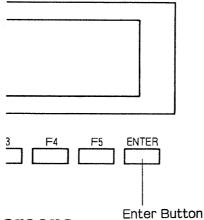
## **Exit Button**

Press this button when you wish to cancel an operation (before it begins).



## **Enter Button**

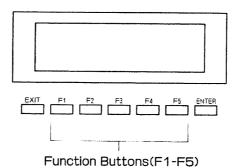
Press this button to execute the selected operation.



## 3-5 How to change screens

## **Function Buttons**

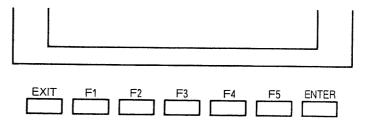
The five buttons located at the bottom of the display are "Function Buttons" which can be used for changing screens.



## Labels

The Function Buttons F1 - F5 on the front panel duplicate the functions of the on-screen "Labels (at the bottom of the display)".

You can select a desired screen by pressing the corresponding Function Button.



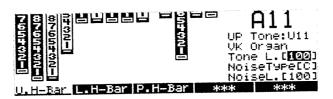
When you call a desired screen by pressing the relevant Function Button, the corresponding label will turn from the reversed to normal indication. The screen name shown in each label is an abbreviation while the full name is shown at the upper right corner of the open screen. full name



## Int.Prm Ext.Prm Effecto Level Assigno

Labbreviation

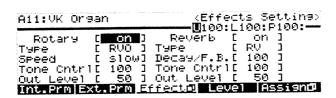
In some screens, less than 5 labels are shown. Even if you press the Function Button that has no label, the screen does not change.



Some screens consists of 2 pages of parameters. The labels contained in such screens are marked with  $\Box$  after the display name.

A11:VK Orsan						ting>
Wah [ off ] Mode [Pedal] A.Sens[ 80 ] A.Rate[ 60 ] Reso. [ 75 ] Int.Prm Ext.P	OD [ Gain [ Level[	off 74 50	] ] H ] M L	EQ li LV lidLV o LV lid Q	[ ] [ ] [ —	on ] 0.03 0.03 1.03 1.00]

\* Pressing the Function Button that corresponds to the label will change pages.



♥ Pressing a Function Button will call the next page.

A11:VK Organ	<pre></pre>
Wah [ off ] OD Mode [Pedal] Gain A.Sens[ 80 ] Leve A.Rate[ 60 ] Reso, [ 75 ] Int.Prm Fxt.Prm Ef	[ off ] EQ [ on ] [ 74 ] Hi LV [ 0.0] 1[ 50 ] MidLV [ 0.0] Lo LV [- 1.0] Mid Q [ 1.00]

#### Note:

In the Play mode, specific functions are assigned to the Function Buttons, and therefore can be used as controllers.

Simply press a Function Button during live performance, to active the assigned function. (\*\* P.57-60).

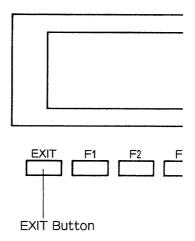
## Menu screens

When you press <code>EDIT</code> + <code>PATCH</code> or <code>WRITE</code>, a menu will appear allowing you to select one of the screens. You can select the desired screen by pressing the corresponding Function Button. This screen is called the "Menu screen".



## **Exit Button**

Pressing the Exit button in the Edit mode will select the previous screen.



Press this button when you want to cancel an operation (before it begins).

# 4. BASIC PROCEDURE

## 4-1 Power-on

To protect all units from damage, please switch on the units in the following sequence

- (1) Check the following before switching on the VK-1000.
  - ●Are all the units set up correctly?
  - ●Is the amplifier turned down?
- 2)Switch on the VK-1000.

For a few seconds after the unit is switched on, the screen displays the welcome message.



When the system is booted up, the display will change, indicating that it is ready to play.

## 

This display is called the "Play screen" in this manual.

- (3)When the Play screen appears, switch on the audio equipment or PA equipment.
- (4) Adjust the volume while playing the keyboard.

The volume of the VK-1000 can be controlled with the Master Volume Slider.

This unit is equipped with a circuit protection device. A brief interval after power up is required before the unit will operate.

## 4-2 Power-off

Swith off the units in the reverse order (audio / PA system first, then the VK-1000). When you have edited data you want to save, do not forget to store it in the internal memory or onto a memory card, using the appropriate write procedure (\*\*P.96). If you switch off the unit without writing the edited data, it will be automatically replaced with the previous data before being edited.

- 1) Turn down the volume of the audio system and the VK-1000.
- 2 Switch off the audio system.
- 3)Switch off the VK-1000.

### 4-3 Cold Boot

The VK-1000 contains 64 different Patches which have been preprogrammed by the manufacturer. These preprogrammed data can be edited or erased as you like, but can easily be restored because they are written on an internal ROM chip. Restoring the factory Patches is called the Cold Boot procedure.

This manual explains the entire procedure from the preprogrammed condition. Therefore, when you use the VK-1000 for the first time, be sure to initialize it with the Cold Boot function.

#### Note:

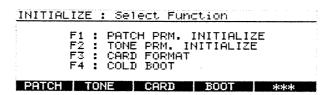
Cold Boot will automatically replace the Patch data you have edited with the preprogrammed data. Save any important data on it into a memory card (\*\*P.110) before you Cold Boot.

### [Cold Boot Procedure]

1 Press WRITE



2)Press F3 Init.



- (3) Press F4 Boot .
- (4) To execute the Cold Boot, press ENTER, and to cancel, press EXIT. Pressing ENTER causes the display to show the welcome message and the Cold Boot starts.



When the Cold Boot is completed, the screen will turn to the Play screen

### 4-4 Patch Selection

Now, you can at last hear the actual sounds of the VK-1000!

The VK-1000 defaults to the Play screen in the Patch Play mode, allowing you to play Patch A11

All: VK Organ

| Under | Under

The Patch shown in the Play screen is the one currently selected and ready to be played on the keyboard. The following table shows all the other Patches in the same Bank.

You can select any Patch you like using INT(A) and CARD(B), BANK buttons 1 - 8 and NUMBER buttons 1 - 8 64 different Patches are preprogrammed and numbered with the 8 Bank and 8 Number buttons.

Patch is a sound unit which can be played on the VK-1000.

Because different Parts can be simultaneously played in different sections of the keyboard (Zones), sophisticated ensemble performances can be achieved with the VK-1000. Also, a Patch consists of other parameters related with the internal effects or external MIDI devices.

### [How to select an internal Patch]

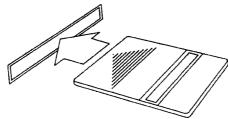
In the Play screen.

- 1) Press PATCH and make sure that the indicator lights up.
- 2) Check that the indicator of INT is lit. If not, press INT.
- Press a Bank Button 1 8, and Number Button 1 8 to specify the Patch you wish to call.

For instance, if you press Bank Button [2] and Number Button [5], Patch 25 will be called.

# [How to select a Patch on a card]

(1) Insert the Memory Card that contains sound data into the Memory Card slot.



- 2)Press PATCH and make sure that the indicator lights up.
- 3)Press CARD and make sure that the indicator lights up.
- (4)Select a Patch you like using a Bank buttton [] [8] and Number button [] [8].

## **4-5 Moving Harmonic Bars**

By changing the positions of the Harmonic Bars, the Tone can be changed in real-time. This can be especially useful during live perfor mances.

#### Harmonic Bar Level switch

When lit (MANUAL), Patches sound in accord with the settings made using the panels Harmonic Bars. When not lit (PATCH), Patches sound according to the setings stored in Memory.

### [How to change a Tone by Harmonic Bars]

In the Play screen,

- 1 Make sure that the indicator of H-BARLEVEL is off. (If not, press H-BARLEVEL .)
- Press F2 H-Bar . In this way, you can monitor the current Harmonic Bar setting of the Upper Tone in the selected Patch.



- Move the Harmonic Bars on the panel. The graphic display of the Harmonic Bars and the sound currently heard will simultaneously change (the edited data, however, will be erased if a different Patch is selected or the unit is turned off).
- 4) If you wish to monitor the Harmonic Bar setting in the Upper Tone of another Patch, change to the desired Patch with the Bank and Number Buttons.
- By pressing F2 LH-Bar or F3 P.H-Bar, the Harmonic Bar setting in the Lower or Upper Part can be monitored in the screen. However, if you have set the unit to the mode that plays only the Upper Tone on the entire keyboard, you cannot hear the Lower or Pedal Part unless a MIDI keyboard or MIDI Pedal Keyboard is connected to the unit.
- (5) When you have completed the procedure, press EXIT to return to the Play screen.

# 4-6 Turning Effects On and Off

You can switch the 5 on-board effects on and off using the Function Buttons in the Play screen.

### [How to switch on or off each effect]

In the Play screen,

Press F3 Effect . The Label indication at the bottom of the display will change as follows.

2)Switch each Effect on and off by pressing the relevant Function button.

The effect is off when the Label is reversed.

```
All: VK Organ

1: VK Organ
2: Jazz Organ
3: Theater
4: Blues Organ

- Wah ] • OD

- EQ

- Month | EQ

- AROtary | AReverb
```

▽ The effect is on when highlighted.

(3)Press EXIT to return to the Play screen.

### 4-7 Adjusting the Level of a Part

The internal sound module has three Parts. The Upper and Lower Pparts can be played on the VK-1000s keyboard while the Pedal part can only be play by external MIDI messages.

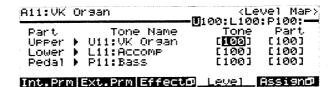
Now, lets change the volume level of each Part.

### (How to adjust the Part Level)

In the Play screen.

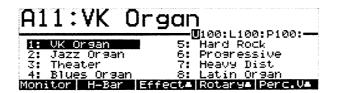
- 1)Press FI Monitor
- 2)Press F4 Level to open the Level Map Parameter screen.

This screen allows you to monitor and edit the Tone Level and Part Level of the Patch currently selected.



- (3) Move the cursor to the relevant parameter and change the value with INC or DEC.
- (4)When you have finished setting the values, press EXIT to return to the Play screen.

The Play screen now shows each Part Level set in step ③ in the upper right corner.



The edited data is overwritten if you change Patches or switch off the unit. If you wish to retain the data, use this appropriate Write procedure (\*\*\* P.96).

# 4-8 Editing a Sound on an External Device

Program Change messages can be sent to external devices from the External Upper Zone and External Lower Zone.

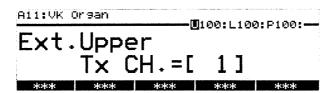
Like Patches, Program Numbers of the VK-1000 are represented by Groups A/B, Banks 1 - 8 and Numbers 1 - 8 (this method is called the G.B.N system). The G.B.N. numbers and the actual Program numbers correspond as follows:

	Internal (Group A)									Card (Group B)									
	Number										Number								
	12345678									12345678								8	
Bank	1	1	2	3	4	5	6	7	8		1	65	66	67	68	69	70	71	72
	2	9	10	11	12	13	14	15	16	77	2	73	74	75	76	77	78	79	80
	3	17	18	19	20	21	22	23	24		3	81	82	83	84	85	86	87	88
	4	25	26	27	28	29	30	31	32		4	89	90	91	92	93	94	95	96
	5	33	34	35	36	37	38	39	40		5	97	98	99	100	101	102	103	104
	6	41	42	43	44	45	46	47	48		6	105	106	107	108	109	110	111	112
	7	49	50	51	52	53	54	55	56		7	113	114	115	116	117	118	119	120
	8	57	58	59	60	61	62	63	64		8	121	122	123	124	125	126	127	128

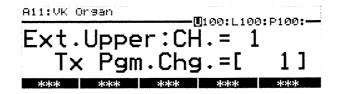
### **(Transmitting Program Changes from the External Zone)**

- 1) Make sure that the indicator of ON/OFF that corresponds to the Zone that transmits Program Change. If it is off, press it.
- Program Change messages are not sent from the VK-1000 if the relevant ON/OFF indicator is off.
- 2) Determine the transmit channel set to the External Zone.

Press TX CH that corresponds to the Zone that is to transmit the Program Change. The indicator will light up indicating the transmit MIDI channel.



- To change the transmit MIDI channel, press the Bank/Number Buttons that correspond to the desired channel.
- (3)Check if the transmit channel is correctly set, and press EXIT to return to the Play screen.
- Press PGM CHG that corresponds to the Zone that is to transmit the Program Change (the indicator lights up), the MIDI Out Transmit Program Change screen appears.



5 Specify the Program Number to be transmitted.

Press A or B to specify the Group, then set the Bank and Number using Bank buttons 1 - 8 and Number buttons 1 - 8. The specified Program Number will be transmitted on the MIDI channel set in step ②.

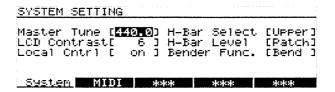
### 4-9 Adjusting the Contrast

If you cannot see the display clearly, adjust the contrast of the display with the "LCD Contrast function".

### [How to adjust the display contrast]

In the Play screen,

1 Press SYSTEM.



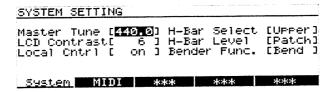
- 2) Move the cursor to "LCD Contrast" and adjust it with MC and DEC.
  - 1 8 are valid parameter values.
- The LCD contrast you have set will be retained in memory even after the unit is switched off.

### 4-10 Master Tune

The VK-1000 can be tuned to another musical instrument using the Master Tune (overall tuning) function. The unit is preset at the factory so that A=440.0 Hz..

In the Play screen,

1)Press SYSTEM.



(2) Move the cursor to "M.Tune" then adjust it with INC and DEC in 0.1Hz steps.

The turning can be adjusted over the range of 425.0 Hz. to 455.0 Hz.

The Master Tune you have set is retained in memory even after the unit is switched off.

# **5. GUIDE MAP**

The following is an index of the VK-1000s most frequently-used functions.

### 5-1 Pitch Control

- ■Controlling the overall pitch (Master Tune) ... \*P.64
- ■Changing the pitch of a Tone in semi-tone steps (Transpose) ... \*P.68
- ■Changing the pitch of a Tone in one octave steps (Octave Shift) ... \*P.68
- ■Fine pitch adjustment of a Tone (Tone Tuning) ... P.92
- ■Subtle pitch change at Key-on (Analog-feel) ... P.88
- ■Setting the tuning curve of a Tone (Stretch Type) ... \*\*P.92
- ■Setting classical temperament ... ☞ P.93
- ■Setting the Vibrato effect (Vibrato / Vibrato Type) ... P.59, 76

### 5-2 Timbre Control

- ■Changing the timbre of a Tone (Harmonic Bar Setting parameters) ... : P.55, 89
- ■Setting the Pitch Envelope of a Tone (Pitch Envelope parameters) ... \*P.90
- ■Changing the source sound to be used for a Tone (Source Select) ... \*P.88
- Changing the Level Envelope of a Tone according to the keyboard range (Time Key Follow) ... ••• P 90
- Adjusting the overall tone using the equalizer (Equalizer parameters) ... #P.79
- ■Adding the Wah effect. ≠ P.77

### 5-3 Volume Control

- ■Adjusting the Tone Level (Tone Level) ... \*P.53, 88
- ■Adjusting the Part Level (Part Level) ... #P.53, 74
- ■Adding Touch Sens, to a Harmonic Bar sound (Feet Velocity-On) ... \*P.75
- ■Adding Touch Sens. to a Percussion Bar sound (Perc. Velocity-On) ... \*P.75
- ■Setting the Level Envelope curve of a Tone (Level Envelope parameters) ... P.89
- ■Changing the Level Envelope of a Tone according to the keyboard range (Time Key Follow) ... \*\*P.90

#### 5-4 Zone Control

- Setting the sound range on the keyboard for an external sound module (Zone Range) ... \*P.69, 48
- ■Changing the Velocity Curve of the internal sound module (Velocity Curve Type) ... \*\*P.68
- ■Changing the Velocity Curve of an external sound module (Velocity Curve Type) ... ▼P.48, 69
- ■Setting the Zone for the internal sound module (Internal Zone parameters) ... > P.68
- ■Setting the Zone for an external sound module (External Zone parameters) ... : P.69
- ■Setting the transmit MIDI channel of the External Zone (TxCH) ... #P.48, 69
- ■Setting the transmit Program Change Number of the External Zone (TxPRG.CHG) ... ∞P 48, 69
- ■Monitoring or editing the sound range of each Zone in the display (Zone Map) ... P.70

### 5-5 Patch Control

- ■Assigning Tones to a Patch (Tone Select) ... P.47, 74
- ■Selecting a Velocity Curve Type for a Zone (Velocity Curve TYPE) ... ⇒ P.68, 69
- ■Naming a Patch (Patch Name Edit) ... ™P.85
- ■Copying a Patch (Patch Parameter Copy) ... P.99
- **■**Writing a Patch into the internal memory (Write All) ... \*\*P.96
- ■Writing a Patch onto a memory card (Write All) ... ☞ P.97
- ■Playing a Patch with the Harmonic Bar settings (H-Bar Level: Patch) ... ☞P.65

### 5-6 Tone Control

- ■Adjusting the Tone Level (Tone Level) ... \*\* P.88
- ■Changing the Harmonic Bar settings of a Tone (Harmonic Bar Setting parameters) ... P. 55, 89
- ■Changing the source sounds to be used for a Tone (Source Select) ... #P.47, 88
- ■Copying a Tone (Tone Parameter Copy) ... \*\*P.101
- ■Naming a Tone (Tone Name Edit) ... P.86

### 5-7 Effects Control

- ■The Wah (Wah parameters) ... \*\*\*P.77
- ■The Equalizer (Equalizer parameters) ... #P.79
- ■The Overdrive (Over Drive parameters) ... #P.78
- ■The Revo effect (Rotary Effect parameters) ... \*P.80
- ■The Phaser (Rotary Effect parameters) ... \*P.80
- ■The Flanger (Rotary Effect parameters) ... : P.80
- ■The Reverb (Reverb Effect parameters) ... \*P.82
- ■The Multi Tap Delay (Rotary Effect parameters) ... 
  P.83

### 5-8 Controllers

- ■Assigning a function to a control slider (Controller Assignment parameters) ... ☞P.71
- Assigning a function to an assignable pedal (Controllers Pedal parameters) ... \* P.73
- ■Setting the maximum pitch range of the bender (Bender Range) ... \*\*P.76
- ■Setting the depth of the modulation lever (Mod Depth) ... \*\*P.76
- ■Changing the rotary speed with the bender (Bender Func : Rotary) ... \*P.65

### **5-9 Parameter Arrangement**

- ■Writing a Patch into the internal memory (Write All) ... ⊕P. 96
- ■Writing a Patch onto a memory card (Write All) ... P.97
- ■Copying a Patch (Patch Parameter Copy) ... \*\*P.99
- ■Copying a Tone (Tone Parameter Copy) ... \*\*P.101

### 5-10 MIDI Control

- ■Changing the sound on an external sound module (TxPRG.CHG) ... P.69
- ■Changing the MIDI transmit channel for an external sound module (TxCH.) ... \*P.69
- ■Disconnecting internal sound module from the Intenal zone (zone:off) ... \*P.68
- ■Disconnecting the External Zone from the external sound module (TxMIDI) ... #P.69
- ■Disconnecting the internal sound module from the keyboard (Local Control) ... ∞P.64
- ■Not sending the MIDI output messages of a selected Patch (MIDI Link: Off) ... P.66
- ■Setting the transmit channel for Control Change messages (Control CH.) ... \*P.65
- Selecting whether or not to send Control Change messages (Tx Ctrl Chg On / Off) ...

  ⇒ P 66
- ■Selecting whether or not to send Program Change messages (Tx Pgm. Chg On / Off) ...

  ⇒ P65
- ■Selecting whether or not to send Exclusive messages (Tx Exclusive On/Off) ... \*\*P.66
- ■Selecting whether or not to receive Exclusive messages (Rx Exclusive On / Off) ... \*\*P.66
- ■Selecting whether or not to receive Program Change messages (Rx Pgm.Chg On/Off) ...

  \*\*\*P.66
- ■Selecting whether or not to receive Volume messages (Rx Volume On/Off) ... #P.66
- ■Setting the Exclusive Unit Number (Unit Number) ... : P.66
- ■Transferring the VK-1000s data to an external device (Backup:1 → MIDI) ... \*P.111
- ■Transferring the Temporary data to an external device (Backup:t →MIDI) ... \*\*P.113
- ■Transferring the card data to an external device (Backup: C → MIDI) ... \*P.112

### 5-11 Other Useful Functions

- ■Adjusting the contrast of the display (LCD Contrast) ... #P.64
- ■Naming a Patch or Tone (Patch Name Edit parameters) ... \*P.85
- ■Naming a Memory Card (Card Name Edit parameters) ... P.86
- Highlighting the Percussion sounds (Percussion Normal) ... № P.75
- Replacing the VK-1000s entire setting with the preprogrammed data (Cold Boot) ... ⇒ P. 107
- Formatting the Memory Card (Format) ... \*P.107

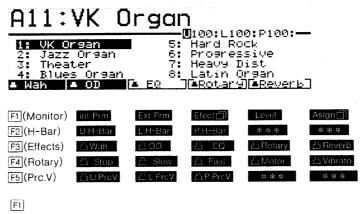
# **6. REFERENCE MANUAL**

### 6-1 PATCH PLAY MODE

The VK-1000 allows you to monitor or edit the current setting of a Patch even while playing the unit. The edited parameter value(S) will be erased when the unit is switched off unless you perform the appropriate write procedure (#P.96).

### 6-1-1 How the Function Buttons (F1 - F5) work in the Play display

Various functions have been assigned to the Function Buttons in the Play screen and these can be used as switch controllers during playing



This button can be used for changing screens in the Play mode.

F2

This is the Harmonic Bar Selection button (selecting the Part where the Harmonic Bar setting should be edited) The Harmonic Bar Selection is a System parameter (\*\* P. 64).

F3

This button can turn all the effects on and off.

F4

This button allows you to change the rotary speed of the Rotary Effect and to turn the "Motor Off Simulation" and Vibrato on and off.

### Motor Off Simulation

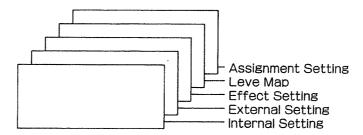
On a mechanical type electric organ, sometimes the pitch and volume of the sound gradually decrease if the instrument is switched off while it is still sounding. This happens because the motor continues to rotate even after the instrument is switched off. The VK-1000 can simulate this effect.

F5

This button can turn the Percussion Velocity on and off for each individual Part.

#### 6-1-2 Monitor

In this mode, you can monitor or edit the overall setting. There are 5 Parameter displays in this mode.



### **■Internal Setting Parameter screen**



This allows you to monitor or edit the setting of the internal sound module for each Part.

A11:VK	Organ				Setting> :P100:—
ZONE Upper	PART/TONE	NAME	RX		P.LEG'T
	• [Lii:Accc [Pii:Bass	MF	] [ ] [	3] 2]	[off]
Int. Pri	a Ext. Prm E	ffecto	D Leve	21	Assigno

The parameters in this screen can also be modified from the Part Parameter screen in the Patch Edit mode.

Tone Select: U11-U88(Upper)/L11-L88(Lower)/P11-P88(Pedal)

This parameter displays or allows you to edit the Tone assigned to each Part. The Tone Name at the "Tone" section of the display will change according to the Tone Number.

\*Only the Tones in the internal memory can be selected for an Internal Patch. If you wish to use a Tone on a card for an Internal Patch, copy the card Tone into the internal memory using the Tone Copy function (\*P.101). Then select the Tone you want.

Rx. CH (Receive Channel): 1-16(Upper/Lower/Pedal)

This parameter monitors or edits the receive channel of the internal sound module for each Part.

P.LEG'T (Percussion Legato On/Off): ON/Off

(Upper/Lower/Pedal)

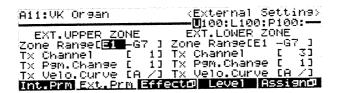
This parameter displays or allows you to edit the Percussion Legato setting for each Part.

### **■**External Setting Parameter screen

PLAY → F1 Monitor → F2 Ext.Prm

The VK-1000 allows you to control an external MIDI sound module using two Zones (External Upper/External Lower). This mode allows you to monitor or edit the zone settings for external MIDI devices.

The parameters in this screen can also be modified from the Keyboard Parameter screen in the Patch Edit mode.



The following parameters can be set for both Ext. Upper Zone and Ext. Lower Zone;

Zone Range: E1-G7

This parameter sets the sound range of the Zone (E1-G7:76 keys).

\*C4 (Note Number 60) is middle C

Tx Channel (Transmit Channel): 1-16

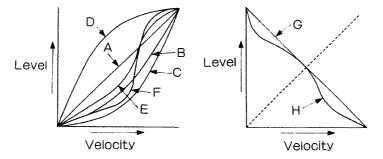
This parameter displays or allows you edit the MIDI channel of the Zone.

Tx Pgm.Change(Transmit Program Change):1 - 128

This parameter displays or allows you to edit the Program Number in the Zone. The Program Change you have specified is transmitted on the Tx CH (Transmit Channel) of the Zone by selecting the Patch which includes the Zone.

#### Tx Velo. Curve (Transmit Velocity Curve): A - H

This parameter displays or allows you to edit the Velocity Curve set to the Zone.



### **■**Effect Setting Parameter screen

PLAY → F1 Monitor → F3 Effect 1

In this screen, you can monitor or edit how the internal Multi Effects Processor is currently set. This screen contains two pages.

The parameters in this screen can also be modified from the Effect Parameter screens in the Patch Edit mode.

### First Page

This page includes parameters that allow you to monitor or edit the Wah, Overdrive and Equalizer settings.

A11:V	K Organ					etting>
Wah	[ Off ]	on r	Off.		0:L100:¦ E0	riee:—
Mode		Gain [			Hi Lul	
A.Sen		Leve1[	50	ā	MidLVI	
A.Rat	e[ 60 ]				Lo LVI	[- 1.0]
Reso.					Mid Q	
Int.P	rm Ext.P	rm <u>Effe</u>	ct.dl	L	evel A:	ssi9n <b>o</b>

To change pages, press F3 Effect .

#### (Wah)

Wah (Wah On/Off): On/Off

This parameter allows you to the Wah effect on and off.

Mode (Wah Mode): Auto/Pedal

This parameter controls the Wah mode.

Auto ... Auto Wah Mode

Pedal ... Wah Pedal Mode

A.Sens(Auto Wah Sensitivity): ±50

This parameter allows you to edit the depth of the effect.

Setting a positive value (+) will open the filter wider with a higher input level. On the contrary, setting a negative value (-) will close the filter with a higher input level.

A.Rate(Auto Wah Attack Rate): 0 - 100

This parameter allows you to set the speed with which the Auto Wah Filter opens. With a higher value set, the filter opens at a slower rate.

Reso.(Resonance): 0 - 100

This parameter controls or edits the Resonance effect. It serves to change the characteristic of the Wah Filter to create unusual sounds. With a higher value, the sound will be more unusual.

### [OverDrive]

OD(Overdrive On/Off): On/Off

This parameter allows you to turn the Overdrive effect on and off.

The on/off status of the Overdrive effect can also be changed using the relevant switch on the panel of the unit.

Gain (Overdrive Gain): 0 - 100

This parameter controls the intensity of the distortion effect. With a higher value, the distortion will be more pronounced.

Level (Overdrive Level): 0 - 100

This parameter monitors or edits the volume of the sound which has been processed at the Overdrive.

When you have changed the Gain, you may need to edit the Level so that no volume difference will be used by turning on and off the Overdrive effect.

### [Equalizer]

EQ(Equalizer On/Off): On/Off

This parameter monitors or edits the on/off status of the Equalizer.

Hi LvI (Equalizer High Level): ±12

This parameter monitors or edits boost/cut status of the sound of high frequency within  $\pm 12 dB$ .

Mid LvI (Equalizer Middle Level): ±12

This parameter monitors or edits boost/cut status of the sound of middle frequency within  $\pm 12 dB$ .

Low LvI (Equalizer Low Level): ±12

This parameter monitors or edits boost/cut status of the sound of low frequency within ±12dB.

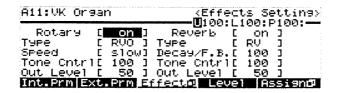
Mid Q(Middle Q): 0 - 100

This parameter monitors or edits how the Mid Q is being set.

The Mid Q parameter changes the intercepting characteristic of the middle range equalizer. With a higher value set, the characteristic of the filter becomes sharper, allowing sharper boosting or cutting for the Middle Level.

### Second Page

This page includes parameters that allows you to monitor or edit the Rotary Effect and Reverb.



To change pages, press F3 Efect .

Rotary (Rotary On/Off): On/Off

This parameter turns the Rotary Effect on and off.

The on/off status of the Rotary Effect can also be changed using the relevant buttons on the panel of the unit.

Type(Rotary Type): RVO/FL/PH

This parameter selects the type of Rotary Effect you use.

RVO ... Revo FL ... Flanger PH ... Phaser

Speed(Rotary Speed) : Stop/Fast/Slow

This parameter controls the speed of the Rotary Effect.

Stop ... The Rotary Effect is stopped.

Fast ... The Rotary Effect is working fast.

Slow ... The Rotary Effect is working slowly.

The speed of the Rotary Effect can also be changed using the three rotary switches on the panel of the unit.

Tone Cntrl: 0 - 100

This parameter controls the setting of a Tone.

When the Rotary Type "RVO" is selected, this parameter changes the frequency characteristic at a higher frequency range of the Revo (revolution speaker) effect. With a higher value set, higher frequency is boosted. This does not apply to the Rotary Type "FL" or "PH".

Out Level (Output Level): 0 - 100

This parameter controls the level of the signal which has been processed at an effect.

Set the Output Level so that no volume difference will occur when turning the Rotary Effect on and off.

Reverb (Reverb On/Off): On/Off

This parameter turns the Reverb on and off.

The on/off status of the Reverb can also be changed using the relevant buttons on the panel of the unit.

Type (Reverb Type): RV/MDL

This parameter selects the type of Reverb you use.

RV ... Reverb

M.DL ... Multi Tap Delay

Decay/F.B.(Decay/Feedback): 0 - 100

This parameter works differently depending on the Reverb Type currently selected.

When "RV" has been selected ... This parameter controls the value of the Reverb Decay.

When "M.DL" has been selected ... This parameter controls the amount of Delay Feedback.

Reverb Decay is a parameter that controls the decay time of reverberation. With a higher value set, the reverberation time will be longer.

Delay Feedback is a parameter that returns delay signal to the delay input unit. With a higher feedback value, the number of delay repeats will be increased.

Out Lvi (Output Level): 0 - 100

This parameter controls the level of the signal which has been processed at an effect. This should be set so that no volume difference will occur when turning the Reverb on and off.

Tone Cntrl (Tone Control): 0 - 100

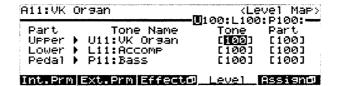
This parameter controls the setting of a Tone.

When the Reverb Type "RV" is selected, this parameter changes the frequency characteristic at a higher frequency range of the Reverberation. With a higher value set, higher frequency is boosted.

### Level Map Parameter screen

PLAY → F1 Montor → F4 Level

This parameter controls the Tone Level and Part Level of the Patch currently open.



Tone (Tone Level): 0 - 100 (Upper/Lower/Pedal)

This parameter controls the level of the Tone assigned to each Part.

Part(Part Level): 0 - 100(Upper/Lower/Pedal)

This parameter controls the level of each Part.

The Part Level can also be changed using MIDI Volume messages (CC#7) sent from an external controller.

### ■ Assignment Setting Parameter screen

PLAY → F1 Monitor → F5 Assem

This screen allows you to monitor or edit the functions assigned to the pedal or slider controllers. It contains two pages.

### First Page

On this page, you can set the function assigned to each controller.

```
A11:VK Organ (Assignment Setting)
Controller Assignment
Controller C1 [INT][Rot. Tone Control ]
Controller C2 [INT][Upper Noise Level ]
Controller C3 [INT][RV Level ]
Int.Prm Ext.Prm Effects Level Assigns
```

Select which to control; internal sound module (INT) or external sound module (EXT).

```
Controller C1 [ ][ ]
Controller C2 [ ][ ]
Controller C3 [ ][ ]
```

Set the function to be assigned.

Available parameters differ depending on whether the destination for the function is internal (INT) or external (EXT). See page 71.

### Second Page

On this page, you can set the function assigned to each pedal.

Select which to control; internal sound module (INT) or external sound module (EXT).

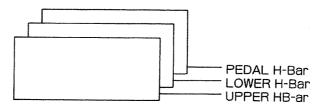
```
Assign. Pedal 1 [ ][ ]
Assign. Pedal 2 [ ][ ]
Assign. Pedal 3 [ ][ ]
```

Set the function to be assigned

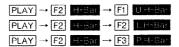
Available parameters differ depending on whether the destination for the function is internal or external sound module. See page 73.

# 6-1-3 H-Bar (Harmonic Bar)

In this mode, you can set the Harmonic Bar for each Part. There are 3 Parameter screens in this mode.



- **EU.H-Bar(Upper Harmonic Bar)**
- **EL.**H-Bar(Lower Harmonic Bar)
- **■P.H-Bar(Pedal Harmonic Bar)**



This screen allows you to monitor or edit how the Harmonic Bar parameters are set in the Part selected.



Tone L. (Tone Level): 0 - 100

This parameter controls or edits the volume of the Tone currently selected in the Part.

Noise Type: A/B/C

This parameter controls or edits the Type of noise (the velocity of the attack portion of the noise).

A...the attack of the noise is quicker

B...the attack of the noise is normal

C...the attack of the noise is slower

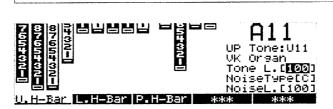
Noise L. (Noise Level): 0 - 100

This parameter controls or edits the level of the noise.

Moving a Harmonic Bar will move the picture of the corresponding Bar in the display. When the VK-1000 receives the Exclusive message that moves a Harmonic Bar, the picture of the relevant Harmonic Bar will similarly move allowing you to monitor the Hamonic Bar setting of the sound currently being played.

#### Column: Patch Play Harmonic Bar

This allows you to monitor or edit how the Harmonic Bar parameters are set in the Tone selected at each Part.



#### NOTE:

If you call a patch with the H-BAR LEVEL indicator being lit, you will hear the Tone of the Part selected with the Harmonic Bar Select Part as the Harmonic Bar is set on the panel of the unit. That is, what you hear is different from the sound of the Tone written in the actual Patch. To monitor the sound in each display of the Patch Play Harmonic Bar, be sure that the H-BAR LEVEL indicator is turned off.

#### Hamonic Bar select cursor

Part selection using the Function Switches F1 - F3 in the Hamonic Bar display is related with the Hamonic select Parmeter of the System Setting and written in the internal memory of the unit even after it is switched off. The Part selected with the Hamonic BarSelect can be monitored with the "Hamonic Bar Select Cursor" shown at the upper right of various displays such as the Play display.



#### **《Effect Switch》**

This mode allows you to monitor or edit the on / off status of the 5 effects in the Internal Multi-Effect Processor.

### **■**Effect (Patch Play Effects Switch)

PLAY → F3 Effect

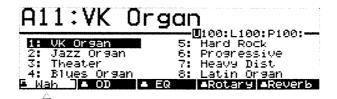
The Patch Play Effect Switch function can be utilized by pressing the Function Buttons that correspond to the Labels in the Menu section (the last line in the display), instead of using the Operating Area in the display.

If you press [53] Effect in the Play display, the Label indication will be replaced with the Patch Play Effect Switch, with the Patch Name indication in the Operation Area remaining unchanged.

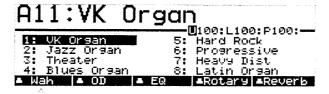
#### 

By pressing the Function Button F1 - F5 that corresponds to each Label, the on/off status of the relevant effect can be changed. The Label indication changes depending whether the effect is turned on or off as follows:

When turned on (the Label indication is normal)



When turned off (the Label indication is reversed)



□ Wah ... On / Off of the Wah effect.
□ OD ... On / Off of the Overdrive effect.
□ EQ ... On / Off of the Equalizer.
□ Rotary ... On / Off of the Rotary Effect.
□ Reverb ... On / Off of the Reverb.

\* To return to the Play screen, press  $\boxed{\text{EXIT}}$ .

### **《Rotary Switch》**

The Rotary Switch function can be utilized by pressing the Function Buttons that correspond to the Labels in the Menu section (the last line in the display), instead of using the Operating Area in the screen. Also, as well as changing the Rotary Speed with the Rotary Switches (Stop/Slow/Fast), you can monitor or edit the on/off status of the Motor or Vibrato.

### ■Rotary(Rotary Switch)

PLAY → F4 Rotary

The Patch Play Rotary Switch function can be utilized by pressing the Function Buttons that correspond to the Labels in the Menu section (the last line in the display), instead of using the Operating Area in the display.

If you press F4 Rotary in the Play display, the Label indication will be replaced with the Rotary Switch etc., with the Patch Name indication in the Operation Area remaining unchanged.



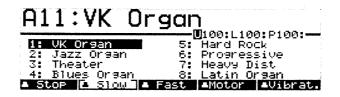
To change the Rotary Speed, press the F1, F2 or F3 key. (These three keys function in exactly the same way as the three buttons on the panel. Only one key can be used at a time.) The function that is assigned to the pressed key works and the Labeled indication will change as follows:

The Motor and Vibrato can be turned on or off by pressing the Function Button F4 or F5 that corresponds to each Label.

When turned on (the Label indication is normal)



When turned off (the Label indication is reversed)



△ Stop △ Slow ... Changing the Rotary Speed. △ Fast

△Motor ... Motor on/off.

凸 Vibrat. ... Vibrato on ∕off of the Part currently open

- By turning the Motor on, you can experience the effect of a gradual decrease of pitch and volume similar to the effect obtained on a mechanical type electric organ when it is switched off.
- Unlike the 5 internal effects, the on/off status of the Vibrato can be set separately for individual Parts.
  - \*To return to the Play screen, press EXIT.

#### **《Percussion Velocity Switch》**

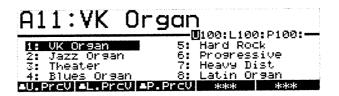
This function allows you to monitor or edit the on/off status of the Percussion Velocity for each Part.

### **■**Perc. V(Percussion Velocity Switch)

PLAY → F5 PrcV

The Percussion Velocity Switch function can be utilized by pressing the Function Buttons that correspond to the Labels in the Menu section (the last line in the display) instead of using the Operating Area in the display.

If you press F5 PrcV in the Play display, the Label indication will be replaced with the Percussion Velocity Switch, while the Patch Name indication in the Operation Area remains unchanged.



The Percussion Velocity of each Part can be turned on or off by pressing the Function Button F1 - F3 that corresponds to each Label. The Label indication changes depending whether the Percussion Velocity is turned on or off as

#### follows:

When turned on (the Label indication is normal)

```
A11:VK Organ

| Too | Column |
```

When turned off (the Label indication is reversed)

```
A11:VK Organ

I: VK Organ

2: Jazz Organ

3: Theater

4: Blues Organ

D100:L100:P100:—

5: Hard Rock
6: Progressive
7: Heavy Dist
4: Blues Organ
8: Latin Organ

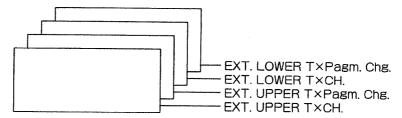
DU.PrcV AL.PrcV P.PrcV ****
```

U.PrcV ... On Off of the Upper Parts Percussion Velocity. L.PrcV ... On Off of the Lower Parts Percussion Velocity. P.PrcV ... On Off of the Pedal Parts Percussion Velocity.

\* To return to the Play screen, press EXIT .

### 6-2 MIDI Out Mode

This mode allows you to transmit Program Change messages from an external Zone while data is being played. To set the parameters in this mode, only the buttons on the panel of the unit can be used. The MIDI Out Mode contains 4 Parameter screens.



PGM CHG in the EXT UPPER ZONE

- ... Press this button to edit the Program Change in the EXT UPPER ZONE.

  TX CH in the EXT UPPER ZONE
- ... Press this button to edit the Transmit Channel in the EXT UPPER ZONE.

  PGM CHG in the EXT LOWER ZONE
- $\dots$  Press this button to edit the Program Change in the EXT LOWER ZONE.  $\scalebox{$\overline{\rm TX}$ CH]}$  in the EXT LOWER ZONE
- ... Press this button to edit the Transmit Channel in the EXT LOWER ZONE.
- \*To leave this mode and return to the Play screen, press  $\boxed{\text{EXIT}}$  or  $\boxed{\text{PLAY}}$ .

### 6-2-1 EXT.UPPER Tx CH.(MIDI Out Transmit Channel Upper)

Pressing the TX CH in the EXT UPPER ZONE (located on the right side of the panel) will the MIDI Output Transmit Channel screen (Upper).



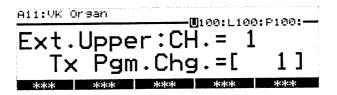
Tx CH(Transmit MIDI Channel):1 - 16

This parameter sets the transmit MIDI channel of the EXT UPPER ZONE. To specify a channel number, press TX CH, then the corresponding Bank/Number button.

\* If you use the above procedure with the indicator turned off (by pressing ON/OFF) of the EXT UPPER ZONE), data is not transmitted from the MIDI Output. Data can be transmitted only when the indicator is lit.

# 6-2-2 EXT.UPPER TxPgm.Chg.(MIDI Out Transmit Program Change Upper)

Pressing the PGM CHG in the EXT UPPER ZONE (located on the right side of the panel) will display MIDI Output Transmit Program Change display (upper).



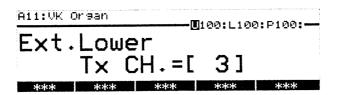
Tx Pgm Chg.(Transmit Program Change):1 - 128

This parameter sets the Program Number transmitted from the EXT UPPER ZONE. To specify a Program number, press PGM CHG, then use INC / DEC.

\* If you use the above procedure with the indicator turned off (by pressing ON/OFF) of the EXT UPPER ZONE), data is not transmitted from the MIDI Output. Data can be transmitted only when the indicator is lit.

### 6-2-3 EXT.LOWER Tx CH.(MIDI Out Transmit Channel Lower)

Pressing the TX CH in the EXT LOWER ZONE (located on the right side of the panel) will display the MIDI Output Transmit Channel display (lower).



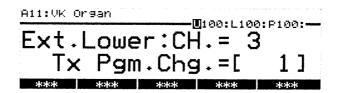
Tx CH(Transmit MIDI Channel):1 - 16

This parameter sets the transmit MIDI channel of the EXT LOWER ZONE. To specify a channel number, press TX CH, then the corresponding Bank/Number button.

\* If you use the above procedure with the indicator turned off (by pressing ON/OFF) of the EXT LOWER ZONE), data is not transmitted from the MIDI Output. Data can be transmitted only when the indicator is lit.

### 6-2-4 EXT.LOWER Tx Pgm.Chg. (MIDI Out Transmit Program Change Lower)

Pressing the PGM CHG in the EXT LOWER ZONE (located on the right side of the panel) will display the MIDI Output Transmit Program Change screen (lower).



Tx Pgm Chg.(Transmit Program Change):1 - 128

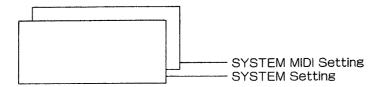
This parameter sets the Program Number transmitted from the EXT LOWER ZONE. To specify a Program number, press PGM CHG, then use INC / DEC.

\*If you use the above procedure with the indicator turned off (by pressing ON/OFF) of the EXT LOWER ZONE), data is not transmitted from the MIDI Output. Data can be transmitted only when the indicator is lit.

### 6-3 SYSTEM SETTING MODE

The VK-1000 allows you to enter the System Setting mode, from any condition, simply by pressing SYSTEM.

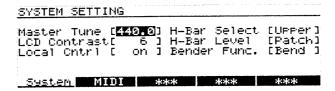
In this mode, you can set the parameters related to the entire system of the VK-1000 and external MIDI devices. This mode provides two Parameter screens.



### 6-3-1 SYSTEM Setting

SYSTEM → F1 System

The System settings are automatically retained even after the unit is switched off. It is therefore unnecessary to save any change in System settings.



Master Tune: 425Hz - 455Hz

This parameter controls the VK-1000's overall pitch adjustment. You may use this for tuning to another musical instrument.

LCD Contrast:1 - 8

This parameter controls the contrast of the display. With a higher value, the display is more distinct.

LocalCntrl: On/Off

This parameter determines the relation ship between the keyboard and the internal sound module.

On ... This is the normal condition in which the keyboard and the internal sound module are connected.

Off ... In this situation, the keyboard is disconnected from the internal sound module. Playing the keyboard does not produce any sound, but the performance information from the keyboard is transmitted from the MIDI OUT. Also, the performance information received at the MIDI IN can play the internal sound module. This parameter should be set when you use the VK-1000 with a sequencer, etc.

H-BAR Select : Upper/Lower/Pedal

To set this parameter, specify the Part where you wish to change the sound of a Tone in a Patch using the Harmonic Bars on the panel.

\* This function can also be selected by using the Function Button in the Patch Play Mode (\*\* P. 55).

#### H-BAR Level (Harmonic Bar Level) : Patch/Manual

This parameter selects the Patch or Manual mode for the Harmonic Bar setting on the panel or that of a Patch. You can set the Harmonic Bar level of the Part you select with the Harmonic Bar Select function.

Patch ... When a Patch is called, it will be played with the Harmonic Bar Setting as set in the Patch. (The panel setting is ignored.)

Manual ... When a Patch is called, it will be played with the Harmonic Bar setting as set on the panel (The Patch setting is ignored).

#### Bender Func. (Bender Function): Bend/Rotary

This parameter determines the function of the bender.

Bend ... The bender works as a normal Pitch Bend / Modulation Lever.

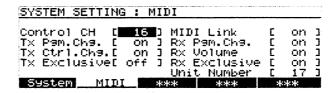
Rotary ... The bender controls the Rotary Speed.

The function of the Rotary Speed Changing Lever is affected by the Rotary Speed Selection Switch (F1 Stop / F2 Slow / F3 Fast ), etc.

### 6-3-2 System MIDI Setting

SYSTEM → F2 MIDI

This mode allows you to control the transmission and reception of MIDI data.



Control CH. (Transmit Control Channel): 1-16

This parameter sets the channel on which the Control Change messages are transmitted to an external MIDI device.

#### Tx Pgm.Chg (Transmit Program Change On/Off): On/Off

This parameter determines whether to transmit Program Change messages or not.

On ... Transmits Program Change messages.

Off ... Does not transmit Program Change messages.

If you do not wish to change the sounds or settings on the external MIDI device, set it to Off.

### Tx Ctrl.Chg (Transmit Control Change On/Off): On/Off

This parameter determines whether to transmit Control Change messages or not.

On ... Transmits Control Change messages.

Off ... Does not transmit Control Change messages.

### Tx Exclusive (Transmit Exclusive On/Off): On/Off

This parameter determines whether to transmit Exclusive messages or not.

On ... Transmits Exclusive messages.

Off ... Does not transmit Exclusive messages.

#### MIDI Link: On/Off

This parameter determines how to handle the MIDI output data included in a Patch when a new Patch is selected.

On ... This is the normal condition where the MIDI data of the new Patch is output the moment a new Patch is selected. Select this condition if you wish to change the settings of the external sound module for each Patch.

Off ... MIDI transmit parameters of the new Patch is not output, even when a new Patch is selected, and the previous MIDI setting of MIDI transmit parameters remain. This condition may be useful for live performance on stage or recording in a studio (where you have different circumstances), because you can change Patches without changing the setting of MIDI transmit parameters you have created.

# Please note that if you change Patches and edit or write a new Patch with the MIDI Link parameter set to Off, the MIDI transmit parameters of the previous Patch will be written into memory.

### Rx Pgm.Chg (Receive Program Change On/Off): On/Off

This parameter determines whether to receive Program Change messages or not

On ... Receives Program Change messages.

Off ... Does not receive Program Change messages.

#### Rx Volume (Receive Volume Messages) On/Off

This parameter determines whether to receive Volume messages (#7) in the Control Change or not.

On ... Receives Volume message accordings to the Rx channel of each Part.

Off ... Does not receive Volume messages.

#### Rx Exclusive (Receive Exclusive On/Off): On/Off

This parameter determines whether or not to receive Exclusive messages (such as messages that move Harmonic Bars, etc.). To bulk-load (#P.108), select On.

On ... Receives Exclusive messages.

Off ... Does not receive Exclusive messages

#### Unit Number: 17 - 32

This parameter sets the Unit Number. Exclusive messages are different from other MIDI messages (such as Note Numbers), in that Exclusive messages are specific to each individual model. Unit Numbers (which are identification numbers) are created to transmit or receive Exclusive messages between units that share the same number. (The initial setting of the Unit Number is 17.)

### 6-4 PATCH EDIT MODE

This mode allows you to edit the Patch called into the Temporary area.

Overview of the Patch Edit Mode:

- ●To enter data, use the Cursor Button, Control Slider C3 (data entry) and INC and DEC.
- The functions you have assigned to the control sliders in the Patch Edit mode are canceled and replaced with the following functions;

Controller 1: The level of the Part currently being edited.

Controller 2: Level of click noise.

Controller 3: Data Entry

●When you enter the Patch Edit mode, the indicators of EDIT and PATCH will light up.

#### Patch Edit Menu

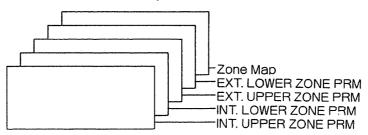
EDIT + PATCH

This allows you to select an appropriate editing mode.

- F1 Keyboard ... This sets Zone settings.
- F2 Assign ... This sets Controller settings.
- F3 Part ... This sets the Part in a sound module.
- F4 Effect ... This sets the internal Multi Effects Processor.
- F5 Names ... This puts a name to a Patch, Tone or Card.

### 6-4-1 Keyboard (Keyboard Parameters)

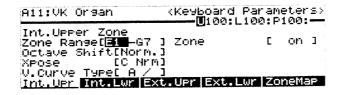
This mode allows you to set a Zone of a Patch. It consists of 5 Parameter screens.



### ■Int. Upper Zone (Internal Upper Zone Parameters)

### **Eint.** Lower Zone (Internal Lower Zone Parameters)

These parameters control the Internal Upper/Lower Zone.



Zone Range: E1-G7

This parameter determines the maximum number of notes that can to be played in the Internal Zone.

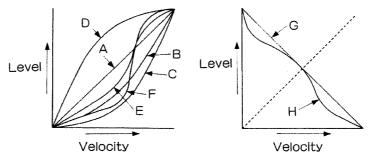
### C4(note number 60) is middle C.

Oct Shift (Octave Shift): -2oct/-1oct/normal/+1oct/+2oct
This parameter determines the pitch of the Zone in Octave steps (-2 to +2 octaves).

This parameter shifts the pitch of the Upper Zone in semi-tone steps. Using this function, you can transpose the pitch of the zone without changing the key positions.

#### V-Curve Type(Velocity Curve Type): A/B/C/D/E/F/G/H

This parameter allows you to select one of 8 different curves.



Zone (Zone On/Off): On/Off

This parameter determines whether or not to connect the Part to the Internal Zone.

On ... The Upper/Lower Part is connected to the Internal Zone.

Off ... The Upper/Lower Part is disconnected from the Internal Zone and therefore no sound is generated even if you play the keyboard within the sound range.

### **EXT UPPER ZONE PRM(External Upper Zone Parameters)**

### **MEXT LOWER ZONE PRM(External Lower Zone Parameters)**

EDIT + PATCH → F1 Keybd → F3 Ext Upr EDIT + PATCH → F1 Keybd → F4 Ext Lwr

These parameters control the Zone of an external sound module. The Zone set here is called External Upper Zone.

All:VK Organ	<pre></pre>	A11:UK Organ
Ext.Upper Zone Zone Range( <b>FU</b> -G)		Ext.Lower Zone Zone Range[ <b>EXE</b> -G7
Octave Shift[Norm		Octave Shift[Norm. Xpose [C Nrm
V.Curve Type[ A / Int.Upr Int.Lwr E	/ ) xt.Upr Ext.Lwr ZoneMap	V.Curve Type[ A / Int.Upr Int.LWr Ex

Zone Range: E10-G7

This parameter determines the range of notes that can be played on the external sound module.

### C4(note number 60) is middle C.

Octave Shift (Octave Shift): -2oct/-1oct/Norm/+1oct/+2oct

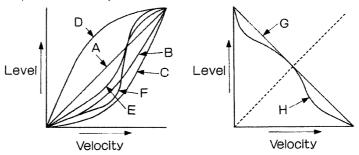
This shifts the the pitch of the Zone in one Octave steps.

XPose(Transpose): -6-normal-+5

This parameter shifts the pitch of the Zone in semi-tone steps.

V-Curve Type(Velocity Curve Type) : A/B/C/D/E/F/G/H

This parameter allows you to select one of 8 different curves.



Tx MIDI (Transmit MIDI Messages): On/Off

This parameter determines whether or not to transmit the Zones MIDI messages to the external instrument.

On ... The MIDI messages of the Zone are transmitted.

Off ... The MIDI messages of the Zone are not transmitted.

# This setting can be changed using the External Upper On/Off Button or the External Lower On/Off Button at the right corner of the panel.

Tx channel.(Transmit MIDI Channel):1 - 16

This parameter sets the MIDI channel of the Zone to the same number as the MIDI channel of the external sound module.

### Tx Pgm. Chg(Transmit Program Change): Off,0 - 127

This parameter specifies the Program Change number to be transmitted to the external sound module.

### **E**Zone Map

EDIT + PATCH → F1 Keybs → F5 Zone Map

On this page, you can monitor or edit the Zone Range of the Patch you select. All the Zone set to Patches are shown on the 76 key keyboard.



In the Zone Map display, each sound range set with the Zone Range of the Internal Upper/ Lower Zone and External

### [How to change the Zone Range]

- $\bigcirc$  Move the cursor to the Zone Name which you wish to edit using the Cursor Keys  $\blacktriangle$  and  $\blacktriangledown$ .
- (2)Press , then edit the highest note of the Zone using INC and DEC or the C3 Slider.
- 3)Press , then edit the lowest note of the Zone using NC and DEC or the C3 Slider.

#### NOTE

If you disconnect a Zone from the internal or external sound module with the Zone On/Off or Tx MIDI On/Off (or External Upper On/Off Button or External Lower On/Off Button), the solid line indication that shows the sound range on the Zone Map will change to a dotted line. (P.69)

eg; Disconnecting the External Upper Zone from the external sound source.

Ext. Upr----

When the External Upper On/Off Button is pressed and the indicator goes out, the indication on the Zone Map will change to as follows.

Ext. Upr----

## 6-4-2 Assignment Prm (Assignment Parameters)

These parameters assign a function to an assignable controller (slider or pedal).

## **Controller Assignment**

```
EDIT + PATCH → F2 Assgri
```

In this screen, you can assign a function to each of the three assignable sliders.

```
A11:VK Organ (Assign. Parameters)

Controller Assignment
Controller C1 [INT][Rot Tone Control ]
Controller C2 [INT][Upper Noise Level ]
Controller C3 [INT][RV Level ]

Cntrl Pedal *** *** ***
```

Select which to control; internal sound module (INT) or external sound module (EXT).

```
Controller C1 [ ][ Controller C2 [ ][ Controller C3 [ ][
```

Set the function to be assigned.

#### Controller C1(C1 Slider): \*

This parameter assigns a function to the Controller 1 slider.

Controller C2(C2 Slider): \*

This parameter assigns a function to the Controller 2 slider.

Controller C3(C3 Slider): \*

This parameter assigns a function to the Controller 3 slider.

#### ${\bf *Available\ parameters\ which\ can\ be\ assigned\ to\ each\ slider\ differs\ as\ follows\ ;}$

When controlling the internal sound module (INT)

Upper Part Level

Lower Part Level

Pedal Part Level

Upper Noise Level

Lower Noise Level

Pedal Part Noise Level

Total Exp. Level

Auto Wah Sens

Auto Wah Time

Wah Resonance

Wah Output Level

- OD Gain
- OD Output Level
- EQ High Level
- EQ Mid Level
- Eq Low Level
- EQ Mid Q
- EQ Mid Freq
- EQ Total Level
- Rot Tone Control
- Rot Output Level
- Rotary Fast Rate
- Rotary Slow Rate
- Rot. Rise Time High
- Rot. Rise Time Low
- Rotary Depth High
- Rotary Depth Low
- Rotary High Level
- Rotary Low Level
- Rotary High Mix
- Rotary Low Mix
- PH/FL Depth
  PH/FL Feed Back
- RV Pre Delay
- RV Decay
- RV Level
- **RV Tone Control**
- M.DL Left Level
- M.DL Left Time
- M.DL Center Level
- M.DL Center Time
- M.DL Right Level
- M.DL Right Time
- M.DL Feed Back

When controlling the external sound module (EXT)

Control numbers 0 - 95 can be assigned.

For details of control numbers, refer to "CONTROL CHANGE TABLE ( P.119)" in the Appendix.

## **■Pedal Assignment (Controller Pedal Parameters)**

EDIT + PATCH → F2 Assign → F2 Pedal

In this screen, you can assign a function to each of the three Pedal jacks. There are two types of Control Pedals; the Continuous Type (EV-5: optional) that requires continuous operation according to the assigned function and the Switch Type (DP-2/6: optional) that requires on/off selection.

A11:VK Organ (Assign. Parameters)
Pedal Assignment
Assign.Pedal 1 [INT][Hold ]
Assign.Pedal 2 [INT][Rotary Speed ]
Assign.Pedal 3 [INT][Wah Pedal ]

Chtrl Pedal \*\*\* \*\*\* \*\*\*\*

Select which to control; internal sound module (INT) or external sound module (EXT).

Assign.Pedal 1 [ ][ ]
Assign.Pedal 2 [ ][ ]
Assign.Pedal 3 [ ][ ]

Set the function to be assigned.

Assign.Pedal 1 (Assignable Pedal 1): \*

This parameter assigns a function to Pedal 1.

Assign.Pedal 2 (Assignable Pedal 2): \*

This parameter assigns a function to Pedal 2.

Assign.Pedal 3 (Assignable Pedal 3): \*

This parameter assigns a function to Pedal 3.

\* Available parameters which can be assigned to each Assignable Pedal are as follows;

When controlling the internal sound module (INT)

Hold \*

Soft \*

Mute

Rotary Speed

OD On/Off

Rotary On/Off

Reverb On/Off

H-Bar PATCH/MANUAL

Perc. NORMAL/SOFT

Bender PITCH/ROT.

Wah Pedal

only when the Hold or Soft is selected for the internal sound module (INT), corresponding Program Change messages (CC#64 Hold or CC#67 Soft) will be transmitted to the sequencer through the MIDI Out for emphasizing the playback ability of the sequencer.

When controlling the external sound module (EXT)

Control numbers 0 - 95 can be assigned.

For details of control numbers, refer to "CONTROL CHANGE TABLE (\*\* P.119)" in the Appendix.

## 6-4-3 Part (Part Parameters)

Part Parameters allow you to edit the internal multi timbral Parts (Upper/Lower/Pedal).

- ■Upper Part (Upper Part Parameters) Page 1/2
- ■Lower Part (Lower Part Parameters) Page 1/2
- ■Pedal Part (Pedal Part Parameters) Page 1/2

```
EDIT + PATCH \rightarrow F3 Part \rightarrow F1 Upper 1
EDIT + PATCH \rightarrow F3 Part \rightarrow F2 Lower 1
EDIT + PATCH \rightarrow F3 Part \rightarrow F3 Pedal* 1
```

Make settings for each Part of the internal multi timbral sound module

Each Part Parameter setting screen consists of two pages.

## **First Page**



Tone name: U11 - U88

This parameter selects a Tone to be assigned to the Upper Part

- Each Part contains 64 Tones and a Tone can be edited with the Tone Edit function.
  - \*An internal Patch allows you to select Tones from theinternal memory. This means that you can't use Card Tones in the internal Patch.

For this reason, you may need to copy Tones from the Card to the Internal memory before you will able to use Card Tones with the internal Patch.

Part Level (Part Level): 0 - 100

This parameter controls the volume level of each Part.

## This may be useful to create an appropriate level balance between sounds when the unit plays in Layer or Split conditions.

#### Perc.Type (Percussion Type): Norm./Soft

This parameter selects the Percussion Type for each Part.

Norm. ... The output level of the Feet Bar decreases without changing the level of the Percussion sound. In other words, the Normal status highlights the percussion sounds. Soft ... The output level of the Feet Bar increases, and therefore the volume difference between the Harmonic Bars and the Percussion sounds becomes smaller.

#### Perc. Legato: On/Off

This parameter turns the Percussion Legato On or Off for each Part.

On ... Percussion effects are is obtained only by playing in a non-legato manner. That is, you can switch over the Percussion by changing the playing manners, to or legart.

Off ... Percussion effect is always obtained.

#### Rx CH(Part Receive Channel):1 - 16

This sets the MIDI receive channel of the Part.

#### Perc. Veloc. (Percussion Velocity): On/Off

This parameter selects whether or not to turn on the Touch-sens function (that changes the volume of tone of a sound depending how you play the keyboard) for a Percussion Bar sound.

On ... You can add desired accents by playing with more force (to the Percussion Bar sound).

Off ... The Touch-sens effect is not obtained.

#### Feet Veloc: On/Off

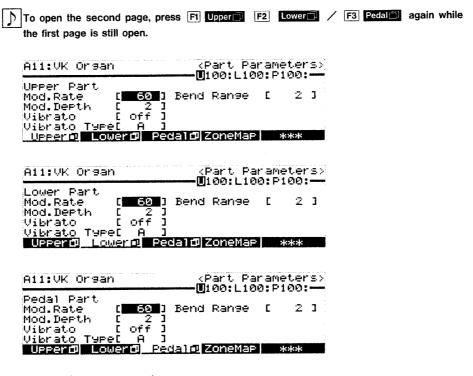
This selects whether or not to change the tone or volume of the Harmonic Bar sound depending how you play the keyboard.

On ... You can add desired accents by playing with more force (to the Harmonic Bar sound)

Off ... The Touch-sens effect is not obtained.

## The Second Page

This page contains parameters that control Bender, Modulation and Vibrato of the Part.



#### Mod.Rate (Modulation Rate): 0 - 100

This parameter sets the rate of the Modulation. With a higher value set, the modulation speed is quicker.

#### Mod.Depth (Modulation Depth): 0 - 100

This parameter sets the depth of the Modulation. With a higher value set, the modulation depth is deeper.

#### Vibrato (Vibrato On/Off): On/Off

This parameter determines whether or not to use the Vibrato effect (the effect that change the pitch periodically).

On ... Vibrato effect is obtained.

Off ... Vibrato effect is canceled.

#### Vibrato Type: A/B/C

This parameter selects the desired Vibrato Type

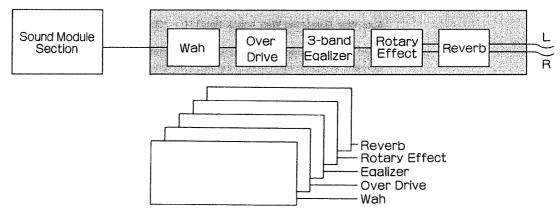
- A ... lighter type
- B ... ordinary, natural Type
- C ... deeper Type

#### Bender Range: 0 - 48

This parameter determines the maximum range of pitch bend in semi-tone steps caused by the Pitch Bend Lever in semi-tone steps.

#### 6-4-4 Effect Parameters

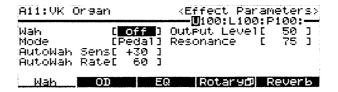
The VK-1000 allows you to use the following 5 effects at the same time. The sequence of the effects, however, cannot be altered.



## **■**Wah(Wah Parameters)



You can select Auto Wah or Pedal Wah that controls the filter via a Pedal.



Wah (Wah On/Off): On/Off

This parameter turns the Wah effect on and off.

On ... Wah effect is on.

Off ... Wah effect is not used.

Mode(Wah Mode): Auto/Pedal

This parameter determines how the Wah should be controlled. You can select Auto Wah that controls the Wah filter depending on the input signal level or Pedal Wah that controls the filter using the Pedal Controller.

## Pedal Wah

When the Pedal Wah mode is selected, you can control the cutoff frequency of the Wah filter by depressing the Expression Pedal (EV-5: optional) connected to the Assignable Pedal socket. To do this, however, you must assign the relevant pedal function to the Wah Pedal with the Pedal Assignment in the Assignment Parameters beforehand (#P.73).

Pedal ... The Wah filter is controlled by the Assignable Pedal Auto ... The Wah filter is controlled by the input signal level.

#### Auto Wah Sens (Auto Wah Sens): -50 - +50

This determines the depth of the Auto Wah effect. When a positive value (+) is set, the filter opens wider with a higher input level. When a negative value (-) is set, the filter closes with higher input level.

## Auto Wah Rate (Auto Wah Attack Rate): 0 - 100

When the Wah Mode is set to AUTO, this parameter determines the time required for the filter to react. A higher value makes the reaction longer.

#### Output Level: 0 - 100

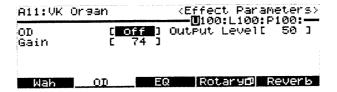
This parameter controls the volume of the sound processed by the Wah filter. You may need to set the volume so that no volume difference will occur by turning the effect on and off.

#### Resonance: 0 - 100

This sets the resonance of the Wah filter. With a higher value, the sound will be more unusual.

## **MOD(Overdrive Parameters)**

Overdrive parameters allow you to create sounds similar to those distorted by vacuum tube amplifiers.



#### OD(Overdrive On/Off): On/Off

This parameter turns Overdrive effect on and off.

On ... Overdrive is on.

Off ... Overdrive is not used.

When the Overdrive is turned on, the OD indicator is lit.

#### Gain: 0 - 100

This parameter controls the intensity of distortion. A higher value increases the distortion level.

#### Output Level: 0 - 100

This parameter controls the volume of the sound which has been processed by the Overdrive. You may need to set this so that no volume difference will occur by turning the effect on and off.

## **EQ(Equalizer Parameters)**

This is a three-band equalizer and the higher and of the lower frequency sections are of the shelving type. The middle section is a peaking type that allows you to set the center frequency.

EQ					):P100:— [ 0.0]
High	Level				[2.00k]
Mid	Level	Ę	0.03	Mid Q	[ 1.00]
Low	Level	Ľ —	1.0]		

EQ(Equalizer On/Off) : On/Off

This parameter turns the Equalizer on and off.

On ... The Equalizer is turned on.

Off ... The Equalizer is off.

High Level: -12 - 0 - +12

This parameter boosts or cuts the higher frequencies ( $\pm 12 \text{ dB}$ )

Mid Level: -12 - 0 - +12

This parameter boosts or cuts the middle frequencies (±12 dB). The middle frequency section is a parametric type equalizer allowing you to select the frequency "center" around which levels are boosted or cut.

Low Level: -12 - 0 - +12

This parameter boosts or cuts the lower frequencies ( $\pm 12 \text{ dB}$ ).

Total Level: 0 - 100

This parameter adjusts the volume of the sound which has been processed by the Equalizer. Set this so that no volume difference will turning on or off the Equalizer.

Mid Freq: 0.71 - 5.66

This parameter sets the center frequency (in KHz) in the middle frequency section.

Mid Q: 1.00 - 5.00

This parameter determines the intensity of boosting or cutting at the Mid Level. With a higher value, the curve will be steeper, allowing sharper boosting or cutting of the specified frequency.

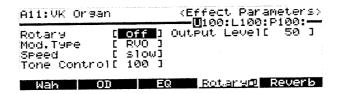
## ■ROTARY (Rotary Effect Parameters)

EDIT + PATCH → F4 F1sct → F4 Rotary ( → F4 Rotary : to change pages)

This is a stereo and modulation type effect. Different phase modulation is applied to the right and left signals and therefore it sounds as if the sound field moves winding in stereo (This effect is obtained only in stereo setup). The Rotary Parameter setting screen contains two pages.

The contents of the parameter display on the second page differs depending on which one of the Rotary Types (Revo or Phaser/Flanger) you select.

## ●The First Page



Rotary (Rotary Effect On/Off): On/Off

This parameter turns the Rotary Effect on and off. When On, the ROTARY indicator is lit.

Rot.Type (Rotary Type): Revo/Phaser/Flanger

This parameter selects one of the three Rotary Effect Types.

RVO ... This effect simulates a rotary speaker sound. (Revolution)

PH ... This creates unique rotating impression and spaciousness.(Phaser)

FL ... This produces a wide variety of sounds from metallic to chorus. (Flanger)

#### Speed(Rotary Speed): Stop/Slow/Fast

This parameter determines the rotation speed of the Rotary Effect.

Stop ... If you press this at Slow or Fast condition, the speed of the Rotary Effect decreases then stops.

Slow ... If you select this at Stop condition, Rotary Effect starts working and remains at the Slow speed. If it is pressed at the Fast condition, the speed of the Rotary Effect decreases up to the Slow speed.

Fast ... If you press this at Stop condition, the Rotary Effect starts working and remains at a fast speed. If it is pressed at Slow condition, the speed of the Rotary Effect increases up to the Fast speed.

Tone Control: 0 - 100

This parameter controls the higher frequency characteristics of the Revo effect. Higher values emphasize higher frequencies.

The above parameter can be set only when the Rotary Type is Revo. When Phaser or Flanger type is selected, asterisks "\* \* \* " will appear at the parameter entry position and you cannot enter a value.

Output Level: 0 - 100

This parameter controls the volume of the sound which has been filtered by the Rotary Effect. Set this so that no volume difference will be occur by turning the effect on and off.

## **●**The Second Page

\*To open the second page, press F4 Rotary while the first page is still open.

## [When Revo is selected with Rotary Type]

By setting the High and Low parameters separately, you can simulate the complicated rotary speaker sound created by both the high and the low frequency rotors.

A11:VK Or	₃an		<effect </effect 		
51ow Rate	[]	50 J	Fast Rate	. [	50 ]
Rise Time Depth Lo	Lo[		Rise Time Depth Hi	HiE	50 ] 50 ]
Lo Level	į	50 ]	Hi Level	į	50 ]
Lo Mix Wah	OD		Hi Mix Rotar	90 R	50 ] everb

Slow Rate: 0 - 100

This parameter sets the rotation rate of the Slow speed.

Fast Rate: 0 - 100

This parameter sets the rotation rate of the Fast speed

Rise Time Lo (Rise Time Low): 0 - 100

This parameter determines the time required for the low frequency rotor to reach the preset speed.

Rise Time Hi (Rise Time High): 0 - 100

This parameter determines the time required for the high frequency rotor to reach the preset speed.

Depth Lo (Depth Low): 0 - 100

This parameter sets the depth of the effect at lower frequencies.

Depth Hi (Depth High): 0 - 100

This parameter sets the depth of the effect at higher frequencies.

Lo Level (Low Level): 0 - 100

This sets the overall level (direct sound + effect sound) at the lower frequencies.

Hi Level (High Level): 0 - 100

This sets the overall level (direct sound + effect sound) at the higher frequencies.

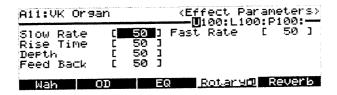
Lo Mix (Low Mix): 0 - 100

This parameter controls propotion of direct and effect sounds at lower frequencies.

Hi Mix (High Mix): 0 - 100

This parameter controls propotion of direct and effect sounds at higher frequencies.

## [When Phaser or Flanger is selected with Rotary Type]



Slow Rate: 0 - 100

This parameter sets the rotation rotor of the slow speed.

Rise Time: 0 - 100

This parameter determines the time required for the effect to reach the selected preset speed.

Depth: 0 - 100

This parameter sets the depth of the effect.

Feedback: 0 - 100

This adjusts the amount of feedback.

By returning the effect sound to the previous condition before being filtered, you can create unusual sound.

Fast Rate: 0 - 100

This parameter sets the rotation rate of the Fast speed

## ■Reverb (Reverb Parameters)

EDIT + PATCH → F4 Effect → F5 Revert

This is a stereo reverberation effect.

The contents of the parameter display differs depending which one of the RV or M.DL is selected with Reverb Type.

## [When RV is selected with the Reverb Type]



Reverb : On / Off

This parameter turns the Reverb effect on and off. When On, the REVERB indicator is lit.

On ··· Reverb effect is on.
Off ··· Reverb effect is off.

Reverb Type: RV/M.DL

This parameter selects Reverb or Multi Tap Delay effect.

RV ··· Reverb

M.DL · · · Multi Tap Delay

If you select M.DL, the screen will immediately change to the Multi Tap Delay setting screen.

Pre Delay: 0 - 100

This parameter can delay the time for the reverb signal is output since from the moment the direct sound is output. In this way, the direct and reverb sounds can be separated, and therefore create clear, spacious sounds.

Reverb Decay: 0 - 100

This parameter controls the decay time of the reverberation. Higher values make the reverb time longer.

Reverb Level: 0 - 100

This parameter adjusts the volume of the reverb sound.

Tone Control (Reverb Tone Control): 0 - 100

This parameter controls the tone of the reverb sound. Lower values will cut more of the higher frequencies.

## [When M.DL is selected with Reverb Type]

A11:VK	Organ				ameters>
Reverb Reverb	] Type [	<u>on</u> ]	Feed E	ack	[ 50 ]
Left Center	Level[	_		Time	[ 10 ]
Right Wah	LevelC OD	50 ]	Right Ro	Time taryo	[ 20 ] Reverb

#### M.DL (Multi Tap Delay)

A Multi Tap Delay is a delay function in whicg delay times for left, right and center signals can be set independently. The multi tap delay effect is obtainable only in stereo output.

Reverb : On/Off

This parameter turns the Reverb effect on and off.

On ··· Reverb effect is on.

Off ... Reverb effect is not used.

Reverb Type: RV/M.DL

This parameter selects Reverb or Multi Tap Delay effect.

RV ··· Reverb is selected.

M.DL ... Multi Tap Delay is selected.

h you select RV, the screen will immediately change to the Reverb parameter setting screen.

#### **6. REFERENCE MANUAL**

Left Level: 0 - 100

This parameter adjusts the delay level of the left signal. Higher values will increase the volume of the delay sound.

Center Level: 0 - 100

This parameter adjusts the delay level of the center signal. Higher values will increase the volume of the delay sound.

Right Level: 0 - 100

This parameter adjusts the delay level of the right signal. Higher values will increase the volume of the delay sound.

Feedback: 0 - 100

Feedback means returning the delay signal of the center direction to the delay input. The Feedback parameter here sets the amount of feedback. Higher values increase the number of delay repeats.

Tone Control (Delay Tone Control): 0 - 100

This parameter controls the tone of the delay sound. Higher values cut more higher frequencies.

Left Time: 0 - 100

This parameter sets the delay time for the left signal.

Center Time: 0 - 100

This parameter sets the delay time for the center signal.

Right Time: 0 - 100

This parameter sets the delay time for the right signal.

## 6-4-5 Names (Name Edit)

These parameters allow you to name a Patch, Tone or Card. The Name Parameters screen contains two pages.

#### ■Patch Name Edit



This mode allows you to name a Patch, or Tones assigned to a Patch.



#### Patch (Patch Name)

This parameter allows you to name a Patch using up to 12 characters.

Move the cursor to the position where the name will be entered. Enter the name using the Controller3 slider, INC and DEC buttons or the Bank and Number buttons.

#### Ousing Controller 3 slider-

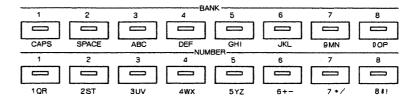
Moving the slider from bottom to top will dispiay the following sequence of characters.

OUsing INC and DEC buttons

Holding INC down will display the characters in the following sequence. (Pressing DEC will them in reversed sequence.)

```
(space)!"#$%&' ( ) *+,-./0123456789 : ; <=>?@ABCDEFGHIJKLMNOPQR STUVWXYZ[\] ^ _ `abcdefghijkImnopqrstuvwxyz
```

## OUsing the Bank and Number buttons



<u>CAPS</u> ··· Each time you press this button will switch the entering two modes; lower-case mode and upper-case mode.

SPACE ... Each time you press this button, a space will be entered.

Pressing other Bank/Number buttons displays one of the 3 characters in the spquence printed on the panel below each button.

eg.; Pressing  $\boxed{ABC}$  (Bank 3) repeatedly will cycle through those 3 characters :  $A \rightarrow B \rightarrow C \rightarrow A \cdots$ .

#### Tone Upper Part

This parameter allows you to name an Upper Tone using up to 12 characters.

#### Tone Lower Part

This parameter allows you to name a Lower Tone using up to 12 characters.

#### Tone Pedal Part

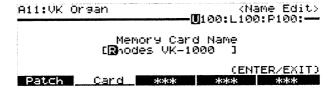
This parameter allows you to name a Pedal Tone using up to 12 characters.

Move the cursor to the position where the name will be entered. Enter the name using the Controller3 slider, INC and DEC buttons or the Bank and Number buttons. For the procedure, refer to the explanation for the Patch Name Edit.

#### ■Card Name Edit

EDIT + PATCH → F5 Names → F2 Card

By naming your memory cards, you can easily find the one you want.



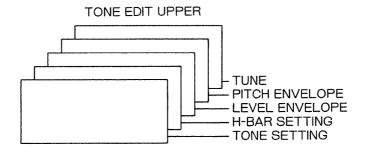
#### Memory Card Name

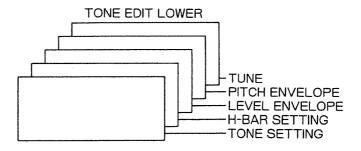
This parameter allows you to name a memory card using up to 10 characters.

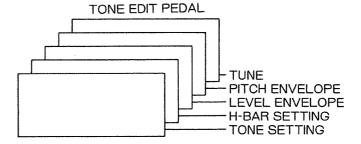
Move the cursor to the position where the name will be entered. Enter the name using the Controller3 slider, NC and DEC buttons or the Bank and Number buttons. For the procedure, refer to the explanation for the Patch Name Edit.

## 6-5 TONE EDIT MODE

This mode allows you to edit the Tone in the Temporary Area. To edit the Tone assigned to a Part of a Patch, press UPPER, LOWER or PEDAL while holding down EDIT on the panel of the unit. Each Part contains of 5 Parameter screens (15 screens in total).







Overview of the Tone Edit Mode:

- ●To enter data, you can use the Cursor buttons, the Controller3 slider (data entry), INC and IDEC.
- ●The functions you have assigned to the Control Slider is canceled. The following assignments are automatically made.

Controller 1: The level of the Part currently being edited.

Controller 2: Click Noise Level of the Part currently being edited.

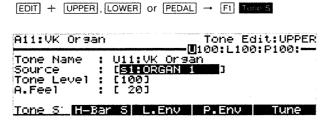
Controller 3: Date Entry

●The EDIT indicator and the corresponding Part indicator ( UPPER , LOWER , PEDAL ) will be lit.

## 6-5-1 Tone (Tone Edit)

A Patch of the VK-1000 can have three Tones individually for each Part, you should edit each Tone individually. In the Tone Mode, you can create a desired Tone using an original source. Up to 64 different Tones for each Part (altogether 192 Tones) can be stored in the internal memory.

## ■Tone S (Tone Setting Parameters)



Source:1 - 8

This parameter selects one of the following 8 sources (basic waveforms):

- S1: ORGAN 1 (Mechanic type electric organ I)
- S2: ORGAN 2 (Mechanic type electric organ II)
- S3: PIPE ORGAN (Small-pipe organ)
- S4: ORGAN BASS (Bass of an electric organ)
- S5: LEAD (Lead synthesizer sound)
- S6: E.PIANO (Electric piano)
- S7: VIBRAPHONE (Vibraphone)
- S8: CHIME (Chirne)

#### Tone Level: 0 - 100

This parameter adjusts the volume of a Tone. Set this so that no volume difference occurs when changing Tones.

#### A-Feel (Analog Feel):1 - 100

This parameter allows you to subtly shake the Tone being played on the keyboard to create analog organs fat sound.

## **EH-BARS** (Harmonic Bar Setting Parameters)

By moving the 13 Bars (Feet or Percussion type) and Controller 2 Slider (Click, Wind or Thump), you can create the desired Tone.



EDIT + UPPER, LOWER or PEDAL → F2 H-Bar 9

#### H-Bar (Harmonic Bar): 0 - 8 (0.5 steps)

This parameter moves the position of the Harmonic Bars on the panel to edit the timber of the Tone. The graphic display of the Harmonic Bars will change accordingly.

#### Noise Type: A/B/C

This parameter selects one of the following noise types (the velocity of the attack portion of the noise) at Key On.

A...the attack of the noise is quicker

B.-.the attack of the noise is normal

C...the attack of the noise is slower

You may think that noise is an unmusical sound that has nothing to do with instrument sound. Actually, however, the attack section of an instrument sound contains much noise contains contents forming a characteristic of the individual instrument sound. For instance, the click noise created at Key-down on a mechanic type electric organ, thump noise included at the attack section of a piano sound and wind noise created when air is being sent to a pipe on a pipe organ. The VK-100 created a realistic sound by adding noise at the head of a Tone or controlling the level of the noise or the type of the noise.

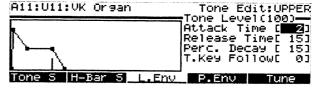
#### Noise L. (Noise Level): 0 - 100

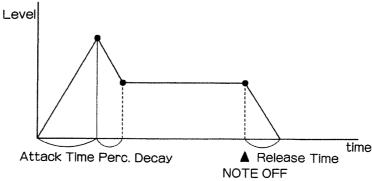
This parameter controls the level of the noise. Higher values increase the volume of the noise.

## **EL ENV (Level Envelope Parameters)**

EDIT + UPPER, LOWER or PEDAL → F3 LEW

These parameters allow you to determine how a sound should be played (by changing the volume). The display shows a graphic envelope curve which you can monitor and edit.





Attack Time: 0 - 100

This parameter determines the time required for the volume to reach the maximum from the moment you play the key (attack time).

Release Time: 0 - 100

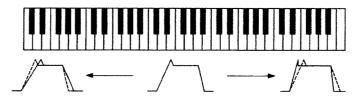
This parameter determines the time needed for the volume to become zero from the moment you release the keyboard.

Perc. Decay (Percussion Decay): 0 - 100

This parameter sets the decay time of a percussion sound

T.KeyFollow (Time Key Follow): 0 - 100

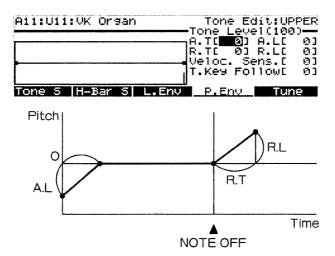
This parameter changes the attack time or release time depending on the positions on the keyboard. In the lower section of the keyboard, the volume changes slowly while it changes quickly in the upper section of the keyboard.



## **■P. ENV (Pitch Envelope Parameters)**

[EDIT] + UPPER, LOWER or PEDAL → F4 PEOV

These parameters allow you to determine how a sound should be played by changing the pitch. The display shows a graphic envelope curve which you can monitor and edit. By setting a Pitch Envelope curve, you can create pitch instability caused at Key On on a pipe organ or mechanical type electric organ (that adopts lead or tone wheel oscillation system).



#### A.T. (Attack Time): 0 - 100

This parameter determines the time required for the pitch to reach the level (pitch) set with the Attack Level on the moment you play the keyboard.

This parameter sets the pitch in upper and lower directions. When the Attack Level is set in a positive (+) direction and higher value, the pitch is higher. When it is set in a negative (-) direction and higher value, the pitch is lower.

#### R.T. (Release Time): 0 - 100

This parameter determines the time needed for the pitch to become the level (pitch) set with the Release Level from the moment you release the keyboard.

This parameter sets the pitch in upper and lower directions. When the Release Level is set in a positive (+) direction and higher value, the pitch is higher. When it is set in a negative (-) direction and higher value, the pitch is lower.

#### Veloc. Sens. (Velocity Sensitivity): 0 - 100

This parameter allows you to change the pitch envelope by changing the strength of keyboard playing. When the Velocity Sensitivity is set to higher value, the effect is deeper. When it is set to zero, the change of pitch is consistent no matter how you play the keyboard.

#### T.KeyFollow (Time Key Follow): 0 - 100

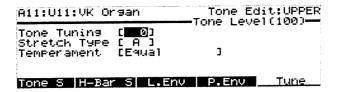
This parameter changes the attack time or release time depending on the positions on the keyboard. In the lower section of the keyboard, the volume changes slowly, while it changes quickly in the upper section of the keyboard.



## **■**Tune (Tuning Parameters)

EDIT + UPPER, LOWER or PEDAL → F5 Tune

These parameters allow you to set the Tune, Stretch and Temperament of the currently selected Part.



Tone Tuning: -50 - + 50

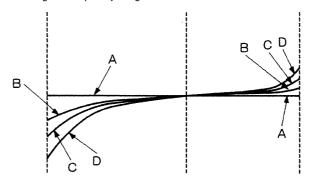
This parameter adjusts a Tone in one cent steps. You can create subtle de-tuned effects between Tones with this parameter.

People tend to hear lower sounds higher in pitch than they actually are. Because of this, it may be a good idea to set the pitch of the Organ Bass Tone slightly lower than the actual pitch. Also, if you set slightly different pitches for two Tones and then mix them, you can create full rich sounds.

Stretch Type (Stretch Type): A/B/C/D

This parameter selects one of the four Stretch Types (tuning curves).

- Generally speaking, a piano is tuned flater at lower frequencies and sharpr at higher frequencies. This "stretching" of the tuning creates a more stable sound. On an electric organ, there is no stretching of the tuning. The "strech tuning curves" provide instant access to several different Keyboard tunings. Chords will sound slightly different when using different strech tuning curves.
  - A: No Stretch
  - B: Natural tuning curve that minimizes the roaring sound.
  - C: Lower frequency range is slightly stretched to resolve the perception effect that the lower frequency range sounds higher than the actual pitch.
  - D: Both lower and higher frequency ranges are stretched.



#### NOTE:

Basically, you should select the same Stretch Type for the three Tones. If you set different curves and overlap the three Zones each other, the pitch difference (detune) will be greater in the higher or lower frequency range. You may think this tricky, but actually this can be used for widening your sound creation.

Temperament: Equal/Werckmeister/Kirnberger/Rameau/Zalzal

This parameter selects one of the five temperament types.

On of the drawbacks of past electric keyboard instruments is that they did not permit the subtle tuning of individual keys. Almost all current music has been composed for the instruments of equal temperament and played on instruments of equal temperament. It would seen quite appropriate that contemporary electronic instruments adopt the use of equal temperament. The VK-1000 however, features five different temperaments including the equal temperament so that you can enjoy the performance of classical music with the tuning system the music was written for. You can select any of these temperaments simply by pressing the relevant button.

#### Equal Temperament

This is the most common temperament used today.

#### Werckmeister

This temperament is ideal for playing chords in the keys with fewer sharps and flats, and for melodies in the keys with more sharps and flats. Melodies in Db major are especially beautiful

#### Kirnberger

This is an improved version of the mean-tone temperament (the tuning that increases the freedom for transposition by partly altering the pure temperament) that increases flexibility for transposition even more allowing performance in all keys. Specially, chords in C major sounds the most beautiful.

#### Rameau

In this temperament, the major third pitch will sound the most beautiful. In chords of 5th between G# to E>, the sound will be muddy.

#### Zalzal

This is the temperament in which E and B are 1/2 semi-tone lower, and  $D\flat$ ,  $G\flat$  and  $A\flat$  are 1/2 semi-tone higher. It provides a neutral 3rd (between the major 3rd and minor 3rd) for G-B, C-E, F-A $\flat$ , B $\flat$ -D $\flat$  and E $\flat$ -G $\flat$  pitch, This allows you to perform pieces using an Arabic tuning in the keys of G, C and F.

#### NOTE:

Basically, you should select the same Temperament for each of the three Tones. Selecting different tunings for each Tone may result in unmusical sounds. Selecting different tuning for each Tone can be useful, however, when you want to create unsual effects.

#### NOTE:

If you wish to play in a classical tuning, you should set the A-Feel (Analog Feel & P.88) as low as possible. If it is set high, the classical tune will be disturbed.

#### NOTE:

If the Reverb is on, chords and melodies may sound unclear if you play the keyboard right after changing the Temperament. This happens because the notes played just prior to changing temperament is still audible. Wait for a few seconds before continuing, or lower the reverb level, or turn the Reverb off..

## 6-6 WRITE MODE

You can open the Write Menu screen by pressing WRITE while in any mode. The Write mode allows you to write edited Patch data into the internal memory or onto a card (Writing), copy it (Copy), initialize the internal memory or card (Initialization), save the date in the internal memory onto a card or transfer it to an external device via MIDI Exclusive (Backup).

Using the Write Menu, you can select one of the following four screens.

[F1] WRITE The Write screen is called.

F2 COPY The Copy screen is called.

F3 INIT. The Initialize screen is called.

F4 BACKUP The Backup screen is called.

## WRITE : Select Function

F1 : WRITE

F2 : COPY F3 : INITIALIZE F4 : BACKUP

WRITE COPY INIT BACKUP \*\*\*

#### Write

This screen allows you to write Patch data or part of it into the internal memory or onto a Memory Card.

#### Copy (COPY)

This screen allows you to copy the parameter data you have stored in the internal memory or onto a Memory Card.

#### Initialization (INITIALIZE)

This screen allows you to return the internal memory to the preprogrammed settings or initialize a Memory Card.

#### Backup (BACKUP)

This screen allows you to transfer data between the internal memory and a Memory Card or transfer backup data (bulk dump) via Exclusive messages



Memory Card(M-256E)

#### How to use a Memory Card

A Memory Card (M-256E: optional) is a strage medium for the VK-1000. Using a Memory Card, you can backup your original Tone or Patch data and create your own sound library. your own sound library.

Please note the following points when using a Memory Card:

- ●When you use a brand new Memory Card, be sure to initialize it. Also, a card which has been previously used for a device other than the VK-1000 can be used by the VK-1000 if it is first initialized. Initialization, however, will erase any existing data on the card.
- A Memory Card requires a battery to support its memory function. When data on a Memory Card is erased, check the battery is correctly connected or it is not exhausted.
- •When you replace the battery with a new one, be sure that the card is connected to the card slot. If you replace the battery with the card disconnected, all the data on the Memory Card will be erased when the old battery is removed from the card. Backup important data (in a sequencer or another Memory card) if you want to remove the card from the card slot while changing the battery.
- ●A Memory Card contains a protect switch that protects data on the card from accidental

Usually, it should be set to ON, but to write data onto a card (to make a backup), set the switch to OFF. When changing the switch positions, be sure that the card is connected to the card slot.



●A Memory Card can store up to 64 Patches.

Patches on a card correspond to B11-B88 in the screen, and Program Change Numbers 65 to 128. (It is possible to change Patches on a card by transmitting relevant Program Change Numbers from an external MIDI device.) When any Program Change Number smaller than 65 is transmitted, the Patches in the internal memory will change.

Internal (Group A)									
	Number								
		1	2	3	4	5	6	7	8
ank	1	1	2	3	4	5	6	7	8
	2	9	10	11	12	13	14	15	16
	3	17	18	19	20	21	22	23	24
	4	25	26	27	28	29	30	31	32
B	5	33	34	35	36	37	38	39	40
	6	41	42	43	44	45	46	47	48
	7	49	50	51	52	53	54	55	56
	8	57	58	59	60	61	62	63	64

	Card (Group B)								
	Number								
		1	2	3	4	5	6	7	8
Bank	1	65	66	67	68	69	70	71	72
	2	73	74	75	76	77	78	79	80
	3	81	82	83	84	85	86	87	88
	4	89	90	91	92	93	94	95	96
	5	97	98	99	100	101	102	103	104
	6	105	106	107	108	109	110	111	112
	7	113	114	115	116	117	118	119	120
	8	121	122	123	124	125	126	127	128

## 6-6-1 WRITE (Writing)

WRITE → F1 PATCH

The edited data in the Temporary Area will automatically be overwritten if the unit is switched off. In the Patch Writing screen, you can write the entire or a part of a Patch (or part of it) in the Temporary Area into the internal memory or onto a card.



F1 Att The Write All screen is called.

F2 PATCH The Patch Write screen is called.

#### WRITE ALL

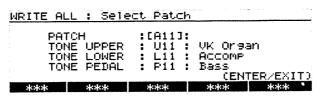
This screen allows you to write the Patch and Tone parameters into the internal memory or onto a Memory Card.

#### PATCH WRITE

This screen allows you to write the Patch parameters into the internal memory or onto a Memory Card.

## [How to write a Patch into the internal memory]

- Press WRITE to call the Write Menu screen. (Pressing WRITE calls the Write Menu screen from any screen.)
- 2) Press F1 PATCH to open the Patch Writing screen.
- (3)Press F1 ALL when you wish to write the Patch and Tone parameters.



-Or-

3 Press F2 ATCH when you wish to write the Patch parameters.



- (4)Specify the destination Patch using INT and the Bank and Number buttons.
- If you select a Patch from B11 to B88 using CARD and the Bank and Number buttons, the data will be written onto the card.

6 To write data, press ENTER. To cancel writing, press EXIT.	
In a few seconds after you press ENTER, the message "WRITE COMPLETE" appears in screen indicating that the writing procedure is complete.	the
[How to write a Patch onto a Memory Card]	
Connect the Memory Card securely to the card slot.	
2)Set the protect switch on the Memory Card to the OFF position.	
Press WRITE to call the Write Menu screen (Pressing WRITE calls the Write Menu screen).	er:
Press F1 WRITE to open the Patch Writing screen.	
Press FI ALL when you wish to write the Patch and Tone parameters.	
WRITE ALL: Select Patch  PATCH :[Bii]: TONE UPPER : Uii : Vk Organ TONE LOWER : Lii : Accomp TONE PEDAL : Pii : Bass (ENTER/EXIT) *** *** *** ***	
Press F2 PATCH when you wish to write the Patch parameters.	
PATCH WRITE : Select Patch	
PATCH :[B11]:  (ENTER/EXIT)  ***	
6 Specify the destination Patch using EXT and the Bank and Number buttons.	
If you select a Patch from A11 to A88 using INT and the Bank and Number buttons, the d will be written into the internal memory.	lata
Ensure that it is the data you wish to write, then press ENTER. Then the message "Are y sure?" appear in the screen.	′ou
An error message related to the Memory Card may appear right after you press ENTER. If the happens, you cannot continue the writing procedure. Refer to the "Error Message Table" should be not page 109.	
	97

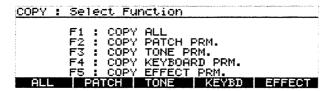
5 Ensure that it is the data you wish to write, then press ENTER. Then the message "Are your sure?" will appear in the screen.

- (8) To write data, press ENTER. To cancel writing, press EXIT.
- In a few seconds after you press ENTER, the message "WRITE COMPLETE" appears in the screen indicating that the writing procedure is complete.

#### 6-6-2 COPY

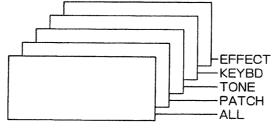
The Copy function is useful for making copies of data or for changing the order of data. This function also allows you to copy the sound data (or a part of the parameters) in the internal memory onto a Memory Card, or copy the sound data (or a part of the parameters) on a Memory Card into the internal memory. To open the Copy Menu screen, press F2 COPY in the Write Menu screen.

WRITE → F2 CCPY



Using the Copy Menu, you can select one of the following four screens.

- F1 PAICH The Patch Parameter Copy screen.
- [F2] TONE The Tone Parameter Copy screen.
- F3 REYBD The Keyboard Parameter Copy screen.
- F4 FIFET The Effect Parameter Copy screen.



COPY ALL

This screen allows you to copy both the Patch and Tone parameters.

#### COPY PATCH PRM. (Patch Parameter Copy)

This screen allows you to copy all the Patch parameters.

#### COPY TONE PRM. (Tone Parameter Copy)

This screen allows you to copy all the Tone parameters.

### COPY KEYBOARD PRM. (Keyboard Parameter Copy)

This screen allows you to copy only the Keyboard parameters of a Patch.

#### COPY EFFECT PRM. (Effect Parameter Copy)

This screen allows you to copy only the Effect parameters of a Patch.

## [How to Copy All]

To copy a Patch between a Memory Card and the internal memory, connect the card to the card slot then set the protect switch on the card to the OFF position.

- Press WRITE to call the Write Menu screen (Pressing WRITE calls the Write Menu screen from any screen).
- Press F2 COPY to open the Copy Menu screen.
- (3)Press F1 ALL to open the Copy All screen.



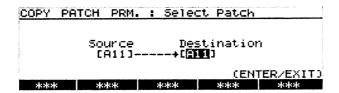
- Move the cursor to "Source" and specify the copy source Patch using INT or CARD and the Bank and Number buttons.
- Move the cursor to "Destination" and specify the destination Patch using INT or CARD and the Bank and Number buttons.
- (6) Press ENTER. The the message "Are your sure?" will appear in the screen.
- 7)To copy data, press ENTER, To cancel copying, press EXIT.
- In a few seconds after you press ENTER, the message "COPY COMPLETE" appears in the screen indicating that the copying procedure is complete.

8 If you have copied data onto a Memory Card, return the protect switch on the card to the ON position.

## [How to copy a Patch]

To copy a Patch between a Memory Card and the internal memory, connect the card to the card slot then set the protect switch on the card to the OFF position.

- Press WRITE to call the Write Menu screen (Pressing WRITE calls the Write Menu screen from any screen).
- Press F2 COPY to open the Copy Menu screen.
- (3)Press F2 PATCH to open the Patch Copy screen.



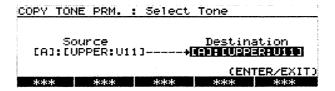
- (4) Move the cursor to "Source".
- (5)Specify the copy source Patch using INT or CARD and the Bank and Number buttons.
- 6)Move the cursor to "Destination".
- 7)Specify the destination Patch using INT or CARD and the Bank and Number buttons.
- If you select a Patch from A11 to A88 using INT and the Bank and Number buttons, the data is written into the internal memory. If you select a Patch from B11-B88 using CARD and the Bank and Number buttons, the data will be written onto the card.
- 8) Press ENTER. The message "Are your sure?" will appear in the screen.
- (9) To copy data, press ENTER. To cancel copying, press EXIT.
- In a few seconds after you press ENTER, the message "COPY COMPLETE" appears in the screen indicating that the copying procedure is complete.
- If you have copied data onto a Memory Card, return the protect switch on the card to the ON position.

## [How to copy a Tone]

To copy a Tone between a Memory Card and the internal memory, connect the card To the card slot then set the

protect switch on the card to the OFF position.

- Press WRITE to call the Write Menu screen. (Pressing WRITE calls the Write Menu screen from any screen.)
- 2) Press F2 COPY to open the Copy Menu screen.
- (3) Press F3 TONE to open the Tone Copy screen.

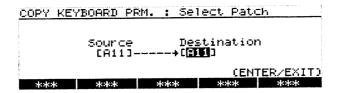


- 4) Move the cursor to "Source".
- (5) Press either of INT or CARD to select the memory area where the source Tone is stored.
- (6)Select the Tone using UPPER, LOWER or PEDAL and the Bank and Number buttons.
- (7) Move the cursor to "Destination".
- (8) Press either INT or CARD to select the memory area where the destination Tone is stored.
- (9) Select the Tone using UPPER, LOWER or PEDAL and the Bank and Number buttons.
- 10 Press ENTER. The message "Are your sure?" Will appear in the screen.
- (11) To copy data, press ENTER. To cancel copying, press EXIT.
- In a few seconds after you press ENTER, the message "COPY COMPLETE" appears in the screen indicating that the copying procedure is completed.
- 12 If you have copied data onto a Memory Card, return the protect switch on the card to the ON position.

## (How to copy Keyboard Parameters)

To copy Keyboard Parameters of a Patch between a Memory Card and the internal memory, connect the card to the card slot then set the protect switch on the card to the OFF position.

- Press WRITE to call the Write Menu screen (Pressing WRITE calls the Write Menu screen from any screen).
- 2)Press F2 COPY to open the Copy Menu screen.
- (3) Press F4 KEYBD to open the Keyboard Parameter Copy screen.



- Move the cursor to "Source" and specify the source Patch using INT or CARD and the Bank and Number buttons.
- (5) Move the cursor to "Destination" and specify the destination Patch using INT or CARD and the Bank and Number buttons.
- If you select a Patch from A11 to A64, the data will be copied into the internal memory. if you select a Patch from B11 B64, the data will be written onto the Memory Card.
- 6 Press ENTER. The message "Are your sure?" will appear in the screen.
- To copy data, press ENTER. To cancel copying, press EXIT.
- In a few seconds after you press ENTER, the message "COPY COMPLETE" appears in the screen indicating that the copying procedure is complete.
- 8 If you have copied data onto a Memory Card, return the protect switch on the card to the ON position.

## [How to copy Effect Parameters]

To copy Effect Parameters of a Patch between a Memory Card and the internal memory, connect the card to the card slot then set the protect switch on the card to the OFF position.

- Press WRITE to call the Write Menu screen (Pressing WRITE calls the Write Menu screen from any screen).
- Press F2 COPY to open the Copy Menu screen.
- (3) Press F4 EFFECT to open the Effect Parameter Copy screen.



- Move the cursor to "Source" and specify the source Patch using INT or CARD and the Bank and Number buttons.
- Move the cursor to "Destination" and specify the destination Patch using INT or CARD and the Bank and Number buttons.
- If you select a Patch from A11 to A64, the data will be copied into the internal memory. If you select a Patch from B11-B64, the data will be written onto the Memory Card.
- (6)Press ENTER. The message "Are your sure?" will appear in the screen.
- 7 To copy data, press ENTER. To cancel copying, press EXIT.
- In a few seconds after you press ENTER, the message "COPY COMPLETE" appears in the screen indicating that the copying procedure is complete.
- 8 If you have copied data onto a Memory Card, return the protect switch on the card to the ON position.

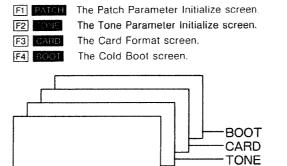
#### 6-6-3 INITIALIZATION

WRITE] → F3 INIT

This function allows you to return the data in the internal memory of the VK-1000 or a part of parameters to the preprogrammed settings, or to format a Memory Card. Press [F3] in the Write Menu screen to open the Initialize Menu screen.



Using the Initialize Menu screen, you can select one of the following four screens.



#### PATCH PRM. INITIALIZE (Patch Parameter Initialization)

This function allows you to initialize each Patch returning all parameters of a Patch to the preprogrammed setting. Initialization erases Patch data you have created.

PATCH

#### TONE PRM. INITIALIZE (Tone Parameter Initialization)

This function allows you to initialize each Tone (returning all parameters of a Tone to the preprogrammed settings) Initialization erases Tone data you have created.

#### CARD FORMAT

This function allows you to format a brand new card (or a card previously used for another device) so that it can be used by the VK-1000.

#### COLD BOOT

This function allows you to return the data in the VK-1000's internal memory to the preprogrammed settings. The Cold Boot replaces all 64 Patches and 192 Tones with the manufacturers preprogrammed data.

# [How to return each Patch to the preprogrammed setting (Patch Parameter Initialization)]

To initialize a Patch on a Memory Card, connect the card to the card slot then set the protect switch on the card to the OFF position.

- 1) Press WRITE to call the Write Menu screen (Pressing WRITE calls the Write Menu screen from any screen).
- 2)Press F3 INIT to open the Initialize screen.
- 3) Press FI PATCH to open the Patch Parameter Initialize screen.

## PATCH PRM. INITIALIZE : Select Patch

Initialize Patch : [A11]

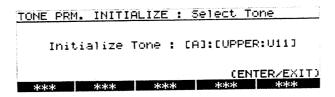
(ENTER/EXIT)
\*\*\* \*\*\* \*\*\*

- 4) Select the Patch to be initialized using INT or CARD and the Bank and Number buttons.
- If you select a Patch from A11 to A64, the patch in the internal memory and if you select a Patch from B11-B64, the Patch on the Memory Card will be initialized.
- 5 Press ENTER. The message "Are your sure?" will appear in the screen.
- 6 To initialize the Patch, press ENTER. To cancel initialization, press EXIT.
- In a few seconds after you press ENTER, the message "COMPLETE!" appears in the screen indicating that the initialization procedure is complete.
- (7) If you have initialized the Patch on a Memory Card, return the protect switch on the card to the ON position.

# [How to return each Tone to the preprogrammed setting (Tone Parameter Initialization)]

To initialize a Tone on a Memory Card, connect the card to the card slot then set the protect switch on the card to the OFF position.

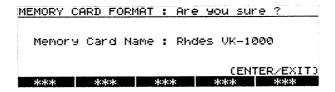
- Press WRITE to call the Write Menu screen (Pressing WRITE calls the Write Menu screen from any screen).
- Press F3 INIT to open the Initialize screen.
- 3 Press F2 TONE to open the Tone Parameter Initialize screen.



- A Select the Tone to be initialized using INT or CARD, UPPER, LOWER or PEDAL and the Bank and Number buttons.
- If you select a Tone from A: U11 to U88, the Upper Tone in the internal memory will be initialized. If a Tone from A: L11 to L88 is selected, the Lower Tone in the internal memory will be initialized. If a Tone from A: P11 to P88 is selected, the Pedal Tone in the Internal memory will be initialized. If you select a Tone from B: U11 to U88, the Upper Tone on the card will be initialized. If B: L11 to L88 is selected, the Lower Tone on the card will be initialized. And if B: P11 to P88 is selected, the Pedal Tone on the card will be initialized.
- (5)Press ENTER. The message "Are your sure?" will appear in the screen.
- 6)To initialize the Tone, press ENTER. To cancel initialization, press EXIT.
- In a few seconds after you press ENTER, the message "COMPLETE!" appears in the screen indicating that the initialization procedure is complete.
- (7) If you have initialized the Tone on a Memory Card, return the protect switch on the card to the ON position.

## [How to format a Memory Card (Card Formatting)]

- Connect the Memory Card to the card slot correctly and securely with the side where the letter ROLAND is printed facing upward in the direction of the arrow.
- (2)Set the protect switch on the Memory Card to the OFF position.
- 3 Press WRITE to call the Write Menu screen (Pressing WRITE calls the Write Menu screen from any screen).
- (4) Press F3 INIT then press F3 CARD to open the Card Format screen.



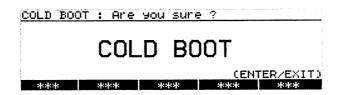
- 5) Press ENTER. The message "Are your sure?" will appear in the screen.
- (6) To format the card, press ENTER. To cancel formatting, press EXIT.
- In a few seconds after you press ENTER, the message "COMPLETE!" appears in the screen indicating that the formatting procedure is complete.
- (7) Return the protect switch on the card to the ON position and remove the card from the card slot.

#### NOTE

All formatted cards are automatically assigned the name "Rhodes VK-1000". The VK-1000, however, allows you to name each card (CARD NAME) as you like. To identify one card from another, change the name "Rhodes VK-1000" to a different name using the Card Name function (\*\*P.86) in the Patch Parameters.

# [How to return the VK-1000's data to the manufacturer's preprogrammed setting (Cold Boot)]

- 1) Press WRITE to call the Write Menu screen (Pressing WRITE calls the Write Menu screen from any screen).
- 2 Press F3 INIT to open the Initialize Menu screen.
- 3)Press F4 BOOT to open the Cold Boot screen.



- (4) To execute the Cold Boot, press ENTER. To cancel it, press EXIT.
- Pressing ENTER causes the screen to show the same indication (Welcome Message) shown when the unit is switched on. The Cold Boot procedure will be completed when the unit has automatically returned to the Play screen.

#### 6-6-4 BACKUP

This function allows you to save data in the VK-1000's internal memory onto a Memory Card or into an external backup device (such as BL-1 or MC-50: optional). The date stored in such a device (eg; a sequencer) can then be loaded into the VK-1000's internal memory. To protect your precious data from accidental erasure, make a backup.

Press F4 BACKUP in the Write Menu screen to open the Backup Menu screen.

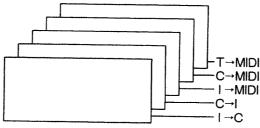
WRITE → F4 BACKUP

```
BACKUP: Select Function

F1: INTERNAL -> CARD
F2: CARD -> INTERNAL
F3: INTERNAL -> MIDI(BULK DUMP)
F4: CARD -> MIDI(BULK DUMP)
F5: TEMPORARY -> MIDI(BULK DUMP)
I->C C->I I->MIDI C->MIDI T->MIDI
```

The Backup Menu screen allows you to select one of the five functions:





#### INTERNAL → CARD

This function allows you to save all data in the internal memory onto a Memory Card.

#### CARD → INTERNAL

This function allows you to load all data on a card back into the internal memory.

#### INTERNAL → MIDI(BULK DUMP)

This function allows you to transfer all data in the internal memory into an external backup device (such as a sequencer). (Bulk Dump)

#### CARD → MIDI (BULK DUMP)

This function allows you to transfer all data on the Memory Card connected to the card slot to an external backup device such as a sequencer. (Bulk Dump)

#### TEMPORARY → MIDI (BULK DUMP)

This function allows you to transfer the Patch data in the Temporary area (&P.17) to an external backup device (such as a sequencer). (Bulk Dump)

#### What is Bulk Dump?

Bulk dump is transferring data between the VK-1000 and another VK-1000 or an external backup device via MIDI Exclusive messages. The bulk dump function allows data transfer only between two VK-1000's or the VK-1000 and a backup device (such as a sequencer) that can handle Exclusive messages. Using this function, you can save sound data created in a VK-1000 onto a sequencer's floppy disk or into another VK-1000's internal memory for storage.

## Exclusive Messages

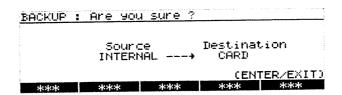
Exclusive messages are used to transmit and receive unique MIDI information (eg; parameter settings) between two of the same device——in this case, two VK-1000s. Exclusive messages can also be stored on an external sequencer. The VK-1000 supports only one-way transfer (transferring data with only one MIDI cable).

## [What can Bulk Dump do?]

Because the capacity of a sequencers floppy disk is much larger than the VK-1000s Memory Card, you can store much more data at one time. Also, by transferring data in a VK-1000 into another VK-1000, you can play the destination VK-1000 with exactly the same settings. When you play the VK-1000 with performance data from a sequencer, normally you change Patches on the VK-1000 using Program Change messages. However, the sound played on one VK-1000 (according to Program Changes sent from the sequencer) may differ from that on the other VK-1000 because the Patches on the two instruments may be set differently. To resolve this situation, you can record Patch settings using Exclusive messages instead of Program Changes. In this way, the same sound can be played by the Program Changes messages sent from the sequencer even on a different VK-1000. You simply transfer the Patch data in the Temporary area of the VK-1000 during recording using the "TEMP.  $\rightarrow$  MIDI" function.

## [How to save all the data in the internal memory onto a Memory Card]

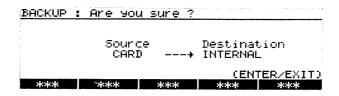
- (1)Connect a Memory Card to the card slot (MEMORY CARD).
- $(\widehat{\mathbf{2}})$ Set the protect switch on the Memory Card to the OFF position.
- Press WRITE to call the Write Menu screen (Pressing WRITE calls the Write Menu screen from any screen).
- 4)Press F4 BACKUP to open the Backup Menu screen.
- (5) Press F1 1 ⋅ C to open the Internal → Card screen.



- (6)To transfer the data, press ENTER. To cancel transfer, press EXIT.
- In a few seconds after you press ENTER, the message "COMPLETE!" will appear in the screen showing that the card backup procedure is completed.
- Return the protect switch on the Memory Card to the ON position, then remove the card from the card slot.

## [How to load all the data on a card into the internal memory]

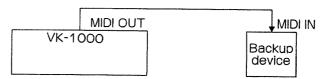
- (1)Connect a Memory Card to the card slot (MEMORY CARD).
- Press WRITE to call the Write Menu screen. (Pressing WRITE calls the Write Menu screen from any screen.)
- (3)Press F4 BACKUP to open the Backup Menu screen.
- (4) Press F2 C → to open the Card → Internal screen.



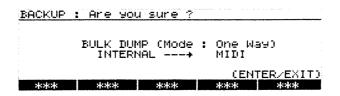
- (5) To transfer the data, press ENTER. To cancel transfer, press EXIT.
- In a few seconds after you press ENTER, the message "COMPLETE!" will appear in the screen showing that all the card data is loaded into the internal memory.
- 6 Remove the card from the card slot.

# [How to transfer all the data in the internal memory into an external backup device]

(This is called a One-way connection.)



- To transfer all the data in the internal memory to another VK-1000, set the Unit Numbers of the two instruments to the same number. Even if the Tx Exclusive of the transmitting VK-1000 is set to OFF, the backup data will be transferred.
- 2) Press WRITE to call the Write Menu screen (Pressing WRITE calls the Write Menu screen from any screen).
- (3) Press F4 BACKUP to open the Backup Menu screen.

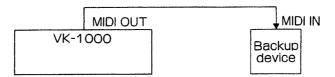


(5)Start receiving on the external backup device (start recording on the sequencer).

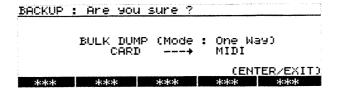
- When using two VK-1000s, there is not special setting required.
- When you use a sequencer featuring a MIDI filter, set it to the mode that can receive Exclusive messages (On the Roland MC-50, set the MIDI 2 RCV STATUS to ON).
- (6) To transfer the data, press ENTER. To cancel transfer, press EXIT.
- In a few seconds after you press ENTER, the message "COMPLETE!" will appear in the screen indicating that the back up procedure is complete.
- (7)Stop the external backup device (Stop the recording on the sequencer).

## [How to transfer all the data on a card into an external backup device]

Connect the MIDI OUT on the VK-1000 to the MIDI IN on the backup device using a MIDI cable. (This is called a One-way connection.)



- To transfer the entire data on the card to another VK-1000, set the Rx Exclusive of the receiving VK-1000 to on, and set the Unit Numbers of the both VK-1000's to the same number.
- (2)Insert the relevant Memory Card into the card slot (MEMORY CARD).
- Press WRITE to call the Write Menu screen. (Pressing WRITE calls the Write Menu screen from any screen.)
- 4) Press F4 BACKUP to open the Backup Menu screen.
- (5) Press F4 C ⋅MIDI to open the Card → MIDI screen.



	6 Start receiving on the external backup device (start recording on the sequencer).
	When you use a sequencer featuring a MIDI filter, set it to the mode that can receive Exclusive messages. (On the Roland MC-50, set the MIDI 2 RCV STATUS to ON.)
	To transfer the data, press ENTER. To cancel transfer, press EXIT.
	In a few seconds after you press ENTER, the message "COMPLETE!" appears in the screen indicating that the backup procedure is complete.
	Stop the external backup device. (Stop the recording on the sequencer.)
	Remove the card from the card slot.
[How to transfer th device]	e Patch data in the Temporary area into an external backup
	Press WRITE to call the Write Menu screen (Pressing WRITE calls the Write Menu screen from any screen).
	2 Press F4 BACKUP to open the Backup Menu screen.
	③Press F5 T ·MIDI to open the Temporary → Card screen.
	BACKUP : Are you sure ?  BULK DUMP (Mode : One Way)
	TEMPORARY+ MIDI  (ENTER/EXIT)  *** *** *** ***
	4)Start receiving on the external backup device (start recording on the sequencer).
	When you use a sequencer featuring a MIDI filter, set it to the mode that can receive the Exclusive messages (On the Roland MC-50, set the MIDI 2 RCV STATUS to ON).
	5 To transfer the data, press ENTER. To cancel transfer, press EXIT.
	In a few seconds after you press ENTER, the message "COMPLETE!" will appear in the screen indicating that the backup procedure is complete.
	6 Stop the external backup device. (stop the recording on the sequencer.)

## 7. APPENDIX

## 7-1 ERROR Messages

If you operate the VK-1000 incorrectly or if an operation could not be executed properly, an error message will appear in the display. Refer to this section and take the appropriate action.

Messages when you turn the power on

#### **Battery Low!**

Reason: The internal backup battery is low.

Action: This display will disappear in a short time. Contact the nearest Roland service station ( back cover).

Messages during the Write operations

#### No Memory Card!

Reason: A Memory Card was not inserted into the card slot or was not correctly inserted.

Action: Correctly insert the Memory Card into the card slot ( Press EXIT to the previous screen ).

#### Memory Card Battery Low!

Reason: The backup battery of the Memory Card is low.

Action: Refer to the instructions included with the Memory Card and replace the battery (CR2016).

#### Memory Card protected!

Reason: The protect switch of the Memory Card is set to the ON position.

Action: Press EXIT to retern to the previous screen (Write or Copy).

Turn the protect switch of the Memory Card to the OFF position, and try the operation again.

#### **Improper Memory Card!**

Reason: An Unformated Memory Card or a Memory Card for another device has been inserted into the card slot.

Action: If you have inserted the card by mistake, remove it immediately (Press EXIT to return to the previous screen ). In order to use a new Memory Card, or a Memory Card which has been used by another device, you must format the card before using. Please use M-256E Memory Cards.

#### **Memory Card Format Error!**

Reason: The format operation was not executed correctly.

Action: Check the Memory Card, and try the operation again.

#### **Unformated Card!**

Reason: An Unformated Memory Card or a Memory Card for another device has been inserted into

the card slot.

Action: Format the Memory Card.

#### Memory Card Data Error!

Reason: The write or copy operation was not executed correctly.

Action: Press EXIT to return to the previous screen, check the Memory Card correctly inserted to

the card slot, and try the operation again.

#### • The other

#### MIDI Check Sum Error!

Reason: Due to an incorrect checksum, exclusive data was correctly received.

Action: Press EXIT to return to the previous screen. Check MIDI cables and the data being

transmitted, and try the operation again.

## 7-2 Troubleshooting

#### No sound is heard / The sound is very low

- Check if the VK-1000 and other devices, such as a mixers or amplifiers, are switched on.
- Check if the power is supplied properly. If power is supplied from a socket which is used by many other units or by a unit that consumes large amounts of power, the VK-1000 may malfunction.
- Check if the units are correctly set up.

Check if sound is heard through headphones. If so, there may be something wrong with the connected units or cables used.

• Check if the following are set to appropriate levels:

Master Volume

Tone Level

Part Level

Check the Harmonic Bar Setting.

Set the Harmonic Bar Level to PATCH. If it is set to MANUAL and the position of the Harmonic Bars are all set to zero, no sound will be produced.

- Check if the Zone is set properly.
- Check if you have correctly connected a card that contains the sound data which is specified by the Patch
- Check if the Local Switch is turned on.

If the Local Switch is turned off, the internal sound module is disconnected from the Zone and therefore no sound will be heard when playing the keyboard.

- Check if the VK-1000 is receiving Exclusive messages.
   While the internal data is being changed, the VK-1000 does not produce any sound. Unnecessary Exclusive messages can be ignored by setting the Rx Exclusive of the system to off.
- Check if the level of any effect is set to zero.

#### The pitch of the sound is incorrect

• Check if the Tone Pitch is set correctly.

If the pitch of a certain Tone sounds strange, the cause may be the pitch setting of the Tone.

Check if the Octave Shift or Transpose is set properly.

If the pitch of a certain Zone sounds strange, the cause may be the Octave Shift or Transpose setting of the Zone.

Check if the Pitch Envelope is set correctly.

#### ■ The Pitch Bend has no effect

- Check if the Bender is set to be used for changing the Rotary Speed.
- Check if the Bend Range of the Part is set to zero.

#### A Controller has no effect

• Check if the external MIDI device can receive the transmitted Controller's messages.

#### ■ The dynamics cannot be controlled as expected

- Check if the correct Velocity Curve is selected.
- Check if the Harmonic/Percussion Velocity is not set to OFF.

#### Some Voices are not played

• Check the Patch Zone setting.

If you press a key in the sound range where the Upper and Lower Zones overlap, two sounds will be simultaneously played and therfore the maximum number of voices possible will be reduced.

• Check if the maximum polyphony of the Part has been exceeded.

The maximum number of voices that can be played differs depending on the Part(7 voices in the Upper and Lower Part respectively and 2 voices in the Pedal Part). No more sounds can be played simultaneously; the previously played note will be replaced with the latest key played(last note priority).

#### Effects are not working

• Check the on/off status and level of each Effect.

If the level is set to zero, no effect can be obtained even if it is set to on.

#### ■ The sound of the connected MIDI sound module continues

This can occur when a cable is disconnected while the device is playing. Switch off the MIDI sound module and check the connection of the MIDI cable.

## ■ Combination of the MIDI system does not change even if you have changed Patches

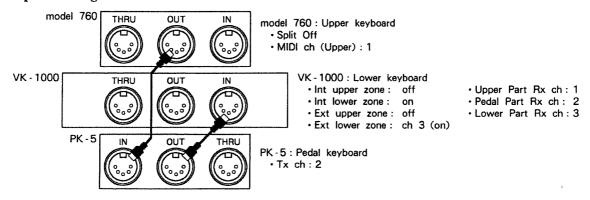
Check if the MIDI Link of the System Setup is set to OFF. If you wish to change the MIDI system by changing Patches, set MIDI Link to ON.

## ■ When you playback data recorded on a sequencer, it does not sound properly

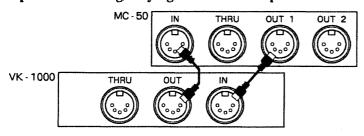
If you make a lot of panel setting changes(ie. moving the Harmonic Bars) during recording, each change is recorded as an Exclusive message. When the VK-1000 receives an excessive number of Exclusive messages during playback from the sequencer, it may not be able to respond correctly. This is quite normal, however.

## 7-3 MIDI settings

Example 1: Using the sound modules of the VK-1000's three Parts with the model 760 and PK-5

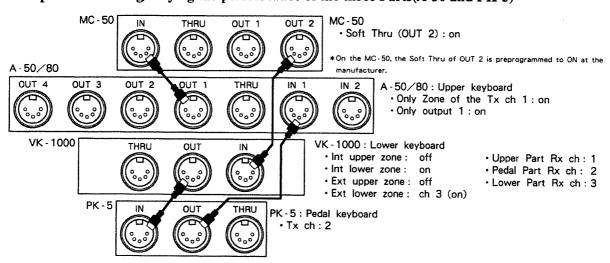


Example 2: Recording/Playing the VK-1000's performance



<sup>\*</sup>You may send Program Change or Exclusive message(TEMPORARY Damp) to the sequencer before recording your performance.

Example 3: Recording/Playing the performance of the three Parts(A-50 and PK-5)



## **CONTROL CHANGE TABLE**

Control Number	Functions	Control Number	Functions
0	Bank Select	64	Hold 1 (damper pedal)
1	Modulation Depth	65	Portamento
2	Breath Controller	66	Sostenuto
		67	Soft Pedal
4	Foot Controller		
5	Portamento Time	69	Hold 2 (freeze)
6	Data Entry (used with RPN/NRPN)		
7	Main Volume		
8	Balance Control	91	Effect 1 Depth
		92	Effect 2 Depth
10	Pan	93	Effect 3 Depth
11	Expression Controller	94	Effect 4 Depth
12	Effect Control 1	95	Effect 5 Depth
13	Effect Control 2		
32	h		
;	LSB of 0 to 31		
63	Ŋ		

Three new Control Change are added to the MIDI standard, 0:Bank Slect, 12:Effect Control 1 and 13:Effect Control 2. Also, 91:External Effect Depth is changed to Effect 1 Depth and 92:Tremolo Depth is changed to Effect 2 Depth and 93:Chorus Depth is changed to Effect 3 Depth and 94:Celeste Depth is changed to Effect 4 Depth and 95:Phaser Depth is changed to Effect 5 Depth.

## **Roland Exclusive Messages**

#### 1. Data Format for Exclusive Messages

Roland's MIDI implementation uses the following data format for all

Byte	Description
FOH	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
CMD	Command ID
[BODY]	Main data
F7H	End of exclusive

#### = MIDI status : FOH, F7H

An exclusive message must be flanked by a pair of status codes, starting with a Manufacturer-ID immediately after FOH (MIDI version 1.0).

#### # Manufacturer ID: 41H

The Manufacturer-ID identifies the manufacturer of a MIDI instrument that triggers an exclusive message. Value 41H represents Roland's Manufacturer-ID

#### # Device ID: DEV

The Device-ID contains a unique value that identifies the individual device in the multiple implementation of MIDI instruments. It is usually set to 00H - 0FH, a value smaller by one than that of a basic channel, but value 00H - 1FH may be used for a device with multiple basic channels.

#### = ModeLID · MDL

The Model-ID contains a value that uniquely identifies one model from another. Different models, however, may share an identical Model-ID if they handle similar data.

The Model-ID format may contain 00H in one or more places to provide an extended data field. The following are examples of valid Model-IDs, each representing a unique model:

> 02H 00H 01H 00H, 02H 00H, 00H, 01H

#### # Command ID: CMD

The Command ID indicates the function of an exclusive message. The Command ID format may contain 00H in one or more places to provide an extended data field. The following are examples of valid Command-IDs, each representing a unique function:

> 02H 00H, 01H 00H, 02H 00H, 00H, 01H

#### # Main data: BODY

This field contains a message to be exchanged across an interface. The exact data size and contents will vary with the Model-ID and

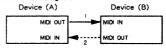
#### 2. Address mapped Data Transfer

Address mapping is a technique for transferring messages conforming to the data format given in Section 1. It assigns a series of memory resident records-waveform and tone data, switch status, and parameters. for example-to specific locations in a machine-dependent address space, thereby allowing access to data residing at the address a message

Address-mapped data transfer is therefore independent of models and data categories. This technique allows use of two different transfer procedures: one-way transfer and handshake transfer.

#### # One-way transfer procedure (See Section 3 for details.)

This procedure is suited for the transfer of a small amount of data. It sends out an exclusive message completely independent of a receiving

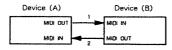


Connection at point 2 is essential for "Request data" procedures. (See

## # Handshake transfer procedure (This device does not cover this procedure)

This procedure initiates a predetermined transfer sequence (handshaking) across the interface before data transfer takes place. Handshaking ensures that reliability and transfer speed are high enough to handle a large amount of data

#### section Diagram



Connection at points 1 and 2 is essential.

#### Notes on the above two procedures

- There are separate Command-IDs for different transfer procedures.
- \* Devices A and B cannot exchange data unless they use the same transfer procedure, share identical Device ID and Model ID, and are ready for communication.

#### 3 One way Transfer Procedure

This procedure sends out data all the way until it stops and is used when the messages are so short that answerbacks need not be checked. For long messages, however, the receiving device must acquire each message in time with the transfer sequence, which inserts intervals of at least 20 milliseconds in between.

#### Types of Messages

-	Message	Command ID
	Request data 1	RQ1 (11H)
	Data set 1	DT1 (12H)

#### #Request data #1: RQ1 (11H)

This message is sent out when there is a need to acquire data from a device at the other end of the interface. It contains data for the address and size that specify designation and length, respectively, of data required.

On receiving an RQ1 message, the remote device checks its memory for

On receiving an KQI message, the remote device checks its memory for the data address and size that satisfy the request. If it finds them and is ready for communication, the device will transmit a "Data set 1 (DT1)" message, which contains the requested data. Otherwise, the device will send out nothing.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
11H	Command ID
ааН	Address MSB
ssH	Size MSB
sum	Check sum
F7H	End of exclusive

#### Roland Exclusive Messages

- \* The size of the requested data does not indicate the number of bytes that will make up a DT1 message, but represents the address fields where the requested data resides.

  Some models are subject to limitations in data format used for a
- single transaction. Requested data, for example, may have a limit in length or must be divided into predetermined address fields before it is exchanged across the interface.
- The same number of bytes comprises address and size data, which, however, vary with the Model-ID.
- The error checking process uses a checksum that provides a bit pattern where the least significant 7 bits are zero when values for an address, size, and that checksum are summed.

#### # Data set 1 : DT1 (12H)

This message corresponds to the actual data transfer process. Because every byte in the data is assigned a unique address, a DT1 message can convey the starting address of one or more data as well as a series of data formatted in an address- dependent order.

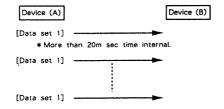
The MIDI standards inhibit non-real time messages from interrupting an exclusive one. This fact is inconvenient for the devices that support a "soft-through" mechanism. To maintain compatibility with such devices, Roland has limited the DT1 to 256 bytes so that an excessively long message is sent out in separate segments.

Byte	Description
F0H	Exclusive
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
12H	Command ID
aaH	Address MSB
ddH  sum	Data Check sum
F7H	End of exclusive

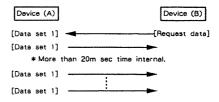
- A DT1 message is capable of providing only the valid data among those specified by an RQ1 message.
- Some models are subject to limitations in data format used for a single transaction. Requested data, for example, may have a limit in length or must be divided into predetermined address fields before it is exchanged across the interface.
- The number of bytes comprising address data varies from one Model ID to another.
- The error checking process uses a checksum that provides a bit pattern where the least significant 7 bits are zero when values for an address, size, and that checksum are summed.

#### #Example of Message Transactions

Device A sending data to Device B
 Transfer of a DTI message is all that takes place.



● Device B requesting data from Device A Device B sends an RQ1 message to Device A. Checking the message, Device A sends a DT1 message back to Device B.



#### Rhodes Organ

VK - 1000

## MIDI Implementation

Date: May. 17 1991

Version: 1.00

#### 1, TRANSMITTED DATA

#### Channel voice messages

#### ● Note off

Status Second Third

n = M1D1 channel No. : 0H - FH (0 - 15) 0 = ch.1 15 = ch.16

: OFH - 71H (15 - 113) kk = Note No.

#### • Note on

Third Second vvH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch.1 15 = ch.16

: OFH - 71H (15 - 113)

vv = Velocity : 01H - 7FH (1 - 127)

#### Control change

#### ○ Modulation

Status Second Third 01H BnH

n = MIDI channel No. : OH - FII (0 - 15) 0 = ch.1 15 = ch.16

vv = Modulation depth : 00H - 7FH (0 - 127)

#### O Expression

Status Second Third OBH vvH

n = MIDI channel No. : OH = FH (0 - 15) 0 = ch.1 15 = ch.16

: 00H + 7FH (0 - 127) vv = Expewaaion

Transmits on the control channel.

#### O Continuous controller

Third BnH mmH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch.1 15 = ch.16

: 00H - 5FH (0 - 95) mm = Control No.

: 00H - 7FH (0 - 127) or 00H, 7FH (0, 127)

Any control No. assigned up to three sliders and three pedal, respectively.

Control value : Slider - 00H - 7FH (0 - 127)

Pedal - 00H - 7FH (0 - 127) or 00H, 7FG (0, 127)

#### Program change

Status Second CnH Had

n = MIDI channel No. : OH - FH (0 - 15) 0 = ch.1 15 = ch.16

: 00H - 7FH (0 - 127) pp = Program change No.

When MIDI function Tx program change is set at on, transmits this message. When patch is changed in PLAY mode, the program change is stored intothe

Transmits upper and lower Prg. Chg. # over the upper and lower Ext Zone TXchannels; and the program No. corresponding to the patch No. on the controlchannel.

#### Pitch hand change

Status Second Third mmH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch.1 15 = ch.16 : 00H, 00H - 7FH, 7FH (-8192 to +8191) mm.ll = value

#### System real time messages

#### Active sensing

Status

Transmits at every approx. 250 ms.

#### System exclusive messages

Data bytes FOH iill, ddH,....,eeH

F7H

: System exclusive ii = ID No. :41H (65)

dd,...,ee = data : 00H - 7FH (0 - 127) : EOX (End of Exclusive/System common)

For details, refer to "Roland Exclusive Messages" and Sections 3 and subsequent.

#### 2. RECOGNIZED RECEIVE DATA

#### Channel voice messages

#### Note off

Second Third Hn8 kkH vvH 9nH kkH H00

n = MIDI channel No. : 0H - Fit (0 - 15) 0 = ch.1 15 - ch.16

: 00H - 7FH (0 - 127)

vv = Velocity : 00H - 7FH (0 - 127)

Velocity is ignored.

#### Note on

Status Third 9nH vvH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch.1 15 = ch.16

kk = Note No. : 00H - 7FH (0 - 127) vv ≈ Velocity

: 01H - 7FH (1 - 127)

Note numbers outside of the range 0FH-71H are transposed to the nearest octave inside this range.

#### Control change

#### 

Status Second BnH 01H vvH

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch.1 15 = ch.16 vv = Modulation depth: 00H - 7FH (0 - 127)

#### O Volume

Status Second Third vvH

n = MIDI channel No. : 0H - FH (0 - 15)  $0 = \text{ch.}1 \quad 15 = \text{ch.}16$ :00H - 7FH (0 - 127)

This message is received when Rx volume of MIDI function is set at on.

#### O Expression

Status Second Third BnH 0BH vvH

Receives on the control channel.

#### O Hold 1

Status Second Third BnH 40H vvH

#### O Soft

Status Second Third BnH 40H vvH

#### Program change

Status Second CnH ppH

n = MIDI channel No. : 0H-FH (0 - 15) 0 = ch.1 15 = ch.16 pp = Program change No. : 00H-7FH (0 - 127)

Receives this message when MIDI function, Rx program change, is set at on. When this message is received on the basic channel of a part, the tone number of the part will be changed.

When this message is received on the control channel, patch change will bedone.

#### Pitch bend change

Status Second Third

#### Channel mode messages

#### Reset all controllers

 Status
 Second
 Third

 BnH
 79H
 00H

n = MIDI channel No. : 0H - FH (0 - 15) 0 = ch.1 15 = ch.16

This message forces the VK - 1000 to set the controller value to the following value.

 Controller
 Setting value

 Modulation
 0 (minimum)

 Volume
 127 (max)

 Hold 1
 0 (off)

 Soft
 0 (off)

 Pitch bend change
 0 (center)

#### ● Local control

Status Second Third BnH 7AH vvH

Received on the control channel.

#### • All notes off

 Status
 Second
 Third

 BnH
 7BH
 00H

n = MIDI channel No. : OH - FH (0 - 15) O = ch.1 15 = ch.16

Turns off all MIDI - on notes on the corresponding channels.

#### System real time messages

#### Active sensing

Status

When VK - 1000 receives Active sensing, it measures time intervals betweenincoming messages. If the subsequent message will not come within 450 msafter the previous one, VK - 1000 turns off all MIDI - on notes and stops measuring message intervals.

#### System exclusive messages

Status Data bytes
F0H iiH, ddH,....,eeH

FOH : System exclusive ii = ID No. : 41H (65) dd,...,ee = data : 00H - 7FH (0 - 127)

F7II : EOX (End of Exclusive/System common)

For details, refer to "Roland Exclusive Messagea" and Sections 3 and subsequent,

#### 3. EXCLUSIVE COMMUNICATIONS

The  $VK\sim1000$  can transmit  $\angle$  receive patch parameters , etc . using exclusivemessages,

The model ID code of VK - 1000 is 48H. The device ID codes are to be determined by the unit number setting, a MIDI function.

#### One - way communication

#### Data set DT1 (12H)

Byte	Comments
FOH	Exclusive status
41H	Manufactures ID (Roland)
Dev	Device ID (Dev = UNIT # - 1)
48H	Model ID (VK - 1000)
12H	Command ID (DT1)
aaH	Address MSB
bbH	Address
ccH	Address LSB
ddH	Data
:	:
eeH	Data
sum	Check sum
F7H	EOX (End Of eXclusive)

## 4. PARAMETER ADDRESS MAP (Model ID = 48H)

Address is configured in 7 bits, and expressed in hexadecimal.

Address	MSB		1	LSB
Binary		aa i Obbb t		
7-bit hex	i AA	i BE	3 1	CC

#### Parameter base address

Model ID = 48H

address	Description
00 00 00	Patch Temporary Area
01 00 00 :	Upeer Tone Temporary Arca
02 00 00 1	Lower Tone Temporary Area
03 00 00	Pedal Tone Temporary Area
04 00 00	Internal Patch Memory #1
04 02 00	Internal Patch Memory #2
04 7C 00	Internal Patch Memory #63
04 7E 00	Internal Patch Memory #64
05 00 00 1	Internal Upper Tone Memory #1
05 00 40	Internal Upper Tone Memory #2
05 1F 00 I	Internal Upper Tone Memory #63
05 1F 40	Internal Upper Tone Memory #64
06 00 00 1	Internal Lower Tone Memory #1
06 00 40	Internal Lower Tone Memory #2
: i	: Internal Lower Tone Memory #63
06 1F 40	Internal Lower Tone Memory #64
07 00 00	Internal Pedal Tone Memory #1
07 00 40	Internal Pedal Tone Memory #2
07 1F 00 I	•
07 1F 40 !	Internal Pedal Tone Memory #64
08 00 00	Card Patch Memory #1
08 02 00 1	Card Patch Memory #2
08 7C 00 1	Card Patch Memory #63
08 7E 00 1	Card Patch Memory #64
09 00 00 1	Card Upper Tone Memory #1
09 00 40	Card Upper Tone Memory #2
: ! 09 1F 00 i	: Card Upper Tone Memory #63
09 1F 40 i	Card Upper Tone Memory #64
0A 00 00 I	Card Lower Tone Memory ≠1
DA 00 40 1	Card Lower Tone Memory #2
: !	Cond Name Tour Manage 462
DA 1F 00	Card Lower Tone Memory #63 Card Lower Tone Memory #64
+	
OB 00 00 !	Card Pedal Tone Memory #1
: 1	Card Pedal Tone Memory #2 :
0B 1F 00 i	Card Pedal Tone Memory #53
0B 1F 40 i	Card Pedal Tone Memory #64

#### \* Paich Temporary Area

110 i	se t ddress	 	D		criptio					† ! !!
				j	Patch	Nane	(A	SC11 12ct	aracter	5)
   							Select	0 - 63 (VII -		1
 	00 OD	00aa	aaaa	1	Lower	Tone	Select	0 - 63 (L11 -	L88)	1
ŧ	00 0E	00aa	aaaa	î	Pedai	Tone	Select	0 - 63		1

(	1 1	(P11 - P88)
1 00 OF	Oxxx xxxx	dummy (ignored if received)
00 10		dummy (ignored if received)
00 11	l Casa asaa	Upper Level 0 - 100
00 12	0aaa aaaa	Lower Level 0 - 100
00 13	Oaaa aaaa	Pedal Level 0 - 100
00 14	OXXX XXXX	
i 00 15	0000 000a	
į	1 !	(OFF, ON)
00 16	0000 000a	Lower Percussion sw 0 - 1
	1	(OFF, ON)
00 17	0000 000a	Pedal Percussion sw 0 - 1
		(OFF, ON) dummy (ignored if received)
00 18		* · =
1 00 13	0000 000a i	Upper Percussion Legato Sw 0 - 1 (OFF, ON)
00 LA	0000 000a	
00 1B		Pedal Percussion Legato Sw 0 - 1
1 00 18	: 0000 0000	(OFF, ON)
00 10	Oxxx xxxx	
00 1D		
1	1 0000 0000	(OFF, ON)
00 1E	0000 000a	
1	1	(OFF, ON)
00 1F	0000 000a	
1	1	(OFF, ON)
00 20	Oxxx xxxx	
00 21		
ŀ	[ [	(OFF, ON)
00 22	1 0000 000a 1	Lower feet Velocity Sw 0 - 1
1	1 1	(OFF, ON)
00 23	0000 000a	· · · · · · · · · · · · · · · · · · ·
1	1 1	(OFF, ON)
00 24	Oxxx xxxx	dummy (ignored if received)
00 25	0000 aaaa !	Upper Midi Rx Channe! 0 - 15
00 26		Lower Midi Rx Channel 0 - 15
00 27		Pedal Midi Rx Channel 0 - 15
00 28		dummy (ignored if received)
00 29		Upper Bend Depth 0 - 48
1 00 2A		Lower Bend Depth 0 - 48
00 2B		Pedal Bend Depth 0 48
00 2C		dummy (ignored if received)
00 2D	00aa aaaa	Upper Modulation Depth 0 - 48
00 2E		Lower Modulation Depth 0 - 48 i
00 2E	00aa aaaa	Pedal Modulation Depth 0 - 48 !
00 2E 00 2F 00 30	00aa aaaa	Pedal Modulation Depth 0 - 48 ! dummy (ignored if received) i
00 2E 00 2F 00 30 00 31	Ocaa aaaa l	Pedal Modulation Depth 0 - 48   dummy (ignored if received)
00 2E 00 2F 00 30 00 31 00 32	Oaa aaaa l	Pedal Modulation Depth
00 2E 00 2F 00 30 00 31 00 32	Onaa aaaa   Onaa aaaa   Onaa aaaa   Onaa aaaa   Onaa aaaa	Peda  Modulation Depth
00 2E 00 2F 00 30 00 31 00 32 00 33	00aa aaaa   00aa aaaaa   00aa aaaaa   00aa aaaaa   00aa aaaaa   00aa aaaaa   00aaa aaaa   00aa aaaaa   00aaa aaaa   00aaa aaaa   00aaa aaaa   00aaaaaa   00aaaaaaa   00aaaaaaaa	Pedal Modulation Depth
00 2E 00 2F 00 30 00 31 00 32	00aa aaaa   00aa aaaaa   00aa aaaaa   00aa aaaaa   00aa aaaaa   00aa aaaaa   00aaa aaaa   00aa aaaaa   00aaa aaaa   00aaa aaaa   00aaa aaaa   00aaaaaa   00aaaaaaa   00aaaaaaaa	Peda  Modulation Depth
00 2E 00 2F 00 30 00 31 00 32 00 33 00 35	00aa aaaa   0xxx xxxx   0aaa aaaa   0aaa aaaa   0aaa aaaa   0xxx xxxx   0000 000a   0	Peda  Modulation Depth
00 2E 00 2F 00 30 00 31 00 32 00 33	00aa aaaa   0xxx xxxx   0aaa aaaa   0aaa aaaa   0aaa aaaa   0xxx xxxx   0000 000a   0	Peda    Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 33 00 30 00 35	00aa aaaa 1 0aaa aaaa 1 0000 000a 1 0000 000a 1	Peda    Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 33 00 35	00aa aaaa 1 0aaa aaaa 1 0000 000a 1 0000 000a 1	Peda  Modulation Depth
00 2E 00 2F 00 30 00 31 00 31 00 35 00 36	00aa aaaa   1 0xxx xxxx   1 0aaa aaaa   1 0aaa aaaa   1 0aaa aaaa   1 0xxx xxxx   1 0000 000a   1   1   1   1   1   1   1   1   1	Peda    Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 33 00 35 00 36	00aa aaaa   0xxx xxxx   1 0aaa aaaa   1 0aaa aaaa   1 0aaa aaaa   1 0xxx xxxx   1   0   0   0   0   0   0   0   0   0	Peda    Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 33 00 35 00 36	00aa aaaa   0xxx xxxx   1 0aaa aaaa   1 0aaa aaaa   1 0aaa aaaa   1 0xxx xxxx   1   0   0   0   0   0   0   0   0   0	Peda    Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 33 00 30 00 35 00 36	00aa aaaa   0xxx xxxx   1 0aaa aaaa   0aax xxxx   3 0000 000a   1 0000	Peda    Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 33 00 30 00 35 00 36	00aa aaaa   0xxx xxxx   1 0aaa aaaa   0aax xxxx   3 0000 000a   1 0000	Pedal   Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 33 00 35 00 36 00 37 00 38 00 38	00aa aaaa   0xxx xxxx   0aaa aaaa   0aaa aaaa   0aaa aaaa   0aax xxxx   0aaa aaaa   0xxx xxxx   0000 00aa   0   0   0   0   0   0   0	Peda    Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 33 00 35 00 36 00 37 00 38 00 38	00aa aaaa   0xxx xxxx   0aaa aaaa   0aaa aaaa   0aaa aaaa   0aax xxxx   0aaa aaaa   0xxx xxxx   0000 00aa   0   0   0   0   0   0   0	Pedal   Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 33 00 30 00 35 00 36 00 37 00 36	00aa aaaa     0xxx xxxx     0aaa aaaa     0axx xxxx     0aaa aaaa     0axx xxxx     0000 00aa	Pedal   Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 33 00 30 00 35 00 36 00 37 00 36	00aa aaaa   0xxx xxxx   0   0xxx xxxx   0   0aaa aaaa   0   0aaa aaaa   0   0	Pedal   Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 30 00 35 00 36 00 36 00 37 00 38 00 39 00 38 00 38 00 38 00 38 00 38 00 38 00 38	00aa aaaa     0xxx xxxx     0aaa aaaa     0aaa aaaa     0aax xxxx     0000 000a     0000 000a     0000 00aa	Pedal   Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 33 00 30 00 35 00 36 00 37 00 36 00 37 00 38 00 38 00 38 00 38 00 38	OQAX XXXX	Pedal   Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 35 00 36 00 37 00 30 00 37 00 38 00 38 00 38 00 38 00 38 00 38	00aa aaaa   0xxx xxxx   0aaa aaaa   0axx xxxx   0aaa aaaa   0axx xxxx   0000 00aa   0   0   0   0   0   0   0	Peda    Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 35 00 36 00 37 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38	OOAX XXXX       OXXX XXXX       OAAA ABAA       OAAA ABAA       OAAA XXXX       OOOO OOOA       OOOO OOOA       OOXX XXXX       OOOO OOAA	Pedal Modulation Depth   0 - 48
00 2E 00 2F 00 30 00 31 00 32 00 33 00 30 00 35 00 36 00 37 00 36 00 37 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38	00aa aaaa   0xxx xxxx   0aaa aaaa   0aaa xxxx xxx   0aaa   0aaaa   0aaa   0aaaa   0aaaaa   0aaaa   0aaaa   0aaaa   0aaaaaaa   0aaaaaaaa	Pedal   Modulation   Depth   0 - 48
00 2E 00 2F 00 30 00 31 00 32 00 33 00 30 00 35 00 36 00 37 00 36 00 37 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38	00aa aaaa   0xxx xxxx   0aaa aaaa   0axx xxxx   0aaa aaaa   0axx xxxx   0000 00aa   0   0   0   0   0   0   0	Pedal Modulation Depth
00 2E 00 2F 00 30 00 31 00 32 00 35 00 36 00 37 00 30 00 37 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38	0000 000a	Pedal Modulation Depth   0 - 48
00 2E 00 2F 00 30 00 31 00 32 00 33 00 35 00 36 00 37 00 38 00 39 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38	00aa aaaa   00ax xxxx   1 0aaa aaaa   0aaa aaaa aaaa aaaa aaaa aaaa aaaa aaaa aaaa	Pedal   Modulation   Depth
00 2E   00 3C   10 0	00aa aaaa   0aaa aaaa aaaa   0aaa aaaa aaaa aaaa aaaa aaaa aaaa aaaa aaaa	Pedal   Modulation   Depth
00 2E 00 2F 00 30 00 31 00 32 00 35 00 36 00 36 00 37 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38 00 38	00aa aaaa   0aaa aaa	Pedal Modulation Depth
00 2E 00 2F 00 30 00 31 00 32 00 35 00 36 00 37 00 30 00 37 00 38	OQAA QAAA   OQAA QAAA QA	Pedal   Modulation   Depth
00 2E   00 30   1	00aa aaaa     0xx xxxx     0aaa aaaa     0xx xxxx     0000 000a     0000 00aa     0000 00aa aaaa     0aaa aaaa	Pedal Modulation Depth   0 - 48
00 2E   00 3C   10 00 5C   10 0	00aa aaaa     0xxx xxxx     0000 00aa     0xxx xxxx	Pedal Modulation Depth   0 - 48
00 2E   00 3C   10 00 5C   10 0	00aa aaaa     0xxx xxxx     0000 00aa     0xxx xxxx	Pedal Modulation Depth   0 - 48
00 2E   00 3P   00 3A   00 3B   00 3	0000 000a	Pedal Modulation Depth   0 - 48
00 2E   00 3P   00 3A   00 3B   00 3	OOAX AXXX     OAAX AXXX     OAAA AAAA	Pedal Modulation Depth   0 - 48
00 2E   00 3C   10 0	00aa aaaa     0xx xxxx     0000 00aa     0xxx xxxx	Pedal Modulation Depth   0 - 48
00 2E   00 3C   10 0	00aa aaaa     0xx xxxx     0000 00aa     0xxx xxxx	Pedal Modulation Depth   0 - 48
OO 2E     OO 3C     OO 3D     OO 4D     OO 4C     OO 4C     OO 4C     OO 4C     OO 4C     OO 5D     OO 55     OO 55     OO 55	OOAX ARXX     OXXX XXXX     OAAA ARAA     OAAA ARAA     OAAA ARAA     OAAA ARAA     OOOO OOAA     OOOO OOOAA     OOOO OOOAAA     OOOO OOOAAAA	Pedal Modulation Depth   0 - 48

:	00	57	0aaa	aaaa	i ! Eq Mid Q	(-12.0db - +12.0db) 0 - 100	
	00	58	0aaa	aaaa	Eq Mid Frequency	(1.00 - 5.00) 0 - 100	
£	00	59 !	0aaa	aaaa	   Eq Total Level	(0.71KHz - 5.66KHz)	
1		i				(-12.0db - +12.0db)	
i	00	5A	0000	000a	Rotary on/off	0 - 1	
1	00	5B	0000	00aa	Rotary Type	(OFF, ON)   0 - 2	
!	00	5C	0000	00aa	   Rotary Speed0 - 2	1	•
	00	5D	0aaa	aaaa	   Rotary Tone Contro	(stop, slow, fast)  	
1	00	5E [			Rotary Output Leve		
1		5F			Rotary Fast Rate	0 ~ 100	
1		60			Rotary Slow Rate	0 - 100	
1		61			Rise Time HIO - 10		
1		62			Rise Time Lo0 - 10		
1		63			Depth III	0 100	
i		64 ! 65 i			I Depth Lo I III Mix	0 - 100 0 - 100	
į		66 !			Lo Mix	0 - 100	
i		67			HI Level	0 - 100	
		68			Lo Level	0 - 100	
1		69 1			Phaser/Flanger Fee		
		6A 1			Phaser/Flanger dep		
i		6B ;			dummy (ignored if		
		6C			Reverb on/off	0 - 1	
1		í			l	(OFF, ON)	
i	-	6Ð	0000	000a	Reverb Type0 - 1	(RV, M. DL)	
1		6E   6F	0aaa		Reverb Pre Delay Reverb Decay	0 - 100 0 - 100	
1		70 I			Reverb Level	0 ~ 100	
		71		2822	Reverb Tone0 - 10		
i		72 1			Milti Delay Left		
i		73			Milti Delay Cente		
i		74			Milti Delay Right		
1		75	0aaa		Milti Delay Feed		
1		76	0aaa		Milti Delay Left		
1	00	77			Milti Delay Cente		
1		78	0aaa	aaaa	Milti Delay Right	Time 0 - 100 1	
1	00	79	0000		Overdrive on/off	0 - 1 (OFF, ON)	
1	00	7A	0aaa	aaaa	Overdrive Gain	0 - 100 i	
1		7B	0aaa		Overdrive Level	0 - 100	
1	00	7C (			dummy (ignored if	received)	
1	00	: [ 7F [	: 0xxx		: dummy (ignored if	received)	
1	01	00		aaaa	Slider 1 IntO - 45	,	
1	10	01 !	0aaa		(Upper Part Level - Slider   Ext0 - 95		
i i		. 1		1			
	• •		0000	000a	Silder   Int/Fxt	(C.chg 0 - 95) 1	
	٠.	f	0000	1	Silder   Int/Ext	0 - 1 (Int - Ext)	
ł		03 i	0xxx	xxxx l	dummy (ignored if Slider 2 Int0 - 45	0 - I	
1	01	03 l 04 i	0xxx	xxxx   aana	dummy (ignored if	0 - 1     (Int - Ext)     received)	
	01	03   04   05	0xxx 00aa 0aaa	xxxx   aaaa   aaaa	dummy (ignored if Slider 2 Into – 45 (Upper Part Level – Slider 2 Exto – 95	0 - 1     (Int - Ext)     recelved)	
	01	03   04   05	0xxx 00aa 0aaa	xxxx   aaaa   aaaa	dummy (ignored If Slider 2 IntO - 45 (Upper Part Level - Slider 2 ExtO - 95 Slider 2 Int/Ext	0 - 1     (Int - Ext)     received)	
1	01 01 01 01	03   04   05   06   07	0xxx 00aa 0aaa 0000	xxxx i aaaa i aaaa i i aaaa i i aaaa i i aaaa i i i aaaa i i aaaaa aaaa aaaa aaaaa aaaaa aaaaa aaaaa	dummy (ignored if Slider 2 int0 - 45 (Upper Part Level - Slider 2 Ext0 - 95 Slider 2 int/Ext dummy (ignored if	0 - I   (Int - Ext)   Freceived)	
	01 01 01 01 01	03 1 04 1 05 1 06 1 07 1 08 1	0xxx 00aa 0aaa 0000 0xxx 00aa	XXXX	dummy (ignored if Slider 2 Int0 - 45 (Upper Part Level - Slider 2 Ext0 - 95 Slider 2 Int/Ext dummy (ignored if Slider 3 Int0 - 45 (Upper Part Level -	0 - 1 (Int - Ext)   1 received)	
	01 01 01 01 01	03 1 04 1 05 1 06 1 07 1 08 1	0xxx 00aa 0aaa 0000	XXXX	dummy (ignored if Slider 2 Int0 - 45 (Upper Part Level - Slider 2 Ext0 - 95 Slider 2 Int/Ext dummy (ignored if Slider 3 Int0 - 45 (Upper Part Level - Slider 3 Ext0 - 95	0 - 1   (Int - Ext)	
	01 01 01 01 01	03 1 04 1 05 1 06 1 07 1 08 1	0xxx 00aa 0aaa 0000 0xxx 00aa	XXXX	dummy (ignored if Slider 2 Int0 - 45 (Upper Part Level - Slider 2 Ext0 - 95 Slider 2 Int/Ext dummy (ignored if Slider 3 Int0 - 45 (Upper Part Level - Slider 3 Ext0 - 95	0 - I (Int - Ext)   received)	
	01 01 01 01 01 01	03 1 04 1 05 1 06 1 07 1 08 1 00 1 00 1 00 1	0xxx 00aa 0aaa 0000 0xxx 00aa 0aaa 0000	xxxx	dummy (ignored if Slider 2 Int0 - 45 (Upper Part Level - Slider 2 Ext0 - 95 Slider 2 Int/Ext dummy (ignored if Slider 3 Int0 - 45 (Upper Part Level - Slider 3 Ext0 - 95 Slider 3 Int/Ext dummy (ignored if	0 - 1	
	01 01 01 01 01 01	03 1 04 1 1 05 1 06 1 07 1 08 1 09 1 00	0xxx 00aa 0aaa 0000 0xxx 00aa 0aaa 0000 0xxx 0000	XXXX	dummy (ignored if Slider 2 Int0 - 45 (Upper Part Level - Slider 2 Ext0 - 95 Slider 2 Int/Ext dummy (ignored if Slider 3 Int0 - 45 (Upper Part Level - Slider 3 Ext0 - 95 Slider 3 Int/Ext dummy (ignored if Pedal 1 Int	0 - I (Int - Ext)	
	01 01 01 01 01 01 01	03 1 1 0 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0xxx 00aa 0aaa 0000 0xxx 00aa 0aaa 0000 0xxx 0000	xxxx   1	dummy (ignored if Slider 2 Int0 - 45 (Upper Part Level - Slider 2 Ext0 - 95 Slider 2 Int/Ext dummy (ignored if Slider 3 Int0 - 45 (Upper Part Level - Slider 3 Ext0 - 95 Slider 3 Int/Ext dummy (ignored if Pedal 1 Int Pedal 1 EXT	0 - I (Int - Ext)	
	01 01 01 01 01 01 01 01	03 1 04 1 05 1 05 1 06 1 07 1 08 1 0 00 1 00 1 00 1 00 1 00 1	0xxx 00aa 0aaa 0000 0xxx 00aa 0000 0xxx 0000		dummy (ignored if Slider 2 Int0 - 45 (Upper Part Level - Slider 2 Int/Ext dummy (ignored if Slider 3 Int0 - 45 (Upper Part Level - Slider 3 Ext0 - 95 Slider 3 Int/Ext dummy (ignored if Pedal 1 Int Pedal 1 EXT Pedal 1 Int/Ext	0 - I (Int - Ext)	
	01 01 01 01 01 01 01 01	03 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0xxx 00aa 00000 0xxx 00aa 00000 0xxx 00000 0aaa 00000		dummy (ignored if Slider 2 Int0 - 45 (Upper Part Level - Slider 2 Ext0 - 95 Slider 2 Int/Ext dummy (ignored if Slider 3 Int0 - 45 (Upper Part Level - Slider 3 Ext0 - 95 Slider 3 Int/Ext dummy (ignored if Pedal 1 Int Pedal 1 EXT Pedal 1 Int/Ext dummy (ignored if Int/Ext dummy (ignored if	0 - I (Int - Ext)   received)	
	01 01 01 01 01 01 01 01	03 1 04 1 05 1 05 1 06 1 07 1 08 1 0 00 1 00 1 00 1 00 1 00 1	0xxx 00aa 00000 0xxx 00aa 00000 0xxx 00000 0aaa 00000		dummy (ignored if Slider 2 Int0 - 45 (Upper Part Level - Slider 2 Ext0 - 95 Slider 2 Int/Ext dummy (ignored if Slider 3 Int0 - 45 (Upper Part Level - Slider 3 Ext0 - 95 Slider 3 Int/Ext dummy (ignored if Pedal 1 Int Pedal 1 EXT Pedal 1 Int/Ext dummy (ignored if Pedal 2 Int/Ext dummy (ignored if Pedal 2 Int/Ext dummy (ignored if Pedal 2 Int	0 - I (Int - Ext)	
	01 01 01 01 01 01 01 01 01	03 1 04 1 05 1 05 1 06 1 07 1 08 1 00 0 1 00 0 0 0 0 0 0 0 0 0 0 0	0xxx 00aa 0aaa 0000 0xxx 00aa 0000 0xxx 0000 0aaa 0000 0xxx		dummy (ignored if Slider 2 Int0 - 45 (Upper Part Level - Slider 2 Ext0 - 95 Slider 2 Int/Ext dummy (ignored if Slider 3 Int0 - 45 (Upper Part Level - Slider 3 Ext0 - 95 Slider 3 Int/Ext dummy (ignored if Pedal 1 Int Pedal 1 EXT Pedal 1 Int/Ext dummy (ignored if Pedal 2 Int/Ext dummy (ignored if Pedal 2 Int/Ext dummy (ignored if Pedal 2 Int	0 - I (Int - Ext)   Freceived)	

01 12	0000 000a	Pedal 2 Int/Ext 0 - 1
1		(Int - Ext)
01 13		dummy (ignored if received)    Pedal 3 Int
. 01 14	i vous Bana	(Hold - Wah Pedal)
01 15	0222 2222	Pedal 3 EXT 0 - 95
i	:	(C. chg 0 - 95)
01 16	0000 000a	Pedal 3 Int/Ext 0 - 1
		(Int - Ext)
01 17	DXXX XXXX	i dummy (ignored if received)
01 18	Oaaa aaaa	Upper Int. Zone from key 0 - 75
i	1	(E1 - G7)
01 19	Daga aaga	Upper int. Zone to key 0 - 75
1 01 1A	0000 0000	(E1 - G7) } i Upper Int. Zone Octave shift 0 - 48 i
i vila	ODaa aaaa	Upper Int.Zone Octave shift 0 - 48 (-2oct +2oct.)
01 1B	0000 aaaa	Epper Int. Zone Key Transpose 0 - 11
į :		(-6 - +5)
01 1C	0000 0aaa	Upper Int. Zone Vel. Curve 0 - 7
1 01 1D	0000 000a	(1 - 8)       Upper Int. Zone SW
ו עווט	0000 0000	Upper Int. Zone SW
01 1E	Oaaa aaaa	Lower Int. Zone from key 0 - 75 i
1	ı	(£1 - 67)
01 1F	Oaaa aaaa	Lower Int. Zone to key 0 - 75
		(E1 ~ G7)
01 20	00aa aaaa	Lower Int.Zone Octave shift 0 - 48    -20ct +20ct.)
01 21	,   0000 aaaa	Lower Int. Zone Key Transpose 0 - 11
1	1	(-B ~ +5)
01 22	0000 aaaa	Lower Int. Zone Vel. Curve 0 - 7
	0000 000	(1 - 8)
01 23	0000 000a	Lower Int. Zone SW 0 - 1 (OFF, ON)
0) 24	Oaaa aaaa	Upper Ext. Zone from key 0 - 75
Į.		(E1 - G7)
01 25	Daaa aaaa	Upper Ext. Zone to key 0 - 75
01 26		(E) ~ G7)
1 01 20 1	00aa aaaa	Upper Ext. Zone Octave shift 0 - 48   
01 27	0000 aaaa	Upper Ext. Zone Key Transpose 0 - 11
1	l i	(-6 - +5)
01 28	0000 0aaa	Upper Ext. Zone Vel. Curve 0 - 7
1		(1 - 8)
01 29 1	0000 000a	Upper Ext. Zone SW 0 - 1
01 2A I	0000 aasa	(OFF, ON) Upper Ext. Zone Tx Channel 0 - 15
01 2B		Upper Ext. Zone Pgm. Chg. # 0 - 127
01 2C		Lower Ext. Zone from key 0 - 75
		(E1 - G7)
01 2D (	0aaa aaaa	Lower Ext. Zone to key 0 - 75 (E1 - 67)
01 2E	00aa aaaa	Lower Ext. Zone Octave shift 0 - 48
		(-20ct +20ct.)
01 2F	0000 aaaa	Lower Ext. Zone Key Transpose 0 - 11
	2000 -	(-6 - +5)
01 30 1	0000 0aaa	
01 31		(1 - 8)   Lower Ext. Zone SW 0 - 1
. 0131		(OFF, ON)
01 32 1		Lower Ext. Zone Tx Channel 0 - 15
		Lower Ext. Zone Pgm. Chg. # 0 - 127
01 34	0000 000a	
		(OFF, UN)
		dummy (ignored if received)
: 1	: !	1
		dummy (ignored if received)
Total		00 01 7F
	5126	

## \* Tone Temporary Area

	fset   address	Description			
		Oaaa aaaa	Tone Name	(ASCII 12charcter)	
 	00 OC		Source tone numbe	,	
1	00 0D I	Oaaa aaaa	Tone Level	0 - 100	
	00 0E I	Oasa aaaa	Analog Feel	0 - 100 i	

```
00 OF | Oaga agga | Harmonichar 1 Level 0 - 100
00 10 | Oaas assa | Harmonicbar 2 Level 0 - 100
00 11 | Oaaa aaaa
                    Harmonicbar 3 Level 0 - 100
00 12 | Oaaa aaaa
                  i Harmonicbar 4 Level 0 - 100
                  Harmonichar 5 Level 0 - 100
00 13 | Oaaa aaaa
                  Harmonicbar 6 Level 0 - 100
00 14 | Oaaa aaaa
                   Harmonicbar 7 Level 0 - 100
00 15 | Oaaa aaaa
00 16 | Oana anna
                    Harmonichar 8 Level 0 - 100
00 17 | Oaaa aaaa
                  | Harmonicbar 9 Level 0 - 100
                  Percussion | Level 0 - 100
00 18 | Oasa aasa
                  Percussion 2 Level 0 - 100
00 19 | Oaaa aaaa
                  Percussion 3 Level 0 - 100
00 1A | Oaaa aaaa
00 1B | 0aaa aaaa
                  Percussion 4 Level 0 - 100
                                 0 - 100
00 IC | Daaa aaaa
                    Noise Level
00 10 | 0000 00aa
                  | Noise Type
                                      0 - 2
                                    (A - C)
00 IE | Oaaa aaaa | Level Env. Attack Time
00 lF | 0xxx xxxx | dummy (ignored if received)
00 20 | Oaaa aaaa | Level Env. Release Time 0 - 100 |
00 21 | Oaaa aaaa | Level Env. Percussion Decay 0 - 100 |
00 22 | Oaga aaga | Level Env. Key Follow 0 - 100
00 23 | Oaaa aaaa | Pitch Env. Attack Time
00 24 | Oaaa aaaa
                  | Pitch Env. Attack Level
                                             0 - 100
                                             0 - 100 |
00 25 | Oaaa maaa
                  Pitch Env. Release Time
                                            0 - 100 |
00 26 | Oaaa aaaa | Pitch Env. Release Depth
00 27 | Cana aasa | Pitch Env. Veio sense
                                             0 - 100 |
00 28 | Qasa assa | Pitch Env. Key Follow
00 29 | Casa assa | Fine Tune
                                      0 - 100
                                      (-50 - +50)
00 2A | 0000 00aa | Stretch Type0 - 3
                                      (A - D)
00 2B | 0000 00aa | Temperament Type 0 - 4
                             (Equal - Zalzal)
00 2C i 0xxx xxxx i dummy (ignored if received)
00 3F | 0xxx xxxx | dummy (ignored If received)
                 1 00 00 3F
```

VK - 1000

## MIDI Implementation Chart

Date : May. 17 1991

Version: 1.00

	Function · · ·	Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1, 2, 3 1 – 16	1, 2, 3 1 - 16	Memorized
Mode	Default Messages Altered	Mode 3 × ******	Mode 3 ×	
Note Number	True Voice	15 - 113 *******	0 - 127 15 - 113	
Velocity	Note ON Note OFF	○ × 9n v=0	○ × 9n v=0	
After Touch	Key's Ch's	×	×	
Pitch Bend	der	0	0	
	1 7 11	O × O	O *1 O	Modulation Volume Expression
Control Change	64 67	×	00	Hold 1 Soft
	0 95	* 1	×	Continuous Controller
	121	×	0	Reset All Controllers
Prog Change True #		*1 (0 - 127) ******	*1 (0 - 127) 0 - 127	
System Exclusive		: *1	*1	
System Common	Song Pos Song Sel Tune	× × ×	× × ×	
System Real Time	Clock Commands	× ×	×	
Aux Messages	Local ON/OFF All Notes OFF Active Sense Reset	× × O ×	O (123) O x	
Notes		*1 Can be set to ○ or	× manually.	

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

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

## **ESPECIFICATIONS**

VK-1000: Rhodes Organ

#### Keyboard

76 keys (with Velocity)

#### Sound Source

Ajastable SA (Structured Adaptive) synthesis

#### ■ Maximum Polyphony

16 voices (Upper Part : 7 voices, Lower Part : 7 voices, Pedal Part : 2 voices)

#### Internal Memory

64 Patches

192 Tones (Upper Part : 64 Tones, Lower Part : 64 Tones,

Pedal Part: 64 Tones)

8 Sources

#### ● Memory Card (M-256E)

64 Patches

192 Tones (Upper Part : 64 Tones, Lower Part : 64 Tones, Pedal Part : 64 Tones)

#### Effects

Wah

3-band EQ

Over Drive

Rotary Effect (Revo/Flanger/Phaser)

Reverb (Reberb/Multi-tap Delay)

#### Display

64 × 240 dots (backlit LCD)

#### Controllers

Harmonic Bars (Feet Bars × 9/Percussion bars × 4)

Master Volume

Control slider × 3

Pitch bend/Modulation lever

Percussion switch (Normal/Soft)

Bendr Switch (Normal/Revo)

H-Bar Level switch (Patch/Manual)

Rotary speed buttons (stop/slow/fast)

Effect buttons (Over Drive/Rotary/Reverb)

Pedal controllers: assignable pedal × 3

Expression Pedal

#### Connectors

Line In Jacks L(MONO)/R
Line Out Jacks L(MONO)/R
Ballanced Out Connectors L/R
MIDI Connectors (IN/OUT/THRU)
Headphone Jack (stereo)
Assignable Pedal Jacks × 3

#### Power Supply

AC 117V, AC 230V or AC 240V

#### Power Consumption

20 W (AC 117V) 25 W (AC 230/240V)

#### Dimensions

 $1255(W) \times 520(D) \times 115(H)$  mm  $49 - 7/16(W) \times 20 - 1/2(D) \times 4 - 1/2(H)$  inches

#### Weight

22 kg

48,5 lbs

#### Accessories

Guide Book

Owner's Manual

Connection Cable (PJ-1M) × 1

Power Cord

#### Options

Memory Card (M-256E)

Stand: RS-80

\* The specifications for this product are subject to change without prior notice.

# INDEX

Assignable Pedal Jacks 23,73 Ajustable SA synthesis 88
Ballanced Out connectors 22
CUrsor buttons       29         click noise       89         Cold Boot       35,107         copy       98         Controllers       22         Controller 1/2/3 slider       71
[D]         Destination       99         DEC       30         Data Entry slider       30
[E]         Eqalizer       79         Exit button       30         Exclusive message       109         External Zone Upper       69         External Zone Lower       69         Expression Pedal Jack       22
Flanger       80         Function buttons       31         Feet Bar       19
[H]         Harmonic Bar       19         Harmonic Bar Level switch       37         Headphones       11
[ I ] INC
[L]         label       31         LCD       28         level envelope       89         Level Map       53         local control       64         Lower       13
[M]       64         Memory Card       95         MIDI transmit channel       61,69         MIDI connectors       118         Motor on/off       59         Multi – tap delay       83         Multi – timbre       13

[ N ] Name
[O]       68         Over Drive       78
Part       13         Patch       15         Patch Edit mode       67         Pedal       22         Percussion Normal/Soft       20         Percussion Bar       19         Percussion velocity       75,68         Percussion legato       75         pitch envelope       90         Pitch Bend / Modulation Lever       21         Phaser       80         Play screen       34         Program change buttons       62
[R]  Revo
[S] source
[T]       93         Temperament       93         Temporary area       17         thump noise       89         Tone       15         transpose       68
【U】 Unit number 66 Upper 13
[V] velocity curve
[ W ] Wah
<b>[Z]</b> Zone

## Information

●When you need repair service, call your local Roland Service Station or the authorized Roland distributor in your country as shown below.

#### U. S. A.

Roland Corp US 7200 Dominion Circle Los Angeles, CA. 90040 - 3647 U. S. A.

**2** (213)685 - 5141

**5** (604)270 - 6626

**5** (514)335 - 2009

#### CANADA

Roland Canada Music Ltd. (Head Office) 5480 Parkwood Richmond B. C., V6V 2M4 CANADA

Roland Canada Music Ltd. 9425 Transcanadienne Service Rd. N., St Laurent, Quebec H4S 1V3 CANADA

Roland Canada Music Ltd.
346 Watline Avenue,
Mississauga, Ontario L4Z 1X2
CANADA

1 (416)890 - 6488

#### **AUSTRALIA**

Roland Corporation (Australia)Pty. Ltd. (Head Office) 38 Campbell Avenue Dee Why West. NSW 2099 AUSTRALIA

☎ (02)982 - 8266

Roland Corporation (Australia)Pty. Ltd. (Melbourne Office) 50 Garden Street South Yarra, Victoria 3141 AUSTRALIA \$\pi\$ (03)241 - 1254

#### NEW ZEALAND

Roland Corporation (NZ)Ltd. 97 Mt. Eden Road, Mt, Eden. Auckland 3 NEW ZEALAND \$\overline{\pi}\$ (09)398 - 715

#### UNITED KINGDOM

Roland(UK)Ltd.
Rye Close
Ancells Business Park
Fleet
Hampshire GU13 8UY
UNITED KINGDOM
© 0252 - 816181

#### **GERMANY**

Roland Elektronische
Musikinstrumente
Handelsgesellschaft mbH.
Oststrasse 96,
2000 Norderstedt
GERMANY
2040/52 60 090

#### BELGIUM/HOLLAND/ LUXEMBOURG

Roland Benelux N. V.
Houtstraat I
B - 2431 Oevel - Westerlo
BELGIUM

(0032)14 - 575811

#### **DENMARK**

Roland Scandinavia as Langebrogade 6 Box 1937 DK - 1023 Copenhagen K. DENMARK \$\oldsymbol{\text{T}} 31 - 95 31 11

#### **SWEDEN**

Roland Scandinavia as
DanvikCenter 28 A, 2 tr.
S - 131 30 Nacka,
SWEDEN

\$\infty 08 - 702 00 20

#### NORWAY

Roland Scandinavia
Avd. Norge
Lilleakerveien 2
Postboks 95 Lilleaker
N - 0216 Oslo 2
NORWAY
TO 2 - 73 00 74

#### FINLAND

Fazer Musik Inc. Länsituulentie POB 169 SF - 02101 Espoo FINLAND TO - 43 50 11

#### ITALY

Roland Italy S. p. A. Viale delle Industrie 8 20020 ARESE MILANO ITALY 27 02 - 93581311

#### SPAIN

Roland Electronics de España, S. A. Bolivia 239 08020 Barcelona SPAIN \$\frac{1}{2} 93 - 308 - 1000

#### **SWITZERLAND**

Musitronic AG
Gerberstrasse 5, CH - 4410
Liestal
SWITZERLAND

☎ 061/921 16 15

Roland CK (Switzerland) AG
Hauptstrasse 21/Postfach
CH - 4456 Tenniken
SWITZERLAND
1001/98 60 55
Repair Service by Musitronic AG

#### **FRANCE**

Musikengro 102 Avenue Jean - Jaures 69007 Lyon Cedex 07 FRANCE ☎ (7)858 - 54 60

Musikengro (Paris Office) Centre Region Parisienne 41 rue Charles - Fourier, 94400 Vitry s/Seine FRANCE 2 (1)4680 86 62

#### **AUSTRIA**

E. Dematte &Co.
Neu - Rum Siemens - Strasse 4
A - 6021 Innsbruck Box 591
AUSTRIA

13 (0512)63 451

#### **GREECE**

V. Dimitriadis & Co. Ltd. 2 Phidiou Str., GR 106 78 Athens GREECE

#### **PORTUGAL**

**21** - 3620130

Casa Caius Instrumentos Musicais Lda. Rua de Santa Catarina 131 Porto PORTUGAL 27 02 - 38 44 56

#### **HUNGARY**

Intermusica Ltd.
Warehouse Area 'DEPO'
Budapest. P.O. Box 3,
2045 Torokbalint
HUNGARY

(1)1868905

#### ISRAEL

D.J.A. International Ltd 25 Pinsker St., Tel Aviv ISRAEL \$\infty\$03 - 283015

#### BRAZIL

FORESIGHT Corporation R. Alvarenga 591 CEP - 05509 Sao Paulo BRAZIL FAX: (011)210 - 0286

#### HONG KONG

Tom Lee Music Co., Ltd Service Division 22 - 32 Pun Shan Street, Tsuen Wan, New Territories, HONG KONG

#### SINGAPORE

Swee Lee Company
Bras Basah Complex #03 - 23
Singapore 0178
SINGAPORE

23 3367886

#### **THAILAND**

Theera Music Co., Ltd.
330 Verng Nakorn Kasem, Soi 2
Bangkok 10100,
THAILAND
2248821

#### MALAYSIA

Syarikat Bentley No. 142, Jalan Bukit Bintang 55100 Kuala Lumpur MALAYSIA \$\oldsymbol{\pi}\$ 2421288

#### **INDONESIA**

PT Galestra Inti Kompleks Perkantoran Duta Merlin Blok C/59 Jl. Gajah mada No.3 - 5 Jakarta 10130 INDONESIA 25 (021) 354604, 354606

#### TURKEY

Barkat Sanayl ve Ticaret Siraselviler Cad. 86/6 Taksim Istanbul TURKEY \$\oldsymbol{2}\$ 149 93 24

#### **CYPRUS**

Radex Sound Equipment Ltd. 17 Panteli Katelari Str. P.O.Box 2046, Nicosia CYPRUS

**2** 453426, 466423

As of FEB 14, 1991

## Apparatus containing Lithium batteries

#### ADVARSEL!

Lithiumbatteri – Eksplosionstare ved fejlaglig

Udskiftning må kun ske med bafteri af samme

fabrikat og type Lever det brugte batteri tilbage til leverandøren.

#### **ADVARSEL!**

Lithiumbatteri - Eksplosjonsfare. Ved utskilting benyttes kun batten som anbefall av apparattabrikanten.

Brukt batteri returneres apparatieveranderen

#### VARNING

Explosionstara við felaktigt batteribyte. Anvand samma batterifyn elfar en ekvivalent typ som rekommenderas av apparattillverkaren Kassera använt batten enligt labrikantens instruktion.

#### **VAROITUS!**

Paristo voi rajahtaa, jos se on virheellisesti

Veinda paristo alinoastaan laitevalmistajan " suosittalemaan tyyppiin. Hävitä käytetty päristo valmistajan ohjeiden mukajsesti.

## Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der/die/das

Rhodes Organ VK - 1000

(Gerat, Typ. Bezeichnung)

in Übereinstimmung mit den Bestimmungen der Amtsbl. Vfg 1046/1984

(Amtsblattverfügung)

funk-entstört ist

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerätes angezeigt und die Berechtigung zur Überprüfung der Serie auf Einhaltung der Bestimmungen eingeräumt.

Roland Corporation Osaka/Japan

Name des Herstellers/Importeurs

For the USA

## RADIO AND TELEVISION INTERFERENCE

he equipment described in this manual generates and uses radio frequency energy. If it is not installed and used property, that is, in stific accords may cause interference with radio and television reception. This equipment has been tested and found to comply with the similar or a Class B computer in the specifications in Subpact. Or Plant 15, or RCC Rules. These rules are designed to provide reasonable protection against such a interference in action or the providence is no guarantee that the interference in Interference in a particular installation. If this equipment does cause interference to radio or tent to determined by furning the equipment on and off, the user is encouraged to try to correct the interference by the following measure:

Disconnect other devices and their improvement on any off, the user is encouraged by try to correct the interference by the following measure:

Disconnect other devices and their improvement of the radio one at a string. It for interference stock to caused by either, the other device or its I/O. These devices, contact the manufacturerior dealer for desistance.

If your equipment does cause interference stocks.

If your equipment does cause interference stocks.

Move the equipment to one side or the other of the TV or radio.

Move the equipment into an outed that is on a different circuit than the TV or radio. (That is, make certain the equipment and the radio or televisic rolled by different circuit problems of the recomposition to one stock or the others.)

- eters of fuses.]

  television anienna with coexial cable fead-in between the anienna and TV. If necessary, you

  additional suggestions. You may find helpful the following booklet prepared by the Federal C

  "How to identify and Resolve Radio TV Identerance Problems"
  in the U.S. Government Printing Office, Westington, D.C., 20402, Slook No. 004-000-00345-4

For Canada

#### CLASS B

#### NOTICE

This digital apparatus does not exceed the Class B limits for radio noise emissions set out in the Radio Interference Regulations of the Canadian Department of Communications

Cet appareil numérique ne dépasse pas les limites de la classe B au niveau des émissions de bruits radioélectriques fixés dans le Réglement des signaux parasites par le ministère canadien des Communications.

# Rhodes