KR-55

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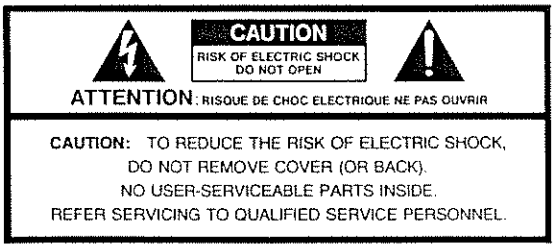
DIGITAL KEYBOARD

OWNER'S MANUAL



The lightning flash with arrowhead symbol, within an equilateral triangle, 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.
2. Do not use this product near water — for example, near a bathtub, washbowl, kitchen sink, in a wet 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.
4. This product, either alone or in combination with an amplifier and headphones or 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 audiologist.
5. 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 dust.
8. 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.
13. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
14. The product should be serviced by qualified service personnel when:
    A. The power-supply cord or the plug has been damaged or
    B. Objects have fallen, or liquid has been spilled into the product; or
    C. 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
    E. 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.

WARNING: THIS APPARATUS MUST BE EARTHED

IMPORTANT: 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 L or coloured RED

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

Introduction

Thank you for purchasing the
Roland KR-55 Digital Keyboard.
The KR-55 contains an RS-PCM digital sound source
that is able to produce a wide variety
of high-quality sounds.

Features

- **High-quality RS-PCM sound source:**
  The KR-55 contains 64 different sounds (23 different instruments with variations of each).
  Sounds include piano, organ, and a variety of sounds used in ensemble jazz classical, rock and fusion performances.

  Additional sounds are available on PCM sound cards (SN-U110 series; sold separately).

- Multi-timbral operation:
  The KR-55 contains a multi-timbral sound source capable of producing 7 parts simultaneously. When used with a MIDI sequencer, a single KR-55 can play the sounds of an entire ensemble.

- **Effects:**
  - Chorus: The chorus effect adds spacious depth to the sound.
  - Reverb: The reverb effect adds the acoustic ambience of a large concert hall.

- Three play modes; whole, dual, and split:
  You can layer two sounds together, or play different sounds in the high and low ranges of the keyboard.

- A Roland PAD-5 can be connected to play the rhythm instruments. This also allows you to enjoy the auto-rhythm patterns (such as rock or swing) that are built into the PAD-5.

- Other electronic instruments or mics can be connected and played through the built-in speaker

Precautions

In addition to the items listed under Safety Precautions, on page 2, please read and adhere to the following.

Concerning the power supply

- Whenever you make any connections with other devices, always turn off the power to all equipment first. This will help in preventing malfunction, and damage to speakers.
- Do not force the unit to share the same power outlet as one used for distortion producing devices (such as motors, variable lighting devices). Be sure to use a separate power outlet.

Concerning placement

- Placing the unit near power amplifiers or other equipment containing large transformers may induce hum.
- Should the unit be operated nearby television or radio receivers, TV pictures may show signs of interference, and static might be heard on radios. In such cases, move the unit out of proximity with such devices.
- Avoid placing the unit where it may be subject to direct sunlight, or where near devices that may emanate heat. Avoid confining it within a tightly closed car or other such places. Otherwise, the unit may become deformed or discolored.

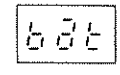
Maintenance

- For everyday cleaning, wipe the unit with a soft dry cloth, or one that is dampened slightly. To remove dirt that is more stubborn, wipe using a mild, neutral detergent. Afterwards, make sure to wipe thoroughly with a soft cloth.
- Never apply benzene, thinners, alcohol or any like agents, to avoid the risk of discoloration and deformation.

Other Precautions

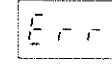
- Protect the unit from a strong impact.
- Never apply strong pressure to the display, or strike it in any way.

The KR-55 contains a backup battery to preserve the settings when the power is turned off. The battery life is 5 years or longer, but we recommend that you change it every 5 years.
When the battery runs low, the following display will appear.



Please contact a Roland service center for replacement.
*The first replacement after purchase may become necessary in less than 5 years.

If the following display appears, it is possible that part or all of the data in memory has been lost. To return all data to the factory settings, refer to the explanation on page 12 "Restoring the Factory Settings".



Assembling The KS-30 (Sold Separately)

Joint bolt D ×4

Joint nut E ×4

Knob bolt F ×4

Assembling Procedure

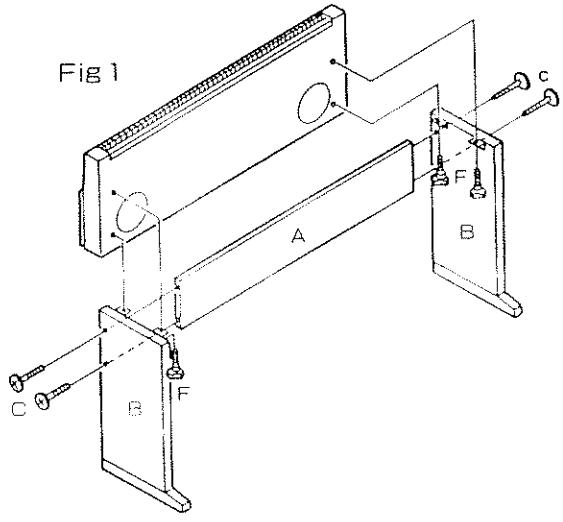
①Insert the Joint nuts D into the holes on the back panel A, and adjust the joint nuts D with the screwdriver provided as shown in Fig 2.

②Attach the back panel A to the side panels B, and tighten the joint bolts C.

③Place the keyboard on the stand, and fix with the knob bolts E.

④Loosen the cord clamp's screw F with the screwdriver provided, put the power cord into the clamp F, and retighten the screw.(Fig 3)

Fig 1



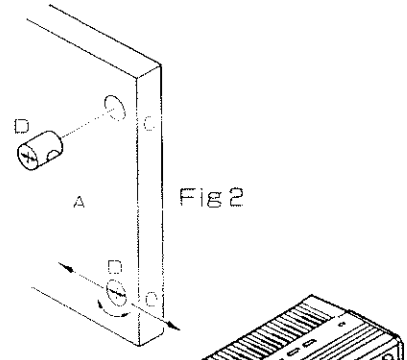


Fig 2

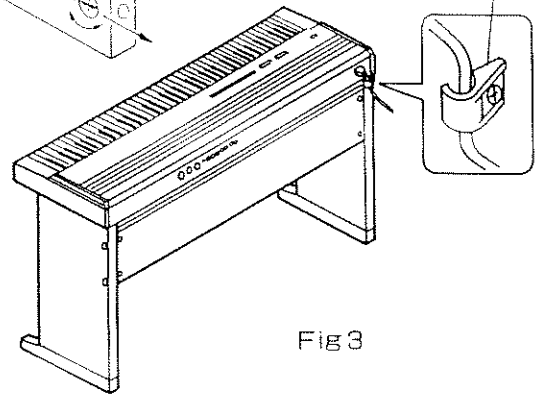
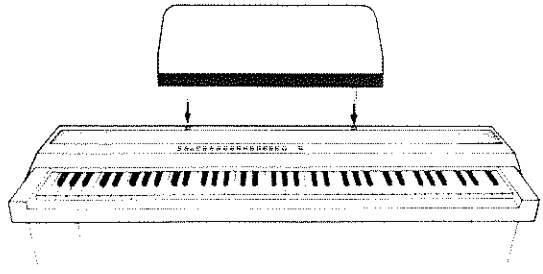


Fig 3

Music Stand

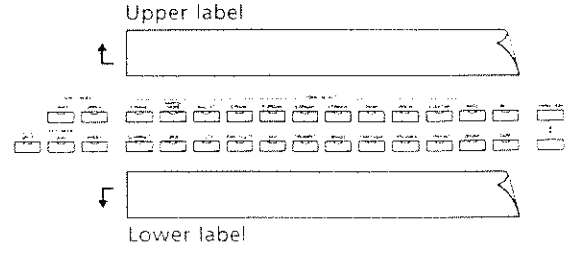
Attach the music stand as shown in the diagram.



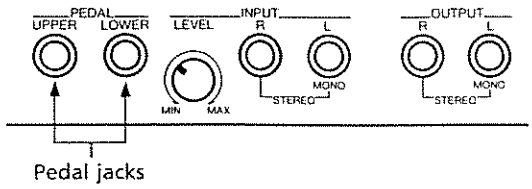
Before moving or transporting the unit, be sure to remove the music stand.

Function Guide Labels

These labels indicate the function of each button when setting performance functions or making MIDI settings. Affix the labels as shown.

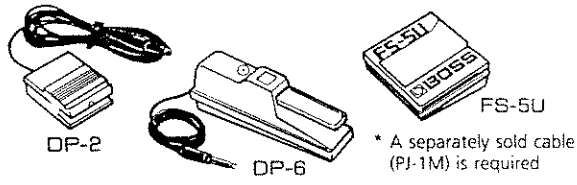


Pedal Connections



Pedal jacks

Connect one or two of the following pedals to the pedal jack(s).



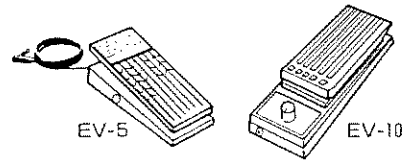
FS-5U

* A separately sold cable (PJ-1M) is required

* When using only one pedal, connect it to the UPPER terminal. This will allow you to simultaneously control both UPPER and LOWER with a single pedal. (→ page 6 E)

• When using a pedal to adjust the volume or pan

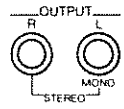
By connecting an expression pedal (EV-5, EV-10) to the pedal jack, you can control the volume or pan.



If you wish to use the pedal to control Volume, set the pedal function to "3".
If you wish to use the pedal to control Pan, set the pedal function to "4". (→ page 6 E)

* With the factory settings, both pedals are set to function as damper pedals (to make the sound decay gradually).

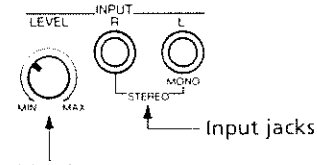
External output



Output jacks

Use these jacks to connect the KR-55 to an external amp or recording device.
Connect these jacks to the AUX IN jacks of an audio amp, or the INPUT jack of a guitar amp.

Connecting Another Electronic Musical Instrument Or Mic



Input jacks

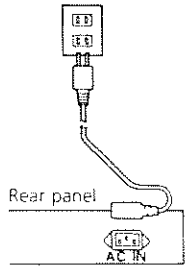
Input level knob
Adjust the level of the INPUT jacks.

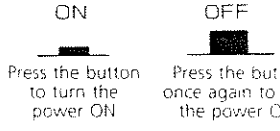
When another electronic musical instrument or microphone is connected, it can be heard through the built-in speakers of the KR-55.

Turning The Power On

① Connect the power cable and insert it into an AC outlet.

* Be sure to use the correct AC voltage for your unit.



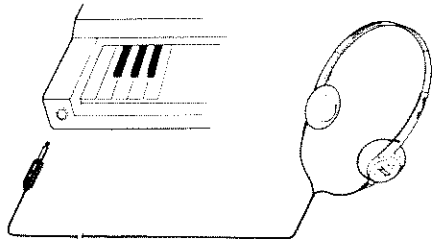


② To turn the power on, press the POWER button located at the left side of the panel.

* Since the KR-55 contains a protection circuit, there will be a short delay before operation begins.

Using Headphones

The headphone jack is located at the lower left on the front of the keyboard. When headphones are connected, the built-in speakers will not sound, allowing you to practice without disturbing others.



* In order to take advantage of the stereo capabilities of the KR-55, we recommend that you use stereo headphones (RH-12, RH-100, or similar sold separately).

1 How to adjust the VOLUME control

This slider controls the volume output from the internal speaker, headphone jack, and output jacks.

2 How to adjust the BRILLIANCE control

This slider modifies the tone. The tone will become brighter when this slider is moved toward "BRIGHT", and darker when moved toward "MELLOW".

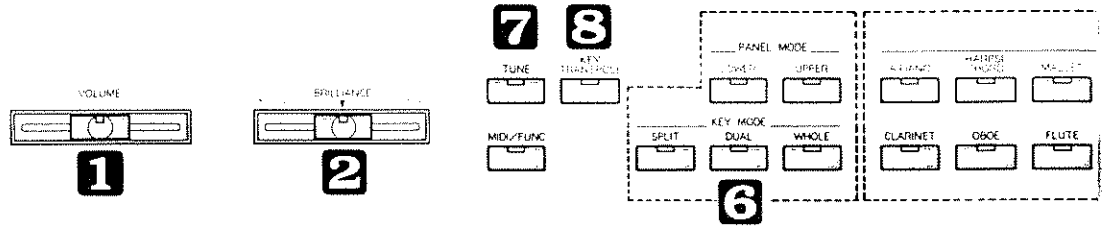
3 Tone select

Press the TONE SELECT buttons to select Tones.

In addition, pressing the VARIATION buttons (▲, ▼) will select variations of the Tone, allowing you to play the same Tone with slightly differing tonal nuances. The display will show the variation number. (The number of variations will depend on the Tone group.)

When a PCM card is inserted into the PCM CARD slot on the rear panel, you can press the CARD Tone select button and play Tones from the PCM card.
In addition, you can press the VARIATION button to select variations of the PCM card Tones.

The selected variation number will be stored for each Tone group.

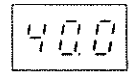


7 Tuning (TUNE)

This allows you to adjust the pitch (tuning) to other instruments.

Press this button and the display will show the current frequency of middle A.

When set to 440.0 Hz the hundreds place is not displayed.



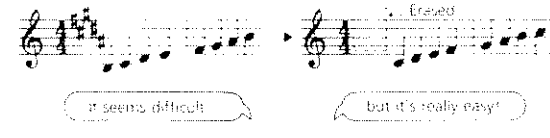
Each time you press the VARIATION button the display will change in steps of 0.1 Hz. If you continue pressing, the value will change continuously. When you have set the desired tuning, press the TUNE button once again to return to normal operation.

8 KEY TRANSPOSE

The Key Transpose function allows you to transpose your playing without changing the notes you play.

Press the KEY TRANSPOSE button and then use the VARIATION buttons to transpose in half steps over a range of −6 to +5.

Once the Key Transpose function has been set, pressing the KEY TRANSPOSE button will change the pitch from standard pitch to the specified transpose pitch, and back again. The indicator of the KEY TRANSPOSE button will light to indicate that the pitch is transposed to a setting other than 0.



4 Add reverb to the sound (REVERB button)

Press this button and the indicator will light, and Reverb will be added to simulate the acoustic ambience of a hall, etc.

Press this button once again and the indicator will go out, and the sound will return to normal.
By pressing the REVERB button while holding the VARIATION button, you can select 8 different Reverb variations.

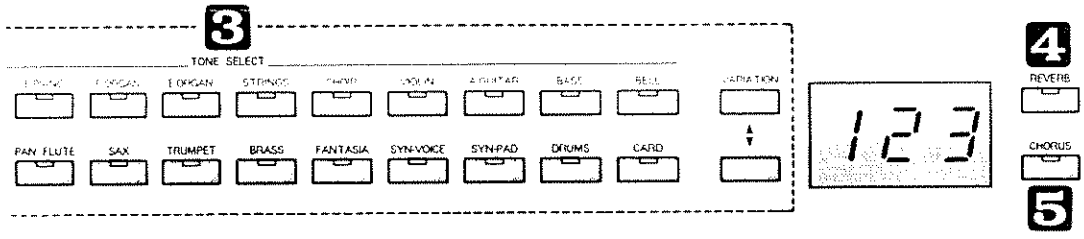
The display will indicate the selected reverb variation, and the REVERB button will store the selected variation.

5 Add depth to the sound (CHORUS button)

Press this button and the indicator will light, and a Chorus effect will be added, creating a spacious sound.

Press this button once again and the indicator will go out, and the sound will return to normal. By pressing the CHORUS button while holding the VARIATION button, you can select 8 different Chorus variations.

The display will indicate the selected Chorus variation number. The Chorus variation number is stored for each Tone and for each Key Mode.



6 Select the key mode (KEY MODE buttons)

The KR-55 has three key modes; whole, dual, and split. Press the SPLIT, DUAL, or WHOLE button to select the Key Mode.

WHOLE

Pressing this button will select the normal mode in which the entire keyboard will play a single Tone.

Select a Tone as explained in 3. The WHOLE button stores the currently selected Tone and the Chorus on/off.

DUAL

This allows you to play two layered Tones.

Press the UPPER button and select the Tone you wish to play in the range of 3. In the same way, press the LOWER button and select another Tone.
The DUAL button stores the two Tones, and the Chorus on/off for each Tone.

SPLIT

This function divides the keyboard into high and low note ranges, and allows you to play different Tones in each range. The upper range will play the UPPER Tone, and the lower range will play the LOWER Tone.

In the same way as for DUAL, select and play the UPPER and LOWER Tones. The SPLIT button stores the two Tones, and the Chorus on/off for each Tone.
The boundary (split point) between UPPER and LOWER can be stored by pressing the SPLIT button and then pressing the note at which you want to split the keyboard. (The note you specify as the split point will belong to the UPPER range.)

* When shipped, the split point is set to middle C (C3).

When you wish to select two Tones at once;

When the DUAL or SPLIT mode is selected, press and hold one TONE SELECT button and then press another to select two Tones at once. In this case, the Tone you press first will be assigned to whichever PANEL MODE button (UPPER/LOWER) is currently lit. The Tone you press second will be assigned to the other button. The indicator of the button pressed second will blink, and then go out when you release it.

Press the MIDI / FUNC button to enter this mode (the indicator will light). Press a TONE SELECT button to select the desired function, and use the VARIATION buttons to make settings. The display will show the value of the setting or whether the function is on or off.

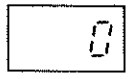
* For some functions, select UPPER/LOWER before you use the VARIATION button to make settings.

When you have finished making settings, press the MIDI/ FUNC button to return to the Play mode (the indicator will go out).

9 Selecting the function of the pedal (PEDAL)

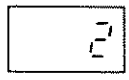
This allows you to select the function of the pedal.

This function can be set independently for UPPER and LOWER. To make settings for UPPER, first press the UPPER button. To make settings for LOWER, first press the LOWER button.



Pedal off
The pedal will have no effect.

DAMPER pedal
When you press the pedal, the sound will decay slowly.

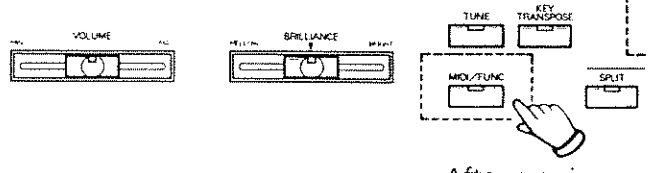


SOSTENUTO pedal
Notes (keys) which are already pressed when the sostenuto pedal is pressed will be sutained, but notes played after the sostenuto pedal is pressed will sound normally.

EXPRESSION pedal
The volume will change according to how the pedal is pressed. When using this function, connect a separately sold EV-5 or EV-10 to the pedal jack.

PAN pedal
The pan position will change according to how the pedal is pressed. When the pedal is fully depressed the sound will move to the right, and when the pedal is fully upright the sound will move to the left. When using this function, connect a separately sold EV-5 or EV-10 to the pedal jack.

* With the factory settings this will be set to 1.



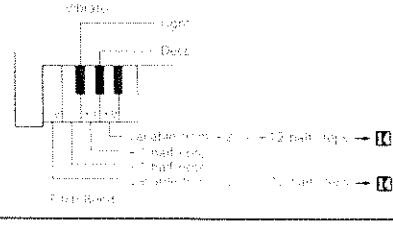
After pressing...

About the Pitch Bend effect

The lowest four white keys of the KR-55 keyboard can be used to raise or lower the pitch of a played note.
The pitch divisions of instruments such as piano or organ are fixed, and it is not possible to produce a pitch, for example, midway between E and F. However other instruments such as violin and guitar are able to change smoothly from one pitch to another pitch.
This performance technique is called "portamento" or "bending", and allows you to freely produce any pitch between (for example) E and F.
By pressing one of the four lowest white keys of the KR-55 keyboard, you can use this performance technique.

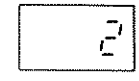
About the Vibrato effect

This effect adds a slight cyclic variation to the pitch of a played note. Vibrato is very important for a musically interesting performance for violin or guitar. It is especially effective to add vibrato after the sound has been sustaining for a while. The lowest two black keys of the KR-55 keyboard allow you to add a vibrato effect.

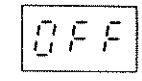


18 PITCH BEND and VIBRATO on/off

The Pitch Bend and Vibrato effects can be used. Playing dynamics (key velocity) will not affect the Pitch Bend Time.



The Pitch Bend and Vibrato effects can be used. Playing dynamics (key velocity) will affect the Pitch Bend Time. With normal key velocity (64), the Pitch Bend Time will be the same as for "1".

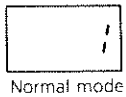


There will be no Pitch Bend or Vibrato effect.

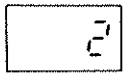
10 Use playing dynamics to switch between sounds (VELOCITY MODE)

In the DUAL mode, when set to 1 (normal), softly played notes will have a low volume and strongly played notes will have a loud volume.

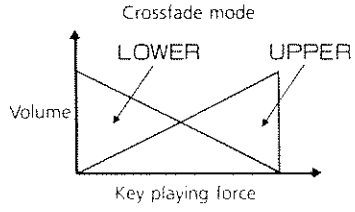
When set to 2 (crossfade), softly played notes will sound the LOWER Tone more loudly and strongly played notes will sound the UPPER Tone more loudly.



Normal mode



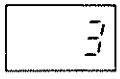
Crossfade mode



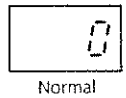
Example: Select DUAL mode, STRINGS for the LOWER tone, A.PIANO for the UPPER tone, and set VELOCITY MODE to Crossfade. When you play the keyboard strongly the piano will be louder, and when you play softly the strings will be louder. This allows you to control the mix of the two Tones by playing dynamics.

11 OCTAVE SHIFT

The pitch can be shifted over a range of +/−3 octaves. This is set independently for UPPER and LOWER. To make settings for UPPER, first press the UPPER button. To make settings for LOWER, first press the LOWER button.



+3 octaves



Normal

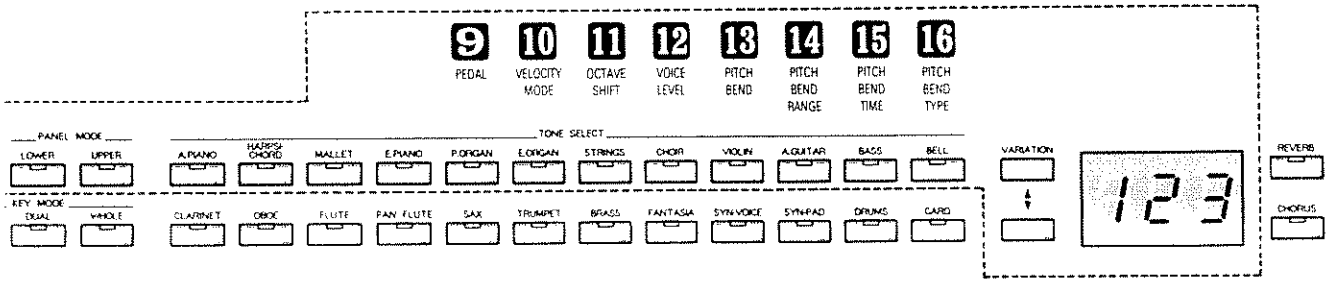
−3 octaves

These settings will be stored for each Tone and also for each Key Mode.

12 VOICE LEVEL

The level of each Tone can be set over a range of 1 ~ 10. The normal setting is 10.

This can be used to adjust the volume balance between two Tones you wish to play in the DUAL mode. In the DUAL or SPLIT mode, this can be set independently for the Tones selected for UPPER and LOWER. To make settings for the UPPER Tone, first press the UPPER button. To make settings for the LOWER Tone, first press the LOWER button.
In the WHOLE mode there is no need to specify UPPER or LOWER.



14 PITCH BEND RANGE

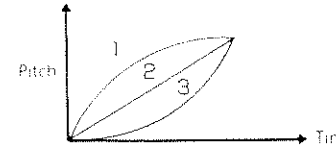
This determines the range of the Pitch Bend effect controlled by the lowest E and A keys over a range of [2] — [12] (semi tones).

15 PITCH BEND TIME

This determines the time [1] — [10] over which Pitch Bend will change the pitch.

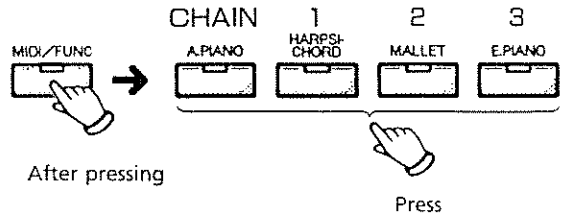
16 PITCH BEND TYPE

This determines the type of change [1] — [3] produced by Pitch Bend.



How To Hear The Demo Songs

The KR-55 has 3 built-in demo songs.



Press buttons 1, 2, or 3, and the corresponding demo song will begin playback. If you press the CHAIN button, playback will repeat all songs. To stop demo playback, press any button other than CHAIN, 1, 2, or 3.

1	"Fossils" from "Carnival of the Animals", Saint-saëns	Composed by Saint-saëns, Arranged by Kaori Kamada
2	Street N'	Composed by Mitsuru Sakaue, Copyright © 1989 Roland Corp.
3	Waltz no. 14 in B minor.	Composed by Chopin

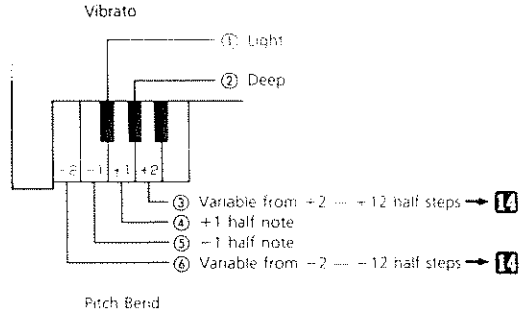
Mitsuru Sakaue

From his school days, Mr. Sakaue has been composing and arranging music for commercials and video, and is especially well known for his studio work. At present he is the chief producer of Ideos, Icn. In addition to producing commercials and FM station jingles, is active as an expert in computer music and instruments, and as an instructor in Roland Learning Centers and music schools in Japan. He is also a Roland demonstrator and product specialist, and is the composer of the Roland U-110 ROM demo song "T-Jazz#1".

Examples of how to use the Pitch Bend and Vibrato effects

<Preparation>

Select a Trumpet Tone, press the MIDI/FUNC button, and set [13] PITCH BEND to 1, [14] PITCH BEND RANGE to 12, [15] PITCH BEND TIME to 6, and [16] PITCH BEND TYPE to 1.



<Effective ways to use Vibrato>

While playing a note with the right hand, press key ① with the left hand, and light vibrato will be applied to the note being played in the right hand. When you press key ②, deep vibrato will be applied. When you press both ① and ②, even deeper vibrato will be applied. This is effective in adding life to a sustained sound.

<Effective ways to use Pitch Bend>

I. While playing a note with the right hand, press key ⑤ with the left hand, and the pitch will change smoothly down a half step. When you release key ⑤, it will return to the original pitch. To raise the pitch a half step, press key ④.
This allows you to use the same performance techniques as a trombone-player or a guitarist when bending strings.

II. Press key ⑤ with the left hand and then play a note in the right hand. Immediately release key ⑤. This will create an effect similar to the pitch change that naturally occurs when a wind instrument begins sounding.

III. While holding a note with the right hand, you can trill keys ④ and ⑤ to create a vibrato-like effect.

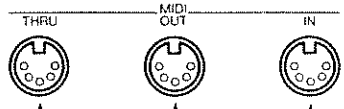
IV. While holding a note with the right hand, you can press key ③ or ⑥ to create an effect similar to portamento (where the pitch will smoothly change to meet the desired pitch).

* Try out various other settings in the <**Preparation**> section, and notice the different effects that are possible.

For those using MIDI

What is MIDI

MIDI (Musical Instrument Digital Interface) is a worldwide standard for exchanging musical data between electronic musical instruments and computers.
By connecting the KR-55 via MIDI to other electronic musical instruments, the other instruments can be controlled from the KR-55 keyboard, or the KR-55 can be controlled from other instruments.

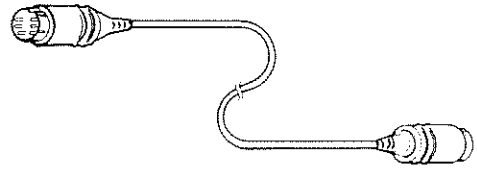


MIDI IN connector:
This connector receives MIDI messages from other MIDI devices. When using a PAD-5 or sequencer to play the KR-55, connect this terminal to the MIDI OUT or MIDI THRU of the other device.

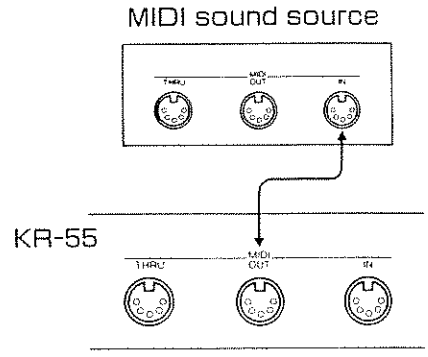
MIDI OUT connector:
This connector transmits MIDI messages to other devices. When you wish to use the KR-55 to play other MIDI sound sources, or record your playing in a MIDI sequencer, connect this terminal to the MIDI IN of the other device.

MIDI THRU connector:
This connector retransmits messages just as they are received at MIDI IN.

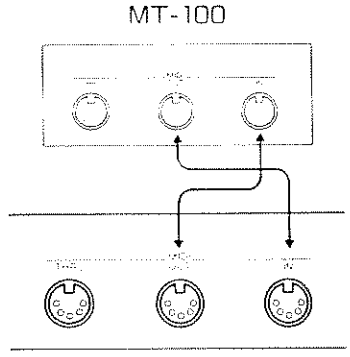
Use a MIDI cable such as shown below (MSC-15/25/50, sold separately) to connect MIDI connectors.



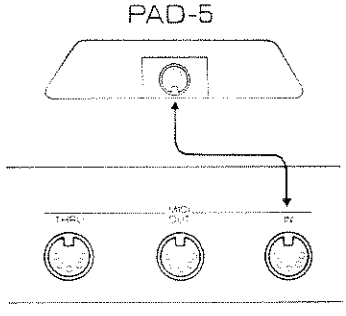
• When connecting a MIDI sound source



• When connecting an MT-100



• When connecting a PAD-5



* If you select PAD mode 1, 2, or 3 in [23], a drum part will be available in addition to the UPPER and LOWER part, and you can connect and play a PAD-5 to play drum sounds.

MIDI Setting

The procedure for making these settings is the same as explained in "Function settings". First press the MIDI/FUNC button to enter this mode (the indicator will light). Then press a TONE SELECT button corresponding to MIDI function you wish to set, select LOWER/UPPER to specify the lower or upper Tone if necessary, and use the VARIATION buttons to modify the setting.

When you finish making settings, press the MIDI/FUNC button to return to Play mode.

By setting the MIDI channel of the transmitting device to be the same as the MIDI channel of the receiving device, you can select and play sounds of one instrument from the other.

17 SEND Program Change message

By transmitting a Program Change message (MIDI data that tells the receiving device to select a memory preset), you can select sounds on another device.

To transmit on the UPPER channel press the UPPER button. To transmit on the LOWER channel press the LOWER button. Use the VARIATION buttons to select the number (1 ~ 128) you wish to transmit. Then press the SEND PROG.C (CLARINET) button once again and a Program Change message of the selected number will be transmitted.

18 Transmit Channel Settings

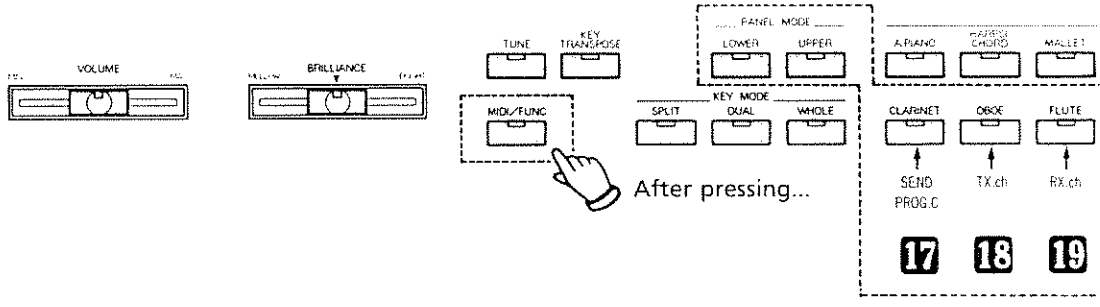
To make settings for the UPPER channel press the UPPER button. To make settings for the LOWER channel press the LOWER button. Use the VARIATION buttons to specify a channel (1 ~ 16).

* In the WHOLE mode, the channel specified for UPPER will be used as the TX.ch.

19 Receive Channel Settings

Make settings in the same way as for 18 TX.ch.

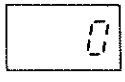
* It is not possible to set UPPER and LOWER to the same channel.
* In the WHOLE mode, the channel specified for UPPER will be used as the RX.ch.



22 MIDI mode

Select one of the following three modes.

Normal mode



This is the normal mode.

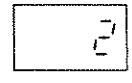
All settings of 17, 18, 19, 20, 21 and 23 will be effective.

Multi-timbre 1 mode

The seven MIDI channels 1, 11, 12, 13, 14, 15, 16 will be received (for seven parts).

These receive channels cannot be modified. This means that the setting of 19 RX.ch will not be used. To assign a Tone to each Part, set the UPPER or LOWER TX.ch to match the Part, and use the TONE SELECT buttons to select Tones.

Multi-timber 2 mode (MT-32 mode)



MIDI channels 1, 2, 3, 4, 5, 6, and 10 will be received simultaneously (for seven parts).

* Other details are the same as for Multi-timbre 1 mode.

* The transmitted and received Program Change messages will depend on the Program Change numbers the MIDI Mode. Refer to table on page 14.
* When shipped, this is set to "0".

20 Program Change Transmission when selecting Tones from the front panel

If this is turned on, a Program Change message will be transmitted each time you select a Tone, a Control Change 93 (chorus) message will be transmitted each time you switch Chorus on/off, and System Exclusive messages will be transmitted each time you make other settings.
If this is turned off, the above messages will not be transmitted.

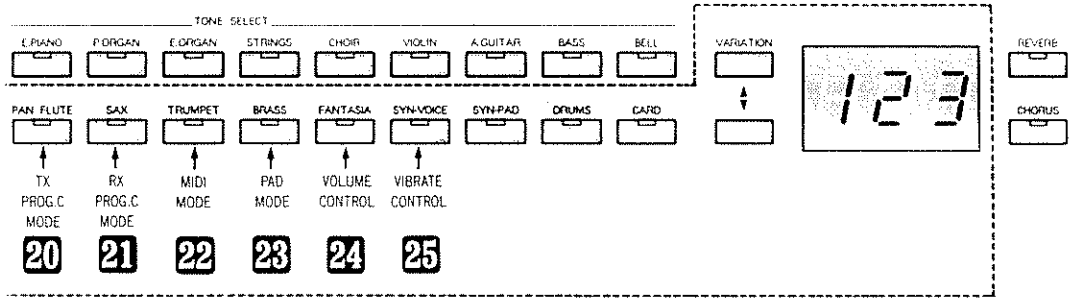
* When shipped, this is turned off.
* The relationship between the selected Tone and the transmitted Program Change Number will depend on the 22 MIDI Mode. Please refer to page 14.
* For details of the transmitted messages, refer to the MIDI Implementation Chart.

21 Program Change Reception on/off

When a Program Change message is received, this setting determines whether the message will select a Tone or be ignored.

On: receive
Off: ignore

* When shipped, this is turned on
* The setting of 22 MIDI receive MODE will determine how the received Program Change message will select internal Tones
* Please refer to page 14.



23 PAD MODE

By connecting a separately sold PAD-5 to the MIDI IN connector, you can play the DRUM Tones of the KR-55.

The Pad Mode can be set to OFF, 1, 2, or 3. When 1, 2, or 3 is selected, MIDI channel 10 will be specially received, and you can use a PAD-5 etc. to play the DRUM Tones of the KR-55. By selecting 1, 2, or 3 you can select variations of the DRUM Tones.

* This setting is effective only when MIDI MODE is set to Normal mode.
* If the UPPER or LOWER receive channel is set to 10, this PAD MODE cannot be used. If you cannot set PAD MODE to a setting other than OFF, first set the UPPER and LOWER receive channels to a setting other than 10, and then make PAD MODE settings.
* When shipped, this is set OFF.

24 VOLUME CONTROL VIA MIDI

Specify which type of MIDI message will be received to control the volume.

OFF : The volume will not be affected by incoming MIDI messages
1 : Control change 11 (expression) messages will control the volume
2 : Control change 7 (volume) messages will control the volume.
3 : Control change 2 (breath controller) messages will control the volume
4 : Channel pressure (after touch) messages will control the volume
* When shipped, this is set to 1

25 VIBRATO CONTROL VIA MIDI

Specify which type of MIDI message will be received to control vibrato.

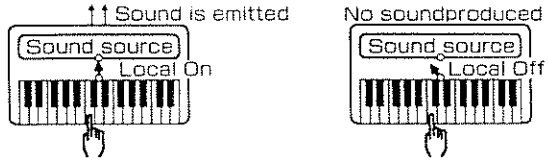
OFF Vibrato will not be affected by incoming MIDI messages
1 Control change 1 (modulation) messages will control the volume
2 Channel pressure (after touch) messages will control the volume
* When shipped, this is set to 1

LOCAL ON/OFF SWITCH

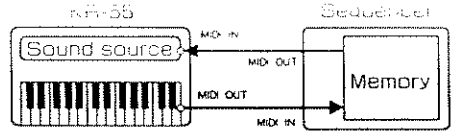
LOCAL ON/OFF can be easily set using the switch on the rear panel of the KR-55.

Local On
This is the normal mode, in which the keyboard of the KR-55 is connected to its built-in sound source.

Local Off
In this mode, the keyboard of the KR-55 will not be connected to its built-in sound source, and playing the keyboard will not produce sound.

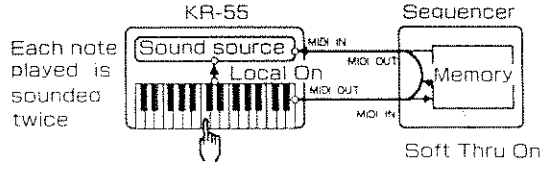


It is convenient to use local off when you wish to play only the connected MIDI sound source, or when a MIDI sequencer is connected.



When the KR-55 is connected to a MIDI sequencer as shown above, you can record a musical performance played on the KR-55, and then play back the sequencer to trigger the sound source of the KR-55.

However if the MIDI sequencer is set to "soft thru" (i.e., when MIDI messages received at MIDI IN are re-transmitted from MIDI OUT), you will need to set the KR-55 to Local Off. If Local is On when you play a note, the message from the KR-55 keyboard and the message returned from the sequencer will both be played, which can cause the sound to be produced or to be cut off unnaturally.



The sequencer manual will explain how to check and make soft thru settings.

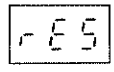
* If a MIDI cable is not connected to the MIDI IN terminal, the KR-55 will always be in Local On mode regardless of the position of the rear panel switch.

To restore the FACTORY SET data

This will restore all function and MIDI settings to the same condition as when the KR-55 was shipped.

After pressing — Press

The following message will be displayed.



Press and hold both the VARIATION (▲ and ▼) buttons for at least 5 seconds. All settings will be restored to the factory settings, and the following display will appear.

KR-55 internal Tones and PCM cards

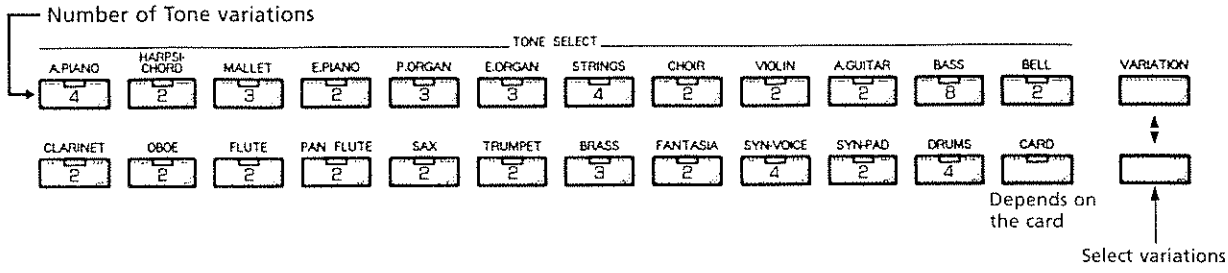
The following PCM card Tones are identical to the internal Tones of the KR-55.

SN-U110-01	: 01 – 06	HARPSI 1 – 6
	13 – 19	CHURCH 1 – 7
	20	CHURCH RVB
SN-U110-02	: 19	JINGLEBELL
SN-U110-06	: 01 – 06	OBOE 1 – 6
	12 – 17	CLARINET 1 – 6
SN-U110-08	: 01	FANTASIA
SN-U110-09	: 13 – 14	JP. BRASS 1 – 2
SN-U110-1	: 08	DOG

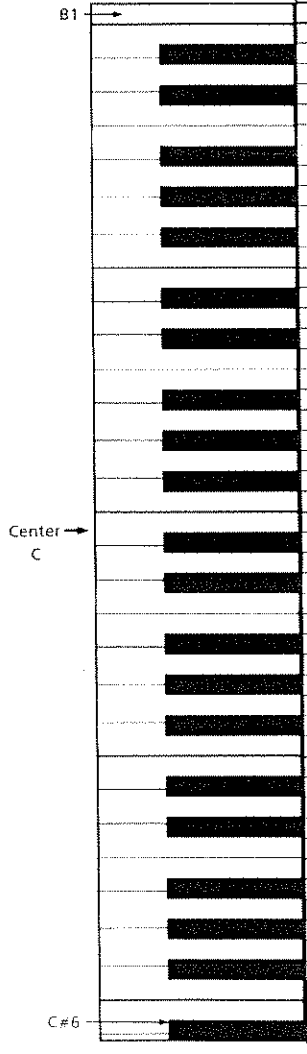
* Please be aware that;
Since the KR-55 is able to receive MIDI Local On/Off messages, the actual Local On/Off condition may differ from the physical position of the rear panel switch.

LIST OF TONES

Number of Tone variations



Keyboard/tone chart for each variation of DRUMS



Key number \ Variation	1	2	3
35	Bass drum 1	Bass drum 1	Bass drum 1
36	2	2	2
37	Rim shot	Rim shot	Rim shot
38	Snare 1	Snare 1	Dog 3
39	Hand clap	Hand clap	Hand clap
40	Snare 2	Snare 2	Snare 2
41	Bass tom 1	Bass tom 1	Sheep 2
42	Hi-hat (closed)	Hi-hat (closed)	Jingle bell 2
43	Bass tom 2	Bass tom 2	Sheep 2
44	Hi-hat (open 1)	Hi-hat (open 1)	Bird 2
45	Mid tom 1	Mid tom 1	Dog 4
46	Hi-hat (open 2)	Hi-hat (open 2)	Bird 2
47	Mid tom 2	Mid tom 2	Dog 4
48	High tom 1	High tom 1	Seal 2
49	Crash cymbal	Crash cymbal	Cuckoo 3
50	High tom 2	High tom 2	Seal 2
51	Ride cymbal	Ride cymbal	Ride cymbal
52	China cymbal	China cymbal	Cat 3
53			
54	Tambourine	Jingle bell 3	Jingle bell 3
55			
56	Cowbell	Cowbell	Cowbell
57			
58			
59			
60	Bongo (high)	Bongo (high)	Bongo (high)
61	(low)	(low)	(low)
62	Muted high conga	Muted high conga	Muted high conga
63	Conga (high)	Conga (high)	Conga (high)
64	(low)	(low)	(low)
65	Timbales (high)	Cat 4	Cat 4
66	(low)	Cat 5	Cat 5
67	Agogo (high)	Dog 5	Dog 5
68	(low)	Dog 2	Dog 2
69	Cabasa	Bird 3	Bird 3
70			
71			
72			
73			
74			
75	Claves	Claves	Claves
76	Jingle bell 1	Jingle bell 1	Jingle bell 1
77	Dog 1	Dog 1	Dog 1
78	2	2	2
79	CAT 1	CAT 1	CAT 1
80	2	2	2
81	Cuckoo 1	Cuckoo 1	Cuckoo 1
82	2	2	2
83	Bird 1	Bird 1	Bird 1
84	Sheep 1	Sheep 1	Sheep 1
85	Seal 1	Seal 1	Seal 1

● **The range over which a Tone will sound**

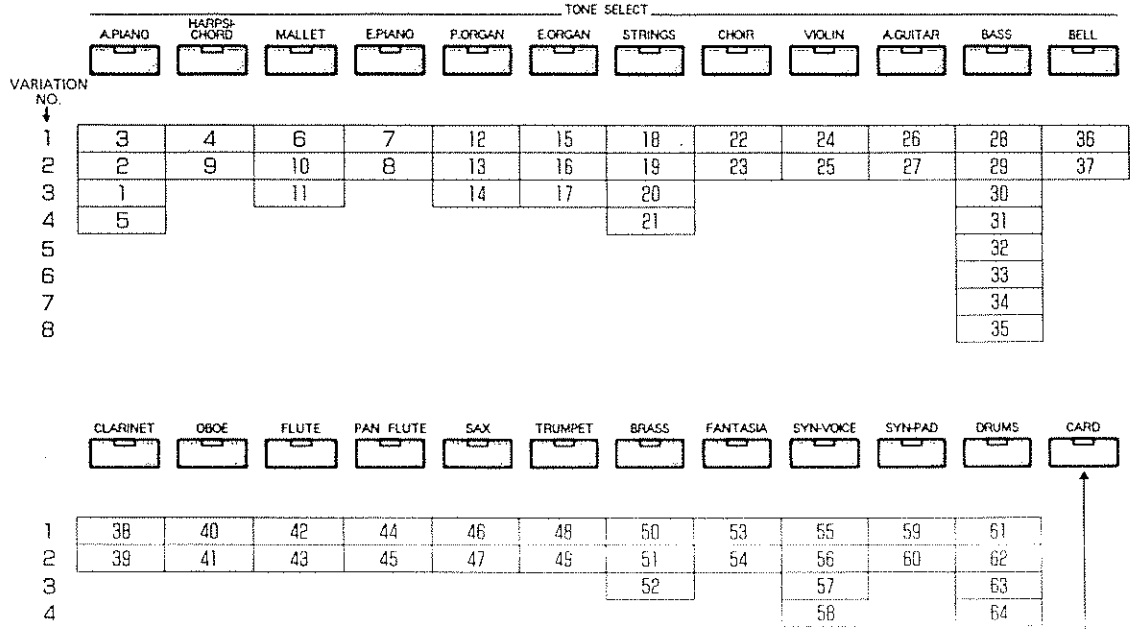
Some Tones have an upper limit beyond which they can not sound. If you attempt to play a note above this limit, the highest octave will be repeated.

Accoustic instruments have natural limits to the range of pitches they can produce, and these limits were observed when creating the sounds of the KR-55.

TONES AND PROGRAM CHANGE NUMBERS

When MIDI mode is Normal or Multi-timbre 1

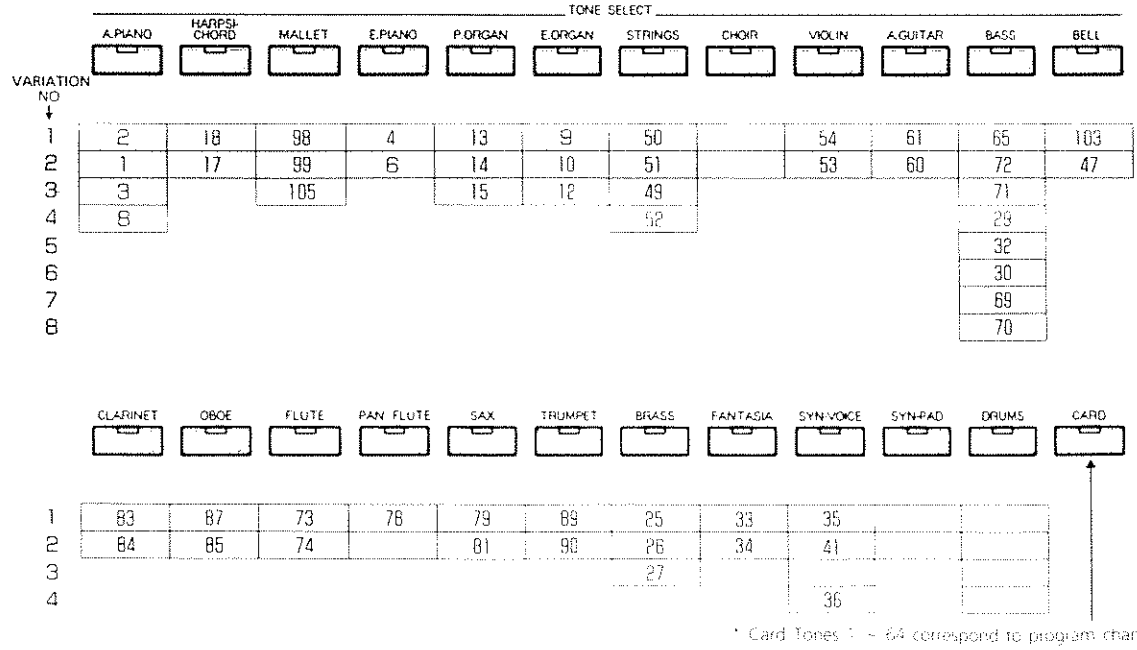
Progam Change numbers transmitted and received



* Card Tones 1 ~ 64 correspond to program change numbers 65 ~ 128. It is not possible to select card Tones 65 or above using Program Change messages.

When MIDI mode is Multi-timbre 2

Program Change numbers transmitted when a Tone is selected



* Card Tones 1 ~ 64 correspond to program change numbers 65 ~ 128. It is not possible to select card Tones 65 or above using Program Change messages.

When MIDI mode is Multi-timbre 2

The Tone selected when a Program Change is received

1	A. PIANO 2
2	A. PIANO 1
3	A. PIANO 3
4	E. PIANO 1
5	E. PIANO 1
6	E. PIANO 2
7	E. PIANO 2
8	A. PIANO 4
9	E. ORGAN 1
10	E. ORGAN 2
11	E. ORGAN 2
12	E. ORGAN 3
13	P. ORGAN 1
14	P. ORGAN 2
15	P. ORGAN 3
16	ACCORDION
17	HARPSICHORD 2
18	HARPSICHORD 1
19	HARPSICHORD 1
20	BASS 8
21	BASS 8
22	BASS 8
23	E. PIANO 1
24	E. PIANO 1
25	BRASS 1
26	BRASS 2
27	BRASS 3
28	BRASS 3
29	BASS 4
30	BASS 6
31	BASS 2
32	BASS 5
33	FANTASIA 1
34	FANTASIA 2
35	SYN VOICE 1
36	SYN VOICE 4
37	
38	STRINGS 4
39	FANTASIA 1
40	FUNNY·VOX
41	FANTASIA 2
42	
43	OBOE 1
44	
45	DOCTOR·SOLO
46	CLARINET 1
47	BELL 2
48	
49	STRINGS 3
50	STRINGS 1
51	STRINGS 2
52	STRINGS 4
53	VIOLIN 2
54	VIOLIN 1
55	VIOLIN 2
56	VIOLIN 1
57	VIOLIN 1
58	A. GUITAR 1

59	A. GUITAR 1
60	A. GUITAR 2
61	A. GUITAR 1
62	A. GUITAR 2
63	BASS 7
64	SITAR
65	BASS 1
66	BASS 1
67	BASS 2
68	BASS 2
69	BASS 7
70	BASS 8
71	BASS 3
72	BASS 2
73	FLUTE 1
74	FLUTE 2
75	FLUTE 1
76	FLUTE 2
77	PAN FLUTE 1
78	PAN FLUTE 1
79	SAX 1
80	SAX 1
81	SAX 2
82	SAX 2
83	CLARINET 1
84	CLARINET 2
85	OBOE 2
86	OBOE 1
87	OBOE 1
88	ACCORDION
89	TRUMPET 1
90	TRUMPET 2
91	TRUMPET 1
92	TRUMPET 2
93	TRUMPET 2
94	TRUMPET 2
95	TRUMPET 1
96	BRASS 1
97	BRASS 2
98	MALLET 1
99	MALLET 2
100	MALLET 2
101	BELL 2
102	MALLET 1
103	BELL 1
104	MALLET 3
105	MALLET 3
106	A.GUITAR 1
107	
108	PAN FLUTE 1
109	PAN FLUTE 1
110	PAN FLUTE 1
111	PAN FLUTE 1
112	PAN FLUTE 1
113	
114	
115	
116	

Roland Exclusive Messages

1 Data Format for Exclusive Messages

Roland's MIDI implementation uses the following data format for all exclusive messages (type IV):

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
CMD	Command ID
[BODY]	Main data
F7H	End of exclusive

= MIDI status : F0H, F7H

An exclusive message must be flanked by a pair of status codes, starting with a Manufacturer-ID immediately after F0H (MIDI version1.0).

= 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.

= Model ID : 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:

01H
02H
03H
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:

01H
02H
03H
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 Command-ID.

2 Address mapped Data Transfer

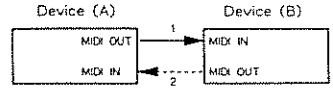
Address mapping is a technique for transferring messages conforming to the data format given in Section 1. It assigns a series of memory-resident records-waveform and tone data, switch status, and parameters, for example-to specific locations in a machine-dependent address space, thereby allowing access to data residing at the address a message specifies.

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 device status.

Connection Diagram

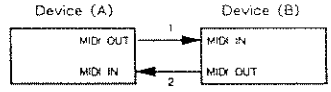


Connection at point 2 is essential for "Request data" procedures. (See Section 3.)

= Handshake-transfer procedure (See Section 4 for details.)

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.

Connection 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 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
aaH ⋮ ⋮	Address MSB ⋮ ⋮ LSB
ssH ⋮ ⋮	Size MSB ⋮ ⋮ LSB
sum	Check sum
F7H	End of exclusive

* 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.

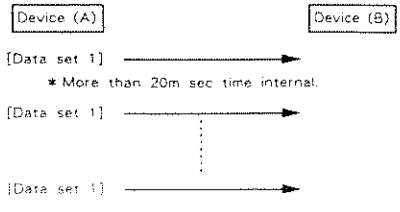
The MIDI standards inhibit non-real time messages from interrupting an exclusive one. This fact is inconvenient for the devices that support a "soft through" mechanism. To maintain compatibility with such devices, Roland has limited the DT1 to 256 bytes so that an excessively long message is sent out in separate segments.

Byte	Description
F0H	Exclusive
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
12H	Command ID
aaH	Address MSB
:	:
	LSB
ddH	Data
:	:
sum	Check sum
F7H	End of exclusive

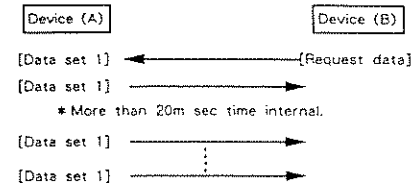
* A DT1 message is capable of providing only the valid data among those specified by an RQ1 message.
* Some models are subject to limitations in data format used for a single transaction. Requested data, for example, may have a limit in length or must be divided into predetermined address fields before 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 DT1 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.



4. Handshake Transfer Procedure

Handshaking is an interactive process where two devices exchange error checking signals before a message transaction takes place, thereby increasing data reliability. Unlike one way transfer that inserts a pause between message transactions, handshake transfer allows much speedier transactions because data transfer starts once the receiving device returns a ready signal.

When it comes to handling large amounts of data-sampler waveforms and synthesizer tones over the entire range, for example-across a MIDI interface, handshaking transfer is more efficient than one way transfer.

Types of Messages

Message	Command ID
Want to send data	WSD (40H)
Request data	RQD (41H)
Data set	DAT (42H)
Acknowledge	ACK (43H)
End of data	EOD (45H)
Communication error	ERR (4EH)
Rejection	RJC (4FH)

= Want to send data : WSD (40H)

This message is sent out when data must be sent to a device at the other end of the interface. It contains data for the address and size that specify designation and length, respectively, of the data to be sent.

On receiving a WSD message, the remote device checks its memory for the specified data address and size which will satisfy the request. If it finds them and is ready for communication, the device will return an "Acknowledge (ACK)" message.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
40H	Command ID
aaH	Address MSB
:	:
	LSB
ssH	Size MSB
:	:
	LSB
sum	Check sum
F7H	End of exclusive

Otherwise, it will return a "Rejection (RJC)" message.

* The size of the data to be sent does not indicate the number of bytes that make up a "Data set (DAT)" message, but represents the address fields where the data should reside.
* 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.

≠Request data : RQD (41H)

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 RQD message, the remote device checks its memory for the data address and size which satisfy the request. If it finds them and is ready for communication, the device will transmit a "Data set (DAT)" message, which contains the requested data. Otherwise, it will return a "Rejection (RJC)" message.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
41H	Command ID
aaH ⋮	Address MSB ⋮ LSB
ssH ⋮	Size MSB ⋮ LSB
sum	Check sum
F7H	End of exclusive

* The size of the requested data does not indicate the number of bytes that make up a "Data set (DAT)" 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 : DAT (42H)

This message corresponds to the actual data transfer process. Because every byte in the data is assigned a unique address, the message can convey the starting address of one or more data as well as a series of data formatted in an address dependent order.

Although the MIDI standards inhibit non-real time messages from interrupting an exclusive one, some devices support a "soft-through" mechanism for such interrupts. To maintain compatibility with such devices, Roland has limited the DAT to 256 bytes so that an excessively long message is sent out in separate segments.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
42H	Command ID
aaH ⋮	Address MSB ⋮ LSB
ddH ⋮	Data ⋮
sum	Check sum
F7H	End of exclusive

* A DAT message is capable of providing only the valid data among those specified by an RQD or WSD 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.

≠Acknowledge : ACK (43H)

This message is sent out when no error was detected on reception of a WSD, DAT, "End of data (EOD)", or some other message and a requested setup or action is complete. Unless it receives an ACK message, the device at the other end will not proceed to the next operation.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
43H	Command ID
F7H	End of exclusive

≠End of data : EOD (45H)

This message is sent out to inform a remote device of the end of a message. Communication, however, will not come to an end unless the remote device returns an ACK message even though an EOD message was transmitted.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
45H	Command ID
F7H	End of exclusive

≠Communications error : ERR (4EH)

This message warns the remote device of a communications fault encountered during message transmission due, for example, to a checksum error. An ERR message may be replaced with a "Rejection (RJC)" one, which terminates the current message transaction in midstream.

When it receives an ERR message, the sending device may either attempt to send out the last message a second time or terminate communication by sending out an RJC message.

Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
4EH	Command ID
F7H	End of exclusive

≠Rejection RJC (4FH)

This message is sent out when there is a need to terminate communication by overriding the current message. An RJC message will be triggered when :

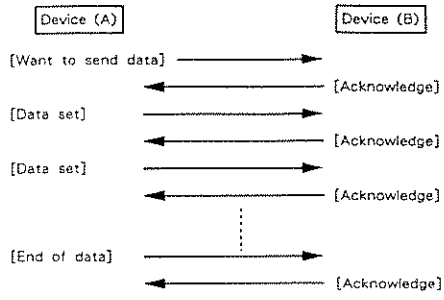
- a WSD or RQD message has specified an illegal data address or size.
- the device is not ready for communication.
- an illegal number of addresses or data has been detected.
- data transfer has been terminated by an operator.
- a communications error has occurred.

An ERR message may be sent out by a device on either side of the interface. Communication must be terminated immediately when either side triggers an ERR message.

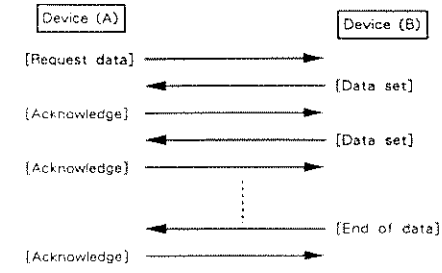
Byte	Description
F0H	Exclusive status
41H	Manufacturer ID (Roland)
DEV	Device ID
MDL	Model ID
4FH	Command ID
F7H	End of exclusive

≠Example of Message Transactions

● Data transfer from device (A) to device (B).

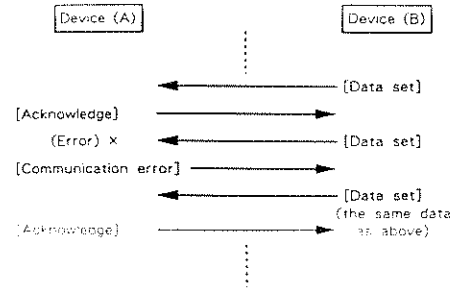


● Device (A) requests and receives data from device (B).

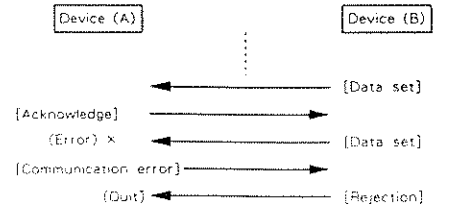


● Error occurs while device (A) is receiving data from device (B).

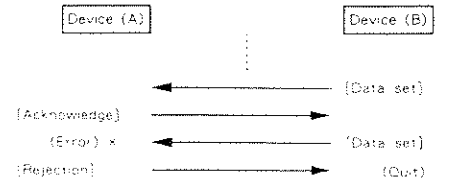
1) Data transfer from device (A) to device (B).



2) Device (B) rejects the data re-transmitted, and quits data transfer.



3) Device (A) immediately quits data transfer.



MIDI Implementation

1. RECOGNIZED RECEIVE DATA

■ Channel Voice Message

● Note Off

Status	Second	Third
8nH	kkH	vvH
9nH	kkH	00H

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
kk=Note number :00H - 7FH (0 - 127)
vv=Velocity :00H - 7FH (0 - 127)

* Velocity value is ignored.

● Note On

Status	Second	Third
9nH	kkH	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
kk=Note number :00H - 7FH (0 - 127)
vv=Velocity :01H - 7FH (1 - 127)

* The transpose function does not affect the recognized note numbers.

● Control Change

○ Modulation depth

Status	Second	Third
BnH	01H	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H - 7FH (0 - 127)

* The VIBRATO CONTROL is set to 1(Control change 1) by panel, then this message is recognized as vibrato depth.

○ Breath Control

Status	Second	Third
BnH	02H	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H - 7FH (0 - 127)

* The VOLUME CONTROL is set to 3(Control change 2) by panel, then this message is recognized to volume.

○ Main volume

Status	Second	Third
BnH	07H	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H - 7FH (0 - 127)

* The VOLUME CONTROL is set to 2(Control change 7) by panel, then this message is recognized to volume.

○ Pan

Status	Second	Third
BnH	0AH	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H - 7FH (0 - 127) 0=Left 64=Center 127=Right

○ Expression

Status	Second	Third
BnH	0BH	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H - 7FH (0 - 127)

* The VOLUME CONTROL is set to 11(Control change 11) by panel, then this message is recognized to volume.

○ Hold 1

Status	Second	Third
BnH	40H	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H - 7FH (0 - 127) 0-63=OFF 64-127=ON

○ Sostenuto

Status	Second	Third
BnH	42H	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H - 7FH (0 - 127) 0-63=OFF 64-127=ON

○ Chorus

Status	Second	Third
BnH	5DH	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H - 7FH (0 - 127) 0-63=OFF 64-127=ON

○ Data Entry MSB

Status	Second	Third
BnH	06H	mmH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
mm=MSB of the parameter's value specified by RPN

○ Data Entry LSB

Status	Second	Third
BnH	26H	llH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
ll=LSB of the parameter's value specified by RPN

○ RPN LSB

Status	Second	Third
BnH	64H	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=LSB of the parameter number controlled by RPN

○ RPN MSB

Status	Second	Third
BnH	65H	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=MSB of the parameter number controlled by RPN

* Master Fine Tune and Pitch Bend Sensitivity are controllable by RPN on FB-55.

RPN MSB	RPN LSB	Data Entry MSB	Data Entry LSB	Comments
00H	00H	mmH	llH	Pitch Bend Sensitivity
		00H	ignored	ignored
		01H	ignored	ignored
		02H	ignored	200 cent
		.	ignored	
		0CH	ignored	1200 cent
		0DH	ignored	ignored
		.	ignored	ignored
		7FH	ignored	ignored

RPN		Data Entry		
MSB	LSB	MSB	LSB	Comments
00H	01H	mmH	llH	Master Fine Tune
		20H	00H	-50 cent
		.		
		.		
		40H	00H	0 cent (A4=440.0Hz)
		.		
		.		
		60H	00H	+50 cent

● Program Change

Status	Second
CnH	ppH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
pp=Program change number :00H - 7FH (0 - 127)

* The relation of between the Program change number and Tone is different in each MIDI modes. (Refer to Section 3.)

● Channel Pressure

Status	Second
DnH	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Pressure Value :00H - 7FH (0 - 127)

* The VOLUME CONTROL is set to 1(Channel pressure) by panel, then this message is recognized to volume.
* The VIBRATO CONTROL is set to 2(Channel pressure), then this message is recognized to vibrato depth.

● Pitch Bend Change

Status	Second	Third
EnH	llH	mmH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
ll=Pitch bend change LSB :00H - 7FH (0 - 127)
mm=Pitch bend change MSB :00H - 7FH (0 - 127)

■ Channel Mode Message

● Reset All controllers

Status	Second	Third
BnH	79H	00H

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16

* When Reset All controllers is recognized, each of the controller is set as follows.

Controller	Value
Modulation	00 (0) MIN
Breath Control	7F (127) MAX
Volume	7FH (127) MAX
Pan	40H (64) center
Expression	7FH (127) MAX
Hold 1	0H (0) OFF
Sostenuto	0H (0) OFF
Channel Pressure	0H (0) MIN
Pitch Bend	LSB - 0H (0), MSB 40H (64) center

● Local Control

Status	Second	Third
BnH	7AH	vvH

n=MIDI Channel :0H FH (0 15) 0=ch.1 15=ch.16
vv=Value 0H 7FH (0 127) 0:OFF 64:127:ON

* When the local OFF is recognized, all the internal notes which have been turned on only by internal keyboard are turned off.
* When the local OFF is recognized, UPPER and LOWER are set to local OFF at the same time.

● All Notes Off

Status	Second	Third
BnH	7BH	00H

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16

* When the All Notes Off is recognized, all the notes which have been turned on only by note on messages are turned off.
However, if the hold-1 on message has been recognized, these notes will not be turned off until the hold-1 off message is received.

● OMNI OFF

Status	Second	Third
BnH	7CH	00H

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16

* The OMNI OFF message is also recognized as All Notes Off. * 1

● OMNI ON

Status	Second	Third
BnH	7DH	00H

n=MIDI Channel :0H FH (0 15) 0=ch.1 15=ch.16

* The OMNI OFF message is also recognized as All Notes Off. * 1

● MONO

Status	Second	Third
BnH	7EH	mmH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16

* The OMNI OFF message is also recognized as All Notes Off. * 1

● POLY

Status	Second	Third
BnH	7FH	00H

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16

* The OMNI OFF message is also recognized as All Notes Off. * 1

Note:
* 1 KR-55 is always set to MODE 3(OMNI OFF, POLY).

■ System Realtime Message

● Active Sensing

Status
FEH

* Once receiving this message, the MIDI transmitting unit starts to send status or data in succession within 300 msec intervals. If the unit fails to receive a message within 300 msec after previous one, it judges there is a problem somewhere in MIDI path, muting the current sound and setting each of controllers as below, then stopping 300 msec interval monitoring of incoming signal.

■ System Exclusive Message

Status	Data byte
F0H	iiH,ddH,... ,eeH
F7H	

F0H :System exclusive
ii=ID Number :41H (65)
dd,...,ee=Data :00H-7FH (0-127)
F7H :EOX (End of Exclusive/System command)

* You can set the MIDI Mode, Partial reserve number and etc. by the system Exclusive Message.
* Refer to "Detail Exclusive Message" and section 4.

2. TRANSMITTED DATA

■ Channel voice message

● Note off

Status	Second	Third
8nH	kkH	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
kk=Note number :16H - 6CH (22 - 108)
vv=Velocity :01H - 7FH (1 - 127)

● Note on

Status	Second	Third
9nH	kkH	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
kk=Note number :16H - 6CH (22 - 106)
vv=Velocity :01H - 7FH (1 - 127)

* The range may be changed by transposition.
* The transpose value can be set with in the range of -6 to +5 by panel operation.

The following chart shows the relation between the transmitted note range and transposed value.

Transpose Value	Transmitted note range
-6	22-97
-5	23-98
-4	24-99
-3	25-100
-2	26-101
-1	27-102
0	28-103
+1	29-104
+2	30-105
+3	31-106
+4	32-107
+5	33-108

● Control Change

○ Modulation Depth

Status	Second	Third
BnH	01H	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H - 60H (0 - 96)

* The PITCH BEND is set to 1 or 2 by panel, then when operate the key which assigned to Vibrato, this message will be transmitted.

○ Pan

Status	Second	Third
BnH	0AH	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H - 7FH (0 - 127)

* When the PEDAL is set to 4(Pan) by panel, this message will be sent by operating the Pedal(Roland EV-5).

○ Expression

Status	Second	Third
BnH	0BH	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H - 7FH (0 - 127)

* The PEDAL is set to 3(Expression) by panel, then when operate the Pedal (Roland EV-5) this message will be transmitted.

○ Hold 1

Status	Second	Third
BnH	40H	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H, 7FH (0, 127) 0=OFF 127=ON

* The PEDAL is set to 1(Damper) by panel, then when operate the Pedal, this message will be transmitted.

○ Sostenuto

Status	Second	Third
BnH	42H	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H , 7FH (0 , 127) 0=OFF 127=ON

* The PEDAL is set to 2(Sostenuto) by panel, then when operate the Pedal, this message will be transmitted.

○ Chorus

Status	Second	Third
BnH	5DH	vvH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
vv=Control Value :00H, 7FH (0, 127) 0=OFF 127=ON

* The TX PROG.C MODE is set to ON by panel, then when operate the CHORUS button, On or Off message will be transmitted.

● Program change

Status	Second
CnH	ppH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
pp=Program change number :00H - 7FH (0 - 127)

* This massage can be transmitted by panel operation of SEND PROG.C.
* The TX PROG.C MODE is set to ON by panel, then the program change message can be sent by only pressing Tone Select button. Transmitted program change number is different from each MIDI mode. Refer to Section 3 (MIDI mode).

● Pitch bend change

Status	Second	Third
EnH	llH	mmH

n=MIDI Channel :0H - FH (0 - 15) 0=ch.1 15=ch.16
ll=Pitch bend change LSB :00H - 7FH (0 - 127)
mm=Pitch bend change MSB :00H - 7FH (0 - 127)

* The PITCH BEND is set to 1 or 2 by panel, when operate the key assigned to Pitch Bend, this message will be transmitted.
* If the KEY MODE is DUAL or SPLIT, sent by both UPPER and LOWER channel. If the WHOLE mode selected, sent by only UPPER channel.

■ System realtime message

● Active sensing

Status
FEH

* Active sensing transmits within the interval of 300 msec.

■ System exclusive message

Status	Data byte
F0H	iiH, 32H, ..., ddH
F7H	

F0H System exclusive
ii ID Number 41H (65)
dd, ..., ee Data 00H-7FH (0-127)
F7H EOX (End of Exclusive System common)

* The TX PROG.C MODE is set to ON by panel, then when operate as [illegible] Parameter base address table [illegible] Partial Reserved by panel, this message will be transmitted.

3. MIDI MODE

KR-55 has three MIDI modes; Normal mode, Multi timbre 1 mode, and Multi timbre 2 mode. It's available three KEY modes (WHOLE, DUAL, and SPLIT) in which MIDI mode. When the both of Multi timbre mode, the setting of receive channel of UPPER and LOWER is invalidate.

■ Normal mode

Normal mode is the basic MIDI mode.

The KEY MODE is set to DUAL or SPLIT, then both UPPER and LOWER has different receive channel(transmit channel) in respectively. The WHOLE selected, receive channel(transmit channel) will use the UPPER channel.

The following chart shows the relation between the Program Change number and tone.

Program change number	tone
0	A.PIANO 3
1	A.PIANO 2
2	A.PIANO 1
3	HARPSICHORD 1
4	A.PIANO 4
5	MALLET 1
6	E.PIANO 1
7	E.PIANO 2
8	HARPSICHORD 2
9	MALLET 2
10	MALLET 3
11	P.ORGAN 1
12	P.ORGAN 2
13	P.ORGAN 3
14	E.ORGAN 1
15	E.ORGAN 2
16	E.ORGAN 3
17	STRINGS 1
18	STRINGS 2
19	STRINGS 3
20	STRINGS 4
21	CHOIR 1
22	CHOIR 2
23	VIOLIN 1
24	VIOLIN 2
25	A.GUITAR 1
26	A.GUITAR 2
27	BASS 1
28	BASS 2
29	BASS 3
30	BASS 4
31	BASS 5
32	BASS 6
33	BASS 7
34	BASS 8
35	BELL 1
36	BELL 2
37	CLARINET 1
38	CLARINET 2
39	OBOE 1
40	OBOE 2
41	FLUTE 1
42	FLUTE 2
43	PAN FLUTE 1
44	PAN FLUTE 2
45	SAX 1
46	SAX 2
47	TRUMPET 1
48	TRUMPET 2
49	BRASS 1
50	BRASS 2
51	BRASS 3
52	FANTASIA 1
53	FANTASIA 2
54	SYN VOICE 1
55	SYN VOICE 2
56	SYN VOICE 3
57	SYN VOICE 4
58	SYN_PAD 1
59	SYN_PAD 2
60	DRUMS 1
61	DRUMS 2
62	DRUMS 3
63	DRUMS 4

* The number from 64 to 127 use to select the tones of PCM CARD. You can select the 64 tones of PCM CARD by sending Program Change messages. When you use the PCM CARD which contains more than 65 tones, you can select the number from 64 to 127 by sending the System Exclusive messages.
* The RX PROG.C MODE is set to OFF by manual, then Program Change message is ignored.

■ Multi timbre 1 mode

In Multi timbre 1 mode, there are 7 parts corresponding to receive channel 1, 11, 12, 13, 14, 15 and 16.
These parts can have specific tones assigned to them.
If transmit channel not set 1, 11, 12, 13, 14, 15 and 16, the KR-55's keyboard can not to be connected to the part.
Each part's tone can change by receive the Program Change Message. The relation between the Program Change number and tone are the same as Normal mode. Tone setting of each part is nonvolatile.
Each part's Partial reserve number can change by receive the System Exclusive Message. The maximum of total partial reserve count are 30.

■ Multi timbre 2 mode

This mode is considered of compatibility from Roland MT-32's receive channel and program change number.

* The explanation as follows is the different point from Multi timbre 1 mode.

In this mode, there are 7 independent parts, corresponding to receive channel 1, 2, 3, 4, 5, 6 and 10.
The tone of the receive channel 10 is always DRUMS1. The program change message are ignored this channel.

The following chart shows the relation between the Program Change number and tone.

Program change number	tone
0*	A.PIANO 2
1*	A.PIANO 1
2*	A.PIANO 3
3*	E.PIANO 1
4	E.PIANO 1
5*	E.PIANO 2
6	E.PIANO 2
7*	A.PIANO 4
8*	E.ORGAN 1
9*	E.ORGAN 2
10	E.ORGAN 2
11*	E.ORGAN 3
12*	P.ORGAN 1
13*	P.ORGAN 2
14*	P.ORGAN 3
15	ACCORDION
16*	HARPSICHORD 2
17*	HARPSICHORD 1
18	HARPSICHORD 1
19	BASS 8
20	BASS 8
21	BASS 8
22	E.PIANO 1
23	E.PIANO 1
24*	BRASS 1
25*	BRASS 2
26*	BRASS 3
27	BRASS 3
28*	BASS 4
29*	BASS 7
30	BASS 5
31*	BASS 6
32*	FANTASIA 1
33*	FANTASIA 2
34*	SYN VOICE 1
35*	SYN VOICE 4
36	
37	STRINGS 4
38	FANTASIA 1
39	BRASS 1/3
40	FANTASIA 1
41	
42	CHOIR
43	
44	ORCHESTRA
45	CLARINET
46*	REED 1
47	
48*	PIANO 1
49*	PIANO 1
50*	PIANO 1
51*	PIANO 1
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	

55	VIOLIN 1
56	VIOLIN 1
57	A.GUITAR 1
58	A.GUITAR 1
59*	A.GUITAR 2
60*	A.GUITAR 1
61	A.GUITAR 2
62	BASS 7
63	SITAR
64*	BASS 1
65	BASS 1
66	BASS 2
67	BASS 2
68*	BASS 7
69*	BASS 8
70*	BASS 3
71*	BASS 2
72*	FLUTE 1
73*	FLUTE 2
74	FLUTE 1
75	FLUTE 2
76	PAN FLUTE 1
77*	PAN FLUTE 1
78*	SAX 1
79	SAX 1
80*	SAX 2
81	SAX 2
82*	CLARINET 1
83*	CLARINET 2
84*	OBOE 2
85	OBOE 1
86*	OBOE 1
87	ACCORDION
88*	TRUMPET 1
89*	TRUMPET 2
90	TRUMPET 1
91	TRUMPET 2
92	TRUMPET 2
93	TRUMPET 2
94	TRUMPET 1
95	BRASS 1
96	BRASS 2
97*	MALLET 1
98*	MALLET 2
99	MALLET 2
100	BELL 2
101	MALLET 1
102*	BELL 1
103	MALLET 3
104*	MALLET 3
105	A.GUITAR 1
106	
107	PAN FLUTE 1
108	PAN FLUTE 1
109	PAN FLUTE 1
110	PAN FLUTE 1
111	PAN FLUTE 1
112	
113	
114	
115	
116	
117	
118	
119	
120	
121	
122	
123	
124	
125	
126	
127	

*The PA PROG.C MODE is set to OFF by panel, then Program Change message is ignored.
* When the recognized the program change number which has no tone name, the key event messages are ignored.
* The TX PROG.C MODE is set to ON by panel, then the program change number marked "*" can be sent to only pressing Tone Select button.
* The program change message can not be sent by pressing tone select button which no listed tone name, in the TX PROG.C MODE is set to ON by panel. Also it can not be sent by recreative of select the CARD's tone.

■ At first, the tone and partial reserve number are set in each part as follows.

Part # (Channel)	Tone	Partial reserve number
1 (1) (1)	PIANO 1	13
2(11) (2)	BASS 4	2
3(12) (3)	STRINGS 3	4
4(13) (4)	BRASS 1	3
5(14) (5)	SAX 1	2
6(15) (6)	FANTASIA 1	2
7(16)(10)	DRUMS 1	4

■ The following chart shows the relation between the tone and use partial number. (For all MIDI modes.)

Tone	Partial number
A.PIANO 1	2
A.PIANO 2	2
A.PIANO 3	1
A.PIANO 4	2
HARPSICHORD 1	1
HARPSICHORD 2	2
MALLET 1	1
MALLET 2	2
MALLET 3	1
E.PIANO 1	2
E.PIANO 2	2
P.ORGAN 1	2
P.ORGAN 2	2
P.ORGAN 3	2
E.ORGAN 1	2
E.ORGAN 2	2
E.ORGAN 3	1
STRINGS 1	1
STRINGS 2	2
STRINGS 3	2
STRINGS 4	1
CHOIR 1	1
CHOIR 2	2
VIOLIN 1	1
VIOLIN 2	1
A.GUITAR 1	1
A.GUITAR 2	2
BASS 1 (ACOUSTIC)	2
BASS 2 (FRETLESS)	1
BASS 3 (FRETLESS)	2
BASS 4 (SYNTH')	2
BASS 5 (SYNTH')	1
BASS 6 (SYNTH')	1
BASS 7 (SLAP)	1
BASS 8 (SLAP)	2
BELL 1	1
BELL 2	1
CLARINET 1	1
CLARINET 2	1
OBOE 1	1
OBOE 2	1
FLUTE 1	1
FLUTE 2	2
PAN FLUTE 1	2
PAN FLUTE 2	2
SAX 1	1
SAX 2	1
TRUMPET 1	1
TRUMPET 2	2
BRASS 1	1
BRASS 2	2
BRASS 3	2
FANTASIA 1	2
FANTASIA 2	2
SYN VOICE 1	1
SYN VOICE 2	2
SYN VOICE 3	2
SYN VOICE 4	2
SYN PAD 1	3
SYN PAD 2	3
DRUMS 1	1
DRUMS 2	1
DRUMS 3	1
DRUMS 4	1

4. EXCLUSIVE COMMUNICATION

You can set the parameter by the Exclusive Communication.
The Partial Reserve massage recognized only Multi timbre mode.
The PAD mode message recognized only Normal Mode.

The KR-55's Model ID is 1AH and Device ID is 10H.

■ One-way transfer procedure

● Data set 1 DT1 (12H)

Byte	Description	
F0H	Exclusive Status	
41H	Manufacturer ID	(Roland)
10H	Device ID	
1AH	Model ID	(KR-55)
12H	Command ID	(DT1)
aaH	Address MSB	
bbH	Address LSB	
ddH	Data	
:	:	
ddH	Data	
sum	Check Sum	
F7H	EOX	(End of exclusive)

5. PARAMETER ADDRESS MAP

(Model ID=1AH)

The address is expressed by 7bit hexadecimal number.

Address	MSB	LSB
Binary	0aaa aaaa	0bbb bbbb
Hexadecimal	AA	BB

■ Parameter base address

Start address	Description
00 1E	0000 00dd	MIDI Mode 0 : Normal Mode 1 : Multi Timbre 1 2 : Multi Timbre 2
00 1F	0000 00dd	PAD Mode 0 : off 1 : Variation 1 2 : Variation 2 3 : Variation 3
00 20	0000 00dd	Key Mode 0 : Whole Mode 1 : Dual Mode 2 : Split Mode
00 21	0000 000d	Velocity Mode 0 : Normal Mode 1 : Reverse Mode
00 22	0ddd dddd	Split Point 28 - 103 (Key number) *1
00 23	0000 00dd	Pitch Bend Switch 0 : off 1 : 1 on 2 : 2 on
00 24	0000 dddd	Pitch Bend Range 2 - 12 : Range (x100cent)
00 25	0000 dddd	Reverb Variation 0 : off 1 - 8 : Reverb Variation
00 26	0000 dddd	Chorus Variation 1 - 8 : Chorus Variation
00 27	0000 0ddd	Pedal Mode (UPPER) 0 : Not Assign 1 : Damper Pedal (Hold 1) 2 : Sostenuto Pedal (Sostenuto) 3 : Expression Pedal (Expression) 4 : Pan (Pan)
00 28	0000 0ddd	Pedal Mode (LOWER) 0 : Not Assign 1 : Damper Pedal (Hold 1) 2 : Sostenuto Pedal (Sostenuto) 3 : Expression Pedal (Expression) 4 : Pan (Pan)
00 29	0000 0ddd	Volume Control 0 : OFF 1 : Control Change 11 (Expression) 2 : Control Change 7 (Volume) 3 : Control Change 2 (Breath) 4 : Channel Pressure
00 2A	0000 00dd	Vibrato Control 0 : OFF 1 : Control Change 1 (Modulation) 2 : Channel Pressure
00 2B	0xxx xxxx	Ignored
00 2C	0xxx xxxx	Ignored
00 2D	0xxx xxxx	Ignored
00 2E	0xxx xxxx	Ignored
00 2F	0xxx xxxx	Ignored
00 30	00dd dddd	Expanded Program Change for ch.1
00 31	00dd dddd	Expanded Program Change for ch.2
00 32	00dd dddd	Expanded Program Change for ch.3
00 33	00dd dddd	Expanded Program Change for ch.4
00 34	00dd dddd	Expanded Program Change for ch.5
00 35	00dd dddd	Expanded Program Change for ch.6
00 36	00dd dddd	Expanded Program Change for ch.7
00 37	00dd dddd	Expanded Program Change for ch.8
00 38	00dd dddd	Expanded Program Change for ch.9
00 39	00dd dddd	Expanded Program Change for ch.10
00 3A	00dd dddd	Expanded Program Change for ch.11
00 3B	00dd dddd	Expanded Program Change for ch.12
00 3C	00dd dddd	Expanded Program Change for ch.13
00 3D	00dd dddd	Expanded Program Change for ch.14
00 3E	00dd dddd	Expanded Program Change for ch.15
00 3F	00dd dddd	Expanded Program Change for ch.16 0 - 63 : Card Tone(65 - 128)
00 40	0000 0ddd	Octave Shift for ch.1
00 41	0000 0ddd	Octave Shift for ch.2
00 42	0000 0ddd	Octave Shift for ch.3
00 43	0000 0ddd	Octave Shift for ch.4
00 44	0000 0ddd	Octave Shift for ch.5
00 45	0000 0ddd	Octave Shift for ch.6
00 46	0000 0ddd	Octave Shift for ch.7
00 47	0000 0ddd	Octave Shift for ch.8
00 48	0000 0ddd	Octave Shift for ch.9
00 49	0000 0ddd	Octave Shift for ch.10
00 4A	0000 0ddd	Octave Shift for ch.11
00 4B	0000 0ddd	Octave Shift for ch.12
00 4C	0000 0ddd	Octave Shift for ch.13
00 4D	0000 0ddd	Octave Shift for ch.14
00 4E	0000 0ddd	Octave Shift for ch.15
00 4F	0000 0ddd	Octave Shift for ch.16 0 : 3 1 : -2 2 : -1 3 : 0 4 : +1 5 : +2 6 : +3
00 50	0000 dddd	Voice Level for ch.1
00 51	0000 dddd	Voice Level for ch.2
00 52	0000 dddd	Voice Level for ch.3
00 53	0000 dddd	Voice Level for ch.4
00 54	0000 dddd	Voice Level for ch.5
00 55	0000 dddd	Voice Level for ch.6
00 56	0000 dddd	Voice Level for ch.7
00 57	0000 dddd	Voice Level for ch.8
00 58	0000 dddd	Voice Level for ch.9
00 59	0000 dddd	Voice Level for ch.10
00 5A	0000 dddd	Voice Level for ch.11
00 5B	0000 dddd	Voice Level for ch.12
00 5C	0000 dddd	Voice Level for ch.13
00 5D	0000 dddd	Voice Level for ch.14
00 5E	0000 dddd	Voice Level for ch.15
00 5F	0000 dddd	Voice Level for ch.16 0 - 9 : Voice Level (1 - 10)
00 60	000d dddd	Partial Reserve for part 1
00 61	000d dddd	Partial Reserve for part 2
00 62	000d dddd	Partial Reserve for part 3
00 63	000d dddd	Partial Reserve for part 4
00 64	000d dddd	Partial Reserve for part 5
00 65	000d dddd	Partial Reserve for part 6
00 66	000d dddd	Partial Reserve for part 7 0 - 70 : Partial Reserve Number *2

Note.
*1 The Transpose value does not affect Split Point
*2 The partial reserve messages will be ignored, if the total number exceeds 64

DIGITAL KEYBOARD
Model KR－55

MIDI Implementation Chart

Date : Dec. 6, 1989
Version : 1.00

Function ···		Transmitted	Recognized	Remarks
Basic Channel	Default	1	1	
	Changed	1－16 ＊3	1－16 ＊2	
Mode	Default	Mode 3	Mode 3	
	Messages	×	○	
	Alterd	＊＊＊＊＊＊＊＊＊		
Note Number	True Voice	22－108	0－127	
		＊＊＊＊＊＊＊＊＊	0－127	
Velocity	Note ON	○	○	
	Note OFF	○	×	
After Touch	Key's	×	×	
	Ch's	×	＊1	
Pitch Bender		○	○	
Control Change	1	＊1	＊1	Modulation
	2	×	＊1	Breath
	7	×	＊1	Volume
	10	＊1	○	Pan
	11	＊1	＊1	Expression
	64	＊1	○	Hold 1
	66	＊1	○	Sostenuto
	93	＊1	○	Chorus depth
	6、38	×	○	Data entry MSB,LSB
	100、101	×	○	RPN MSB,LSB
	121	×	○	Reset all controllers
Prog Change	True #	＊1 (0－127)	＊1 (0－127)	
		＊＊＊＊＊＊＊＊＊	0－127	
System Exclusive		○	○	
System Common	Song Pos	×	×	
	Song Sel	×	×	
	Tune	×	×	
System Real Time	Clock	×	×	
	Commands	×	×	
Aux Messages	Local ON／OFF	×	○	
	All Notes OFF	× (123)	○ (123－127)	
	Active Sense	○	○	
	Reset	×	×	
Notes		＊1 Able to chose between o and x. ＊2 Multi timbre 1 : 1, 2, 3, 4, 5, 6, 10 Multi timbre 2 : 1, 11, 12, 13, 14, 15, 16 ＊3 The DUAL and SPLIT mode has two channels.		

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

SPECIFICATIONS

Keyboard	76 keys
Maximum polyphony	30 voice polyphonic
Preset sounds	23 groups, 64 tones
Effects	Chorus, reverb
Connectors	Output (mono, stereo)
	Input (mono, stereo)
	Pedal (upper, lower)
	MIDI IN connector
	MIDI OUT connector
	MIDI THRU connector
Switches	Power switch, local ON/OFF switch
Speakers	16cm × 2
Output	10W × 2
Finish	Hairline finish
External dimensions	1158 (W) × 394 (D) × 108 (H) mm
	45-5/8 × 15-1/2 × 4-1/4 inch
Weight	Main unit 16 kg/35 lb 3 oz
Power consumption	35W (117V), 70W (220V/240V)
Included items	Music stand
	Power cable
Options	Special stand (KS-30, 9 kg)
	Pedal switch (DP-2, DP-6)
	Handypad (PAD-5)
	Expression Pedal (EV-5, EV-10)

*Specifications and appearance are subject to change without notice.

MEMO

For Nordic Countries

Apparatus containing Lithium batteries

ADVARSEL!

Lithiumbatteri. Eksplosionsfare.
Udskiftning må kun foretages af en sagkyndig, og som beskrevet i servicemanual.

VARNING!

Lithiumbatteri. Explosionsrisk.
Får endast bytas av behörig servicetekniker.
Se instruktioner i servicemanualen.

ADVARSEL!

Lithiumbatteri. Fare for eksplotion.
Må bare skiftes av kvalifisert tekniker som beskrevet i servicemanualen.

VAROITUS!

Lithiumparisto. Räjähdysvaara.
Pariston saa vaihtaa ainoastaan alan ammottimies.

For West Germany

Bescheinigung des Herstellers/Importeurs

Hiermit wird bescheinigt, daß der/die/das

Roland DIGITAL KEYBOAD KR-55

(Gerät, 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

WARNING — This equipment has been verified to comply with the limits for a Class B computing device, pursuant to Subpart J, of Part 15, of FCC rules. Operation with non-certified or non-verified equipment is likely to result in interference to radio and TV reception.

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

- Disconnect other devices and their input/output cables one at a time. If the interference stops, it is caused by either the other device or its I/O cable. These devices usually require Roland designated shielded I/O cables. For Roland devices, you can obtain the proper shielded cable from your dealer. For non Roland devices, contact the manufacturer or dealer for assistance.

If your equipment does cause interference to radio or television reception, you can try to correct the interference by using one or more of the following measures:

- Turn the TV or radio antenna until the interference stops.
- Move the equipment to one side or the other of the TV or radio.
- Move the equipment farther away from the TV or radio.
- Plug the equipment into an outlet that is on a different circuit than the TV or radio. (That is, make certain the equipment and the radio or television set are on circuits controlled by different circuit breakers or fuses.)
- Consider installing a rooftop television antenna with coaxial cable lead-in between the antenna and TV. If necessary, you should consult your dealer or an experienced radio/television technician for additional suggestions. You may find helpful the following booklet prepared by the Federal Communications Commission:

"How to Identify and Resolve Radio — TV Interference Problems."

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock 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.

CLASSE B — **AVIS**

Cet appareil numerique ne depasse pas les limites de la classe B au niveau des émissions de bruits radioélectriques fixes dans le Reglement des signaux parasites par le ministere canadien des Communications.

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