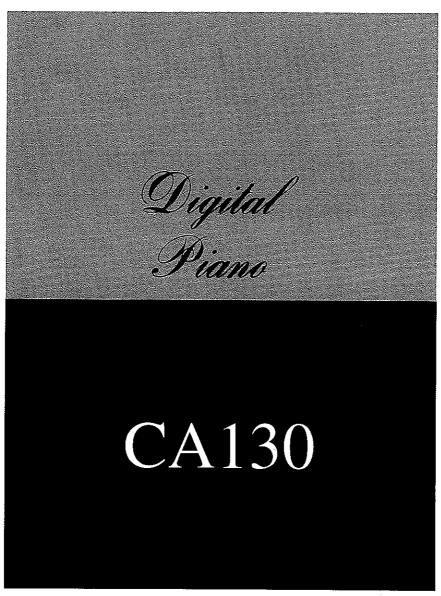
KAWAI



Owner's Manual

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This instrument has been certified to comply with the limits for a class B digital apparatus, pursuant to the Radio Interference Regulations, C.R.C., c. 1374.

This digital piano should be not commercial use but household use.

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. To reduce the risk of injury, close supervision is necessary when a product is used near children.
- 3. 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.
- 4. Do not touch the power plug with wet hands. There is a risk of electrical shock. Treat the power cord with care as well. Stepping on or tripping over it can break or shortcircuit the wire inside.
- 5. This product should be used only with a cart or stand that is recommended by the manufacturer.
- 6. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable or 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.
- 7. The product should be located so that its location or position does not interfere with its proper ventilation.
- 8. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
- 9. Keep the instrument away from electrical motors, neon signs, fluorescent light fixtures, and other sources of electrical noises.

- 10. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
- 11. This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.
- 12. Always turn the power off when the instrument is not in use. The power supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
- 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



CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK. DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

AVIS: RISQUE DE CHOC ELECTRIQUE -NE PAS OUVRIR.

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 lighting flash with arrowhead symbol, within an equilateral triangle, is intended to afert 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.

Thank you for purchasing a KAWAI Digital Piano!

The Kawai digital piano is a revolutionary new keyboard instrument that combines the latest in electronic advances with traditional craftsmanship inherited from Kawai's many years of experience in building fine pianos. Its keyboard provides the touch responce and full dynamic range required for a superb performance on the piano, harpsichord, organ, and other instrument presets. Industry-Standard MIDI (Musical Instrument Digital Interface) jacks are included which allow you to play other electronic instruments at the same time-opening a whole new world of musical possibilities.

This Owner's Manual contains valuable information that will help you make full use of this instrument's many capabilities. Read it carefully and keep it handy for further reference.

Table of Contents

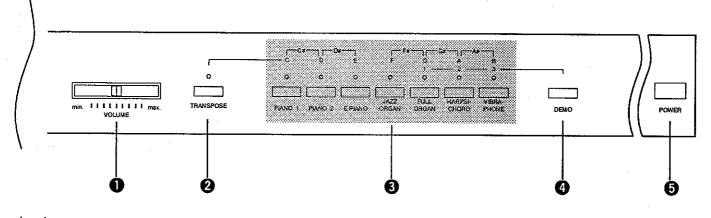
■ Basic Controls	1
1. Front Panel	
2. Rear Panel	2
■Let's Play	
1. Basic Operations	3
2. Transpose	4
3. Playing the Demo Songs	5
Advanced Features	6
1. Programming Mode	6
2. Choosing a Touch Curve	8
3. Tuning	9
4. Temperaments	
■ MIDI Interface	
1. What's MIDI?	12
2. Connections	
3. MIDI Implementation	15
4. MIDI Settings	16
(A) Setting the channel	
(B) Sending program number (timbre code) and MiDI exclusive data	17
(C) Turning MULTI TIMBRE on and off	20
(D) Turning on and off individual sounds when using	
MULTI TIMBRE 2 mode	
(E) Local Control	23
MIDI Exclusive Data Format	
■ Specifications	25
■ MIDI Implementation Chart	26

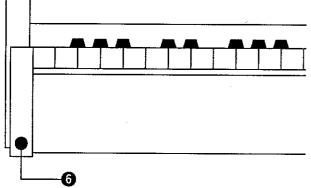


Basic Controls

1

Front Panel





VOLUME

Move the volume slider to the right to increase the instrument's volume.

Move the slider to the left to decrease the volume.

2 TRANSPOSE switch

This switch is used to transpose from one key to another. (See p. 4)

That is, you can use transpose to switch from the key of C to the key of D. This is valuable when you have learned a song in one key and someone (usually a singer) asks you to play it in another key. The transpose feature lets you play the song as you learned it (in the original key), but hear it in another key.

1 TONE SELECTORS

Select the desired instrument by pressing the appropriate switch.

4 DEMO

Use this button to play the 3 demo songs stored in the keyboard's internal memory.

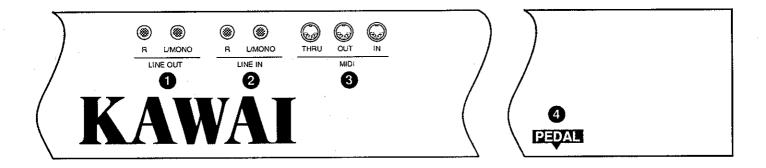
See p. 5 for more information on playing the demo songs.

6 POWER

This switch turns the instrument on and off. Be sure to turn off the instrument when finished playing.

6 HEADPHONE jack

This jack is for headphones sold separately (SH-2).



1 LINE OUT

These jacks provide stereo output to amplifiers, stereo systems, tape recorders, or similar equipment. Use the L/MONO jack when using only one output.

2 LINE IN

These jacks connect two channels of output from other electronic instruments to the piano's speakers. Use the L/MONO jack when using only one input.

This input bypasses the piano's VOLUME control. To adjust the balance, you must use the output volume controls on the individual instruments.

3 MIDI

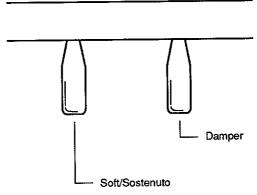
These jacks allow communication with other gear equipped with MIDI.

4 PEDAL jack

This jack is used to activate the damper and soft pedals.

The pedals

From right to left, the pedals are the damper pedal and the soft pedal.



Damper pedal: Pressing this pedal sustains the sound even after removing the hands from the keyboard.

Soft pedal: Pressing this pedal softens the sound, and also reduces its volume.

* The soft pedal can be used as the sostenuto pedal by turning on the power while depressing this pedal.

Sostenuto pedal: Depressing this pedal after pressing the keyboard and before releasing the keys sustains the sound of only the keys just played.



Let's Play

Basic operations

	•
Step 1	Turn on the power.
	POWER
Step 2	Adjust the volume.
	VOLUME
	min.
	Play a note on the keyboard and adjust the volume (Moving the slider to the right raises the volume; moving it to the left lowers it).
Step 3	Choose the tone. Pressing a TONE SELECTOR switch automatically changes the tone of the piano The LED above it lights to indicate which tone is currently in effect. PIANO1 is automatically selected when the power is turned on.
	0 0 0 0 0 0
	PIANO 1 PIANO 2 E.PIANO JAZZ FULL HARPSI- VIBRA- ORGAN ORGAN CHORD PHONE
Step 4	Play. Experiment with the various tone colors to acquaint yourself with the sounds that are available.

Up to 15 keys can be played simultaneously (15 note polyphonic).

2

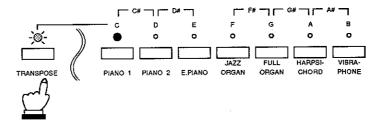
Transpose

TRANSPOSE allows you to shift key when playing with an instrument in a different key or accompanying a singer on the piano. You can also play the piano using easier keys if there are a lot of sharps or flats in the score.

Putting the attached sheet on the panel makes the operation easier.

Step 1

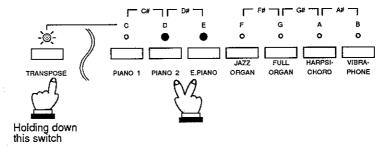
Press the **TRANSPOSE** switch so that the LED above it flashes and the current key LED lights.



The key is set to C when the power is turned on.

Step 2

Holding down the **TRANSPOSE** switch, press the key switch you wish to select. To change the key to #, simultaneously press the switches on either side of that key.



In the example above, D# will be selected.

TRANSPOSE LED will light when the key except for when C is selected.

Step 3

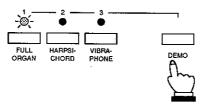
Press the **TRANSPOSE** switch to exit. The **TRANSPOSE** LED will go off and the key signature will return to C.

Playing the Demo Songs

There are 3 demo songs stored in the keyboard's internal memory. Using the following method you can enjoy listening to an automated recital of these songs.

Step 1

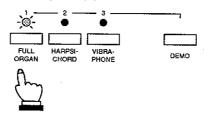
Press the **DEMO** switch.



The 3 demo songs will play automatically one after another and repeat until stopped.

Step 2

By pushing the **FULL ORGAN**, **HARPSICHORD**, or **VIBRAPHONE** switches while holding down the **DEMO** switch, you can choose the specific demo song or songs (demo song 1~3) you wish to hear.



Step 3

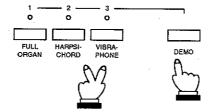
To stop the demo concert.....

Push the **DEMO** switch once again.

The demo song will stop.

Its LED will turn off and the demo song will stop.

If you wish to hear the specific demo song or songs repeatedly, simultaneously press the desired song switches while holding down the DEMO switch before starting the demo concert.



In the example above demo songs 2 and 3 will be played repeatedly.



Advanced Features

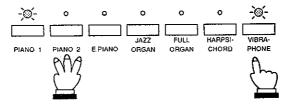
1 Programming Mode

The programming mode allows you to change the keyboard's tuning, and temperament, and utilize the various MIDI capabilities. These programming functions are performed using the panel switches and keyboard, so please try them after reading and understanding the programming instructions completely.

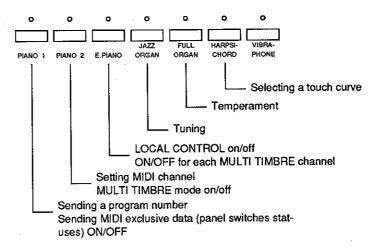
A. Entering the programming mode

Step 1 Press the VIBRAPHONE switch.

Holding down the VIBRAPHONE switch, press the first three tone selector switches (PIANO 1, PIANO 2, and E. PIANO).

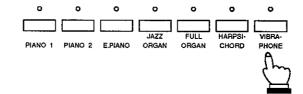


- The LEDs above the VIBRAPHONE and PIANO 1 switches should then start flashing to indicate that the piano is in the programming mode. In this mode, striking the keyboard produces no sound.
- Step 4 Press a TONE SELECTOR switch to select the desired programming mode. The correspondence between switches and 6 types of programming mode is as below.



B. Leaving the programming mode

Step 1 Press the VIBRAPHONE switch.



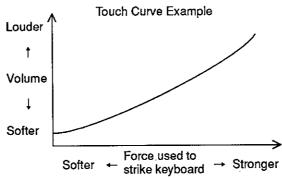
Step 2 The flashing will stop, and you will return to the tone in effect when you entered the programming mode.

You can also continue into another programming mode by pressing another TONE SELECTOR without pressing the VIBRAPHONE switch.

2

Choosing a Touch Curve

Touch curve is the term used describe the volume of sound produced by pressing keys on the keyboard at a given pressure.

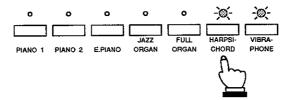


You can choose from 3 different touch curves with this unit.

- (1) Press the PIANO1, PIANO2, and ELECTRIC PIANO buttons at the same time while also pressing the VIBRAPHONE button.

 This puts the unit in Programming Mode (see P. 6).

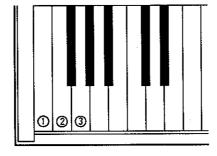
 The LEDs above the VIBRAPHONE and PIANO 1 buttons will flash.
- (2) Press the HARPSICHORD button.



The flashing light will move from above the **PIANO1** button to the **HARPSICHORD** button. The unit is now in the mode to select the touch curve.

If you press the keyboard while the unit is in this mode, the preset sound you had selected before entering "Programming Mode" will play. If you want to change the preset sound, exit the "Programming Mode" (see P. 6), select the new preset sound, and the repeat steps above (1) and (2).

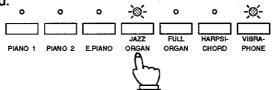
(3) Use the 3 white keys on the extreme left end of the keyboard to select your touch curve.



- ①Light: A loud sound is emitted even when you play with a soft touch. This is best suited for people who lack finger strength.
- ②Normal: Volume changes in accordance with a normal touch. (Unit is set at this whenever power is turned on.)
- ③Heavy: A loud sound is produced with a hard touch. This touch curve is suited for those with strong fingers, or for practise purposes.

Step 1 Make sure that the piano is in the programming mode (see P. 6)

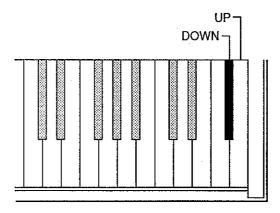
Step 2 Press the JAZZ ORGAN switch so that it flashes to indicate that the piano is ready to be tuned.



Unlike the other functions in the programming mode, this one produces sound so that you can compare the piano's pitch with another instrument.

Playing the keyboard when set up this way produces the tone selected before entering the programming mode. Tuning is done using this tone. If you want to change the tone, leave the programming mode (see P. 7), select the new tone and repeat steps 1 and 2.

Step 4 Press the highest black key to lower the pitch.
Or press the highest white one to raise it.
It may be necessary to press these keys repeatedly to achieve proper tuning.



The range of tuning possible is \pm 50 cents (100 cents = a half tone). Each push of the key will change the tuning 1.56 cents. Repeatedly hit the UP/DOWN key until you get the desined pitch.

Step 5 Leave the programming mode by pressing the VIBRAPHONE switch.

Momentarily turning off the power restores the original pitch.

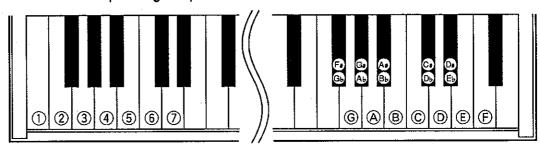
Temperaments

Your Kawai digital piano offers not only equal temperament (the modern standard) but also immediate access to those popular during the Renaissance and Baroque periods.

Step 1 Make sure that the piano is in the programming mode.

Step 2 Press the FULL ORGAN switch so that it flashes to indicate that the piano is waiting for a temperament specification.

Step 3 Press one of the seven white keys at the lower end of the keyboard to select one of these corresponding temperaments.



- 1) Equal temperament without the tuning curve
- 2 Mersenne pure temperament
- 3 Pythagorean temperament
- Meantone temperament
- (5) Werckmeister III temperament
- **(6)** Kirnberger III temperament
- (7) Equal temperament with the tuning curve

Step 4 Leave the programming mode.

When the power is first applied or reapplied after a short break, the piano returns to the modern standard (equal temperament with the tuning curve = #7).

Key set function is also available at this point. As you know, limitless modulation of the key became available only after the invention of Equal temperament. When we use a temperament other than Equal temperament, we must carefully choose the key signature to play in.

To select the key signature setting, simply press one of the keys. For example, if the song you are going to play is written in D major, press D key to set the keys. (See the right side of the above chart.)

Please note that this will only change the "balance" of the tuning, and the pitch of the keyboard will remain unchanged. Use the TRANSPOSE control to change the pitch of the whole keyboard.

Temperament characteristic

♣ Equal temperament

This, by far the most popular piano temperament, divides the scale into twelve equal semitones and has the advantage of producing the same chordal intervals in all twelve keys.

♣ Mersenne temperament

This temperament, which eliminates consonances for thirds and fifths, is still popular for choral music.

♣ Pythagorean temperament

This temperament, which uses mathematical ratios to eliminate consonances for fifths, has problems with chords, but produces very beautiful melodic lines.

♠ Meantone temperaments

This temperament, which uses a mean between a major and minor whole tone to eliminate consonances for thirds, was devised to eliminate the lack of consonances experienced with certain fifths for the Mersenne pure temperament. It produces chords that are more beautiful than those with the equal temperament.

♣ Werckmeister III temperament, Kirnberger III temperament

For key signatures with accidentals, this temperament produces the beautiful chords of the mean tone, but, as the accidentals increase, the tension increases, and the temperament produces the beautiful melodies of the Pythagorean temperament. It is used primarily for classical music written to take advantage of these characteristics.



MIDI Interface

1

What's MIDI?

Before attempting to set the MIDI function, let's take a brief look at what MIDI is.

The letters MIDI stand for Musical Instrument Digital Interface, an international standard for connecting synthesizers, drum machines, and other electronic instruments so that they can exchange performance data.

Instruments equipped with MIDI have three jacks for exchanging data: IN, OUT, and THRU. Each uses a special cable with a DIN connector for connection (see p. 13).

IN: For receiving keyboard, timbre, and other data OUT: For sending keyboard, timbre, and other data

THRU: For sending received data to another instrument without processing

Electrical and electronic musical instruments equipped with MIDI are able to transmit and receive performance data such as for keyboard and timbre.

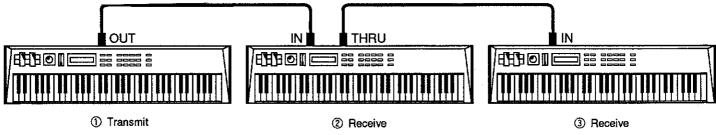
Depending on the connection method, instruments are grouped as those which receive data (producing sound according to data received from the connected instrument), those which send data (to the instruments to which they are connected), and those which both send and receive data.

The cable is connected to the MIDI IN jack of the instrument receiving data and to the OUT jack of the sending instrument. The THRU jack is used when the data received is to be sent to another instrument.

MIDI uses what are known as "channels" as a means of transmitting data for playing a specified instrument.

There are two types of channels, one for receiving and one for sending, and MIDI instruments are normally equipped with both types. Receive channels are used when an instrument receives data from another instrument, and send channels are used for transmission to another instrument.

For instance, let's say that three instruments are connected for playing in this way:



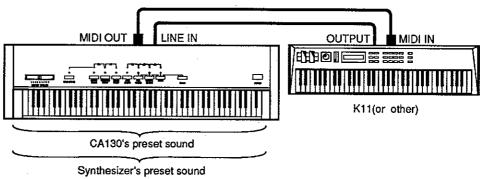
Instrument ①, which is sending, transmits the send channel along with keyboard and other data to instruments ② and ③, which are receiving. This data is sent to instruments ② and ③, but the data will not be received unless the receive channel for these two instruments matches the send channel used by instrument ①.

There are 16 channels each (1 through 16) available for both sending and receiving.

Connections

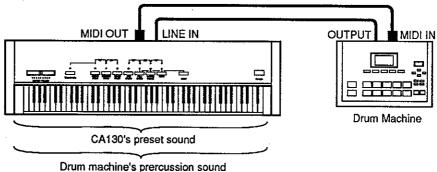
(1) Connection to another MIDI-compatible keyboard

(connection with instruments such as the Kawai digital synthesizers K11/ KC10/K1 II)



When connected as shown in the illustration, data on how the digital piano is played (what keys are struck and how hard) is sent to the synthesizer unchanged. Also, by connecting the synthesizer's OUT-PUT jack and the LINE IN jack on the digital piano, the sound from the digital piano can be layered over the sound of the synthesizer. Since timbre can be set separately, you can assemble a wide variety of sound combinations, such as a PIANO tone from the digital piano layered with a STRING tone from the synthesizer for a thick sound. You can assemble the PIANO tone from a synthesizer by connecting the MIDI IN and OUT jack backwards.

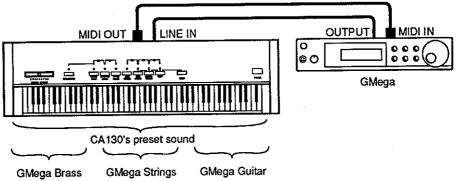
(2) Connection to a drum machine



When connected as shown in the illustration, you can not only play along with the rhythm from the drum machine, you can also play the drum machine by striking the keys on the digital piano.

(3) Connection to a sound generator module

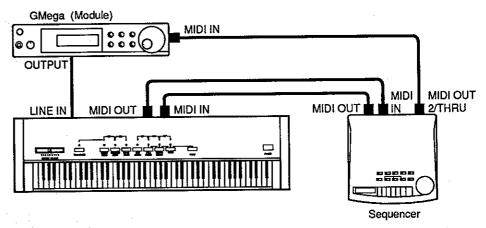
(connection with instruments such as the Kawai GMega/XS-1)



When connected as shown in the illustration, you can layer sounds like in example (1), as well as playing a large number of tones.

(4) Connection to a sequencer and sound generator module

(connection with instruments such as the Kawai Q-55/GMega



When connected as shown in the illustration, you can record songs played on the digital piano with the sequencer and play them back as many times as you like, and layer the mudule's tones made with the digital piano's MULTI TIMBRE function to assemble a complex automatic performance

3

MIDI Implementation

The MIDI interface on your Kawai Digital Piano allows you to:

1. Receive and transmit keyboard data.

You can play the digital piano to output sound on a synthesizer or other instrument, or vice versa.

2. Set channel numbers for sending and receiving.

You can set send or receive channels to any number from 1 to 16.

3. Receive and transmit program numbers (codes for changing timbres).

You can operate the digital piano to change the programmed timbre of a synthesizer or other instrument connected with the MIDI interface to the digital piano, or vice versa (see p. 17).

4. Receive and transmit pedal data.

You may receive and transmit ON/OFF data for the soft and damper pedals or transmit ON/OFF information for the sostenute pedal.

Receive volume data.

You can control the volume of the digital piano from an external source connected via the MIDI interface.

6. Set MULTI TIMBRE.

When the digital piano is used as a receiving instrument, you can receive keyboard data on a number of different channels, producing different timbres for each one.

7. Sending and Receiving Exclusive data

Settings in the Programming Mode or Panel switch operations can be sent as MIDI exclusive data.

8. Sending the recorder play back

You can play back a performance recorded with the recorder on an instrument connected to the MIDI interface of the digital piano or record it using the external sequencer.

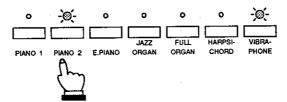
For details of the MIDI function of this instrument, please refer to the MIDI Implementation Chart.

A. Setting the channel

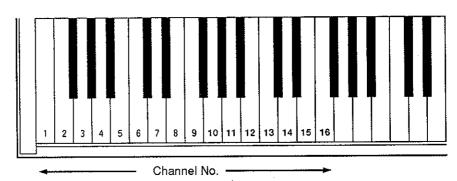
In order to be able to exchange information with a connected MIDI instrument, you must first set the interconnected instruments to the same channel.

Step 1 Make sure that the digital plano is in the programming mode. (see p. 6)

Step 2 Press the PIANO 2 switch so that it flashes to indicate that the interface is waiting for a channel specification.



Select the channel by pressing the one of the first 16 white keys at the lower end of the keyboard.



Step 4 Pressing one of these keys automatically sets the instrument's transmitting and receiving channel to the number selected.

Step 5 Leave the programming mode.(see p. 7)

When the power is first applied, the interface uses Channel 1 and has the OMNI parameter on. Changing to another channel automatically turns the OMNI parameter off. In OMNI mode, information from all channels is received.

B. Sending program number (timbre code) and MIDI exclusive data

(a) Transmitting with the TONE SELECTORs

You can use the seven TONE SELECTORs during normal playing to transmit program number 0 through 6 shown in the chart below.

Tone Selector	Program No.	
PIANO 1	0	
PIANO 2	1	
E. PIANO	2	
JAZZ ORGAN	3	
FULL ORGAN	4	
HARPSICHORD	5	
VIBRAPHONE	6	

Transmission of a program number and MIDI exclusive data can be switched on and off as described below.

Step 1

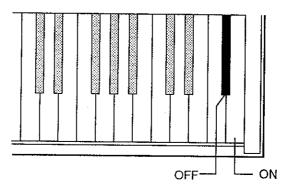
Enter the programming mode (see p. 16).

The LEDs for VIBRAPHONE and PIANO 1 will flash. The flashing of the PIANO 1 LED shows that the instrument is in the programming mode for transmitting the program number, so move on to the next step.

No sound will be played if the keyboard is pressed at this time.

Step 2

Press the highest black or white key.



Pressing the black key (OFF) disables transmission of the program number and MIDI exclusive data. Pressing the white key (ON) enables it.

Step 3

Press the **VIBRAPHONE** switch to leave the programming mode. You may then change to another programming mode.

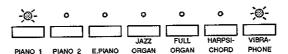
The setting described above is automatically set on when the power is turned on, so you can also turn the setting simply by turning the power off and then on again, instead of using the procedure described above.

(b) Using black keys

In addition to transmission with the **TONE SELECTORs**, you can also use the black keys on the instrument to send program numbers 0 through 127.

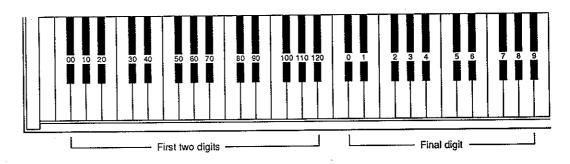
Step 1

Make sure that the digital piano is in the programming mode. (see p. 6)
The flashing LED of the **PIANO 1** switch indicates that the interface is ready to transmit a program number.



Select the program number by pressing the corresponding pair of black keys at the lower end of the keyboard.

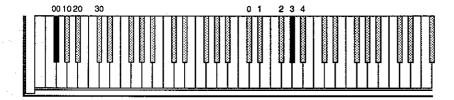
There are a total of 128 numbers possible: the first thirteen black keys give the first and second digits ("00" - "12") of this three digit numbers; the next ten, the final digit ("0" - "9").



You must press the two keys in order from left to right.

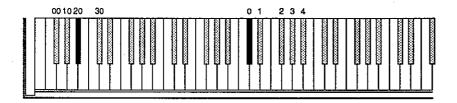
Example

Program No. 3



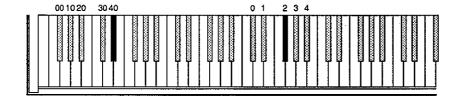
 Press the "00" key and then the "3" key.

• Program No. 20



 Press the "20" key and then the "0" key.

• Program No. 42



 Press the "40" key and then the "2" key.

When transmitting a program number that has the same tens digit as the number being sent (such as, for instance, transmitting 33 after sending 31), you don't need to press the tens digit. The number can be transmitted simply by pressing the ones digit.

The tens digit is set at "0" when the programming mode is entered.

Step 3

Leave the programming mode. (see p. 7)

C. Turning MULTI TIMBRE on and off

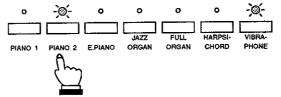
Step 2

Normally, the procedure described above is used to transmit or receive data on a set MIDI channel (any one of 1 through 16), but by turning the MULTI TIMBRE function on you can receive more than one MIDI channel and simultaneously play a different type of timbre on each one. With this feature, you can use a sequencer such as the Kawai Q-80/Q-55 to assemble performances with a number of timbres (MULTI TIMBRE) on the digital piano.

There are 2 parameters to which the MULTI TIMBRE mode can be set. MULTI TIMBRE 1 produces the preset sound directly corresponding to the channel of the MIDI signal received. MULTI TIMBRE 2 lets you set which sound will be on or off for each channel of signal received.

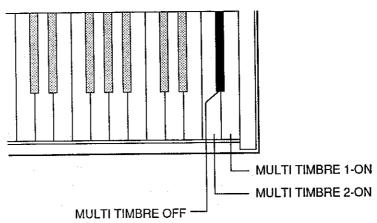
Step 1) Make sure that the digital piano is in the programming mode. (see p. 6)

Press the PIANO 2 switch to set the LED above the PIANO 2 switch flashing.



The white and black keys on the far right of the keyboard are used to turn the MULTI TIMBRE mode on and off.

Pressing the white key on the extreme right turns on MULTI TIMBRE 1, the white key second from the extreme right turns on MULTI TIMBRE 2, and the black key turns off MULTI TIMBRE.



When MIDI data is received while the MULTI TIMBRE function is off, it will be played according to whichever TONE SELECTOR is currently selected. When the MULTI TIMBRE 1 mode is on, the received MIDI data will be played in the timbre corresponding to the MIDI channel shown in the chart below, regardless of the TONE SELECTOR currently in effect.

Channel	Timbre	Channel	Timbre
1	PIANO 1	9	Empty
2	PIANO 2	10	Empty
3	E. PIANO	11	Empty
4	JAZZ ORGAN	12	Empty
5	FULL ORGAN	13	Empty
6	HARPSICHORD	14	WOOD BASS
7	VIBRAPHONE	15	WOOD BASS
8	Empty 16		WOOD BASS

When MULTI TIMBRE 2 is on, you can select which sound will be on and off for each channel of reception.

The default setting for the MULTI TIMBRE mode ON/OFF when the keyboard's power is turned on is OFF.

Step 4

Leave the programming mode. (see p. 7)

D. Turning on and off individual sounds when using MULTI TIMBRE 2 mode

When MULTI TIMBRE 2 mode is on, use the following steps to turn on or off each sound.

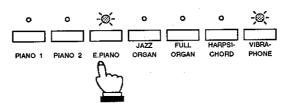
Step 1

Enter the programming mode. (see p. 6)

Step 2

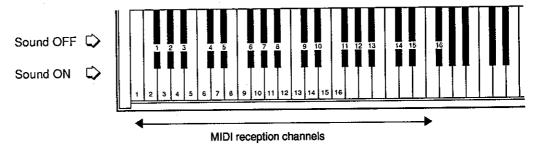
Press E. PIANO switch.

The flashing LED will move from **PIANO 1** to **E. PIANO** indicating that the keyboard is in the programming mode for setting which sounds will be on and off, and turning local control on and off when using MULTI TIMBRE 2 mode.



Step 3

Use the black and white keys at the left end of the keyboard to set the sound for each channel on or off.



Use the 16 white keys at the left end of the keyboard to set the channels to ON. Use the 16 black keys at the left end of the keyboard to set the channels to OFF.

(Step 4)

Press VIBRAPHONE switch to exit the programming mode. (see p. 7)

The default setting in the MULTI TIMBRE 2 mode, the sound for 2 to 10 channels is off.

In the MULTI TIMBRE 2 mode, receiving the program change data for individual channels makes it possible to change the tone color which corresponds to the table given below.

Program change number	Tone color	Program change number	Tone color
0	PIANO 1	6	VIBRAPHONE
1	PIANO 2	7	WOOD BASS
2	E. PIANO	8~127	PIANO 1
3	JAZZ ORGAN		,
4	FULL ORGAN		
5	HARPSICHORD		

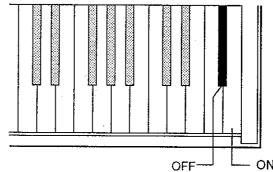
E. LOCAL CONTROL

This mode is used to set whether the sound from the piano's keyboard will be played or not, and is called the LOCAL CONTROL ON/OFF mode.

- Make sure that the piano is in the programming mode. (see p.6)

 After turning off the MULTI TIMBRE mode, press the E. PIANO switch.

 The flashing LED will change from PIANO 2 to E. PIANO.
- Step 2 Press the highest white or black key to turn LOCAL CONTROL on or off.



White key (ON): The piano will output sound when the keys are struck.

Black key (OFF): Sound will be output only when MIDI data is received, and not when the keyboard is played.

You can also turn this on by turning the power off and then on again, instead of using the highest key as described above.

Step 3 Press the VIBRAPHONE switch to leave the programming mode.



MIDI Exclusive Data Format

Data format

1st byte 2nd byte 3rd byte ① ② ③	4th byte 5th byte 6th byte 7th byte 8th byte 9th byte 10th byte (4) (5) (6) (7) (8) (9) (10)
①	F0Start code
2	40Kawai's ID number
3	00 - 0F MIDI channel
4	10, 30 Function code (30 when setting MULTI TIMBRE 2 ON/OFF)
5	04Indicates that the instrument is Electronic Piano
6	02Indicates that the piano is one of "CA" series
7	data 1 , Exclusive data. Data 3 may not
8	data 2 exist depending on the function
9	data 3 (see below).
10	F7 End code

2 Data structure

data 1	data 2	2 data 3 Function		
00	00	_	MULTI TIMBRE OFF	
01	00		MULTI TIMBRE 1 ON	
02	00		MULTI TIMBRE 2 ON	
16	20~40~5F	 Tuning (20; minimum, 40; center, 5F; maximum) 		
17	00/7F	MIDI exclusive data transmission ON/OFF		
18	00 ~ 02		Touch curve select (0; Light, 1; Normal, 2; Heavy)	
25	00 ~ 06	00 ~ 0B	data 2; Temperament No., data 3; root key No.	
26	00/7F	00 ~ 0F	data 2; MULTI TIMBRE 2 ON/OFF data 3; Channel	



Specifications

Keyboard	76keys		
Polyphonic	15		
Tone colors	PIANO 1, PIANO 2, E. PIANO, JAZZ ORGAN, FULL ORGAN, HARPSICHORD, VIBRAPHONE		
Temperaments	Equal (with/without tuning curve), Mersenne pure, Pythagorean, Meantone, Werckmeister!!!, Kernberger!!!		
Other Features	VOLUME, TRANSPOSE, TUNE, TOUCH CURVE SELECTION (Light, Normal, Heavy)		
Pedals	Damper, Soft/Sostenuto		
Jacks	Headphone, Pedał, MIDI (IN, OUT, THRU), LINE IN (L/MONO, R), LINE OUT (L/MONO, R)		
Output Power	10W x 2		
Speakers	16cm x 2		
Finish	Bright Cosmo Black		
Dimensions	122 (W) x 45 (D) x 78 (H) cm		
Weight	36.5kg (without bench)		

KAWAI

Kawai Musical Instruments Manufacturing Co., Ltd. 200 Terajima-cho, Hamamatsu, Japan