KAWAI

ELECTRIC PIANO
EP 705M

Owner's Manual

OWNER'S MANUAL FOR EP-705M

CONGRATULATIONS on the purchase of your new KAWAI electric piano. This owner's manual contains detailed information and operating instructions for all the features and controls on the piano. Please read the manual to become familiar with your KAWAI and to enjoy it fully.

MODE D'EMPLOI DU EP-705M

Nous vous remercions de l'achat de notre nouveau piano électrique KAWAI. Ce mode d'emploi contient des informations détaillées concernant les caractéristiques et les contrôles de l'instrument. Nous vous demandons de lire ce manuel pour vous familiariser avec votre piano KAWAI et en tirer toutes les satisfactions.

HANDBUCH FÜR DAS EP-705M

Herzlichen Glückwunsch zu Ihrem neuen Elektrish-Piano von KAWAI. Dieses Handbuch enthält detaillierte Informationen und Anleitungen für alle Einrichtungen und Kontrollmöglichkeiten des Pianos. Bitte lesen Sie dieses Handbuch sorgfältig, damit Sie sich gut mit ihm auskennen und seine Möglichkeiten voll ausschöpfen können.

MANUAL DEL EP-705M

Le felicitamos por la compra de su nuevo piano eléctrico KAWAI. Este manual contiene información detallada e instrucciones de manejo de todas las características y controles del piano. Por favor lea el manual para familiarizarse con su KAWAI y disfrutar de él plenamente.

SPECIFICATIONS

POWER CONSUMPTION

MODEL	EP-705
FINISH	BLACK
KEYBOARD	75 Keys (FI-G7)
KEY TOUCH	Conventional Piano Style
ACTION	Kawai Piano Action
CONTROLS	Total Volume Piano I (Normal) Piano II (Hard) Piano III (Brilliant)
EFFECTS	Chorus (ON/OFF)
MIDI	Dual Split Lower Upper Channel Memory 1 Memory 2 Memory 3 Memory 4 Write
OUTPUT	Stereo (Left/Right) × 1 Standard Jack (Unbalanced)
PATCH	Out: –20 dB, 600 Ω In: –20 dB, 30 kΩ
FOOT PEDAL	Damper Pedal
POWER CONSUMPTION	1.5 W
DIMENSIONS (mm/Inches)	1,304/51.3 (W) 1,000/39.4 (H) 537/21.1 (D)
WEIGHT	87 kg (192 lbs.)

CONTENTS

SOMMAIRE

INHALT

INDICE

When the hammer blow causes a string to vibrate, the vibrations are detected by a piezo-electric cable pickup. The resulting electrical signals are corrected and amplified by an electrical circuit, and routed to your audio amplification system.
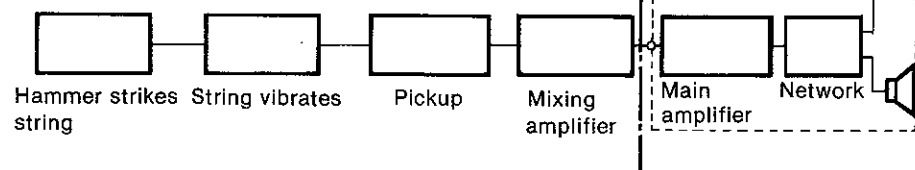
A. Conventional acoustic piano operation

A. Piano

| Hammer strikes string | String vibrates | Bridge | Vibration relayed to soundboard |
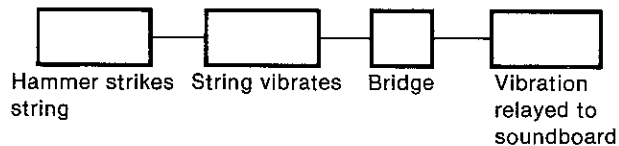
B. EP-705M operation

B. EP-705M

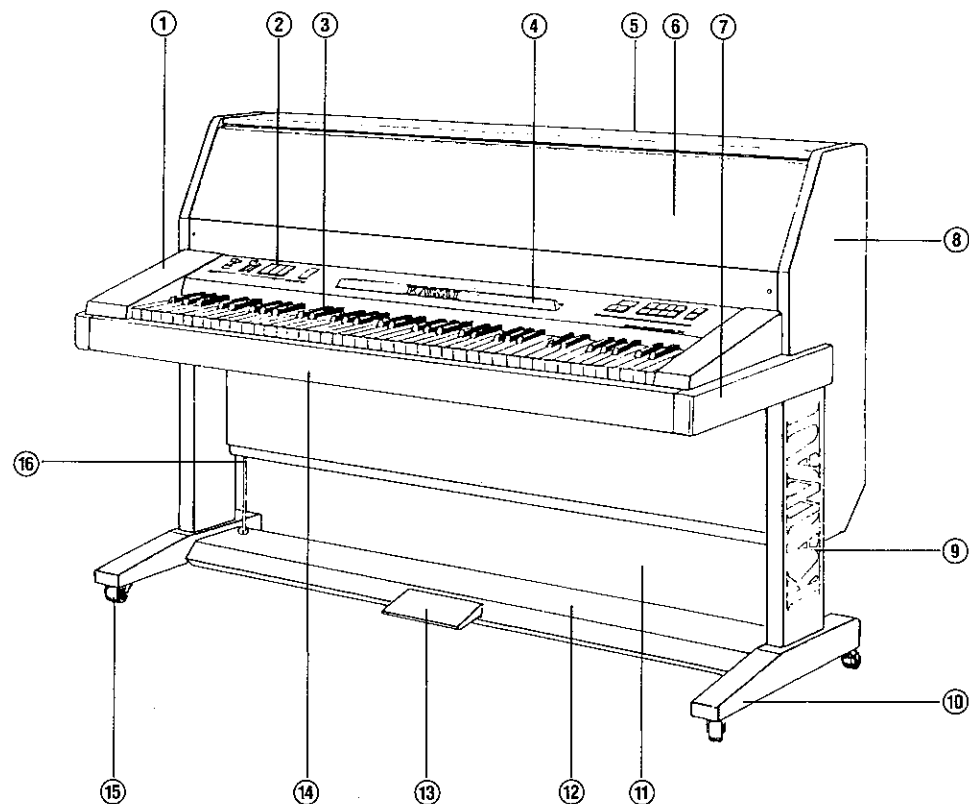| Hammer strikes string | String vibrates | Pickup | Mixing amplifier | Main amplifier | Network |

*External tone box or any PA/audio system

FEATURES OF EP-705M

1) Since regular KAWAI piano keyboards and actions are used, touch is identical to that of the Kawai acoustic piano.
2) Use of piano strings for sound generation and a special pickup mechanism provide sound which is exceedingly close to that of an acoustic piano.
3) Since the electric signal produced by the unit is preamped out, a speaker system which incorporates a power amplifier or any PA/audio system with a power amplifier can be used. For home use, you can also connect it to your hi-fi system, radio cassette recorder, etc.

① Cheek Block
② Control Panel
③ Keyboard
④ Music Shelf Strip
⑤ Topboard
⑥ Upper Panel
⑦ Arm
⑧ End Panel
⑨ Leg
⑩ Toe Block
⑪ Lower Panel
⑫ Pedal Cover
⑬ Damper Pedal
⑭ Keyslip
⑮ Caster
⑯ Pedal Rod

3. CABLE CONNECTIONS (1)

Items required for connecting the unit are the 24V AC adaptor, two signal cables, and two powered tone boxes (sold separately) or any PA/audio system that includes a power amplifier and speaker combination.
① AC adaptor accessory
② Signal cable accessory
③ MIDI cable
④ Tone Box (optional purchase; use of the KAWAI KM-704 is recommended)

4. CABLE CONNECTIONS (2)

The connector panel is located on the back panel. Make cable connections as shown in the diagram.
a) Connect the AC adaptor to the DC IN socket on the connector panel.
b) Plug the tone boxes and AC adaptor in AC outlets.
c) Set all power switches to ON.
The EP-705M can also be connected to guitar amplifiers, mixers, hi-fi systems, radio-cassette recorders and other audio systems which have AUX or LINE IN inputs. The monaural phone jacks accessory cables can be connected to the same type of inputs, for example, guitar amplifiers without modification. If other input jacks (DIN, pin jacks or monaural mini jacks) are used, however, adaptors would be required.

Note: Regarding MIDI connection, see page 4.

5. PATCH

When special effects ("Wah-wah", echo, distortion, etc.) are to be used, connect an effector to the PATCH OUT/IN jacks.

6. HOW TO USE THE CONTROLS

POWER SWITCH
To set the power switch to ON, press red button; the red indicator lamp will then light.

PIANO 1, 2 AND 3
These buttons are used to change tone color.
PIANO 1 .... Normal
PIANO 2 .... Hard
PIANO 3 .... Brilliant
One of these buttons must be selected otherwise there will be no audio output. Selecting any two or all buttons at the same time will mix the tone colors. Select the tone color which best suits the music you play or your preference.
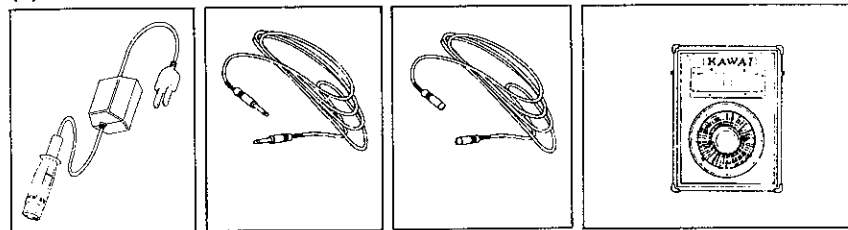
VOLUME
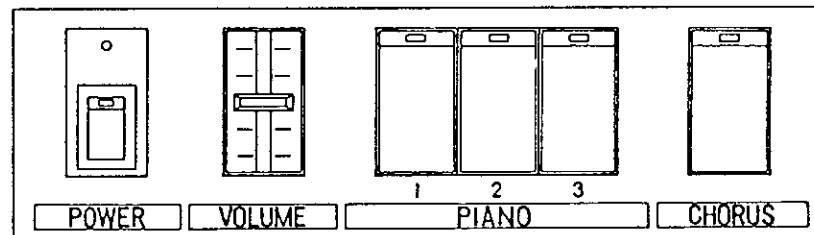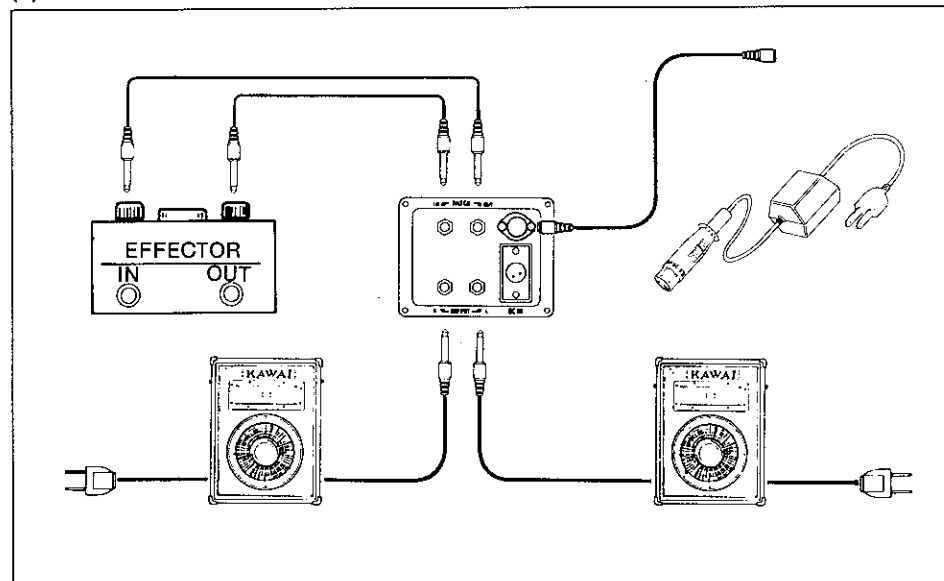The volume increases as the slider moves up.

CHORUS OPERATION
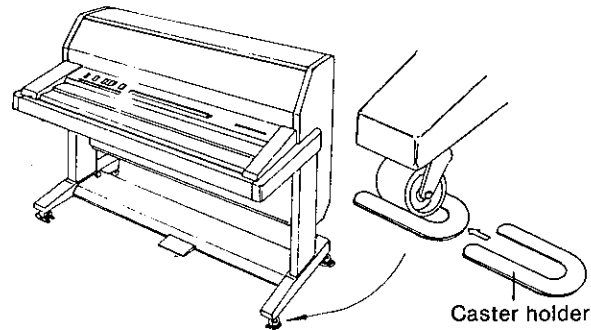To use the chorus effect, press the CHORUS switch so that the LED lights.

(1)

(2)

EFFECTOR
IN   OUT

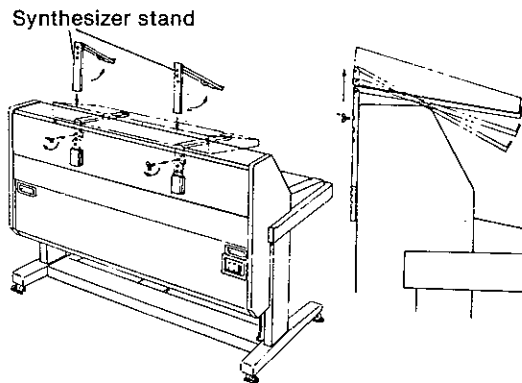POWER   VOLUME   PIANO   CHORUS
        1   2   3

FIXING THE PIANO CASTERS

Caster holder

The EP-705M is provided with holders which keep its casters from rolling. Always install them as shown in the illustration above.

Note: The caster holders are stored in the accessory case.

ATTACHING THE SYNTHESIZER STAND

Synthesizer stand

* Open up the arms of the synthesizer stand to form an L-shape and insert the sides with the screw holes into the stand fittings on the back of the electric piano. Fix with wing bolts.
* There are three screw holes on the arms. The choice of hole determines the angle of the synthesizer stand. There are three different angles to choose from.

Note: The synthesizer stand and wing bolts are stored in the accessory case.

8. MIDI

The letters MIDI stand for the Musical Instrument Digital Interface, an international standard for connecting drum machines, synthesizers, and other electrical/electronic musical instruments so that they can exchange keyboard and tone color data. The EP-705M, since it relies on a mechanical sound source— a hammer hitting a string— can only send keyboard data.

CONNECTION
Since the EP-705M is limited to sending keyboard data, the interface has only one connector, labelled MIDI OUT. This receptacle accepts the DIN plug on the MIDI cable.
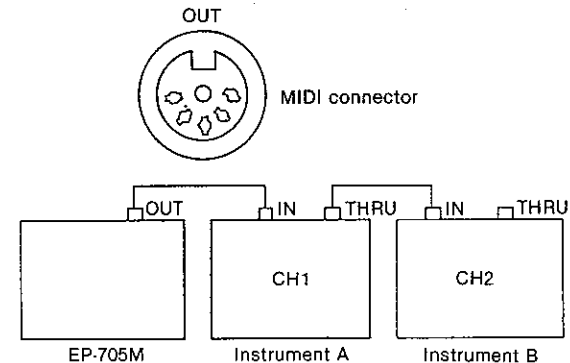
Note: The receiving instruments must be assigned channel numbers before use.

DISABLING THE INTERFACE
To disable the interface and prevent communication, turn on the CH key and off both of the UPPER and LOWER keys. The display will change to "— —" indicating that the interface is not operating. Pressing one of above three keys enables the interface.
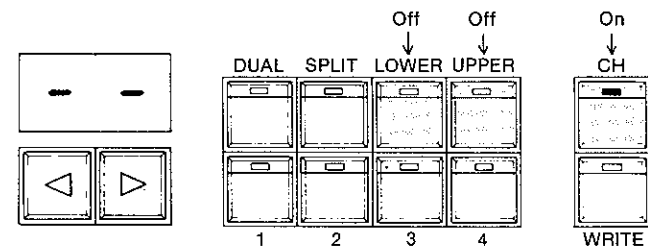
MIDI CHANNELS

Before the EP-705M can control another instrument through the interface, the receiving instrument must be assigned a channel number for receiving and the EP-705M must transmit over that channel. The EP-705M transmits over two channels, referred to as UPPER and LOWER.

• Specifying the UPPER Channel

1) Press the UPPER and the CH (Channel) keys to light the LEDs inside them and display the channel currently assigned to that keyboard on the multi-purpose display.
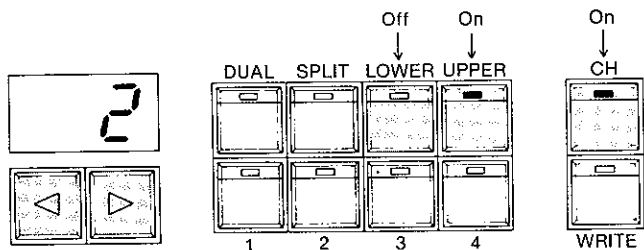

2) Use the selector keys to increase (right arrow) or decrease (left arrow) the channel number.

Note: The channel number changes each time one of these keys is pressed. Continuous pressing changes the number once only.
The order is cyclic: The channel after "16" is "1"; the one before "1" is "16".

• Specifying the LOWER Channel

Repeat the above procedure, pressing the LOWER key instead of the the UPPER one.

The requirement that the transmitting channel number agree with the receiving channel number means that the EP-705M can control different instruments simply by switching transmitting channels.
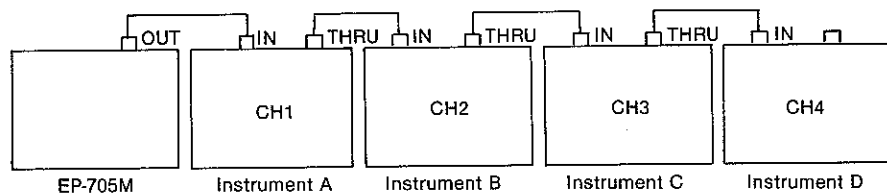
The EP-705M transmits over any channel between 1 and 4.

KEY MODES

The EP-705M offers three modes of transmission. WHOLE, DUAL, and SPLIT.

• WHOLE mode

In this mode, the EP-705M sends all keyboard data over the channel assigned to the upper or lower keyboads.

Case 1: **With the UPPER key pressed**
The LED in the UPPER key is ON; those in the DUAL, SPLIT, and LOWER keys, OFF.
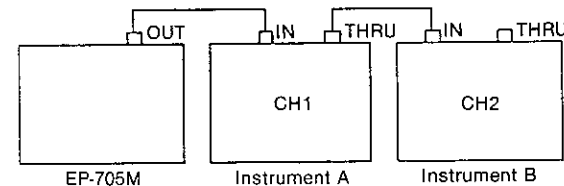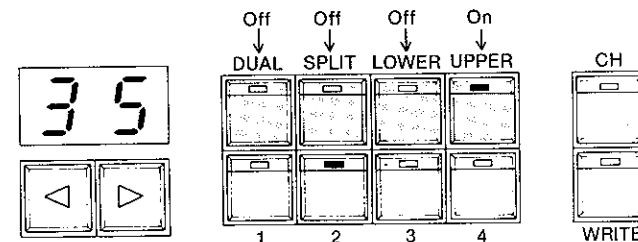
In this example, the keyboard data goes out on channel 2, so only Instrument B responds. Instrument A remains silent.

Case 2: **With the LOWER key pressed**
The LED in the LOWER key is ON; those in the DUAL, SPLIT, and UPPER keys, OFF.
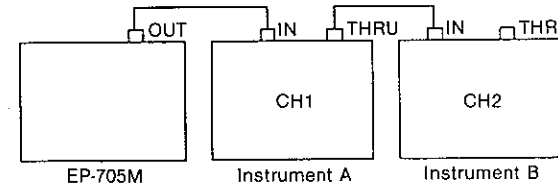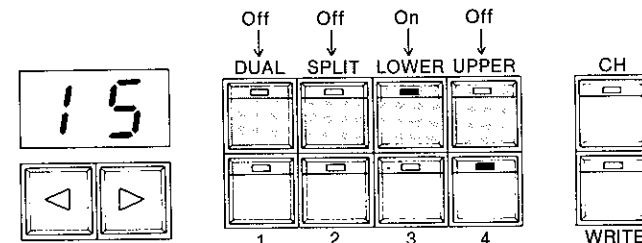
This example is the reverse of the preceding one in that Instrument A responds while Instrument B remains silent.

• DUAL mode

In this mode, the EP-705M simultaneously sends all keyboard data over both channels separetely assigned to the upper and lower keyboards.

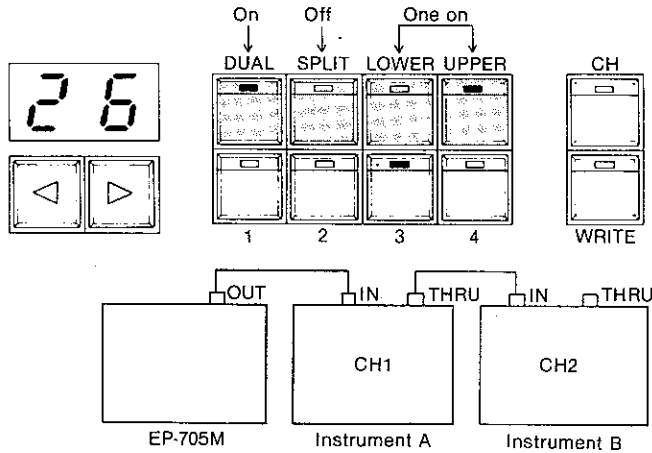To activate, press the DUAL key (automatically turning off the LED in the SPLIT key) and either the UPPER or LOWER key to light the LEDs inside them. The multipurpose display will then show the MIDI channel or program number currently assigned to that channel.

In this example, the multipurpose display will contain the program number assigned to the UPPER keyboard.

The keyboard data goes out on channel 1 and 2, so both instruments respond.

• SPLIT mode

This mode divides the keyboard into UPPER and LOWER halves, each with a separated MIDI channel.

To activate, press the SPLIT key (automatically turning off the LED in the DUAL key) and either the UPPER or LOWER key to light the LEDs inside them. The multipurpose display will then show the MIDI channel or program number currently assigned to the keyboard corresponding to the lighted LED.

In this example, the multipurpose display will contain the program number assigned to the LOWER keyboad.
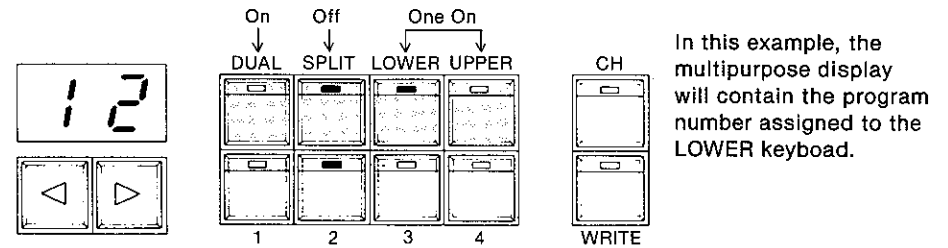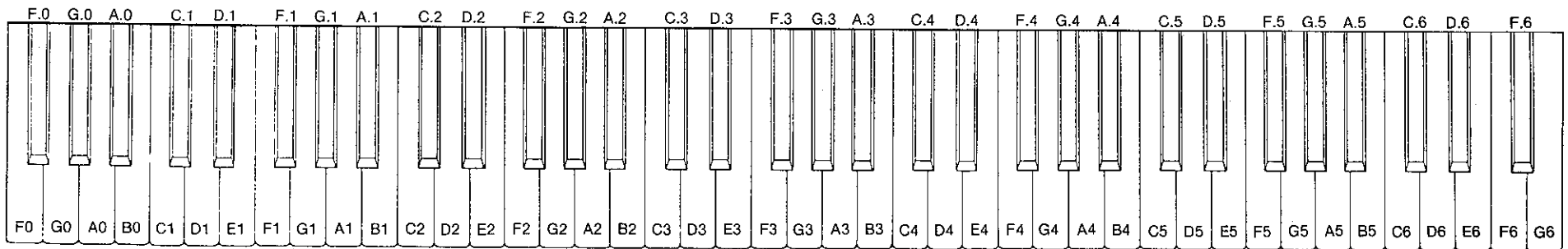
The keyboard data from the lower half of the keyboard goes out on channel 1 to Instrument A; that from the upper half, out on channel 2 to Instrument B.

• Specifying the SPLIT POINT

Procedure:

1) Hold down the WRITE switch to display the current SPLIT POINT, the highest note on the lower half of the keyboard. (See the accompanying illustration for the key numbering system used.)

SPLIT POINT

WRITE

LOWER ←——————→ UPPER
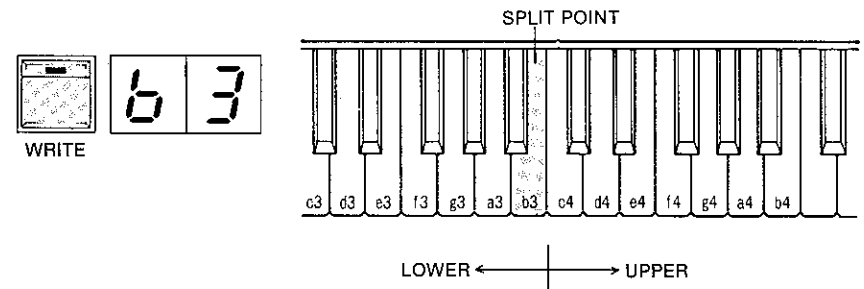
2) Holding the WRITE switch down, press the key corresponding to the new SPLIT POINT. The display will automatically change to the new setting.

PROGRAM CHANGE

The MIDI interface also allows the EP-705M to the control the program number of the receiving instruments. The EP-705M does this over two separate channels: Upper and LOWER.

• Changing the program for the UPPER channel

1) Turn off the CH key and on the UPPER key. The display will then contain the program number for the upper channel.

2) Use the selector keys to increase (right arrow) or decrease (left arrow) the channel number.

Note: The channel number changes by one each time the arrow key is pressed. Continuous pressing changes the number in steps of ten. The order is cyclic: The number after "99" is "1"; the one before "1" is "99".
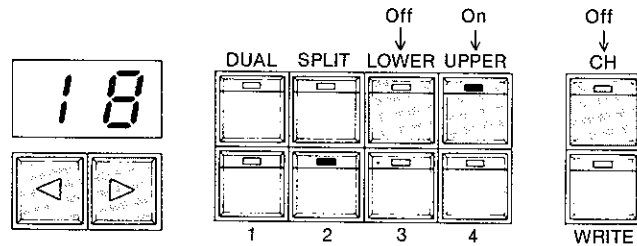
**• Changing the program number for the LOWER channel**

Repeat the above procedure. Pressing the LOWER key instead of the UPPER one.

MEMORY FUNCTION

Up to four sets of MIDI parameters —channel and program numbers, mode, and keyboard division— may be saved for future recall.

• Procedure:

1) Set the parameters using the procedures already described.
   a) UPPER MIDI CH
   b) LOWER MIDI CH
   c) KEY MODE
   d) SPLIT POINT
   e) UPPER PROGRAM NUMBER
   f) LOWER PROGRAM NUMBER
2) Simultaneously press the WRITE key and one of the memory keys. (Example: 3)
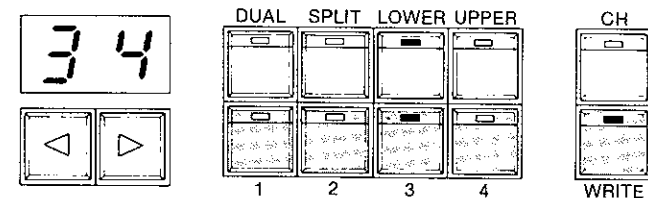
The LED in the WRITE key will go out. The one in the "3" key will continue to flash for a few seconds.

3) Press the memory button to recall the settings.

Note: • The memory contents are protected by a special backup battery. They do not disappear when the power to the instrument is removed.
• When the UPPER and LOWER channel numbers are the same or the receiving instrument is in the OMNI ON mode, the program number assigned to the key, UPPER or LOWER, that is lit takes precedence.

OTHER FEATURES

• Sending other parameters

The interface is also capable of sending such parameters as touch response and the damper effect.

• Initial settings

When the power is first applied, the interface settings automatically return to those in effect when the instrument was last used.

• Precaution for disconnection

Turning off the power or disconnecting the interface cable while a key is pressed and the interface is operative may cause the receiving instruments to sound continuously. Cut the power to silence the instrument.

9. HOW TO CARE FOR YOUR EP-705M

1) Keep it level and stable
If your electric piano is at an angle or unstable, you will not be able to play properly. Such a step-up will also place a strain on only one part of the piano or the floor, easily causing damage to both.

2) Avoid humidity
Excessive humidity degrades internal operation, causing the piano to get out of tune and the key action to become heavy. When the weather is fine, open the windows for better ventilation.

3) Avoid direct sunlight
If you set up your electric piano next to a window or other place in direct sunlight, it may get out of tune. If there is no alternative, at least protect your electric piano with curtains, etc.

4) Avoid rapid changes in temperature and humidity
Placing your electric piano next to a heating or air conditioning unit will expose it to rapid changes in temperature and humidity—changes which will cause the external finish to deteriorate and the instrument to get out of tune. Keep your instrument away from heating and air conditioning appliances.

5) Do not place heavy objects or flower vases on your EP-705M
Placing something heavy on this instrument can damage it. Similarly, a flower vase or a glass of water can spill, letting water into the instrument and damaging the internal mechanism.

6) Turn off the power
After performing or practicing—whenever you are not playing—be sure to turn off the power. Always check to make sure that the power indicator lamp goes out. Leaving the power on for extended periods can damage the electric components.

7) When cleaning your instrument...
The EP-705M case is covered with vinyl leather which should be wiped with a soft, dampened cloth. Do not treat with wax or similar products.

10. SIMPLE TROUBLESHOOTING

Please check the items listed in the table below if either of the following problems should occur.

PROBLEM	POINT TO CHECK	SOLUTION
The instrument does not play even though the power switch is turned on.	Check whether the AC adapter is firmly connected both to the piano as well as to the electrical outlet.	Connect the AC adapter properly.
No sound is produced.	Check the signal cable from the piano to the external tone box input jack.	Connect the signal cable properly.
	Check whether the output cable is connected to the jack.	Connect the cable properly to the output jack.
	Check whether a tone selector has been turned on or not.	A tone selector must always be selected.
	Check the power to the external tone box.	Connect the power cable properly.
	Check the volume on the external tone box.	Turn up the volume.
	Check the patch cord connections.	Connect the patch cords properly. (For the connections see page 3.)

[ELECTRIC PIANO]
Model EP-705M MIDI Implementation Chart

Date : August 27, 1985

Version : 1.0

Function···		Transmitted	Recognized	Remarks
Basic Channel	Default	1 – 16		Memorized
	Changed	1 – 16		
Mode	Default	3		
	Messages	×		
	Altered	*****************		
Note Number :		29 – 103		
	True voice	*****************		
Velocity	Note ON	○ 9 n V = 1 – 127		
	Note OFF	× 9 n V = 0		
After Touch	Key's	×		
	Ch's	×		
Pitch Bender		×		
Control Change	64	○		Damper
Prog Change :		○ (0 – 98)		
	True #	*****************		
System Exclusive		×		
System Common	Song Pos	×		
	Song Sel	×		
	Tune	×		
System Real Time	Clock	×		
	Commands	×		
Aux Messages :	Local ON/OFF	×		
	All Notes OFF	○ (123)		
	Active Sense	×		
	Reset	×		
Notes				

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

EP-705M MIDI Implementation

[TRANSMITTED DATA]

Status	Second	Third	Description	
1 0 0 1 n n n n	0 K K K K K K K	0 0 0 0 0 0 0 0	Note Off	※1)
1 0 0 1 n n n n	0 K K K K K K K	0 V V V V V V V	Note On	※1)
1 0 1 1 n n n n	0 1 0 0 0 0 0 0	0 0 0 0 0 0 0 0	Damper Pedal Off	
	0 1 0 0 0 0 0 0	0 1 1 1 1 1 1 1	// On	
1 1 0 0 n n n n	0 P P P P P P P		Program Change	※2)
1 0 1 1 n n n n	0 1 1 1 1 0 1 1	0 0 0 0 0 0 0 0	All Notes Off	
1 0 1 1 n n n n	0 1 1 1 1 1 0 0	0 0 0 0 0 0 0 0	Omni Off	※3)
1 0 1 1 n n n n	0 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0	Poly Mode On	※3)

※1) n n n n ……Channel Number (n = 0 , ch 1)
K K K K K K K ……Key Number (29~103)
V V V V V V V ……Key Velocity (1~127)

※2) P P P P P P P ……Program Number (0~98)

※3) When the power is first applied, this message is transmitted to all channels.

KAWAI

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