

KAWAI

Professional Stage Piano

MP9000

OWNER'S MANUAL

Important Safety Instructions

SAVE THESE INSTRUCTIONS



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 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.

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

Read all the instructions before using the product.

To reduce the risk of injury, close supervision is necessary when a product is used near children.

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.

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 short-circuit the wire inside.



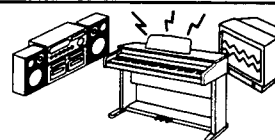
This product in combination with an amplifier and headphones or speakers, may be capable of producing sound level that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ear, you should consult an audiologist.



The product should be located so that its location or position does not interfere with its proper ventilation.

The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.

Keep the instrument away from electrical motors, neon signs, fluorescent light fixture, and other sources of electrical noises.



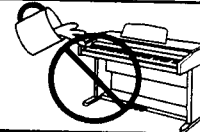
The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.



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.



The product should be serviced by qualified service personnel when:

- The power supply cord or the plug has been damaged.
- Objects have fallen, or liquid has been spilled into the product.
- The product has been exposed to rain.
- The product does not appear to operate normally or exhibits a marked change in performance.
- The product has been dropped, or the enclosure damaged.

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.



When disconnecting the AC power cord's plug, always hold the plug and pull it to remove it.



Pulling the AC power cord itself may damage the cord, causing a fire, electric shock or short-circuit.

Do not use the product in the following areas.

- Areas, such as those near windows, where the product is exposed to direct sunlight
- Extremely cold areas, such as outside
- Extremely humid areas
- Areas where a large amount of sand or dust is present
- Areas where the product is exposed to excessive vibrations

Using the product in such areas may result in product breakdown.

Do not wipe the product with benzene or thinner.



Doing so may result in discoloration or deformation of the product.

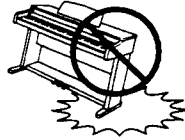
When cleaning the product, put a soft cloth in lukewarm water, squeeze it well, then wipe the product.

Do not stand on the product or exert excessive force.



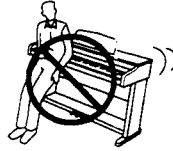
Doing so may cause the product to become deformed or fall over, resulting in breakdown or injury.

Take care not to drop the product.



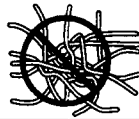
Please note that the product is heavy and must be carried by more than two persons. Dropping the product may result in breakdown.

Do not lean against the keyboard.



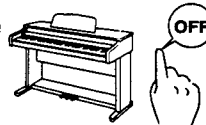
Doing so may cause the product to fall over, resulting in injury.

When connecting the AC power cord and other cords, take care not to get them tangled.



Failure to do so may damage them, resulting in fire, electric shock or short-circuit.

Before connecting cords, make sure that the power to this product and other devices is turned OFF.



Failure to do so may cause breakdown of this product and other devices.

GROUNDING INSTRUCTIONS

This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

Notes on Repair

Should an abnormality occur in the product, immediately turn the power OFF, disconnect the power cord plug, and then contact the shop from which the product was purchased.

FCC Information

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. 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 different electrical circuit from the receiver.
- Consult the dealer or an experienced radio/TV technician for help.

Canadian Radio Interference Regulations

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

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WELCOME TO THE MP9000

Thank you for purchasing the KAWAI MP9000. The MP9000 Professional Stage Piano features 16 Internal Sounds of the highest quality. The MP9000 can also be used as a MIDI master controller. On stage, at home, or in the studio, the MP9000 has been designed to offer quick and easy access to many sophisticated features.

BASIC FEATURES of the MP9000

SOUND mode & SETUP mode & SYSTEM mode



The MP9000 operates in three modes: the SOUND mode, the SETUP mode and the SYSTEM mode. The SOUND mode provides instant access to the Internal Sounds, Reverb, EFX, and other Real Time Controls. The SETUP mode is used to both program and recall any of the 64 User Programmable SETUPS. The SYSTEM mode is used to access global settings of the MP9000.

INT(INTERNAL) & EXT(EXTERNAL)

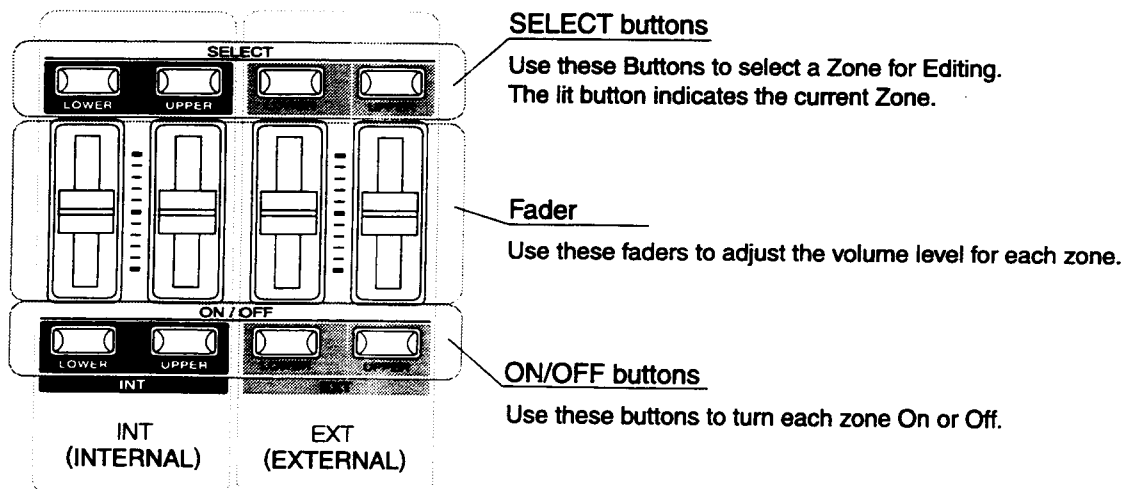
The MP9000 uses two zones to play Internal Sounds, labeled INT-UPPER and INT-LOWER. Two additional zones are available to control external MIDI instruments or devices; these are labeled EXT-UPPER and EXT-LOWER. In total, the MP9000 has 4 zones. Each zone can be played individually, or multiple zones can be freely split, layered and velocity switched to create stunning and personalized performances.

ACOUSTIC TOUCH KEYBOARD

The MP9000 has a wood constructed keyboard with an advanced hammer action.

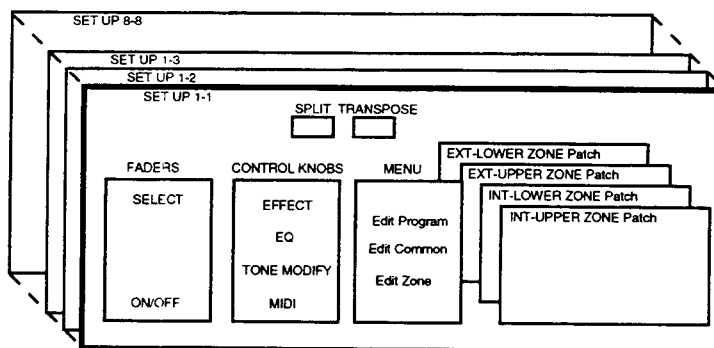
REVERB AND EFFECTS

The MP9000 offers 7 high quality REVERB types, and 21 popular EFX types.



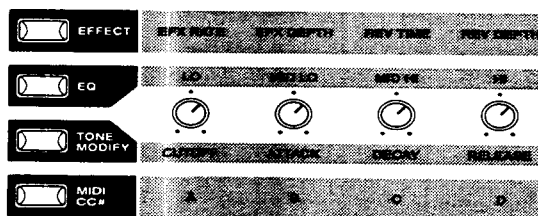
SETUP & LINK

The MP9000 has memory for 64 User SETUPS for various performance situations. Moreover, up to 32 SETUPS can be chained together in any order for instant access using the LINK Mode.

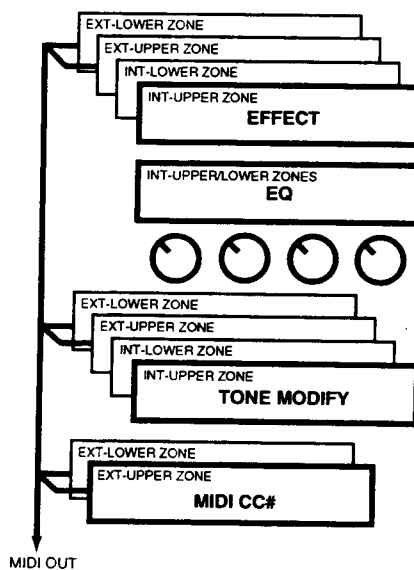


CONTROL KNOBS

The MP9000 has 4 multi-function CONTROL KNOBS, which offer real time control of the EFFECTS, EQ, TONE MODIFY and MIDI-CONTROL CHANGE messages.



CONTROL KNOBS



1. NAMES AND FUNCTIONS

FRONT PANEL

[FADER SECTION]

1 VOLUME Fader

This fader controls the master volume level of the MP9000. (Note: The VOLUME fader does not affect the Fixed Outputs on the rear panel)

2 SELECT buttons

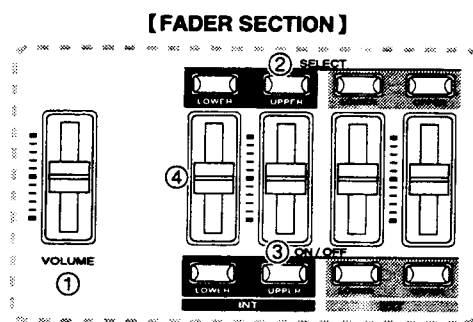
SELECT buttons are to select one of the four zones for editing. These buttons work exclusively, so only one zone can be selected at a time. The front panel setting represents the current zone status.

3 ON/OFF buttons

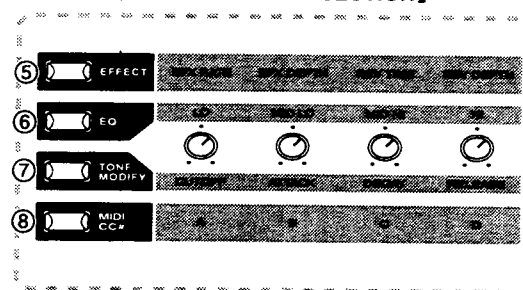
These buttons are used to turn zones ON/OFF. When the lamp is lit, the zone is active.

4 FADERS (zone volume level control)

Each fader controls the volume level of a designated zone. When multiple zones are active, these faders can be used as an audio mixer.

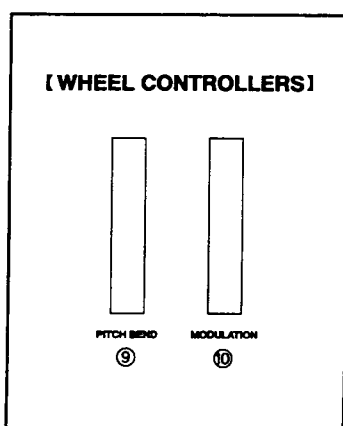


[CONTROL KNOBS SECTION]



[CONTROL KNOBS SECTION]

These four CONTROL KNOBS are multi-function real time controllers. A function can be selected using the four buttons to the left side of the CONTROL KNOBS. When the lamp is lit, that function is active. Touching any of these knobs will instantly change the Display to the current knob function and value.



5 EFFECT button

When this button is lit, the CONTROL KNOBS will adjust the REVERB time, REVERB depth, EFX rate and EFX depth.

6 EQ button

When this button is lit, the CONTROL KNOBS are working as a 4-band graphic equalizer.

7 TONE MODIFY button

When this button is lit, the CUTOFF, ATTACK, DECAY and RELEASE Levels for the selected zone can be changed.

8 MIDI cc# button

When this button is lit, MIDI control changes are sent from the MP9000 to the MIDI device specified by the selected zone.

[WHEEL CONTROLLERS]

9 PITCH BEND

This control wheel smoothly bends the pitch Up or Down from its current value.

10 MODULATION

Vibrato depth is controlled by this wheel. Moving the wheel forward increases the effect.

[EFFECT BUTTONS]

11 EFX button

This button turns the EFX ON or OFF for the selected zone. EFX are already assigned as default settings for the internal SOUNDS and SETUPS. To change the EFX type, use the MENU buttons to display the EFX type, and use the VALUE buttons to change the type.

12 REVERB button

This button turns the REVERB ON or OFF for the selected zone. REVERB is already assigned as default settings for the internal SOUNDS and SETUPS. To change the REVERB type, use the MENU buttons to display the REVERB type, and use the VALUE buttons to change the type.

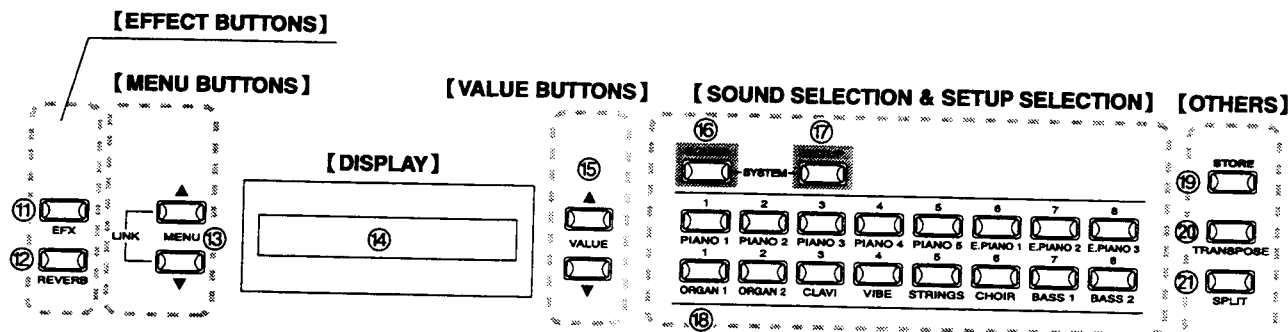
[MENU BUTTONS]

13 MENU buttons

The MENU buttons scroll through all the various parameters of the MP9000, depending on the Current Mode. To change a parameter value, use the VALUE buttons. Pressing both MENU buttons simultaneously will activate the LINK mode.

[DISPLAY]

14 DISPLAY



[VALUE BUTTONS]

15 VALUE buttons

Use these buttons to change the value of the current parameter as indicated on the DISPLAY.

[SOUND SELECTION & SETUP SELECTION]

16 SOUND button

This button switches the MP9000 to the SOUND mode. The PATCH buttons below this button will now select any of the 16 Internal Sounds.

17 SETUP button

This button switches the MP9000 to the SETUP mode. The PATCH buttons below this button will now select any of the 64 SETUPS.

18 PATCH buttons

Two rows of eight buttons form the PATCH button section. When the SOUND button is lit, these buttons can be used to select SOUNDS. When the SETUP button is lit, these buttons are used to recall and create SETUPS.

[OTHERS]

19 STORE button

Use this button to access the STORE, RESET and DUMP functions of the MP9000.

20 TRANPOSE button

Use this button to turn the TRANPOSE function ON/OFF.

21 SPLIT button

Use this button to turn the KEY SPLIT function ON/OFF.

MP9000 REAR PANEL

1 OUTPUTS

FIXED OUTPUTS

XLR outputs are used for connection to professional audio equipment. These jacks eliminate the need for direct boxes when connecting the MP9000 to a PA system or recording console. The VOLUME control and the EQ setting do not affect these outputs.

NORMAL OUTPUTS

These jacks are for connecting the MP9000 to musical instrument amplifier using standard 1/4 inch phone jacks.

2 PHONES

This is a headphone output, using a standard stereo 1/4 inch phone jack.

3 FOOT CONTROLLERS

EXP JACK

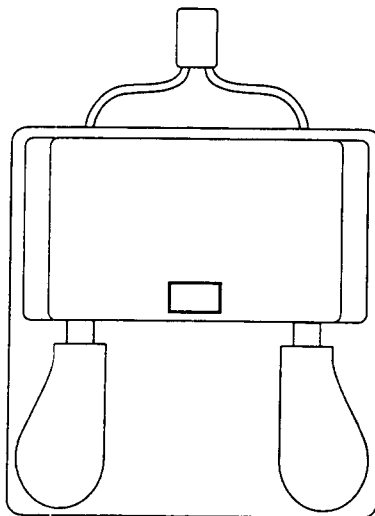
An expression pedal can be connected to this jack. (EX: Kawai V-20X)
This pedal is assignable under the SYSTEM menu with a MIDI control number.

FSW JACK

A momentary footswitch can be connected to this jack. (EX: Kawai F-1) This foot switch is also assignable under the SYSTEM menu with a MIDI control number.

4 DAMPER / SOFT JACK

This jack is used to connect the Foot Pedal included with the MP9000. (Kawai F-2)



The Soft pedal is located on the left side, and the Damper pedal is on the right side.

Note:

When the Rotary EFX is in use, the Soft pedal changes function to a Fast/Slow Rotor switch.

5 MIDI JACKS

These jacks are used to connect the MP9000 with external MIDI devices such as a MIDI sound module or a MIDI sequencer.

6 POWER SWITCH

Turns the MP9000 ON or OFF.

7 POWER RECEPTACLE

Connect the power cable, which is included in the MP9000 package, to this receptacle.

2. SOUND mode

In this mode, the MP9000 behaves as a stand alone digital piano with full access to the Internal Sounds, REVERB, and EFX.

1) Getting Ready

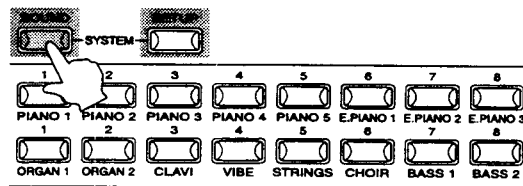
Turn the MP9000 ON, using the POWER SWITCH on the rear panel.
It is recommended to turn the MP9000 on before turning on any amplifiers in order to avoid switching noise.

2) Playing the MP9000 as a stand alone Digital Piano

How to use the UPPER zone.

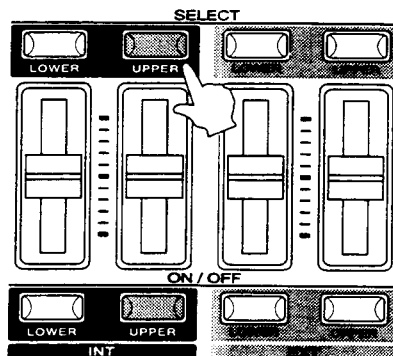
OPERATION

The MP9000 is always in the SOUND MODE, with the INTERNAL UPPER zone active and selected when first turned on. Make sure the SOUND button is lit. If the lamp is turned off, press the SOUND button again.



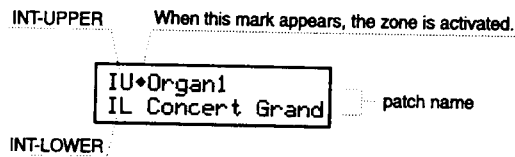
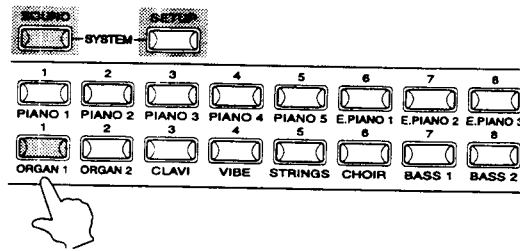
STEP 1

Be sure the SELECT INT-UPPER button is lit. If the lamp is turned off, press the SELECT INT-UPPER button again. The INT-UPPER ON/OFF button will be turned on automatically if any of the 16 PATCH buttons is pressed. When both lamps are on, the UPPER zone is selected and ready to play.

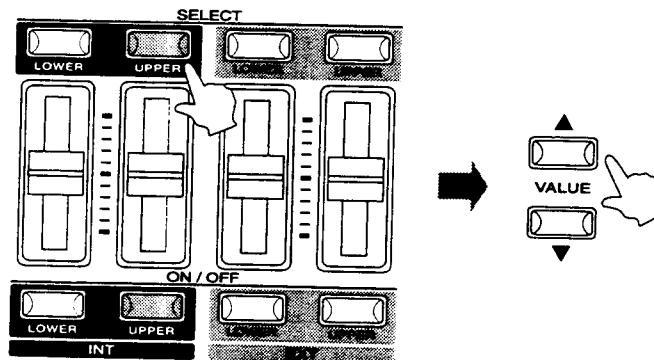


STEP 2

Use any of the 16 PATCH buttons to select one of the Internal Sounds. When the PATCH button is lit, the MP9000 is ready to play that selected sound.



Note:
Internal Sounds can also be chosen using the VALUE buttons.



Layering the UPPER and LOWER zones.

Method 1

How to layer zones using the SELECT buttons

First, press the SELECT INT-UPPER button, the lamp will light up.
Choose a sound for the UPPER zone using the PATCH buttons.

Next, Press the SELECT INT-LOWER button, the lamp will light up.
Choose a sound for the LOWER zone using PATCH buttons.

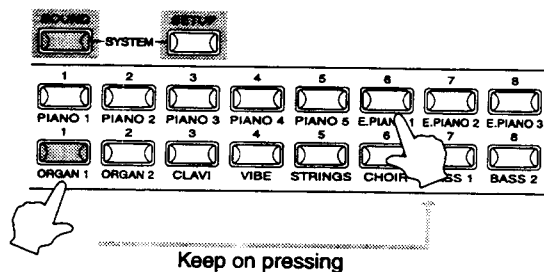
IU•Organ1
IL•E.Piano1

Method 2

How to layer zones using just the sound buttons

Make sure that the SELECT INT-UPPER button is lit.

While holding down the PATCH button for the sound to play on the UPPER zone, also press a second PATCH button for the sound to play on the LOWER zone.



Method 3

How to layer zones using the VALUE buttons

First, press the SELECT INT-UPPER button, the lamp will light up.
Press the VALUE buttons to select the sound to play on the UPPER zone.

Next, press the SELECT INT-LOWER button, the lamp will light up.
Press the VALUE buttons to select the sound to play on the LOWER zone.

Note:

Both the INT-UPPER and INT-LOWER zones must be on. Use the FADERS to adjust the balance between the two zones.

3) Using the MP9000 as a MIDI controller

The MP9000 provides two EXTERNAL zones (EXT-UPPER and EXT-LOWER) to control other MIDI instruments or devices.

MIDI CONNECTION

OPERATION

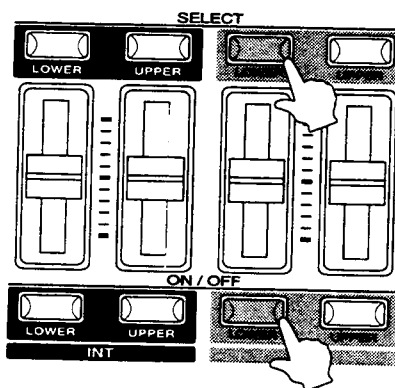
STEP 1

Connect the MIDI OUT on the MP9000 to the MIDI IN on an external MIDI device with a MIDI cable.

STEP 2

Press the ON/OFF EXT-UPPER button. The EXT-UPPER zone is now sending MIDI data.

To send MIDI data for the EXT-LOWER zone, press the ON/OFF EXT-LOWER button

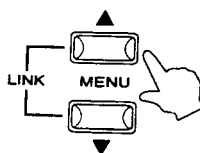


Selecting the MIDI Channel

The MIDI Transmit Channel of the MP9000 must be matched with the Receive Channel of the MIDI devices connected to the MP9000.

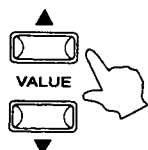
STEP 3

Press the MENU-DOWN button until 'EU Tx Ch' (EXT-UPPER Transmitting Channel) appears on the display.



IU•Organ1
EU Tx Ch = 16

STEP 4



Use the VALUE buttons to choose a MIDI Transmit Channel from 1 to 16.

Note:

To select the MIDI channel for the EXT-LOWER zone, press the MENU-DOWN button until "EL Tx Ch"(EXT-LOWER Transmitting Channel) appears on the display. Then press the VALUE button to choose a MIDI channel from 1 to 16.

IU*Organ1
EL Tx Ch = 16

In the SET UP mode, the MP9000 can select sounds on the external MIDI devices by transmitting a Program Change Number.
(see p.32 for detail)

4) SPLIT

The SPLIT function quickly divides the keyboard into two zones on either side of the Split Point. The LOWER zones play on the left-hand side and the UPPER zones play on the right-hand side. This function enables different sounds to play on the right-hand and left-hand sides of the keyboard. The SPLIT function is available for both the INT and the EXT zones.

To turn on the SPLIT function

Press the SPLIT button, the lamp will light up.

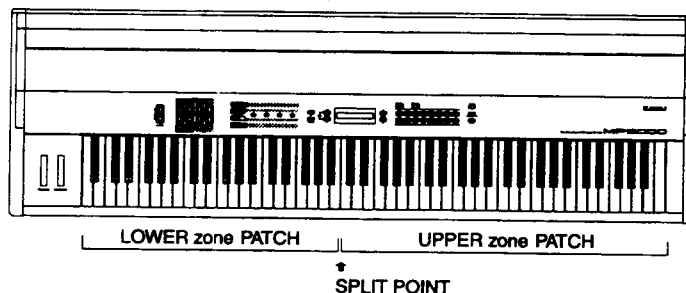


To check the SPLIT POINT

SPLIT POINT
C3

The key "C3" is the default SPLIT POINT.

The display indicates the current location of the SPLIT POINT when the SPLIT button is held down.



Note:

The SPLIT POINT key is included in the UPPER zone area.

How to SPLIT two sounds on the keyboard

To select sounds while the SPLIT function is "ON", the procedure is the same as the regular method.

OPERATION

Method 1

How to split zones using the SELECT buttons

First, press the SELECT INT-UPPER button, the lamp will light up.
Choose a sound for the UPPER zone using the PATCH buttons.

Next, Press the SELECT INT-LOWER button, the lamp will light up.
Choose a sound for the LOWER zone using PATCH buttons.

Method 2

How to split zones using just the sound buttons

Make sure that the SELECT INT-UPPER button is lit.

While pressing the PATCH button which you would like to play on the UPPER zone, then press the PATCH button which you would like to play on the LOWER zone.

Method 3

How to split zones using the VALUE buttons

First, press the SELECT INT-UPPER button, the lamp will light up.
Press the VALUE buttons to select the sound to play on the UPPER zone.

Next, press the SELECT INT-LOWER button, the lamp will light up.
Press the VALUE buttons to select the sound to play on the LOWER zone.

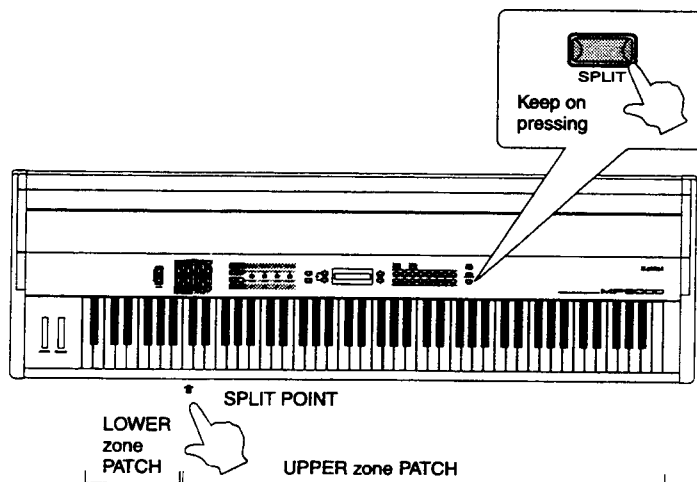
Note:

Both the INT-UPPER and INT-LOWER zones must be on. Use the FADERS to adjust the balance between the two zones.

Moving the SPLIT POINT

While holding down the SPLIT button, also press the key on the keyboard that will act as the SPLIT POINT.

The SPLIT POINT can also be set using the VALUE buttons, while holding the SPLIT button down.



Note:

The SPLIT POINT key is included in the UPPER zone area.

To Exit the SPLIT function

Press the SPLIT button again to exit this function.

Note:

When returning to the SOUND mode from the SPLIT function, only the UPPER zone remains active.

5) TRANSPOSE

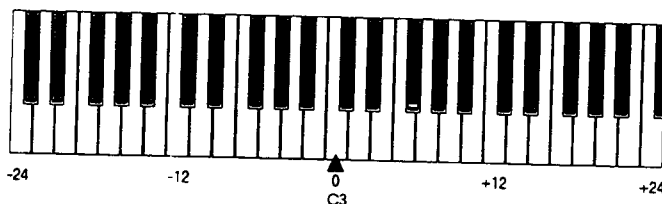
When the TRANSPOSE function is "ON", entire MP9000 can be shifted in pitch, either to a new key or to a new octave. The available range of transposition is 24 semitones, either up or down.

OPERATION

Method 1



While holding down the TRANSPOSE button, also press the new key for the MP9000 to play in.



Method 2

The transpose amount can also be set using the VALUE buttons.

While holding the TRANSPOSE button down, press the VALUE buttons to change the transpose amount.

The display shows the current TRANSPOSE amount when the TRANSPOSE button is held down.

A value of "0" indicates no transposition.

TRANSPOSE
0

Note:

Transpose settings are not saved in the SOUND mode. Refer to the Store Setup procedure. (see p.44)

6) EFX/REVERB

The Internal Sounds of the MP9000 can be enhanced using the built in REVERB and EFX generators.

There are 7 REVERB types to choose from, and 21 different EFX types. However, there is only one of each, so it is not possible to assign one EFX type to the INT-UPPER zone and a different EFX type to the INT-LOWER zone. However, it is possible to adjust the EFX DEPTH and REVERB DEPTH independently for each INTERNAL zone, as shown in the table below.

EFX				
	TYPE	RATE	DEPTH	ON/OFF
INT-UPPER	Common (Affects INT-UPPER & INT-LOWER)	Common	Independent	Independent
INT-LOWER	Common (Affects INT-UPPER & INT-LOWER)	Common	Independent	Independent

REVERB				
	TYPE	RATE	DEPTH	ON/OFF
INT-UPPER	Common (Affects INT-UPPER & INT-LOWER)	Common	Independent	Independent
INT-LOWER	Common (Affects INT-UPPER & INT-LOWER)	Common	Independent	Independent

EFX

The MP9000 contains 21 high quality EFX types, designed to complement the Internal Sounds.

EFX ON/OFF

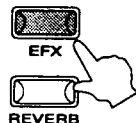
EFX are already assigned as default settings for the internal patches. The EFX button turns the EFX generator ON or OFF for the selected zone

OPERATION

STEP 1

First, press either the SELECT INT-UPPER button or SELECT INT-LOWER button to select the current zone. The lamp will light up to indicate the current zone.

STEP 2



To turn the EFX "ON" for the current zone, press the EFX button and the lamp will light up.

EFX will be added to the current zone.

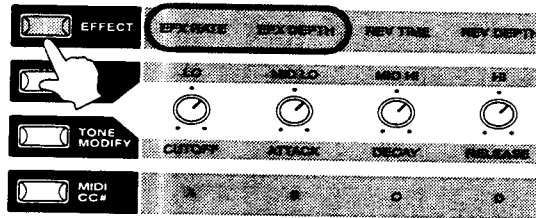
To turn the EFX "OFF" again, press the EFX button again (the lamp will go dark).

Adjusting the EFX value using the CONTROL KNOBS

OPERATION

STEP 1

Make sure that the EFFECT button is lit.
If the EFFECT button is turned off, press it again.



STEP 2

The CONTROL KNOBS are now active and assigned to the EFX parameters. Pressing the EFFECT button, or touching any of the CONTROL KNOBS will cause the display to show the current settings.

EfR	EfD	RuT	RuD
41	64	96	127

EFX RATE (0-127): EFX RATE assigns frequency or character of the EFX.
EFX DEPTH (0-127): EFX DEPTH assigns the amount of the EFX added to the sound.

EFX parameter list;

		EFX DEPTH	EFX RATE	
1	CHORUS 1	send level	rate	0-12.7Hz
2	CHORUS 2	send level	rate	0-12.7Hz
3	CHORUS 3	send level	rate	0-12.7Hz
4	FLANGER 1	send level	rate	0-12.7Hz
5	FLANGER 2	send level	rate	0-12.7Hz
6	ENSEMBLE	send level	rate	0-12.7Hz
7	CELESTE	send level	rate	0-12.7Hz
8	DELAY 1	send level	delay time	0-743ms
9	DELAY 2	send level	delay time	0-743ms
10	AUTO PAN	wet balance	rate	0-12.7Hz
11	TREMOLO	wet balance	rate	0-12.7Hz
12	PHASER 1	wet balance	rate	0-12.7Hz
13	PHASER 2	wet balance	rate	0-12.7Hz
14	ROTARY 1	wet balance	rate	slow/fast
15	ROTARY 2	wet balance	rate	slow/fast
16	AUTO WAH	wet balance	resonance	1-100(%)
17	EXCITER	send level	intensity	1-100(%)
18	ENHANCER	send level	intensity	1-100(%)
19	OVERDRIVE	wet balance	drive	1-100(%)
20	DISTORTION	wet balance	drive	1-100(%)
21	SYMPRES	send level	early ref level	1-100(%)

REVERB

The MP9000 contains 7 high quality REVERB types, designed to complement the Internal Sounds.

REVERB ON/OFF

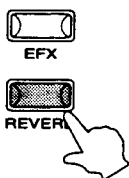
Default REVERB settings are already assigned for the internal patches. The REVERB button turns the REVERB generator ON or OFF for the selected zone

OPERATION

STEP 1

First, press either the SELECT INT-UPPER button or SELECT INT-LOWER button to select the current zone. The lamp will light up to indicate the current zone.

STEP 2



To turn the REVERB "ON" for the current zone, press the REVERB button and the lamp will light up. REVERB will be added to the current zone.

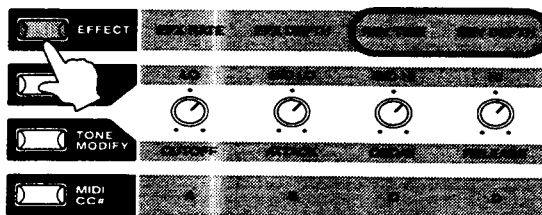
To turn the REVERB "OFF" again, press the REVERB button again (the lamp will go dark).

Adjusting the REVERB value using the CONTROL KNOBS

OPERATION

STEP 1

Make sure that the EFFECT button is lit. If the EFFECT button is turned off, press it again.



STEP 2

The CONTROL KNOBS are now capable of changing the REVERB parameters.

EfR	EfD	RvT	RvD
41	64	96	127

REV TIME (0-127): REV TIME set the reverb time.

REV DEPTH (0-127): REV DEPTH assigns the send level to the reverb.

REVERB parameter list;

	REV DEPTH	REV TIME
1 REV HALL 1	send level	rev.time 0.3-5.0S
2 REV HALL 2	send level	rev.time 0.3-5.0S
3 REV STAGE 1	send level	rev.time 0.3-3.0S
4 REV STAGE 2	send level	rev.time 0.3-3.0S
5 REV ROOM 1	send level	rev.time 0.3-3.0S
6 REV ROOM 2	send level	rev.time 0.3-3.0S
7 REV PLATE	send level	rev.time 0.3-3.0S

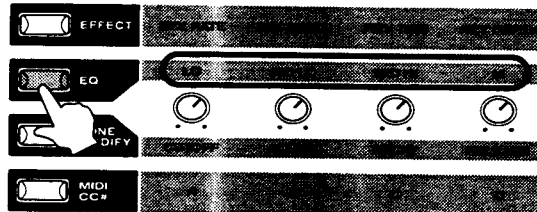
7) EQ (EQUALIZER)

The MP9000 contains a four-band graphic equalizer to shape the overall tone of the sound. The EQ is global, and will affect the sound of both the INT-UPPER and INT-LOWER zones

OPERATION

STEP 1

Be sure that the EQ button is lit.
If the EQ button is turned off, press it again.



STEP 2

The CONTROL KNOBS are now active and assigned to the EQ parameters. Pressing the EQ button, or touching any of the CONTROL KNOBS will cause the display to show the current settings.

Each parameter of the EQ has an adjustable range from -6 to +6. A positive (+) value indicates amplification, or a boost of that frequency range. A negative (-) value indicates attenuation, or a cut of that frequency range.

Lo	Mlo	Mhi	Hi
0	0	0	0

Note:

The EQ function has no effect on the FIXED Outputs of the MP9000.

8) TONE MODIFY

The MP9000 allows certain characteristics of the Internal Sounds to be custom tailored to suit a particular musical or playing style, or to create many variations and different types of sounds.

The following parameters are provided:

CUTOFF, ATTACK, DECAY and RELEASE.

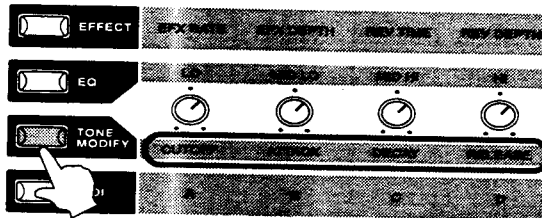
OPERATION

STEP 1

Make sure that the TONE MODIFY button is lit.

If the TONE MODIFY button is turned off, press it again.

CUT	ATK	DCY	RLS
0	0	0	0



The CONTROL KNOBS are now active and assigned to the Tone Modify parameters for the current zone.

Pressing the TONE MODIFY button, or touching any of the CONTROL KNOBS will cause the display to show the current settings.

Each parameter of the TONE MODIFY function has an adjustable range from -50 to +50.

STEP 2

Move each CONTROL KNOB to gain the desired tone quality.

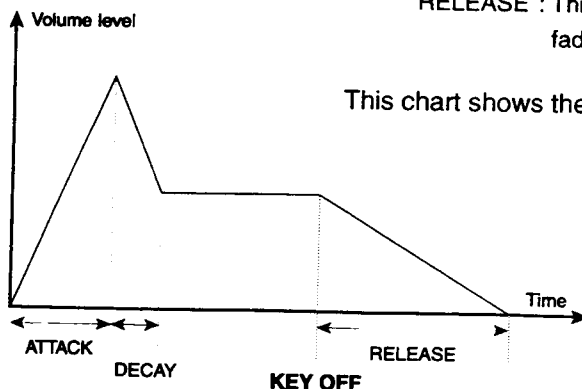
TONE MODIFY parameter list;

CUTOFF : Raising the CUTOFF level makes the sound brighter, lowering the level makes the sound duller.

ATTACK : As the value increases, the attack time becomes longer, which means a slower attack is produced.

DECAY : This parameter controls the amount of time from the peak level to the sustain level of the sound.

RELEASE : This parameter controls the amount of time needed for the sound to fade out after the key is released.



This chart shows the relationship of ATTACK, DECAY and RELEASE.

9) Transmitting MIDI Control Changes using the CONTROL KNOBS

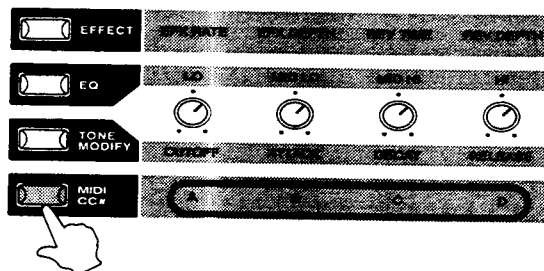
The MP9000 can send any MIDI Continuous Controller information to any MIDI Instrument or Device.

This powerful feature allows for editing the sounds of an external sound module in Real Time during performance, or for recording Real Time performance edits to a MIDI sequencer. Obviously, the MIDI Control Change function is available for the EXT-UPPER and EXT-LOWER zones only.

OPERATION

STEP 1

Press the MIDI button, then the lamp will light up.



The CONTROL KNOBS are now active and assigned to the MIDI CC parameters. Pressing the MIDI button, or touching any of the CONTROL KNOBS will cause the display to show the current settings.

STEP 2

Using the CONTROL KNOBS, adjust the parameters as desired, or have them available for performance.

C010	011	016	017
0	0	0	0

Each parameter of the Control Change has an adjustable range from 0 to 127.

Control Change parameter list;

- A: #10 PAN
- B: #11 EXPRESSION
- C: #16 GENERAL PURPOSE#1
- D: #17 GENERAL PURPOSE#2

Note:

Control Change Numbers are fixed in the SOUND mode.

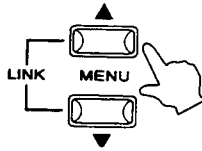
In the SET UP mode, different Control Numbers can be programmed in Each Set Up, and in Each EXTERNAL zone. (see p.39)

Note:

When the INT zones are selected in this function, the display will appear as below.

Cxxx	xxx	xxx	xxx
---	---	---	---

10) Sound Menu



Each mode (SOUND, SET UP, SYSTEM) of the MP9000 has its own list of parameters. Use the MENU buttons to scroll through the parameters.

Sound Menu list:

Voicing
REV Type
EFX Type
EL Tx Ch
EU Tx Ch

The Voicing, REV Type and EFX Type can be set for each of the 16 Internal Sounds

Caution:

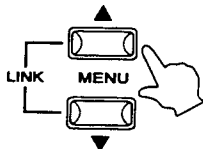
The settings in the Sound Menu will not be retained when the power is turned off. To Save these settings, use the Store Sound or the Store SET UP procedure. (see p.43)

How to reach the Sound Parameter Menu

OPERATION

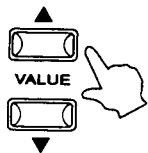
Make sure that the SOUND button is lit.

STEP 1



Use the MENU buttons to scroll to the correct parameter.

STEP 2



Use the VALUE buttons to change the value of the parameter.
Since each parameter has a different value range, consult the parameter list.
(see p.28-29)

STEP 3



Save these settings using the STORE button.
(see p.43 for details)

Voicing <INT only>

[Available Voicing types: Normal/Mellow/Dynami/Bright]

IU•Organ1
Voicing = Mellow

This parameter re-creates electronically the "Voicing", or hammer surface treatments in a real acoustic piano.

This function is a very powerful way to enhance and customize the piano response for each player and each sound.

The effect is most useful on the Piano sounds, but is available for all of the Internal Sounds.

Voicing type list;

Normal : Reproduces the effect of a normal hammer surfaces.

Mellow : Reproduces the effect of a softer hammer surface.

Dynami : This setting is impossible on a traditional piano, Using the Dynamic Voicing type, the MP9000 will play the pianissimo notes as if they were struck with a soft hammer, and the forte notes as if they were struck with a harder hammer. This setting can provide an enormous dynamic range.

Bright : Reproduces the effect of a harder hammer surface.

REV type <INT only>

[Available REVERBtypes: Hall 1/Hall 2/Stage 1/Stage 2/Room 1/Room 2/Plate]

REVERB type list;

IU•Organ1
REV type=Hall1

Hall 1 : Simulates the reverb in a standard hall
Hall 2 : Simulates the reverb in a small hall
Stage 1 : Simulates the reverb on a standard stage
Stage 2 : Simulates the reverb on a small stage
Room 1 : Simulates the reverb in a standard room
Room 2 : Simulates the reverb in a small room
Plate : Simulates the reverb of a metallic plate

Note:

Each REVERB type has its own default RATE and DEPTH values, so when changing the REVERB type, the values are changed automatically.

EFX type <INT only>

[Available EFXtypes: Chorus 1,2,3/Flangr 1,2/Ensemble/Celeste/Delay 1,2/AutoPan/Tremolo/Phaser 1,2/Rotary 1,2/Autwah/Exciter/Enhancr/Overdrv/Distrtn /SympRes]

EFX type list;

IU•Organ1
EFX type=Flangr1

Chorus 1/2/3 : Chorus is a slight detuning of the sound, which adds depth and richness to the sound.
Flangr 1/2 : Flanger introduces a shifting comb-filter, which adds motion and a "hollow" tone to the sound.
Ensemble : Ensemble is a three phase chorus, with each of the three chorus units at a different phase and frequency. This gives a slightly richer sound than the Celeste effect, below.
Celeste : Celeste is a three phase chorus, with each of the three chorus units at different phase.
Delay 1/2 : Delay adds echoes to the sound.

- AutoPan : AutoPan alternates the sound left and right across the stereo field at a variable rate
- Tremolo : Tremolo changes the volume of the sound, making it louder and softer at a variable rate
- Phaser 1/2 : Phaser creates a cyclic phase change, adding motion to the sound.
- Rotary 1/2 : Rotary simulates the slow and fast switching of an rotary organ speaker.
- Auto Wah : Auto Wah creates an automatic filter sweep at the attack of each note.
- Exciter : Exciter emphasizes certain high frequencies to make a sound more easily discernible.
- Enhancer : Enhancer produces a crisper tone, so the sound is more easily discernible.
- Overdrv : Overdrive effect adds pre-amp style distortion.
- Distrtn : Distortion effect adds a harder, fuzzier distortion than the overdrive.
- SympRes : This effect simulates the sympathetic resonance occurring in the undamped strings of an acoustic piano.

Note:

Each EFX type has the appropriate value of RATE and DEPTH, so as changing the EFX type, the values are changed automatically.

EL Tx Ch (Transmitting Channel for the EXT-LOWER zone)

[Value Range: 1 - 16]

IU*Organ1 EL Tx Ch = 16

This parameter sets the MIDI OUT channel for the EXT-LOWER zone. This MIDI channel must be matched to an external MIDI device.
(see p.15)

Note:

The UPPER Tx Ch and LOWER Tx Ch can be set two different channels.

EU Tx Ch (Transmitting Channel for the EXT-UPPER zone)

[Value Range: 1 - 16]

IU*Organ1 EU Tx Ch = 16

This parameter sets the MIDI OUT channel for the EXT-UPPER zone. This MIDI channel must be matched to an external MIDI device.
(see p.15)

3. SETUP mode

This mode allows access to all of the available parameters in the MP9000. This collection of settings is called a SETUP. The MP9000 provides 64 SETUPS, and all are User programmable.

The following groups of parameters are stored in a SETUP.

SPLIT
TRANSPOSE
CONTROL KNOB
Edit Program
Edit Common
Edit Zone

The SPLIT and TRANSPOSE functions work the same as in the SOUND mode. (see p.16-19)

1) SETUP recall

Each SETUP is designated by both a name and by a two-digit number, for quick access.

OPERATION

STEP 1



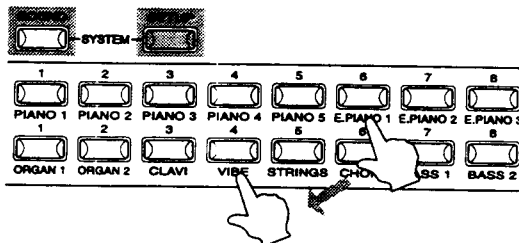
To enter the SETUP mode, press the SETUP button, the lamp will light up. When entering the SETUP mode, the MP9000 returns to the most recently used SETUP.

HIEND1

STEP 2

Choose a SETUP using the PATCH buttons. Again, each SETUP uses a two-digit number. The first digit is selected from the top row, the second digit is selected from the bottom row.

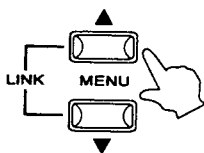
For example, to recall 6-4 SETUP, press the PATCH buttons "6" in the top row, and "4" in the bottom row.



The display will confirm the current SETUP.

6-4SETUP

2) SETUP Menu



Each mode (SETUP, SOUND, SYSTEM) of the MP9000 has its own list of parameters. The SETUP Menu allows for the highest level of programming available on the MP9000. Inside each of the four zones, a multitude of features and effects can be programmed and combined together into one exciting SETUP.

A total of 64 SETUPS may be programmed in this way.

The menu consists of three categories: Edit Program, Edit Common and Edit Zone.

Each category has several parameters. The Edit Zone parameters can be set individually for each zone.

Use the MENU buttons to scroll through all the different parameters.

Caution:

The settings in the SETUP Menu will not be retained when the power is turned off, unless they are saved. To save these settings, use the Store SetUp procedure. (see p.44)

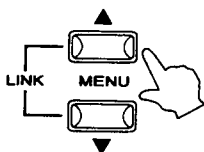
		INT	EXT
EDIT PROGRAM	IU/IL	○	—
	PRG	—	○
	MSB	—	○
	LSB	—	○
	CH	—	○
EDIT COMMON	REV type	○	—
	EFX type	○	—
EDIT Zone	Zone Hi	○	○
	Zone Lo	○	○
	Velo SW	○	○
	Velo SW val	○	○
	Velo sense	○	○
	Transpose	○	○
	Damper	○	○
	FSW	○	○
	CC exp	○	○
	Modulation	○	○
	Bender	○	○
	Tx Ch	—	○
	Tx PRG	—	○
	Tx Bank	—	○
	Knob [A~D]	—	○
	Knob [A~D] cc#	—	○
	Pan	○	○
	Coarse	○	○
	Fine	○	○
	Bender Range	○	○
	Voicing	○	—
	Solo	—	○
	Solo Mode	—	○
	Tx Pan	—	○
	Tx Coarse	—	○
	Tx Fine	—	○
	Tx BendrRange	—	○
	Tx Attack	—	○
	Tx Decay	—	○
	Tx Release	—	○
	Tx Cutoff	—	○

How to reach the SETUP Parameter Menu

OPERATION

Make sure that the SETUP button is lit.

STEP 1

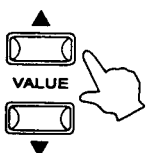


First, press the SELECT button for the zone to be edited.

Next, press the MENU Up and Down buttons until the correct parameter has been selected and appears in the DISPLAY.

(see p.32-42 for the parameter)

STEP 2



Set the value of the parameter using the VALUE buttons.

Since each parameter has a different value range, consult the following pages for the details. Repeat this procedure for any other parameters in any of the zones that need to be modified.

STEP 3



Save these settings using the STORE button.

(see p.44 for detail)

Edit Program

Use the Edit Program parameters to set the correct PATCHES for each zone in the SETUP mode.

Note:

Use the four SELECT buttons to choose the zone to be edited.

IU/IL (PATCH Setting) <INT only>

[PATCH SOUND types: PIANO 1/PIANO 2/PIANO 3/PIANO 4/PIANO 5/E.PIANO 1/E.PIANO 2/E.PIANO 3/ORGAN 1/ORGAN 2/CLAVI/VIBE/STRINGS/CHOIR/BASS 1/BASS 2]

IU•Organ1
IL Concert Grand

PRG (Program Number) <EXT only>

[Value Range: 1-128]

EU•127:127-127	1
EL ***:***-***	1

Note:

PRG, MSB, LSB and CH are displayed on the same page. To choose EXT-UPPER or EXT-LOWER, use the SELECT buttons. To move the cursor, use the MENU buttons.

MSB <EXT only>

[Value Range: 0-127]

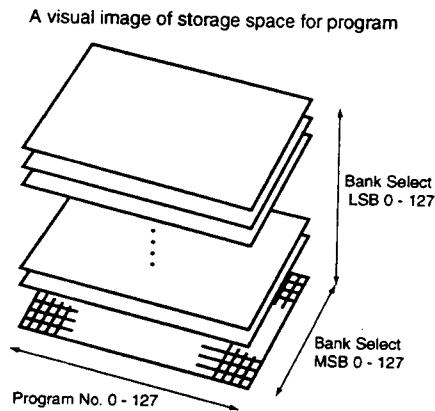
EU•127:127-127	1
EL ***:***-***	1

LSB <EXT only>

[Value Range: 0-127]

EU•127:127-127	1
EL ***:***-***	1

In MIDI standard, there are 128 storage spaces. The number of storage spaces can be expanded using an LSB and an MSB.



This is a 3D image of the expanded program change system with the MSB and LSB. To use these efficiently and correctly, refer to the operation manual of the external MIDI sound modules that are connected to the MP9000.

CH (Channel) <EXT only>

[Value Range: 1-16]

EU•127:127-127	1
EL ***:***-***	1

This parameter sets the MIDI Transmitting Channel of EXT-UPPER and EXT-LOWER zones.

Make sure that receiving channel of any external MIDI devices are matched to these channels.

Edit Common

Use the Edit Common Menu to select the EFX type and the REVERB type for the Internal Sounds. There are 7 REVERB types to choose from, and 21 different EFX types. However, there is only one of each, so it is not possible to assign one EFX type to the INT-UPPER zone and a different EFX type to the INT-LOWER zone.

(see p.20)

REV type (Reverb Type) <INT only>

[Available Reverb types: Hall 1/Hall 2/Stage 1/Stage 2/Room 1/Room 2/Plate]

COMMON REV type=Hall1

This parameter sets the REVERB type.(see p.23 for detail)

The INT-UPPER and INT-LOWER zones cannot be set to different REVERB types. However, The REVERB DEPTH and REVERB ON/OFF can be controlled independently for the INT-UPPER and INT-LOWER zones.

EFX type (Effect Type) <INT only>

[Available EFX types: Chorus 1,2,3/Flangr 1,2/Ensemb 1/Celeste/Delay 1,2/AutoPan/Tremolo/Phaser1,2/Rotary1,2/AutoWah/Exciter/Enhancr/Overdrv/Distrtn/SympRes]

COMMON EFX type=Flangr1

This parameter sets the EFX type.(see p.21 for detail)

The INT-UPPER and LOWER zones can't be set different types of EFX. The INT-LOWER follows the EFX type of the INT-UPPER zone.

Edit Zone

The Edit Zone function contains many parameters. Some parameters apply to both INTERNAL and EXTERNAL zones. Other parameters only apply to EXTERNAL zones, and some only apply to INTERNAL zones. When choosing a zone to be edited, only the parameters that apply to the selected zone will be displayed. Again, use the MENU buttons to scroll through the various parameters. Use the VALUE buttons to edit the parameter.

Note:

To select the INT-UPPER/LOWER or the EXT-UPPER/LOWER zones, press the SELECT button.

Zone Hi <INT/EXT> Zone Lo <INT/EXT>

[Value Range: C-2 - G8]

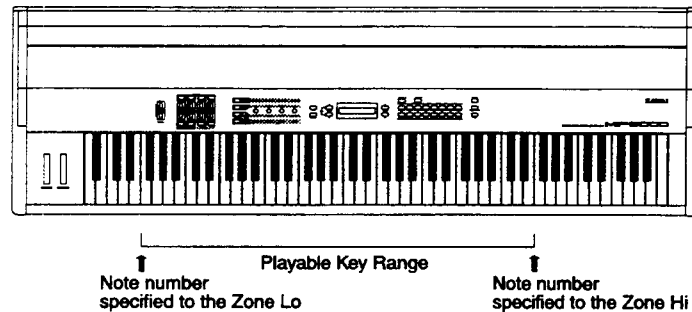
IU•Organ1 Zone Hi = E5

These two parameters define the playable key range on the keyboard.

IU•Organ1 Zone Lo = F0

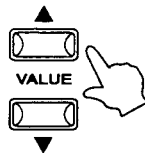
First, while Zone Hi appears in the display, press the key on the keyboard that will be the highest note that the selected zone can play.

Next, while Zone Lo appears in the display, press the key on the keyboard that will be the lowest note that the selected zone can play.



Note:

For convenience, the keyboard is used to set the values for Zone Hi and Zone Lo. Be careful not to leave the Zone Hi or Zone Lo parameters active in the display after these values have been set!

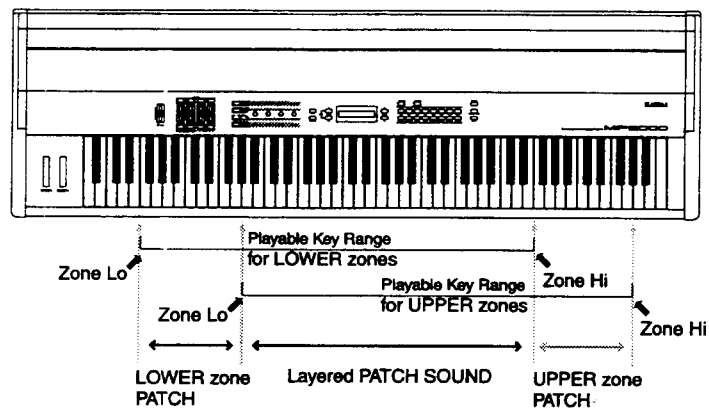


Note:

The Zone Hi and Zone Lo can be also set using the VALUE buttons.

TIPS

An effective use of the Zone Hi and Lo



(1) Assign a patch to the INT-UPPER zone and a different patch to the INT-LOWER zone using the regular method.

(2) For the LOWER zone, set Zone Lo to "F0" and Zone Hi to "E5".

(3) For the UPPER zone, set Zone Lo to "A1" and Zone Hi to "G6".

F0 - G1 : These keys will play the LOWER zone only.

A1 - E5 : These keys will play the UPPER and LOWER zones as a layer.

F5 - G6 : These keys will play the UPPER zone only.

Velo SW (Velocity Switch) <INT/EXT>

[Value Range: Off/Loud/Soft]

IU•Organ1
Velo SW =Loud

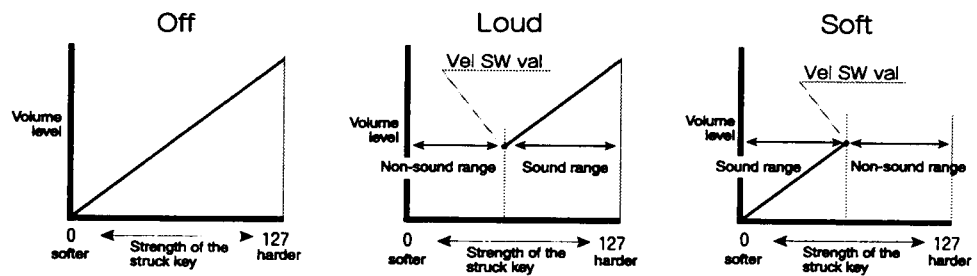
Velocity switching is an extremely useful and creative tool for customizing a performance. Using Velocity Switching, it is possible to have either one sound switch to another sound at a set velocity, or even for a second sound to be added in once a certain velocity has been reached, or to have a sound drop out above or below a set velocity level.

This parameter sets the velocity switch type.

Off : No effect. The PATCH plays normally.

Loud : The selected sound plays only when the key is struck harder than the Velo SW value. (See next parameter)

Soft : The selected sound plays only when the key is struck softer than the Velo SW value. (See next parameter)



Velo SW val (Velocity Switch Value) <INT/EXT>

[Value Range: 0 - 127]

IU•Organ1
Velo SW val= 127

This parameter determines switching level of the key velocity.

For the Loud Velo SW : determines the lowest key velocity to sound.

For the Soft Velo SW : determines the highest key velocity to sound.

Note:

Each zone can have a separate Velocity Switch Value. By setting the Soft Zone Velocity Switch Value higher than that of the Loud Zone, a dynamic area where both sounds play can be created. It is also possible to switch Internal Zones with External Zones for even more possibilities.

Velo sense (Velocity Sense) <INT/EXT>

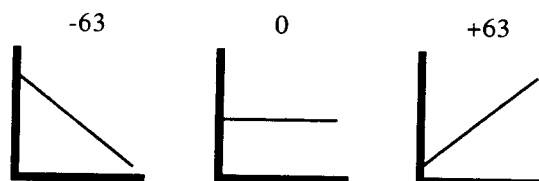
[Value Range: -64 - 0 - +63]

IU•Organ1
Velo sense = +63

This parameter adjusts the keyboard response.

If a positive value is set, the velocity level increases when keys are struck harder.

On the contrary, if a negative value is set, the velocity level decreases when keys are struck harder.



Vertical Line: Volume level

Horizontal axis: Strength of the struck key

Transpose <INT/EXT>

[Value Range: -36 - 0 - +36]

IU•Organ1
Transpose = +24

This parameter sets the amount of transposition. The range is available within three octaves above or below C3.

This parameter is available for each zone separately in the SETUP Menu.

(To set the master transpose, press the TRANSPOSE button and set the value.)

Damper <INT/EXT>

[Value Range: On/Off]

IU•Organ1
Damper = Off

On : The Damper Pedal is active for the selected zone.

Off : The Damper pedal has no affect in the selected zone.

FSW (Foot Switch) <INT/EXT>

[Value Range: On/Off]

IU•Organ1
FSW = Off

On : The Foot Switch is active for the selected zone.

Off : The Foot Switch has no affect in the selected zone.

EXP (Expression) <INT/EXT>

[Value Range: On/Off]

IU•Organ1 EXP = Off

On : The Expression Pedal is active for the selected zone.

Off : The Expression Pedal has no affect in the selected zone.

Modulation <INT/EXT>

[Value Range: On/Off]

IU•Organ1 Modulation = Off

On : The Modulation Wheel is active for the selected zone.

Off : The Modulation Wheel has no affect in the selected zone.

Bender <INT/EXT>

[Value Range: On/Off]

IU•Organ1 Bender = Off

On : The Pitch Bend Wheel is active for the selected zone.

Off : The Pitch Bend Wheel has no affect in the selected zone.

Tx Ch (Transmitting Channel) <EXT only>

[Value Range : 1 - 16]

EU ***:***-*** 1 Tx Ch = 1

This parameter sets the MIDI OUT transmit channel for the selected zone.

Tx PRG (Transmitting Program Change) <EXT only>

[Value Range: On/Off]

EU ***:***-*** 1 Tx PRG = Off

On : The Program Change is transmitted to external MIDI devices when a SETUP is recalled.

Off : The Program Change is not transmitted to external MIDI devices when a SETUP is recalled.

Tx Bank (Transmitting Bank) <EXT only>

[Value Range: On/Off]

EU ***:***-*** 1 Tx Bank = Off

On : The Bank Select MSB and LSB is transmitted to external MIDI devices when a SETUP is recalled.

Off : The Bank Select MSB and LSB is not transmitted to external MIDI devices when a SETUP is recalled.

Knob [A-D] <EXT only>

[Value Range: On/Off]

EU ***:***-*** 1
Knob A = Off

On : Stored Values of the MIDI CONTROL KNOBS are transmitted to external MIDI devices when a SETUP is recalled.

Off : Stored Values of the MIDI CONTROL KNOBS are not transmitted when a SETUP is recalled.

Knob [A-D] cc# (Knob A-D/Control Change No.) <EXT only>

[Value Range: 0-114]

EU ***:***-*** 1
Knob A cc# = 0

This parameter specifies the Control Change Number for the four CONTROL KNOBS.

See p.68 for the available Control Numbers.

Note:

Control changes are transmitted whenever the CONTROL KNOBS are moved, even when the "Knob [A-D]" are set to "OFF." The "OFF" setting prevents stored data from being Transmitted each time a SETUP is recalled.

Pan <INT/EXT>

[Value Range: L63 - 0 - R63]

IU♦Organ1
Pan = L63

INT: This sets the pan-pot: (the L. R. balance)

EXT: This sets a pan-pot value sent out to external sound modules.

If the Tx Pan is "ON", the value is transmitted when a SETUP is recalled.

Coarse <INT/EXT>

[Value Range: -24 - 0 - +24]

IU♦Organ1
Coarse = -24

INT: This parameter is to tune up the keyboard in semitone steps.

EXT: This is used to send out coarse tuning information to external sound modules.

If the Tx Coarse is "ON", the value is transmitted when a SETUP is recalled.

Fine <INT/EXT>

[Value Range: -63 - 0 - +63]

IU♦Organ1
Fine = +50

INT: This is a fine tuning function for values smaller than a semi-tone.

EXT: This is used to send out fine tuning information to external sound modules.

If the Tx Fine is "ON", the value is transmitted when a SETUP is recalled.

Bender Range <INT/EXT>

[Value Range: (EXT) 0 - +12 / (INT) 0 - +7]

IU*Organ1
Bender Range= 7

INT: This sets the Bender Range in semitone steps.

EXT: This is used to send out Bender Range information to external sound modules.
If the Tx Bender Range is "ON", the value is transmitted when a SETUP is recalled.

Voicing <INT only>

[Available Voicing types: Normal/Mellow/Dynami/Bright]

IU*Organ1
Voicing =Normal

This parameter re-creates electronically the "Voicing", or Hammer Surface treatments of a real acoustic piano. This function is a very powerful way to enhance and customize the piano response for each player and each sound. The effect is most useful on the Piano sounds, but is available for all of the Internal Sounds.

Voicing type list;

Normal : Reproduces the effect of a normal hammer surfaces.

Mellow : Reproduces the effect of a softer hammer surface.

Dynami : This setting is impossible on a traditional piano, Using the Dynamic Voicing type, the MP9000 will play the pianissimo notes as if they were struck with a soft hammer, and the forte notes as if they were struck with a harder hammer. This setting can provide an enormous dynamic range.

Bright : Reproduces the effect of a harder hammer surface.

Solo <EXT only>

[Value Range : On/Off]

EU ***:***-*** 1
Solo = Off

This parameter turns the Solo Mode ON/OFF.

When the Solo Mode is "ON", the MIDI signal will only transmit a single note at a time for the selected zone. This can be used for playing Monophonic solos via MIDI, even while playing a polyphonic part using the Internal Sounds.

Solo Mode <EXT only>

[Available types : Last/Hi/Low]

EU ***:***-*** 1
Solo Mode =Last

This parameter sets the algorithm of transmitting a note when the Solo is "ON". Each type has a different priority for choosing the mono note.

Last : This transmits the most recent note played, regardless of pitch order.

Hi : This transmits the note highest in pitch.

Low : This transmits the note lowest in pitch.

Tx Pan (Transmitting Pan) <EXT only>

[Value Range: On/Off]

EU ***:***-*** 1
Tx pan = Off

On : The Pan setting is transmitted to external MIDI devices when a SETUP is recalled.

Off : The Pan setting is not transmitted to external MIDI devices when a SETUP is recalled.

Tx Coarse <EXT only>

[Value Range: On/Off]

EU ***:***-*** 1
Tx Coarse = Off

On : The Coarse tuning is transmitted to external MIDI devices when a SETUP is recalled.

Off : The Coarse tuning is not transmitted to external MIDI devices when a SETUP is recalled.

Tx Fine (Transmitting Fine) <EXT only>

[Value Range: On/Off]

EU ***:***-*** 1
Tx Fine = ON

On : The Fine tuning is transmitted to external MIDI devices when a SETUP is recalled.

Off : The Fine tuning is not transmitted to external MIDI devices when a SETUP is recalled.

Tx BendRange (Transmitting Bender Range) <EXT only>

[Value Range: On/Off]

EU ***:***-*** 1
TxBendrRange=On

On : The Bender Range setting is transmitted to external MIDI devices when a SETUP is recalled.

Off : The Bender Range setting is not transmitted to external MIDI devices when a SETUP is recalled.

Tx Attack (Transmitting Attack) <EXT only>

[Value Range: On/Off]

EU ***:***-*** 1
Tx Attack = Off

On : The Attack time is transmitted to external MIDI devices when a SETUP is recalled.

Off : The Attack time is not transmitted to external MIDI devices when a SETUP is recalled.

Tx Decay (Transmitting Decay) <EXT only>

[Value Range: On/Off]

EU ***:***-*** 1
Tx Decay = Off

On : The Decay setting is transmitted to external MIDI devices when a SETUP is recalled.

Off : The Decay setting is not transmitted to external MIDI devices when a SETUP is recalled.

Tx Release (Transmitting Release) <EXT only>

[Value Range: On/Off]

EU ***:***-*** 1
Tx Release = Off

On : The Release time is transmitted to external MIDI devices when a SETUP is recalled.

Off : The Release time is not transmitted to external MIDI devices when a SETUP is recalled.

Tx Cutoff (Transmitting Cutoff) <EXT only>

[Value Range: On/Off]

EU ***:***-*** 1
Tx Cutoff = Off

On : The Cutoff level is transmitted to external MIDI devices when a SETUP is recalled.

Off : The Cutoff level is not transmitted to external MIDI devices when a SETUP is recalled.

4. STORE

1) Store Sound

The Store Sound procedure is executed in the SOUND mode. The CONTROL KNOB values and the Sound Menu settings are stored.

The settings in the SOUND mode won't be retained after the power is turned off, unless they are saved.

OPERATION

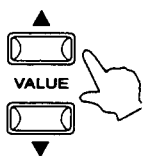
STEP 1



To begin, press the STORE button.

Store Sound
Press VALUE UP

STEP 2



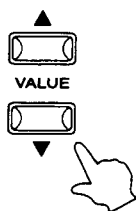
Press the VALUE-UP button.

The display will change.

Store Sound
sure?

The display will ask if the Store Sound function should be executed or not. To cancel Store Sound at this point, press the VALUE-DOWN button. Otherwise, go on to the STEP 3.

STEP 3



To execute Store Sound, press the VALUE-UP button again.

The SOUND mode settings are now stored.

The display will change.

Store Sound
Completed!!

By using the Store Sound function, the settings are retained even when the power is turned off.

To reset the patch settings to the factory preset, see p.48-49 "Reset Current" or "Reset All" for detail.

Note:

In the Store Sound the VALUE-UP button represents "YES," the VALUE-DOWN button represents "NO."

2) Store Setup

The MP9000 is capable of storing 64 user SETUPS. In the Store Setup procedure, the CONTROL KNOB values, SPLIT, TRANSPOSE and all of the SETUP Menu parameters for each zone are stored.

The settings in the SETUP mode will not be retained if a SETUP is recalled, or if the power is turned off unless they are saved.

If the Store Setup procedure is executed in the SOUND mode, only the CONTROL KNOB values and the Sound Menu settings are stored.

OPERATION

STEP 1

Press the STORE button.

Store Setup
Rename?

If you are in SOUND mode, press MENU-UP button once.

SETUPs can be named with a maximum of 8 letters.

To rename the SETUP, press the VALUE-UP button. Press the VALUE-DOWN button in order to go ahead without renaming the SETUP.

Rename Setup
Name = SOUND***

Use the MENU-UP/DOWN button to move the cursor, use the VALUE UP/DOWN buttons to select the character.

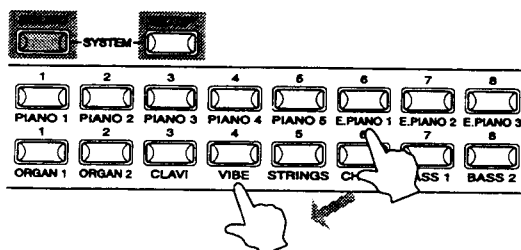
Available characters:

(SPACE) ! " # \$ % & ' () * + , - . / 0-9 : ; < = > ? @ A-Z [\] ^ _ ` a-z { | } →

STEP 2

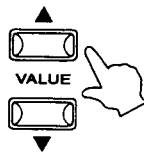
Select a SETUP location to save to, using a two-digit SETUP number. Select the first digit from the top row of patch buttons. Select the second digit from the bottom row of PATCH buttons.

For example, in order to store the SETUP setting to 6-4 SETUP, press the PATCH buttons "6" from the top row of PATCH buttons and "4" From the bottom row of PATCH buttons.



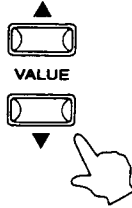
Store Setup
to 6-4 6-4SETUP

STEP 3



Press the VALUE-UP button.
The display will change.

Store Setup Sure?
to 6-4 6-4SETUP



The display will ask if the Store Setup function should be executed or not.
To cancel Store Setup at this point, press the VALUE-DOWN button.
Otherwise, go on to the STEP 4.

STEP 4

Press the VALUE-UP button again.
The SETUP has been stored to the designated SETUP location.

Store Setup
Completed!!

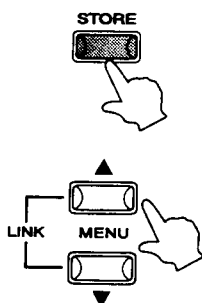
Note:

In the Store Setup, the VALUE-UP button represents "YES," whereas the VALUE-DOWN button represents "NO."

3) Dump All

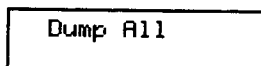
This function transmits all the settings of the MP9000 as System Exclusive Messages via the MIDI OUT.

STEP 1

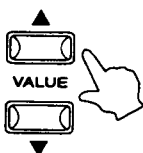


Press the STORE button.

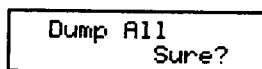
Press the MENU-UP button until "Dump All" appears on the display. The display will indicate "Dump All".



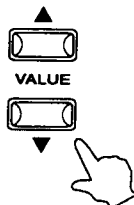
STEP 2



Press the VALUE-UP button. The display will change.



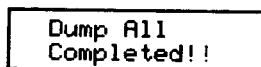
The display will ask if the Dump All function should be executed or not.



To cancel Dump All at this point, press the VALUE-DOWN button. Otherwise, go on to the STEP 3.

STEP 3

Press the VALUE-UP button again. When the data is done transmitting, the display will change to read "Completed!" Dump All is complete.



Note:

In the Dump All, the VALUE-UP button represents "YES," whereas the VALUE-DOWN button represents "NO."

4) Dump Current

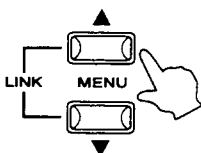
This function transmits the current and active settings of the MP9000 as a System Exclusive Message via the MIDI OUT.

(In the SOUND mode, only SOUND MODE data is sent. In the SETUP mode, the current values for all SETUP parameters are transmitted.)

STEP 1



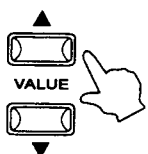
Press the STORE button.



Press the MENU-UP button until "Dump Current" appears on the display. The display will indicate "Dump Current".

Dump Current

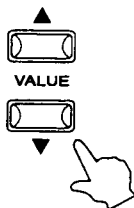
STEP 2



Press the VALUE-UP button. The display will change.

Dump Current
Sure?

The display will ask if the Dump Current function should be executed or not.



To cancel Dump Current at this point, press the VALUE-DOWN button. Otherwise, go on to the STEP 3.

STEP 3

Press the VALUE-UP button again.

The display will change to read "Completed!" Dump Current is complete.

Dump Current
Completed!!

Note:

In the Dump Current, the VALUE-UP button represents "YES," the VALUE-DOWN button represents "NO."

5) Reset Current

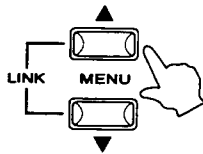
This function resets the current SOUND or SETUP back to the original factory default settings.

The SYSTEM mode is not reset.

STEP 1



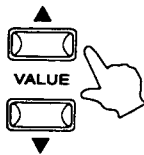
Press the STORE button.



Press the MENU-UP button until "Reset Current" appears on the display. The display will indicate "Reset Current".

Reset Current

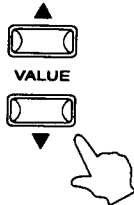
STEP 2



Press the VALUE-UP button. The display will change.

Reset Current
Sure?

The display will ask if the Reset Current function should be executed or not.



To cancel Reset Current at this point, press the VALUE-DOWN button. Otherwise, go on to the STEP 3.

STEP 3

Press the VALUE-UP button again.

The display will change to read "Completed!" Reset Current is complete.

Reset Current
Completed!!

Note:

In the Store Set Up, the VALUE-UP button represents "YES," the VALUE-DOWN button represents "NO."

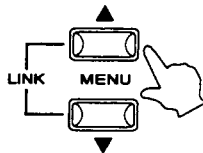
6) Reset All

This function performs a global reset of all 16 SOUNDS and all 64 SETUPS back to the original factory default settings. The SYSTEM settings are not reset.

STEP 1



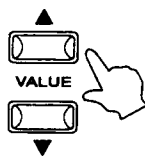
Press the STORE button.



Press the MENU-UP button until "Reset All" appears on the display. The display will indicate "Reset All".

Reset All

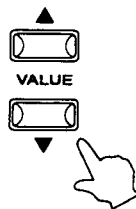
STEP 2



Press the VALUE-UP button. The display will change.

Reset All
Sure?

The display will ask if the Reset All function should be executed or not.



To cancel Reset All at this point, press the VALUE-DOWN button. Otherwise, go on to the STEP 3.

STEP 3

Press the VALUE-UP button again.

The display will change to read "Completed!" Reset All is complete.

Reset All
Completed!!

Note:

In the Store Setup, the VALUE-UP button represents "YES," the VALUE-DOWN button represents "NO."

5.LINK

1) LINK setting

Using the LINK function, up to 32 performance setting, either any of the 64 SETUPS, or any of the 16 SOUNDS, can be chained together in any order. In performance, simply pressing one button or tapping a pedal will instantly recall the next step in the LINK. The LINK function is convenient when moving quickly from one performance setting to another. This is extremely useful; especially for live performances.

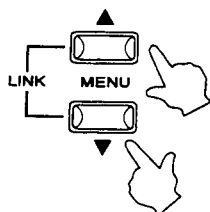
Caution:

The settings in the LINK will not be retained when the power is turned off unless they are saved. To save these settings, use the Store LINK procedure.

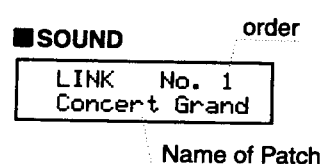
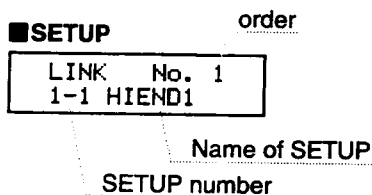
How to program a LINK

OPERATION

STEP 1



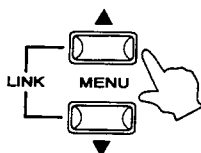
To enter the LINK function, press the MENU-UP and MENU-DOWN buttons simultaneously.



Note:

To cancel the LINK function, press the MENU-UP and MENU-DOWN buttons simultaneously again.

STEP 2

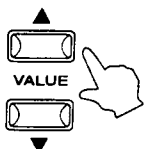


The LINK function has 32 locations, or STEPS. Use the MENU-UP and MENU-DOWN buttons to move through the different STEPS.

STEP 3

Using the SOUND, SETUP and PATCH buttons, select a performance setting for the current STEP of the LINK.

Repeat Steps 2 & 3 for each of the STEPS in the LINK.



Note:

The SETUPS and SOUNDS can be also be set using the VALUE UP and VALUE DOWN buttons.

STEP 4



To save the LINK settings, use the STORE button.

2) Store Link

The settings in the LINK function won't be stored after the power is turned off, so to save the current settings, they must be stored using the Store LINK function.

OPERATION

Make sure that the LINK function is on.

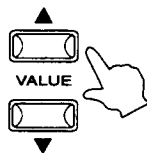
STEP 1



Press the STORE button.
The display will change.

Store Link
Press VALUE UP

STEP 2



Press the VALUE-UP button.
The display will change.

Store Link
Sure?

The display will ask if the Store Link function should be executed or not.
To cancel Store Link at this point, press the VALUE-DOWN button.
Otherwise, go on to the STEP 3.

STEP 3

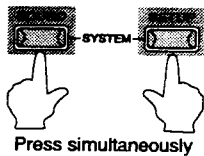
To execute Store Link, press the VALUE-UP button again.
The current LINK settings are now stored. The display will change.

Store Link
Completed!!

Note:

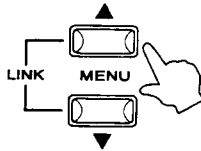
In the Store LINK, the VALUE-UP button represents "YES," the VALUE-DOWN button represents "NO."

6. SYSTEM mode



Use this mode to set the global System parameters of MP9000.
To enter the SYSTEM mode, press the SOUND button and the SETUP button simultaneously.

1) System Menu



Each mode (SOUND, SETUP, SYSTEM) of the MP9000 has its own list of parameters. Use the MENU buttons to scroll through the parameters.

Sys Tune
System CH
FSW CC#
EXP CC#
Touch
LCD Contrast
RCV CH [1-16; Play/Mute]
Local Control
INT Tx

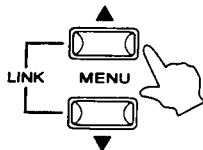
The System Menu parameters are always stored when leaving the SYSTEM mode, and there is no need to store them.

How to reach the SYSTEM Menu

OPERATION

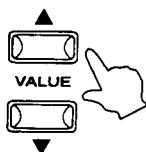
Make sure that both the SOUND and SETUP buttons are lit.

STEP 1



Press the MENU button until the parameter to be adjusted appears on the display.

STEP 2



Set the value of the parameter by using the VALUE buttons.
The value range differs depending on the parameter.

SysTune (System Tuning)

[Value Range: 427.0 - 453.0 (Hz)]

SYSTEM SysTune = 440.0

This parameter sets the global master tuning of the MP9000.

System CH (System Channel)

[Value Range: 1 - 16 (CH)]

SYSTEM System CH = 1

This parameter assigns a receiving MIDI channel for the INT zones.
This is used when System exclusive is received.

FSW CC# (Footswitch Control Change)

[Value Range: 0 - 114, LNK]

SYSTEM FSW CC# = 10

This parameter assigns a Control Change Number to the Footswitch.
If the LNK is selected, the Foot Switch is used to select the next step in the LINK (LINK Mode must be on)

EXP CC# (Expression Control Change)

[Value Range: 0 - 114, AFT]

SYSTEM EXP CC# = 5

This parameter assigns a Control Change Number to the Expression Pedal.

Note:

The FSW CC# and the EXP CC# are used to specify the Control Change Number when the CC# is being sent out to external MIDI devices. When the following Numbers are specified, the functions effect the INT zones, too.

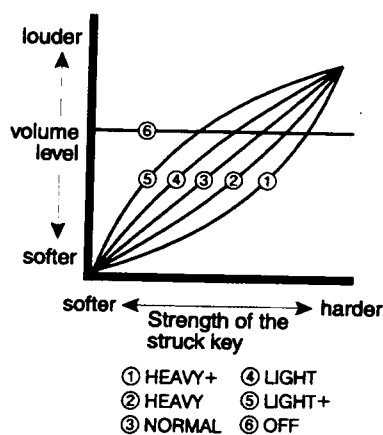
CC# parameter list;

- 1 Modulation Wheel
- 7 Volume
- 10 Pan
- 11 Expression Controller
- 64 Damper Pedal
- 66 Sostenuto
- 67 Soft Pedal

Touch

[Available touch response curves: [Off/Heavy +/Heavy/Normal/Light/Light +]

This parameter adjusts the touch response curve of the keyboard.



OFF : This type gives a flat velocity level no matter how the keyboard is struck. (see 6)

HEAVY + : This Curve has a steep rise as velocity increases, and a shallower curve at low velocities. (see 1)

HEAVY : This type gives a steep raise at the end of the graph, it simulates heavier touch response. (see 2)
This curve type is good for the players with strong touch.

LIGHT : This type has a easy responding characteristic. (see 4)
This curve is useful for the players who need enhanced touch response.
This curve is recommended for small children or organ players.

LIGHT + : This curve require less striking force to achieve a forte note, and is recommended for players with a delicate touch.

NORMAL: This type simulates the touch response of an average acoustic piano.

LCD Contrast

[Value Range: 1 - 10]

SYSTEM
LCD Contrast= 10

This parameter adjusts the contrast of the LCD display.
As the value changes higher, the contrast gets sharper.

RCV CH [1-16] (Receive Channel)

[Value Range: Play/Mute]

SYSTEM
RCV 1ch = Play

Play: The MP9000 plays the MIDI information received on this channel

Mute: The MP9000 ignores the MIDI information being received on this channel

Local Control

[Value Range: On/Off]

SYSTEM
Local = On

On : The keyboard of the MP9000 and the internal tone generators are connected.
Set this parameter to "On" for normal use.

Off : The internal connection between the keyboard and the tone generators is switched off. This feature will avoid the "Doubled Sound" that results from use with an external sequencer equipped with Soft Thru or Echo Thru.

INT Tx (Transmitting MIDI data for INTERNAL zones)

[Value Range: On/Off]

SYSTEM	
INT Tx	= On

On : The MP9000 will send MIDI data for the Internal Upper and Internal Lower Zones. This mode allows all the features of the MP9000 to be used with an external sequencer.

Off : The MP9000 does not transmit MIDI data from the two Internal Zones. This is the normal setting for this feature.

Note:

The INT UPPER MIDI data is sent on the System Channel. The MIDI data from INT LOWER is sent on the System Channel +1. Be careful to avoid setting the INTERNAL and EXTERNAL Zones to the same MIDI Channels. When this parameter is switched "On", the MP9000 will automatically set the INT UPPER and INT LOWER Channels to "Play" also the Local Control will automatically be set to "Off".

7. OTHER

MIDI IN

The MP9000 can be used as a multi-timbral sound module, playing up to 16 different sounds on 16 MIDI channels.

MIDI Channel

The MIDI data coming in on the System Channel is assigned to the INT UPPER. MIDI data received on the Channel with a value one higher than the System Channel (System Channel +1) is routed to the INT LOWER zone. Only the sounds for these two channels may be affected from the front panel controls, REV and EFX. The other Channels are controlled only via MIDI.

To activate a part or a MIDI channel, use the "RCV CH" procedure in the SYSTEM mode.

(see p.53)

To receive the System Exclusive, set the "System CH" in the SYSTEM mode.
(see p.53)

To change the patch of MP9000, the Program Number must be sent from an external MIDI device.

Program Number List;

Program Number	PATCH name
1,17-127	Concert Grand
2	Studio Grand
3	Mellow Grand
4	Modern Piano
5	Rock Piano
6	E.Piano 1
7	E.Piano 2
8	E.Piano 3
9	Organ 1
10	Organ 2
11	Clavi
12	Vibraphone
13	Strings
14	Choir
15	Bass 1
16	Bass 2

MP9000 MIDI Implementation

Version 1.1 98Sep16

Contents

- 1. Recognized data
 - 1.1 Channel Voice Message
 - 1.2 Channel Mode Message
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 - 2.1 Channel Voice Message
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- 3. Exclusive data
 - 3.1 Sys-EX Format
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- 4. MIDI Implementation Chart
 - 4.1 MP9000
- 5. Table
 - 5.1 CC# table

MIDI Implementation

1. Recognized Data

1.1 Channel Voice message

Note off

Status	2nd Byte	3rd Byte
8nH	kkH	vvH
9nH	kkH	00H

n=MIDI channel number	:0H-fH(ch.1 - ch.16)
kk=Note Number	:00H - 7fH(0 - 127)
vv=Velocity	:00H - 7fH(0 - 127)

Note on

Status	2nd Byte	3rd Byte
9nH	kkH	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)
kk=Note Number	:00H - 7fH(0 - 127)
vv=Velocity	:00H - 7fH(0 - 127)

Control Change

Modulation

Status	2nd Byte	3rd Byte
BnH	01H	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)	
vv = Modulation depth	:00H - 7fH(0 - 127)	Default = 00H

Data Entry

Status	2nd Byte	3rd Byte
BnH	06H	mmH
BnH	26H	IIH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)
mm,II=Value indicated in RPN/NRPN, see RPN/NRPN chapter	:00H - 7fH(0 - 127)

Volume

Status	2nd Byte	3rd Byte
BnH	07H	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)	
vv = Volume	:00H - 7fH(0 - 127)	Default = 7fH

Panpot

Status	2nd Byte	3rd Byte
BnH	0aH	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)	
vv = Panpot	:00H - 40H - 7fH(left - Center - right)	Default = 40H(center)

Expression

Status	2nd Byte	3rd Byte
BnH	0bH	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)	
vv = Expression	:00H - 7fH(0 - 127)	Default = 7fH

Damper Pedal

Status	2nd Byte	3rd Byte
BnH	40H	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)	
vv = Control Value	:00H - 7fH(0 - 127)	Default = 00H
	0 - 63 =OFF, 64 - 127=ON	

Soft Pedal

Status	2nd Byte	3rd Byte
BnH	43H	vvH

n=MIDI channel number :0H-fH(ch.1 - ch.16)
 vv = Control Value :00H - 7fH(0 - 127)
 0 - 63 =OFF, 64 - 127=ON

Default = 00H

Sound controllers #3-6

Status	2nd Byte	3rd Byte	
BnH	48H	vvH	Release time
BnH	49H	vvH	Attack time
BnH	4aH	vvH	Cutoff
BnH	4bH	vvH	Decay time

n=MIDI channel number :0H-fH(ch.1 - ch.16)
 vv = Control Value :00H - 7fH(0 - 127)

Default = 40H

Common Effect

Status	2nd Byte	3rd Byte	
BnH	5bH	vvH	Reverb depth
BnH	5dH	vvH	EFX depth

n=MIDI channel number :0H-fH(ch.1 - ch.16)
 vv = Control Value :00H - 7fH(0 - 127)

NRPN MSB/LSB

Status	2nd Byte	3rd Byte
BnH	63H	mmH
BnH	62H	llH

n=MIDI channel number :0H-fH(ch.1 - ch.16)
 mm=MSB of the NRPN parameter number
 ll=LSB of the NRPN parameter number

NRPN numbers implemented in MP9000 are as follows

NRPN #	Data	Function & Range
MSB LSB	MSB	Cutoff offset
01H 20H	mmH	mm:0eH - 40H - 72H(-50 - 0 +50)
01H 63H	mmH	Attack time offset
		mm:0eH - 40H - 72H(-50 - 0 +50)
01H 64H	mmH	Decay time offset
		mm:0eH - 40H - 72H(-50 - 0 +50)
01H 66H	mmH	Release time offset
		mm:0eH - 40H - 72H(-50 - 0 +50)

* Ignoring the LSB of data Entry

* It is not affected in case of modifying cutoff if tone does not use the dcf.

RPN MSB/LSB

Status	2nd Byte	3rd Byte
BnH	65H	mmH
BnH	64H	llH

n=MIDI channel number :0H-fH(ch.1 - ch.16)
 mm=MSB of the RPN parameter number
 ll=LSB of the RPN parameter number

RPN number implemented in MP9000 are the followings

RPN #	Data	Function & Range	
MSB LSB	MSB		
00H 00H	mmH	Pitch bend sensitivity	
		mm:00H - 07H(0 - 7 half tone)	Default = 02H
		ll:Ignored(as 00H)	
00H 01H	mmH	Master fine tuning	
		mm,ll:00 00H - 40 00H - 7f 7f (-8192x100/8192 - 0 +8192x100/8192 cent)	
00H 02H	mmH	Master coarse tuning	
		mm:28H - 40H - 58H(-24 - 0 - +24 half tone)	
		ll:Ignored(as 00H)	
7fH 7fH	--	RPN NULL	

Program Change

Status	2nd Byte		
CnH	ppH		
n=MIDI channel number		:0H-fH(ch.1 - ch.16)	
pp=Program number		:00H - 0fH(Prog#1 - prog#16)	Default = 00H
		:10H - 7fH(prog#1)	

Pitch Bend Change

Status	2nd Byte	3rd Byte	
EnH	llH	mmH	
n=MIDI channel number		:0H-fH(ch.1 - ch.16)	
"mm,ll=Pitch bend value"		:00 00 - 7f 7fH(-8192 - 0 - +8192)	Default = 40 00H(center)

1.2 Channel Mode Message

All Sound OFF

Status	2nd Byte	3rd Byte	
BnH	78H	00H	
n=MIDI channel number		:0H-fH(ch.1 - ch.16)	

All Note Off

Status	2nd Byte	3rd Byte	
BnH	7bH	00H	
n=MIDI channel number		:0H-fH(ch.1 - ch.16)	

1.3 System Real time Message

Active sensing

Status
FEH

2. Transmitted Data

2.1 Channel Voice message

Note off

Status	2nd Byte	3rd Byte
9nH	kkH	00H

n=MIDI channel number	:0H-fH(ch.1 - ch.16)
kk=Note Number	:00H - 7fH(0 - 127)

Note on

Status	2nd Byte	3rd Byte
9nH	kkH	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)
kk=Note Number	:00H - 7fH(0 - 127)
vv=Velocity	:00H - 7fH(0 - 127)

Control Change

Bank Select

Status	2nd Byte	3rd Byte
BnH	00H	mmH
BnH	20H	llH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)
mm=Bank Number MSB	:00H - 7fH(0 - 127)
ll=Bank Number LSB	:00H - 7fH(0 - 127)

Modulation

Status	2nd Byte	3rd Byte
BnH	01H	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)
vv = Modulation depth	:00H - 7fH(0 - 127)

Data Entry

Status	2nd Byte	3rd Byte
BnH	06H	mmH
BnH	26H	llH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)
mm,ll=Value indicated in RPN/NRPN, see RPN/NRPN chapter	:00H - 7fH(0 - 127)

Volume

Status	2nd Byte	3rd Byte
BnH	07H	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)	
vv = Volume	:00H - 7fH(0 - 127)	Default = 7fH

Panpot

Status	2nd Byte	3rd Byte
BnH	0aH	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)	
vv = Panpot	:00H - 7fH(0 - 127)	Default = 40H

Expression

Status	2nd Byte	3rd Byte
BnH	0bH	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)	
vv = Expression	:00H - 7fH(0 - 127)	Default = 7fH

Damper Pedal

Status	2nd Byte	3rd Byte
BnH	40H	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)	
vv = Control Value	:00H - 7fH(0 - 127)	Default = 00H
	0 - 63 =OFF, 64 - 127=ON	

Soft Pedal

Status	2nd Byte	3rd Byte
BnH	43H	vvH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)	
vv = Control Value	00H - 7fH(0 - 127)	Default = 00H
	0 - 63 =OFF, 64 - 127=ON	

Sound controllers #3-6

Status	2nd Byte	3rd Byte	
BnH	48H	vvH	Release time
BnH	49H	vvH	Attack time
BnH	4aH	vvH	Cutoff
BnH	4bH	vvH	Decay time

n=MIDI channel number	:0H-fH(ch.1 - ch.16)	
vv = Control Value	vv:0eH - 40H - 72H(-50 - 0 +50)	Default = 40H

Common Effect

Status	2nd Byte	3rd Byte	
BnH	5bH	vvH	Reverb depth
BnH	5dH	vvH	EFX depth

n=MIDI channel number	:0H-fH(ch.1 - ch.16)
vv = Control Value	00H - 7fH(0 - 127)

NRPN MSB/LSB

Status	2nd Byte	3rd Byte
BnH	63H	mmH
BnH	62H	llH

n=MIDI channel number	:0H-fH(ch.1 - ch.16)
mm=MSB of the NRPN parameter number	
ll=LSB of the NRPN parameter number	

NRPN numbers implemented in MP9000 are as follows

NRPN #	Data	Function & Range
MSB LSB MSB		
01H 20H mmH		Cutoff offset
		mm:0eH - 40H - 72H(-50 - 0 +50)
01H 63H mmH		Attack time offset
		mm:0eH - 40H - 72H(-50 - 0 +50)
01H 64H mmH		Decay time offset
		mm:0eH - 40H - 72H(-50 - 0 +50)
01H 66H mmH		Release time offset
		mm:0eH - 40H - 72H(-50 - 0 +50)

RPN MSB/LSB

States	2nd Byte	3rd Byte
BnH	65H	mmH
BnH	64H	llH

n=MIDI channel number :0H-fH(ch.1 - ch.16)

mm=MSB of the RPN parameter number

ll=LSB of the RPN parameter number

RPN number implemented in MP9000 are the followings

RPN #	Data
-------	------

MSB	LSB	MSB	Function & Range
-----	-----	-----	------------------

00H	00H	mmH	Pitch bend sensitivity mm:00H - 0ch(0 - 12 half tone) ll:Ignored(as 00H)
-----	-----	-----	--

Default = 02H

7fH	7fH	--	RPN NULL
-----	-----	----	----------

Program Change

Status	2nd Byte
CnH	ppH

n=MIDI channel number :0H-fH(ch.1 - ch.16)

pp=Program number :00H - 7fH

Default = 00H

After Touch

Status	2nd Byte
DnH	ppH

n=MIDI channel number :0H-fH(ch.1 - ch.16)

pp=Value :00H - 7fH

Default = 00H

*Sending only when EXP CC#=AFT

Pitch Bend Change

Status	2nd Byte	3rd Byte
EnH	llH	mmH

n=MIDI channel number :0H-fH(ch.1 - ch.16)

"mm,ll=Pitch bend value" :00 00 - 7f 7fH(-8192 - 0 - +8192) Default = 40 00H(center)

2.2 Channel Mode Message

2.3 System Real time Message

Active sensing

Status
FEH

3. Exclusive data

3.1 Sys-EX FORMAT

a: Dump CURRENT

Format: F0 40 <ch> 20 00 0B <DATA> F7
<ch>:MIDI ch (00~0F)
<DATA>: Setup data in edit buffer

The structure of the one setup patch

(common DATA) + (INT Lower Section DATA) + (INT Upper Section DATA)
+ (EXT Lower Section DATA) + (EXT Upper Section DATA) + (Only_for_Sound DATA)

b: Dump ALL (Setup 1-64)

Format: F0 40 <ch> 21 00 0B <DATA> F7
<ch>:MIDI ch (00~0F)
<DATA>: All Setup 1~64 + Sound

Setup1-1
Setup1-2
Setup1-3

Setup8-7
Setup8-8
Sound

The structure of the one setup(Sound) patch

(common DATA) + (INT Lower Section DATA) + (INT Upper Section DATA)
+ (EXT Lower Section DATA) + (EXT Upper Section DATA) + (Only_for_Sound DATA)

c: Set Up Changes

Format: F0 40 <ch> 30 00 0B <DATA> F7
<ch>:MIDI ch (00~0F)
<DATA>: Setup(Sound) program no.
0~63: Setup 1-1 ~ Setup 8-8
64: Sound

3.2 Data Format

The structure of 1Setup(Sound) Patch
 (common DATA) + (INT Lower Section DATA) + (INT Upper Section DATA)
 + (EXT Lower Section DATA) + (EXT Upper Section DATA) + (Only_for_Sound DATA)

3.2.1 COMMON DATA

No.		VALUE
1	part_sel	0-3 (il,iu,el,eu)
2	transpose_sw	0,1 (off,on)
3	transpose_value	52~64~76(-12~0~+12)
4	split_sw	0,1 (off,on)
5	split_point	15~108(a0~c8)
6	knob_mode	0-3(Effect,EQ,tone,CC#)
7	eq1	58~64~70(-6~0~+6)
8	eq2	58~64~70(-6~0~+6)
9	eq3	58~64~70(-6~0~+6)
10	eq4	58~64~70(-6~0~+6)
11	efx_type	0~20
12	efx_rate	0~127
13	rev_type	0~6
14	rev_rate	0~127
15	Name 1st	ASCII
16	Name 2nd	ASCII
17	Name 3rd	ASCII
18	Name 4th	ASCII
19	Name 5th	ASCII
20	Name 6th	ASCII
21	Name 7th	ASCII
22	Name 8th	ASCII

3.2.2 SECTION DATA

INT Lower/Upper

No.	PARAMETER	VALUE
1	tone_no	0~15
2	zone_lo	15~108(a0~c8)
3	zone_hi	15~108(a0~c8)
4	velo_sw_type	0~2(off,loud,soft)
5	velo_sw_value	0~127
6	velo_sense	1~64~127(-63~0~+63)
7	transpose	40~64~88(-24~0~+24)
8	part_sw	0,1 (off,on)
9	effect_sw	0,1 (off,on)
10	reverb_sw	0,1 (off,on)
11	damper_sw	0,1 (off,on)
12	FSW_sw	0,1 (off,on)
13	EXP_sw	0,1 (off,on)
14	modwheel_sw	0,1 (off,on)
15	bender_sw	0,1 (off,on)
16	level	0~127
17	panpot	1~64~127(L63~0~R63)
18	coarsetune	40~64~88(-24~0~+24)
19	finetune	1~64~127(-63~0~+63)
20	rev_send	0~127
21	efx_send	0~127
22	bend_range	0~7
23	cutoff	14~64~114(-50~0~+50)
24	attack	14~64~114(-50~0~+50)
25	decay	14~64~114(-50~0~+50)
26	release	14~64~114(-50~0~+50)
27	voicing	0~3(Normal,Mellow,Dynamic,Bright)

3.2.3 SECTION DATA

EXT Lower/Upper

No.	PARAMETER	VALUE
1	zone_lo	15~108(a0~c8)
2	zone_hi	15~108(a0~c8)
3	velo_sw_type	0~2(off,loud,soft)
4	velo_sw_value	0~127
5	velo_sense	1~64~127(-63~0~+63)
6	transpose	40~64~88(-24~0~+24)
7	part_sw	0,1 (off,on)
8	damper_sw	0,1 (off,on)
9	FSW_sw	0,1 (off,on)
10	EXP_sw	0,1 (off,on)
11	modwheel_sw	0,1 (off,on)
12	bender_sw	0,1 (off,on)
13	tx_ch	0~15(1~16ch)
14	tx_prog_sw	0,1 (off,on)
15	tx_prog_no	0~127(1~128)
16	tx_level	0~127
17	tx_bank_sw	0,1 (off,on)
18	tx_bank_lo	0~127
19	tx_bank_hi	0~127
20	tx_knobA_sw	0,1 (off,on)
21	tx_knobA_no	0~114
22	tx_knobA_value	0~127
23	tx_knobB_sw	0,1 (off,on)
24	tx_knobB_no	0~114
25	tx_knobB_value	0~127
26	tx_knobC_sw	0,1 (off,on)
27	tx_knobC_no	0~114
28	tx_knobC_value	0~127
29	tx_knobD_sw	0,1 (off,on)
30	tx_knobD_no	0~114
31	tx_knobD_value	0~127
32	panpot	1~64~127(L63~0~R63)
33	coarsetune	40~64~88(-24~0~+24)
34	finetune	1~64~127(-63~0~+63)
35	rev_send	0~127
36	efx_send	0~127
37	bend_range	0~12
38	cutoff	14~64~114(-50~0~+50)
39	attack	14~64~114(-50~0~+50)
40	decay	14~64~114(-50~0~+50)
41	release	14~64~114(-50~0~+50)
42	solo_sw	0,1 (off,on)
43	solo_mode;	0,1,2(last,hi,lo)
44	tx_pan_sw;	0,1 (off,on)
45	tx_coarse_sw;	0,1 (off,on)
46	tx_fine_sw;	0,1 (off,on)
47	tx_bendrange_sw;	0,1 (off,on)
48	tx_cutoff_sw;	0,1 (off,on)
49	tx_attack_sw;	0,1 (off,on)
50	tx_decay_sw;	0,1 (off,on)
51	tx_release_sw;	0,1 (off,on)

3.2.4 Only for Sound DATA

No.		VALUE
1~16	cutoff	14~64~114(-50~0~+50) for tone1~16
17~32	attack	14~64~114(-50~0~+50) for tone1~16
33~48	decay	14~64~114(-50~0~+50) for tone1~16
49~64	release	14~64~114(-50~0~+50) for tone1~16
65~80	efx_type	0~20 for tone1~16
81~96	efx_rate	0~127 for tone1~16
97~112	effect_sw_l	0,1 (off,on) for tone1~16
113~128	efx_send_l	0~127 for tone1~16
129~144	effect_sw_u	0,1 (off,on) for tone1~16
145~160	efx_send_u	0~127 for tone1~16
161~176	rev_type	0~6 for tone1~16
177~192	rev_rate	0~127 for tone1~16
193~208	reverb_sw_l	0,1 (off,on) for tone1~16
209~224	rev_send_l	0~127 for tone1~16
225~240	reverb_sw_u	0,1 (off,on) for tone1~16
241~256	rev_send_u	0~127 for tone1~16
257~272	voicing	0~3(Normal,Mellow,Dynamic,Bright) for tone1~16

4.MIDI Implementation Chart

4.1 MP9000

[STAGE PIANO]
Model KAWAI MP9000

MIDI Implementation Chart

Date: SEP,16,1998
Version:1.1

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1-16	1-16	
	Changed	1-16	1-16	
Mode	Default	Mode3	Mode 3	
	Messages Altered	X *****	X	
Note Number:	True voice	0-127	0-127	
		*****	0-127	
Velocity	Note ON	1-127	1-127	
	Note OFF	X	X	
After Touch	Key's	X	X	
	Ch's	O(*2)	X	
Pitch Bend		O	O	
Control Change	0,32	O	X	Bank Select
	1	O	O	Modulation
	6,38	O	O	Data Entry
	7	O	O	Volume
	10	O	O	Panpot
	11	O	O	Expression
	64	O	O	Hold1
	67	O	O	Soft
	72	O	O	Release
	73	O	O	Attack
	74	O	O	Cutoff
	75	O	O	Decay
	91	O	O	Reverb depth
	93	O	O	EFX depth
	98,99	O	O	NRPN LSB,MSB
	100,101	O	O	RPN LSB,MSB
	0-114	O(*1)	X	
Prog Change:	True #	O	O	
		****	0-15 (16-127 > 0)	
System Exclusive		O	O	
Common	:Song pos	X	X	
	:Song sel	X	X	
	:Tune	X	X	
System Real time	:Clock	X	X	
	:Commands	X	X	
Aux Messages	:All Sound OFF	X	O	
	:Reset All Controller	X	O	
	:Local ON/OFF	X	X	
	:All Note OFF	X	O(123)	
	:Active Sense	O	O	
	:Reset	X	X	
Notes		*1: assigned to EXP, FSW, knobA-D *2: assigned to EXP		

*Mode1 : OMNI ON, POLY"
*Mode3 : OMNI OFF, POLY"

*Mode2 : OMNI ON, MONO"
*Mode4 : OMNI OFF, MONO"

O : Yes
X : No

5.Table

5.1 Control Change Number(CC#) table

CONTROL NUMBER		CONTROL FUNCTION
Decimal	Hex	
0	0	Bank Select
1	1	Modulation wheel or lever
2	2	Breath Controller
3	3	Undefined
4	4	Foot controller
5	5	Portamento time
6	6	Data entry MSB
7	7	Channel Volume
8	8	Balance
9	9	Undefined
10	A	Pan
11	B	Expression Controller
12	C	Effect Control 1
13	D	Effect Control 2
14	E	Undefined
15	F	Undefined
16	10	General Purpose Controller 1
17	11	General Purpose Controller 2
18	12	General Purpose Controller 3
19	13	General Purpose Controller 4
20-31	14-1F	Undefined
32-63	20-3F	LSB for value 0-31
64	40	Damper pedal(Sustain)
65	41	Portamento on/off
66	42	Sostenuto
67	43	Soft pedal
68	44	Legato Footswitch
69	45	hold2(freez etc)
70	46	sound controller1(sound vari)
71	47	sound controller2(resonance)
72	48	sound controller3(release)
73	49	sound controller4(attack)
74	4A	sound controller5(cutoff)
75	4B	sound controller6(decay)
76	4C	sound controller7(vibrato rate)
77	4D	sound controller8(vibrato depth)
78	4E	sound controller9(vibrato delay)
79	4F	sound controller10(undefined)
80	50	General Purpose Controller 5
81	51	General Purpose Controller 6
82	52	General Purpose Controller 7
83	53	General Purpose Controller 8
84	54	Portamento control
85-90	55-5A	Undefined
91	5B	Effect1 depth (Reverb send level)
92	5C	Effect2 depth
93	5D	Effect3 depth (Chorus send level)
94	5E	Effect4 depth
95	5F	Effect5 depth
96	60	Data increment
97	61	Data decrement
98	62	NRPN LSB
99	63	NRPN MSB
100	64	RPN LSB
101	65	RPN MSB
102-119	66-77	Undefined
120-127	78-7F	Reserved for Channel Mode Message

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