

KAWAI

STAGE PIANO
MP5

Owner's Manual

Important Safety Instructions

SAVE THESE INSTRUCTIONS

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

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

Examples of Picture Symbols



denotes that care should be taken.
The example instructs the user to take care not to allow fingers to be trapped.



denotes a prohibited operation.
The example instructs that disassembly of the product is prohibited



denotes an operation that should be carried out.
The example instructs the user to remove the power cord plug from the AC outlet.

Read all the instructions before using the product.

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



WARNING

Indicates a potential hazard that could result in death or serious injury if the product is handled incorrectly.

The product should be connected to an AC outlet of the specified voltage.



- If you are going to use an AC power cord, make sure that its has the correct plug shape and conforms to the specified power voltage.
- Failure to do so may result in fire.

Do not insert or disconnect the power cord plug with wet hands.



Doing so may cause electric shock.

When using the headphones, do not listen for long periods of time at high volume levels.



Doing so may result in hearing problems.

Do not disassemble, repair or modify the product.



Doing so may result in product breakdown, electric shock or short-circuit.

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



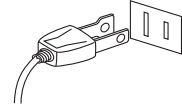
Pulling the AC power cord itself may damage the cord, causing a fire, electric shock or short-circuit.

The product is not completely disconnected from the power supply even when the power switch is turned off. If the product will not be used for a long time, unplug the AC power cord from the AC outlet.



- Failure to do so may cause fire in case of lightning.
- Failure to do so may over-heat the product, resulting in fire.

This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.



It is a good practice to have the instrument near the AC outlet and the power cord plug in a position so that it can readily be disconnected in an emergency because electricity is always charging while the plug is in the AC outlet even in a power switch off condition.



CAUTION

Indicates a potential hazard that could result in injury or damage to the product or other property if the product is handled incorrectly

Do not use the product in the following areas.

- Areas, such as those near windows, where the product is exposed to direct sunlight
- Extremely hot areas, such as near a heater
- 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.

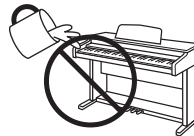
Use the product only in moderate climates (not in tropical climates).

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.

Take care not to allow any foreign matter to enter the product.



Entry of water, needles or hair pins may result in breakdown or short-circuit.

The product shall not be exposed to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the product.

Do not drag the product on the floor. Take care not to drop the product.



Please lift up the product when moving it. 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 place the product near electrical appliances such as TVs and radios.



- Doing so may cause the product to generate noise.
- If the product generates noise, move the product sufficiently away from the electrical appliance or connect it to another AC outlet.

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



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

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.

The product should be located so that its location or position does not interfere with its proper ventilation. Ensure a minimum distance of 5cm around the product for sufficient ventilation. Ensure that the ventilation is not impeded by covering the ventilation openings with items, such as newspaper, table-cloths, curtains, etc.

Do not place open flame sources, such as lighted candles on the product.

The mains plug shall remain readily operable.

Use the apparatus only in moderate climates (not in tropical climates)

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.**

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.

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.

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.



An information on Disposal for users

If your product is marked with this recycling symbol it means that, at the end of its life, you must dispose of it

separately by taking it to an appropriate collection point.

You should not mix it with general household waste. Disposing of this product correctly will prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling. For further details, please contact your local authority.
(European Union only)

FCC Information (U.S.A)

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

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

FCC WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



Declaration of Conformity

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Model Name :	MP5
Responsible Party Name :	Kawai America Corporation
Address :	2055 East University Drive Rancho Dominguez, CA 90220
Telephone :	310-631-1771

This applies only to products distributed by Kawai America Corporation.

WELCOME TO THE MP5

Thank you for purchasing the KAWAI MP5. The MP5 Stage Piano features 256 Internal Sounds of the highest quality. The MP5 can also be used as a MIDI master controller. On stage, at home, or in the studio, the MP5 has been designed to offer quick and easy access to many sophisticated features.

BASIC FEATURES of the MP5

4 ASSIGNABLE ZONES

The MP5 keyboard can be divided into 4 zones. Each zone can be set to INT, EXT or BOTH individually. INT (Internal) is to play any of the 256 internal sounds. EXT (External) is to play external MIDI devices. BOTH is to play internal sounds and external MIDI devices at the same time. 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 MP5's Advanced Hammer Action IV keyboard provides excellent feel and control like that found in an acoustic piano.

256 INTERNAL SOUNDS, 256 SETUPS

The MP5 offers not only acoustic piano and electric piano sounds, but also other sounds such as organ, brass, pads and so on. All the settings of these sounds, together with the settings to control the external devices, can be stored into 256 setups.

REVERB AND EFFECTS

The MP5 offers 7 high quality REVERB types, and 22 different EFFECT types to improve acoustical realism and enhance tonal quality.

CONTROL KNOBS

The MP5 has 4 multi-function CONTROL KNOBS, which offer real time control of the EFFECTS, EQ, TONE MODIFY and MIDI-CONTROL CHANGE messages.

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1. NAMES AND FUNCTIONS

1.1 FRONT PANEL

[FADER SECTION]

1. VOLUME Fader

The VOLUME fader controls the master volume level of the MP5.

2. ZONE SELECT buttons

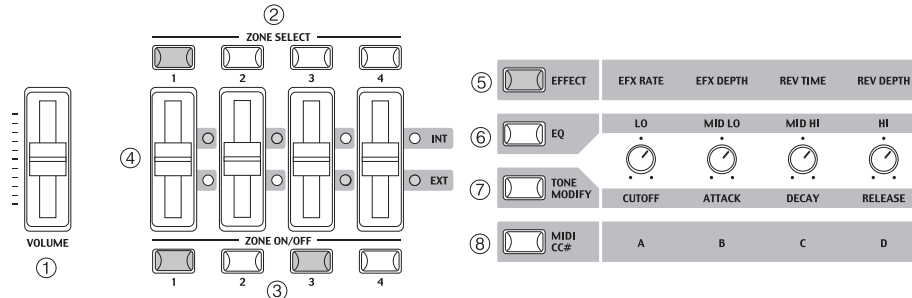
The ZONE SELECT buttons are used to select one of the four zones for editing. Only one zone can be selected at a time. The front panel setting represents the current zone status.

3. ON/OFF buttons

The ON/OFF buttons are used to turn zones ON/OFF. When the button is lit, the zone is active. Normally the button color is red, but when a zone is not using the full keyboard range the color will be green to indicate it.

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]

The four CONTROL KNOBS are multi-function real time controllers. The different functions can be selected using the four buttons to the left side of the CONTROL KNOBS. When a function is active, its button is lit. 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

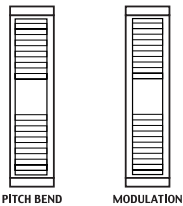
When this button is lit, the CONTROL KNOBS will adjust the 4-band graphic equalizer.

7. TONE MODIFY button

When this button is lit, the CONTROL KNOBS will adjust the CUTOFF, ATTACK, DECAY and RELEASE Levels for the selected zone.

8. MIDI CC# button

When this button is lit, MIDI control changes are sent from the MP5 to the MIDI device specified by the selected zone. Some control changes can also be used with the internal sounds.



[WHEEL CONTROLLERS]

9. PITCH BEND

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

10. MODULATION

This control wheel controls the modulation (vibrato) depth. Moving the wheel forward increases the vibrato depth.

[EFFECT BUTTONS]

11. SW button

This button turns the assigned function ON or OFF. Many different functions can be assigned to this switch for your convenience. When in edit mode, pressing the SW button will exit from edit mode.

12. EFX button

This button turns the EFX ON or OFF for the selected zone.

13. REVERB button

This button turns the REVERB ON or OFF for the selected zone.

To change the function or type assigned to the above buttons, press and hold the desired button to display the currently selected function or type, then use the VALUE buttons to change it.

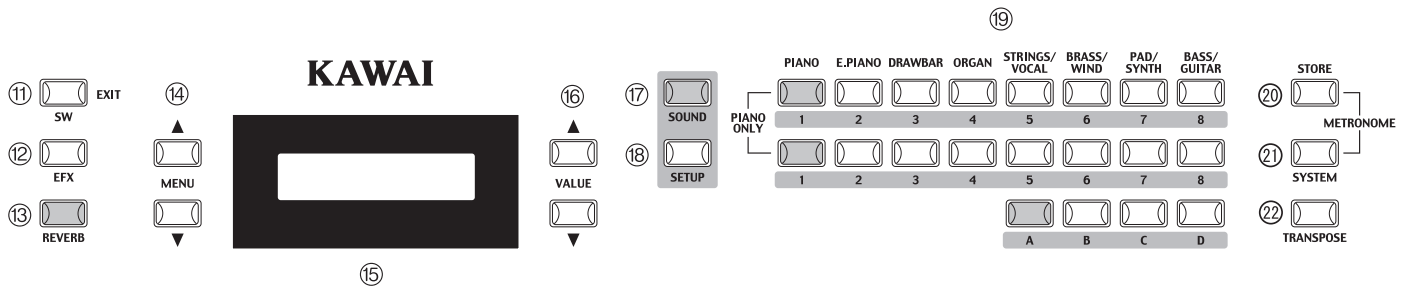
[MENU BUTTONS]

14. MENU buttons

The MENU buttons are used to enter the edit mode and scroll through all the various parameters of the MP5. To change a parameter value, use the VALUE buttons.

[DISPLAY]

15. DISPLAY



[VALUE BUTTONS]

16. VALUE buttons

The VALUE buttons are used to change the value of the current parameter as indicated on the DISPLAY.

[SOUND SELECTION & SETUP SELECTION]

17. SOUND button

The SOUND button switches the MP5 to the SOUND mode. The PATCH buttons will now select any of the 256 internal sounds.

18. SETUP button

The SETUP button switches the MP5 to the SETUP mode. The PATCH buttons will now select any of the 256 SETUPS.

19. SOUND SELECT buttons

The SOUND SELECT buttons are organized in two rows of eight buttons and one row of four ones. In SOUND mode the upper row of buttons is used to select a sound category and the second & third rows of buttons is used to select the different internal sounds within each category. In SETUP mode the upper row of buttons is used to select a bank and the second & third rows of buttons is used to select the different SETUPS within each bank.

[OTHERS]

20. STORE button

The STORE button is used to store the settings of the MP5.

21. SYSTEM button

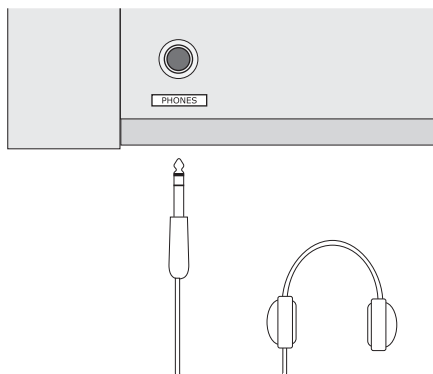
The SYSTEM button is used to set the system parameters of the MP5.

22. TRANSPOSE button

The TRANSPOSE button is used to turn the TRANSPOSE function ON/OFF.

1.2 HEADPHONE JACK

The headphone jack is located in front at the left end of the key slip. Use a headphone with a standard stereo 1/4 inch phone jack.



1.3 REAR PANEL

1. POWER SWITCH

Turns the MP5 ON or OFF.

2. POWER RECEPTACLE

Connect the power cable, which is included in the MP5 package, to this receptacle.

3. MIDI JACKS

These jacks are used to connect the MP5 with external MIDI devices such as a MIDI sound module or a MIDI sequencer.

4. USB JACK

This jack is used to connect the MP5 with a personal computer. See page60 for details.

5. FOOT CONTROLLERS

EXP JACK

An expression pedal can be connected to this jack.

The expression pedal can be assigned to different MIDI control numbers or functions in the Menu.

DAMPER JACK

This jack is used to connect the Foot Pedal included with the MP5 (KAWAI F-10H).

6. FOOT SWITCH

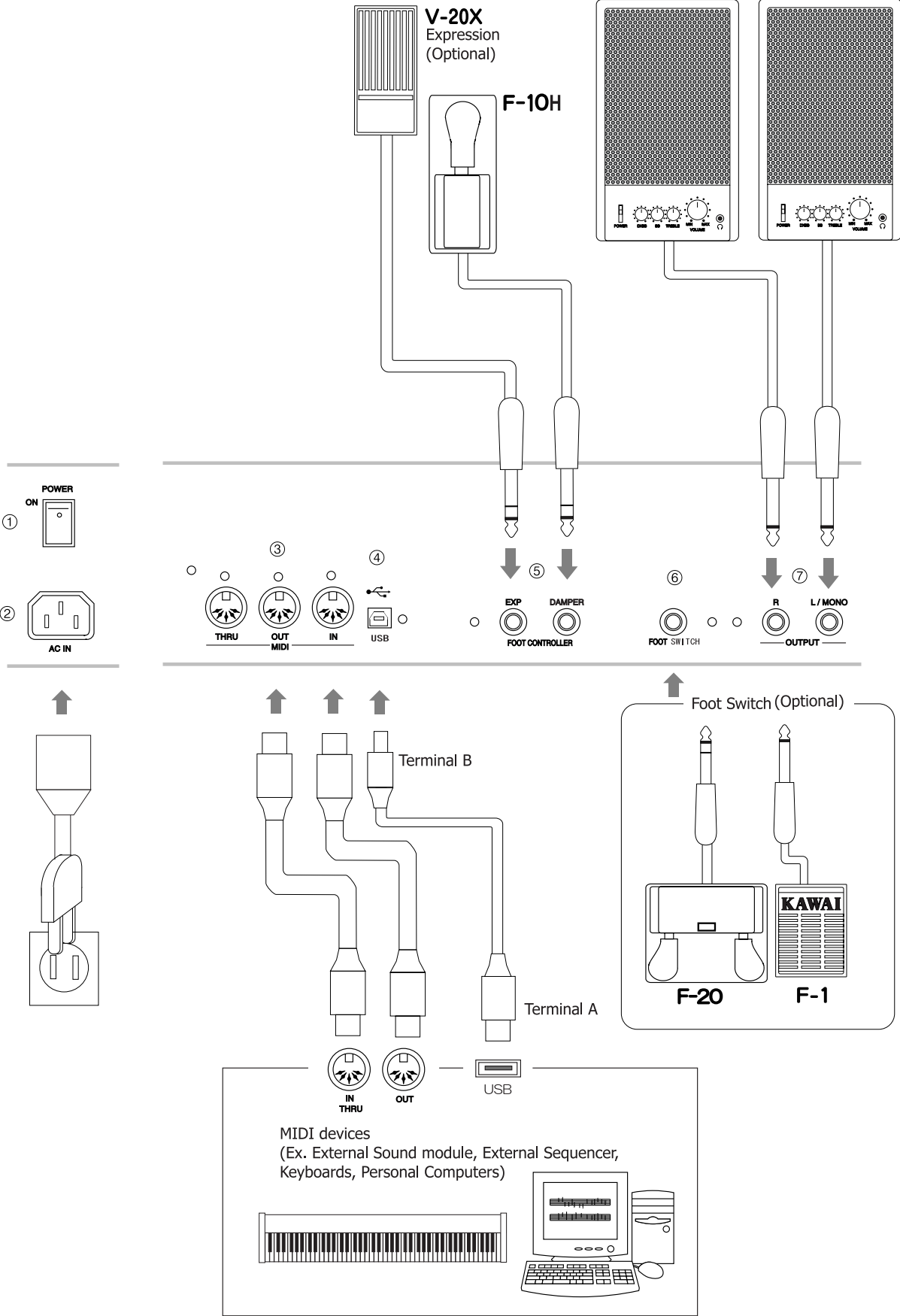
A momentary footswitch can be connected to this jack (EX: KAWAI F-1 or F-20). The FootSwitch can be assigned to different MIDI control numbers or functions in the Menu. When using the KAWAI F-20. The right pedal works as a Foot Switch, and the left pedal works as a Soft pedal. When the Rotary EFX is in use, the Soft pedal changes between Fast & Slow Rotor speeds.

7. OUTPUTS

R, L/MONO OUTPUTS

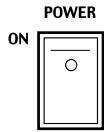
The R, L/MONO outputs are used to connect the MP5 to a musical instrument amplifier using standard 1/4 inch phone jacks. The R, L/MONO outputs can also be used to connect the MP5 to a PA system or recording console.

Keyboard amplifier
PA equipments
(Ex. Mixer, Multi-track recorder)



2. Basic Operations

2.1 Getting Ready



Since the MP5 has no built-in speakers, you will need to connect a mixer, keyboard amplifier or headphones in order to listen.

Turn the MP5 on, using the POWER SWITCH on the rear panel.

It is recommended to turn the MP5 on before turning on any amplifiers in order to avoid switching noise.

What you need to know before starting:

Please read this part for a better understanding of the MP5 structure.

The MP5's SOUND and SETUP modes are largely the same. The main difference between the two is that SETUP is used to recall stored SETUPS. Edits and changes can be made freely in either mode, using the 4 faders, 4 knobs and MENU functions, however edits made in SOUND mode will be lost when the power is turned OFF and must therefore be stored in SETUP mode.

In order to start from scratch, use the SOUND mode and press PIANO ONLY first.

In order to modify a SETUP, select the desired SETUP, perform any edits, and store the changes as a SETUP.

If selected sounds do not sound correct, it is possible that parameters (knobs etc.) were edited. To restore sounds to their default setting, use the PIANO ONLY function, then re-select the desired sound.

2.2 Selecting a Sound

The MP5 always starts up in SOUND mode when the power is turned ON. The SOUND button will be lit to indicate SOUND mode is active.

Operation 1

Select the sound category by pressing a sound select button in the top row. There are 3 rows of sound select buttons, the top row is for selecting a sound category and the second and third rows are for selecting a variation. For example, to select "60's EP2", first press the E.PIANO in the top row and the first sound in the E.PIANO category "Classic EP" is recalled. (If any other variation was selected before, the last selected sound is recalled as long as the power is on.)

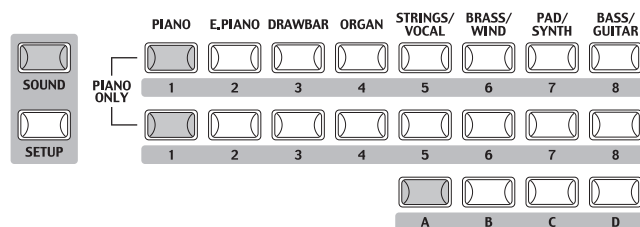
Operation 2

Select the first variation by pressing a sound select button in the second row. Press one of the 1-8 buttons in the second row. If you press 3, the variation 3 "60's EP" is recalled. (If any other variation was selected before, the last selected sound is recalled as long as the power is on.)

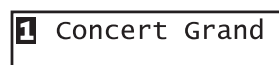
Operation 3

Select the second variation by pressing a sound select button in the third row. Press one of the A-D buttons in the second row. If you press B, a variation sound "60's EP2" is recalled.

Select the variations with the sound select buttons in the second and third rows.



The display shows the currently selected sound name.



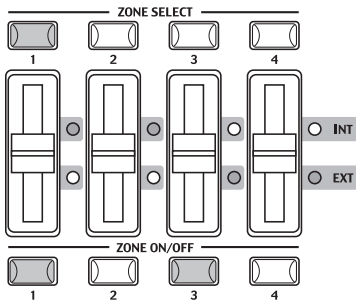
Note:

Internal sounds or Setups can be also selected using the VALUE buttons.

You should also listen to the preprogrammed Setups. Setups are organized in 8 Banks with 32 Numbers each (total 256 Setups). Press the SETUP button to change to SETUP mode and select a Setup by pressing one of the Bank buttons in the upper row followed by a Number button in the second and third row.

The display shows the currently selected Setup name.

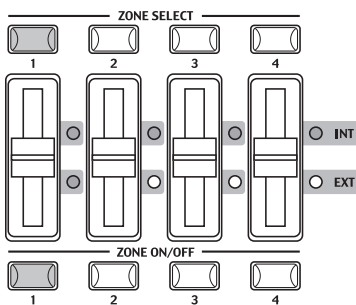
In Sound mode, the "1" in the display indicates that the zone 1 is currently selected.



When the multitimbre is off, the default settings of the zones are as follows. It is recommended for simple MIDI transmit/receive use on stage etc. The default TXchannel is System Ch (see page45).

Zone 1	Internal	On	(Plays internal sound)
Zone 2	Internal	Off	(Muted)
Zone 3	External	On	(Plays external device)
Zone 4	External	Off	(Muted)

When the multitimbre is on, the default settings of the zones are as follows. It is recommended for recording/playback with PC or sequencer. The default TXchannel is System Ch (see page45).



The system channel mode is Panel:

Zone 1	Both	On	(Plays internal sound & external device)
Zone 2	int	Off	(Muted)
Zone 3	int	Off	(Muted)
Zone 4	int	Off	(Muted)

The system channel mode is Normal:

Zone 1	Both	On	(Plays internal sound & external device)
Zone 2	Both	Off	(Muted)
Zone 3	Both	Off	(Muted)
Zone 4	Both	Off	(Muted)

The zone mode for each zone is indicated by the INT/EXT LED beside the faders. The zone status for each zone is indicated by the ZONE ON/OFF buttons. If the ZONE buttons is red, this zone is assigned to the entire keyrange of the MP5. If the button is green, the key range for that zone is less than the entire key range. You can check the key range setting by holding the SELECT button for the zone for 1 second.

2.3 Layer

Let's try layering another sound. Turn the zone 2 on by pressing the ZONE ON/OFF button for zone 2. The ZONE SELECT button for zone 2 is automatically selected and the display shows the sound name for zone 2.

Select the sound for zone 2 with the SOUND SELECT buttons as shown in the previous section.

```
2 String Pad
```

Adjust the volume balance of zone 1 and 2 with the faders for each zone.

2.4 Split

Now let's split the keyboard and play different sounds in upper and lower sections.

Press and hold the ZONE SELECT button for zone 1. The display shows the key range for zone 1 as follows.

```
1 Key A -1 > C 7
  Range A -1 > C 7
```

While still holding down the ZONE SELECT button for zone 1, press the lowest note on the keyboard. The display changes as follows.

```
1 KeyRange(Both)
  = A -1 > ----
```

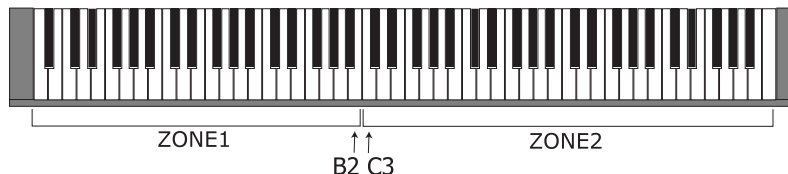
While still holding down the ZONE SELECT button for zone 1, select the highest note for zone 1, for example, B2 by pressing B2 key on the keyboard.

```
1 KeyRange(Both)
  = A -1 > B 2
```

Repeat the same procedure for zone 2 while holding down the ZONE SELECT button for zone 2 and set the key range from C3 to C7.

```
2 Key C 3 > C 7
  Range C 3 > C 7
```

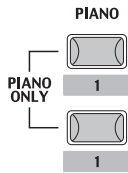
Now the keyboard is split as follows.



Note:

In this method, the key ranges for internal and external zones always change together. If you want individual settings, use the Key Range Hi/Lo parameter in MENU (see page36).

2.5 Piano Only



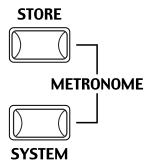
The Piano Only function lets you quickly return the MP5 sounds to the default settings.

Press the PIANO button and the SOUND SELECT button 1 simultaneously. All the current settings (except for SYSTEM settings) will go back to original and only Concert Grand sound can be played on the whole keyboard.

Note:

You may use this function also as a kind of Panic or Reset button. Also it is a good starting point to create Setups from scratch.

2.6 Metronome



A metronome is available on the MP5.

Press the STORE and SYSTEM buttons simultaneously to start the metronome.

Press the STORE or SYSTEM button to stop the metronome.

Changing the Tempo/Volume

The display will show as follows.



Use the VALUE buttons to change the tempo.

Use the MENU buttons to change the volume.

Note:

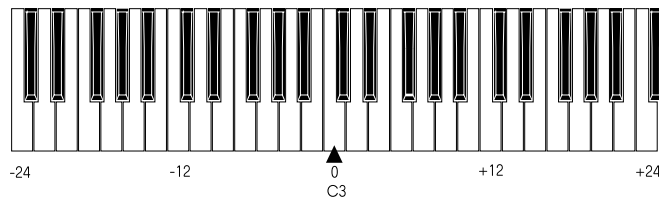
The metronome tempo is also used as MIDI clock tempo to control an external sequencer. See page24 for details.

2.7 Transpose



When the Transpose function is "ON" the MP5's key can be raised or lowered in half steps. The available range of transposition is 24 semitones, either up or down.

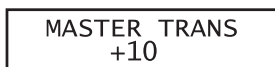
While holding down the TRANSPOSE button, press any key on the MP5 keyboard to select a new transposed key. Pressing the F key above middle C for example will transpose the MP5 UP to the key of F (+5 half steps).



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.



MASTER TRANS
+10

2.8 Using the MP5 as a MIDI controller

The MP5 can control external devices via MIDI.

MIDI Connection

Connect the MIDI OUT on the MP5 to the MIDI IN on an external MIDI device with a MIDI cable.

Selecting the MIDI Channel

The MIDI Transmit Channel of the MP5 must be matched with the Receive Channel of any MIDI devices connected to the MP5.

Select zone 3 by pressing the ZONE SELECT button 3. (Zone 3 is set to external as default setting.)

Press the MENU-UP button until "TX Channel" (Transmit Channel) appears on the display.



3 External
S TX Channel= 1

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

To exit from MENU, press the EXIT(SW) button.

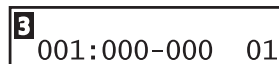
Any notes played on the keyboard or any movements of the Knobs, sliders, etc. will be transmitted to any external MIDI devices connected to the MIDI out of the MP5 on the selected MIDI channel.

Sending Program Change Number

The MP5 can send MIDI program change numbers from 1 to 256 and Bank number LSB from 0 to 1 in SOUND mode. Simply press the SOUND SELECT buttons and the corresponding program number will be transmitted. See the program number table below.

UPPER	SECOND	THIRD	PROG#:MSB-LSB
1	1	A	001:000-000
1	1	B	002:000-000
1	1	C	003:000-000
1	1	D	004:000-000
1	2	A~D	005:000-000 ~ 008:000-000
1	3	A~D	009:000-000 ~ 012:000-000
1	4	A~D	013:000-000 ~ 016:000-000
1	5	A~D	017:000-000 ~ 020:000-000
1	6	A~D	021:000-000 ~ 024:000-000
1	7	A~D	025:000-000 ~ 028:000-000
1	8	A~D	029:000-000 ~ 032:000-000
2	1~8	A~D	033:000-000 ~ 064:000-000
3	1~8	A~D	065:000-000 ~ 096:000-000
4	1~8	A~D	097:000-000 ~ 128:000-000
5	1~8	A~D	001:000-001 ~ 032:000-001
6	1~8	A~D	033:000-001 ~ 064:000-001
7	1~8	A~D	065:000-001 ~ 096:000-001
8	1~8	A~D	097:000-001 ~ 128:000-001

The transmitted program number is shown in the display.



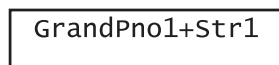
You can also send program change numbers by using VALUE buttons.

Note:

Full program change numbers including bank numbers can be transmitted by setting them in MENU and saving it as a SETUP. See page35 for details.

2.9 Selecting a SETUP

The MP5 offers 256 preset combinations of the panel settings called SETUPS. To select a SETUP, press the SETUP button. Now the SOUND SELECT buttons are used to select a SETUP. Use a combination of the numbers in the upper, second and third rows to select a desired SETUP. The display will show the selected SETUP name.



To check the sound (internal) or program number (external) assigned to each zone, press the ZONE SELECT button. The display briefly shows the assigned sound name or program number, and then automatically returns to the SETUP name in a few seconds.

If you hold a ZONE SELECT button for 2 seconds the display will show you the key range information for that zone. You can also set the key range using the same procedure that is used in Sound mode.

3. SW Button



The SW button is a programmable realtime switch which can be assigned to one of 8 different functions.

Press and hold the SW button. The display shows the currently assigned function. Press the SW button again to exit without changing the function.

```
SW TYPE/COMMON  
1:Panel Lock
```

Use the VALUE buttons to change the function. The display will automatically return to SOUND or SETUP mode after you change the function.

This function can be stored using the STORE button. (see page43)

When the MENU function is displayed, the SW button works as an EXIT button.

3.1 Panel Lock

You can lock the panel operation to avoid unnecessary changes to the settings by accident.

When the SW button is lit Panel Lock is ON.

Panel Lock On: All the operations except for keyboard, wheels, pedals and SW button are locked. The display shows as follows while the panel is locked.

```
Panel Lock  
>Press [SW] button
```

Panel Lock Off: Panel Lock is canceled.

3.2 Touch Curve

You can temporary turn on/off the Touch Curve for example to play organ sounds correctly.

Touch Curve On: The display briefly shows the selected Touch Curve in the SYSTEM and the Touch Curve becomes active. If the selected Touch Curve in the SYSTEM is Off, the Normal Touch Curve becomes active.

Touch Curve Off: The display briefly shows as follows and the Touch Curve becomes Off.

```
Touch Curve  
Off
```

3.3 Rotary Slow/Fast

You can switch the speed of roter between slow and fast when the Rotary effect is in use.

When the SW button is lit: The display briefly shows as follows and the rotary speed changes to fast.

```
Rotary Speed  
Fast
```

When the SW button is OFF: The display briefly shows as follows and the rotary speed changes to slow.

Rotary Speed
Slow

Note:

When the Rotary effect is not in use, the display briefly shows as follows.

Rotary is
not selected.

3.4 EQ Bypass On/Off

You can temporarily bypass the EQ by turning the SW button on.

When the SW button is lit the EQ Bypass is on.

EQ Bypass On: The display briefly shows as follows and the sound bypasses the EQ.

EQ Bypass
On

EQ Bypass Off: The display briefly shows as follows and the EQ comes back to active.

EQ Bypass
Off

Note:

When the EQ Bypass is turned on and the EQ control knobs are used, the display briefly shows as follows.

EQ Bypass
>Press[SW]button

3.5 Wheel Lock

You can lock the bender wheel and modulation wheel to avoid unnecessary movement by accident.

When the SW button is lit the Wheel Lock is on.

Wheel Lock On: The display briefly shows as follows and the wheels are locked.

wheel Lock
On

Wheel Lock Off: The display briefly shows as follows and the wheels are unlocked.

wheel Lock
Off

Note:

When the Wheel Lock is turned on and the wheels are used, the display briefly shows as follows.

wheel Lock
>Press[SW]button

3.6 Foot Switch Lock

You can lock the assignable foot switch to avoid unnecessary movement by accident.

First, connect a foot switch to the FSW jack on the rear panel of the MP5. When the SW button is lit the Foot Switch Lock is on.

Foot Switch Lock On: The display briefly shows as follows and the assignable foot switch is locked.

```
FSW Lock
On
```

Foot Switch Lock Off: The display briefly shows as follows and the assignable foot switch is unlocked.

```
FSW Lock
Off
```

Note:

When the FSW Lock is turned on and the foot switch is used, the display briefly shows as follows.

```
FSW Lock
>Press[SW]button
```

3.7 Expression Pedal Lock

You can lock the expression pedal to avoid unnecessary movement by accident. First, connect an expression pedal to the EXP jack on the rear panel of the MP5.

When the SW button is lit the Expression Pedal Lock is on

Expression Pedal Lock On: The display briefly shows as follows and the expression pedal is locked.

```
EXP Lock
On
```

Expression Pedal Lock Off: The display briefly shows as follows and the expression pedal is unlocked.

```
EXP Lock
Off
```

Note:

When the EXP Lock is turned on and the expression pedal is used, the display briefly shows as follows.

```
EXP Lock
>Press[SW]button
```

3.8 External Sequencer Start/Stop

You can start and stop the external sequencer connected to the MP5 with SW button.

First, connect an external sequencer to the MIDI OUT jack on the rear panel of the MP5. Make sure that the sequencer is capable to receiving external MIDI clock and commands. Check the MIDI implementation chart of the sequencer if the Recognized column of the System Real Time Clock & Commands is marked "O (yes)". Consult the owner's manual of the sequencer on how to set the sequencer to receive external MIDI clock and commands.

When the SW button is lit the MIDI clock is transmitted

External Sequencer Start: Press the SW button to turn the light on. The display briefly shows as follows and the external sequencer starts.

External Seq Start

External Sequencer Stop: Press the SW button to turn the light off. The display briefly shows as follows and the external sequencer stops.

External Seq Stop

Note:

The tempo is controlled by the Metronome tempo of the MP5. See page18 for details.

4. EFX/REVERB



The internal sounds of the MP5 can be enhanced using the built in REVERB and EFX generators.

There are 7 REVERB types and 22 different EFX types to choose from. MP5 contains 4 variations of EFX type per INT section, and different EFX can be added to the sound of each ZONE.

4.1 EFX

The MP5 contains 22 high quality EFX types, designed to complement the internal sounds. Each internal sound has a preset effect assigned as the default. The EFX button turns the EFX generator ON or OFF for the selected sound.

To turn the EFX "ON" for the current sound, press the EFX button and the button will light up. EFX will be added to the current sound.

To turn the EFX "OFF" again, press the EFX button again (The light on the button will be turned OFF).

EFX type

Press and hold the EFX button for a few seconds. The display shows EFX type added to the current selected ZONE.



Use the VALUE buttons to change the effect type. Each EFX type has a default value for RATE and DEPTH, so when changing the EFX type, the values are changed automatically. You can edit these values with the EFX RATE and EFX DEPTH knobs in the first row of the CONTROL KNOBS section on the panel. To choose another ZONE, press ZONE SELECT button of it.

- | | |
|----------------|--|
| Chorus: | Chorus is a slight detuning of the sound, which adds depth and richness to the sound. |
| Flanger: | Flanger introduces a shifting comb-filter, which adds motion and a "hollow" tone to the sound. |
| Celeste: | Celeste is a three phase chorus, with each of the three chorus units at different phase. |
| 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, above. |
| Delay 1/2/3/4: | Delay adds echoes to the sound. |
| AutoPan 1/2/3: | AutoPan alternates the sound left and right across the stereo field at a variable rate. AutoPan 3 include an overdrive effect. |
| Tremolo 1/2/3: | Tremolo changes the volume of the sound, making it louder and softer at a variable rate. Tremolo 3 include an overdrive effect. |
| Phaser 1/2: | Phaser creates a cyclic phase change, adding motion to the sound. |
| Rotary 1/2: | The Rotary effect simulates the sound of the rotary speaker cabinet commonly used with electronic organs. Rotary 2 include an overdrive effect. |

Auto Wah:	Auto Wah creates an automatic filter sweep at the attack of each note.
Pedal Wah:	Pedal Wah creates a filter sweep with the expression pedal connected to the MP5.
Enhancer:	Enhancer produces a crisper tone, so the sound is more easily discernible.
Overdrive:	Overdrive effect adds tube-amp style distortion.

Note:
You can select different types for each zone.

4.2 REVERB

The MP5 contains 7 high quality REVERB types, designed to complement the internal sounds. Each internal sound has a preset REVERB type assigned as the default. The REVERB button turns the REVERB generator ON or OFF for the selected sound.

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

To turn the REVERB "OFF" again, press the REVERB button again (The light on the button will be turned OFF).

REVERB type

Press and hold the REVERB button until the display shows REVERB type.

REVERB TYPE
 1:Ha111

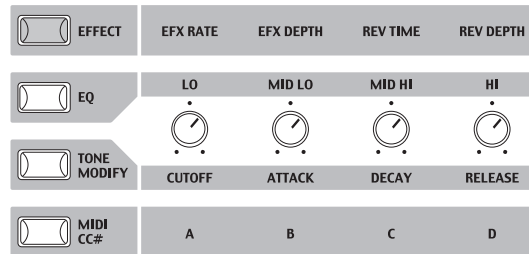
Use the VALUE buttons to change the REVERB type. Each REVERB type has a default value for TIME, so when changing the REVERB type, the value is changed automatically.

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:
REVERB type is common to all internal zones. You cannot select a different type for each zone. But you can individually turn on/off or set different depths for each zone.

5. Control Knobs

Select the function with the buttons on the left and use the knobs to change the values. You can also move the cursor with the MENU buttons and change the value with the VALUE buttons while the display is showing Control Knobs function.



5.1 EFFECT

Make sure that the EFFECT button in the CONTROL KNOBS section is lit. If the EFFECT button is turned off, press it to turn it ON.

The CONTROL KNOBS are now active and assigned to the EFX/REVERB parameters for the selected zone. Use the CONTROL KNOBS to change the current settings.



EfxR (EFX Rate) adjusts the value of the preset parameter for each EFX. (internal only)

EfxD (EFX Depth) adjusts the depth of the EFX added to the sound.

RvT (REVERB Time) adjusts the reverb time. (internal only)

RvD (REVERB Depth) adjusts the depth of the reverb added to the sound.

EFX parameter list

		EFX Rate	EFX Depth
1.	CHORUS	rate 0 -12.7Hz	send level
2.	FLANGER	rate 0 -12.7Hz	send level
3.	CELESTE	rate 0 -12.7Hz	send level
4.	ENSEMBLE	rate 0 -12.7Hz	send level
5.	DELAY 1	delay time 0 -100 (%)	send level
6.	DELAY 2	delay time 0 -100 (%)	send level
7.	DELAY 3	delay time 0 -100 (%)	send level
8.	DELAY 4	delay time 0 -100 (%)	send level
9.	AUTO PAN 1	rate 0 -12.7Hz	wet balance
10.	AUTO PAN 2	rate 0 -12.7Hz	wet balance
11.	AUTO PAN 3	rate 0 -12.7Hz	wet balance
12.	TREMOLO 1	rate 0 -12.7Hz	wet balance
13.	TREMOLO 2	rate 0 -12.7Hz	wet balance
14.	TREMOLO 3	rate 0 -12.7Hz	wet balance
15.	PHASER 1	rate 0 -12.7Hz	wet balance
16.	PHASER 2	rate 0 -12.7Hz	wet balance

17. ROTARY 1	rate	slow/fast	wet balance
18. ROTARY 2	rate	slow/fast	drive
19. AUTO WAH	sense	0 -100 (%)	wet balance
20. PEDAL WAH	sense	0 -100 (%)	wet balance
21. ENHANCER	intensity	0 -100 (%)	send level
22. OVERDRIVE	drive	0 -100 (%)	wet balance

REVERB parameter list

		REVERB Time	REVERB Depth
1. HALL 1	rev.time	0.3 - 5.0S	send level
2. HALL 2	rev.time	0.3 - 5.0S	send level
3. STAGE 1	rev.time	0.3 - 3.0S	send level
4. STAGE 2	rev.time	0.3 - 3.0S	send level
5. ROOM 1	rev.time	0.3 - 3.0S	send level
6. ROOM 2	rev.time	0.3 - 3.0S	send level
7. PLATE	rev.time	0.3 - 3.0S	send level

Note:

When EFX/REVERB depth is set to 0 while the EFX/REVERB button is active, the EFX/REVERB button will blink to indicate that the EFX/REVERB is turned ON but the depth is set to 0.

EFX rate and REVERB time are effective to internal zone only.

If the selected zone is set to BOTH, changing the value for EFX depth or REVERB depth affects for both internal and external sections. If you want different settings for internal and external sections, first enter the edit mode by pressing the MENU button and press the EFFECT button. Now you can select internal or external zone with ZONE SELECT button. (See page33 for details.)

Quick Change Reverb Offset

Press and hold the EFFECT button. The EFFECT button starts blinking and the following screen for Reverb Offset (see page47) will be shown until the button is released.

Rev. Offset 100%

This parameter is stored automatically when leaving the screen, there is no need to store the setting manually.

5.2 EQ (EQUALIZER)

The MP5 contains a four-band graphic equalizer to shape the overall tone of the sound. The EQ affects all zones at the same time. However, each SETUP can have its own EQ setting that affects the internal sounds only.

Be sure that the EQ button in the CONTROL KNOBS section is lit. If the EQ button is turned off, press it to turn it ON.

The CONTROL KNOBS are now active and assigned to the EQ parameters. Use the CONTROL KNOBS to change the current settings.

Each parameter of the EQ has an adjustable range from -12 to +12. 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	Ml	Mh	Hi
+6	+5	+4	+2

Quick Change EQ Offset

Press and hold the EQ button. The EQ button starts blinking and the following screen for EQ Offset (see page 47) will be shown until the button is released.

EQ Offset			
<u>0</u>	+2	-1	-1

This parameter is stored automatically when leaving the screen, there is no need to store the setting manually.

If EQ Offset is set to Off in System parameters, this page will not be displayed.

5.3 TONE MODIFY

The MP5 allows certain characteristics of the sounds to be custom tailored to suit a particular musical or playing style, or to create many variations and different types of sounds. TONE MODIFY settings can be done for each zone individually.

The following parameters are provided:

CUTOFF, ATTACK, DECAY and RELEASE.

Make sure that the TONE MODIFY button in the CONTROL KNOBS section is lit. If the TONE MODIFY button is turned off, press it to turn it ON.

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

Use the CONTROL KNOBS to change the current settings for the selected zone. Each parameter of the TONE MODIFY function has an adjustable range from -50 to +50.

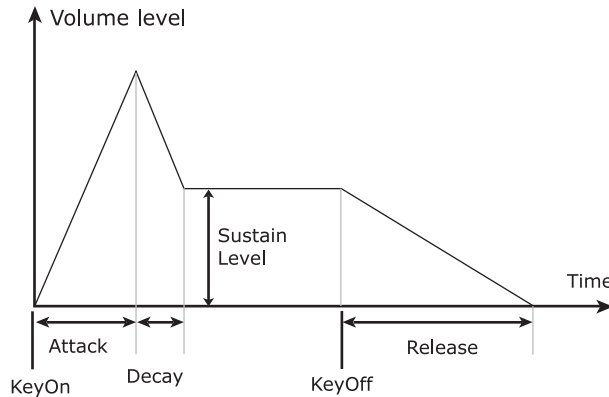
<input checked="" type="checkbox"/>	CUT	ATK	DCY	RLS
+5 <u>0</u>	-50	+40	-20	

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.



Note:

If the selected zone is set to BOTH, changing the TONE MODIFY parameters affects both internal and external sections. If you want different settings for internal and external sections, enter the edit mode by pressing the MENU button and select internal or external section with the ZONE SELECT button. (See page33 for details.)

5.4 MIDI CC# (Control Change)

The MP5 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.

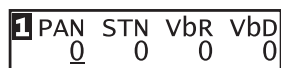
Some control changes are also effective to internal sounds.

Make sure that the MIDI CC# button in the CONTROL KNOBS section is lit. If the MIDI CC# button is turned off, press it to turn it ON.

The CONTROL KNOBS are now active and assigned to the MIDI CC parameters. Use the CONTROL KNOBS to change the MIDI continuous controller information assigned to each knob as described below.

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

When the selected zone is set to INT or BOTH, the display shows the parameter names.



When the selected zone is set to EXT, the display shows the MIDI CC numbers.

E	010	070	076	077
	64	64	64	64

The default parameters assigned for each knob are as follows.

- A: #10 Panpot (PAN)
- B: #70 Sustain Level (STN)
- C: #76 Vibrato Rate (VbR)
- D: #77 Vibrato Depth (VbD)

Note:

If the selected zone is set to BOTH, changing the MIDI CC# parameters affects both internal and external sections. If you want different settings for internal and external sections, enter the edit mode by pressing the MENU button and select internal or external section with the ZONE SELECT button. (See page33 for details.)

Changing MIDI CC parameter

Press and hold the MIDI CC# button. The MIDI CC# button starts blinking and the cursor in the display moves up to the parameter name.

MIDI CC#	PAN	STN	VbR	VbD
	0	0	0	0

Use the CONTROL KNOBS to change the parameters.

After changing the parameter, press the MIDI CC# button again. The MIDI CC# button stops blinking and the cursor in the display moves down to the value.

Note:

When the selected zone is set to INT, only the following parameters can be selected.

10	Panpot	PAN
70	Sustain Level	STN
71	Resonance	RSN
76	Vibrato Rate	VbR
77	Vibrato Depth	VbD
78	Vibrato Delay	VbY
93	Chorus Depth	ChD

When the selected zone is set to BOTH and the internal section is selected in edit mode, the parameters not available for INT section show as "XXX".

MIDI CC#	015	STN	VbR	VbD
	xxx	0	0	0

6. MENU

The MENU buttons allow access to the edit parameters in the MP5. This collection of settings together with other editable parameters can be stored as a SETUP. The MP5 provides 256 SETUPS, and all are user programmable.

A SETUP consists of four zones. Each zone can be set as Internal, External or Both individually. 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 256 SETUPS may be programmed in this way.

The menu consists of Internal parameters, External parameters and Common parameters.

Common parameter affect all zones. If a zone is set as Both, both the Internal parameters and External parameters are available for the zone.

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

In SOUND mode, both the Int Zone parameters and the Common parameters without the inverse "S(Setup)" icon can be individually stored. (see page43)

The Int Zone parameters can be stored as a SOUND of the MP5's 256 SOUNDS.

The Common parameters can be stored as the initial settings in SOUND mode.

Zone parameters (Int)

Mode
Sound Selection
Damper Reso. (Int Piano only)
String Reso. (Int Piano only)
KeyOff Effect (Int Piano only)
Voicing (Int Piano only)
Key Range Hi/Lo
Velocity Switch On/Off
Velocity Switch Value
Velocity Compression
Velocity Offset
Zone Transpose
Volume
Pan
Fine Tune
Damper Pedal On/Off/Hold
Footswitch On/Off
Expression Pedal On/Off
Modulation On/Off
Bender On/Off
Bender Range
Solo On/Off
Solo Mode

Zone parameters (Ext)

Mode
TX Channel
TX PRG # On/Off
PRG #
TX Bank On/Off
Bank Select MSB LSB
Keyboard On/Off
Key Range Hi/Lo
Velocity Switch On/Off
Velocity Switch Value
Velocity Compression
Velocity Offset
Zone Transpose
TX Volume On/Off
Volume
TX Controller On/Off
Pan
Fine Tune
Damper Pedal On/Off
Footswitch On/Off
Expression Pedal On/Off
Modulation On/Off
Bender On/Off
TX Bender Range On/Off
Bender Range
Solo On/Off
Solo Mode

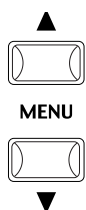
Common parameters

Master Volume
Left Pedal Mode
M.Wheel CC#
Expression Pedal CC#
Footswitch CC#
Temperament
Stretch Tuning

Caution:

The edited settings will be erased when the power is turned off, or other sound is recalled. To save these settings, use the STORE procedure to save them as a SETUP. (see page43)

6.1 Editing Procedure and Parameters



First, press the ZONE SELECT button for the zone to be edited.
Next, press the MENU buttons until the parameter you want to edit appears in the DISPLAY. When a zone is set as Both, pressing the ZONE SELECT button again will switch the menu list from Internal to External or vice versa.

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.

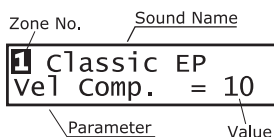
Save these settings using the STORE button.
(See page43 for detail)

Note:
Once you enter the edit mode from SETUP mode by pressing the MENU button, the mode automatically changes to SOUND mode and the SOUND SELECT buttons are used to select sounds, not SETUPS.



You can exit the edit mode by pressing the EXIT(SW) button. Any edits you have made so far will be retained to SOUND mode. If you exit the edit mode by pressing SOUND or SETUP buttons, your changes will be lost and the previously saved settings are recalled.

6.2 Edit Parameters



Zone parameters can be edited individually for each zone. There are two parameter groups, Internal parameter group and External parameter group. If a zone is set to Int, only Internal parameters are available for editing. If a zone is set to Ext, only External parameters are available for editing. If a zone is set to Both, both Internal and External parameters are available for editing.

6.2.1 Zone Mode



This parameter sets the Zone mode. The example shows that the Zone 1 is set to Both mode.

6.2.2 Sound (Int only)



This parameter determines which internal sound is assigned for the selected zone.

6.2.3 Damper Resonance (Int Piano only)



When the sustain pedal is depressed, the volume of the whole resonance can be changed to the level you prefer. The value changes from 0 (off) to 10.

* The display shows this parameter only when Piano sound is selected.

6.2.4 String Resonance (Int Piano only)

1 Concert Grand
String Reso.= 1

The volume of string resonance can be changed to the level you prefer. The value changes from 0 (off) to 10.

<String Resonance>

In acoustic pianos, there are strings corresponding to each key. When a key is pressed, strings of other keys in the related harmonic series to the note played resonate. This effect is called "sound resonance", which makes the sound of an acoustic piano full and rich.

* The display shows this parameter only when Piano sound is selected.

6.2.5 Key-off Effect (Int Piano only)

1 Concert Grand
KeyOff Effect= 1

Especially for low-pitched tones, when a key is played strongly and released quickly, there will be the sound of the damper touching the strings immediately before the sound stops. The key-off effect simulates this phenomenon, and allows you to adjust the key-off volume to your taste. The value changes from 0 (off) to 10.

* The display shows this parameter only when Piano sound is selected.

6.2.6 Voicing (Int Piano only)

1 Concert Grand
Voicing = Normal

This parameter re-creates electronically the voicing technique of adjusting the action, hammers and strings on an acoustic piano to change the tone character. This function is a very powerful way to enhance and customize the piano response for each player and each sound.

The effect is only available for the internal piano sounds. Other sounds cannot use this parameter.

Normal:	Produces the normal tone of an acoustic piano throughout the entire dynamic range.
Mellow:	Reproduces the effect of a softer hammer surface. It produces a mellower tone throughout the entire dynamic range.
Dynamic:	This setting is not possible with an acoustic piano. Softly played notes will have the tone of a mellow voicing and notes played harder will have the tone of a bright voicing. This setting produces a dramatic change from mellow to bright throughout the entire dynamic range.
Bright:	Produces a brighter tone throughout the entire dynamic range.

* The display shows this parameter only when Piano sound is selected.

6.2.7 TX Ch (Ext only)

3 External
5 TX Channel= 1

This parameter sets the MIDI transmit channel for the selected zone. All MIDI data for the selected zone will be transmitted on this channel. Make sure that the receiving channel for any external MIDI devices to be controlled from this zone is set to the same channel as the zone.

6.2.8 TX Prg # (Ext only)

External
S TX Prg # = On

This parameter determines if a Program Change Number will be transmitted (On) or not (Off) when a SETUP is recalled. If you want to switch sounds on external MIDI devices every time you call the Setup turn this parameter ON.

6.2.9 Prg # (Ext only)

External
S Prg # = 001

This parameter determines which Program Change Number will be transmitted when a SETUP is recalled. When the TX Prg # is set to Off, this page won't be displayed. Select the desired PRG number for the sound you want to select on the external MIDI device.

6.2.10 TX Bank (Ext only)

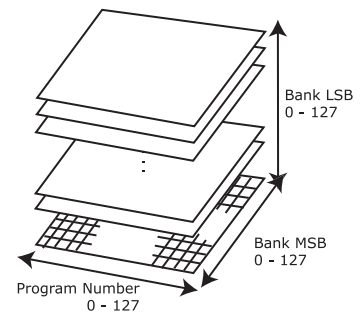
External
S TX Bank = On

This parameter determines if Program Bank Numbers (MSB, LSB) will be transmitted (On) or not (Off) when a SETUP is recalled. If your external MIDI device requires a Bank Select message, turn on this function.

6.2.11 Bank MSB/LSB (Ext only)

External MSB LSB
S Bank = 000 032

This parameter determines which MSB and LSB Number will be transmitted when this SETUP is recalled. When the TX Bank is set to Off, this page won't be displayed. In the MIDI standard, there are 128 storage spaces. The number of storage spaces can be expanded using an MSB and an LSB.

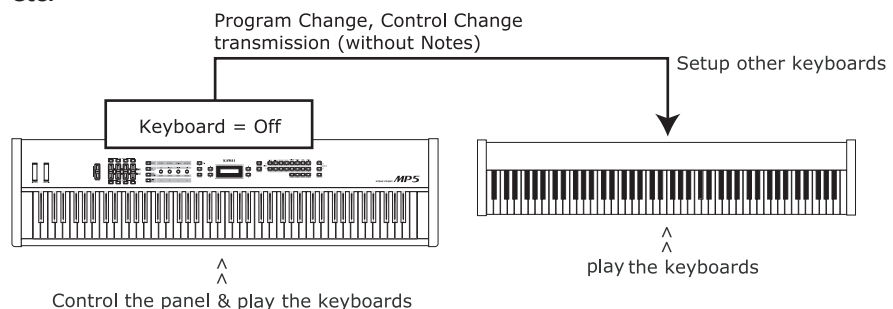


This is a 3D image of the expanded program change system with the MSB and LSB. To use these efficiently and correctly, refer to the operation manual of any external MIDI sound modules that are connected to the MP5.

6.2.12 Keyboard On/Off (Ext only)

External
S Keyboard = On

This parameter determines whether or not note data generated by playing the keys on the MP5 will be transmitted to an external MIDI device. This parameter is useful when using 2 or more keyboards. When set to OFF the MP5 will not send any note data to an external MIDI device but the MP5 can still be used to adjust other connected keyboards or MIDI devices using the knobs, wheels etc.

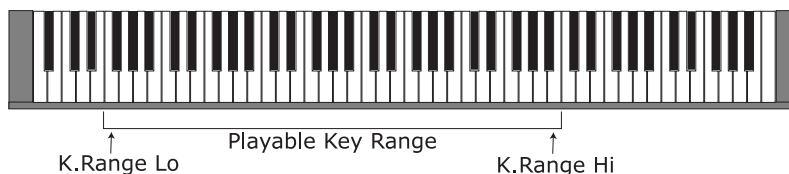


6.2.13 Key Range Hi/Lo

1 Concert Grand
S K.Range Hi= B4

1 Concert Grand
S K.Range Lo= F0

These two parameters define the playable key range on the keyboard for the selected zone. First, while K.Range Hi appears in the display, use the VALUE buttons to set the highest note that the selected zone can play. Next, while K.Range Lo appears in the display, use the VALUE buttons to set the lowest note that the selected zone can play.



Note:

Another convenient way to input the key range is to hold the ZONE SELECT button of the desired zone for more than 1 second and input the K.Range Lo by pressing the lowest key followed by the key of the highest note, while still holding the ZONE SELECT button.

6.2.14 Velocity Switch

1 Concert Grand
S Vel SW =Loud

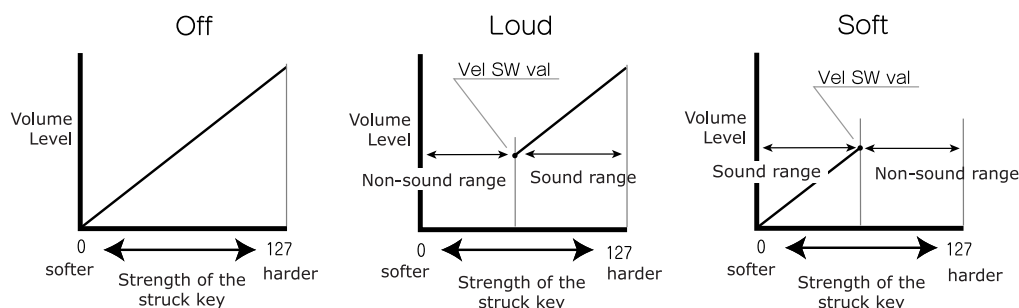
Velocity switching is an extremely useful and creative tool for customizing a performance. Using Velocity Switching, it is possible to have either one sound switch to another sound at a set velocity, or even for a second sound to be added in once a certain velocity has been reached, or to have a sound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

This parameter sets the velocity switch type.

Off: No effect. The sound plays normally.

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

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



6.2.15 Velocity Switch Value

1 Concert Grand
S Vel SW Val= 80

This parameter determines switching level of the key velocity.

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

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

When the Velocity Switch is set to Off, this page won't be displayed.

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.

Note2:

Velocity Switch = Loud / Velocity Switch Value = 1

In this settings, it is possible to press a key very softly and hear no sound. This is just the same as an acoustic piano.

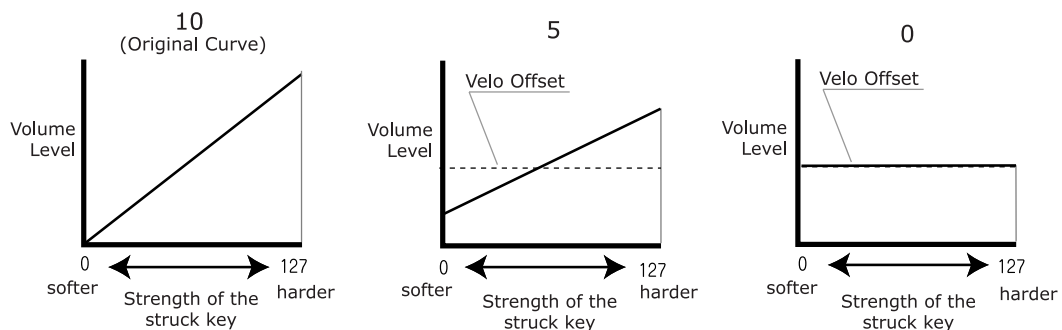
6.2.16 Velocity Compression

1 Concert Grand
Vel Comp. = 10

This parameter adjusts the keyboard response.

When the value is 10 (default), the keyboard response is normal (same as the setting in the SYSTEM).

When the value comes closer to 0, the keyboard response becomes less dynamic and at 0, it becomes completely flat (no touch response).



6.2.17 Velocity Offset

1 Concert Grand
Vel Offset = 60

This parameter sets the velocity value used when Velocity Compression is lower than 10.

For example to get a "No-Velocity" Organ type of playing feeling, set Velocity Compression to 0 and adjust the velocity level with this parameter to 127 or any other wanted level of velocity.

When the Velocity Compression is set to 10, this page won't be displayed.

6.2.18 Zone Transpose

1 Concert Grand
Zone Trans= 0

This parameter sets the amount of transposition for the selected zone. The available range is three octaves up or down (+/-36 semitones).

Note:

To set the master transpose, press the TRANSPOSE button and set the value. messages even if TX Volume is set to Off.

6.2.19 Transmitting Volume (Ext only)

3 External
S TX Volume = On

This parameter determines if an initial MIDI Volume message will be transmitted (On) to an external MIDI device or not (Off) when a SETUP is recalled.

Note:

In a zone set to External or Both, moving the faders will still transmit volume messages even if TX Volume is set to Off.

6.2.20 Volume

1 Concert Grand
S Volume = 127

This parameter sets the volume level for the selected zone. The value can be changed by using the FADER or VALUE buttons.

For External zones, when the TX Volume is "Off", this page won't be displayed.

6.2.21 Transmitting Control Change (Ext only)

3 External
S TX Cntrl# = On

This parameter determines if the Pan/Fine Tune/Control Knob settings will be transmitted (On) via MIDI or not (Off) when a SETUP is recalled.

Note:

In a zone set to External or Both, moving the Control Knobs will still transmit the values even if TX CC is set to Off.

6.2.22 Pan

1 Concert Grand
S Pan = R10

Int: This sets the pan-pot (right and left balance).

Ext: This sets the pan-pot value that will be transmitted to external sound modules. If the TX CC is "On", the value is transmitted when a SETUP is recalled. When the TX CC is "Off", this page won't be displayed.

The value changes from L63 to R63.

6.2.23 Fine Tune

1 Concert Grand
S Fine Tune = 0

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

Ext: This is used to transmit fine tuning settings to external sound modules. If the TX CC is "On", the value is transmitted when a SETUP is recalled. When the TX CC is "Off", this page won't be displayed.

The value changes from -63 to +63.

6.2.24 Damper

1 Concert Grand
S Damper = On

This parameter determines if the damper pedal is active (Norm [Int] / On [Ext], with natural decay), deactivated (Off) or set to HOLD (On, with steady sustain level) for the selected zone.

Use the HOLD value, if you don't want a sound to disappear. HOLD is only available for internal Sounds.

6.2.25 Foot Switch

1 Concert Grand
Foot SW = On

This parameter determines if a Foot Switch connected to the FOOT SWITCH jack is active (On) or not (Off) for the selected zone. The type of controller assigned to the footswitch is a common Setup parameter and is used for all zones of a Setup as a global parameter.

6.2.26 Expression Pedal

1 Concert Grand
Exp Pedal = On

This parameter determines if an Expression Pedal connected to the EXP jack is active (On) or not (Off) for the selected zone. The type of controller assigned to Expression pedal is a common Setup parameter and is used for all zones of a Setup as a global parameter.

6.2.27 Modulation

1 Concert Grand
Modulation = On

This parameter determines if the Modulation Wheel is active (On) or not (Off) for the selected zone.

6.2.28 Bender

1 Concert Grand
Bender = On

This parameter determines if the Bender Wheel is active (On) or not (Off) for the selected zone.

6.2.29 Transmitting Bender Range (Ext only)

3 External
S TXBendrRng= On

This parameter decides if a Bender Range should be transmitted (On) or not (Off) when a SETUP is recalled. When the Bender is "Off", this page won't be displayed.

6.2.30 Bender Range

1 Concert Grand
Bendr Rng = 2

Int: This sets the Bender Range in semitone steps. The value changes from 0 to 7.
Ext: This is used to transmit Bender Range information to external sound modules. If the Tx Bender Range is "On", the value is transmitted when a SETUP is recalled. The value changes from 0 to 12.

When the Bender is "Off", this page won't be displayed.

6.2.31 Solo

1 Concert Grand
Solo = On

This parameter turns the Solo Mode On/Off. When Solo is turned "On" only one note will be heard for the selected zone even if more than one note is being played simultaneously. This can be used to effectively simulate the performance characteristics of a monophonic synthesizer or as a special performance tool for playing solo parts. Solo mode can also be used while playing a polyphonic part from another zone.

6.2.32 Solo Mode

1 Concert Grand
Solo Mode =Last

This parameter determines which note will be played when Solo is ON and more than one note is being played simultaneously. There are three choices for Solo note priority.

Last: The most recently played note within a group of notes will be heard when Solo is ON

Hi: The highest note played within a group of notes will be heard when Solo is ON.

Low: The lowest note played within a group of notes will be heard when Solo is ON.

When the Solo is "Off", this page won't be displayed.

6.3 Common Parameters

Common parameters are affecting all zones.

6.3.1 Stretch Tuning

COMMON
Stretch = Piano_w

The hearing ability of a human is uneven and is not accurate with high frequency and low frequency as it is with the middle range. The tuning of an acoustic piano is stretched to compensate for this so the sound will be heard naturally to the ears.

Off: The tuning is flat without stretching.

On: The tuning is always stretched.

Piano: The tuning is stretched only when piano sounds are selected.

On W: Same as "On" but the stretching is wider.

Piano W: Same as "Piano" but the stretching is wider.

6.3.2 Temperament

COMMON
Tempr =Pure Maj

This parameter sets the temperament of the MP5.

Equal: This is the most popular tuning method that divides the scale into twelve equal semitones. This produces the same chordal intervals in all twelve keys, and has the advantage of limitless modulation of the key. However the tonality of each key becomes less characteristic and no chord is in pure consonance.

Pure Maj/min: This temperament, which eliminates dissonances for thirds and fifths is still popular for choral music because of its perfect harmony. When playing in a major key select "Pure Maj" and when playing in a minor key select "Pure Min".

Pythagor: This temperament, which uses mathematical ratios to eliminate dissonance for fifths, is very limited for use with chords, but it produces very characteristic melodic lines.

Meantone: This temperament, which uses a mean between a major and minor whole tone to eliminate dissonance for thirds, was devised to eliminate the lack of consonances experienced with certain fifths

for the Mersenne pure temperament. It produces chords that are more beautiful than those with the equal temperament.

Werkmeis/Kirnberg: These two temperaments are placed in between Meantone and Pythagorean. For music with few accidentals, this temperament produces the beautiful chords of the mean tone, but as accidentals increase, the temperament produces the characteristic melodies of the Pythagorean temperament. It is used primarily for classical music written in the Baroque era to revive the original characteristics.

User: You can make your own temperament by raising or lowering the pitch for each half tone.

6.3.3 Key of Temperament

COMMON
TemprKey = C

Limitless modulation of the key became available only after the invention of Equal temperament. When we use a temperament other than Equal temperament, we must carefully choose the key signature to play in.

For example, if the song you are going to play is written in D major, choose "D" as the temperament key.

When Temperament is set to Equal, this page won't be displayed.

6.3.4 Tuning C - B

COMMON
C = 0

When the temperament is set to "User", adjust the pitch for each key and create your own temperament. The value changes from -50 to +50. These pages will only be displayed when the user temperament is selected.

Note:

The value is shown in "cent". Half tone equals to 100 cents.

6.3.5 Foot SW Control Change Number

COMMON
FootSW CC# = SST

This parameter assigns a Control Change Number to the Footswitch connected to the FOOT SWITCH jack on the rear panel.

See page72 for the list of Control Change numbers.

If the "SW" is selected, the footswitch is used to turn on/off the SW button.

When the System parameter FootSW is "Setup+" this page won't be displayed.

6.3.6 EXP Control Change Number

COMMON
ExpPd1 CC# = EXP

This parameter assigns a Control Change Number to the Expression Pedal connected to the EXP jack on the rear panel.

See page72 for the list of Control Change numbers.

If the "AFT" is selected, the expression pedal is used to send After Touch information.

If the "RTR" is selected, the expression pedal is used to switch the speed of roter between slow and fast when the Rotary effect is in use.

If the "Pedal Wah" is selected in EFX, the pedal works as a Wah Pedal regardless of the setting in this parameter.

6.3.7 Modulation Wheel Control Change Number

COMMON
M.WheelCC# = Mod

This parameter assigns a Control Change Number to the Modulation Wheel on the right side of the front panel.

See page72 for the list of Control Change numbers.

Note:

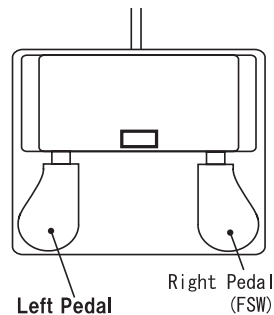
When the following Numbers are selected for the FootSW,EXP or Modulation Wheel Control Change Number, the functions affect the internal sounds, too.

1. Modulation Wheel (MOD)
7. Volume (VOL)
10. Pan (PAN)
11. Expression Controller (EXP)
64. Damper Pedal (HLD)
66. Sostenuato (SST)
67. Soft Pedal (SFT)

6.3.8 Left Pedal Mode

COMMON
Left Pedal =Soft

This parameter determines whether the left pedal of the optional F-20 (twin pedal) accessory functions as Soft or Sost (Sostenuto).



F-20

Soft: The Left Pedal works as a Soft Pedal (Default).
When the Rotary EFX is in use, the Soft Pedal changes function to a Fast/Slow Rotor switch.

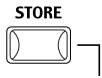
Sost: The Left Pedal works as a Sostenuato Pedal.
When the Damper setting (see page38) is Off or Norm, the sosotenuato pedal works with natural decay. When the Damper setting is Hold, the sostenuto pedal works with a steady susustain level.

6.3.9 Master Volume

COMMON
Master Vol= 127

Adjust the total volume of the SETUP.
The value changes from 0 to 127.

7. STORE



You can save the changes of the settings made as either a SOUND or a SETUP. Up to 256 SOUNDS or 256 SETUPS can be stored.

Moreover, the Common parameters can also be stored as the initial setting in SOUND mode.

The following groups of parameters are stored.

[SOUND]

Selected Zone's One Sound settings:

EFX/REVERB settings (see page25)

Control Knob settings -except for EQ (see page27)

Int Zone parameters in MENU settings (see page32)

-except for parameters with the inverse "S(Setup)" icon

[COMMON]

Initial settings in SOUND mode:

Function SW setting (see page21)

COMMON parameters in MENU settings (see page32)

-except for parameters with the inverse "S(Setup)" icon

[SETUP]

MP5's whole settings of 4zones:

Sound Selection, Zone On/Off Status (see page15)

EFX/REVERB settings (see page25)

Fader, Control Knob settings (see page17, page27)

Function SW setting (see page21)

MASTER TRANSPOSE setting (see page18)

All MENU settings (see page32)

7.1 Storing the settings as a SOUND

While in SOUND mode, press the STORE button. The display will show the following screen:

<SETUP	SOUND>
	COMMON>

Press the VALUE UP button, the display will show the following screen:

Sound	Sure?
Press	VALUE UP

Press the VALUE UP button to confirm. The STORE procedure can be cancelled at any time by pressing any other button which is not used during the STORE procedure.

Writing Memory, Completed!

Note:

Storing will overwrite the selected SOUND.

If the selected zone is external, the SOUND cannot be stored.

7.2 Storing the COMMON settings

While in SOUND mode, press the STORE button. The display will show the following screen:

```
<SETUP   SOUND>
          COMMON>
```

Press the VALUE DOWN button, the display will show the following screen:

```
Common   Sure?
Press VALUE UP
```

Press the VALUE UP button to confirm. The STORE procedure can be cancelled at any time by pressing any other button which is not used during the STORE procedure.

```
Writing Memory,
Completed!
```

7.3 Storing the settings as a SETUP

While in SOUND mode, press the STORE button. The display will show the following screen:

```
<SETUP   SOUND>
          COMMON>
```

Press the MENU UP button to select to store the settings as a SETUP.

In SETUP mode, press the STORE button. The display will show the SETUP number to store.

```
Store to 1-1-A
= GrandPno+Str1
```

Use the SOUND SELECT buttons to change the SETUP number in which the settings will be stored. For example, to choose SETUP 2-3-B, press 2 in the upper row, press 3 in the second row, and press B in the third row. Then press the STORE button.

```
Set Name
= GrandPno+Str1
```

To set a name use the MENU buttons to move the cursor, use the VALUE buttons to select the character. After you rename the SETUP, press the STORE button again.

```
Are You Sure?
Press VALUE UP
```

Press the VALUE UP button to confirm. The STORE procedure can be cancelled at any time by pressing any other button which is not used during the STORE procedure.

```
Writing Memory,
Completed!
```

Note:
Storing will overwrite the selected SETUP.

8. SYSTEM



Use this mode to set the System parameters of MP5.
To enter the SYSTEM mode, press the SYSTEM button.

8.1 System Menu

Use the MENU buttons to scroll through the System parameters.

[System Parameter]

- System Channel
- Touch
- System Tune
- Volume Slider Action
- Reverb Offset
- EQ Offset
- Local Control On/Off
- Multitimbre On/Off
- System Channel Mode
- Receive Channel On/Off
- LCD Contrast
- LED Brightness
- Out Mode
- Foot SW
- Wheel Mode
- Dump Mode

[System Dump]

- Dump Current
- Dump All Sound/Setup

[System Reset]

- Reset One Sound/Setup
- Reset All

Make sure the SYSTEM button is lit.
Press the MENU buttons until the parameter you want to edit appears in the display.

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

8.2 System Parameters

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

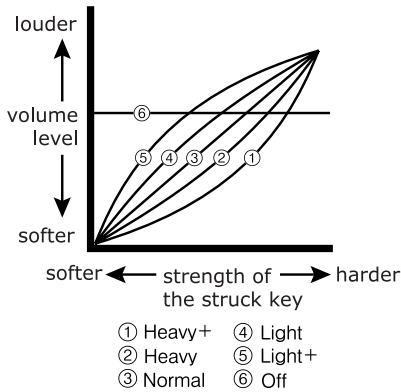
8.2.1 System Channel

SYSTEM System Ch = 1

This parameter sets the System MIDI channel on which System Exclusive messages are transmitted/received.

8.2.2 Touch

SYSTEM
Touch = Normal



This parameter adjusts the touch response curve of the keyboard.

Heavy+: This Curve has a steep rise as velocity increases, and a shallower curve at low velocities. (see 1) This curve requires the most striking force to produce a loud volume.

Heavy: This curve requires a stronger striking force to produce a loud volume. (see 2) This curve is perfect for those with strong fingers.

Normal: This curve recreates the touch response of an average acoustic piano.

Light: This curve requires less striking force to produce a loud volume. (see 4) This curve is good for those still developing finger strength.

Light+: This curve requires the least amount of striking force to produce a loud volume. (see 5) This curve is good for those with a very delicate touch.

Off: This curve gives a constant velocity level no matter how hard the keyboard is struck. (see 6) This curve is suitable for sounds that have a fixed dynamic range such as Organ, Harpsichord and certain synthesizer sounds.

User1,2: You can create your own custom touch curve to fit your playing style. Two user touch curves can be saved.

User Touch

The touch curve is the main component between the action and the sound. With this User Touch Curve function you can customize the MP5 according to your personal playing style.

After selecting the "Touch" function by pressing the MENU buttons, use the VALUE buttons to select User1 or User2. Now the selected curve is activated.

Press STORE
Touch = User 1

To create your own personal touch curve press the STORE button.

Start Playing
Soft → Loud

Now start playing the piano dynamically from soft to loud in order to let the piano analyze your playing style. Make sure that you really play in a realistic way according to your finger power and feeling. Sometimes the result is better if you turn off the volume first.

Press STORE
When finished

Press the STORE button again when you finish playing.

Analysis
Completed!!

The piano will analyze your playing and create a custom touch curve for you based upon your playing style. The new curve is automatically saved and will be used until you change the touch curve again or record a new one.

8.2.3 System Tuning

SYSTEM
SysTune = 440.0

This parameter sets the global master tuning of the MP5. The value changes from 427.0 to 453.0 (Hz).

8.2.4 Volume Slider Action

SYSTEM
VolAction=Catch

This selects how the volume sliders react, when you change the volume.

Normal: The value changes immediately, when the volume slider is moved.

Catch: The value won't change until the volume slider catches the position of the previously saved Volume value. This setting is designed for live editing to prevent you from unexpected volume jumps.

8.2.5 Reverb Offset

SYSTEM
Rev.Offset =100%

This parameter sets the global reverb depth offset. The value changes from 0 to 100%. You can decrease the whole depth of the MP5.

8.2.6 EQ Offset On/Off

SYSTEM
EQ Offset = On

This parameter sets the global EQ.

On: The global EQ settings are added to the EQ knob settings.

Off: The global EQ is disabled.

8.2.7 EQ Offset

SYSTEM
EQ High = 0

SYSTEM
EQ Mid High= 0

SYSTEM
EQ Mid Low = 0

SYSTEM
EQ Low = 0

This parameter sets the global EQ offset value of the MP5. The value changes from -12 to +12 (dB).

These parameters - High, Mid High, Mid Low and Low - are each added to the EQ knob settings. In the case that the total value exceeds +-12dB, it is limited to +-12dB.

When the EQ Offset On/Off is set to Off, this page won't be displayed.

8.2.8 Local Control

SYSTEM
Local = On

On: The keyboard of the MP5 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.

8.2.9 Multi-Timbral Mode

SYSTEM
MultiTimbre= off

Multi-Timbral Mode allows the MP5 to receive data on more than one MIDI channel simultaneously. In this mode, the MP5 can play different musical parts with different sounds for each part.

- On1/2: This is a flexible 16 part multi-timbral setup. (On 1 and On 2) MP5's normal program change numbers are assigned in On 1, and General MIDI program change numbers are assigned in On 2. (please see page54 for SOUND Program Number List.)
- Off: This turns off the multi-timbral capability. Only the system channel will be active and only the preset sound currently selected will be heard when a MIDI signal is received.

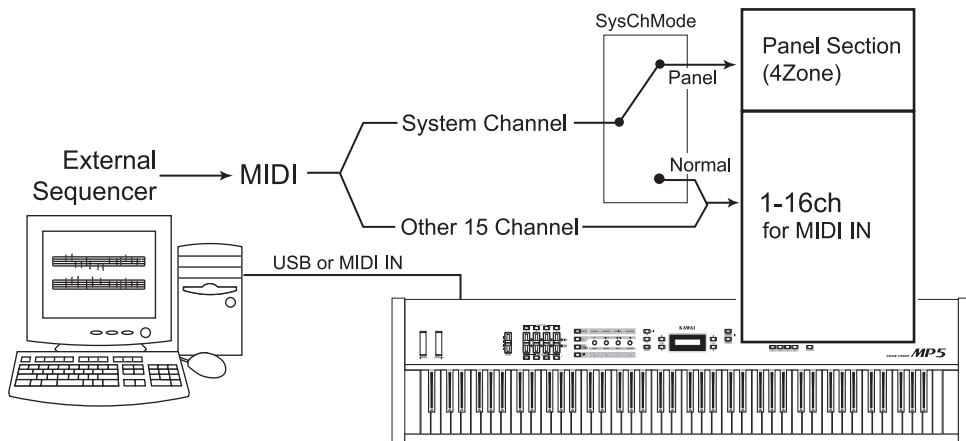
8.2.10 System Ch Mode

SYSTEM
SysChMode=Panel

This parameter determines whether or not MIDI data received on the system channel will be sent to panel section (4zone setup internal section) when MultiTimbre is set to ON.

- Panel: MIDI data received on the SystemCh is sent to panel section (Default). Use this setting to play your sound and setup patches (including effect/reverb settings) via MIDI on the system channel in Multi-Timbral mode.
- Normal: The system channel receives MIDI data as part of a simple 16 part Multi-Timbral set up. When Normal is selected Sound and setup patch settings will not be used via MIDI.

When the Multi-Timbral Mode is set to Off, this page won't be displayed.



Note:

When "Multi-Timbre=On" and "SysCh mode=Panel", The Receive Channel parameter in the System menu will display an asterisk for the MIDI channel assigned to the System. The asterisk indicates that MIDI data received on this channel will be sent to the Panel section.

8.2.11 Receive Channel

SYSTEM
RX Ch 1 = On

This parameter determines whether or not a particular MIDI channel will receive incoming MIDI data from an external source. This parameter can be used to filter out data on specific MIDI channels that are not intended for the MP5.

On: The MP5 responds to MIDI data received on this channel.

Off: The MP5 ignores MIDI data received on this channel.

When the Multi-Timbral Mode is set to Off, this page won't be displayed.

8.2.12 LCD Contrast

SYSTEM
LCD Cont. = 10

This parameter adjusts the contrast of the LCD display.

As the value changes higher, the contrast gets sharper. The value changes from 1 to 10.

8.2.13 LED Brightness

SYSTEM
LED Bright.=High

This adjusts the brightness of the LEDs. You can choose from High or Low.

The Low setting is designed for dark stages, while the High setting is good for bright ambience.

8.2.14 Out Mode

SYSTEM
Out Mode =Stereo

Sometimes it is convenient to have two mono outputs instead of a stereo output.

In this case one mono output can be used for your own monitor system and the other goes to the mixing console.

Stereo: The signal on the Line-Outs is normal stereo.

2xMono: The signal on the Line-Outs is mono on both jacks

Note:

To avoid unexpected sound issues some stereo effects like AutoPan will be turned off when 2xMono is selected.

8.2.15 Foot Switch Mode

SYSTEM
FootSW =Normal

This parameter sets the mode of FootSW's function.

Normal: The type of controller assigned to the footswitch is a common Setup parameter "FootSW CC#". (see page41)

Setup+: The footswitch is pushed 1 time, and Setup number will be increased by 1.

Note:

When the value is "Setup+", FootSW CC# page won't be displayed.

8.2.16 Wheel Mode

SYSTEM
wheelMode=Normal

This parameter determines whether or not the modulation wheel can be used to edit parameters like a value dial.

Normal: The wheel functions as a performance wheel and controls the CC controller that is assigned in the setup menu (Default).

Edit: The wheel is used to edit parameters. The value won't change until the wheel reaches the position of the previously set the value. It can be used to edit the following parameters:

- *Setup parameters in the MENU except Zone mode and Sound
- *Setup name when stored
- *Function SW assign, EFX/REVERB type
- *Tempo of the metronome

Note:

When the Wheel Mode is set to "Edit", the normal function of the wheel is ineffective, and the wheel parameters will show an asterisk.

Concert Grand
Modulation =*On

COMMON
M.wheelCC# =*Mod

8.2.17 Dump Mode

SYSTEM
DumpMode =Normal

This parameter determines whether or not the dump data is divided into plural Packets. When a Personal Computer is used for the Dump, if the performance of the computer or sequencer is insufficient, the MP5 may not dump information correctly. In such a case, please set the Dump mode to "Divide".

Normal: Dump data is transmitted as one exclusive data.[default]

Divide: Dump data is transmitted as plural Packets -each max 128bytes. The "Divide" transmission requires more time than "Normal".

8.3 System Dump

8.3.1 Dump Current

Dump Current
Press VALUE UP

This function transmits the current and active settings of the MP5 as a System Exclusive Message via the MIDI OUT.

Press the SYSTEM button. Then press the MENU-DOWN button until "Dump Current" appears on the display.

Dump Current
Sure?

Press the VALUE-UP button. The display will ask for confirmation.

To cancel Dump Current at this point, press the VALUE-DOWN button. Otherwise, press the VALUE-UP button again.

Dump Current
Completed!!

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

Note:

Loading the data back to the MP5 will change the current settings. SETUP and SYSTEM data will not change. You can use this function to temporarily change the setting from your sequencer. If you want to save the setting, you must use the STORE procedure and save as Setup.

8.3.2 Dump All SOUND

Dump All Sound
Press VALUE UP

This function transmits all the Sounds of the MP5 as System Exclusive Messages via the MIDI OUT. Use this function to backup your Setups on an external MIDI sequencer.

Press the SYSTEM button. Then press the MENU-DOWN button until "Dump All Sound" appears on the display.

Dump All Sound
Sure?

Press the VALUE-UP button. The display will ask for confirmation.

To cancel Dump All Sound at this point, press the VALUE-DOWN button. Otherwise, press the VALUE-UP button again.

Dump All Sound
Completed!!

When the data is done transmitting, the display will change to read "Completed!!". Dump All Sound is complete.

Note:

Loading the data back to MP5 will overwrite all the sound data in the memory.

8.3.3 Dump All SETUP

Dump All Setup
Press VALUE UP

This function transmits all the Setups of the MP5 as System Exclusive Messages via the MIDI OUT. Use this function to backup your Setups on an external MIDI sequencer.

Press the SYSTEM button. Then press the MENU-DOWN button until "Dump All" appears on the display.

Dump All Setup
Sure?

Press the VALUE-UP button. The display will ask for confirmation.

To cancel Dump All Setup at this point, press the VALUE-DOWN button. Otherwise, press the VALUE-UP button again.

Dump All Setup
Completed!!

When the data is done transmitting, the display will change to read "Completed!!". Dump All Setup is complete.

Note:

Loading the data back to MP5 will overwrite all the setup data in the memory.

8.4 System Reset

8.4.1 Reset One SOUND/SETUP

Reset 6-4-A
Press VALUE UP

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

Press the SYSTEM button. Then press the MENU-DOWN button until "Reset X-X-X" (X-X-X stands for the setup number) appears on the display. Now use the SOUND SELECT buttons to select the sound or setup you want to reset.

Reset 6-4-A
Sure?

Press the VALUE-UP button. The display will ask for confirmation.

To cancel the Reset procedure at this point, press the VALUE-DOWN button. Otherwise, press the VALUE-UP button again.

Reset 6-4-A
Completed!!

The display will show "Completed!!" after finishing.

Note:

The selected SOUND/SETUP data will be overwritten by the factory settings.

8.4.2 Reset All

Reset All
Press VALUE UP

This function performs a global reset of all 256 SOUNDS, all 256 SETUPS and SYSTEM settings back to the original factory default settings.

Press the SYSTEM button. Then press the MENU-DOWN button until "Reset All" appears on the display.

Reset All
Sure?

Press the VALUE-UP button. The display will ask for confirmation.

To cancel Reset All at this point, press the VALUE-DOWN button. Otherwise, press the VALUE-UP button again.

Reset All
Completed!!

The display will show "Completed!!" after finishing.

Note:

All the data in the MP5 will be overwritten by the factory settings.

9. OTHER

9.1 MIDI IN

When the Multi-Timbral Mode is Off, the MP5 receives the MIDI information coming in the System Channel only. (see page45)

For changing the internal sounds via MIDI, refer to the SOUND Program Number List on the next page.

Note:

If the MP5 receives the Program Number from 1 to 128 and Bank number LSB from 2 to 3 in the System Channel (see page45), the MP5 will switch to SETUP mode and the corresponding SETUP is recalled. (see the SETUP Program Number Table below.) The recalled SETUP can be played only from the keyboard of the MP5.

When the Multi-Timbral Mode is On, the MP5 can be used as a multi-timbral sound module, playing up to 16 different sounds on 16 MIDI channels.

9.2 SETUP Program Number Table

UPPER	SECOND	THIRD	PROG#:MSB-LSB
1	1	A	001:000-002
1	1	B	002:000-002
1	1	C	003:000-002
1	1	D	004:000-002
1	2	A~D	005:000-002 ~ 008:000-002
1	3	A~D	009:000-002 ~ 012:000-002
1	4	A~D	013:000-002 ~ 016:000-002
1	5	A~D	017:000-002 ~ 020:000-002
1	6	A~D	021:000-002 ~ 024:000-002
1	7	A~D	025:000-002 ~ 028:000-002
1	8	A~D	029:000-002 ~ 032:000-002
2	1~8	A~D	033:000-002 ~ 064:000-002
3	1~8	A~D	065:000-002 ~ 096:000-002
4	1~8	A~D	097:000-002 ~ 128:000-002
5	1~8	A~D	001:000-003 ~ 032:000-003
6	1~8	A~D	033:000-003 ~ 064:000-003
7	1~8	A~D	065:000-003 ~ 096:000-003
8	1~8	A~D	097:000-003 ~ 128:000-003

9.3 SOUND Program Number List

			Multi Timbre ON1			Multi Timbre ON2		
			Prog#	Bank MSB	Bank LSB	Prog#	Bank MSB	Bank LSB
Piano								
1	A	Concert Grand	1	0	0	1	95	16
	B	Studio Grand	2	0	0	1	95	17
	C	Mellow Grand	3	0	0	1	95	18
	D	Jazz Grand	4	0	0	1	95	19
2	A	Concert Grand2	5	0	0	1	121	0
	B	Studio Grand 2	6	0	0	1	121	1
	C	Mellow Grand 2	7	0	0	1	121	2
	D	Jazz Grand 2	8	0	0	1	95	8
3	A	Modern Piano	9	0	0	2	121	0
	B	Rock Piano	10	0	0	2	121	1
	C	Old Age Piano	11	0	0	2	95	5
	D	Honky Tonk	12	0	0	4	121	0
4	A	Mono Piano	13	0	0	1	95	20
	B	Mono Piano 2	14	0	0	1	95	3
	C	Mono Piano 3	15	0	0	1	95	21
	D	Mono Piano 4	16	0	0	1	95	24
5	A	Piano Vari.	17	0	0	1	95	22
	B	Piano Vari. 2	18	0	0	1	95	23
	C	Piano Vari. 3	19	0	0	2	95	6
	D	Piano Vari. 4	20	0	0	2	95	7
6	A	Piano Oct.	21	0	0	1	95	1
	B	Piano Oct. 2	22	0	0	1	95	2
	C	Piano & EP	23	0	0	2	95	1
	D	Piano & EP 2	24	0	0	2	95	2
7	A	New Age Piano	25	0	0	1	95	9
	B	New Age Piano2	26	0	0	1	95	10
	C	New Age Piano3	27	0	0	1	95	11
	D	New Age Piano4	28	0	0	1	95	15
8	A	Harpsichord	29	0	0	7	121	3
	B	Harpsichord2	30	0	0	7	121	0
	C	Harpsi. Octave	31	0	0	7	121	1
	D	Harpsi & Clavi	32	0	0	7	95	5
E.Piano								
1	A	Classic EP	33	0	0	5	121	0
	B	Classic EP 2	34	0	0	5	95	5
	C	Classic EP 3	35	0	0	5	95	3
	D	Classic EP 4	36	0	0	5	121	1
2	A	Modern EP	37	0	0	6	121	0
	B	Modern EP 2	39	0	0	6	121	1
	C	Modern EP 3	40	0	0	6	121	2
	D	Modern EP 4	38	0	0	6	95	5
3	A	60s EP	41	0	0	5	121	3
	B	60's EP 2	42	0	0	5	95	4
	C	Electric Grand	44	0	0	3	121	0
	D	Electric GP 2	43	0	0	3	121	1
4	A	Dolce EP	45	0	0	5	95	2
	B	Legend EP	46	0	0	6	121	3
	C	Phase EP	47	0	0	6	121	4
	D	Classic EP 5	48	0	0	5	121	2

			Multi Timbre ON1			Multi Timbre ON2		
			Prog#	Bank MSB	Bank LSB	Prog#	Bank MSB	Bank LSB
5	A	Crystal EP	49	0	0	6	95	1
	B	New Age EP	50	0	0	6	95	2
	C	New Age EP2	51	0	0	6	95	3
	D	New Age EP3	52	0	0	6	95	4
6	A	Clavinet	53	0	0	8	121	0
	B	Synth Clavinet	54	0	0	8	121	1
	C	Clavi & Marim	55	0	0	8	95	1
	D	Clavi Phaser	56	0	0	8	95	2
7	A	Vibraphone	57	0	0	12	121	0
	B	Octave Vibes	58	0	0	12	95	2
	C	Celesta	59	0	0	9	121	0
	D	Bells	60	0	0	15	95	3
8	A	Marimba	61	0	0	13	121	0
	B	Hard Marimba	62	0	0	13	95	1
	C	Xylophone	63	0	0	14	121	0
	D	Steel Drums	64	0	0	115	121	0
Drawbar								
1	A	Be More	65	0	0	17	95	2
	B	Jazzier	66	0	0	18	95	1
	C	Be 3	67	0	0	17	95	1
	D	Be Nice	68	0	0	17	95	7
2	A	Mellow	69	0	0	17	95	5
	B	Drawbar 2	70	0	0	17	121	3
	C	Odd Man	71	0	0	17	95	6
	D	Hi-Lo	72	0	0	17	95	3
3	A	Soft Solo	73	0	0	17	95	8
	B	Full Organ	74	0	0	18	95	4
	C	Jazz Organ 2	75	0	0	18	95	12
	D	Hollow	76	0	0	18	95	6
4	A	Rock Organ 2	77	0	0	19	121	0
	B	Drawbar 3	78	0	0	17	121	1
	C	Screamin'	79	0	0	17	95	4
	D	Drawbar	80	0	0	17	121	0
5	A	Jazz Organ	81	0	0	18	121	0
	B	Rock Organ	82	0	0	18	95	13
	C	Perc. Organ 2	83	0	0	18	12	11
	D	Perc. Organ	84	0	0	18	95	15
6	A	16' Drawbar	85	0	0	19	95	1
	B	8' Drawbar	86	0	0	19	95	2
	C	5 1/3' Drawbar	87	0	0	19	95	3
	D	4' Drawbar	88	0	0	19	95	4
7	A	2 2/3' Drawbar	89	0	0	19	95	5
	B	2' Drawbar	90	0	0	19	95	6
	C	1 3/5' Drawbar	91	0	0	19	95	7
	D	1 1/3' Drawbar	92	0	0	19	95	8
8	A	1' Drawbar	93	0	0	19	95	9
	B	4' percussion	94	0	0	18	95	3
	C	2 2/3' perc.	95	0	0	18	95	2
	D	Key Click	96	0	0	122	95	1

			Multi Timbre ON1			Multi Timbre ON2		
			Prog#	Bank MSB	Bank LSB	Prog#	Bank MSB	Bank LSB
Organ								
1	A	Church Organ	97	0	0	20	121	0
	B	Full Pipes	98	0	0	20	95	9
	C	Full Ensemble	99	0	0	21	95	10
	D	Church Organ 2	100	0	0	20	121	1
2	A	PrincipleChoir	101	0	0	20	95	23
	B	Small Ensemble	102	0	0	20	95	8
	C	Small Ens. 2	103	0	0	20	95	25
	D	Baroque	104	0	0	20	95	19
3	A	Chiffy Tibia	105	0	0	20	95	17
	B	8'&4'sPrinciple	106	0	0	20	95	24
	C	Stopped Pipe	107	0	0	20	95	21
	D	Principle Pipe	108	0	0	20	95	22
4	A	8' Celeste	109	0	0	20	95	5
	B	Diapason	110	0	0	20	95	6
	C	Voice Celeste	111	0	0	20	95	39
	D	Baroque Mix	112	0	0	20	95	7
5	A	Reeds	113	0	0	20	95	10
	B	8' Reed	114	0	0	21	95	1
	C	Reed Pipes	115	0	0	20	95	26
	D	Posaune	116	0	0	20	95	27
6	A	Theater Organ	117	0	0	20	95	2
	B	Theater Organ2	118	0	0	20	95	3
	C	Theater Organ3	119	0	0	20	95	4
	D	Theater Tibia	120	0	0	20	95	36
7	A	Elec. Organ	121	0	0	17	95	9
	B	Elec. Organ 2	122	0	0	17	95	10
	C	60's Organ	123	0	0	17	121	2
	D	Pump Organ	124	0	0	20	95	40
8	A	Fr. Accordion	125	0	0	22	121	0
	B	TangoAccordion	126	0	0	24	121	0
	C	Harmonica	127	0	0	23	121	0
	D	Kenban Harmo.	128	0	0	23	95	4
Strings/Vocal								
1	A	String Pad	1	0	1	49	95	8
	B	Warm Strings	2	0	1	49	95	1
	C	Warm Strings 2	3	0	1	51	121	0
	D	Synth Strings	4	0	1	52	121	0
2	A	Beautiful Str.	5	0	1	45	95	1
	B	String Ens. 2	6	0	1	50	121	0
	C	String Ens.	7	0	1	49	121	0
	D	Full Orchestra	8	0	1	49	95	12
3	A	Small Str. Ens	9	0	1	49	95	13
	B	Quartet	10	0	1	49	95	11
	C	Str. Bass Ens.	11	0	1	44	121	0
	D	Str. Sustain	12	0	1	49	95	10
4	A	Pizzicato	13	0	1	46	121	0
	B	TremoloStrings	14	0	1	45	121	0
	C	Str. Sforzando	15	0	1	49	95	9
	D	Orchestra Hit	16	0	1	56	121	0

			Multi Timbre ON1			Multi Timbre ON2		
			Prog#	Bank MSB	Bank LSB	Prog#	Bank MSB	Bank LSB
5	A	Passionate Vln	17	0	1	41	121	0
	B	Classic Violin	18	0	1	41	95	3
	C	Passionate Vc	19	0	1	43	121	0
	D	Classic Cello	20	0	1	43	95	4
6	A	Choir	21	0	1	53	121	0
	B	Breathy Choir	22	0	1	53	95	1
	C	Choir Aahs	23	0	1	53	95	3
	D	Slow Choir	24	0	1	53	95	2
7	A	Jazz Ensemble	25	0	1	54	95	2
	B	Female Scat	26	0	1	54	95	22
	C	Pop Ensemble	27	0	1	54	121	0
	D	Contemp Ens.	28	0	1	54	95	10
8	A	Itopia	29	0	1	92	121	0
	B	Halo Pad	30	0	1	95	121	0
	C	Halo Pad 2	31	0	1	95	95	1
	D	Synth Vocals	32	0	1	55	121	0

Brass/Wind

1	A	Exp Brass	33	0	1	62	95	8
	B	Exp Saxes	34	0	1	66	95	11
	C	Tp&Bone&Tenor	35	0	1	58	95	11
	D	Flugel & Tenor	36	0	1	57	95	18
2	A	Brass Section	37	0	1	62	121	0
	B	Synth Brass	39	0	1	63	121	0
	C	Synth Brass 2	40	0	1	64	121	0
	D	Jump Brass	38	0	1	63	121	3
3	A	Exp Trumpet	41	0	1	57	121	0
	B	PlungerTrumpet	42	0	1	57	95	7
	C	Trumpet Shake	44	0	1	57	95	6
	D	Harmon Mute Tp	43	0	1	60	121	0
4	A	Exp Trombone	45	0	1	58	121	0
	B	Lead Trombone	46	0	1	58	95	2
	C	PlungerTrombon	47	0	1	58	95	4
	D	ClosedMuteBone	48	0	1	58	95	9
5	A	Exp Alto	49	0	1	66	121	0
	B	Lead Alto	50	0	1	66	95	2
	C	Soft Alto	51	0	1	66	95	7
	D	Lead Soprano	52	0	1	65	121	0
6	A	Exp Tenor	53	0	1	67	121	0
	B	Ballad Tenor	54	0	1	67	95	6
	C	Growl Tenor	55	0	1	67	95	4
	D	Baritone Sax	56	0	1	68	121	0
7	A	Exp Flute	57	0	1	74	95	12
	B	Ballad Flute	58	0	1	74	121	0
	C	Flute Overblow	59	0	1	74	95	9
	D	Flute Flutter	60	0	1	74	95	10
8	A	Oboe	61	0	1	69	121	0
	B	Bassoon	62	0	1	71	121	0
	C	Jazz Clarinet	63	0	1	72	121	0
	D	Pan Flute	64	0	1	76	121	0

			Multi Timbre ON1			Multi Timbre ON2		
			Bank	Bank		Bank	Bank	
			Prog#	MSB	LSB	Prog#	MSB	LSB
Pad & Synth								
1	A	New Age Pad	65	0	1	89	121	0
	B	New Age Pad 2	66	0	1	89	95	1
	C	New Age Pad 3	67	0	1	89	95	2
	D	New Age Pad 4	68	0	1	89	95	3
2	A	Atmosphere	69	0	1	100	121	0
	B	Brightness	70	0	1	101	121	0
	C	Brightness 2	71	0	1	101	95	1
	D	Goblin	72	0	1	102	121	0
3	A	Classic Synth	73	0	1	82	121	0
	B	Classic Synth2	74	0	1	82	121	1
	C	Big Saw	75	0	1	82	95	1
	D	Saw Pad	76	0	1	82	95	3
4	A	Pulse Lead	77	0	1	82	95	4
	B	Pulse Lead 2	78	0	1	82	95	5
	C	Square Lead	79	0	1	81	121	0
	D	Lead	80	0	1	82	121	2
5	A	Caliope	81	0	1	83	121	0
	B	Chiff	82	0	1	84	121	0
	C	Ensemble Lead	83	0	1	84	95	1
	D	Blow lead	84	0	1	83	95	2
6	A	Bright WarmPad	85	0	1	90	95	1
	B	Warm Pad	86	0	1	90	121	0
	C	Sine Pad	87	0	1	90	121	1
	D	Bowed Pad	88	0	1	93	121	0
7	A	Brass Pad	89	0	1	62	95	2
	B	Metallic	90	0	1	94	121	0
	C	Multi Sweep	91	0	1	96	121	0
	D	Soundtrack	92	0	1	98	121	0
8	A	Analog Brass	93	0	1	63	121	2
	B	Analog Brass 2	94	0	1	64	121	2
	C	Analog Brass 3	95	0	1	64	95	1
	D	Analog Brass 4	96	0	1	64	95	2
Bass/Guitar								
1	A	Acc. Bass	97	0	1	33	121	0
	B	Acc. Bass&Ride	98	0	1	33	95	1
	C	Electric Bass	99	0	1	34	95	1
	D	Electric Bass2	100	0	1	34	95	4
2	A	Finger Bass	101	0	1	34	121	0
	B	FingerSlapBass	102	0	1	34	121	1
	C	Pick Bass	103	0	1	35	121	0
	D	Fretless Bass	104	0	1	36	121	0
3	A	Synth Bass	105	0	1	39	121	0
	B	Synth Bass 2	106	0	1	40	121	0
	C	Rubber Bass	107	0	1	40	121	2
	D	Warm SynthBass	108	0	1	39	121	1
4	A	Exp. Nylon Gtr	109	0	1	25	121	0
	B	Pick Nylon Gtr	110	0	1	25	95	3
	C	Exp Guitar	111	0	1	26	121	0
	D	Exp Guitar 2	112	0	1	26	95	11

			Multi Timbre ON1			Multi Timbre ON2		
			Prog#	Bank	Bank	Prog#	Bank	Bank
				MSB	LSB		MSB	LSB
5	A	Rhythm Guitar	113	0	1	28	121	0
	B	Overdrive	114	0	1	30	121	0
	C	Distortion	115	0	1	31	121	0
	D	Muted Electric	116	0	1	29	121	0
6	A	Pedal Steel	117	0	1	27	121	1
	B	HawaiianGuitar	118	0	1	27	95	1
	C	Jazz Guitar	119	0	1	27	121	0
	D	Jazz Guitar 2	120	0	1	27	95	2
7	A	Banjo	121	0	1	106	121	0
	B	Mandolin	122	0	1	26	121	2
	C	Sitar	123	0	1	105	121	0
	D	Harp	124	0	1	47	121	0
8	A	Standard Set	125	0	1	1	120	0
	B	Standard Set 2	126	0	1	33	120	0
	C	Room Set	127	0	1	9	120	0
	D	Analog Set	128	0	1	26	120	0

9.4 Notes about USB

The MP5 can be connected to a personal computer with a USB cable for exchanging MIDI data. You need a USB driver installed in your computer.

[For Windows XP/Me users]

A standard USB driver is already installed in your computer. You don't need to install a new driver.

[For Windows 2000/98SE users]

You need to install the designated driver in your computer. Visit the KAWAI web site at <http://www.kawai.co.jp/english/Download1.html> and download the program.

[For Macintosh users]

Macintosh OSX automatically recognizes our USB interface. No special driver is needed. Older Macintosh OS are not supported by us. If you have an older Macintosh OS, please use an appropriate MIDI interface and MIDI cables when connecting the MP5 to a Macintosh computer.

NOTE:

When both MIDI jacks and USB jack are connected, USB has priority.

When connecting USB cable to the MP5, first connect the USB cable and then turn the power of the MP5 on.

It may take some time to start communication when the MP5 is connected to the computer via USB.

When USB communication is unstable with connection via hub, connect the USB cable directly to the USB port of the computer.

Turning the power of MP5 on/off or disconnecting the USB cable while the following actions may cause unstable communication.

- while installing USB driver
- while booting up the computer
- while MIDI application is working
- while communicating with the computer
- while the computer is in energy saver mode

* If you have any problem with USB communication, consult the instruction manual of your computer and check your computer set up.

* The USB-MIDI conversion board TID10000934 used in the MP5 is approved to show the USB logo. The USB logo can be used only for the product which is approved by USB-IF (USB Implements Forum Inc.) test.

* Windows is registered trademark of Microsoft Corporation.

* Macintosh is registered trademark of Apple Computer, Inc.

Specifications

Keyboard	88 keys with Advanced Hammer Action IV
# of Zone	4 zones
# of Internal Sound	256 sounds
Polyphony	Maximum 192
Effect	7 Reverbs 22 Effects 4-band Equalizer
Internal Memory	256 SETUPS
Display	16 x 2 LCD w/backlight
Jack	1/4" Out (L/MONO, R) Headphones MIDI IN/OUT/THRU USB (to Host) Foot Controller Damper EXP (Assignable) Foot Switch (Assignable) AC Inlet
Power Consumption	15W
Dimensions (WxDxH)	1356 x 340 x 172 mm (53 3/8" x 13 3/8" x 6 7/8")
Weight	20.5kg(45 lbs)
Accessories included	Damper Pedal [F-10H] Music Rack Power Cable Owner's Manual

* Specifications subject to change without notice.

MP5 MIDI Implementation

Version 1.0 February 2007

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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

Bank Select (MSB)

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 = BankNumber 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)

Default = 00H

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:00H - 7fH(0 ~ 127)	
*see RPN/NRPN chapter	

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	
Sostenuto Pedal			
Status	2nd Byte	3rd Byte	
BnH	42H	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 #1-9			
Status	2nd Byte	3rd Byte	
BnH	46H	vvH	Sustain Level
BnH	47H	vvH	Resonance
BnH	48H	vvH	Release time
BnH	49H	vvH	Attack time
BnH	4aH	vvH	Cutoff
BnH	4bH	vvH	Decay time
BnH	4cH	vvH	Vibrato Rate
BnH	4dH	vvH	Vibrato Depth
BnH	4eH	vvH	Vibrato Delay
n=MIDI channel number		:0H-fH(ch.1 ~ ch.16)	
vv=Control Value		:00H - 7fH(-64 ~ 0 ~ +63)	Default = 40H
Effect Control			
Status	2nd Byte	3rd Byte	
BnH	5bH	vvH	Reverb depth
BnH	5cH	vvH	Rotary speaker speed(0~63:Slow,64~127:Fast)
			*Only when rotary speaker selected
BnH	5dH	vvH	Chorus depth
BnH	5eH	vvH	Effect deoth
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 MP5 are as follows			
NRPN #	Data		
MSB LSB	MSB	Function & Range	
01H 08H	mmH	Vibrato Rate mm:00H - 7FH(-64 ~ 0 ~ +63)	Default = 40H
01H 09H	mmH	Vibrato Depth mm:00H - 7FH(-64 ~ 0 ~ +63)	Default = 40H
01H 0aH	mmH	Vibrato Delay mm:00H - 7FH(-64 ~ 0 ~ +63)	Default = 40H
01H 20H	mmH	Cutoff mm:00H - 7FH(-64 ~ 0 ~ +63)	Default = 40H
01H 21H	mmH	Resonance mm:00H - 7FH(-64 ~ 0 ~ +63)	Default = 40H
01H 63H	mmH	Attack time mm:00H - 7FH(-64 ~ 0 ~ +63)	Default = 40H

01H 64H	mmH	Decay time	mm:00H - 7FH(-64 ~ 0 ~ +63)	Default = 40H
01H 66H	mmH	Release time	mm:00H - 7FH(-64 ~ 0 ~ +63)	Default = 40H

* 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 MP5 are the followings

RPN #	Data	Function & Range
MSB LSB	MSB LSB	
00H 00H	mmH llH	Pitch bend sensitivity mm:00H-0cH (0~12 [half tone]),ll:00H Default=02H
00H 01H	mmH llH	Master fine tuning mm,ll :20 00H - 40 00H - 60 00H (-8192x50/8192 ~ 0 ~ +8192x50/8192 [cent])
00H 02H	mmH llH	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 - 7fH(0 ~ 127) Default = 00H

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

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)

Reset All Controller

Status	2nd Byte	3rd Byte
BnH	79H	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)

MONO

Status	2nd Byte	3rd Byte
BnH	7eH	mmH

n=MIDI channel number :0H-fH(ch.1 ~ ch.16)
mm=mono number :01H(M=1)

POLY

Status	2nd Byte	3rd Byte
BnH	7fH	00H

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

1.3 System Realtime Message

Status

FEH Active sensing

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:00H - 7fH(0 ~ 127)

*see RPN/NRPN chapter

Volume			
Status	2nd Byte	3rd Byte	
BnH	07H	vvH	
n=MIDI channel number		:0H-fH(ch.1 ~ ch.16)	
v=Volume		:00H - 7fH(0 ~ 127)	Default = 64H
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(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) 0 - 63 =OFF, 64 - 127=ON	Default = 00H
Sostenuto Pedal			
Status	2nd Byte	3rd Byte	
BnH	42H	vvH	
n=MIDI channel number		:0H-fH(ch.1 ~ ch.16)	
vv=Control Value		:00H - 7fH(0 ~ 127)	Default = 00H
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 #1-9			
Status	2nd Byte	3rd Byte	
BnH	46H	vvH	Sustain Level
BnH	47H	vvH	Resonance
BnH	48H	vvH	Release time
BnH	49H	vvH	Attack time
BnH	4aH	vvH	Cutoff
BnH	4bH	vvH	Decay time
BnH	4cH	vvH	Vibrato Rate
BnH	4dH	vvH	Vibrato Depth
BnH	4eH	vvH	Vibrato Delay
n=MIDI channel number		:0H-fH(ch.1 ~ ch.16)	
vv=Control Value		:00H - 7fH(-64 ~ 0 ~ +63)	Default = 40H
Effect Control			
Status	2nd Byte	3rd Byte	
BnH	5bH	vvH	Reverb depth
BnH	5cH	vvH	Rotary speaker speed(0~63:Slow,64~127:Fast) *Only when rotary speaker selected
BnH	5dH	vvH	Chorus depth
BnH	5eH	vvH	Effect deoth
n=MIDI channel number		:0H-fH(ch.1 ~ ch.16)	
vv=Control Value		:00H - 7fH(0 ~ 127)	

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 MP5 are the followings

RPN #	Data	Function & Range	Default
MSB LSB	MSB LSB		
00H 00H	mmH llH	Pitch bend sensitivity mm:00H-0cH(0~12 [half tone]), ll:00H	Default=02H
00H 01H	mmH llH	Master fine tuning mm,ll:20 00H - 40 00H - 60 00 (-8192x50/8192 ~ 0 ~ +8192x50/8192 [cent])	
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

MONO

Status	2nd Byte	3rd Byte
BnH	7eH	mmH

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

mm=mono number :01H(M=1)

POLY

Status	2nd Byte	3rd Byte
BnH	7fH	00H

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

2.3 System Realtime Message

Status

F8H Clock
FAH Start
FCH Stop

*Sending [SW] External Seq. Start/Stop

3. Exclusive Data

3.1 Universal Realtime Exclusive Message

Master Volume

Format:F0 7F 7F 04 01 ll mm F7

mm=MSB of Master Volume

ll=LSB of Master Volume

3.2 Dump Message

MP5 can receive this dump data, and also can transmit by the panel operation with System switch.

Also,MP5 can receive MP8/4/9500/9000's dump data.(Please see the manual of MP8/4/9500/9000 about the format.)

*note: A Part of MP8/4/9500/9000's tones or parameters will be replaced to the MP5's one.

3.2.1 Normal Dump Message

Format:F0 40 <ch> <ff> 00 0E <DATA> F7

<ch> :MIDI ch (00~0F)

<ff> :20=Dump Current / 21=Dump All (Sound or Setup)

<DATA> :Dump Current = 432bytes *Current Setup data in edit buffer or to edit buffer

 :Dump All Sound= 12,288bytes *All Sound 1~256(Sound1-1-A ... Sound 8-8-D)

 :Dump All Setup= 110,592bytes *All Setup 1~256 (Setup1-1-A ... Setup 8-8-D)

3.2.2 Divided Dump Message

a: Top Of Data

Format:F0 40 <ch> <ff> 00 0E 01 <LENGTH> F7

<ch> :MIDI ch (00~0F)

<ff> :22=Dump Current / 23=Dump All

<LENGTH>: 4bytes (7bit*4=28bit, Big Endian)

b: Data Packet

Format:F0 40 <ch> <ff> 00 0E 02 <DATA> F7

<ch> :MIDI ch (00~0F)

<ff> :22=Dump Current / 23=Dump All (Sound or Setup)

<DATA> :max 120bytes that are divided from Dump Current or Dump All

 :Dump Current = 432bytes *Current Setup data in edit buffer or to edit buffer

 :Dump All Sound=12,288bytes *All Sound 1~256(Sound1-1-A ... Sound 8-8-D)

 :Dump All Setup= 110,592bytes *All Setup 1~256 (Setup1-1-A ... Setup 8-8-D)

c:End Of Data

Format:F0 40 <ch> <ff> 00 0E 7B F7

<ch> :MIDI ch (00~0F)

<ff> :22=Dump Current / 23=Dump All

3.3 Sound Data Format

The structure of the one Sound patch [48bytes]

No.	PARAMETER	VALUE
1	Sound Data ID	2
2	Reverb Type	0~6 (see page26)
3	Reverb Time	0-127
4	-undifiend-	
5-47	<Int Parameters>	*see table3.4.2
48	-undefined-	

3.4 Setup Data Format

The structure of the one Setup patch [432bytes]

(common DATA) + (Zone 1,2,3,4 Int DATA) + (Zone 1,2,3,4 Ext DATA)

3.4.1 Common DATA

No.	PARAMETER	VALUE
1	Setup Data ID	0 or 1
2	-reserved-	
3-16	Name 1st~14th	ASCII
17	Zone Select	0-3 (0-3:Zone1-4)
18-21	Zone1-4 Edit Section	1,2 0 (1:INT, 2:EXT)
22-25	Zone1-4 Mode	0,1,2 (0:BOTH, 1:INT, 2:EXT)
26-29	Zone1-4 On/Off	0,1 (0:off, 1:on)
30	Knob Mode	0-3 (0:Effect, 1:EQ, 2:tone, 3:CC#)
31	EQ Lo	52~64~76 (-12~0~+12[dB])
32	EQ Mid Lo	52~64~76 (-12~0~+12[dB])
33	EQ Mid Hi	52~64~76 (-12~0~+12[dB])
34	EQ Hi	52~64~76 (-12~0~+12[dB])
35	-reserved-	
36	-reserved-	
37	Reverb Type	0~6 (see page26)
38	Reverb Time	0-127
39-42	Zone1 MIDICC# A-D	0-119
43-46	Zone2 MIDI CC#A-D	0-119
47-50	Zone3 MIDICC# A-D	0-119
51-54	Zone4 MIDICC# A-D	0-119
55	FootSW CC#	0-120 (120:Function SW)
56	EXP CC#	0-121 (120:After Touch,121:Rotary Slow/Fast)
57	Transpose SW	0,1 (0:off, 1:on)
58	Transpose Value	40~64~88 (-24~0~+24)
59	Function SW Type	0-8 (see page21)
60	Function SW	0,1 (0:off,1:on)
61	Stretch Tuning	0-4 (0:Off,1:On,2:Piano,3:On Wide,4:Piano Wide)
62	Temperament	0-7 (see page40)
63	Key of Temperament	0-11(0:C,1:C# ~ 9:A,10:Bb,11:B)
64-75	User C-B Tuning	14~64~114 (-50~0~+50[cent])
76	Master Volume	0-127
77	Left Pedal Mode	0,127(0:Sostenuto Pedal,127:Soft Pedal)
78	Wheel CC#	0-119
79-84	-undefined-	

3.4.2 Zone 1-4 Internal DATA

No.	PARAMETER	VALUE
1	Tone Number MSB	0-2
2	Tone Number LSB	0-127
3	Voicing	0-5 (0:Normal,1~2:Mellow1~2,3:Dynamic,4~5:Bright1~2)
4	-reserved-	
5	Damper Resonance	0-10 (0:off, 1-10)
6	String Resonance	0-10 (0:off, 1-10)
7-40	<Both Parameters>	*see table3.4.4
41	EFX Type	0-21 (see page25)
42	EFX Rate	0-127
43	Key-Off Effect	0-10 (0:off, 1-10)

3.4.3 Zone 1-4 External DATA

No.	PARAMETER	VALUE
1	tx_ch	0-15 (1~16ch)
2	Program Number	0-127 (#001-#128)
3	Bank Number LSB	0-127
4	Bank Number MSB	0-127
5	Prog# TX SW	0,1 (0:off,1:on)
6	Bank# TX SW	0,1 (0:off,1:on)
7	Volume TX SW	0,1 (0:off,1:on)
8	MIDI CC# TX SW	0,1 (0:off,1:on)
9	BendRange TX SW	0,1 (0:off,1:on)
10-43	<Both Parameters>	*see table3.4.4
44	Several SWs	bit0:TX keyboard 0,1(0:off,1:on) bit1~6: undefined

3.4.4 Zone 1-4 Both Parameters

No.	PARAMETER	VALUE
1	Section On/Off	0,1 (off,on)
2-3	KeyRange Lo/Hi	0-127 (A0~C8)
4	VeloSW Type	0~2 (off,loud,soft)
5	VeloSW Value	0~127
6	Velo Comp	1~64~127 (-63~0~+63)
7	Solo SW	0,1 (off,on)
8	Solo Mode	0,1,2 (Last,Hi,Lo)
9	Zone Transpose	40~64~88 (-24~0~+24)
10	Effect SW	0,1 (off,on)
11	Reverb SW	0,1 (off,on)
12	Damper SW	0,1 (off,on)
13	FootSW SW	0,1 (off,on)
14	EXP SW	0,1 (off,on)
15	Modulation SW	0,1 (off,on)
16	Bender SW	0,1 (off,on)
17	Volume	0-127
18	Panpot	1-64-127 (L63~0~R63)
19	Reverb Depth	0-127
20	Effect Depth	0-127
21	Bend Range	<INT>0-7 <EXT>0-12
22	-reserverd-	
23	Fine Tune	1-64-127 (-50*63/63~0~+50*63/63[cent])
24	Cutoff	14~64~114(-50~0~+50)
25	Attack Time	14~64~114(-50~0~+50)
26	Decay Time	14~64~114(-50~0~+50)
27	Release Time	14~64~114(-50~0~+50)
28	CC# A Value	0-127
29	CC# B Value	0-127
30	CC# C Value	0-127
31	CC# D Value	0-127
32	Velo Offset	0-127
33-34	-undefined-	

4. Control Change Number (CC#) Table

Control Number		Control Function
Decimal	Hex	
0	0	Bank Select (MSB)
1	1	Modulation Wheel or lever
2	2	Breath Controller
3	3	(undefined)
4	4	Foot Controller
5	5	Portament Time
6	6	Data Entry (MSB)
7	7	Channel Volume
8	8	Balance
9	9	(undefined)
10	A	Panpot
11	B	Expression Controller
12	C	Effect Controller1
13	D	Effect Controller2
14	E	(undefined)
15	F	(undefined)
16-19	10-13	General Purpose Controller1~4
20-31	14-1F	(undeifined)
32	20	Bank Select (LSB)
33-63	21-3F	(LSB of Control Number 1-32)
64	40	Hold1 (Damper Pedal or Sustain)
65	41	Poratament On/Off
66	42	Sostenuto
67	43	Soft Pedal
68	44	Legato Footswitch
69	45	Hold2 (freez etc)
70	46	Sound Controller1 (Sound Variation)
71	47	Sound Controller2 (Filter Resonance/Harmonic Intensity)
72	48	Sound Controller3 (Release Time)
73	49	Sound Controller4 (Attack Time)
74	4A	Sound Controller5 (Brightness/Cutoff)
75	4B	Sound Controller6 (Decay TTime)
76	4C	Sound Controller7 (Vibrato Rate)
77	4D	Sound Controller8 (Vibrato Depth)
78	4E	Sound Controller9 (Vibrato Delay)
79	4F	Sound Controller10
80-83	50-53	General Purpose Controller5~8
84	54	Portament Control
85-90	55-5A	(undefine)
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	Non Registered Parameter Number (LSB)
99	63	Non Registered Parameter Number (MSB)
100	64	Registered Parameter Number (LSB)
101	65	Registered Parameter Number (MSB)
102-119	66-77	(undefined/reserved)
120-127	78-7F	Channel Mode Message

MIDI Implementation Chart

[STAGE PIANO]
Model: KAWAI MP5

Date: February 2007
Version: 1.0

Function		Transmit	Receive		Remarks
			Multi Off(*5)	Multi On	
Basic Channel	Default	1-16	1-16	1-16	
	Changed	1-16	1-16	1-16	
Mode	Default	3	3	3	
	Messages Altered	3, 4 (M=1) *****	X	3, 4 (M=1)	
Note Number:	True Voice	0-127 *****	0-127	0-127	
Velocity	Note ON	O 1-127	O 1-127	O 1-127	
	Note OFF	X	X	X	
Afer Touch	Key's	X	X	X	
	Touch Ch's	O (*1)	X	X	
Pitch Bend		O	O	O	
Control Change	0, 32	O	O	O	Bank Select
	1	O	O (*2)	O	Modulation
	6, 38	O	O	O	Data Entry
	7	O	O	O	Volume
	10	O	O	O	Panpot
	11	O	O (*2, 3)	O	Expression (EXP)
	64	O	O (*2)	O	Hold1 (Damper)
	66	O	O (*2, 3)	O	Sostenuto (FootSW)
	67	O	O	O	Soft
	70, 71	O	O	O	Sustain, Resonance
	72, 73, 74, 75	O	O	O	RLS, ATK, CTF, DCY
	76, 77, 78	O	O	O	Vibrato (Rate, Depth, Delay)
	91	O	O	O	Reverb Depth
	92	O	O (*4)	X	Rotary Speed
	93	O	O	O	Chorus Depth
94	O	O	X	Effect Depth	
98, 99	O	O	O	NRPN LSB/MSB	
100, 101	O	O	O	RPN LSB/MSB	
0-119	O (*1)	X	X		
Prog Change:	True #	O *****	O 0-127	O 0-127	
System Exclusive		O	O	O	
Common	: Song Position	X	X	X	
	: Song Select	X	X	X	
	: Tune	X	X	X	
System Real Time	: Clock	O	X	X	
	: Commands	O	X	X	
Aux Messages	: All Sound Off	X	O	O	
	: Reset All Controller	X	O	O	
	: Local ON/OFFX	X	X	X	
	: All Note OFF	X	O (123-127)	O (123-127)	
	: Active Sense	X	O	O	
	: Reset	X	X	X	
Notes		*1: assigned to Modulation Wheel, EXP, FootSW or Knob A-D *2: On/Off settings of each zones are set in Menu. *3: The effect is assigned to EXP/FootSW in Menu . (default effect is #11.Exp/#66.Soste) *4: Only when rotary effect is selected. *5: a. In the case of MultiOn and SysChMode=Panel, Able to receive on system channel b. Control changes work to a selected zone only. (except controllers of [*2]) c. Knob A-D parameters are received only when it is assigned to Knob.			

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

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

O: Yes
X: No

KAWAI

THE FUTURE OF THE PIANO

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