

Plus **MAX**

Owner's Manual

## THE FCC REGULATION WARNING (for USA)

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.

Unauthorized changes or modification to this system can void the user's authority to operate this equipment.

### CAUTION

The normal function of the product may be disturbed by Strong Electro Magnetic Interference. If so, simply reset the product to resume normal operation by following the owner's manual. In case the function could not resume, please use the product in other location.

### Regarding the display

This instrument display is a precision device created using extremely high technology, and careful attention has been paid to its product quality. Although you may notice some of the issues listed below, please be aware that these are due to the characteristics of LCD displays, and are not malfunctions.

- There may be pixels in the display that are always dark (unlit) or always bright (lit).
- Depending on the displayed content, the brightness of the display may appear uneven.
- Depending on the displayed content, horizontal stripes of shading may be visible.
- Depending on the displayed content, flickering or moire patterns may be visible.

## PRECAUTIONS

### PLEASE READ CAREFULLY BEFORE PROCEEDING

Please keep this manual in a safe place for future reference.

#### Power Supply

Please connect the designated AC adaptor to an AC outlet of the correct voltage.

Do not connect it to an AC outlet of voltage other than that for which your instrument is intended.

Unplug the AC power adaptor when not using the instrument, or during electrical storms.

#### Connections

Before connecting the instrument to other devices, turn off the power to all units. This will help prevent malfunction and / or damage to other devices.

#### Location

Do not expose the instrument to the following conditions to avoid deformation, discoloration, or more serious damage:

- Direct sunlight
- Extreme temperature or humidity
- Excessive dusty or dirty location
- Strong vibrations or shocks
- Close to magnetic fields

#### Interference with other electrical devices

Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

#### Cleaning

Clean only with a soft, dry cloth.

Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.

#### Handling

Do not apply excessive force to the switches or controls.

Do not let paper, metallic, or other objects into the instrument. If this happens, unplug the AC adaptor from the wall outlet. Then have the instrument inspected by qualified service personnel.

Disconnect all cables before moving the instrument.

## Introduction

### Panel & Display Description

Front Panel.....	6
Rear Panel.....	7
Main Display.....	8

### Setup

Power Supply.....	9
Setting a Music Stand.....	9

### Connections

Connecting a pair of Headphones.....	10
Connecting an Audio Equipment.....	10
Connecting an MP3/CD Player.....	10
Connecting a Computer.....	10
Connecting a Footswitch.....	11
Connecting a Volume Pedal.....	11
Connecting external MIDI devices.....	11

## Quick Start

### Basic Operations

Selection Operation.....	12
Soft Keyboard Operation.....	12
Setting Operation.....	13

<b>Playing the Demos.....</b>	<b>14</b>
-------------------------------	-----------

<b>Playing Voices .....</b>	<b>15</b>
-----------------------------	-----------

<b>Playing with a Style.....</b>	<b>16</b>
----------------------------------	-----------

<b>Playing Songs.....</b>	<b>17</b>
---------------------------	-----------

<b>Recording Your Performance to MIDI.....</b>	<b>18</b>
------------------------------------------------	-----------

<b>Recording Your Performance as Audio...19</b>
-------------------------------------------------

<b>Using a USB Storage Device.....</b>	<b>20</b>
----------------------------------------	-----------

## Voice

Playing Various Voices.....	21
Keyboard Parts.....	21
Playing a single Voice (Right1).....	21
Playing Two or Three Voices Simultaneously (R 1, 2, 3).....	21
Playing Different Voices with the Left and Right Hands.....	22
Setting the touch sensitivity of the keyboard.....	23
Selecting keyboard latch.....	23
Changing Pitch.....	24
Master Tuning.....	24
Transpose.....	24
Octave.....	25
Scale Tune.....	25
Adjusting the Volume of Voices.....	26
Adding Effects to Voices.....	26
Arpeggiator.....	28
Harmony.....	31
Chopper.....	31
Global Effect.....	32
Reverb and Chorus.....	32
EQ.....	33
Editing Voice.....	33
Editable Parameters.....	34
Saving the Edited Voice.....	35
Saving, Deleting or Renaming the User Voice.....	35

## Style

Selecting Various Styles.....	36
Playing Only the Rhythm Tracks of a Style.....	36
Playing All Tracks of a Style.....	36
Adjusting the Volume Balance.....	37
Muting the tracks of a style.....	38
Split Point Settings.....	38
Selecting a Chord Fingering Type.....	39
Chord Basics.....	39
Single Finger.....	40
Multi Finger.....	40
Chord Dictionary.....	40
Operations for Style Playback.....	41
Style Variations.....	41
The Function Description of Control Buttons.....	41
Adjusting the Tempo.....	42
Using the Metronome.....	42
One Touch Setting.....	43
Saving, Deleting or Renaming the User Style.....	43

## Style Recording

Editing Basic Parameters.....	44
Further Editing a Style.....	47

## Advanced Use

Playing the Keyboard and Recording Your Performance as a New Style.....	48
Editing Each Note of Style.....	49
Setting the Notes Transfer Rules for Chord Changes.....	51
Setting O.T.S. of Style (One Touch Settings).....	53

## Song

Playing Various Songs.....	54
Operations for Song Playback.....	54
Adjusting the Volume of the Song.....	55
Displaying Sheet Music (Score).....	56

## Song Recording

MIDI Recording.....	58
Quick Recording.....	58
Multi Track Recording.....	59
Editing the Recorded MIDI Song.....	60
Audio Recording.....	61
Saving, Deleting or Renaming the User Song.....	61

## Global Setting

Keyboard.....	62
Style & Song.....	62
Controllers.....	63
Knob.....	63
Multi Pad.....	64
Pedal.....	65
Pitch Bend.....	65
Effect.....	66
MIDI I/O.....	66
Utility.....	66

## Performance Memory

Selecting a Performance Bank.....	68
Recalling a Performance Memory Settings.....	68
Freezing the Specific Item.....	69
Registering the Performance Memory Settings.....	69
Saving, Deleting or Renaming the User Performance.....	70

## USB Device

File Operations in the File Selection Display.....	71
Creating a New Folder.....	72
Formatting the USB Device.....	72

## MIDI

What's MIDI?.....	73
Midi Terminals.....	73

## Appendices

Troubleshooting.....74

Specification.....74

### Appendices

Voice List.....75

Style List.....81

Song List.....83

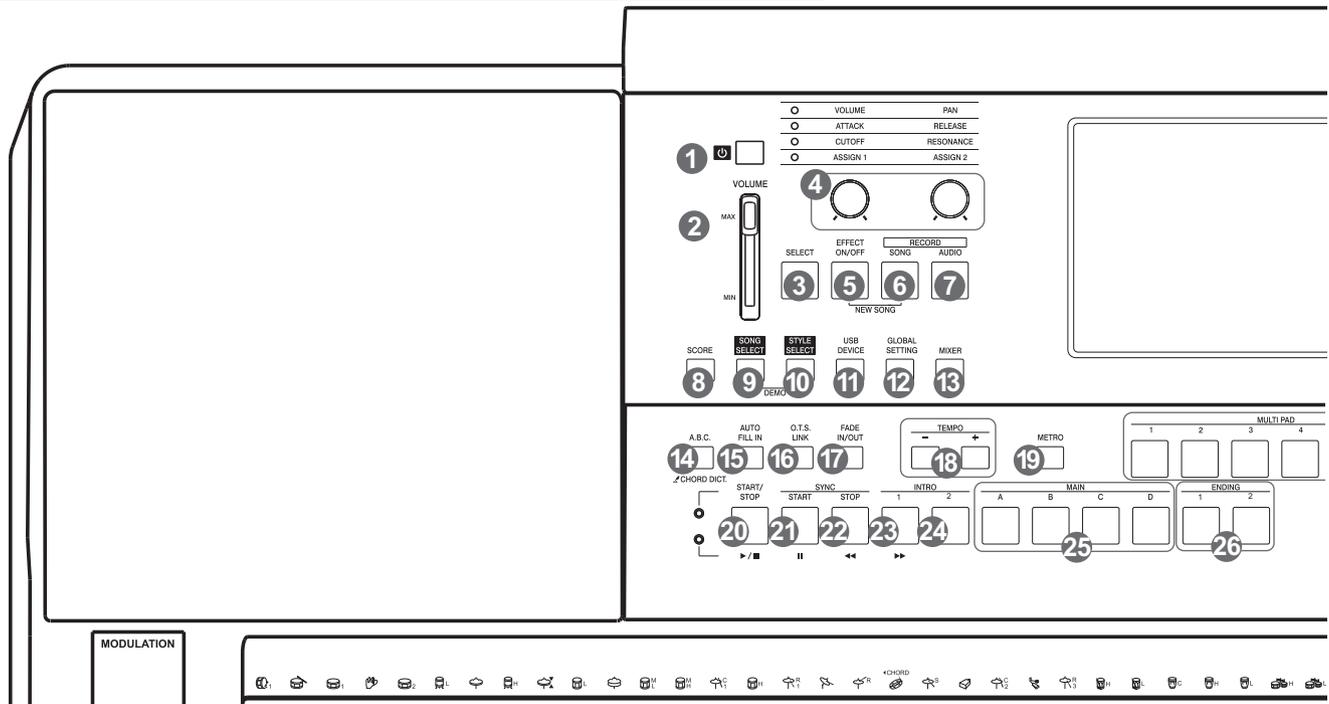
Demo List.....83

Chord List.....84

MIDI Implementation List.....85

# Panel & Display Description

## Front Panel



### 1. POWER ON/OFF BUTTON

Turn the power on or off.

### 2. MASTER VOLUME SLIDER

Adjust the master volume.

### 3. SELECT BUTTON

Select the four effect combinations of GROUP KNOBS sequentially.

### 4. GROUP KNOBS

**Effect1:** Adjust volume, pan of the current part(R1/R2/R3/L).

**Effect2:** Adjust attack time, release time of the current part (R1/R2/R3/L).

**Effect3:** Adjust the filter cutoff frequency, the amount of resonance applied at the filter cutoff frequency of the current part(R1/R2/R3/L).

**Effect4:** The knob effect can be assigned separately. See "Controller".

### 5. EFFECT ON/OFF BUTTON

Turn the special effect such as arpeggio, harmony, or chopper on or off.

### 6. RECORD SONG BUTTON

Enter the RECORD SONG interface. You'll record your performance in SMF format.

### 7. RECORD AUDIO BUTTON

Enter the audio recording is in ready state. You'll record your performance in WAV format.

### 8. SCORE BUTTON

Show the staff of the current song (SMF).

### 9. SONG SELECT BUTTON

Enter the SONG SELECT interface.

### 10. STYLE SELECT BUTTON

Enter the STYLE SELECT interface.

### 11. USB DEVICE BUTTON

Enter the USB DEVICE interface.

### 12. GLOBAL SETTING BUTTON

Enter the GLOBAL SETTING interface.

### 13. MIXER BUTTON

Enter the MIXER interface.

### 14. A.B.C. BUTTON

Turn the A.B.C. MODE on or off.

### 15. AUTO FILL IN BUTTON

Turn the AUTO FILL IN on or off.

### 16. O.T.S. LINK BUTTON

Turn the O.T.S. LINK on or off. If it is turned on, the One Touch Settings can be changed when you select different style.

### 17. FADE IN/OUT BUTTON

Turn the FADE IN or OUT on or off.

### 18. TEMPO +, TEMPO - BUTTONS

Adjust the current tempo.

### 19. METRO. BUTTON

Turn the Metronome on or off.

### SONG CONTROL

#### 20. PLAY/STOP BUTTON

Start playing the song or stop the song playback.

#### 21. PAUSE BUTTON

Pause the song playback.

#### 22. RW BUTTON

Rewind the song.

#### 23. FF BUTTON

Fast forward the song.

### STYLE CONTROL

#### 20. START/STOP BUTTON

Start or stop playing the style.

#### 21. SYNC. START BUTTON

Turn the SYNC. START on or off.

#### 22. SYNC. STOP BUTTON

Turn the SYNC. STOP on or off.

#### 23. INTRO 1 BUTTON

Play the intro 1.

#### 24. INTRO 2 BUTTON

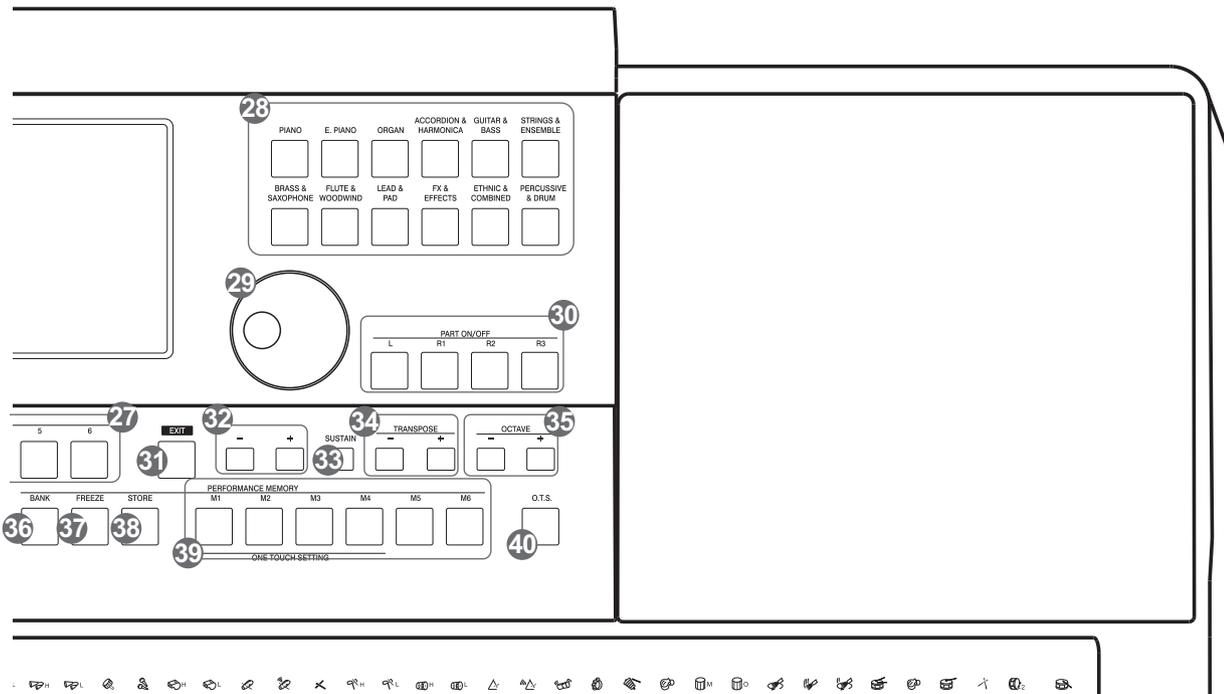
Play the intro 2.

#### 25. MAIN A, B, C, D BUTTONS

Play the main part.

#### 26. ENDING 1, 2 BUTTONS

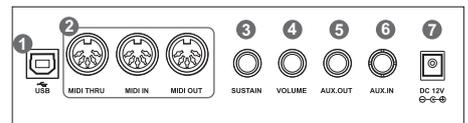
Play the ending.



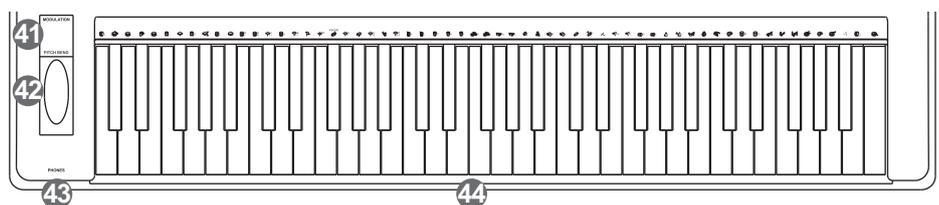
- 27. MULTI PAD BUTTONS**  
Add spice to your performance with special dynamic phrases by pressing them.
- 28. VOICE BUTTONS**  
Enter the VOICE SELECT interface. You'll select a voice category.
- 29. DATA DIAL**  
Change the value of current selection.
- 30. PART ON/OFF BUTTONS**  
Turn LEFT, RIGHT1, RIGHT2, RIGHT3 on or off individually.
- 31. EXIT BUTTON**  
Exit the current interface and return to the previous display.
- 32. +, - BUTTONS**  
Increase and decrease the value by 1.
- 33. SUSTAIN BUTTON**  
Turn the sustain effect on or off.
- 34. TRANSPOSE+, TRANSPOSE- BUTTONS**  
Adjust the TRANSPOSE value.
- 35. OCTAVE+, OCTAVE- BUTTONS**  
Adjust the OCTAVE value.
- 36. BANK BUTTON**  
Select a performance memory bank.

- 37. FREEZE BUTTON**  
Turn the FREEZE function on or off.
- 38. STORE BUTTON**  
Save the panel setups to one of the performance memories.
- 39. M1-M6 BUTTONS PERFORMANCE MEMROY:**  
Recall the panel setups from one of the performance memories.  
**O.T.S (M1-M4):**  
Call up all the settings (voice, effect, etc) that match the current style.
- 40. O.T.S. BUTTON**  
Switch to the O.T.S. function.
- 41. MODULATION BUTTON**  
Apply a vibrato effect.
- 42. PITCH BEND**  
Bend note up and down.
- 43. PHONES**  
Connect the headphones to the keyboard.
- 44. USB PORT**  
Connect the USB storage device.

## Rear Panel



- 1. USB JACK**  
Connect to a computer.
- 2. MIDI IN/OUT/THRU JACKS**  
Connect other products equipped with a MIDI interface.
- 3. SUSTAIN JACK**  
Connect a sustain pedal.
- 4. VOLUME JACK**  
Connect a volume pedal.
- 5. AUX. OUT JACK**  
Connect to your amplifier/audio.
- 6. AUX. IN JACK**  
Connect any external audio source, such as an MP3 or CD player.
- 7. DC 12V**  
Connect DC 12V power adaptor. (Optional)



# Panel & Display Description

## Main Display



### 1. Voice

Display voice name and octave data of each part.  
(Right1, Right2, Right3, Left)

How to select the voice for each part?

For example:

1. Pressing anywhere in the R1 display area makes the R1 part selected.
2. Pressing again will call up the Voice Selection display. Now, you can select the voice for R1.

### 2. Style&Song

Display the currently selected style name, for example "8Beat Ballad". Pressing this name will call up the Style Selection.

Pressing song tab will display the currently selected song name, for example "Brahms Waltz". Pressing this name will call up the Song Selection display.

### 3. Performance

Display the currently selected performance name.  
Pressing this name will call up the Performance Selection display.

### 4. Chord

Display the chord name and related information.

- A. Chord Name
- B. Chord Mode
- C. Split

### 5. Shortcut to setup pages

- Pressing "Split Point" will call up the Split Setting quickly.
- Pressing "Effect" will call up the Effect Setting quickly.
- Pressing "Controllers" will call up the Controllers display quickly.

### 6. Others

- The amount of transposition in semitone units.
- Current tempo.
- Current playback position.
- Current time signature.

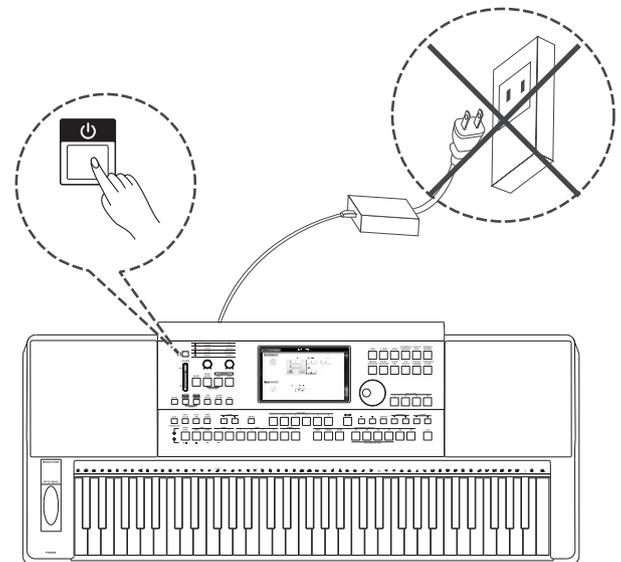
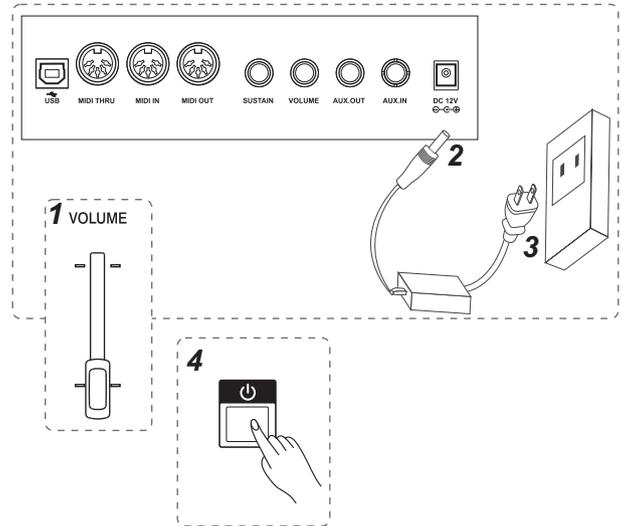
This section contains information about setting up your instrument and preparing to play. Please go through this section carefully before turning the power on.

## Power Supply

1. Move the MASTER VOLUME slider downwards to set the minimum volume level.
2. Connect the AC/DC adaptor to the power supply jack.
3. Plug the AC/DC adaptor into an AC outlet.
4. Turn the power ON. The LCD on the panel will light up.

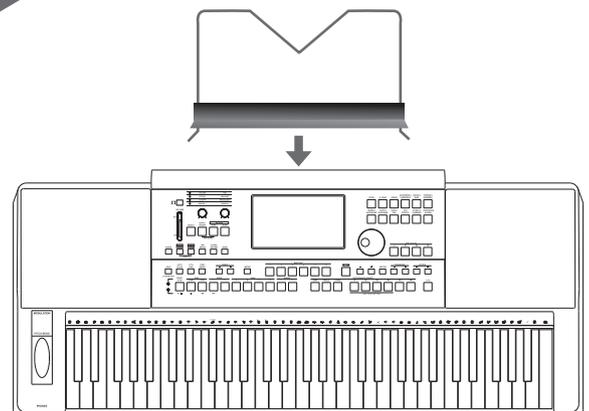
### Note:

1. In order to save energy, we have designed the Auto Power Off function to this instrument. With this function, the instrument will be automatically powered off in 30 minutes if you do not take any action on the instrument. For more details, please refer to Global Setting chapter.
2. When the keyboard is not in use or in the time of thunderstorm, please disconnect the power for safety purpose.
3. To prevent malfunction and/ or damage, always use the panel power button to power off the keyboard. Never unplug the power adapter before the keyboard is powered off, doing so may cause damage to your product.



## Setting a Music Stand

A music stand is supplied with the keyboard. You can easily attach it to the instrument by inserting it into the slots at the rear of the panel.



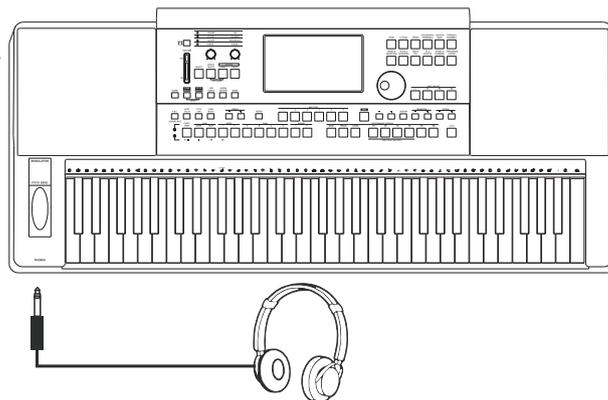
# Connections

## Connecting a pair of Headphones

When an optional pair of stereo headphones is connected with the headphones jack, the sound from speakers will switch off automatically resulting in only the sound from headphone to be heard for private practice or late-night playing.

### Note:

Do not listen with the headphones at high volume for long periods of time. Doing so may cause hearing loss.

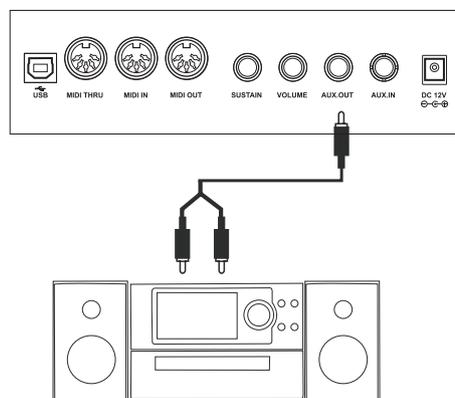


## Connecting an Audio Equipment

Connect the rear-panel AUX.OUT jack to amplified speakers, amplifiers or domestic hi-fi units for external amplification.

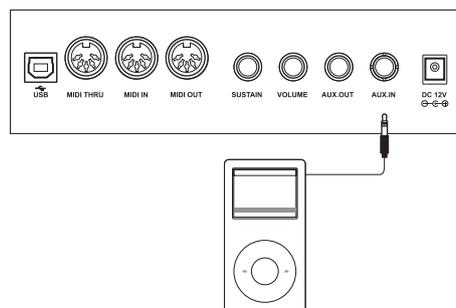
### Note:

To avoid damaging the speakers, please ensure that the volume has been set to the minimum level before connecting the power and other devices.



## Connecting an MP3/CD Player

Connect the audio output of an MP3/CD player or other audio source to the stereo AUX. IN jack on the rear panel. The input signal is mixed with the instrument signal, allowing you to play along.



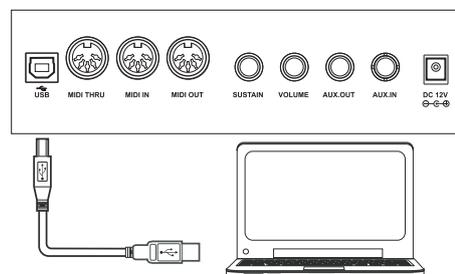
## Connecting a Computer

You can simply connect the computer with USB cable via the USB connector.

You can use a commercially available MIDI interface to connect the keyboard to the computer via the MIDI connectors.

### Note:

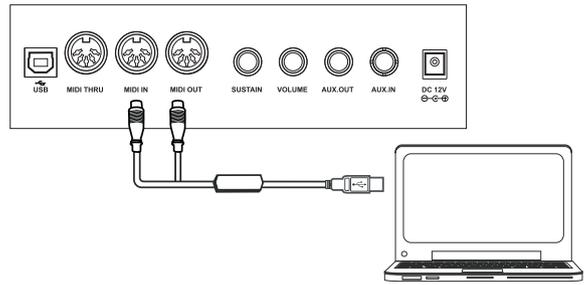
The default MIDI I/O device is USB, so please first set this device as MIDI, and then connect to the computer. (The setting operation see **Global Setting-MIDI IN/OUT.**)



After the driver is installed and initialization is finished, you can choose USB MIDI Keyboard in the device menu of the software to transfer MIDI data.

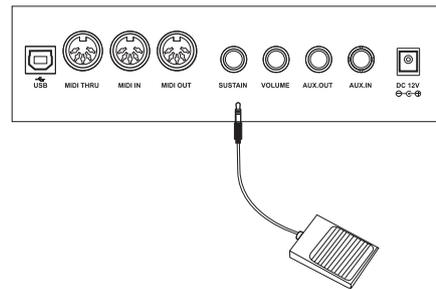
**Note:**

Do not select USB MIDI Keyboard in both of input and output settings together, otherwise the sound overlaps.



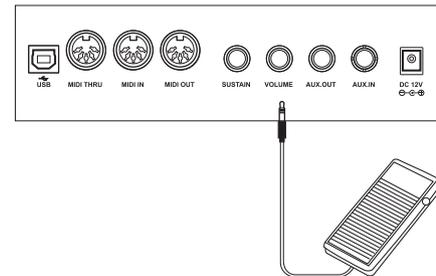
## Connecting a Footswitch

An optional footswitch can be plugged into the sustain jack and be used to switch sustain on or off. Simply by pressing a sustain footswitch, you will have a natural sustain as you play.



## Connecting a Volume Pedal

An optional volume control can be plugged into the volume jack for adjusting the volume of sound.



## Connecting external MIDI devices

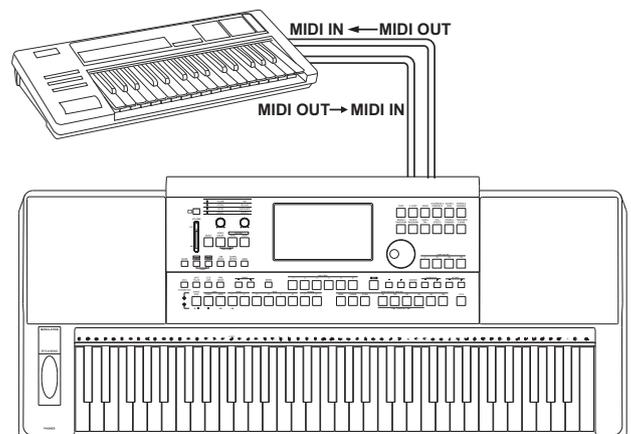
You can use standard MIDI cables to connect external MIDI devices.

- MIDI IN:** Receive MIDI message from an external MIDI device.
- MIDI OUT:** Transmits MIDI message generated by the instrument.
- MIDI THRU:** Simply relays the MIDI message received at MIDI IN.

**Note:**

To avoid damages, please be sure to turn off the power switches before you disconnect the related devices from the keyboard.

The default MIDI I/O device is USB, so please first set this device as MIDI, and then connect to the external MIDI device. (The setting operation see **Global Setting-MIDI IN/OUT.**)



# Basic Operations

## Selection Operation

There are some selection interfaces: voice selection, style selection, song selection, performance selection, etc.  
How to select the file in these selection interfaces?

For example:

### 1. Location of data

- Preset:** Location where pre-programmed (preset) data is stored.
- User:** Location where recorded or edited data is saved.
- USB:** Location where data on USB storage device is saved.

### 2. Category of data

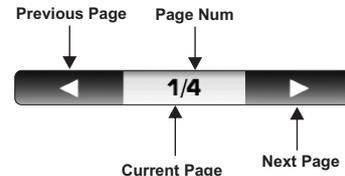
The files are divided into categories according to their types. The categorization will be selected by pressing this categorization name on LCD. For example: The voice file (Grand Piano) is in the Piano categorization. Pressing "Piano" will select the Piano categorization.

### 3. Flip and File Browsing

10 files can be listed in one page, use screen page up or page down button to browsing files by pages.

### 4. File Selecting

Select the desired file by pressing the file name on the current page.



## Using the Soft Keyboard

When you name or rename a file or a folder, you should call up soft keyboard display.

### 1. Deleting characters:

Press the delete button.

### 2. Moving the cursor:

Press the right or left cursor button.

### 3. Entering capital characters:

Press the CAPS button, the capital characters will be displayed.

### 4. Entering space:

Press the space button.

### 5. Entering numbers or marks:

Press the numbers button, the numbers and marks will be displayed.

Enter the number or mark by pressing its button.

### 6. Confirming OK or Cancel:

After you have finished name editing, press the OK button to actually enter the new name and return to the previous display. Or you can press the CANCEL button to cancel operations and return to the previous display.

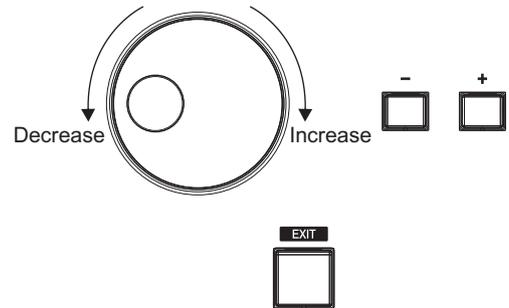


## Setting Operation

In order to have a quick reference for basic parameter settings, please remember these panel button operations during all edit procedure.

### Select a voice, a style or a song

Use the DATA DIAL or [+] / [-] button to select a desired item. Quickly press [+] / [-] button for once to increase/decrease value gradually. Press and hold for a while to have a quickly change in value.



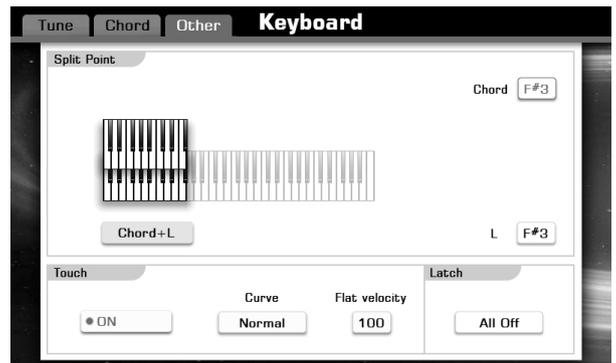
### EXIT button

This is a very useful button. Sometimes, you may “lost” in a selection/setting interface, and you want back to the main display, don’t worry and just press [EXIT] button times until you get the goal display.

There are three types on parameter setting.

#### 1. ON/OFF (as in the picture: ON OFF)

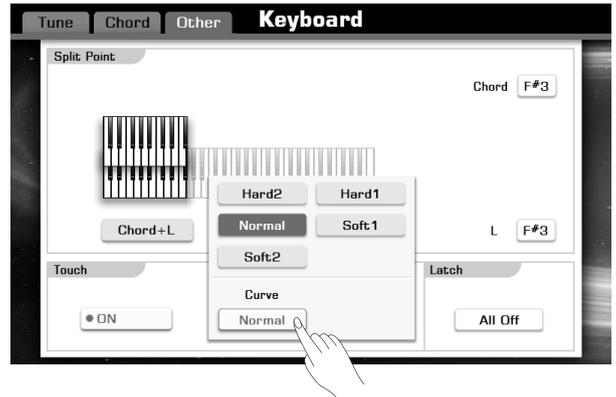
Press this “ON” button to switch the keyboard touch response ON or OFF.



#### 2. LIST (as in the picture: Curve

Press this “Normal” button, all available parameters would be listed.

Directly press a desired parameter on the display, or you can also use DATA DIAL or [+] / [-] button.



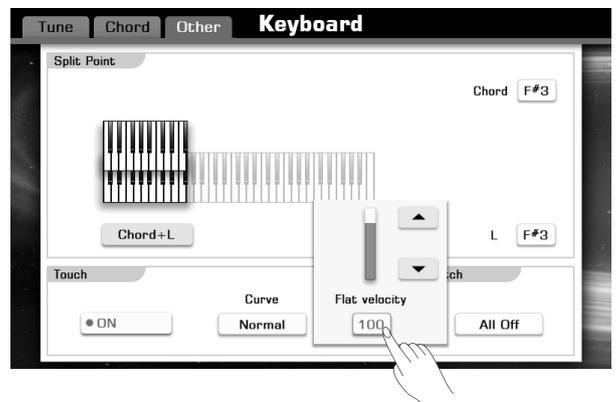
#### Note:

The selected parameter will be highlighted.

#### 3. DATA (as in the picture: Flat velocity

Press this “100” button to display a pop-up box.

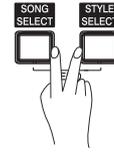
Press the screen button “▲” or “▼” to adjust the data. Or you can also use DATA DIAL or [+] / [-] button.



# Playing the Demos

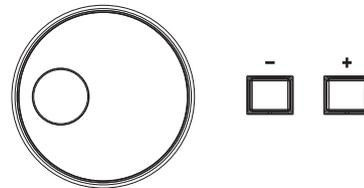
The instrument features 2 wonderful demos. Please refer to **DEMO LIST**.

Press the [SONG SELECT] and [STYLE SELECT] buttons simultaneously to start playing the demo.



## Select your desired demo

Press the Demo name on LCD or use the DATA DIAL, the [+] or the [-] button to select your desired demo.



## Pause the demo

Press the [PAUSE] button to pause the demo playing or continue playing the demo.



## Stop the demo

Press the [PLAY/STOP] button to stop the demo playback.



## Adjust the tempo of the demo playback

Press the [TEMPO+] or [TEMPO-] button to adjust the tempo of the playback demo.



## Exit the demo

Press the [EXIT] button to stop the demo playback and return to the main display.



# Playing Voices

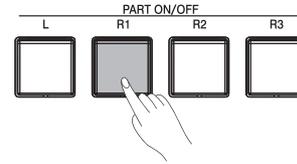
The keyboard has 672 remarkably realistic built-in voices, including Piano, Woodwind, Saxophone, Drum Kits and many more. Please refer to **Voice List**.

## Turn the R1 PART on

Normally, the default setting is R1, or you can press PART ON/OFF [R1] to turn the right 1 part on.

### Note:

You can also turn most 4 parts on at the same time (L, R1, R2, and R3), refer to **Playing Different Voices with the Left and Right Hands** chapter for details.



## Select a Voice for R1 PART

### 1. Select a voice category, call up voice selection display.

There are 2 methods to select a voice category:

- Panel button: press one of the panel voice category buttons located on the right-top of instrument. For example "PIANO", as the picture shown.
- Screen button: in main display, tap the R1 part.

### 2. Select an exactly voice.

Use DATA DIAL or [+] / [-] button move cursor position step by step. The last voice you have selected will be saved as your new choice. See **Basic Operations** page description. Also can use screen page up or page down button to browsing files by pages.



## Play the Voice Demo

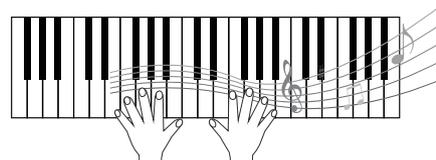
Press the "Voice Demo" on the Voice Selection display to start the demo for the selected voice. Press the "Voice Demo" again to stop it.

### Note:

If there isn't voice demo for the selected voice, "Voice Demo" will not be displayed.



Play the keyboard and listen to the selected voice.



# Playing with a Style

The instrument features 240 styles in a variety of different musical genres. Try selecting some of the different styles (Refer to **Style List**) and play with the auto accompaniment.

## Select a style

1. Select a style category, call up style selection display.  
There are 2 methods to select a style category:
  - Panel button: press the panel [STYLE SELECT] button.
  - Screen button: in main display, tap the style tab area.
2. Select an exactly style.  
Use DATA DIAL or [+] / [-] button move cursor position step by step. The last style you have selected will be saved as your new choice. See **Basic Operations** page description. Also can use screen page up or page down button to browsing files by pages.

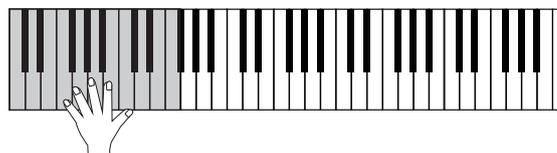
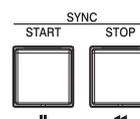


## Start a style

1. Press the [A.B.C.] button.  
When the [A.B.C.] is switched on, the chords you played in the specified Chord section of the keyboard will be automatically detected and will be used to control the playback of the selected style.
2. Press the [SYNC START] button.  
Set Auto Accompaniment to standby—letting you simultaneously start the accompaniment as soon as you start playing in Chord section.
3. Playing the keyboard as your performance should be.
4. Press the [START/STOP] button to stop the accompaniment.



CHORD DICT.



START/STOP



# Playing Songs

The instrument features 90 songs, these songs are gathered by different types and already been sorted in categories. It is pretty easy to pick up your favorite style. Let's begin now!

## Select a Song

1. Select a song category, call up song selection display.  
There are 2 methods to select a song category:
  - Panel button: press the panel [SONG SELECT] button.
  - Screen button: in main display, tap the song tab area.



### Note:

Normally, the main display shows style area as default setting, you may firstly tap the song tab in need.

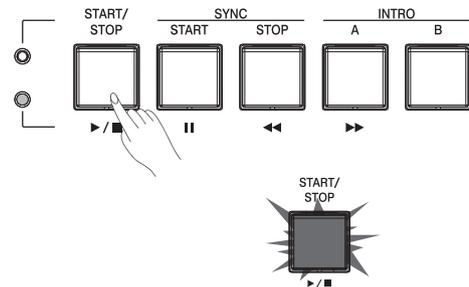
2. Select an exactly song.  
Use DATA DIAL or [+] / [-] button move cursor position step by step. The last song you have selected will be saved as your new choice. See **Basic Operations** page description. Also can use screen page up or page down button to browsing files by pages.



## Playback a Song

The instrument automatically switches to song control mode, corresponding indicator lights up.

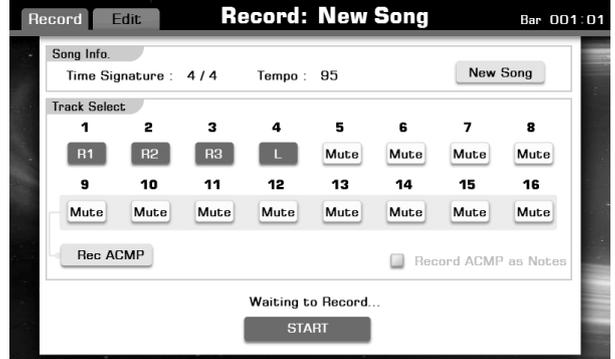
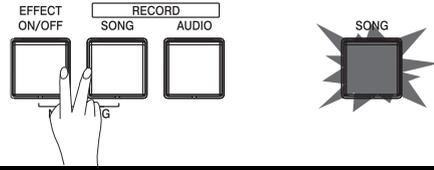
1. Press the [PLAY/STOP] button to start playing a selected song.  
There is a pre-count, about a measure length, at the beginning of one song. [PLAY/STOP] button flashes in red and blue, and the red light represents the first stressed beat.
2. If you want to pause playing.  
Press [PAUSE] button to pausing a song playing, press [PAUSE] again to continue playing back.
3. Press the [PLAY/STOP] button to stop playing song.



# Record Your Performance to MIDI

It is convenient to record your performance, play back your performance, and share your performance.

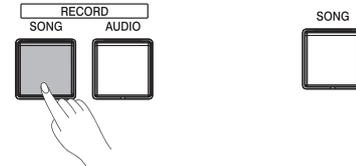
1. Press the [EFFECT ON/OFF] and [RECORD SONG] panel buttons simultaneously to call up the Recording Display. A blank song ("New Song") is called up and the system is in recording standby mode. The screen displays "Waiting to Record...", at the mean time, the [RECORD SONG] starts flashing.



2. Play notes on the keyboard or press the [PLAY/ STOP] button to start recording. The [RECORD SONG] button will stop flashing and keep lighting.



3. Press the [RECORD SONG] button or tap the "STOP" button to stop recording. There will pop-up a soft keyboard to remind you rename the new recording or not.



4. Enter a new name and press "OK" button to save this new recording into user location.



5. Press the [PLAY/ STOP] button to playback the recorded user song.

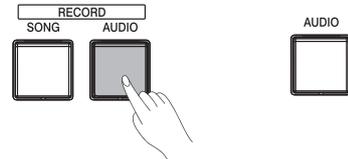
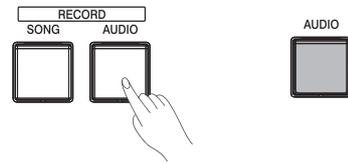
If you want to record R1, R2, R3, L or record melody and accompaniment simultaneously, you may refer to **MIDI RECORDING** for details.



# Recording Your Performance as Audio

You can also record your own performance as CD quality audio file. The procedure is very simple.

1. Insert your USB disk to the USB slot.
2. Press the [RECORD AUDIO] button to start recording. The [RECORD AUDIO] lights up.
3. Play your performance immediately on the keyboard.
4. Press the [RECORD AUDIO] button again to stop recording. The soft keyboard will pop up and the [RECORD AUDIO] stops lighting.
5. In soft keyboard display, enter the name and press "OK" button to confirm save operation.



6. Press the [PLAY/STOP] button to play back the recorded audio song.

For more details, please refer to **Audio Recording** chapter.



# Using a USB Storage Device

By connecting a USB storage device to your instrument, you can save data you've created to the connected device, as well as read data from the connected device.

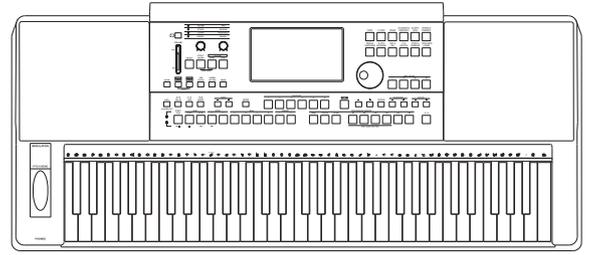
## Note

### Compatible USB device

Recommended Brand: KINGSTON, SANDISK, SONY, LEXAR, TRANSCEND

Format: FAT 16/32

Capacity: 1G,2G,4G,8G,16G,32G



## Using the USB device

1. Connect the USB storage device to the USB port.
2. Press the [USB DEVICE] button to display the folders and files under the root directory of USB device.
3. Press the USB tab on each selection display (such as voice, style, song, performance), enter the relevant folder directly, and save, rename or delete the user files from USB device.



## Note

If you save your files to your USB storage device in file selection displays (like VOICE Selection or Song Selection), the files would be saved into folder "PianoUser" in the root directory of your USB storage device.



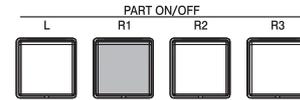
The instrument has a huge selection of various musical instrument voices which you can play. Try out the different voices referring to the **Voice List** in the appendix.

## Playing Various Voices

The instrument allows you to play several different voices together in a layer, or play one voice with your left hand while you play a different voice (or even three layered voices!) with your right hand.

### Keyboard Parts

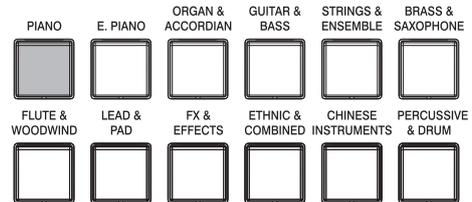
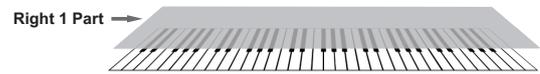
You can select different voices and arpeggiators for each keyboard part: Right 1, Right 2, Right 3 and Left. By using the PART ON/OFF buttons you can switch each keyboard part on or off. The countless combinations bring you infinite possibilities in your performance.



### Playing a single Voice (Right 1)

You can play a single voice over the entire keyboard range.

1. Press the PART ON/OFF [RIGHT 1] button to turn the R1 part on. Use the other PART ON/OFF buttons to turn R2 part, R3 part, L part off.
2. Select a voice for R1. Press one of the VOICE buttons to call up the Voice selection display for the R1 part. If you want to select the user voice, press the "User" to select the USER display or press the "USB" to select the USB display. Press the cursor button on LCD to select your desired voice page. Press the voice NAME to select the desired voice on the current page display.

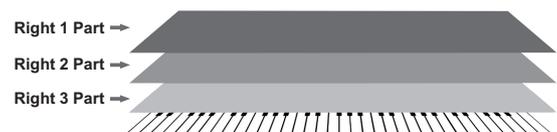
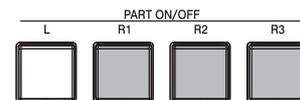


3. Play the keyboard and listen to the voice.

### Playing Two or Three Voices Simultaneously (Right 1, 2, 3)

You can simulate a melody duet or trio.

1. Turn on all the keyboard parts you need by using the PART ON/OFF buttons on the panel.
2. Open the voice selection screen by voice buttons, choose a keyboard part in the top left corner of the screen to select its voice. You can select voices for different parts by doing so.
3. Play the keyboard and listen to the performance.

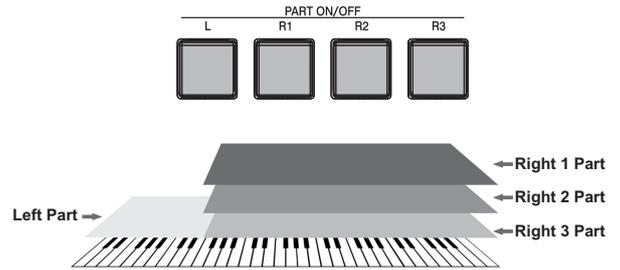


# Voice

## Playing Different Voices with the Left and Right Hands

You can combine these four parts to create a rich, ensemble sound.

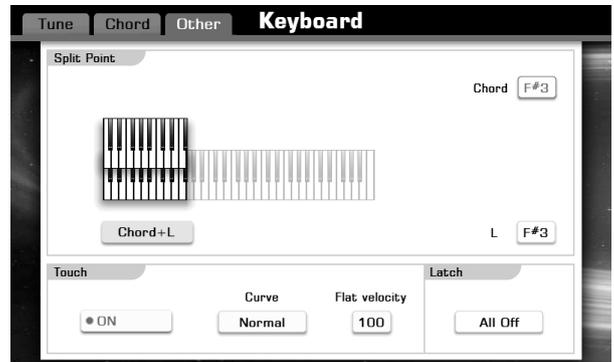
1. Turn on different parts as you like.  
The most complicated situation is turning 4 parts on. See picture on the right.



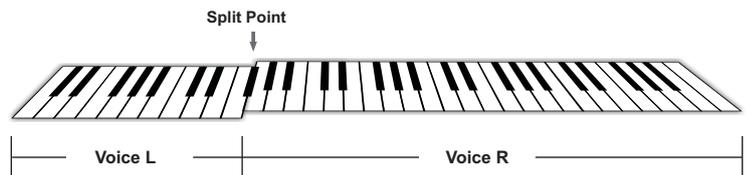
2. Select different voices for each part.  
We are following introduce the Left part as an example:
  - A. Press one of the voice category buttons to call up the voice selection display. Or you can also by touching the screen to achieve all procedures that we are going to describe.
  - B. Select an exactly voice.  
Use the DATA DIAL, [+] / [-] button to move cursor, and screen page up or page down button to turn page up and down.
  - C. The last voice you have selected will be saved as final voice setting.



3. Set split point.  
The point on the keyboard that separates L and R1/R2/R3 is called the "split point". The split point is set to F#3 at the factory setting, however you can set this to any key you wish.
  - A. Pressing "SPLIT POINT" on main display or pressing "Split" on voice selection display. Call up the Split Setting display.
  - B. Press Left area and make the left split point selected.  
Use the DATA DIAL, the [+] / [-] button or press the key directly to set your desired split point.



4. Play the keyboard and enjoy the fantastic voice.



## Setting the touch sensitivity of the keyboard

In order to simulate the acoustic piano touch sensitivity, we have pre-programmed several curves to choose.

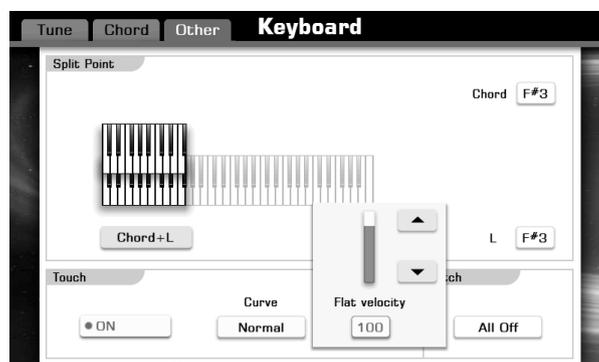
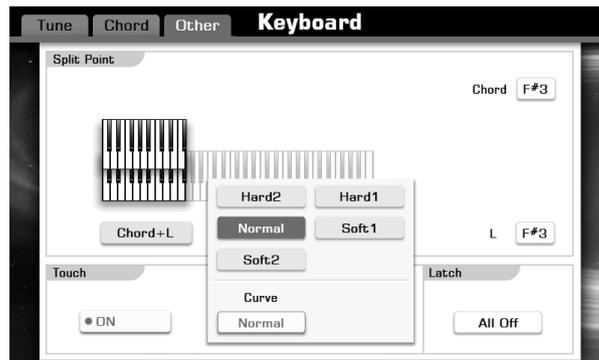
1. Enter the touch sensitivity setting display.  
The fastest way in main display is to press "SPLIT POINT" button, or you can also press "Split" button in voice selection display.  
Operate: press the [GLOBAL SETTING], enter keyboard section, and select the "Other" tab, always the same result.
2. Switch "Touch Sensitivity" function on or off.  
Press the "ON/OFF" button to switch the keyboard touch response ON (orange font display) or OFF (gray font display).
3. Select a different velocity curve.  
Press the "Normal" button to call up a pop-up box.

Parameter	Description
Hard2	This needs strong strength to produce a high volume level.
Hard1	This needs moderately strong strength to produce a high volume level.
Normal	Standard touch response.
Soft1	This produces a high level volume when you play the keyboard with medium strength.
Soft2	This produces a quite high level volume even you play the keyboard with light strength.

4. Adjust the range of velocity parameter. Specify the value of high volume level.  
Press the "100" button to call up a pop-up box. Play the keyboard and adjust the parameter until you set an appropriate value.

### Note:

1. Only the keyboard touch response is set to OFF, this parameter can be work.
2. Adjustable range: 1~127.

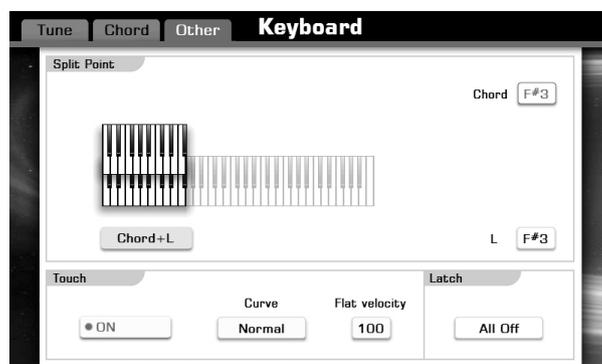


## Selecting keyboard latch

Turn the latch function on, the layer voice will continue playing after you remove your hand from the keyboard.

1. Press the "All Off" button to call up a pop-up box showing the other selection.

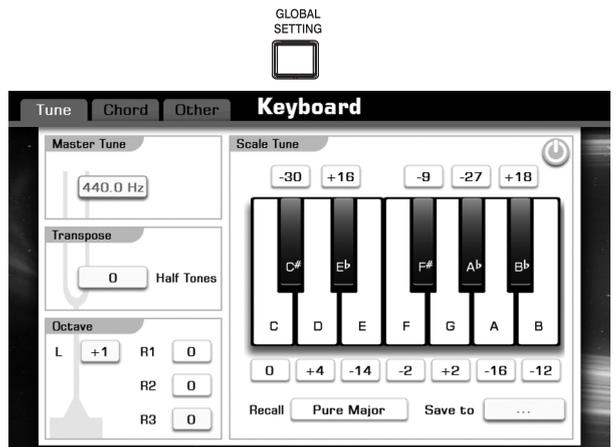
Parameter	Description
All Off	The latch function cannot apply to all voice layers.
Left	The latch function will apply to left part voice layer.
All On	The latch function will apply to all voice layers.



## Changing Pitch

In this instrument, we can use the Master Tuning setting, Transpose setting, Octave setting, and Scale Tune setting to changing pitch, they are common in this point, but they also have different detail effect on pitch.

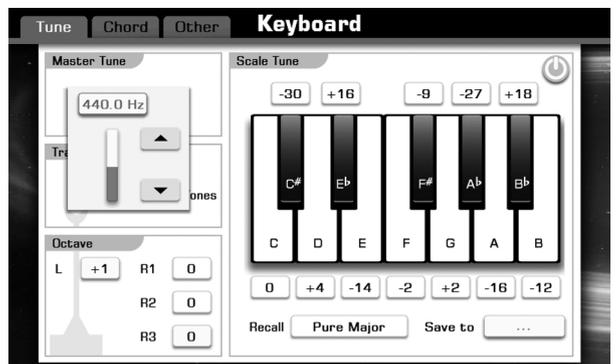
1. Firstly, enter the setting display.  
Press the [GLOBAL SETTING], enter keyboard section, and select the "Tune" tab.



### Master Tuning

The master tuning function sets the overall pitch of this instrument.

1. Press the "440.0Hz" button to call up a pop-up box showing the adjustable range of parameter.
2. Use the DATA DIAL or [+] / [-] button to adjust parameter value. Or you can also press the screen button "▲" or "▼".  
Adjustable range: from 415.4Hz to 466.2Hz.
3. Press the [+] and [-] button simultaneously to revert the default value: 440.0Hz.

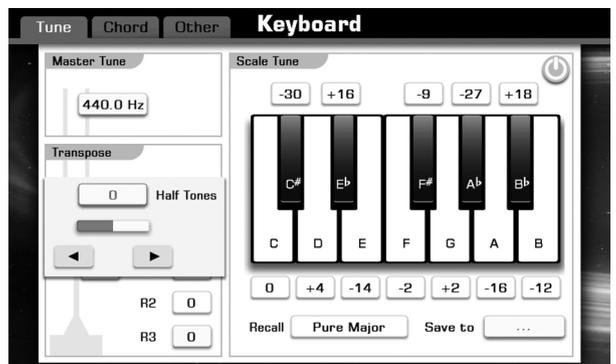


### Transpose

This function allows the overall pitch of the instrument to be transposed up or down by a maximum of one octave in semitone increments.

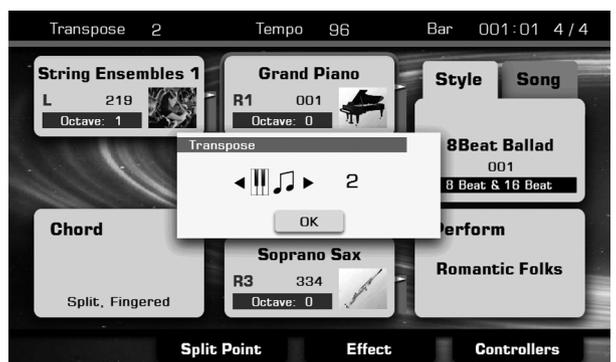
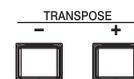
#### Method 1:

1. In the transpose setting area, press "0" button to call up a pop-up box showing the adjustable range of parameter.
2. Use the DATA DIAL or [+] / [-] button to adjust parameter value. Or you can also press the screen button "▲" or "▼".



#### Method 2:

1. Press the panel button [TRANPOSE +] or [TRANPOSE -] to set the value, the range of parameter is from -12~+12.
2. Press the [TRANPOSE +] and [TRANPOSE-] buttons simultaneously to revert the default value: 0.



## Octave

Shifts the pitch of the specified voice or track up or down by octaves. A setting of "0" produces normal pitch.

You can adjust the range of the pitch change in octaves for each keyboard part (R1, R2, R3, L).

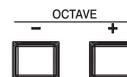
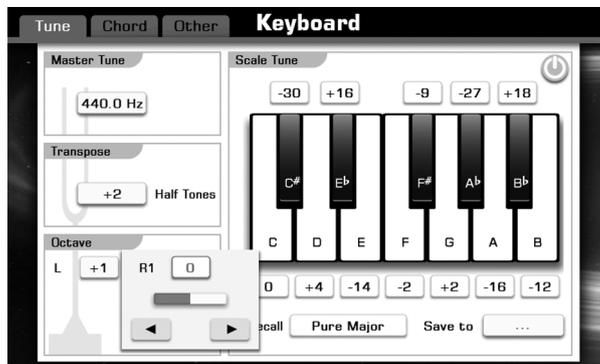
### Method 1:

1. In the octave setting area, press the R1 "0" button to call up a pop-up box showing the adjustable range of parameter.

2. Use the DATA DIAL or [+] / [-] button to adjust parameter value. Or you can also press the screen button "▲" or "▼".

### Method 2:

1. Firstly, press PART ON/OFF button to select a voice part, or you can also press the corresponding area in the main display.
2. Press the panel button [OCTAVE +] or [OCTAVE -] to set the value, the range of parameter is from -1~+1.
3. Press the "OK" button to confirm your operation. Or wait about seconds, the "OK" message box will disappear, the system commit ok command by default.
4. Press the [OCTAVE +] and [OCTAVE -] buttons simultaneously to revert the default value: 0.



## Scale Tune

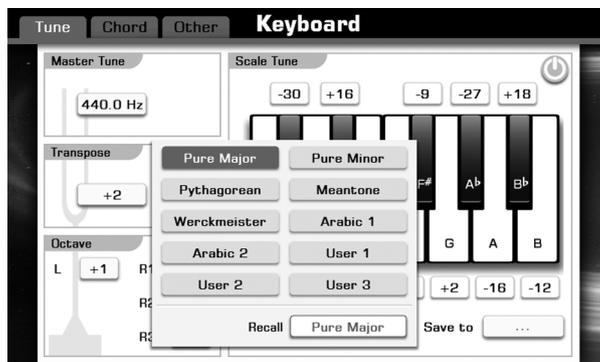
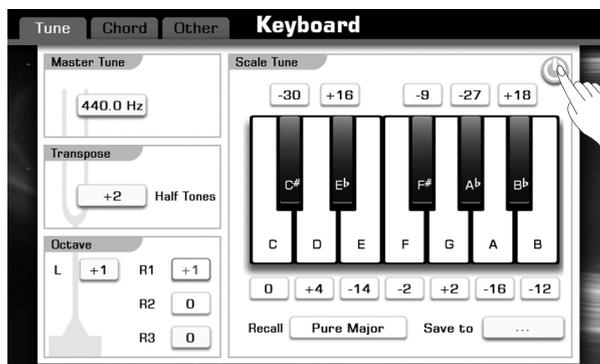
Scale Tune allows tuning each note within a octave, the same notes in all octaves will be affected. The notes can be tuned from -50 to +50 cents (1 cent = 1/100 of a semitone). You can use the scale tune to play in different scales, including classic and Arabic.

### Turn on Scale Tune

In the scale tune setting area, press the button  to switch this function on or off. When the Scale Tune function is set to ON, the color of message box and the button  will be changed from gray to orange.

### Select Preset Scale Types

1. In the scale tune setting area, press the Recall "Pure Major" to call up a pop-up box showing the scale types.
2. Use the DATA DIAL or [+] / [-] button to adjust parameter value. Or you can also press the screen button "+" or "-".



# Voice

## Pure Major & Pure Minor

The just intonation is any musical tuning in which is based on the stack of intervals called perfect fifth and major third of overtone series. And the major scale which consisted of just intonations especially for this triad chords: Root, Third, Fifth are sounded extremely harmony. The just intonation must be the most natural temperament.

## Pythagorean

The Pythagorean System, the oldest tuning system to be theorized in the world, also called Circle-of-fifths System. This system was first devised by the Pythagorean, hence people named it by his name. The Pythagorean System comes from Circle-of-fifths System, which applies this principle: The pitches of three times of subdominant and the twice times of supertonic are equal, to create a series of perfect fifths, and then find the equal scale notes put them into a single octave. The 3rd and 6th in this tuning are dissonance, but the 4th and 5th are sound very harmony.

## Meantone

The Meantone System is a musical temperament which is close to just intonation. Used to tuning pipe organ in 16th century Europe. These musical scales which based on the Pythagorean System, minus quarter of common comma for once, are extremely approaching just intonation. So, use this system to create musical scales are sound beautiful and pure, just like a perfect triad chord.

## Werckmeister

The Werkmeister was named after Andreas Werckmeister, and this scale was created as an improvement on the Pythagorean scale. This tuning collapse comma maxima, created by Pythagorean, into four perfect fifths, the rest fifths still remain their Pythagorean scale characteristics. Werkmeister Tuning can tune scale from harmonic to melodic by increasing tone number, makes each tonality sound distinct (this is the important gist for classicists and romanticism tonality music to name as the tone name)

## Arabic

The Arabic tunings are specified to easily playing Arabic music.

## Tune the individual note

You can also tuning every individual note if necessary.

1. In the scale tune setting area, press the mini value button, which corresponding to each keyboard (top/bottom), to call up a pop-up box showing the adjustable range of tune. Then adjust the parameter to an appropriate value.

We introduce the C0 as an example:

- A. Press the "C0" button to call up an adjustment pop-up box.
- B. Use the DATA DIAL or [+]/[-] button to adjust parameter value. Or you can also press the screen button "▲" or "▼".

## Note:

Press the [+] and [-] buttons simultaneously, the tune of note will revert to the default setting of selected scale type.

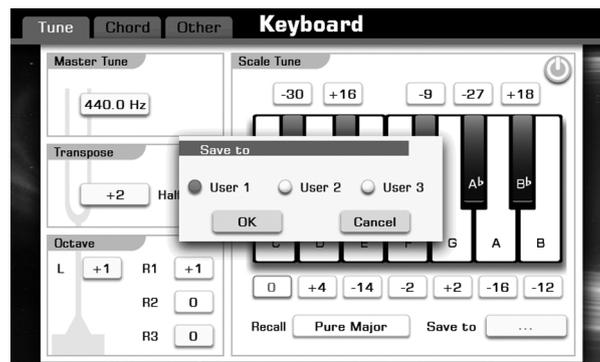
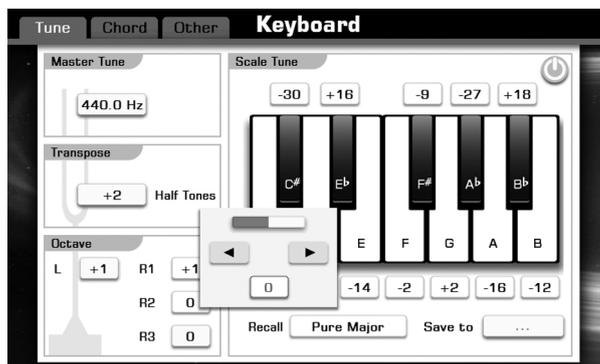
## Save to User Scale

You can save the edited scale tune setting to user scale. With this operation, it becomes very easy to call up your own expectation scale type.

1. In the scale tune setting area, press the Save to "..." button.
2. There are totally 3 user scale positions you can choose: User 1, User 2, and User 3. Select the dot form in front of each user scale tune name.
3. Press "OK" to confirm saving operation, or press "CANCEL" to quit save user scale.

## Note:

If you select a user scale position, which already contains user scale tune data. The system will automatically delete the original user settings, and replaces it with your new user scale tune data.



## Adjusting the Volume of Voices

In the mixer interface, you can adjust the levels and stereo position (pan) of each voice.

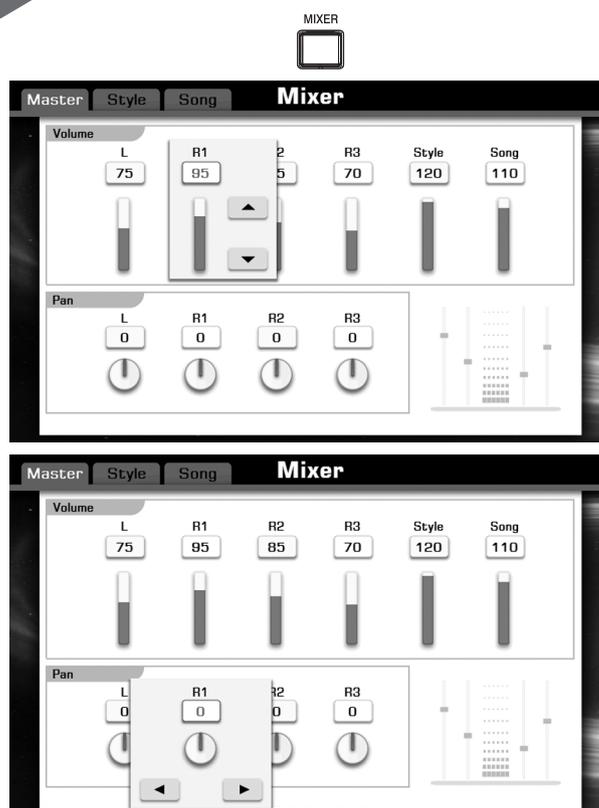
### Volume

1. Press the [MIXER] button to call up the Mixer display.
2. Press “Master” to call up the relevant setting display.
3. Press R1 “95” button in the volume box to call up a pop-up box showing the adjustable range of volume.
4. Press the “▲” or “▼” button or use the DATA DIAL, the [+] or the [-] button to adjust the data.

### Pan

1. Press R1 “0” button in the pan box to call up a pop-up box showing the adjustable range of pan.
2. Press the “▲” or “▼” button or use the DATA DIAL, the [+] or the [-] button to adjust the data.

If you want to adjust the volume of other parts (R2, R3, L, Style, Song) or the pan of other parts (R2, R3, L), just press the relevant button and operate according to the above steps.



## Adding Effects to Voices

Add the advanced Arpeggiator, Harmony, Chopper effect to your voice.

### Enter the effect display.

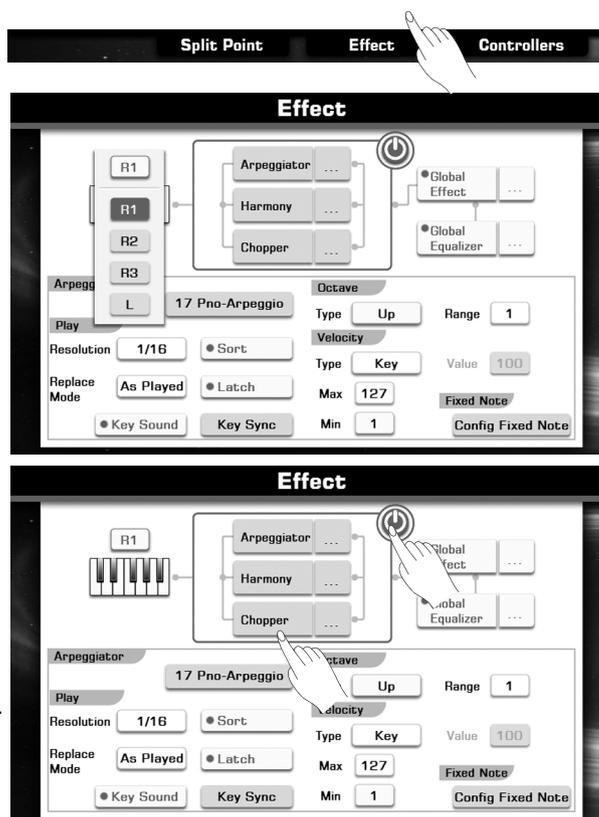
1. Press “effect” button at the bottom line of main display and voice selection display.

### Select the desired part

1. Press the “R1” button to call up a pop-up box as shown to the right.
2. Press the relevant button (R1, R2, R3, and L) to select your desired part for which you want to add effects.

### Turn On/Off Effects

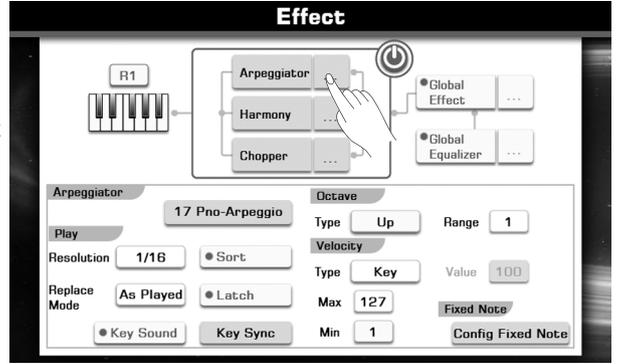
1. Press the switch button to turn on/off all effects. The color of button will be changed between gray (OFF) and orange (ON). Press this “Arpeggiator” button to switch the arpeggiator effect ON or OFF. Press this “Harmony” button to switch the harmony effect ON or OFF. Press this “Chopper” button to switch the chopper effect ON or OFF.



## Arpeggiator

The arpeggiator is a function that automatically generates arpeggios (playing the notes of the chord individually, with a constant tempo). You can make settings for the arpeggiator used in the voice. There are more than 120 internal Arp patterns that you can select. You can also select your original Arp patterns that are made by Grand Suite software on PC and saved to USB Storage Device.

Press the “Arpeggiator ...” button on the Effect display to call up the Arpeggiator Setting display.



### Arpeggiator parameters:

#### 1. Pattern

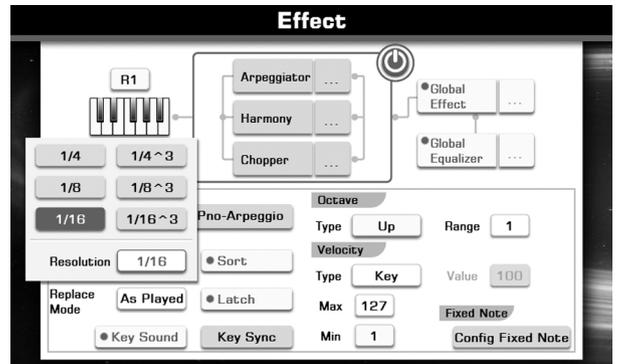
Press the Arp pattern name (Ex. 17 Pno-rpeggio) to call up the Arp Pattern Selection display. Press the Arp Pattern name to select your desired Arp Pattern. Press the [EXIT] button to exit to the Effect display.



#### 2. Resolution

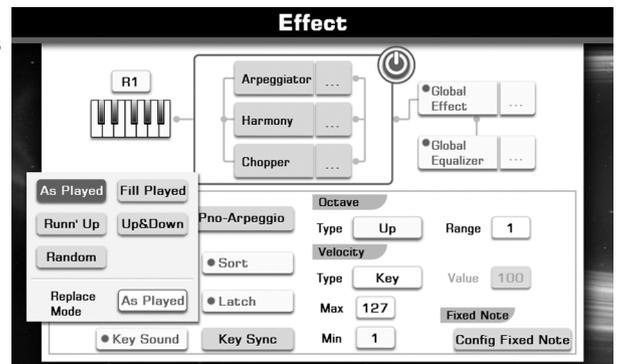
Specify the timing resolution of the arpeggio. The notes of the arpeggio will be played as the interval you specify: 1/16^3, 1/16, 1/8^3, 1/8, 1/4^3, 1/4.

Press the “Resolution 1/16” button to call up a pop-up box showing the timing resolutions of the arpeggio. Press the resolution button or use the DATA DIAL, the [+] or the [-] button to select the resolution.



#### 3. Sort

This specifies the order in which the notes you press will be arpeggiated. Press the “Sort” button to switch this function ON or OFF. ON: Notes will be arpeggiated in the order of their pitch, regardless of the order in which you pressed them. OFF: Notes will be arpeggiated in the order in which you pressed them.

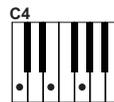
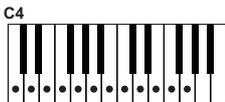


#### 4. Replace Mode

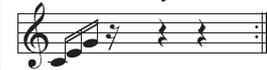
Press the “As Played” button to call up a pop-up box showing the replace modes.

#### Example 1 :

Preset Arp Pattern: 01 Up Down; Sort:On; Resolution:1/16



As Played



Fill Played



Running Up



Up & Down



Random



## 5. Latch

Press the "LATCH" button to switch this function ON or OFF.  
 ON: The arpeggio will continue playing after you remove your hand from the keyboard.  
 OFF: The arpeggio will stop when you remove your hand from the keyboard.

## 6. Key Sound

Press the "KEY SOUND" button to switch this function ON or OFF.  
 ON: The notes you played will be sounded, in addition to being sounded as part of the arpeggio.  
 OFF: Only the arpeggiated notes will be heard.

## 7. Key Sync

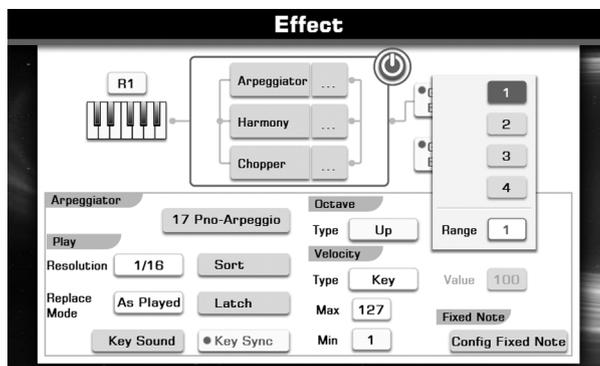
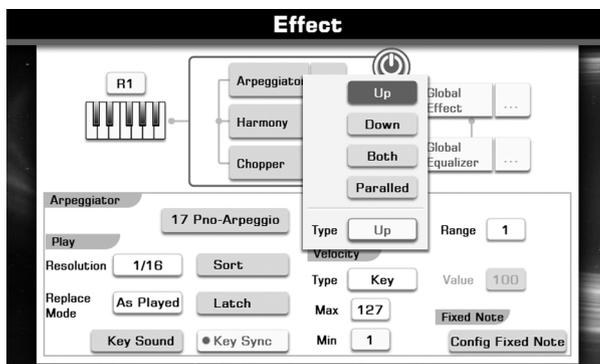
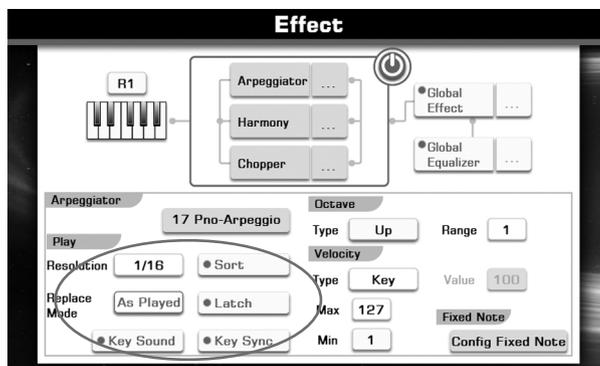
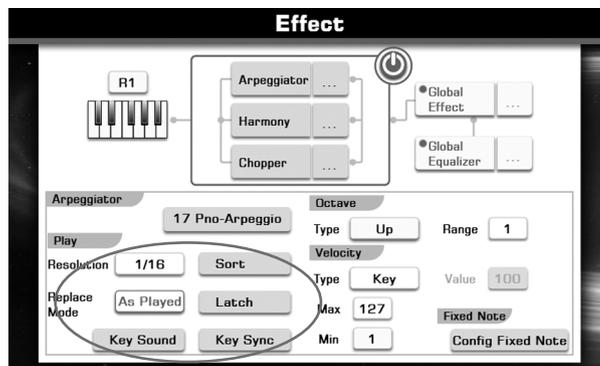
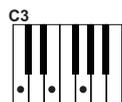
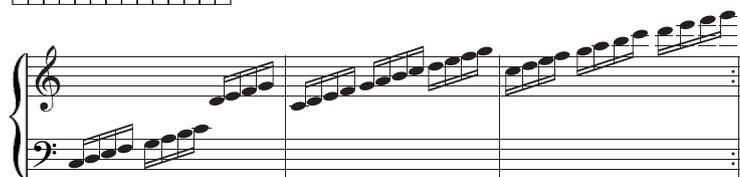
Press the "KEY SYNC" button to switch this function ON or OFF.  
 ON: The arpeggio pattern will start playing once a note is played on the keyboard.  
 OFF: The arpeggio pattern will always play according to the tempo.

## 8. Octave

Press the "Range 1" button to call up a pop-up box showing the numbers of octaves in which the arpeggio will be played.  
 Press the "Type UP" button to call up a pop-up box showing the arpeggio playing type in the octave ranges.

Example 1:

Preset Arp Pattern: 01 Up Down; Sort: On; Resolution: 1/16;  
 Replace Mode: As played; Key Sound: On; Octave Range: 3



# Voice

## 9. Velocity

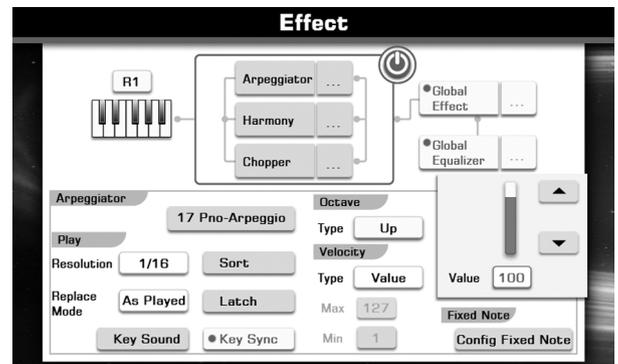
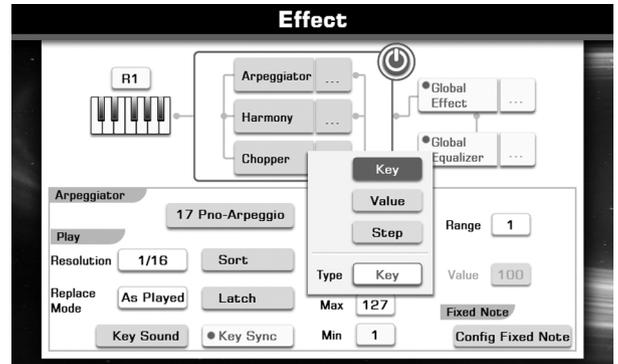
Specifies the velocity of the notes in the arpeggio.

Press the Type “Key” button to call up a pop-up box showing the velocity types.

**Key:** Each note will sound with the velocity value at which it was actually played. You can also set the range of the velocity. “Min” and “Max”. If the velocity value is not in the range of the specified velocity, the arpeggio pattern will not play.

**Value:** Each note will sound with the specified velocity values.

**Step:** Each note will sound with the velocity specified for each step.



## 10. Fixed Note

With this Fixed Note setting, the arpeggio pattern will always play the specified pitches regardless of the note numbers received from the keyboard.

Press the “Configure Fixed Note” button to call up the Fixed Note Setting display.

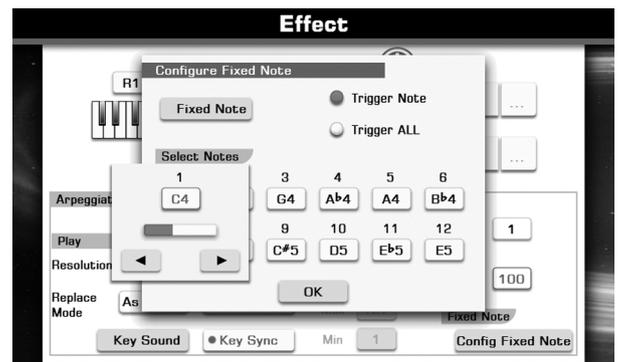
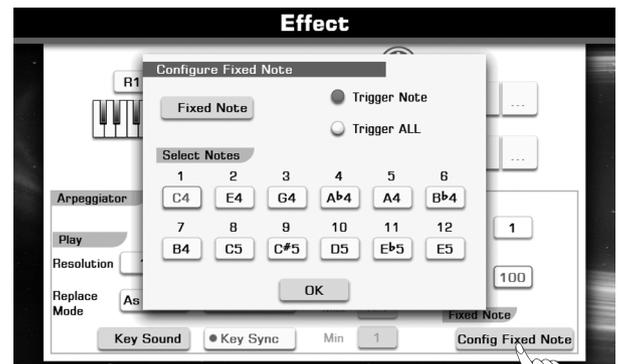
Press this “Fixed Note” button to switch the function ON or OFF.

You can also select the different mode to trigger the arpeggio pattern.

**Trigger Note:** Play the first specified pitch if you play one key on the keyboard.

**Trigger All:** Play all 12 specified pitches if you play one key on the keyboard.

**Specifying the Note:** Press this “C4” button to display a pop-up box.



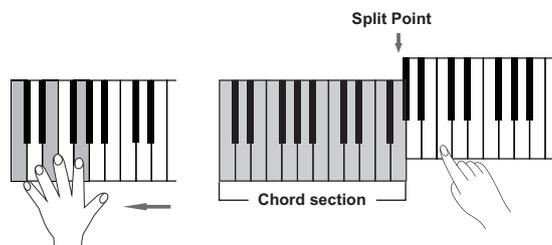
### Note:

Please set the replace mode as “As Played”.

## Harmony

The harmony function will automatically add harmony notes to the notes played in the right-hand section, which gives you a rich and harmonic expression.

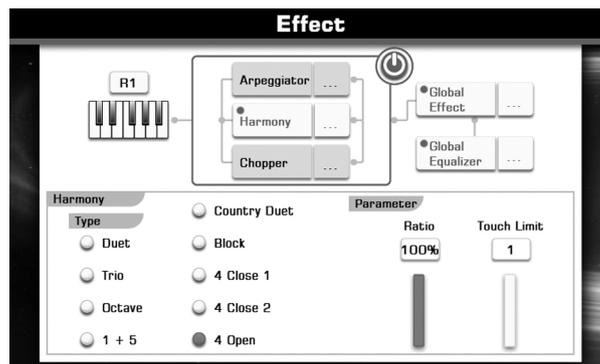
In this example, chord C major is played in the chord section, harmony notes will be automatically added to the notes played in the right-hand section of the keyboard accordingly.



1. Press the “Harmony...” button on the Effect display to call up the Harmony Setting display.

There are nine harmony types: Duet, Trio, Octave, 1+5, Country Duet, Block, 4 Close 1, 4 Close 2, 4 Open. Octave or 1+5 effect is always added by playing a melody with your right hand. The others effect is added by playing chords with your left hand and melodies with your right hand.

Parameter	Value	Description
Ratio	20%, 40%, 80%, 100%	Adjust the volume level of harmony parts.
Touch Limit	0-127	Set the minimum of the response velocity. If you play a melody with your right hand at a velocity less than the setting value, the Harmony part will not be added to the notes.



## Chopper

If you turn the chopper on, it automatically adds chopping effect to the notes you hold down. Since the Chopper effect is added by detecting pressed keys. If you release the key, it automatically turns the chopper effect off.

1. Press the “Chopper...” button on the Effect display to call up the Chopper Setting display.

There are two play modes: Use Pattern or Real-Time.

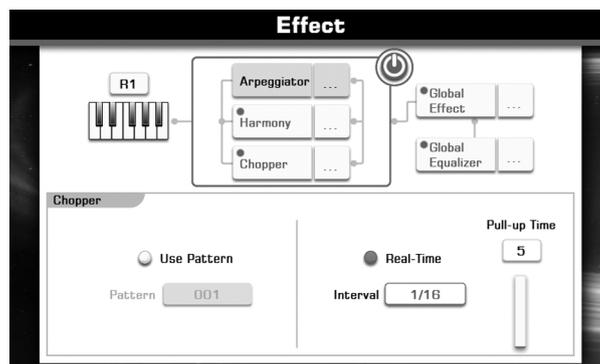
### Mode 1: Use Pattern

There are 25 user patterns you can select. Press the Pattern “001” on the Chopper Setting display to call up a pop-up box showing the available patterns for selection.

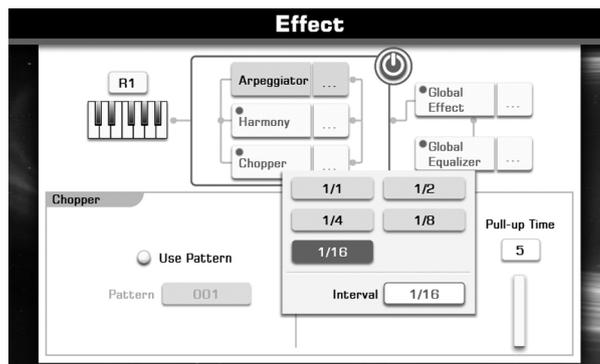
### Mode 2: Real Time

There are 2 parameters you can change.

Parameter	Value
Interval	1/1, 1/2, 1/4, 1/8, 1/16
Pull-up Time	5-100



2. Press the Interval “1/16” on the Chopper Setting display to call up a pop-up box showing the available interval values for selection.



## Global Effect

### Reverb and Chorus

**Reverb:** The effect creates a realistic environment for your performance, like playing in a concert hall or live in a club.

**Chorus:** The effect create a rich ensemble sound, as if one keyboard part is played by several instruments at the same time.

### Turn On/Off Global Effect and Adjust the Parameter

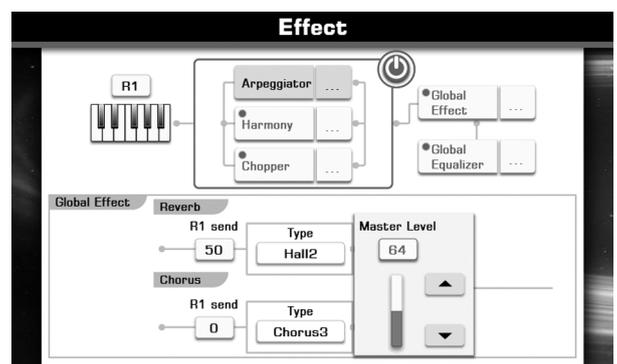
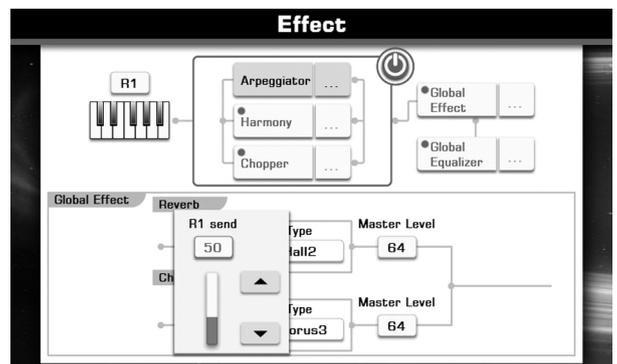
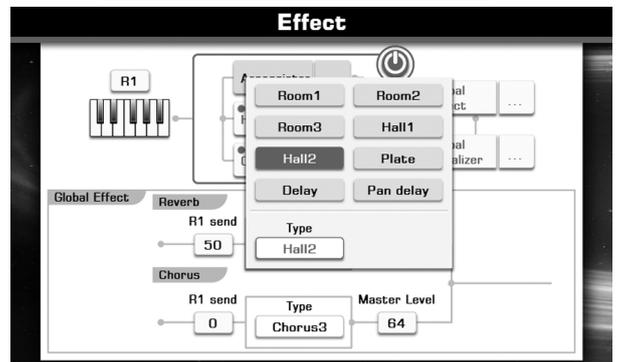
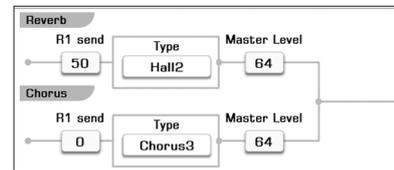
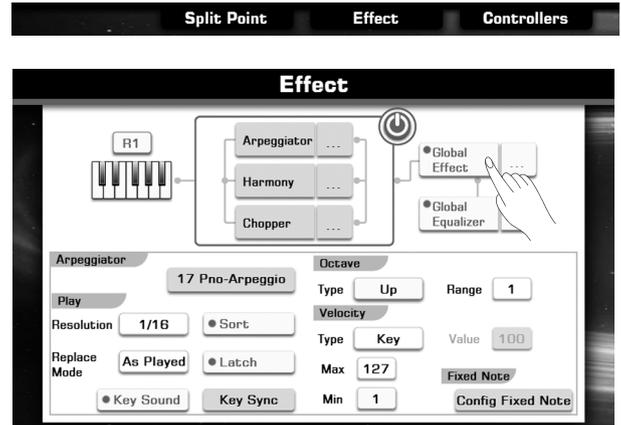
1. Enter the effect display.  
Press "effect" button at the bottom line of main display and voice selection display.
2. Press the "Global Effect" button to turn Global Effect on.  
This applies the reverb and chorus effects to the entire sound of the instrument.
3. Press the "..." button right beside the "Global Effect" to call up the Global Effect Setting display.

Parameter	Description
R1 send	The channel reverb/chorus level.
Type	Select the reverb/chorus type.
Master Level	The master reverb/chorus level.

4. Set the R1 send value from 0~127.  
Adjust the channel reverb/chorus level.
5. Set the reverb/chorus type.

Parameter	Value	Description
Reverb		
Type	Room1, Room2, Room3, Hall1, Hall2, Plate, Delay, Pan delay	Type of reverb
Chorus		
Type	Chorus1, Chorus2, Chorus3, Chorus4, Feedback, Flanger, Short delay, FB delay	Type of chorus

6. Set the Master Level value from 0~127.  
Adjust the master reverb/chorus level.
7. Use the DATA DIAL or [+] / [-] button to adjust parameter value. Or you can also press the screen button "▲" or "▼".



## EQ

“EQ” is the abbreviation of equalizer. To put it very plainly, a frequency-selective filter that’s able to cut or boost the level of specified parts of the frequency spectrum. The instrument possesses a four-band digital equalizer function.

These parameters determine the center frequency and gain of low/high EQ bands.

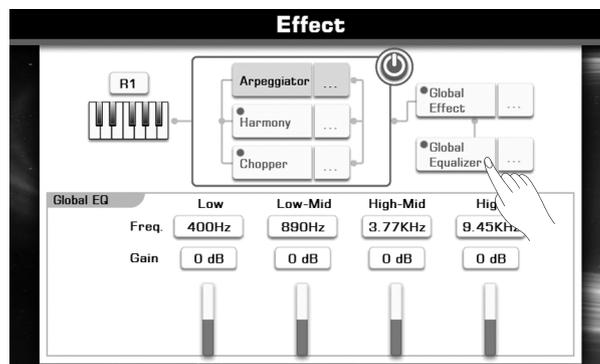
**Low**

**Low-Mid**

**High-Mid**

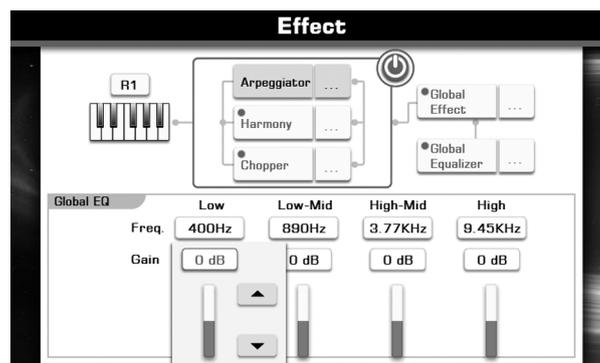
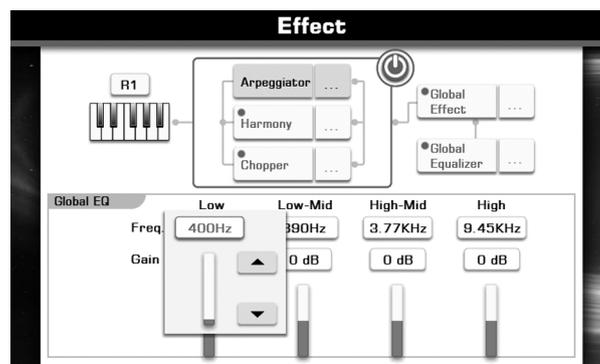
**High**

You can adjust the FREQ (center frequency) of every band and adjust the gain (amplitude change) in each of the four frequency bands within a range of -12 to 0 to +12 decibels [dB].



## Turn On/Off Global EQ and Adjust the Parameter

1. Enter the effect display.  
Press “effect” button at the bottom line of main display and voice selection display.
2. Press the “Global Equalizer” button to turn Global Equalizer on.  
This applies the equalizer effects to the entire sound of the instrument.
3. Press the “...” button right beside the “Global Equalizer” to call up the Global Equalizer Setting display.  
You can adjust the FREQ (center frequency) of every band (0~4.2 KHz) and adjust the gain (amplitude change) in each of the four frequency bands (-12 to 0 to +12 decibels [dB]).
4. Use the DATA DIAL or [+] / [-] button to adjust parameter value. Or you can also press the screen button “▲” or “▼”.



## Editing Voice

The voice edit function enables you to create your own voices by editing parameters of existing voices. You can recall the edited user voices from the USER voice tab.

1. Select the desired voice for editing.
2. Press the “EDIT” on the Voice Selection display to call up the Voice Editing display.
3. Press the “Common” or “Envelope” on the Voice Editing display to call up the relevant editing display.
4. Press the relevant button to select the item (parameter) to be edited.
5. Use the DATA DIAL, [+] or [-] button to adjust the data.

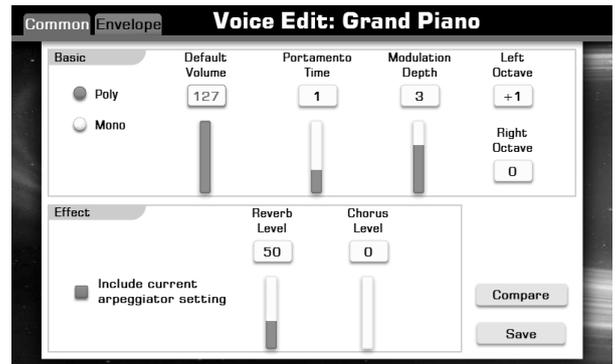


# Voice

## Editable Parameters

### Common

Default Volume	Change the default volume of the current voice.	0-127
MONO/POLY	Determines whether the voice is played back with single notes only (monophonically) or with multiple simultaneous notes (polyphonically).	
Portamento Time	Determines the transition speed from the first note played on the keyboard to the next when portamento is switched on.	0-3
Modulation Depth	Determines the intensity of the Vibrato effect. Higher settings result in a more pronounced Vibrato.	1-4
Left Octave	Determines the default octave shift of the edited voice when used as the LEFT keyboard part.	-1,0,1
Right Octave	Determines the default octave shift of the edited voice when used as any of the RIGHT 1-3 keyboard parts.	-1,0,1

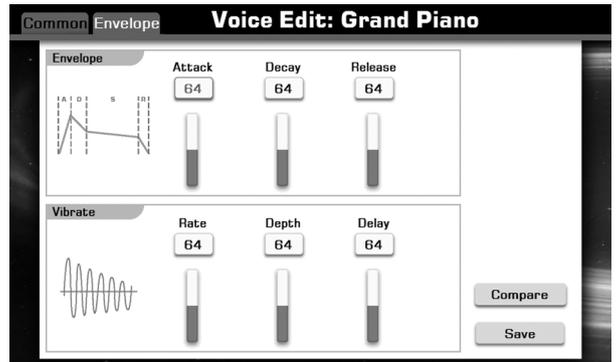


### Effect

Arpeggiator	Including the current arpeggiator setting or not.	
Reverb Level	Adjust the reverb level of the edited voice.	0-127
Chorus Level	Adjust the chorus level of the edited voice.	0-127

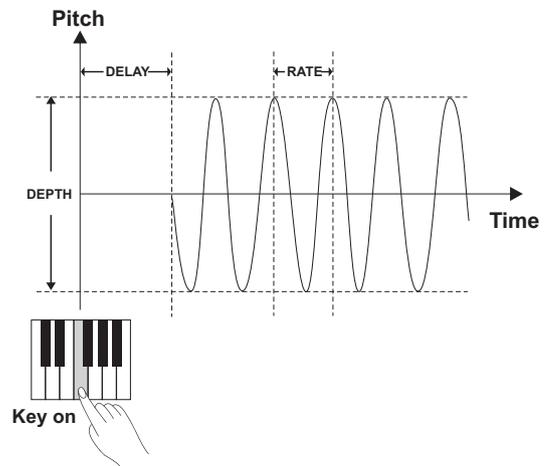
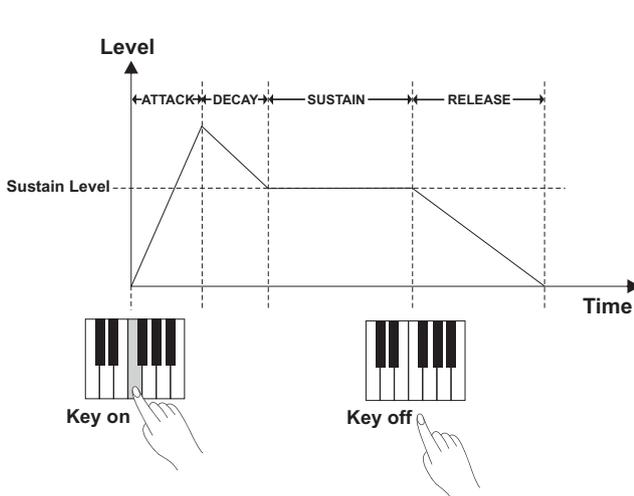
### Envelope

Attack	Determines the time it takes for a sound to reach maximum volume after the key is pressed and sound begun.	0-127
Decay	Determines the time it takes for a sound to reach its sustain level volume after the attack.	0-127
Release	Determines the time from when you your release the key until the sound decays to silence.	0-127



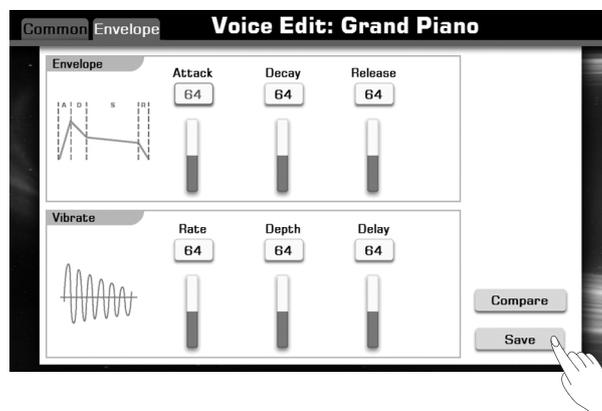
### Vibrato

Rate	Determines how fast one Vibrato effect cycle should be played.	0-127
Depth	Determines how strong the Vibrato effect should be played.	0-127
Delay	Determines how quickly the Vibrato effect starts after the sound start.	0-127



## Saving the Edited Voice

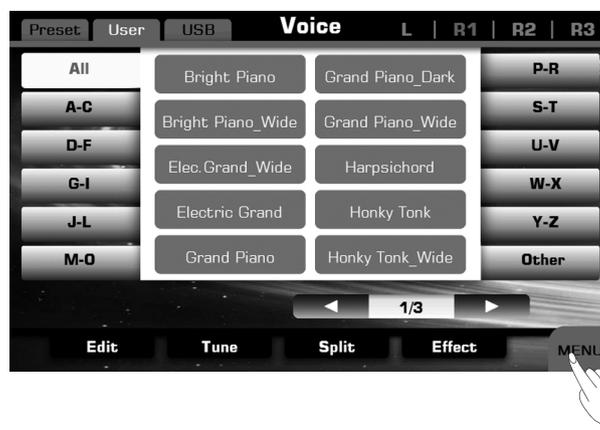
1. Press the "COMPARE" button.  
It is a functional operation to compare the sound of the edited voice with the original voice.
2. Press the "SAVE" button, if you are satisfied with your edited voice.
3. Call up the save display.  
Name your edited voice in the soft keyboard.
4. Press "OK" button to save edited voice as a user voice.



## Saving, Deleting or Renaming the User Voice

1. In voice selection display, press the "USER" or "USB" tab to call up relevant display for user voices.
2. Select your desired user voice.
3. Then, press the "MENU" button at the bottom right corner of display.

Parameter	Description
Delete	Delete the selected user voice.
Save to User	Save the edited voice as a new user voice.
Save to USB	Save the edited voice as a new user voice.
Rename	Rename the selected user voice.



### Note:

If the new name you entered is same as the name of existed user voice, a pop-up box will appear. Please press "OK" and rename the file again.



The instrument has a huge selection of various musical genre styles which you can play. Try out the different styles referring to the **Style List** in the appendix.

## Selecting Various Styles

1. Press the panel button [STYLE SELECT] button, or you can also press the screen style area on the Main Display, to call up the Style Selection display.
2. In the style Selection display, press one of the style categories.
3. Then, find a style as you want.  
If you cannot find your goal style at the first page, press the page up and page down button to browsing more styles.
4. Select an exactly style.  
Press the style name to select the desired style on the current page display.

### Note:

If you want to select the user style, press the “User” tab to display the available user styles or press the “USB” tab to display the user styles on your USB device.



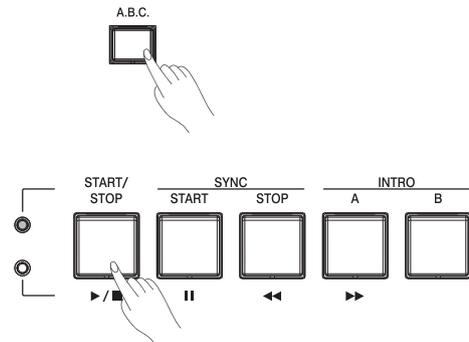
## Playing Only the Rhythm Tracks of a Style

Rhythm is one of the most important parts of a Style. Try to play the melody along with just the rhythm. You can sound different rhythms for each Style. Keep in mind, however, that not all Styles contain rhythm channels. (Piano category)

1. Select your desired style.
2. Press the [A.B.C.] button to turn auto accompaniment off.  
The indicator of [A.B.C.] button goes out.
3. Press the [START/STOP] button to play back the rhythm channels.
4. Press the [START/STOP] button to stop the rhythm.

### Note:

You can also start the rhythm simply by playing a key if SYNC START is enabled.

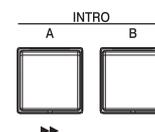
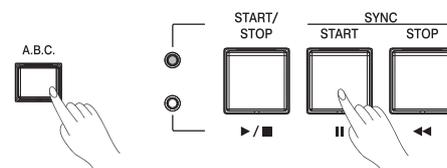


## Playing All Tracks of a Style

The auto accompaniment feature puts a full backing band at your fingertips. To use it, all you have to do is play the chords with your left hand as you perform and the selected accompaniment style matching your music will automatically play along, instantly following the chords you play. With auto accompaniment, even a solo performer can enjoy playing with the backing of entire band or orchestra.

Track Name
Percussion
Drum
Bass
Chord 1
Chord 2
Chord 3
Phrase 1
Phrase 2

1. Select your desired style.  
The indicator of [A.B.C.] button lights up.
2. Press the [A.B.C] button to turn auto accompaniment on.
3. Press the [SYNC START] button to turn SYNC START on.
4. Play a chord with your left hand to start the auto accompaniment.
5. Press the [START/STOP] button or press any of the [ENDING] button to stop the auto accompaniment.



### Note:

You can also stop the auto accompaniment simply by releasing the chord keys if SYNC STOP is enabled.

## Adjusting the Volume Balance

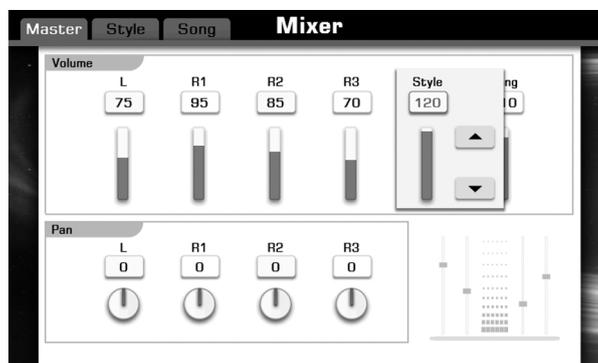
We all know that the mixer is very important to users to intuitively control the volume of Master keyboard, Style and Song parts. We also equipped a simple mixer in this instrument.

1. Press the [MIXER] button to call up the Mixer Display.



### Adjusting the Volume Balance between the style and the keyboard

1. Press the "Master" tab to call up the relevant setting display.
2. Press Style "120" button in the volume box showing the adjustable range of volume.
3. Use the DATA DIAL or [+] / [-] button to adjust parameter value. Or you can also press the screen button "▲" or "▼".
4. Adjust the keyboard volume by pressing the relevant button and operating according to the above steps.
5. Press the [EXIT] button to exit the Mixer Display.

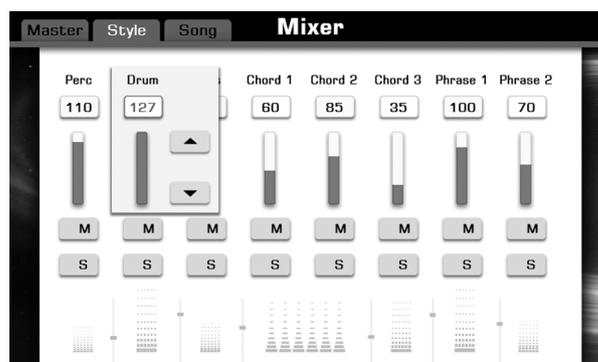


### Note:

If you turn on the Chord velocity control, the style volume changes in response to your playing strength in the chord section of the keyboard. Details see **Global Setting-Style & Song**.

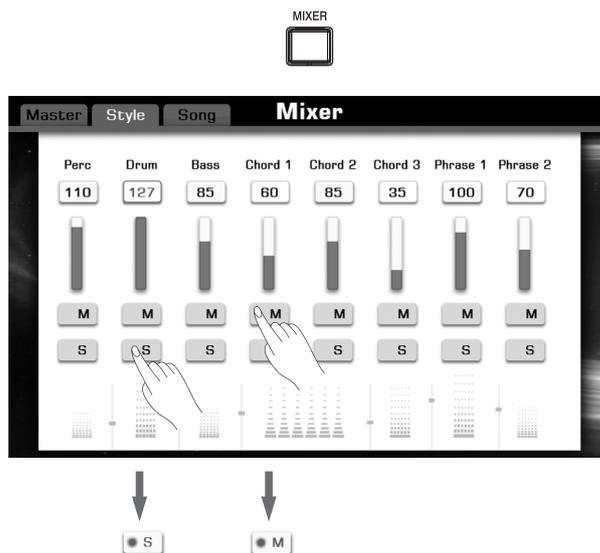
### Adjusting the Volume Balance for style

1. In Mixer display, press "Style" tab to call up the relevant setting display.
2. Press Drum "127" button in the volume box to call up a pop-up box showing the adjustable range of volume.
3. Use the DATA DIAL or [+] / [-] button to adjust parameter value. Or you can also press the screen button "▲" or "▼".
4. Adjust the volume of other tracks by pressing the relevant button and operating according to the above steps.
5. Press the [EXIT] button to exit the Mixer Display.



## Muting the tracks of a style

1. Press the [MIXER] button to call up the Mixer Display.
2. Press “Style” tab to call up the relevant style setting display.
3. Press the “S” button to set the channel to SOLO (orange font display). You listen to only one instrument of this track. Press the “S” button again to cancel SOLO (gray font display).
4. Press the “M” button to mute the channel (orange font display). You can listen to the playback of the style except this track. Press the “M” button again to cancel MUTE (gray font display).
5. Press the [EXIT] button to exit the Mixer Display.

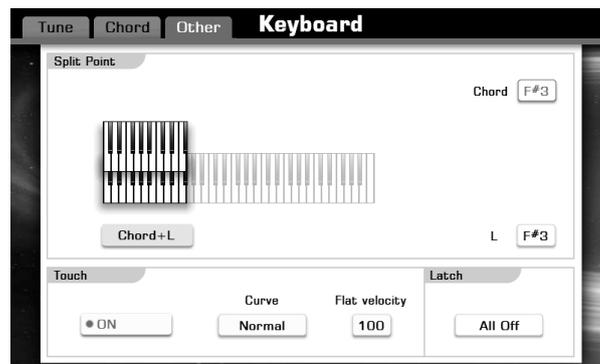


## Split Point Settings

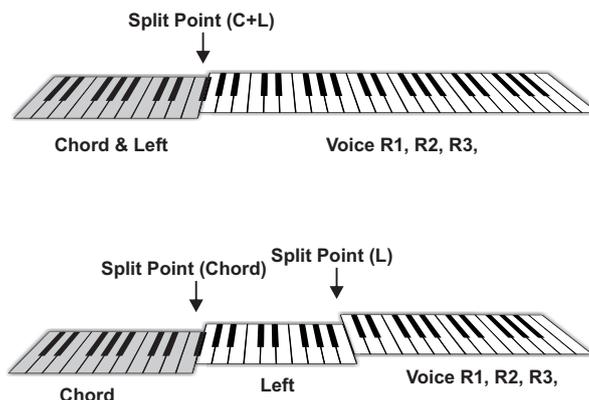
The Split Point of the LEFT/RIGHT part section and the Split Point of Chord section can be assigned separately. You can find the note names of the two Split Point settings in the screen.

**Split Point (Chord)**—separates the Chord section for Style playback from the section(s) for playing Voices (RIGHT 1, 2, 3 and LEFT).

**Split Point (Left)**—separates the two sections for playing Voices, LEFT and RIGHT 1- 3.



1. Pressing “SPLIT POINT” on main display or pressing “Split” on voice selection display will call up the Split Setting display.
2. Set the Split Point (Chord) and the Split Point (Left) to the same note
  - Press “Chord + Left” to turn it on.
  - Use the DATA DIAL, the [+] or the [-] button or press the key directly to set your desired split point.
3. Set the Split Point (Chord) and the Split Point (Left) to different notes.
  - Press “Chord + Left” to turn it off.
  - Press Chord Note Name and make the chord split point selected. Use the DATA DIAL, the [+] or the [-] button or press the key directly to set your desired chord split point.
  - Press Left Note Name and make the left split point selected. Use the DATA DIAL, the [+] or the [-] button or press the key directly to set your desired left split point.



**Note:**

Split Point(Left) cannot be set lower than Split Point(Chord), and Split Point(Chord) cannot be set higher than Split Point(Left).

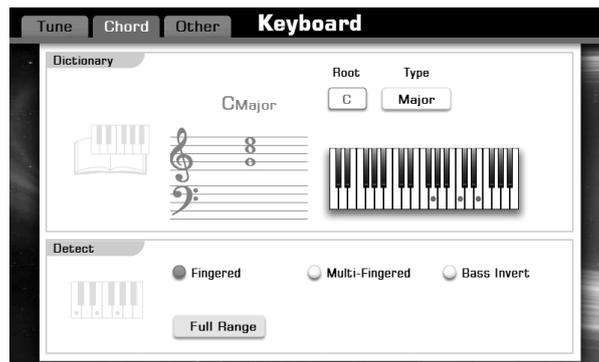
## Selecting a Chord Fingering Type

With style playback which controlled by different chord types to meet your performance playing. You can select one from these three types: Fingered, Multi-Fingered, and Bass Invert.

Holding down [A.B.C.] button will call up the Chord Setting display.

Press the Fingering type name to select your desired Chord Fingering type.

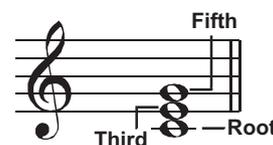
Press "Full Range" to turn it on (orange font display). Detect chords in the entire key range. Chords are detected in a way similar to Multi Finger, even if you split the notes between your left and right hands.



Finger	Automatically detects Single Finger or Multi Finger chord types.
Multi Finger	Only detects Multi Finger chord type.
Bass Invert	Automatically detects chord inversion of bass track.

## Chord Basics

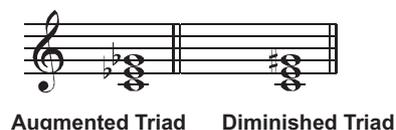
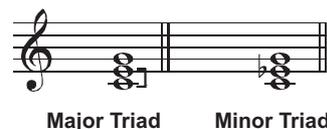
A chord, in music, is any harmonic set of three or more notes that is heard as if sounding simultaneously. The most frequently encountered chords are triads. A triad is a set of three notes that can be stacked in thirds. When stacked in thirds, the triad's members, from lowest pitched tone to highest, are called: the Root, the Third, and the Fifth.



### Triad Type

There are following basic triad types:

Major Triad	A root with a major third added above and a perfect fifth will consist as a "Major Triad".
Minor Triad	A root with a minor third added above and a perfect fifth will consist as a "Minor Triad".
Augmented Triad	A root with a major third added above and an augmented fifth will consist as an "Augmented Triad".
Diminished Triad	A root with a minor third added above and a diminished fifth will consist as a "Diminished Triad".



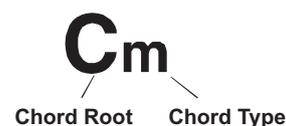
## Chord Inversion

We define this chord its root is not in the bass (i.e., is not the lowest note) as an inversion chord. When the root is in the bass, we call the chord: root-position chord. If we put the Third and Fifth in the root position, then it forms "Inversion", we call this chord "Inversion Chord". See the following major triad and its inverted chord.



## Chord Name

The chord name contains two parts content: Chord root and Chord type.



# Style

## Single Finger

Single finger type not only can detect single finger but also can detect multi finger. And the single finger makes it easily to play chords through only one, two or three keys. Including major, minor, seventh, and minor seventh chord. Refer to relevant picture on the right for details.

<b>C</b>		<ul style="list-style-type: none"> <li>• <b>Major Triad</b> Only press the root note on the keyboard.</li> </ul>
<b>Cm</b>		<ul style="list-style-type: none"> <li>• <b>Minor Triad</b> Press the root note and the nearest left black key simultaneously.</li> </ul>
<b>C7</b>		<ul style="list-style-type: none"> <li>• <b>Seventh chord</b> Press the root note and the nearest left white key simultaneously.</li> </ul>
<b>Cm7</b>		<ul style="list-style-type: none"> <li>• <b>Minor seventh chord</b> Press the root note and the nearest left white and black keys simultaneously.</li> </ul>

## Multi Finger

Multi finger type only can recognize those chords have listed in the chord list, and also can be found in the dictionary function.

0 C	1 C <sub>6</sub>	2 C <sub>M7</sub>	3 C <sub>M7</sub> (#11)	4 C <sub>M</sub> (9)	5 C <sub>M7</sub> (9)
6 C <sub>6</sub> (9)	7 C <sub>aug</sub>	8 C <sub>m</sub>	9 C <sub>m6</sub>	10 C <sub>m7</sub>	11 C <sub>m7</sub> (b5)
12 C <sub>m</sub> (9)	13 C <sub>m7</sub> (9)	14 C <sub>m7</sub> (11)	15 C <sub>mM7</sub>	16 C <sub>mM7</sub> (9)	17 C <sub>dim</sub>
18 C <sub>dim7</sub>	19 C <sub>7</sub>	20 C <sub>7sus4</sub>	21 C <sub>7</sub> (b5)	22 C <sub>7</sub> (9)	23 C <sub>7</sub> (#11)
24 C <sub>7</sub> (13)	25 C <sub>7</sub> (b9)	26 C <sub>7</sub> (b13)	27 C <sub>7</sub> (#9)	28 C <sub>M7aug</sub>	29 C <sub>7aug</sub>
30 C <sub>sus4</sub>	31 C <sub>1+2+5</sub>	Notes enclosed in parentheses ♯ are optional; the chords could be recognized without them.			

## Chord Dictionary

If you know the name of a chord but don't know how to play it, you can use the Chord Dictionary function.

1. Holding down [A.B.C] button will call up the Chord Setting display.
2. Press "Root C" button to select the root note.
3. Press "Type Major" button to select the chord type.

The notes you need to play to make the selected chord are shown in the display. (Music Score and Keyboard)



## Operations for Style Playback

### Style Variations

Specially created intros, mains, endings can be automatically added into style playing. These variations make your performance more professional and plentiful.

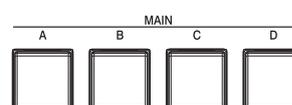
#### INTRO

The intro is an opening section of the song. Each preset style features two different patterns. When the intro pattern finished, the system will automatically shift to the main section. Press one of the INTRO [1]-[2] buttons before starting style playback. Now the LED of INTRO flashes, the style is standing by playing. Press the [START/ STOP] button or play a chord on the keyboard (In the condition of SYNC START is enabled) to start playing intro pattern.



#### MAIN

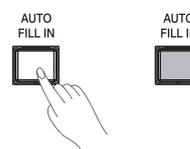
The main is an important section of the song. And it plays an accompaniment pattern and repeat infinitely. In this instrument, we have preprogrammed four different mains per style. Press one of the MAIN buttons [A]-[D] during style playback to shift between different patterns, and your desired MAIN section will start playing at the next measure. Press the currently MAIN button again add a plentiful break to fill the repeatedly section and then smoothly back to style playing.



#### AUTO FILL IN

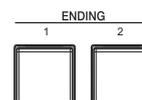
Auto fill in function automatically adds a fill while you press any of the MAIN [A]-[D] buttons.

Turn on the [AUTO FILL IN] button; the LED of the [AUTO FILL IN] button will light up. Simply press one of the MAIN [A]-[D] buttons as you play, and the selected fill-in section plays automatically (the relevant LED of MAIN flashes). When the fill-in is finished, accompaniment shifts to the Main section.



#### ENDING

Ending is used for the ending of the song. In this instrument, you can select two different ways to stop endings. Press one of the ENDING [1]-[2] buttons during style playback (the relevant LED of MAIN flashes). The ending will start playing at the next measure. When the ending is finished, the style automatically stops.



## The Function Description of Control Buttons

#### START/STOP

Start or stop playing back the style. When the style is playing, the LED of [START/STOP] button flashes according to the current tempo.

#### SYNC START

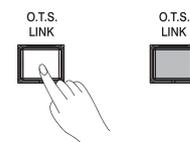
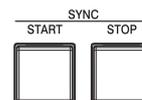
When Sync Start is turned on, the style playback will be triggered by playing on the keyboard.

#### SYNC STOP

This lets you stop the Style anytime you want by simply releasing the chord notes.

#### O.T.S LINK

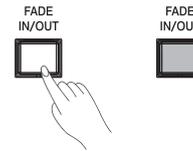
When O.T.S. Link is turned on, the corresponding One Touch Setting parameters will be recalled once a different Main section is selected. The LED of the [OTS LINK] button will light up.



# Style

## FADE IN

Starting the style with fade in produces a smooth beginning, the volume increases from low to high. Press the [FADE IN/OUT] button when style playback is stopped, the LED of the [FADE IN/OUT] button will light up. When the fade in is finished, the LED of the [FADE IN/OUT] button will light off.



## FADE OUT

Stopping the style with fade out produces a smooth ending, the volume increases from high to low. Press the [FADE IN/OUT] button during style playback, the LED of the [FADE IN/OUT] button will light up. When the fade out is finished, the style will be automatically stopped and the LED of the [FADE IN/OUT] button will light off.

### Note:

You can set the fade-in and fade-out time, Details see Global Setting-Utility.

## Adjusting the Tempo

Tempo means how many quarter notes there are in one minute. You can change the tempo value between 30 and 280.

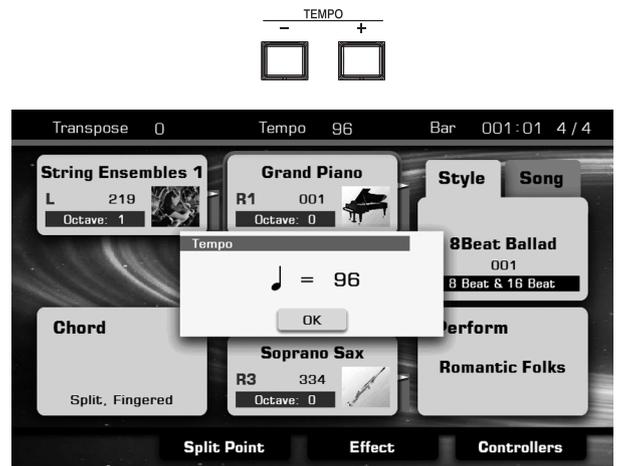
1. Pressing [TEMPO+] or [TEMPO-] button will call up the tempo setting window and change the tempo, holding either of the buttons will allow the tempo be changed continuously. Pressing both buttons simultaneously will reset the tempo to default value.

You can also use the dial to change the tempo value when the tempo setting window is displayed.

2. Pressing the [EXIT] button will close the tempo setting window.

### Note:

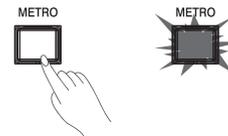
When you select another style during style playback, the selected style will start playing at next measure by current tempo. If you turn off the Lock Tempo function, it will use the new style's default tempo when the style changes. How to turn off the Lock Tempo? Details see **Global Setting-Style & Song**.



## Using the Metronome

1. Press the [METRO] button to turn the metronome on. The LED of [METRO] button flashes according to the current tempo.
2. Press the [METRO] button again to turn the metronome off.

Adjusting the metronome tempo is same as adjusting the tempo. The metronome parameters:



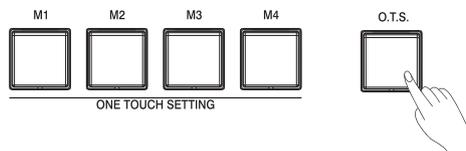
Parameter	Description
Volume	Determines the loudness of the metronome.
Bell On/Off	Determines if the bell sound should be played on the first beat.
Time Signature	Determines the time signature for the metronome.

How to set these parameters? Details see **Global Setting-Utility-Metronome**.

## One Touch Setting

When One Touch Setting is switched on, you can instantly recall all auto accompaniment related settings including voices selection and digital effects simply with a single touch of a button.

1. Press the [O.T.S.] button to turn on the One Touch Setting for the current style. The LED of the [O.T.S.] button will light up.
2. Press one of the [ONE TOUCH SETTING] buttons [M1]-[M4], the relevant LED will light up, A.B.C and SYNC START are automatically turned on. Various panel settings (such as voice, effect, etc.) that match the selected style can be instantly recalled with just a single button press.



### One Touch Setting Parameters:

Part ON/OFF	VOICER1,R2,R3,L
Voice Selection	VOICER1,R2,R3,L
Octave	VOICER1,R2,R3,L
Volume	VOICER1,R2,R3,L
Reverb Level	VOICER1,R2,R3,L
Chorus Level	VOICER1,R2,R3,L

### Note:

If the OTS LINK is turned on, various panel settings (such as voice, effect, etc.) that match the selected Main Section will be instantly recalled when you select the Main Section. The relevant O.T.S LED will light up to hint.

## Saving, Deleting or Renaming the User Style

1. Press "USER" or "USB" tab on Style Selection display to call up the relevant display for user styles.
2. Select your desired user style by pressing the relevant name of user style.
3. Press the "Menu" button to display the relevant buttons on the current display.
4. Press "SAVE TO USER" to call up soft keyboard display, enter the new name and press "OK" to save as a new user style to the internal memory.
5. Press "SAVE TO USB" to call up soft keyboard display, enter the new name and press "OK" to save as a new user style to the USB device memory.
6. Press "DELETE" to display the pop-up box, press "Yes" to delete the current user style.
7. Press "RENAME" to call up soft keyboard display, enter the new name and press "OK" to rename the current user style.



### Note:

If the new name you entered is same as the name of existed user style, a pop-up box will appear. Please press "OK" and rename the file again.

# Style Recording

Style recording is a powerful and convenient function to create a personalized style. You can rebuild an all new style or you can also edit an exist style for basic sample. Try to record one right now and find out more professional use.

With the Style Record function, you can do following things:

1. Edit an internal style.
2. Record a whole new style.
3. Copy channels from the existing style to make a new combination.
4. Edit detailed notes of a style.
5. Set the note transposition rule of a style.
6. Create or edit the O.T.S. settings of a style.

## Basic knowledge of a style

Styles are made up of different sections (INTRO, MAIN, FILL and ENDING) each section has eight separate channels (PERCUSSION, DRUM, BASS, CHD1, CHD2, CHD3, PHR1 and PHR2). With the style record function, you can create a style by separately recording the channels, or by importing pattern data from other existing Styles.

## Editing Basic Parameters

If you want to adjust the basic parameters like Tempo, Voice and Volume, easily do as following operations.

1. Enter the style record interface  
In the style selection page, select a desired style as the basis for recording/editing, and then press the "Edit".



Enter the edit display, and you can see the current editing information of style.

The channel which selected with red background color is available to editing. Set an appropriate value to its corresponding Voice, Volume, Pan and so on.

The channel with its channel name displayed in grey is unavailable for editing, as there is no music data in this channel.



2. Change default tempo value

The current default TEMPO value will remain the same in all sections. Press the value button of Tempo to call up the parameter box. You can use the Up and Down arrows or Dial to adjust the tempo value.

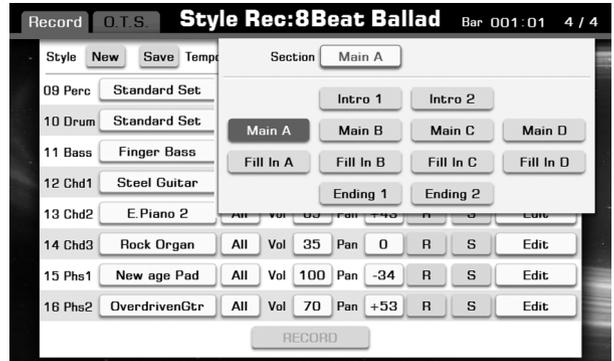


You can also use the panel button [Tempo+]/ [Tempo-] to adjust the tempo value. Press the [+] and [-] buttons simultaneously to reset the tempo. Adjustable range: 30~280.



### 3. Select Section

Select the current section you are going to record/edit, you can select from Intro (1~2), Main (A~D), Fill (A~D) and Ending (1~2). Press the [Intro 1] button to call up section selection box. You can press the panel button of section or directly press the section name on the display.



### 4. Select channel (Choose the channel displayed on the screen)

If you are editing the Intro/Ending section, you can select to display channel 1~8 or channel 9~16 for editing. If you need a channel only playback when the Major or Minor chords are input, you may configure this with the chord response buttons for each channel.

If you are recording other sections, you can only record them into the channel 9~16, and each channel can be played with all chord types.



### Note:

While playing styles, the channel 1~8 and 9~16 will be played in the same 8 tracks, so please note your settings. For example, the channel 1 and channel 9 will be played back in a same track, if you set these two channels can both be played under all chords, and set their voice and volume with different values; the parameters of these two channels may conflict when playing the style.

### 5. Length (Set the length of current section)

Press the value button on the top right of display to call up the parameter box of section measure length. You can use the panel Dial or press the Up and Down arrows in the screen to adjust the value.

### Note:

If you have selected a Fill in section, the Length value will be fixed as 1 and unchangeable.

### 6. Voice (Set the voice of current channel)

Press the voice button on the right of channel name; enter the voice selection interface. You can choose an appropriate voice for current channel, then press the panel button [EXIT] to continue editing the style.

### Note:

You can select only the percussion voices for Perc and Drum channel, and only bass voices for the bass channel.



# Style Recording

## 7. Volume (Set the volume of current channel)

Press the value button on the right of "Volume" to call up the volume parameter box. You can press the Up and Down arrow or use the panel Dial to adjust the volume value. Parameter range: 0~127.



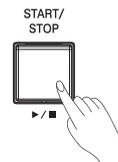
## 8. Pan (Set the pan of current channel)

Press the value button on the right of "Pan" to call up the pan value parameter box. Press the Up and Down arrows or use the panel Dial to adjust the Pan value. Parameter range: -64(left) ~63(right).



## 9. Listen to Your Changes

Press the panel [START/STOP] button, and it will circularly play the current selected section of the style. Press the [START/STOP] again to stop the playback. You can turn on the [A.B.C.] and play a chord to listening to the effects.



## 10. Save Changes

Press the "SAVE" button in the style editing interface, enter the file name you want to save, press "OK" if you sure to save the edited style into the USER group.



## Further Editing a Style

In style editing interface, you can press the “Edit” menu at the right end of channel parameters to select more editing functions.

### 1. Quantize (Quantize the notes of channel)

Press “Edit” button; select “Quantize” function to enter the corresponding settings.



### Quantize:

The quantize function can help you correct timing, which may have some imprecision. Select the quantize size (resolution). For optimum results, you should set the Quantize size to the shortest note value in the channel. For example, if eighth notes are the shortest in the channel, you should use eighth note as the Quantize accuracy.



You can set the Quantize accuracy of this operation: quarter note, eighth note, sixteenth note, thirty-second note, quarter note triplet, eighth note triplet, or sixteenth note triplet.



### 2. Velocity (Edit the velocity of all notes in a channel)

Press the “Edit” button to call up the velocity display, as the picture shows:

**Velocity:** Boosts or cuts the velocity of all notes in the specified channel, according to the percentage specified here. This instrument velocity is from 1% to 400%.



# Style Recording

### 3. Copy From (Copy a channel from an existing style)

Open the “Edit” menu, and then select the “Copy From” button, as picture shows:

Press the style selection button to enter the selection interface, as picture shows:

You can select a style, then press [EXIT] button to confirm your selection and return to the style editing.

Back to the style editing interface, you can also select your desired source section and channel.

#### Note:

If you are editing the Perc or Drum channel, the only source channel you can copy from is Perc or Drum.

If you are editing the Bass channel, the only source channel you can copy from is Bass.

If you are editing the Chord or Phrase channel, you can choose any channels except for Rhythm and Bass channels as a copy source.

Press the “OK” button after you have selected the copy source, then the channel contents you are editing will be replaced by the selected copy source.



### 4. Clear (Clear all contents of a channel)

Press “Edit” button and then select the “Clear” item to open a new window confirm your clear operation. As picture shows:

If you select the “OK” button, the channel you are editing will be cleared.

#### Note:

The deleted contents cannot be recovered after saving.



## Playing the Keyboard and Recording your Performance as a New Style

Besides editing the existing music content, you can also record your own performance as a channel of style.

#### 1. Create a blank style

If you just want to record a new style which is based on an existing style, please select a desired style and skip this step.

Press “New” button; set the default time signature and for the new style, press “OK” button if to confirm the settings.

#### 2. Select the channel for recording

You must select a channel to record; the button will be lightening up if you press the “R” button corresponding to the right of channel parameters.



### 3. Start record

Press the "RECORD" button; the button will change to "START" and waiting for recording. Press any keys, "START" button or panel [START/STOP] button to start record.

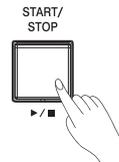
The current style section will be playback circularly while recording, the notes you played will be added to (overdub) the existing music content of the channel.

#### Note:

Some of functions and panel buttons are unavailable while recording.

### 4. Stop recording

Press the STOP button in the display, or press panel [START/STOP] button to stop recording. You can listen to your record or edit it later.



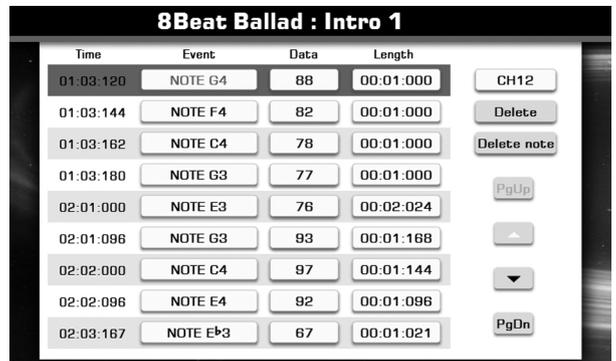
## Editing Each Note of Style

With the powerful Event List function, you can edit each note of channel; this is very helpful for detailed modification with your style.

### 1. Open the Event List

Press the "Edit" menu of channel; select "Event List" button to enter the event list display. Each row in this display represents an event, you can see following information about the event:

Parameter	Description
Time	The event occurs time, express with "Bar: Beat: Tick".
Event	The event name. You can deal with the "NOTE", "CTRL" and "PROG" events.
Data	Event parameter.
Length	The length of notes.



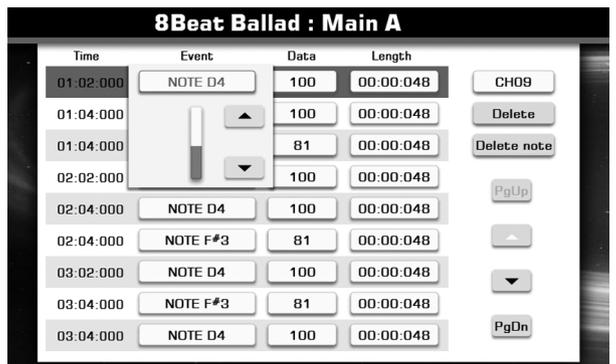
### 2. Change an event

Press the "Event" button; correspond to different event types you can edit different objects:

Parameter	Description
"NOTE"	This event changes the pitch of note.
"CTRL"	This event changes the number of controllers.
"PROG"	This event changes the program selection.

#### Note:

If you have selected Main or Fill section, except for two percussion channels, the NOTE events can only be set to the C Maj7 chord notes. The selectable control event numbers are: 1(Modulation), 10(Pan), 11(Expression), 91(Reverb Level), 93(Chorus Level).

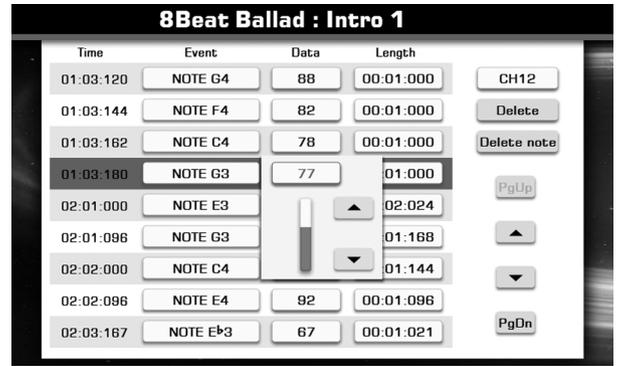


# Style Recording

### 3. Edit the event parameters

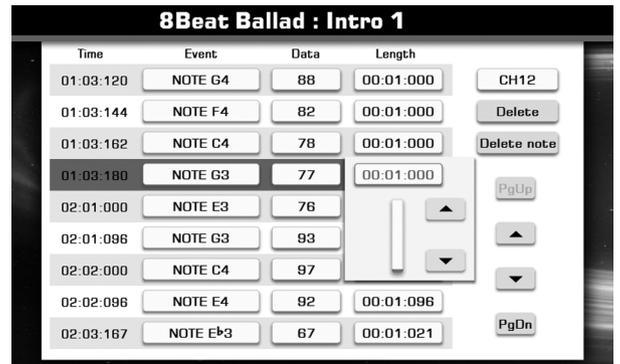
Press the "Data" button; correspond to different events you can edit different parameters.

Parameter	Description
"NOTE"	This event changes the velocity of note.
"CTRL"	This event changes the controller parameters.



### 4. Change the length of notes

The NOTE event, you can press the "Length" button to change the length of notes, change from tick, then beat and measure.

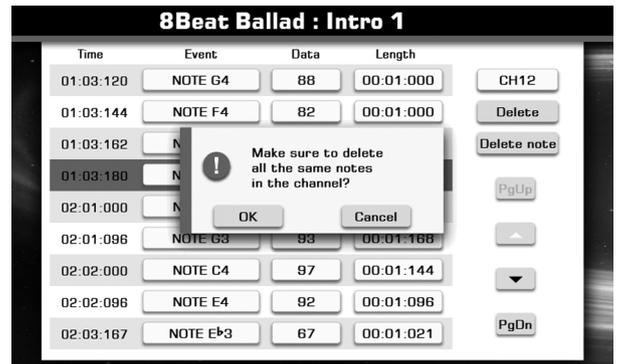


### 5. Delete a note

Select an event, press "DELETE" button on the right, you can delete the event.

### 6. Delete all notes with equal pitch

Select a NOTE event; press the "Delete Note" button, if you are ready to delete all desired notes with the same pitch, press "OK" button to confirm the operation.



### Note:

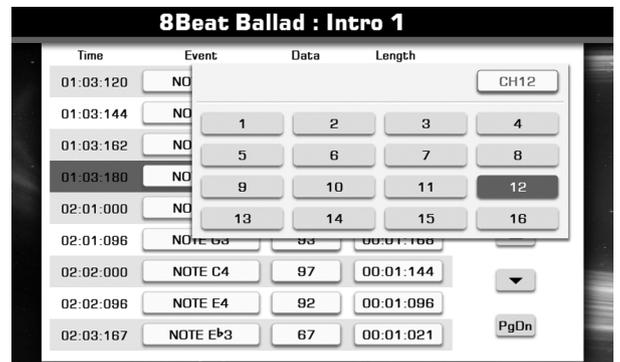
The deleted contents will not be recovered after saving the file.

### 7. Select channel

You can directly change channel selection in Event List without returning to the style editing interface. Just press the "Channel" button in the display to select a different one.

### 8. Exit Event List

Press panel [EXIT] button; you can exit from Event List and return to the Style Editing interface. You can save your changes there.



## Setting the Notes Transfer Rules for Chord Changes

While playing style, each note of every channel will response to chord changes according to their own rule. You can edit these response rules to achieve your desired effects.

1. Set the type of chords that the current channel should response to. If you are editing Intro or Ending section, you can set the chord category for each channel. Press the chord category setting buttons; you have three choices: select "Major" the channel will only play back when major chords are inputted; select "Min" for playing only under minor chords; or you can select "All" for playing under all chords.

### Note:

In style playing mode, channel 1~8 and 9~16 will be played in the same track, so take care of your settings. For example, the channel 1 and 9 will played in a same track, if you set these two channels are played in all chords, and like voice, volume, these parameters are different, then parameters of two channels may conflict while you are playing the style.

2. The chord control parameters  
Press the "Edit" menu on the right end of channel parameters, and then press the "Parameter" button to open the chord control parameter window. You can set detailed parameters response to chord changes.

3. Note Trans Rule (Note transposition rule)  
Press "Note Trans" button; this sets the note transposition table for the source pattern.

	Suitable for	Scale change
By Pass	Percussion Channel	/
Melody	Melody line and bass channel	/
Chord	Chord transposition	/
Melodic Minor	Intros Endings	Third
Melodic Minor 5th	Intros Endings	Third, Fifth
Harmonic Minor	Intros Endings	Third, Sixth
Harmonic Minor 5th	Intros Endings	Third, Fifth, Sixth
Natural Minor	Intros Endings	Third, Sixth, Seventh
Natural Minor 5th	Intros Endings	Third, Fifth, Sixth, Seventh
Dorian	Intros Endings	Third, Seventh
Dorian 5th	Intros Endings	Third, Fifth, Seventh

\*When chord changes from a major to a minor, the original intervals will be lowered in the scale; in a similar way, when chord changes from a minor to a major, the original intervals will be raised in the scale.



# Style Recording

4. Root Trans Rule (Changing rule with root note)  
This parameter determines the root note position of chords.

	Suitable for	Root Trans Rule
Root	Melody line and bass channel.	Keep the pitch relationship between notes.
Fixed	Percussion Channel Contains chord channel	Keep the note as close as possible to the root note of previous chord.



5. Root Limit (High key)  
Acoustic instruments have their note limit of real performance range. This parameter limits the root position in a chord which shifts down an octave in currently channel.



6. Note Range (Note limit)  
Automatically shift those notes (too high or too lower) to an available range you have set; makes the voices sound as realistic as possible.



7. Retrigger Rule  
This parameter can be used to determine how note changes when responds chord changing.

Parameter	Description
Pitch Shift	When a new chord is played, the playing notes will bend to the new pitch instead of re-trigger with new attacks.
Pitch Shift to Root	When a new chord is played, the playing notes will bend to the new pitch to match the new chord root.
Retrigger	When a new chord in played, the playing notes will be stopped then new notes will be re-triggered accordingly.
Retrigger to Root	When a new chord in played, the playing notes will be stopped then new notes will be re-triggered accordingly to match the new chord root.
Stop	When a new chord in played, the playing notes will be stopped.



## Setting O.T.S. of Style (One Touch Settings)

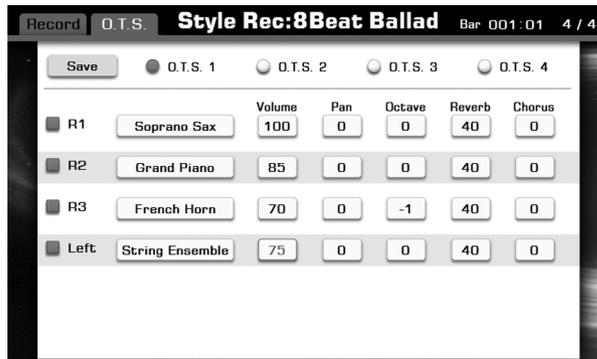
One Touch Setting is a powerful and convenient feature that automatically calls up the most appropriate panel settings (Voices or effects, etc.) for the currently selected Style, with the touch of a single button. If you've already decided which Style you wish to use, you can have One Touch Setting automatically select the appropriate Voice for you.

1. Open the O.T.S. setting display  
Press the O.T.S. tab page on the top of the Style Record display; enter O.T.S. settings.



2. Setting detail parameters  
You can individually set the O.T.S. in detail. The parameters you can set are listed as follows.

Parameter	Value Range
Switch layers	R1/R2/R3/L
Select voice	
Volume	0~127
Pan	-64~+64
Octave	-1~+1
Reverb	0~127
Chorus	0~127



3. Save your settings  
Press "Save" button to save your O.T.S. settings.

# Song

The instruments can playback songs to provide a various accompaniments selections.

## Built-in Songs

You can select from 90 fine tuned built-in classic songs from the [Preset] tab in the Song selection.

## User Songs

You can record your own multi-track MIDI songs to the internal user memory and playback them from the [User] tab in the Song selection.

## External Songs

- SMF (Standard MIDI file)  
Standard MIDI Files are generally available as one of two types:  
Format 0 or Format 1.
- Audio File (MP3/WMA /WAV)

## Playing Various Songs

1. Select a song category, call up song selection display.  
There are 2 methods to select a song category:
  - Panel button: press the panel [SONG SELECT] button.
  - Display button: in main display, tap the song tab area.

### Note:

Normally, the main display shows style area as default setting, you may firstly tap the song tab in need.

2. Select an exactly song.  
Use DATA DIAL or [+] / [-] button move cursor position step by step.  
The last song you have selected will be saved as your new choice.  
See Basic Operations page description. Also can use screen page up or page down button to browsing files by page.
3. Press the [PLAY/STOP] button to start playing back.
4. Press the [PLAY/STOP] button again to stop playing back.



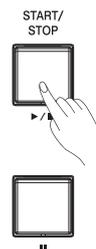
## Operations for Song Playback

### PLAY/STOP

Start or stop playing back the song. When the song is playing, the LED of [PLAY/STOP] button flashes according to the current tempo.

### PAUSE

Press this button during song playback to pause the current song. Pressing it again will resume the playback from the paused position.



## REWIND and FAST FORWARD

Pressing the [REW] or [FF] button will allow you to jump to a certain measure of a song during playback.

The Song position windows will show up when either of the two buttons is pressed, then you can also use the dial to change the target measure.

Pressing and holding either button lets you continuously move back or forth.



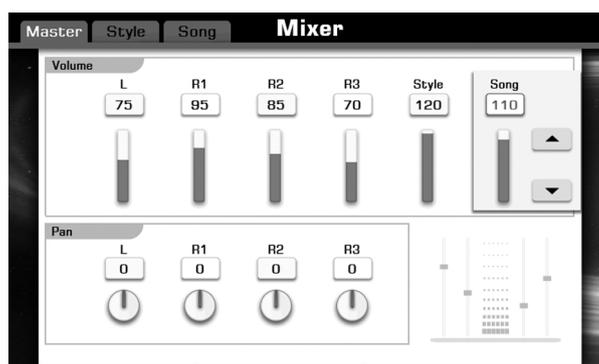
## Adjusting the Volume of the Song

Press the [MIXER] button to call up the Mixer Display.

### Tuning the volume balance between the Song and the Keyboard parts

When a Song is playing, you may need to change the volume setting for a better balance for the keyboard parts.

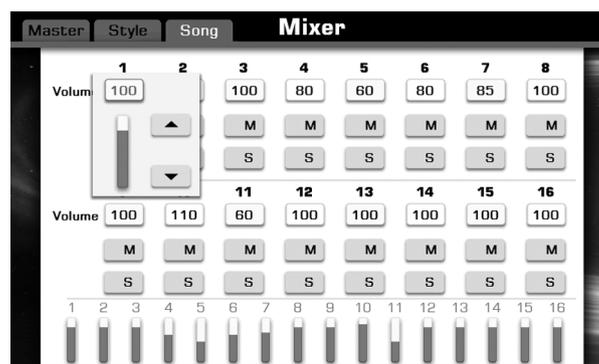
1. Press "Master" tab to call up the relevant setting display.
2. Press Song "110" button in the volume box to call up a pop-up box showing the adjustable range of volume.
3. Press the "▲" or "▼" button in screen or use the DATA DIAL, the [+] or the [-] button to adjust the data.
4. Adjust the keyboard volume by pressing the relevant button and operating according to the above steps.



### Adjusting the Volume of each Channel of the MIDI Song

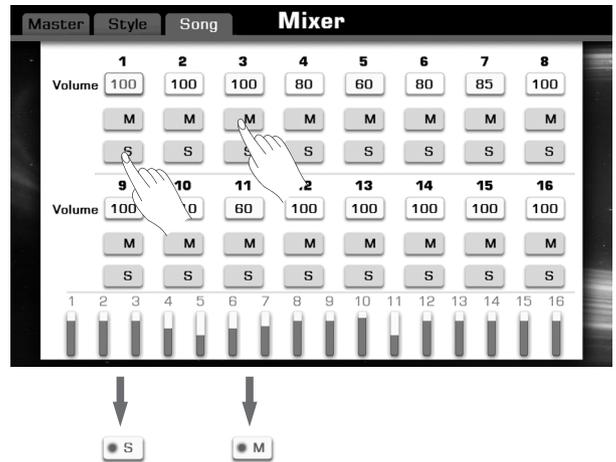
A MIDI song may contain up to sixteen MIDI channels. You can adjust the volume of each channel and mute or solo each track.

1. Select a Song.
2. Press the [MIXER] button to call up the Mixer Display.
3. Press "Song" tab to call up the relevant setting display.
4. Press 1 "100" button in the volume box to call up a pop-up box showing the adjustable range of volume.
5. Press the "▲" or "▼" button or use the DATA DIAL, the [+] or the [-] button to adjust the data.
6. Adjust the volume of other tracks by pressing the relevant button and operating according to the above steps.



# Song

- Press the "S" button to set the channel to SOLO. You listen to only one instrument of this track. Press the "S" button again to cancel SOLO.
- Press the "M" button to mute the channel. You can listen to the playback of the song except this track. Press the "M" button again to cancel MUTE.
- Press the [EXIT] button to exit the Mixer Display.



## Displaying Sheet Music (Score)

You can check the sheet music of a song.

- Choose a song you would like to view.
- Press the [SCORE] button, the sheet music will be generated.
- Press the [PLAY/STOP] button will start the playback of the song. The position cursor moves through the score, indicating the current position.

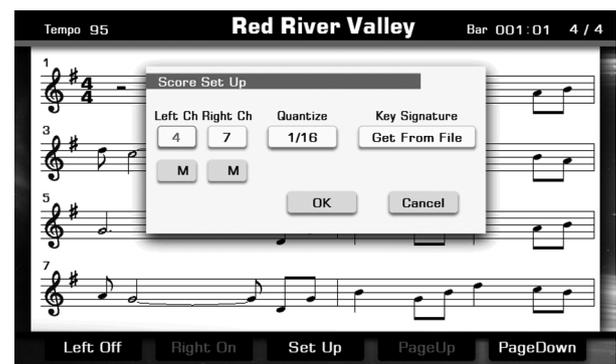
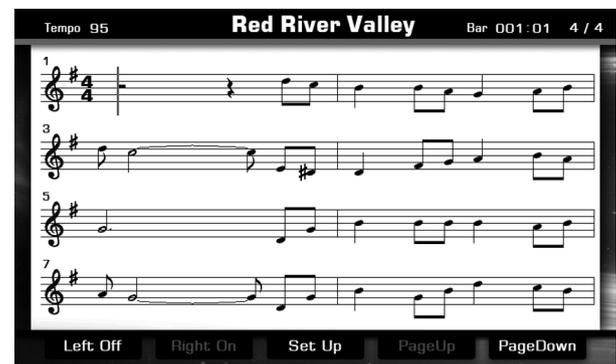
### Operation for Score Display

Button	Description
Left On/Off	Turn on or off the score of left hand.
Right On/Off	Turn on or off the score of right hand.
Page Up	Goes to the previous page of the score.
Page Down	Goes to the next page of the score.

### Set Up

Set the detailed parameters of the view type as desired.

- Press the "Set Up" button to call up the detailed setting display.
- Press the relevant button to set the view type.
- Press the "OK" button to apply the setting.



1. Select a MIDI channel which is used for left/ right hand part.

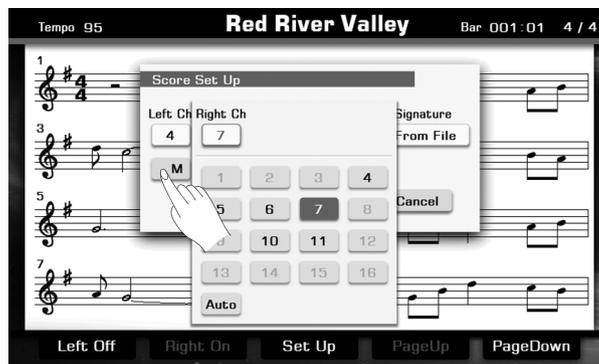
LEFT CH	Select the MIDI channel for left hand part.
RIGHT CH	Select the MIDI channel for right hand part.

**Note:**

The system automatically set to “Auto” when a different song is selected.

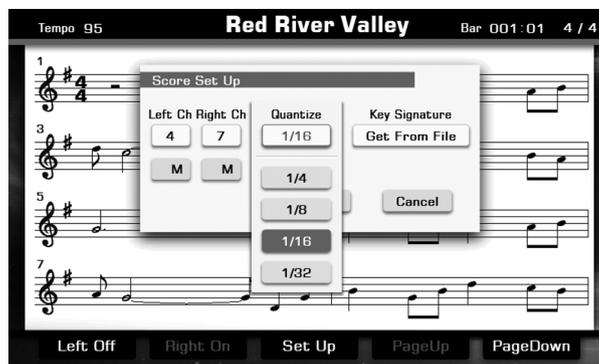
2. Press the Right Ch “M” button to mute the right channel and press the Left Ch “M” button to mute the left channel.

3. Press the “M” button again to cancel MUTE.



**Quantize**

The quantize function can help you correct timing, which may have some imprecision. Select the quantize size (resolution). Available settings: 1/4, 1/8, 1/16, 1/32. For optimum results, we recommend you set the Quantize size to the shortest note value in the channel. Normally, the default setting is sixteenth note.

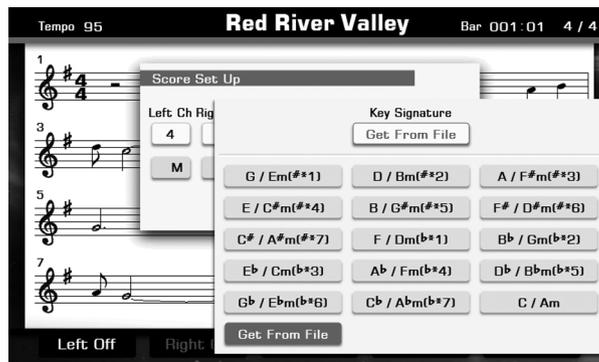


**Key Signature**

This function is very useful. It makes your score easily displayed as your familiar simple signature type.

**Note:**

Get From File means display the score as the MIDI file default data.



# Song Recording

In this chapter, we will introduce you how to record your performance in different ways. We have pre-programmed two useful methods: Record your own performance as MIDI file, and use an external storage to save your own performance as audios.

## MIDI Recording

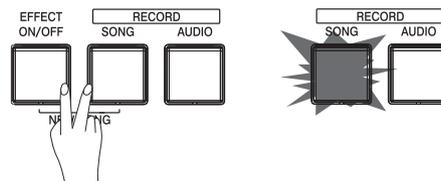
To make recording procedure more simply, you can choose quick recording or multiple recording for different requires.

**Quick Recording:** It makes performance recording more conveniently and quickly.

**Multi Track Recording:** Record several different parts to multiple channels.

**Note:**

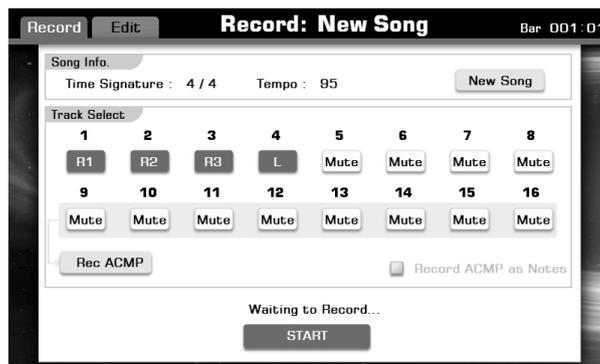
All recorded songs can be further edited.



### Quick Recording

You can start the record for a new song with just one press.

1. Press the [RECORD SONG] and [EFFECT ON/OFF] buttons simultaneously to call up the Recording Display. A blank Song (“New Song”) is called up for recording. The LED of [RECORD SONG] is flashing that means it is in the recording standby mode.

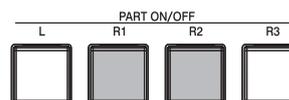


2. Make the desired panel setting for your keyboard performance.

#### Recording the RIGHT2, RIGHT3, and LEFT parts

Pressing the “ch mute” button and selecting the relevant part or pressing the relevant part button directly to turn on the relevant part and record them.

Select the voice for each keyboard part. Details see **Voice-Playing Various Voices**.

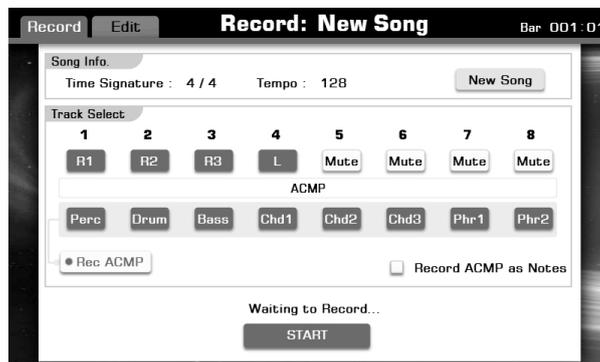


#### Recording Styles

Press the “Rec ACMP” button to switch recording accompaniment on or off.

Select a style. Details see **Style- Selecting Various Styles**.

Set the tempo for recording by pressing the [TEMPO+] or [TEMPO-] buttons.



#### Using Performance Memories

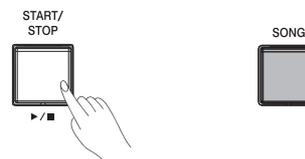
Press one of the PERFORMANCE MEMORY [1–6] buttons.

#### Record ACMP as Notes

Select the “Record ACMP as Notes” to directly record the ACMP track as notes.

3. Start recording. Press the [PLAY/STOP] button or Press the [RECORD SONG] button. The LED of [RECORD SONG] will light up.

Playing the keyboard. Recording begins automatically as soon as you play a note on the keyboard.



**Note:**

You can turn on the metronome during recording. The metronome sound will not be recorded.

## 4. Stop recording

Press the “STOP” button on the Record Display or press the [RECORD SONG] button. The LED of [RECORD SONG] will go out.

If you are recording style, press the [ENDING] button, when the Ending is finished, the recording would also stop automatically.

## 5. Save recording data.

When the soft keyboard is called up, please enter the new name and press “OK” to save the new user song.

### Note:

The recorded song data will be lost without executing the save operation.

6. Press the [PLAY/STOP] button to playback the song you just recorded.

## Multi Track Recording

You can have up to 16 tracks in one song. By using multi-track recording, you can record each track independently. You can determine the target track for each keyboard part, the style part can also be recorded.

You can also record over already-recorded parts of an existing User Song.

1. Press the [RECORD SONG] button to call up the Recording Display.

If the current song is user song, this user song is called up for new recording.

If the current song is preset song, a blank song (“New Song”) is called up for recording.

2. Determine the tracks for the recording.

Defaultly track 1-4 will be used for the keyboard parts (Right 1-3 and Left). The style part will always be recorded to track 9-16.

### Note:

Press the “Rec ACMP” button to switch accompaniment recording on.

3. Select voices for keyboard parts and select a style.

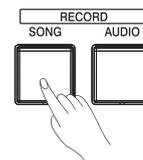
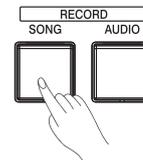
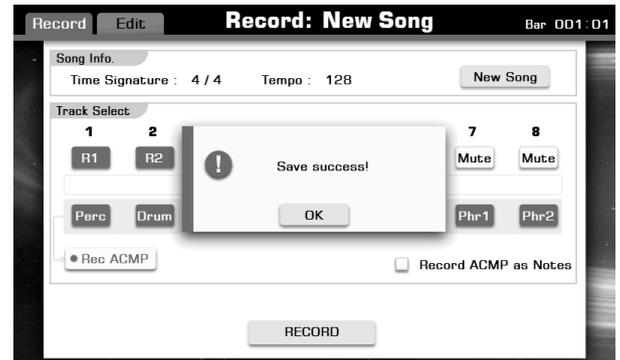
4. Press the [RECORD SONG] button or press the “RECORD” button on the Recording Display to enter recording standby mode.

5. Press the [RECORD SONG] button or press the “START” button on the Recording Display to start recording.

6. Press the [RECORD SONG] button or press the “STOP” button on the Recording Display to stop recording.

7. Press the [PLAY/STOP] button to listen to your newly recorded performance.

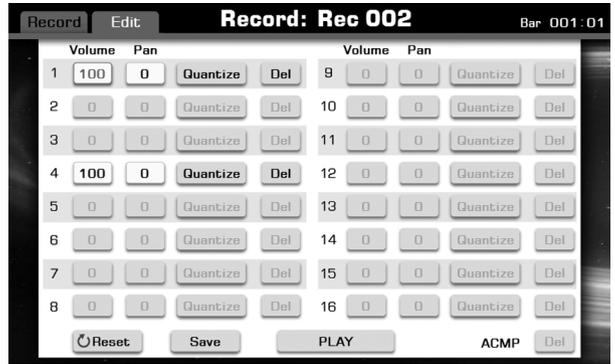
8. To record another channel, repeat steps 2-7.



# Song Recording

## Editing the Recorded MIDI Song

Press the “Edit” tab on the Recording Display or press the “Edit” button on the User Song Selection Display to call up the Song Editing Display.



Press the Volume “100” button to call up a pop-up box showing the adjustable range of volume values. Use the DATA DIAL, the [+] or the [-] button to adjust the volume.



Press the Pan “0” button to call up a pop-up box showing the adjustable range of pan values. Use the DATA DIAL, the [+] or the [-] button to adjust the pan.



Press the “Quantize” button to call up a pop-up box showing the quantize accuracy. Use the DATA DIAL, the [+] or the [-] button to adjust the parameter. Press “OK” to confirm executing quantize.



Other button operations:

Button	Description
“Del”	This deletes the relevant channel.
“PLAY”	This plays back the currently edited song before saving.
“Reset”	This resets all operations.
“Save”	This calls up a pop-up box.
“OK”	This confirms executing quantize.

## Audio Recording

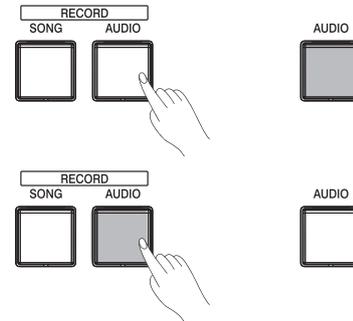
Audio recording will record your performance into a CD quality WAV file to your USB storage drive.

When Audio Recording is started, all sounds you hear from the keyboard will be recorded except for the Metronome.

1. Connect your USB storage device to the instrument. Press the [RECORD AUDIO] button to start recording your performance. The LED of [RECORD AUDIO] will light up.
2. Press the [RECORD AUDIO] button again to stop recording your performance and call up soft keyboard display. The LED of [RECORD AUDIO] will go out.
3. Enter the new name and press "OK" to save the new audio song. The recorded audio will be saved in the format of:
  - Stereo WAV
  - 16 bit per channel
  - 44.1 KHz sampling rate

### Note:

- The recorded audio file size is depending on the capacity of your USB storage device.
- When you are recording a midi song or playing a audio file from USB device, you can't start audio recording.



## Saving, Deleting or Renaming the User Song

1. Press "USER" or "USB" tab on Song Selection display to call up the relevant display for user songs.
2. Select your desired user song by pressing the relevant name of user song.
3. Press the "Menu" button to display the relevant buttons on the current display.
4. Press "SAVE TO USER" to call up soft keyboard display, enter the new name and press "OK" to save as a new user song to the internal memory.
5. Press "SAVE TO USB" to call up soft keyboard display, enter the new name and press "OK" to save as a new user song to the USB device memory.
6. Press "DELETE" to display the pop-up box, press "Yes" to delete the current user song.
7. Press "RENAME" to call up soft keyboard display, enter the new name and press "OK" to rename the current user song.

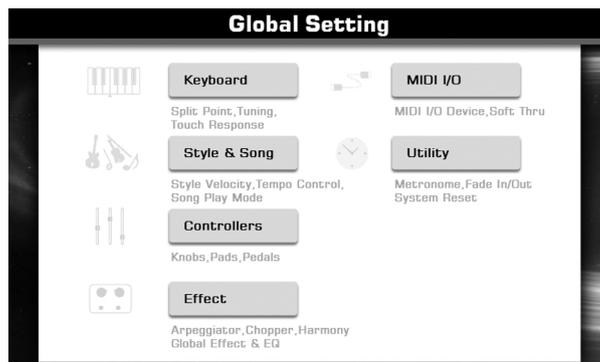


### Note:

If the new name you entered is same as the name of existed user song, a pop-up box will appear. Please press "OK" and rename the file again.

# Global Setting

In Global Setting chapter, you can individually set different part. Such as Keyboard, Style & Song, Controllers, Effect, MIDI I/O and Utility. Press the [Global Setting] button to call up the Global Setting display. The relevant button will light up.



## Keyboard

In the keyboard part also contains different detailed settings: Tune, Chord, and Other. Press the “Keyboard” button to calls up relevant display. These parameters can be set below:

### Tune

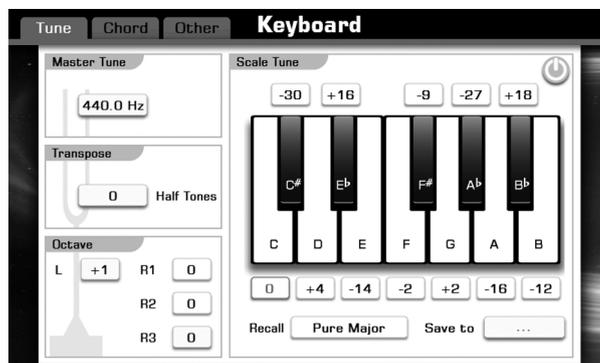
Press the “Tune” tab. You can adjust the Master Tune, Transpose, and Octave and switch Scale Tune on or off, etc. Details see **Voice-Changing Pitch**.

### Chord

Press the “Chord” tab to call up the chord setting display. You can see details from **Style-Selecting a Chord Fingering Type**.

### Other

Press the “Other” tab will call up the split and touch setting display. For more details about the split point, please refer to **Style-Split point Settings**. For more details about the touch sensitivity, please refer to **Voice-Setting the Touch Sensitivity of the Keyboard**.



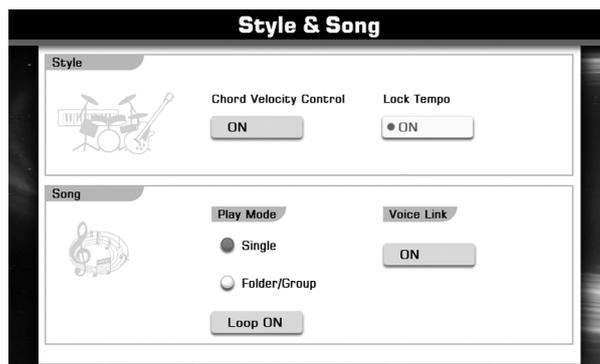
### Note:

Press the [EXIT] button back to Global Setting display.

## Style & Song

In the Style & Song part, we can further adjust the following settings:

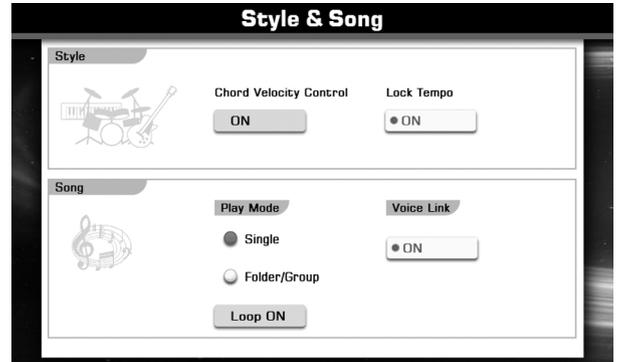
Parameter	Value	Description
<b>Style</b>		
Chord Velocity Control	ON/OFF	Press this function on; the style volume level will be affected by your playing strength in the chord section of the keyboard.
Lock Tempo	ON/OFF	Press this function on; lock tempo value without changing, even play back different style.
<b>Song</b>		
Play Mode	Single, Folder/Group	Single: Playback the current song repeatedly if you turn this function on or the playback will be stopped once the current playing song is finished. Press the [PLAY/STOP] button if you want to stop playing. Folder/Group: Play back the songs in one folder from USB device or in one group from User song in sequence repeatedly if you turn this function on. Or the playback will be stopped once all songs are finished. Press the [PLAY/STOP] button if you want to stop playing.



Parameter	Value	Description
Loop ON	ON/OFF	Switch the Single and Folder/Group function on or off.
Voice Link	ON/OFF	Set this function ON, the voice R1 will be automatically linked with preset songs, and changed with the melody of selected songs.

### Note:

Press the [EXIT] button back to Global Setting display.



## Controllers

This instrument has many useful assignable controllers: 2 knobs, 6 multi pads and 1 pedal. Lots of applied settings can be controlled in real-time.

Press the "Controllers" button to call up relevant display. These parameters can be set below:

### Knob

These knobs let you change various aspects of the sound in real time while you are playing. Turn a knob towards right to increase the value, and the left to decrease it. There are 4 groups, 3 are fixed settings, and 1 assignable setting. In Controller display, press the "Knob" tab.



Group 1	VOLUME	PAN
Group 2	ATTACK	RELEASE
Group 3	CUTOFF	RESONANCE
Group 4	ASSIGN 1	ASSIGN 2

Press the [SELECT] button to switch knob settings from Groups. The relevant panel LED will light up when you select a group setting. Touch the screen to select the knob icon or assignable parameters.

Or you can also turning the knob to select the one you want to know. If you have selected the ASSIGN knobs (Group 4), or you are trying to assign different parameters to one knob of Group 1~3, it will recognize that you are willing to assign these knob and automatically skip to Group 4 setting, following parameters you can choose for a new Group 4 setting.

Parameters are only applied to the keyboard part: Volume, Pan, Reverb level, Chorus level, Envelope, Attack, Envelope Release, Cutoff, and Resonance.

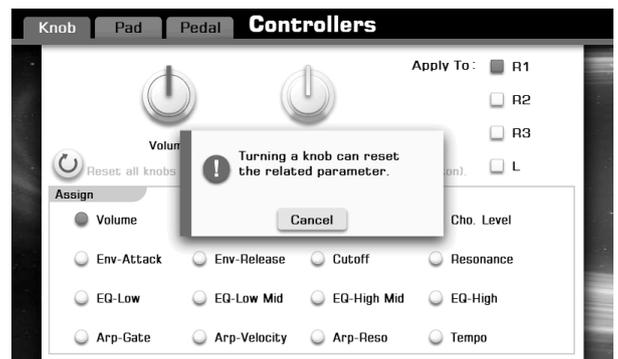
Parameters are applied to the entire system: EQ LOW, EQ LOW MID, EQ HIGH MID, EQ HIGH, ARP GAE, ARP VELOCITY, ARP RESO, and TEMPO.

How about the effect of these parameters? Details see **VOICE**.

### Reset All Knobs

Holding down the panel [SELECT] button, you will see a prompt message box, turning a knob (clockwise or anticlockwise) to reset related parameters.

Press the arrow button to reset all knob parameters.

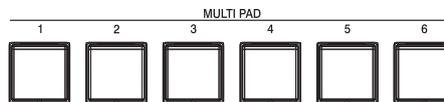


# Global Setting

## Multi Pad

The Multi Pads of the instrument can be assigned to different functions, including tempo tap and accompaniments synchronizing. They can also be used to trigger pre-recorded percussion notes or chords.

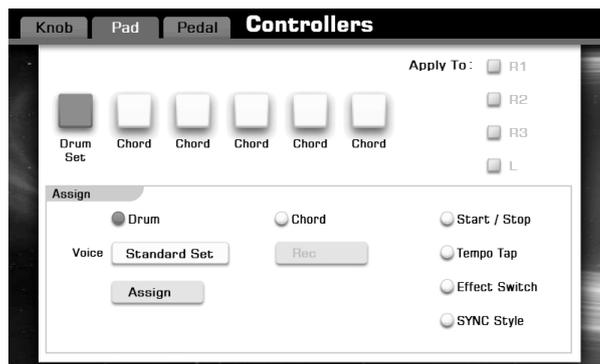
In Controller display, press the “Pad” tab. Each panel buttons are corresponding to screen buttons. Select a pad you want to edit.



### Assign PLAY DRUM function to the pad

Assign the drum set voice phrase to the pad.

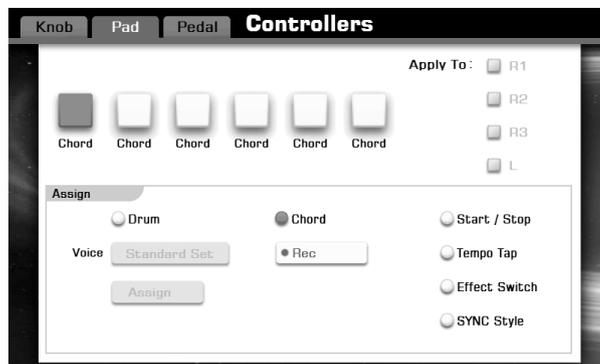
1. Firstly, select the “Drum” item.  
Press the dot form in front of “Drum” item.
2. Change a different drum set voice.  
Press the Voice “Standard Set” button to call up drum set selection display.
3. Select a drum set, and then press the “Exit” button back to the Pad display.
4. Press the panel pad button and listen.
5. If you don't satisfied with this voice, you can press the “Assign” button, and then play the key to find your desired voice from the kit you have selected.  
You can find the drum set icons corresponding to each keyboard. They can help you to find the drum set voice quickly.
6. Press “Assign” button to confirm your selection. You can repeat above procedure to other pads if necessary.
7. It's ok now, try to press panel pad to appreciate percussion playing.



### Assign PLAY CHORD function to the pad

Assign the chord phrase to the pad.

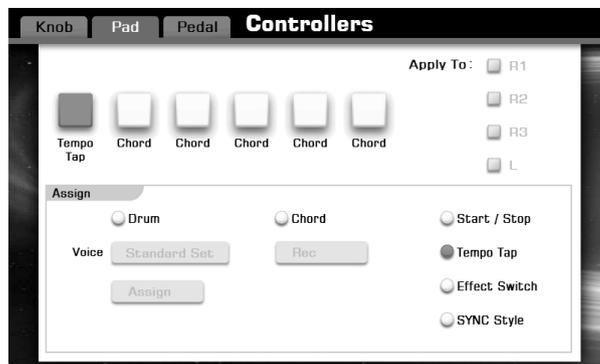
1. Firstly, select the “Chord” item.  
Press the dot form in front of “Chord” item.
2. Press “Rec” button to record new chord phrase.
3. Play notes on the keyboard.
4. Press “Rec” button again to stop recording.  
Now, press the pad to play the recorded chord.



### Assign other functions to the pad

Assign other control function to the pad.

Parameter	Description
Start / Stop	The pad can be used as a switch button to start or stop playing the current song or style.
Tempo Tap	The pad can be used as “Tempo Tap” button, press the pad four times to automatically start the song/style at that tapped speed.
Effect Switch	The pad can be used as [EFFECT ON/OFF] button, turn the special effect such as arpeggio, harmony, or chopper on or off.
SYNC Style	The pad can be used as SYNC Style function, pressing this pad while the style is playing, the style pattern will go back to the previous strong beat.
Apply To	When the effect switch is on, you can apply special effect to the keyboard parts as you like:R1, R2, R3, L.



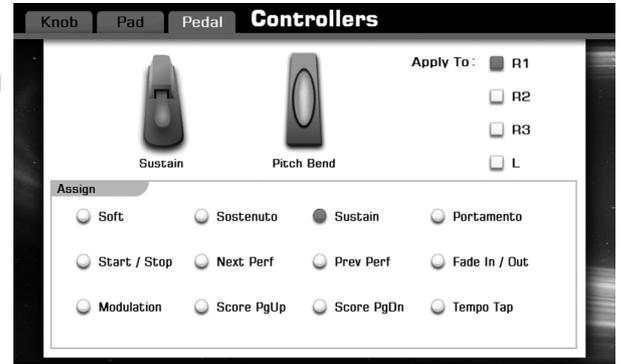
## Pedal

Pedal can be used as a switch for start/stop a style or song, or more functional control, also can be assigned as pitch bend, modulation, and tempo tap and so on. In Controller display, press the “Pedal” tab.

### Assign specific functions to the pedal

Press the pedal icon, and then select a relevant button from the following assignable parameters.

Parameter	Description
Soft	Press this pedal to reducing the volume of the notes while you are playing.
Sostenuto	Press the sostenuto pedal, the un-released notes played on the keyboard before the pedal is pressed will have a longer sustain, the notes played afterwards will note be sustained.
Sustain	The notes played on the keyboard will have a longer and realistic sustain when the pedal is pressed.
Portamento	Pressing the pedal will turns on portamento. The first note played on the keyboard will transit to the next played. Releasing the pedal will switch off portamento.
Start / Stop	Same as the [START/STOP] button. Press this pedal to start or stop Style/Song playback.
Next Perf	Press this pedal to select the next performance memory.
Prev Perf	Press this pedal to select the previous performance memory.
Fade In / Out	Same as the [FADE IN/OUT] button.
Modulation	Same as the [MODULATION] button.
Score PgUp	You can press the pedal to turn to the previous page of the score when the song playback is stopped.
Score PgDn	You can press the pedal to turn to the next page of the score when the song playback is stopped.
Tap Tempo	Press the pedal four times to automatically start the song or style at that tapped speed.



## Pitch Bend

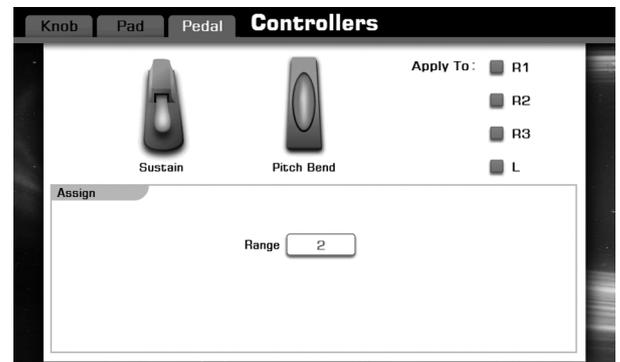
You can set the range of the pitch bend wheel here.

Parameter	Description
Range	This determines the range of the pitch change in semitones. Adjustable range: from 0 to 12.

### Note:

You can individual set those effects (such as pitch bend, modulation and so on) apply to different voice parts.

Press the [EXIT] button back to **Global Setting** display.

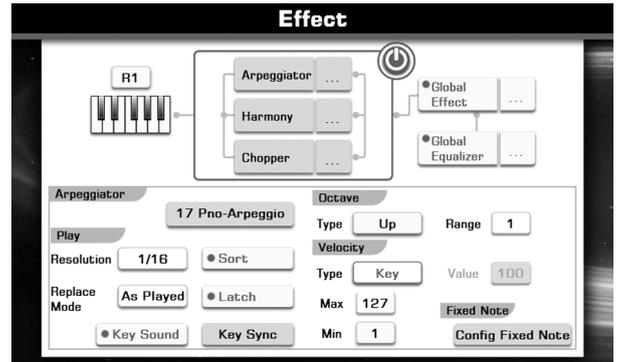


# Global Setting

## Effect

Press the “Effect” button calls up effect setting display, contains arpeggiator, chopper, harmony, global effect and global equalizer. Refer to **Voice-Adding Effects to Voices** for details.

Press the [EXIT] button back to Global Setting display.

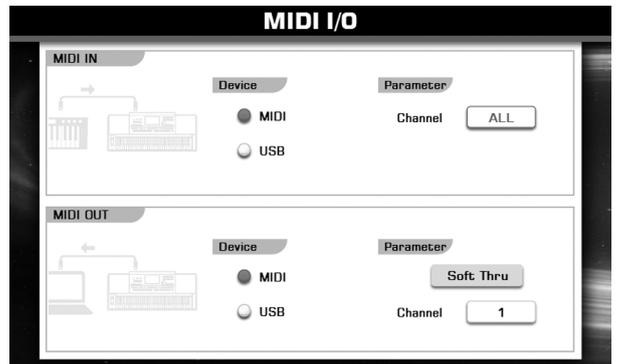


## MIDI I/O

These settings are based on the MIDI applications including MIDI IN and MIDI OUT. Press the “MIDI I/O” button to call up relevant display. These parameters can be set below:

### MIDI IN

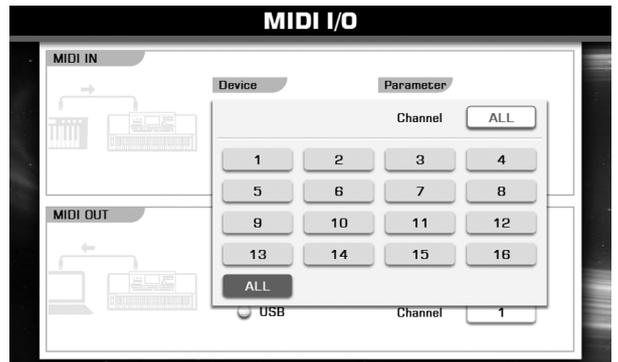
Parameter	Value	Description
Device	MIDI USB	Depends on your USB/MIDI interface, choose exactly device in need.
Channel	1~16 ALL	Only two options in this instrument. Select “ALL” to play all 16 channels or you can only select one channel (1~16) to play.



### MIDI OUT

In the MIDI OUT setting area, you can find the “Soft Thru” parameter which can transmit MIDI signal between MIDI interface and USB interface (it depends on your MIDI IN and MIDI OUT devices).

Parameter	Value	Description
Device	MIDI USB	Depends on your USB/MIDI interface, choose exactly device in need.
Channel	1~16 ALL	Just like the MIDI IN channel setting, select “ALL” to send all 16 channels out or you can only send one channel out. When the “Soft Thru” function on, the channel setting will be reset to “ALL”.
Soft Thru	ON/OFF	Set this function on. All channels which has been received and played by this instrument can be transmitted and send out to other device.



Press the [EXIT] button back to **Global Setting** display.

## Utility

This contains utility settings including Metronome, Fade In/ Out, System Reset, Data & Time, and Power. Press the “Utility” button on the Controller display.

### Metronome

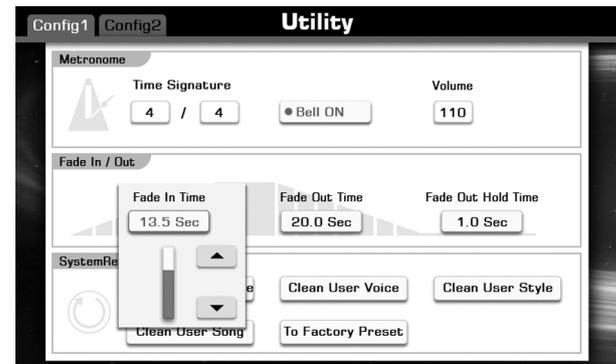
By using metronome to help keep a steady tempo as you play. Set following parameters for metronome.

Parameter	Value	Description
Time Signature	Denominator: 2,4,8,16 Numerator: 1~16	The lower numeral indicates the note value that represents one beat (the beat unit). And the upper numeral indicates how many such beats there are in a bar.
Bell ON	ON/OFF	Set this "Bell on" button to on, add a bell ring denotes a stressed beat.
Volume	0~127	Adjust the volume of the metronome.



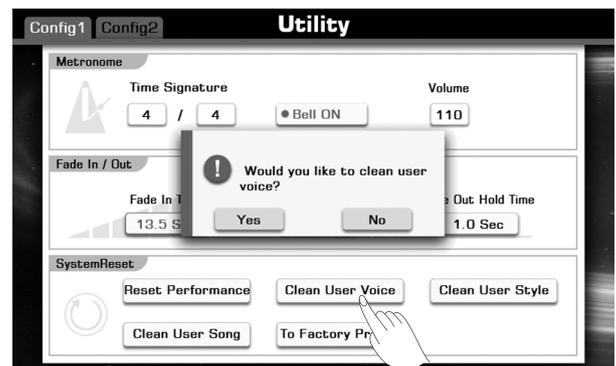
## Fade In/Out

Parameter	Value	Description
Fade In Time	0.0~20.0Sec	Set the time it takes for the volume to fade in, you can find the volume rises from minimum to maximum.
Fade Out Time	0.0~20.0Sec	Set the time it takes for the volume to fade out, you can find the volume decreases from maximum to minimum.
Fade Out Hold Time	0.0~5.0Sec	Set the time the volume is held at 0 following the fade out.



## System Reset

Parameter	Description
Reset Performance	Restores the all performance memory setting to the original factory settings.
Clean User Voice	Delete all user voices.
Clean User Style	Delete all user styles.
Clean User Song	Delete all user songs.
To Factory Reset	Restores the all data to the original factor settings (User voice, user style, user son user performance, utility setting, etc.)



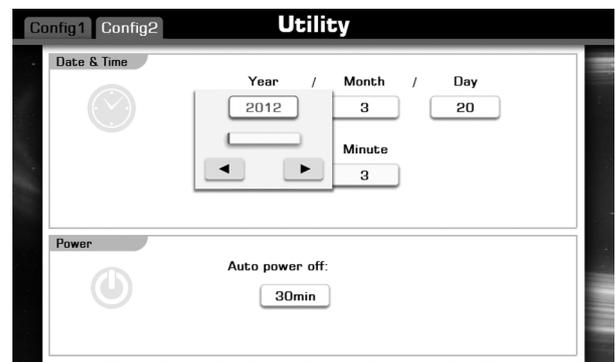
## Setting the Data and Time

### Note:

Press the "Config 2" tab to call up the relevant setting display. You can set year, month, day, hour, and minute data.

### Auto Power Off

The auto power off time can be set here. There three options: 30min, 60min and Never.



# Performance Memory

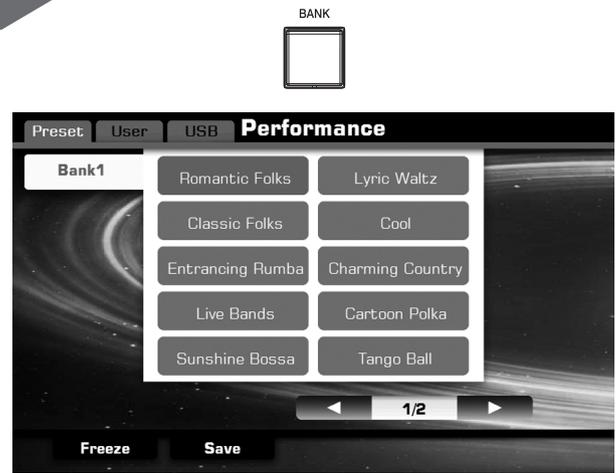
The Performance Memory feature can make your performance more easily and efficiently. It allows you to save panel settings to a Performance Memory button, and then instantly recall your custom panel settings by pressing a single button (M1-M6). The saved settings for six Memory buttons should be saved as a single Bank (Performance file).

## Selecting a Performance Bank

1. Press the [BANK] button to call up the performance selection display. Or you can tap the screen Performance area.
2. Press the screen page up/down button to select a desired performance page.
3. Press the name of performance to select a desired one.

### Note:

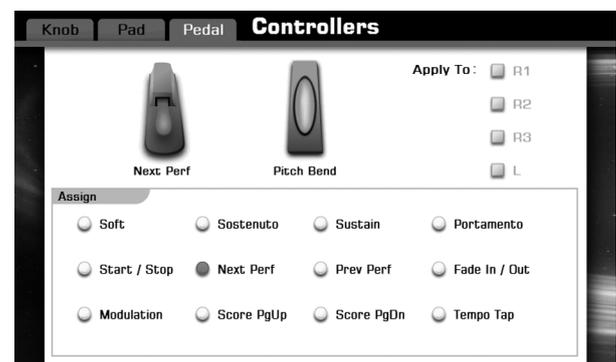
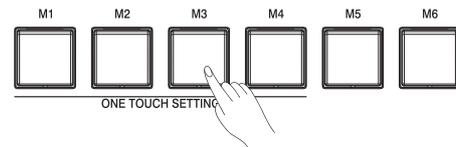
If you want to select the user performance, press the "User" to select the USER display or press the "USB" to select the USB display. You can edit the preset performance memory and save to user, or create new user performance by the GrandSuite software.



## Recalling a Performance Memory Settings

Press one of the Performance Memory buttons ([M1]-[M6]). In this example, the panel settings stored in the memory 3 of performance bank 1 are recalled. The parameters about the panel settings:

Voice	R1/R2/R3/Left Part ON/OFF R1/R2/R3/Left voice selection R1/R2/R3/Left settings (Volume/Pan/Reverb Level/Chorus Level) Pitch (Transpose/Master Tune /Octave Scale/Tune) Left Split & touch
Style	Style selection Variations Mixer settings about style Chord Split The settings about chord Control button status(SYNC, O.T.S LINK, AUTO FILL, A.B.C) Tempo and the relevant settings
Song	Song selection Play mode Mixer settings about song
Effect	Reverb & Chorus EQ Effect (Arpeggiator, Harmony, Chopper)
Controller	Knob Settings Multi Pad Settings Pedal and Pitch bend Settings
Transpose	Transpose setting
Others	Fade and Fade time settings Metronome settings



You can use a pedal to select the Performance Memory numbers in order. The pedal is assigned as Next Perf. or Prev. Perf. function.

## Freezing the Specific Item

When Freeze is switched on, the selected groups of panel parameters will maintain current setting when a Performance Memory is recalled. Press the [FREEZE ] button to turn the FREEZE function on or off.

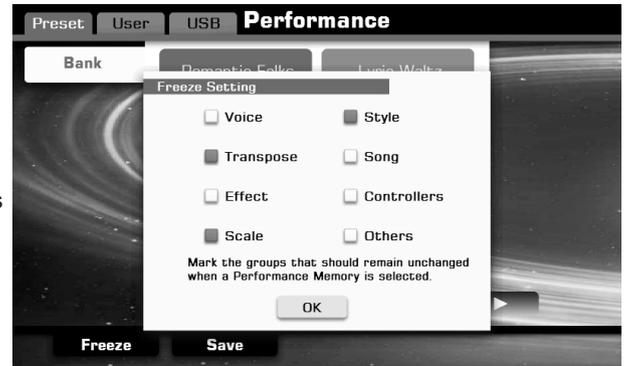


### How to select the frozen item?

1. Press the [BANK] button or press PERFORMANCE display area on the Main Display to call up the Performance Selection display.
2. Press the [FREEZE] button on the Performance Selection display to call up a pop-up box.
3. Press the relevant button to select the frozen items. The parameters about the frozen item see the above parameter form.
4. Press the "OK" button to confirm it.

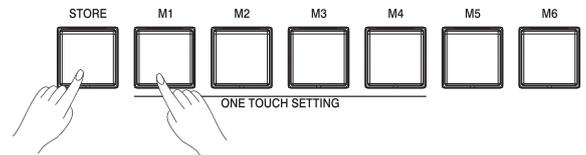
### Note:

The Settings about the FREEZE function are automatically saved to the instrument when you exit from this display. However, if you turn the power off, the settings will be lost.



## Registering the Performance Memory Settings

1. Set up the panel controls (such as Voice, Style, effect, and so on) as desired.
2. Press and hold the [STORE] button, then press one of the Performance Memory buttons ([M1]-[M6]). All panel setup will be registered to the selected Performance Memory.



### Note:

When new settings is registered to the selected Performance memory, the previously saved data of it will be replaced.

## Saving the Preset Performance

1. Press the [BANK] button or press PERFORMANCE display area on the Main Display to call up the Performance Selection display.
2. Press the [SAVE] button on the Performance Selection display to call up a pop-up box.
3. Press the relevant button to select saving to User or saving to USB.
4. Press the [OK] button to call up soft keyboard display, enter the new name and press "OK" to save as a new user performance to the internal memory or USB device.



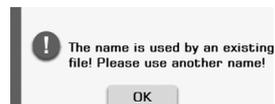
# Performance Memory

## Saving, Deleting or Renaming the User Performance

1. Press "USER" or "USB" tab on Performance Selection display to call up the relevant display for user Performances.
2. Select your desired user performance by pressing the relevant name of user performance.
3. Press the "Menu" button to display the relevant buttons on the current display.
4. Press "SAVE TO USER" to call up soft keyboard display, enter the new name and press "OK" to save as a new user performance to the internal memory.
5. Press "SAVE TO USB" to display a pop-up box, you can save a single performance file(\*.prf) or save a packing performance file(\*.tpf) to the USB device memory. Press "OK" button to call up soft keyboard display, enter the new name and press "OK" to save it.
6. Press "DELETE" to display the pop-up box, press "Yes" to delete the current user performance.
7. Press "RENAME" to call up soft keyboard display, enter the new name and press "OK" to rename the current user performance.

### Note:

If the new name you entered is same as the name of existed user performance, a pop-up box will appear. Please press "OK" and rename the file again.



By connecting a USB storage device to your instrument, you can save data you've created to the connected device, as well as read data from the connected device.

## Compatible USB device

Recommended Brand: KINGSTON, SANDISK, SONY, LEXAR, TRANSCEND

Format: FAT 16/32

Capacity: 1G,2G,4G,8G,16G,32G

## Using the USB device

1. Connect the USB storage device to the USB port.
2. Press the [USB DEVICE] button to display the folders and files under the root directory of USB device.

Press the USB tab on each selection display (such as voice, style, song, performance), enter the relevant folder directly, and save, rename or delete the user files from USB device.



## Note

If you save your files to your USB storage device in file selection displays (like VOICE Selection or Song Selection), the files would be saved into folder "PianoUser" in the root directory of your USB storage device.

## File Operations in the File Selection Display

### Caution:

While the instrument is accessing data (like during the Save, Copy and Delete operations), do not unplug the USB device, and do not turn off the instrument power. Doing so may corrupt the data on either or both devices.

## Executing a file

Press the "Execute" button to executing the operation for the selected file.

File Format	Executing Operation
Voice	Select the voice file for the current part
Style	Same as [START/STOP] button
Song (midi file)	Same as [PLAY/STOP] button
Audio file	Same as [PLAY/STOP] button
Performance(*.tpf)	Save to internal user performance memory

## Saving a file

Press the "Save to User" button to save the selected file to internal user memory.

### Note:

Storage path depends on the file type.

Press the "Save to USB" button to save the selected file to external USB device.

## Deleting a file

Press the "Delete" button to call up a pop-up box.

Press the "OK" button to delete the selected file.

## Renaming a file

Press the "Menu" button to display the relevant buttons on the current display.

Press "RENAME" to call up soft keyboard display, enter the new name and press "OK" to rename the selected file.

### Note:

If the new name you entered is same as the name of existed user voice, a pop-up box will appear. Please press "OK" and rename the file again.

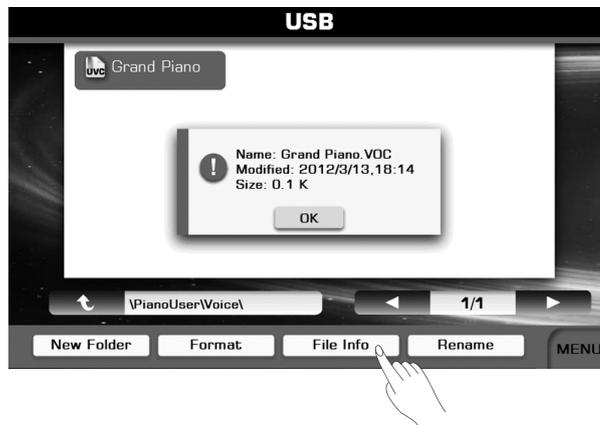


# USB Device

## Viewing the file information

Press the "Menu" button to display the relevant buttons on the current display.

Press "File Info" to call up a pop-up box about the file information (EX. Full name, size, etc.).

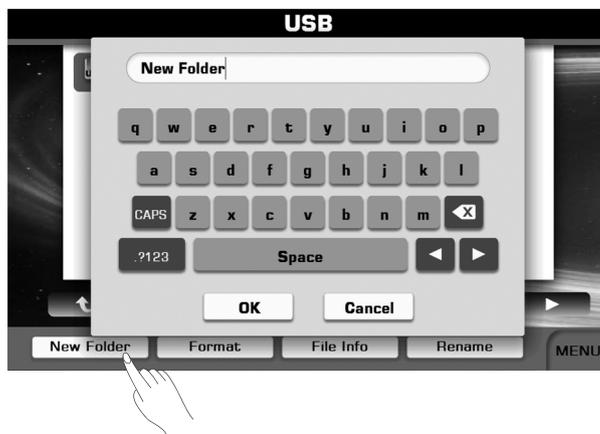


## Creating a New Folder

Press the "Menu" button to display the relevant buttons on the current display.

Press "Folder" to call up soft keyboard display, enter the new folder name and press "OK" to create it.

If the name you entered is same as the name of existed folder, a pop-up box will appear.



## Formatting the USB Device

It is better to use the USB Storage Device which is formatted by the instrument.

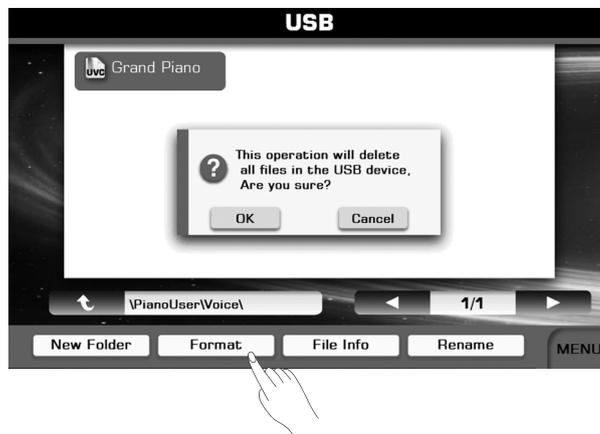
### Note:

The format operation overwrites any previously existing data. Proceed with caution.

Press the "Menu" button to display the relevant buttons on the current display.

Press "Format" to call up a pop-up box.

Press the "OK" button to format the connected USB device.



By using the MIDI functions you can expand your musical possibilities. This section explains what MIDI is, and what it can do, as well as how you can use MIDI on your instrument.

## What's MIDI?

MIDI (short for Musical Instrument Digital Interface) allows a wide variety of electronic musical instruments, computers and other related devices to connect and communicate with one another. MIDI carries event messages that specify notation, pitch and velocity, control signals for parameters such as volume, vibrato, audio panning, and program change information to change the voice selections.

The instrument can output the real-time playback information via MIDI and control external MIDI devices. The instrument can also accept incoming MIDI messages and generate sound accordingly.

## MIDI Terminals

In order to exchange MIDI data between multiple devices, each device must be connected by a cable.

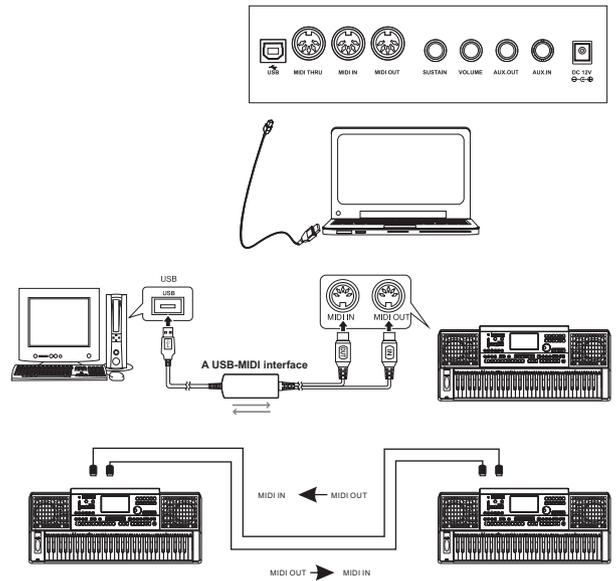
**MIDI IN:** Receives MIDI data from a computer.

**MIDI OUT:** Transmits the instrument information as MIDI data to another MIDI device.

**MIDI THRU PORT:** You can use MIDI cable to link the MIDI THRU port to other MIDI instrument MIDI IN port. The message that the MIDI IN port receives will be auto sent to the MIDI THRU port, so that one MIDI instrument can control many MIDI instrument at the same time.

Connect the MIDI OUT of other Device to the MIDI IN jack on the rear panel, this instrument will as sound module.

Connect the MIDI IN of other Device to the MIDI OUT jack on the rear panel. this instrument will as Midi Controller.



# Troubleshooting

Problem	Possible Cause and Solution
The speakers produce a “pop” sound whenever the power is turned ON or OFF.	This is normal and is no cause for alarm.
No sound when the keyboard is played.	The R1/R2/R3/L voice volume (Mixer) settings could be set too low. Make sure the voice volumes are set at appropriate levels.
When using a mobile phone, noise is produced.	Using a mobile phone in close proximity to the instrument may produce interference. To prevent this, turn off the mobile phone or use it further away from the instrument.
The auto accompaniment does not play back even Sync is in standby condition and a key is pressed.	You may be trying to start accompaniment by playing a key in the right-hand range of the keyboard. To start the accompaniment with Sync Start, make sure to play a key in the left-hand range of the keyboard.
Certain notes sound at wrong pitch.	Make sure that the Master Tune is set to “440.1hz” and turn off the Scale Tune.
The Harmony function does not operate.	Harmony cannot be turned on when the Full Keyboard fingering mode is selected. And Harmony cannot be turned on when a drum kit is selected for the voice R1.

## Specification

### Keyboard

61 Keys with touch response

### Display

7" TFT, 800 x 480 color touch screen

### Polyphony

128

### Voice

more than 1370 sounds and over 75 Drumkits

### Effect

Reverb, Chorus, Master EQ, Arpeggio, Harmony, Chopper

### Style

more than 370 expanded with free software updates

### Style Control

STYLE SELECT, START/STOP, SYNC STOP, SYNC START, INTRO 1, INTRO 2, MAIN A, MAIN B, MAIN C, MAIN D, ENDING 1, ENDING 2, A.B.C., AUTO FILL IN, O.T.S. LINK, FADE IN/OUT

### Song

90 Preset Songs

### Song Control

SONG SELECT, PLAY/STOP, PAUSE, RW, FF

### SCORE

Display the Music Notation

### Record

MIDI Recorder and USB Audio Recorder

### Demo

2

### Tempo

30-280, Tap Tempo

**Performance Memory** unlimited(BANK)\*6(M1-M6), FREEZE, STORE

### Multi Pad

6

### Other Control

MASTER VOLUME SLIDER, SELECT, 2 KNOBS, EFFECT ON/OFF, GLOBAL SETTING, MIXER, VOICE DIRECT BUTTONS, DATA DIAL, +, -, PART ON/OFF BUTTONS, EXIT, SUSTAIN, TRANSPOSE+, TRANSPOSE-, OCTAVE+, OCTAVE-, O.T.S., MODULATION, PITCH BEND, MASTER TUNE, SCALE TUNE, METRONOME

### USB Device

Save the user data (Ex: User voices, User Song, User Memory, etc.)  
Play the User Song (Format: SMF/WAV/MP3/WMA)

### Connectors

DC IN, Headphones, AUX. IN, AUX. OUT, Sustain Pedal, Volume Pedal, USB, MIDI IN, MIDI OUT, MIDI THRU, USB PORT.

### Power Supply

DC 12V

### Speaker

15W+15W, 25W+25W

### Dimensions

970(W)X390(D)X160(H)mm

### Weight

9Kg

\* All specifications and appearances are subject to change without notice.

# Style List

No.	Full Name	LCD Name
<b>8Beat &amp; 16Beat</b>		
1	8Beat Ballad	8Beat Ballad
2	8Beat Piano	8Beat Piano
3	8Beat 1	8Beat 1
4	Guitar Pop 1	Guitar Pop 1
5	8Beat Hip Hop	8Beat Hip Hop
6	8Beat Blues Rock	8Beat Blues Rock
7	8Beat Pop	8Beat Pop
8	Pop Funk 1	Pop Funk 1
9	Rhythm&Beat 1	Rhythm&Beat 1
10	8Beat Disco 1	8Beat Disco 1
11	8Beat Rock	8Beat Rock
12	Guitar Pop 2	Guitar Pop 2
13	8Beat 2	8Beat 2
14	Sweet Beat	Sweet Beat
15	8Beat Dance	8Beat Dance
16	8Beat Disco 2	8Beat Disco 2
17	Pop Funk 2	Pop Funk 2
18	8Beat 3	8Beat 3
19	60's 8Beat	60's 8Beat
20	Rhythm&Beat 2	Rhythm&Beat 2
21	16Beat 1	16Beat 1
22	16Beat Funk 1	16Beat Funk 1
23	16Beat Ballad 1	16Beat Ballad 1
24	16Beat R&B	16Beat R&B
25	Pop 16Beat 1	Pop 16Beat 1
26	16Beat Funk 2	16Beat Funk 2
27	16Beat Dance	16Beat Dance
28	Pop 16Beat 2	Pop 16Beat 2
29	16Beat 2	16Beat 2
30	Pop 16Beat 3	Pop 16Beat 3
31	Pop 16Beat 4	Pop 16Beat 4
32	Modern 16Beat	Modern 16Beat
33	16Beat Hot	16Beat Hot
34	16Beat Modern	16Beat Modern
35	16Beat Funk 3	16Beat Funk 3
36	16Beat 3	16Beat 3
37	Cool Beat	Cool Beat
38	16Beat Ballad 2	16Beat Ballad 2
39	16Beat 4	16Beat 4
40	Pop Shuffle	Pop Shuffle
<b>Pop &amp; Ballad</b>		
41	Pop Rock 1	Pop Rock 1
42	Pop Dance 1	Pop Dance 1
43	Pop Fusion	Pop Fusion
44	Analog Night 1	Analog Night 1
45	6/8 Pop	6/8 Pop
46	Brit. Pop 1	Brit. Pop 1
47	Brit. Pop 2	Brit. Pop 2
48	Pop Hit	Pop Hit
49	Fusion Shuffle	Fusion Shuffle
50	Analog Night 2	Analog Night 2
51	Guitar Pop 3	Guitar Pop 3
52	Pop Beat	Pop Beat
53	Soft Beat	Soft Beat
54	60's Pop	60's Pop
55	Sting Latin	Sting Latin

56	R&B Ballad 1	R&B Ballad 1
57	Guitar Ballad	Guitar Ballad
58	Ballad Rock	Ballad Rock
59	Piano Pop 1	Piano Pop 1
60	Soft Ballad	Soft Ballad
61	Natural Ballad	Natural Ballad
62	Love Ballad	Love Ballad
63	Easy Ballad	Easy Ballad
64	Miami Folk	Miami Folk
65	Slow Ballad	Slow Ballad
66	Folk Ballad	Folk Ballad
67	Pop Ballad 1	Pop Ballad 1
68	Pop Ballad 2	Pop Ballad 2
69	EP Ballad	EP Ballad
70	New R&B Ballad	New R&B Ballad
<b>Rock</b>		
71	Rock	Rock
72	New Wave	New Wave
73	Ska	Ska
74	Pop Rock 2	Pop Rock 2
75	Slow Rock	Slow Rock
76	70's Rock&Roll	70's Rock&Roll
77	Folk Rock	Folk Rock
78	Soft Rock	Soft Rock
79	Old Rock	Old Rock
80	Easy Rock	Easy Rock
81	New Shuffle	New Shuffle
82	Rock Hip Hop	Rock Hip Hop
83	Rock&Roll 1	Rock&Roll 1
84	Rock Shuffle	Rock Shuffle
85	Rock&Roll 2	Rock&Roll 2
<b>Ballroom</b>		
86	Tango 1	Tango 1
87	Spain Matador	Spain Matador
88	Twist 1	Twist 1
89	Twist 2	Twist 2
90	Big Band Fox	Big Band Fox
91	Tango 2	Tango 2
92	Slow Fox	Slow Fox
93	Slow Waltz 1	Slow Waltz 1
94	Swing Fox	Swing Fox
95	Salsa 1	Salsa 1
96	Cha Cha 1	Cha Cha 1
97	Cha Cha 2	Cha Cha 2
98	Beguine 1	Beguine 1
99	Beguine 2	Beguine 2
100	Rumba 1	Rumba 1
101	Samba 1	Samba 1
102	Samba 2	Samba 2
103	Jive	Jive
104	Fox Trot	Fox Trot
<b>Dance</b>		
105	Techno 1	Techno 1
106	Hip Hop 1	Hip Hop 1
107	House 1	House 1
108	House 2	House 2
109	Pop Dance 2	Pop Dance 2
110	Down Beat	Down Beat

111	Techno 2	Techno 2
112	Progressive	Progressive
113	Rap 1	Rap 1
114	Rap 2	Rap 2
115	Disco	Disco
116	Soft Disco	Soft Disco
117	Disco Party	Disco Party
118	70's Disco	70's Disco
119	70's Disco Funk	70's Disco Funk
120	Club Dance	Club Dance
121	Euro Dance	Euro Dance
122	Hip Hop 2	Hip Hop 2
123	Garage	Garage
<b>Soul &amp; Funk</b>		
124	Funk 1	Funk 1
125	Classic Funk	Classic Funk
126	Jay R&B	Jay R&B
127	Gospel Swing	Gospel Swing
128	Gospel	Gospel
129	Funk 2	Funk 2
130	Electric Funk	Electric Funk
131	Groove Funk	Groove Funk
132	Rubber Funk	Rubber Funk
133	Cool Funky	Cool Funky
134	Jazz Funk	Jazz Funk
135	Groove	Groove
136	Soul	Soul
137	Hip Hop Soul	Hip Hop Soul
138	Hip Hop Beat	Hip Hop Beat
139	R&B	R&B
140	Soul Beat	Soul Beat
141	R&B Ballad 2	R&B Ballad 2
142	British Soul Pop	British Soul Pop
<b>Swing &amp; Jazz</b>		
143	Latin Jazz 1	Latin Jazz 1
144	Big Band	Big Band
145	Dixieland 1	Dixieland 1
146	Guitar Swing 1	Guitar Swing 1
147	Broadway Big Band	Broadway B.Band
148	Swing	Swing
149	Latin Jazz 2	Latin Jazz 2
150	Fusion	Fusion
151	Acid Jazz	Acid Jazz
152	Cool Jazz Ballad	Cool Jazz Ballad
153	Swing Shuffle	Swing Shuffle
154	Big Band Medium	Big Band Medium
155	Dixieland 2	Dixieland 2
156	Acoustic Jazz	Acoustic Jazz
157	Guitar Swing 2	Guitar Swing 2
158	Ragtime	Ragtime
159	Modern Jazz Ballad	Modern Jazz Ballad
160	Swing Ballad	Swing Ballad
161	Orchestra Swing	Orchestra Swing
<b>Country</b>		
162	Country Pop 1	Country Pop 1
163	Bluegrass 1	Bluegrass 1
164	8Beat Country	8Beat Country
165	Modern Country	Modern Country

# Style List

166	Country Pop 2	Country Pop 2
167	Bluegrass 2	Bluegrass 2
168	2/4 Country	2/4 Country
169	Country Quick Steps	Country QuickStp
170	Country Folk	Country Folk
171	Country Shuffle	Country Shuffle
<b>Latin &amp; Latin Dance</b>		
172	Samba 3	Samba 3
173	Bossa Nova	Bossa Nova
174	Latin	Latin
175	New Reggae	New Reggae
176	Reggae Dance	Reggae Dance
177	Paso Doble	Paso Doble
178	Lite Bossa	Lite Bossa
179	Latin Rock	Latin Rock
180	Beguine 3	Beguine 3
181	Slow Bolero	Slow Bolero
182	Disco Samba	Disco Samba
183	Mambo	Mambo
184	Meneito	Meneito
185	Rumba 2	Rumba 2
186	Rumba 3	Rumba 3
187	Tikitikita	Tikitikita
188	Lambada	Lambada
189	Pop Cha Cha 1	Pop Cha Cha 1
190	Pop Cha Cha 2	Pop Cha Cha 2
191	Salsa 2	Salsa 2
<b>Waltz &amp; Traditional</b>		
192	Waltz	Waltz
193	Old Waltz	Old Waltz
194	English Waltz	English Waltz
195	German Waltz	German Waltz
196	Italian Mazurka	Italian Mazurka
197	Mexico Waltz	Mexico Waltz
198	Vienna Waltz	Vienna Waltz
199	Slow Waltz 2	Slow Waltz 2
200	Jazz Waltz	Jazz Waltz
201	Polka	Polka
202	6/8 March	6/8 March
203	German Polka	German Polka
204	Party Polka	Party Polka
205	Army March	Army March
206	March	March
207	US March	US March
208	Musette	Musette
209	French Musette	French Musette
210	Mazurka	Mazurka
<b>World</b>		
211	Enka Ballad	Enka Ballad
212	Laendler	Laendler
213	Hawaiian	Hawaiian
214	Sirtake	Sirtake
215	Dangdut	Dangdut
216	6/8 Flipper	6/8 Flipper
217	New Age	New Age
218	Tarantella	Tarantella

219	Scottish	Scottish
220	Norteno	Norteno
<b>Pianist</b>		
221	Pianist 1	Pianist 1
222	Pianist 2	Pianist 2
223	Pianist 3	Pianist 3
224	Jazz 1	Jazz 1
225	Jazz 2	Jazz 2
226	Jazz Pub	Jazz Pub
227	Piano Rock	Piano Rock
228	Pop Bossa	Pop Bossa
229	March 1	March 1
230	March 2	March 2
231	Piano Beat	Piano Beat
232	Piano Bar	Piano Bar
233	Blues	Blues
234	Pop Waltz	Pop Waltz
235	Slow Waltz	Slow Waltz
236	Ballad 1	Ballad 1
237	Ballad 2	Ballad 2
238	6/8 Ballad	6/8 Ballad
239	Pop 1	Pop 1
240	Pop 2	Pop 2

more Styles inside the instrument with free software updates  
in the moment more than 370 styles included

# Song List

No.	Full Name	LCD Name
<b>Folk &amp; Country</b>		
1	Red River Valley	Red River Valley
2	Troika	Troika
3	Oh! Susanna!	Oh! Susanna!
4	Wave Of The Danube	Wave of Danube
5	Long Long Ago	Long Long Ago
6	Old Folks at Home	Old Folks at Home
7	Jambalaya	Jambalaya
8	Ding! Dong! Merrily On High	Ding! Dong!
9	Battle Hymn Of The Republic	Battle Hymn
10	The Old Gray Mare	The Old Gray Mare
11	American Patrol	American Patrol
12	Christmas Is Coming	Christmas Coming
13	Sippin' Cider Through A Straw	Sipping Cider
14	Christmas Sound	Christmas Sound
15	On London Bridge	On London Bridge
<b>Golden &amp; POP</b>		
16	House Of The Rising Sun	House of Rising
17	The Blue Bells Of Scotland	The Blue Bells
18	Beautiful Dreamer	Beautiful Dreamer
19	It's Been A Long, Long Time	Been a Long Time
20	O Sole Mio	O Sole Mio
21	Der Deitcher's Dog	Der Deitcher's Dog
22	Joy To The World	Joy to the World
23	Silent Night	Silent Night
24	Ave Maria	Ave Maria
25	Five Hundred Miles	Five Hundred Mil
26	Happy New Year	Happy New Year
27	It's Beginning To Look A Lot Like Christmas	Like Christmas
28	Jeanie With The Light Brown Hair	Jeanie
29	Music Box Dancer	Music Box Dancer
30	Go Tell It On The Mountain	Tell It on Mountain
31	Entertainer	Entertainer
32	Annie Laurie	Annie Laurie
33	Rumba Romance	Rumba Romance
34	The Last Rose Of Summer	Rose of Summer
35	The Old King Cole	The Old King Cole
<b>Jazz &amp; Fusion</b>		
36	Samba In June	Samba In June
37	Funk	Funk
38	I Can...	I Can...
39	Sea Shore	Sea Shore
40	Guitar&Saxphone	Guitar&Saxphone
41	The Hip Hop's Night	HipHop's Night
42	Blue Lunch	Blue Lunch
43	Cobweb	Cobweb
44	Wine	Wine
45	Jazz Old Man	Jazz Old Man
46	Dark Eyes	Dark Eyes
47	Carlos	Carlos
48	Sad	Sad
49	The Jazz	The Jazz

<b>Piano</b>		
50	Fur Elise	Fur Elise
51	Prelude In C-Sharp Major	Prelude
52	Innocence	Innocence
53	The Happy Farmer	The Happy Farmer
54	L' Arabesque	L' Arabesque
55	Minuet In G Major (BWV Anh. 116)	Minuet in G 1
56	Austria Variation	Austria Variation
57	Schos Doll's Dance No. 7	Doll's Dance No. 7
58	The Rag-Time Dance	Rag-Time Dance
59	2-Part Invention In A Minor	Invention A 2 Voix
60	Minuet In G Major (BWV Anh. 114)	Minuet in G 2
61	Turkish March	Turkish March
62	Schos Doll's Dance No. 2	Doll's Dance No. 2
63	Italian Polka	Italian Polka
64	Musette In D Major	Musette in D
65	Bourree	Bourree
66	Piano Sonata In C Major, K.330. III	Sonata K.330. III
67	To A Wild Rose	To A Wild Rose
68	Away In A Manger	Away In A Manger
69	Gavotte I	Gavotte I
70	Angels We Have Heard On High	Angels We Heard
71	Waltz	Waltz
72	Did You Ever See A Lassie	Did You See Lassie
73	Chopsticks	Chopsticks
74	Four Swans' Dance	Four Swans' Dance
75	Old French Song	Old French Song
76	Inquietude	Inquietude
77	La Pastorale	La Pastorale
78	Santa Claus Is Coming To Town	Santa is Coming
79	Wilder Reiter	Wilder Reiter
80	Rialto Ripples (Rag)	Rialto Ripples
81	Mazurka	Mazurka
82	Tchaikovsky Waltz	Tchaikovsky Waltz
83	Salut d' Amour	Salut d' Amour
84	Gavotte	Gavotte
85	Neapolitan Song	Neapolitan Song
86	Minuet In D Major	Minuet in D
87	Prelude In E Major	Prelude in E
88	Barcarolle	Barcarole
89	Piano Sonata In A Major, K.331. I	Sonata K.331.I
90	Waltz For Piano In G-Sharp Minor	Waltz in G-Sharp

## Demo List

No.	Full Name	LCD Name
1	Demo1	Demo1
2	Demo2	Demo2

# Chord List

Chord Name	Abbreviation	Normal Voicing	Display for Root "C"
Major	M	1+3+5	C
Sixth	6	1+(3)+5+6	C6
Major seventh	M7	1+3+(5)+7	Cm7
Major seventh add sharp eleventh	M7(#11)	1+(2)+3+#4+5+7	CM7(#11)
Add ninth	(9)	1+2+3+5	C(9)
Major seventh ninth	M7(9)	1+2+3+(5)+7	CM7(9)
Sixth ninth	6(9)	1+2+3+(5)+6	C6(9)
Augmented	aug	1+3+#5	Caug
Seventh augmented	7aug	1+3+#5+b7	C7aug
Major seventh augmented	M7aug	1+(3)+#5+7	CM7aug
Minor	m	1+b3+5	Cm
Minor sixth	m6	1+b3+5+6	Cm6
Minor seventh	m7	1+b3+(5)+b7	Cm7
Minor seventh flatted fifth	m7b5	1+b3+b5+b7	Cm7b5
Minor add ninth	m(9)	1+2+b3+5	Cm(9)
Minor seventh ninth	m7(9)	1+2+b3+(5)+b7	Cm7(9)
Minor seventh eleventh	m7(11)	1+(2)+b3+4+5+(b7)	Cm7(11)
Minor major seventh	mM7	1+b3+(5)+7	CmM7
Minor major seventh ninth	mM7(9)	1+2+b3+(5)+7	CmM7(9)
Diminished	dim	1+b3+b5	Cdim
Diminished seventh	dim7	1+b3+b5+6	Cdim7
Seventh	7	1+3+(5)+b7	C7
Seventh suspended fourth	7sus4	1+4+5+b7	C7sus4
Seventh ninth	7(9)	1+2+3+(5)+b7	C7(9)
Seventh add sharp eleventh	7(#11)	1+(2)+3+#4+5+b7	C7(#11)
Seventh add thirteenth	7(13)	1+ 3+(5)+6+b7	C7(13)
Seventh flatted fifth	7b5	1+3+b5+b7	C7b5
Seventh flatted ninth	7(b9)	1+b2+3+(5)+b7	C7(b9)
Seventh add flatted thirteenth	7(b13)	1+3+5+b6+b7	C7(b13)
Seventh sharp ninth	7(#9)	1+#2+3+(5)+b7	C7(#9)
Suspended fourth	sus4	1+4+5	Csus4
One plus two plus five	sus2	1+2+5	C/Csus2

# MIDI Implementation List

Function		Transmitted	Recognized	Remarks
Basic	Default	1ch	ALL	
Channel	Changed	1-16ch	1-16ch	
Mode	Default	x	3	
	Messages	x	x	
	Altered	*****	x	
Note	Note	0—127	0—127	
Number	:True voice	*****	0—127	
Velocity	Note on	o 9nH,V=1-127	o 9nH,V=1-127	
	Note off	x (9nH,V=0)	o(9nH,V=0; 8nH,V=0-127)	
After	key's	x	x	
Touch	Ch's	x	x	
Pitch Bend		o	o	
Control	0	o	o	Bank Select
Change	1	o	o	Modulation
	5	o	o	Portamento Time
	6	o	o	Data Entry
	7	o	o	Volume
	10	o	o	Pan
	11	o	o	Expression
	64	o	o	Sustain Pedal
	65	o	o	Portamento ON/OFF
	66	o	o	Sostenuto Pedal
	67	o	o	Soft Pedal
	80	x	o	Reverb Program
	81	x	o	Chorus Program
	91	o	o	Reverb Level
	93	o	o	Chorus Level
	120	x	o	All Sound Off
	121	x	o	Reset All Controllers
	123	o	o	All Notes Off
Program		o	o	
Change	:true	*****	0—127	
System Exclusive		o	o	
System	:SongPosition	x	x	
Common	:Song Select	x	x	
	:Tune	x	x	
System	:Clock	o	x	
Real Time	:Commands	o *1	x	
Aux	:LOCAL ON/OFF	x	x	
	:All Notes Off	o	o	
Messages	:Active sense	x	o	
	:Reset	x	o	
Notes: *1 When the accompaniment is started, an FAH message is transmitted. When accompaniment is stopped, an FCH message is transmitted.				

- Mode 1: OMNI ON, POLY
- Mode 2: OMNI ON, MONO

- Mode 3: OMNI OFF, POLY
- Mode 4: OMNI OFF, MONO

- o: YES
- x: NO

