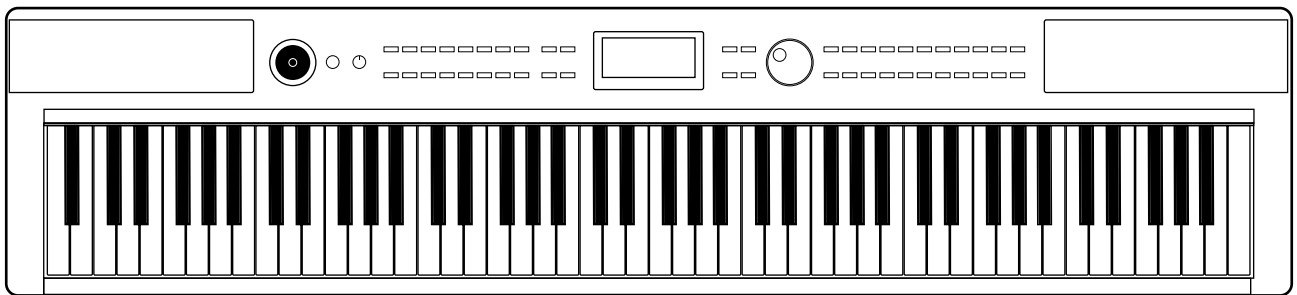


MEDELI



SP-A500

SLIM PIANO
OWNER'S MANUAL

Important Messages

Please read this page carefully before operating and keep this manual properly for convenient reference in the future.

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 this product may be subject to strong electromagnetic interference. Should the circumstances arise, please follow the relevant instructions in this manual to restore the product to its default settings. Otherwise, try moving the product to another location.

PACKING LIST

Dear customer, please double-check the following items upon receiving the package:

- The instrument
- Power adapter
- Music stand
- Owner's manual
- Warranty

Power supply

Please connect the power adapter provided in the package to a power socket with the correct voltage. DO NOT connect to power sources with unmatched voltages. Unplug this device during thunderstorms or when the device is not in active use.

Connections

Power off all devices before making connections. This will effectively prevent potential malfunctioning & damage.

Precautions

To avoid deformation, discoloration or other more serious damages, DO NOT place this instrument in:

- direct sunlight
- extremely hot environments or too close to a heat source (such as a heater)
- severe cold such as snowy and icy outdoors
- dusty environments, or places with high temperatures, high humidity, or unstable locations where strong vibrations or displacements may occur
- proximity of strong electromagnetic fields

Interference

To avoid unwanted interference, please keep this instrument at a proper distance from televisions, radios, and cell phones.

Maintenance

Use only soft, dry cloth for cleaning. DO NOT use thinners, solvents, detergents, or wipes soaked with chemicals. DO NOT apply excessive force when handling switches & knobs.

This instrument is safe for use in tropical climates with a maximum operating temperature of 45°C.

The maximum operating altitude is determined by the selected model of the power adapter.

Handling

Please avoid getting scraps of paper, metal, or other materials inside this instrument. If this happens, unplug this unit and have it checked by a qualified maintenance personnel.

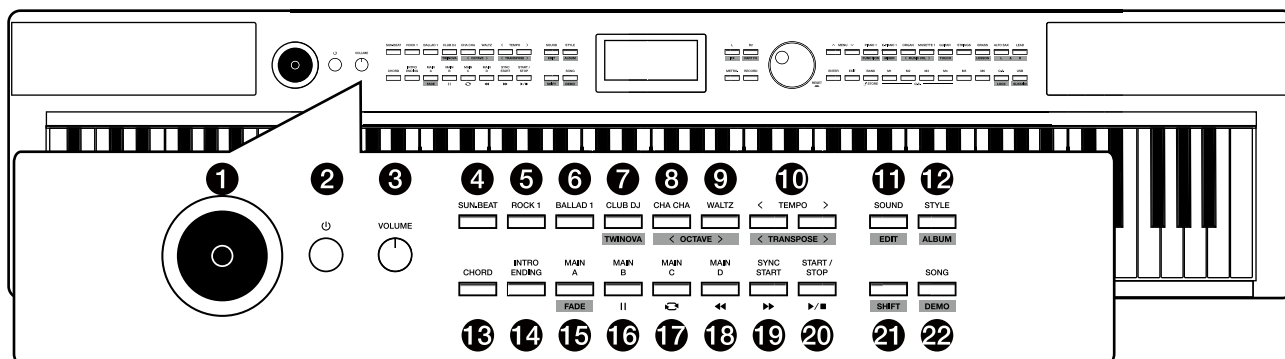
Also, unplug this unit before moving it to another location.

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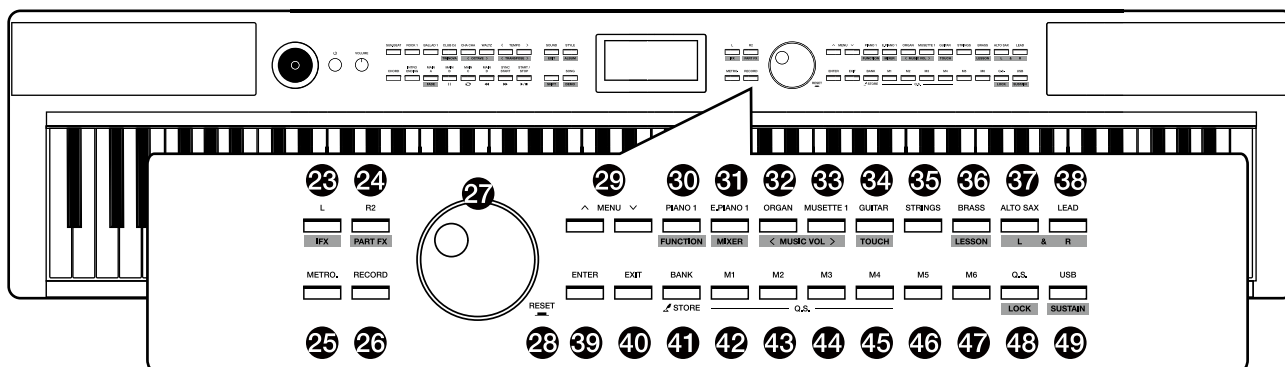
Overview

Control Panel



No.	Control panel	Description
1	Joystick	Control the pitch bend and modulation or apply assigned effects.
2	[] Button	Turn the power on or off.
3	[VOLUME] Knob	Adjust the master volume.
4~9	STYLE Selection Buttons	Select directly a preset style.
10	TEMPO [<]/[>] Buttons	Adjust the current tempo.
11	[SOUND] Button	Enter the Sound mode.
12	[STYLE] Button	Enter the Style mode.
Hold [SHIFT] and press these buttons to access the specified functions:		
7	[TWINOVA] Button	Turn Twinova function on or off.
8-9	OCTAVE [<]/[>] Buttons	Adjust the octave value in Twinova mode.
10	TRANPOSE [<]/[>] Buttons	Transpose the pitch of the entire keyboard in semitones.
11	[EDIT] Button	Enter the Sound Edit mode.
12	[ALBUM] Button	Turn the Album function on or off.
In Style mode, use buttons no.13-20 to control style playback:		
13	[CHORD] Button	Turn the Chord mode on or off.
14	[INTRO/ENDING] Button	Play the Intro or Ending section of the style.
15	[MAIN A] Button	Play the Main A section of the style. Press again to play fill A.
16	[MAIN B] Button	Play the Main B section of the style. Press again to play fill B.
17	[MAIN C] Button	Play the Main C section of the style. Press again to play fill C.
18	[MAIN D] Button	Play the Main D section of the style. Press again to play fill D.
19	[SYNC START] Button	Turn Sync Start on or off.
20	[START/STOP] Button	Start or stop playing the style.
Hold [SHIFT] and press the button to access the specified functions:		
15	[FADE] Button	Turn the Fade In, Fade Out on or off.
In Song mode, use buttons no.16-20 to control song playback:		
16	[] Button	Pause or continue playing the song.

17	[] Button	Set the start and the end points of a loop section.
18	[◀◀] Button	Rewind the song.
19	[▶▶] Button	Fast forward the song.
20	[▶/■] Button	Start or stop playing the song.
21	[SHIFT] Button	Hold this button and press other buttons to access the specified functions.
22	[SONG] Button	Enter the Song mode.
Hold [SHIFT] and press the button to access the specified functions:		
22	[DEMO] Button	Enter Demo mode.



23	[L] Button	Turn Sound L (left hand) on or off.
24	[R2] Button	Turn Sound R2 (right 2) on or off
25	[METRO.] Button	Turn the metronome on or off.
26	[RECORD] Button	Enter the Recording mode.
Hold [SHIFT] and press these button to access the specified functions:		
23	[IFX] Button	Turn the insert effect on or off.
24	[PART FX] Button	Turn the part effect on or off.
27	Data Dial	Select an item or adjust the value.
28	[RESET] Button	Press the dial to reset the currently edited setting.
29	MENU [^]/[v] Buttons	Go up or down the menu to select a category or item.
30-38	SOUND Selection Buttons	Select directly a preset sound.
39	[ENTER] Button	Confirm the current operation or enter the sub-menu.
40	[EXIT] Button	Exit from the current menu.
Hold [SHIFT] and press these button to access the specified functions:		
29	MENU [^]/[v] Buttons	Switch the group of settings in Function Setting.
30	[FUNCTION] Button	Enter Function Setting. Press repeatedly to switch the group of settings.
31	[MIXER] Button	Enter the Mixer menu.
32-33	MUSIC VOL [<]/[>] Buttons	Adjust the volume for song or style playback.
34	[TOUCH] Button	Turn the touch response on or off.

36	[LESSON] Button	Enter or exit from Lesson mode.
37	[L] Button	In Lesson mode, enter or exit the left hand practice.
38	[R] Button	In Lesson mode, enter or exit the right hand practice.
Use buttons no.41-47 to recall or store a Performance Memory:		
41	[BANK] Button	Select a memory bank.
41	[STORE] Button	Hold this button then press one of the memory buttons [M1]-[M6] to save the current panel settings to that memory.
42~47	[M1]-[M6] Buttons	Save or recall the panel settings.
48	[Q.S.] Button	Turn the Quick Setting function on or off. In Q.S. mode, use [M1]-[M4] to recall sound setting for the current style.
49	[USB] Button	Enter the USB directory.
Hold [SHIFT] and press these button to access the specified functions:		
48	[LOCK] Button	Turn the lock function on or off.
49	[SUSTAIN] Button	Turn the sustain on or off.

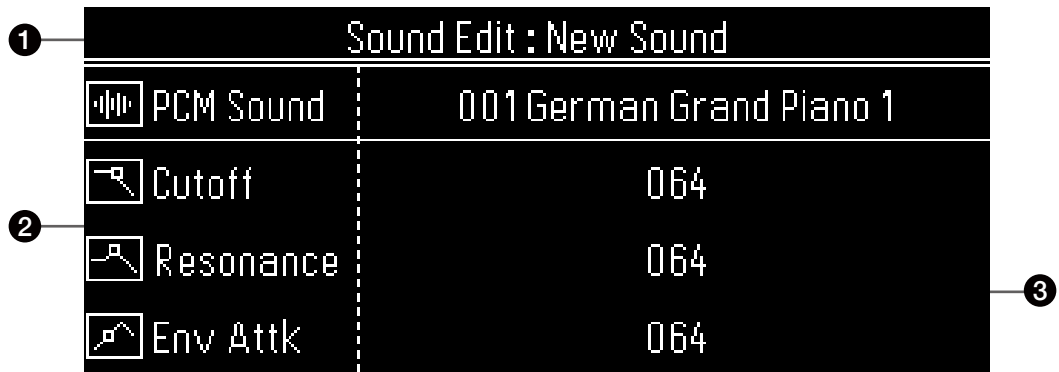
Display

The LCD shows the information related to the current menu. Here are some examples:
The main display:



No.	Section	Description
1	Top	Transpose value, USB icon, record icon, the time of Audio recording / bar number of MIDI recording, time signature, current tempo.
2	Sound	Current sound part, sound name and sound number. In the image, the sound R1 and R2 are turned on. Sound L is turned off. The current sound part is R1 because the icon is highlighted with a square frame.
3	Chord	Current chord name and related information.
4	Style/Song	Current style/song name and related information.
5	Bottom	Twinova octave, fade in/out, performance memory number, part effect icon, insert effect icon, sustain icon, and touch response icon.

The sound edit menu:



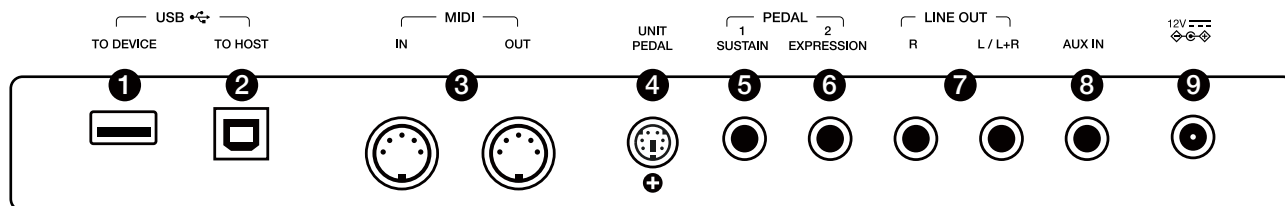
No.	Section	Description
1	Top	Menu name of the current function.
2	Left side	List of editable parameters.
3	Right side	Current setting of each parameter.

The song selection menu:



No.	Section	Description
1	Top	Name of the current mode.
2	Left side	Song category.
3	Right side	Name of the songs in each category.

Interface



1. [USB TO DEVICE]

For connecting a USB drive to store recorded songs in real-time, play back or load files from the USB drive. MP3, WAV, and SMF formats are supported for both recording and playback.

2. [USB TO HOST]

For connecting to a computer or a mobile device (converter may be required for the latter). Supports two-way data transmission for playing back audio files through the instrument's speakers and recording performance without external sound cards.

3. [MIDI IN], [MIDI OUT]

For connecting other MIDI devices such as a MIDI keyboard or sequencer. Please refer to the MIDI chapter for more details.

4. [UNIT PEDAL]

For connecting a unit pedal (Soft, Sostenuto, Damper).

5. [SUSTAIN PEDAL] (Assignable)

For connecting a sustain pedal (optional).

6. [EXPRESSION PEDAL] (Assignable)

For connecting an expression pedal (optional).

7. [LINE OUT] (R, L/L+R)

For connecting to external speakers or a PA system.

8. [AUX IN]

For connecting an external playback device such as an MP3 player. External audio will be played through the built-in speakers of the instrument.

9. Power jack

For connecting DC 12V power adapter.

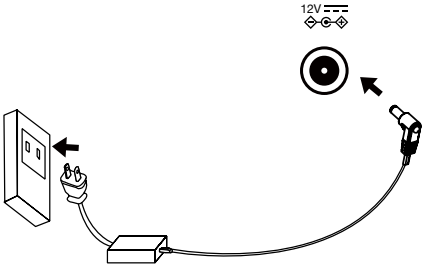
Note!

Avoid connecting the [LINE OUT] jacks to the [AUX IN] jack on this interface, as this will create a feedback loop that may potentially damage the instrument.

Preparing to Play

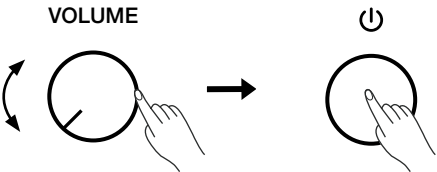
Connecting Power

- 1. Connect the power adapter to the Power jack on the rear panel of the instrument.
- 2. Plug the power adapter into an AC outlet.



Powering On/Off

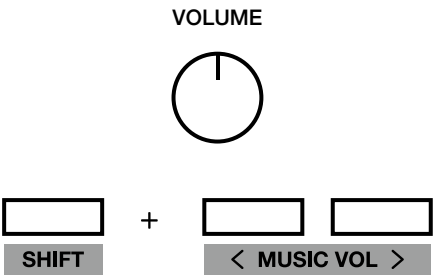
- 1. Set the volume of the instrument and all connected devices to 0.
- 2. Press the [⏻] button to turn on the power. The screen starts up and then shows the main display.
- 3. Press this button again to turn off the power.



Notes!	<ul style="list-style-type: none">1. For energy conservation, the instrument will automatically turn off after 30 minutes of standby. You can set the standby time or disable this function in System Setting.2. Use only the standard adapter provided with the instrument to avoid any damage to the unit or safety hazards. For safe use of electricity, unplug the instrument when it is not in use or in thunderstorms.
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Adjusting the Master Volume

- 1. You can adjust the master volume of the instrument by turning the [VOLUME] knob. Turn counter-clockwise to decrease the volume, or turn clockwise to increase it.
- 2. You can adjust the playback volume of styles and songs by using the MUSIC VOL [<]/[>] buttons. Hold down [SHIFT] and press the MUSIC VOL [<] button to decrease the volume, or press the MUSIC VOL [>] button to increase it.

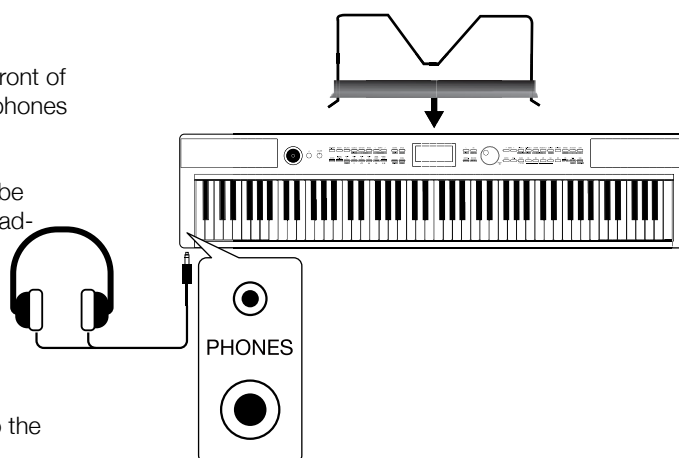


Notes!	<ul style="list-style-type: none">1. When the master volume is set very low, the output volume of the instrument will be low no matter how you increase the music volume. You can adjust the volume balance to suit your needs.2. If the speakers do not produce any sound, please check if the master volume is set too low, or if the PHONES jack is plugged in. When headphones or adapter is plugged in, the built-in speaker will be automatically muted. Unplug the headphones or adapter to unmute the speakers.
---------------	--

Connecting Headphones

The instrument offers 2 PHONES jacks located at the left-front of the instrument, allowing you to connect two pairs of headphones at the same time.

When headphones is plugged in, the built-in speakers will be automatically muted, and you will hear only through the headphones.



Connecting the Music Stand

A music stand is provided with the instrument. Insert it into the slots at the rear panel to attach it to the instrument.

Using Pedals

The instrument comes with a unit pedal (Soft, Sostenuto, Damper).

1. Left/Soft Pedal

This pedal produces a soft effect on notes played after pressing it down, with a slight decrease in volume and a subtle change in tone. It does not affect notes played before the pedal is pressed down. The function of this pedal will vary depending on the selected instrumental sound.

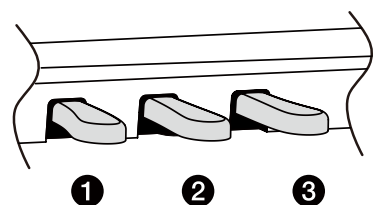
2. Mid/Sostenuto Pedal

Press and hold this pedal while holding notes down to sustain those notes. The sustain will last until you release the pedal. Notes played after pressing down this pedal are NOT affected.

3. Right/Damper Pedal

Press and hold this pedal to add a sustain effect to all notes.

You can assign different functions to the Soft pedal. You can also assign different functions to the optional sustain pedal and expression pedal. Please refer to Controller Setting.



Press the mid/sostenuto here to sustain the F note. Notes played afterwards are not affected.

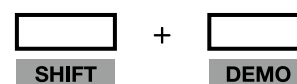


Press the right/damper pedal here to gain sustain for the F note and all that follows.

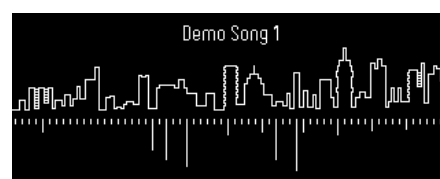
Playing Demo

You can listen to the demo songs to get an overview of the instrument's sound characteristics.

1. Hold down [SHIFT] and press the [DEMO] button to enter the Demo mode. It will start playing the demo. Some of the panel functions will be disabled in Demo mode.
2. Press the [▶/■] button to stop or start demo playback.
3. Use the data dial to select a demo.
4. To exit Demo mode, hold down [SHIFT] and press the [DEMO] button again. Or simply press the [EXIT] button.



START /
STOP



Sound Mode

The instrument has a variety of high-quality sounds, arranged in different categories. Please refer to Sound List.

Selecting and Playing Sounds

Turn Sound Parts On/Off

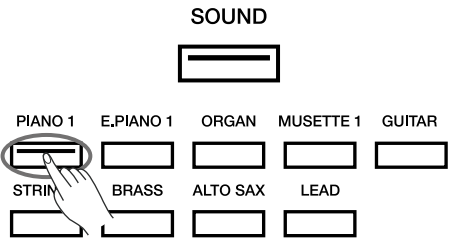
The instrument has 3 sound parts: L (left), R1 (right 1) and R2 (right 2). You can turn them on or off, and assign different sounds to each part.

- 1. The part “R1” is turned on by default, and cannot be turned off.
- 2. Press the [L]/[R2] buttons to turn the corresponding sound part on or off.

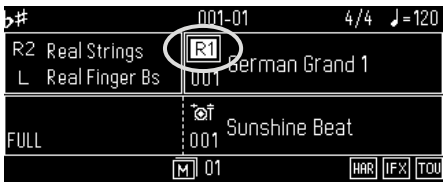


Select and Play Sounds

- 1. Press the [SOUND] button to enter the Sound mode. The button LED is red. The “R1” icon is selected on screen.

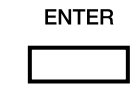


- 2. Use the data dial or press one of the SOUND selection buttons to select a sound.



- 3. You can also press the [ENTER] button to display the Sound selection menu. Use the MENU [^]/[v] buttons to select a sound category, then use the data dial to select a sound.

In the Sound selection menu, you can press the [SOUND] button repeatedly to switch the sound part menu: R1 -> R2 -> L. Press the [EXIT] button to quit the menu.



^ MENU v



- 4. Play the keyboard to use the selected sound for performance.

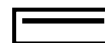


Playing Two Sounds Simultaneously

You can layer two different sounds simultaneously, allowing for a wide range of timbral combinations.

1. Press the [R2] button to turn on this sound part. The button LED becomes red. The “R2” icon lights up and is selected. Press the button again to turn it off.
2. Use the data dial or press one of the SOUND selection buttons to select a sound for the current sound part. Or press the [ENTER] button to enter the Sound selection menu to select a sound.
3. Now you can play the keyboard to hear a layered, ensemble sound combining two parts.

R2



Note!

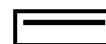
When the keyboard is split (part “L” or chord mode is turned on), the right hand parts can only be played in the right hand section.

Playing Different Sounds with Each Hand

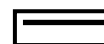
You can turn on and play all three sound parts simultaneously, one for the left hand section, and two for the right hand section.

1. Press the [R2] button to turn on this sound part. The button LED becomes red. The “R2” icon is selected.
2. Press the [L] button to turn on this sound part. The button LED becomes red. The “L” icon is selected.
3. Use the data dial or press one of the SOUND selection buttons to select a sound for the current sound part.
4. Now you can play the keyboard to hear different sounds from the left and right hand sections.

R2



L

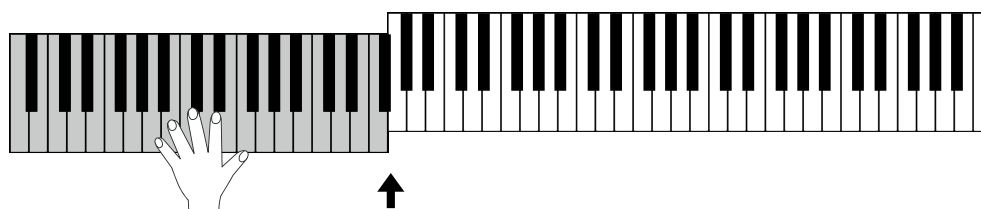


Tips:

1. When part “L” is turned off, you can play the right hand parts over the entire keyboard.
2. When part “L” is turned on, the keyboard will be split into the left and right sections. The key that splits the keyboard is called the “split point”.

Setting the Split Point

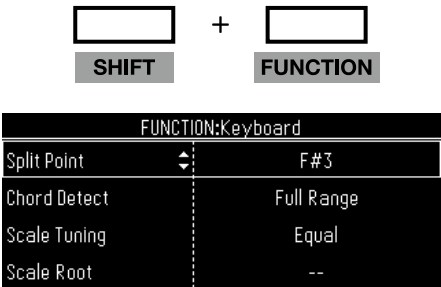
The split point is the key that splits the entire keyboard into the left and the right sections. The default split point is F#3.



Default Split Point : F#3

You can set the split point to any key on the keyboard.

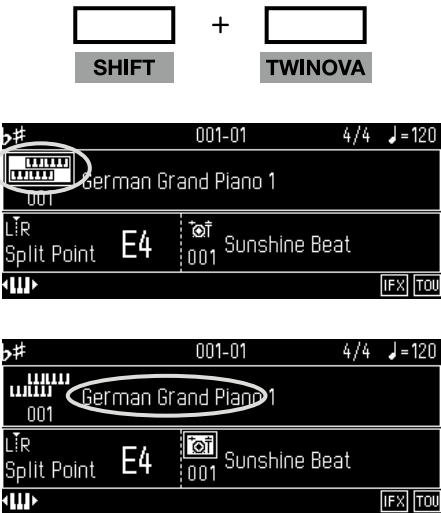
1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “Keyboard”.
2. Use the MENU [^]/[v] buttons to select “Split Point”. Use the data dial to change the split point, or press a desired key to designate it as the new split point.



Twinova Mode

In Twinova mode, the entire keyboard is divided into two equal areas, left and right, with the same pitch and sound for both. This feature is particularly useful for elementary level one-on-one instruction, as well as for practicing and performing simple duets that require two pianos.

1. Hold down [SHIFT] and press the [TWINOVA] button to enter the Twinova mode.
2. The sound “R1” selected before entering Twinova will become the default sound for both areas. You can use the data dial or press one of the SOUND selection buttons to change the sound.
3. The style you previously selected will be carried over to Twinova mode. To change the style, press the [STYLE] button to select the style icon on screen, then use the data dial or press one of the STYLE selection buttons to select a style.
4. To exit Twinova mode, hold down [SHIFT] and press the [TWINOVA] button again. Or simply press the [EXIT] button to quit this mode.
5. The split point for Twinova mode is “E4”.



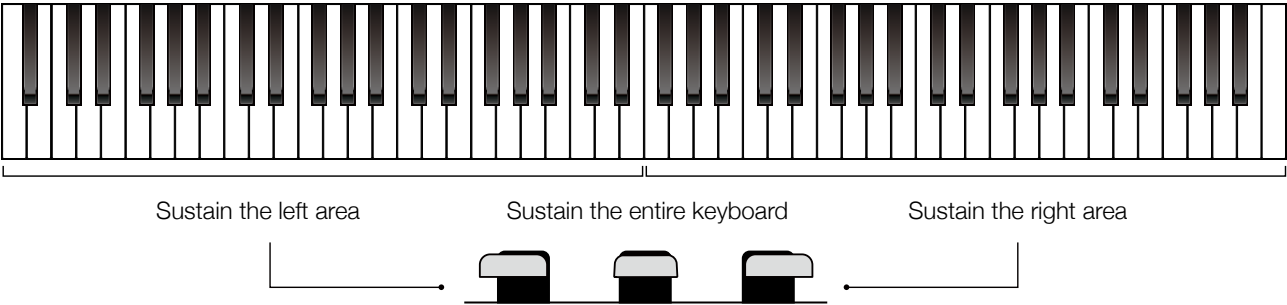
Tips:

1. You can set the split point for Twinova mode. The setting range is C3 ~ C6.
2. You can change the Twinova split point in Keyboard Setting. When setting the split point, you can press the data dial to restore the default split point “E4”.
3. In Twinova mode, sound “R2” and sound “L” are not available.

Pedals in Twinova Mode

In Twinova mode, all three pedals will function as damper pedals, each controlling a different keyboard area:

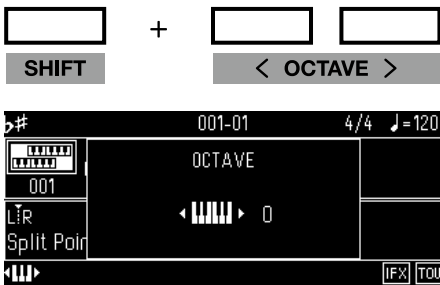
- The left pedal sustains the left area.
- The right pedal sustains the right area.
- The middle pedal sustains the entire keyboard.



Twinova Octave

You have the option to transpose one octave up or down in Twinova mode. The octave is editable in Twinova mode only, with the range of ± 1 .

1. In Twinova mode, hold down [SHIFT] and press the OCTAVE [<]/[>] buttons to transpose one octave down or up.
2. Hold down [SHIFT] and press the OCTAVE [<] and [>] buttons at the same time to restore the default octave setting.



Touch Response

You can control your performance by the force of your touch. The touch response feature is enabled by default to ensure your emotional expressions are well reflected. This instrument comes with 5 levels of touch response curves from which you can choose to best suit your style.

1. Hold down [SHIFT] and press the [TOUCH] button to turn touch response off or on. The "TOU" icon on screen will light off or on.
2. You can change the touch response curve. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select "Keyboard". Use the MENU [^]/[v] buttons to select "Touch Response", then use the data dial to change the setting.

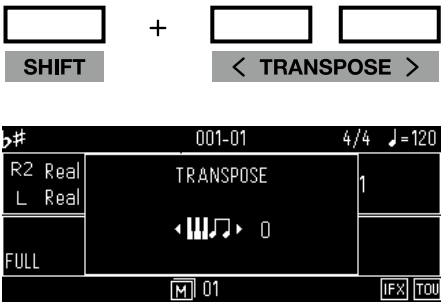


FUNCTION:Keyboard	
Touch Response	Medium
Split Point	E4
Chord Detect	Full Range
Scale Tuning	Equal

Transpose

Transposing allows you to move the pitch of the entire keyboard in semitones. This means you can shift to a different key without changing how you play. This is a very handy feature when you need to accompany a singer or play with other instruments that are in a different key.

1. Hold down [SHIFT] and press the TRANSPOSE [<]/[>] buttons to temporarily display the transpose screen.
2. On the transpose screen, hold down [SHIFT] and press the TRANSPOSE [<]/[>] buttons, or use the data dial to change the transpose value. The setting range is ± 12 semitones. Transpose setting applies to the accompaniment and the entire keyboard sound.
For example, setting the transpose value to “1”. When playing the note C, you will hear the sound of the note C# instead. Or by setting the transpose value to “-5” or “7”, when playing the C major scale on the keyboard, it will produce the pitch of G.
3. On the transpose screen, hold down [SHIFT] and press the TRANSPOSE [<] and [>] buttons at the same time to restore the default transpose setting.

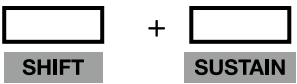


Performance Enhancement

The instrument comes with some features which apply to the sound parts, to greatly enhance your keyboard performance.

Sustain

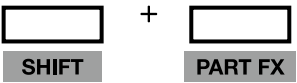
Hold down [SHIFT] and press the [SUSTAIN] button to turn the sustain function on or off. When it is turned on, the “SUS” icon will light up on screen. All the notes you play will have a longer sustain.



Tips:	Please use a sustain pedal to achieve a more natural sustain effect.
--------------	--

Part Effect

Hold down [SHIFT] and press the [PART FX] button to turn the current part effect (arpeggio or harmony) on or off. The corresponding “ARP” or “HAR” icon will light up on screen. Play the keyboard to use the part effect.



Notes!	<ol style="list-style-type: none">1. Part effect applies to sound part “R1” only.2. Most harmony types work only in Chord mode. Press the [CHORD] button to enter Chord mode, then play a chord in the chord section, it will add harmony effect to the notes you play in the right hand section.3. Arpeggio and Harmony cannot be available at the same time.4. You can change the part effect type, please refer to Keyboard Setting. For more details on using part effect, please refer to the Part Effect chapter.
---------------	--

Insert Effect

Insert effect is turned on by default. Hold down [SHIFT] and press the [IFX] button to turn the insert effect off or on. When it is turned on, the “IFX” icon lights up on screen.

The instrument comes with a large selection of IFX to greatly enrich the sound. For example, adding distortion to a guitar sound, or adding delay to an electronic piano.



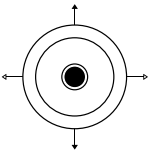
Tips:

You can change the IFX type and level for each sound part, please refer to Effect Setting.

Joystick

The instrument has a Joystick, which can be moved up, down, left, or right to change the keyboard pitch or sound effect. After releasing it, the Joystick will return to the neutral position.

- 1. The Joystick’s left and right directions are for pitch bend. Move it leftward to apply pitch bend down, or rightward to apply pitch bend up.
- 2. The Joystick’s up direction is for modulation, which will apply a vibrato effect to the note you play.
- 3. The Joystick’s down direction is assignable. You can assign a function to Joystick Down. Please refer to Controller Setting.



X- ←	Pitch Bend Down
X+ →	Pitch Bend Up
Y+ ↑	Modulation
Y- ↓	Assignable

Sound Edit

The sound edit function allows you to create your own sound based on the built-in sound samples, then save it to the user sound category. You can save up to 50 user sounds.

Edit a Sound

- 1. Hold down [SHIFT] and press the [EDIT] button to enter the Sound Edit menu.
- 2. Use the MENU [^]/[v] buttons to select a parameter.
- 3. Use the data dial to change the setting of the selected parameter.
- 4. When selecting a sound to edit, you can also use the SOUND selection buttons to select a sound.

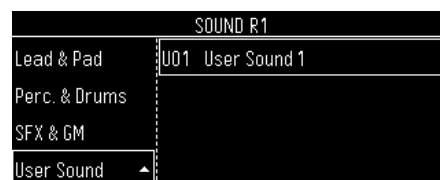
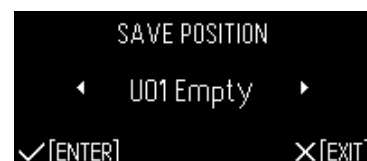


Sound Edit : New Sound	
PCM Sound	001 German Grand Piano 1
Cutoff	064
Resonance	064
Env Attk	064

Parameter	Range	Description
PCM Sound	Refer to Sound List.	...
Cutoff	000 ~ 127	Adjust the filter cutoff of the sound. As the value goes higher, the sound becomes brighter.
Resonance	000 ~ 127	Adjust the filter resonance of the sound. As the value goes higher, the resonance effect becomes stronger.
Env Attk	000 ~ 127	Determines the time it takes for a sound to reach maximum volume after the key is pressed and the sound begins. As the value goes lower, the sound begins faster.
Env Dcy	000 ~ 127	Determines the time it takes for a sound to reach its sustain level after the attack. As the value goes lower, the sound decays faster.
Env Rls	000 ~ 127	Determines the time from the key is released until the sound decays to silence. As the value goes lower, the sound disappears faster.
VibRate	000 ~ 127	Determines how fast one vibrato effect cycle is played. As the value goes higher, the vibrato speed becomes faster.
VibDepth	000 ~ 127	Determines the amount of the vibrato effect. As the value goes higher, the effect becomes stronger.
VibDelay	000 ~ 127	Determines how quickly the vibrato effect starts after the sound begins.
Play Mode	Poly PolyPort Mono MonoPort MonoLegato	Poly: the sound will be played back polyphonically. PolyPort: the sound will be played back polyphonically. Legato playing will trigger portamento effect. Mono: the sound will be played back monophonically. MonoPort: the sound will be played back monophonically. Legato playing will trigger portamento effect. MonoLegato: the sound will be played back with legato, but without portamento.
Port Time	000~127	Sets the transition speed from the first note played to the next, when the playing mode is set to "PolyPort", "MonoPort" or "MonoLegato".
Part FX	Refer to Part FX types in Keyboard Setting.	Change the part effect (harmony or arpeggio) applied to the sound.

Save the Edited Sound

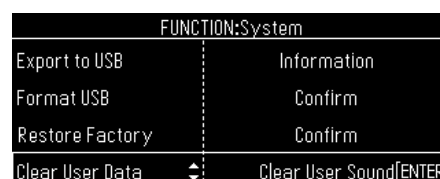
- After editing the sound, you can save it to the user sound category.
Press the [ENTER] button to display the save screen and the save position. It will automatically select the first empty slot, such as "U01 Empty".
- Press the [ENTER] button again to save the user sound. The screen will prompt "Success!". Now you can go to the Sound selection menu and find the saved user sound in the user sound category.



Delete User Sounds

You can choose to delete the user sound data saved to the user sound category.

- Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select "System". Use the MENU [^]/[v] buttons to select "Clear User Data", then use the data dial to select "Clear User Sound".
- Press the [ENTER] button to delete all user sound data.

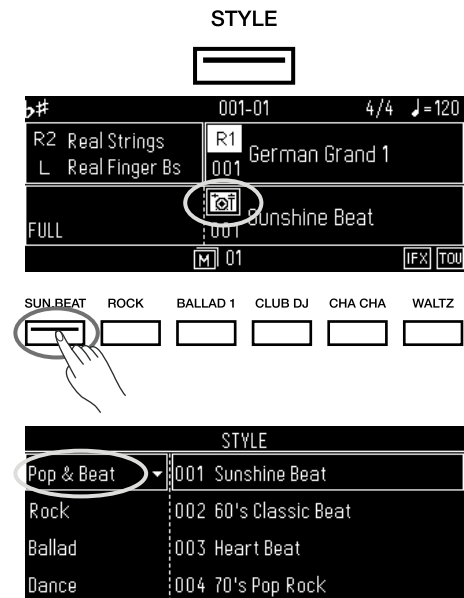


Style Mode

The instrument provides a huge selection of styles, please refer to Style List.

Selecting Styles

1. Press the [STYLE] button to enter Style mode. The button LED becomes red. The style icon is selected on screen.
2. Use the data dial or press one of the STYLE selection buttons select a style.
3. You can also press the [ENTER] button to display the Style selection menu. Use the MENU [^]/[v] buttons to select a style category, then use the data dial to select a style. Press the [EXIT] button to quit the menu.



Playing the Percussion Tracks of a Style

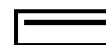
The percussion track is a significant part of a style. You can generally identify the style of music by listening to its percussion track.

1. In Style mode, press the [START/STOP] button. The style will immediately start with only the percussion tracks. The button LED becomes red and flashes according to the current tempo.
2. Alternatively, when the [CHORD] function is turned off, you can turn on the [SYNC START], then play a key on the keyboard to start the percussion tracks.
3. When style is playing, press the [START/STOP] button to stop the playback.

START /
STOP



SYNC
START



Notes!

1. If you select a piano style, pressing the [START/STOP] button may not produce any sound, because a piano style doesn't have percussion tracks.
2. You can adjust the volume of the style and each track in Mixer.

Playing All Tracks of a Style

With auto accompaniment, you just need to play chords. The accompaniment will automatically follow along with the chords you play. This simulates the experience of playing with an orchestra.

1. Press the [CHORD] button to enter the Chord mode. The button LED becomes red.

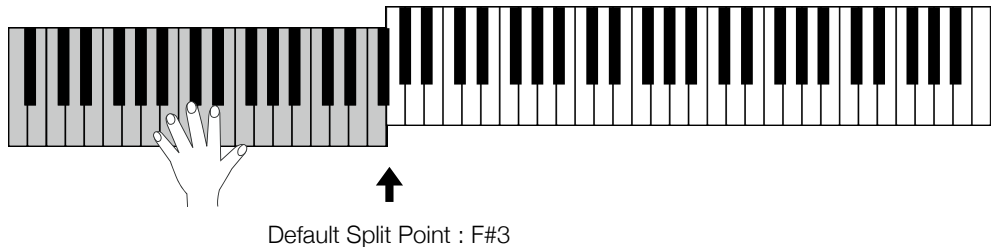
CHORD



2. Press the [SYNC START] button to turn on the sync start function.



3. Play a chord in the chord area. It will immediately start playing all tracks of the style. Try playing different chords with your left hand and melody with your right hand, and enjoy playing with auto accompaniment.



Style Playback

Style Variations

The instrument provides many pre-programmed variations for each style, including Main, Fill, Intro and Ending. Fade In and Fade Out are also available for style playback.

Intro

An Intro is usually used at the beginning of a song. When style stops, press the [INTRO/ENDING] button to engage the Intro section. The button LED becomes red. Press the [START/STOP] button or turn on [SYNC START] and then play a chord on the chord area. It will start playing the Intro section. When the Intro is finished, it will automatically play the select Main section.



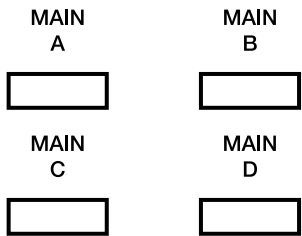
Ending

An Ending is commonly used at the end of a song. When style is playing, press the [INTRO/ENDING] button. It will start the Ending section in the next measure. Style playback will automatically stop when the Ending is finished.

Tips:	When the Intro or Ending is playing, the selected MAIN button will flash until the Intro or Ending is finished.
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Main

Main is used for the loop part of a song. The instrument has 4 built-in Main sections. When style is playing, press one of the [MAIN A] - [MAIN D] buttons to play the select Main section in the next measure. It will automatically play a Fill pattern before switching to the new Main section. When the Fill is finished, it will loop playing the Main section.



Tips:	Whenever you press a MAIN button to engage it, the button LED will flash until it goes to the loop playback of the Main section.
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Fill

The Fill pattern will add variation to the playback. The instrument has 4 built-in Fill patterns. Press the current MAIN button to play a Fill pattern. It will also play a Fill when you change the Main section. When the Fill is finished, it will loop playing the Main section.

Tips:

The Fill function is turned on by default. When you change the Main section, it will automatically play a Fill to smooth the playback. For example, when Main A is playing, if you press the [MAIN B] button, it will play a Fill pattern in the current measure and then switch to Main B in the next measure.

Fade In

When style stops, hold down [SHIFT] and press the [FADE] button to engage Fade In. The Fade In icon lights up on screen. Now start playing the style, the volume will increase from low to high until it reaches the normal level. At the same time, the Fade In icon will flash and then turn off.



Fade Out

When style is playing, hold down [SHIFT] and press the [FADE] button to engage Fade Out. The Fade Out icon will flash on screen. The volume will decrease from high to low until the style stops. If you're playing the keyboard at the same time, Fade Out will also apply to the keyboard sound.

Tips:

When Fade In is playing, you can hold down [SHIFT] and press the [FADE] button to disengage Fade In. It will immediately return to normal volume. It works the same with Fade Out.

Chord Mode

1. Press the [CHORD] button to turn on Chord mode. The button LED becomes red. The left hand area is the chord area. When you play different chords in the chord area, the auto accompaniment will change along.
2. When Chord mode is turned off, if you start style playback, it will play the percussion tracks only.

CHORD



Sync Start

Sync Start function will start style playback as soon as you play the keyboard. Press the [SYNC START] button to turn sync start on or off.

SYNC
START



When Chord mode is turn off, with sync start, you can start the percussion playback by pressing any key on the keyboard.

When Chord mode is turned on, with sync start, you can start the auto accompaniment of all tracks by playing a chord in the chord area.

Chord Basics

This section is a brief introduction to the basics of chords.

Chord Construction

When three or more notes are played together, they form a chord. A chord is the basic component of harmony, and each note in the chord is generally built according to a principle of thirds.

In most music, the fundamental chord is the “triad.” The notes that make up a chord are determined according to their position: the lowest note is called the “root”, the one a third interval above the root is called the “third”, and the one a fifth interval above the root is called the “fifth”.

The root note, also known as the tonic, is the most important note in a chord. It stabilizes the sound by determining the “mode” of the chord, fixing the composition of the other notes in the chord. The name of the chord structure depends on the interval of each note above the root note in the chord.

When the root pitch is a perfect fifth away from the fifth note and a major or minor third from the third note, they are called “major chords” and “minor chords”.

When the root pitch is a major third and an augmented fifth or a minor triad and a diminished fifth from the third note and fifth note, they are called the “augmented chord” and “diminished chord”.

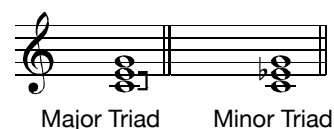
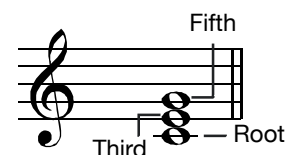
According to the principle of third superposition, we can add a seventh (seven intervals from the root note) and ninth (nine intervals from the root note) on the triad to form a “seventh chord”, “ninth chord”, “eleventh chord” and “thirteenth chord”.

Please refer to a chord chart or use a chord reference for more information on chord types.

Chord Inversion

The “inversion” of a chord is formed by turning the root note upward and placing the third or fifth note in the lowest position. The chord is called an “inversion chord” when the root of the chord is not in the lowest position.

This instrument supports playing chords by using inversion chord fingering. When Bass inversion mode is turned on, the fingering of standard chords and the fingering of inversion chords will have different effects.

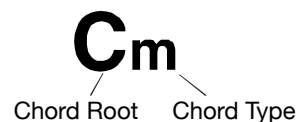


Root Position First Inversion Second Inversion

Chord Name

A chord name can tell you almost everything you need to know about a chord, including: the root of the chord, whether the chord is a major chord or a minor chord, an augmented chord or a diminished chord, a seventh chord or a ninth chord, and so on.

For example, the name in the image clearly indicates that the root of the chord is C, and the chord type is a minor triad, so this chord is a minor triad with C as the root.



Please refer to a chord chart or use a chord reference for more information on chord names.

Fingered

The default chord detect mode of this instrument is Fingered. You can either use Single-fingered or Multi-fingered.

Note!

In Single-fingered Mode, you can play Major chords, Minor chords, Seventh chords and Minor seventh chords by using up to three fingers. Let's take for example a chord with root C and introduce the fingering for these four chords.

In Single Finger mode, you can play these four chords with one, two or three fingers.

C		★ Major Triad Only press the root note on the keyboard.
Cm		★ Minor Triad Press the root note and the nearest left black key simultaneously.
C7		★ Seventh chord Press the root note and the nearest left white key simultaneously.
Cm7		★ Minor seventh chord Press the root note and the nearest left white and black keys simultaneously.

Multi-fingered

Multi-fingered mode only detects multi-finger chords. Let's take for example a chord with root C and introduce fingering according to a chord chart or chord reference.

1 C	2 C ₆	3 CM ₇	4 CM ₇ (#11)	5 C(9)	6 CM ₇ (9)	7 C ₆ (9)	8 Caug	9 Cm	10 Cm ₆	11 Cm ₇	12 Cm ₇ (b5)	13 Cm(9)
14 Cm ₇ (9)	15 Cm ₇ (11)	16 CmM ₇	17 CmM ₇ (9)	18 Cdim	19 Cdim ₇	20 C ₇	21 C ₇ sus4	22 C ₇ (b5)	23 C ₇ (9)	24 C ₇ (#11)	25 C ₇ (13)	26 C ₇ (b9)
27 C ₇ (b13)	28 C ₇ (#9)	29 CM ₇ aug	30 C ₇ aug	31 Csus4	32 Csus2	33 C(b5)	34 CM ₇ (b5)	35 CmM ₇ (b5)	36 C1+8	37 C1+5	38 Cancel	39 Cancel/C

Notes marked with ★ are optional, the chords could be recognized without them.

Bass Invert

Detects inverted chords so the Bass channel can play a note other than the root of the chord.

Smart Full Range

Detects multi-fingered chords in the full keyboard area.

Chord Detect Mode

The instrument has four types of chord detect modes. Each of them supports different fingering.

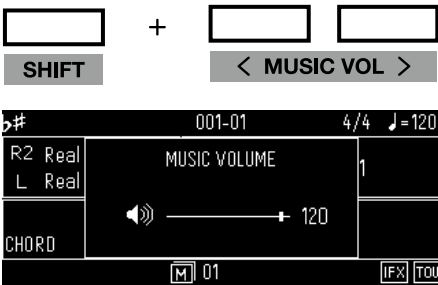
- 1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “Keyboard”.
- 2. Use the MENU [^]/[v] buttons to select “Chord Detect”, then use the data dial to select a chord detect mode.
When chord detect mode is set to Fingered, Multi-fingered or Bass Invert, the keyboard is divided into two areas. The chord area is in the left hand.

Chord Detect Mode	Description
Fingered	This mode supports single-fingered and multi-fingered.
Multi-fingered	This mode only detects multi-finder chords.
Bass Invert	This mode detects inverted chords so the Bass channel can play a note other than the root of the chord.
Smart Full Range	This mode detects multi-fingered chords over the entire keyboard.

Accompaniment Volume

You can adjust the accompaniment volume, to balance the volume between the style playback and the keyboard sound.

- 1. Hold down [SHIFT] and press the MUSIC VOL [<]/[>] buttons repeatedly to adjust the playback volume. The screen displays the current volume setting.
- 2. On the music volume screen, hold down [SHIFT] and press the MUSIC VOL [<] and [>] buttons at the same time or press the data dial to restore the default volume setting.

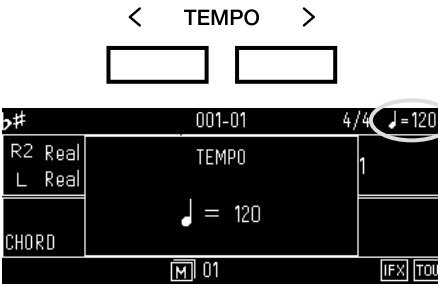


Tips:	The MUSIC VOL buttons affect music playback only, including style, song and lesson song. They will not affect the keyboard sound and the metronome. You can use the [VOLUME] knob to adjust the global volume.
--------------	--

Tempo

Each style is preset with a default optimal tempo. You can change the tempo to suit your needs.

- 1. Press the TEMPO [<]/[>] buttons to adjust the tempo.
- 2. Press the TEMPO [<] and [>] buttons at the same time to restore the default tempo setting of the style.



Tips:	When style is playing, changing the style will not result in tempo change. When style stops, changing the style will reset the tempo to the default setting of the new style.
--------------	--

Metronome

- 1. Press the [METRO.] button to turn on the metronome. The beat will sound. The button LED will flash in sync with the current tempo.
- 2. Press the [METRO.] button again to turn off the metronome.

METRO.



Tips:

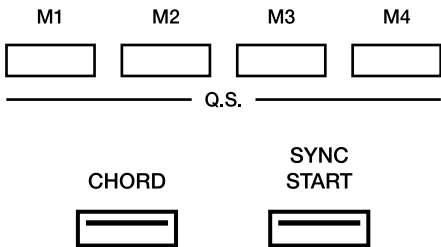
- 1. You can set the metronome time signature. Please refer to System Setting.
- 2. Whenever you start a style or song, the time signature will be reset to the default setting of the style or song.

Quick Setting (Q.S.)

When Quick Setting is turned on, you can instantly recall all auto accompaniment related settings including sound selection and effects, simply with a single touch of a button.

- 1. In style mode, press the [Q.S.] button to turn on Quick Setting for current style. The “Q.S.” icon lights up on screen.
- 2. The [M1]-[M4] buttons now work as the Q.S. buttons. Press one of the Q.S. buttons to recall the related setting for the current style. The [CHORD] and [SYNC START] functions are automatically turned on. Each style has 4 Q.S. settings.
- 3. Play a chord in the chord area. It will start the auto accompaniment.

Q.S.



Notes!

- 1. When Q.S. is turned off, the [M1]-[M4] buttons are performance memory buttons (the “M1” icon lights up on screen).
- 2. Performance memory is not available when Q.S. is turned on.

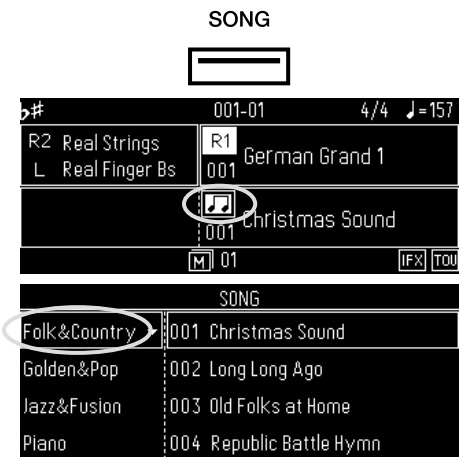
Songs and Audio

The instrument comes with a large selection of built-in songs of various musical genres. In addition, audio playback (in WAV and MP3 format) is available by connecting an external USB drive.

Playing Songs

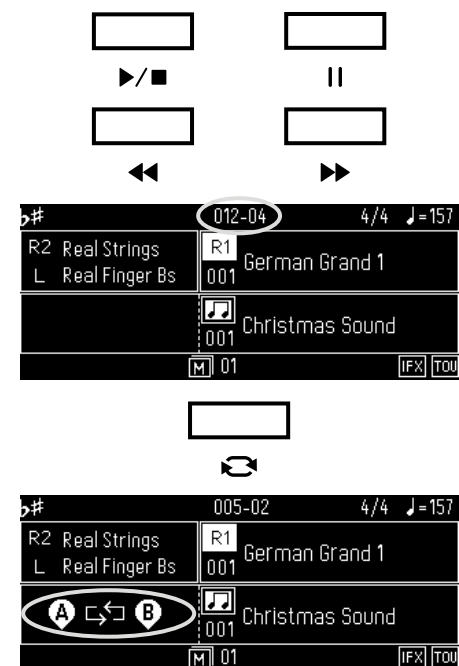
Selecting Songs

1. Press the [SONG] button to enter Song mode. The button LED becomes red. The song icon is selected on screen. You can use the data dial to select a song.
2. Alternatively, you can press the [SONG] button, then press the [ENTER] button to display the Song selection menu. Use the MENU [^]/[v] buttons to select a song category, then use the data dial to select a song. Press the [EXIT] button to quit the menu.



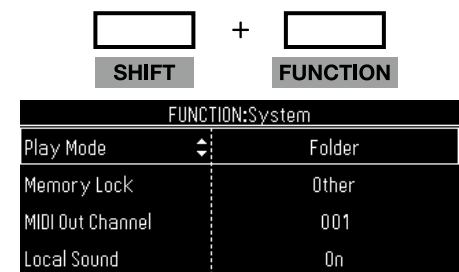
Song Playback

1. In Song mode, press the [▶/■] button to start playing the song. Press it again to stop playing.
2. When the song is playing, press the [||] button to pause the song. Press it again to continue playing.
3. When the song is playing or paused, press the [◀◀]/[▶▶] buttons once to skip backward or forward by one measure. Or hold down the [◀◀]/[▶▶] buttons to rewind or fast forward the song. You can check the playback position on top of the screen.
4. You can loop playing a specific section of a song. When song is playing, press the [A↔B] button once to set the beginning point, then press this button again to set the ending point. It will loop playing the specific section. Press the [A↔B] button again to quit the section loop.



■ Play Mode

You set the play mode to specify how the songs are play back. To change the play mode, hold down [SHIFT] and press the [FUNCTION] button repeatedly to select "System". Use the MENU [^]/[v] buttons to select "Play Mode", then use the data dial to select a desired play mode.



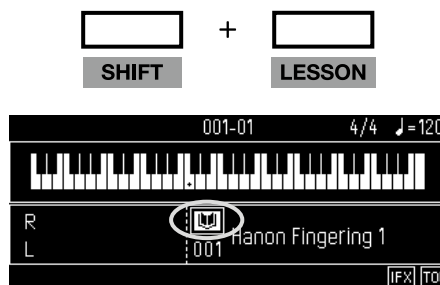
Play Mode	Description
Single	It will stop playing when the the currently selected song is finished.
Folder (default)	Play the songs in the current category in order. It will stop playing when the last song of the current category is finished.
Single Loop	Loop playing the current song.
Folder Loop	Loop playing all songs in the current category.

Lesson Mode

In Lesson mode, you can practice the lesson songs by muting the hand part you wish to practice and keeping the other part audible as accompaniment.

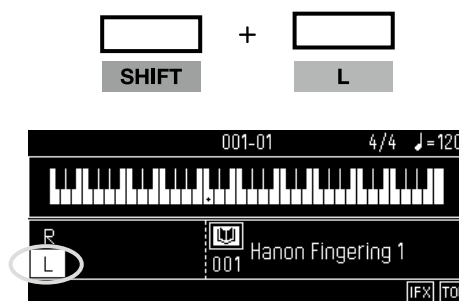
Enter Lesson Mode

1. Hold down [SHIFT] and press the [LESSON] button to enter the Lesson mode.
2. Use the data to select a lesson song. Or press the [ENTER] button to display the Lesson song selection menu. Use the data dial or the MENU [^]/[v] buttons to select a song. Press the [EXIT] button to quit the menu.
3. After selecting a song, you can press the [▶/■] button to preview the song. Press it again to stop the song.



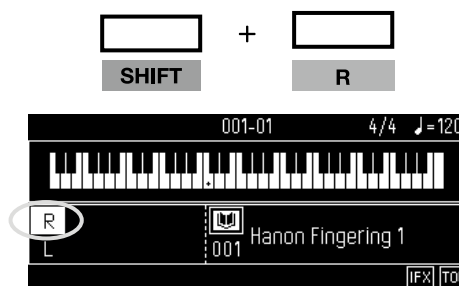
Practice the Left Hand Part

1. Hold down [SHIFT] and press the [L] button to mute the left hand part. The "L" icon is selected on screen.
2. Press the [▶/■] button to start the playback. Only the right hand part is audible. Now you can follow the on-screen note indications to practice the left hand part.
3. You can press the TEMPO [<]/[>] buttons to adjust the play back tempo.
4. Hold down [SHIFT] and press the [L] button again to unmute the left hand part.



Practice the Right Hand Part

1. Hold down [SHIFT] and press the [R] button to mute the right hand part. The "R" icon is selected on screen.
2. Press the [▶/■] button to start the playback. Only the left hand part is audible. Now you can follow the on-screen note indications to practice the right hand part. You can use the TEMPO buttons to adjust the tempo.
3. Hold down [SHIFT] and press the [R] button again to unmute the right hand part.



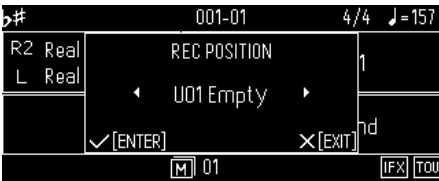
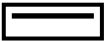
MIDI Recording

In MIDI recording, you can save your recording as a user song on the instrument, then play it back while playing the keyboard. You can also choose to export the user song to a connected USB drive, which you can later export to host devices such as a computer for further editing or other creative purposes.

Prepare Recording

- 1. Press the [RECORD] button to enter the Recording mode. The screen prompts to select a recording position. It will automatically select the first empty slot, such as “U01 Empty”.
- 2. Press the [ENTER] button to enter the recording preparation state. The record icon “●” flashes. The metronome is turned on. Now you can set the desired sound, style, tempo, etc.

RECORD



Start Recording

In recording preparation state, press the [START/STOP] button or simply play the keyboard to start recording. Alternatively, turn on the Chord mode and Sync Start, then play a chord in the chord area to start recording. During recording, the record icon “●” stays lit.



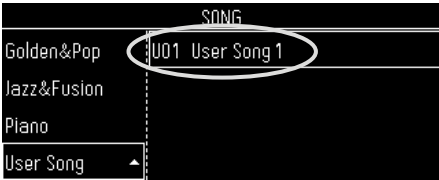
Stop Recording

- 1. During recording, press the [RECORD] button. It will stop recording and save the recorded song automatically. The record icon “●” turns off. The screen will prompt “Success!” to indicate the user song is saved.
- 2. If you are recording with auto accompaniment, recording will automatically stop when the Ending section is finished.
- 3. If the storage becomes used up, the screen will prompt “Full”. Recording will stop and be saved automatically.



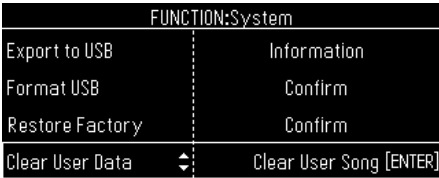
Play Back Recording

- 1. After recording, it will automatically select this user song in the user song category of the Song selection menu. Alternatively, press the [SONG] button, then press the [ENTER] button to display the Song selection menu. Use the MENU [^]/[v] buttons to select the user song category, then use the data dial to select the user song.
- 2. Press the [▶/■] button to start playing the user song.



Delete Recording

- 1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “System”.
- 2. Use the MENU [^]/[v] buttons to select “Clear User Data”, then use the data dial to select “Clear User Song”. Press the [ENTER] button to confirm and delete all user songs.



Audio Recording

You can record audio and save it in WAV or MP3 format to a connected USB drive.

1. Insert a USB drive to the [USB TO DEVICE] jack. When the USB drive is recognized, the USB icon will light up on screen. Please make sure your USB drive has sufficient storage.
2. Press the [RECORD] button. The screen prompts to select the recording mode. Use the data dial to set the recording format to WAV or MP3 .

These audio formats are supported:

- WAV (44.1KHz/16bit, stereo)
- MP3 (320Kbps)

3. Press the [ENTER] button to start recording. The screen will temporarily display “RecStart”. The record icon “●” stays lit. All the sounds that you hear from the instrument will be recorded, such as accompaniment, keyboard sounds, song playback, music from Aux In, etc.
4. Press the [RECORD] button to stop recording. The record icon “●” turns off. The screen will prompt "Success!". The user song is saved to the USB drive, and be named as “AudioXXX”.
5. Press the [▶/■] button to start playing the recorded song. Alternatively, you can select to play back the recorded song from the USB menu. Please refer to Connecting an USB drive.



RECORD



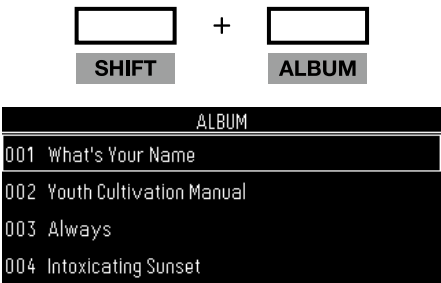
Notes!

1. During recording, do NOT disconnect the USB drive from the instrument or turn off the power, otherwise, the file may be corrupted.
2. Audio recording does not support playing back audio files.
3. Audio recording does not support recording Demo.
4. Audio recording does not support using the USB drive function, Lesson mode or Sound Edit function.

Album

When you select a song in the Album, the instrument will automatically recall the best settings for you to play this song.

1. Hold down [SHIFT] and press the [ALBUM] button to turn on the album function. The screen displays the Album list.
2. Use the data dial to select a desired album. The panel settings that match the selected album will be immediately recalled. It will automatically enter the Style mode.

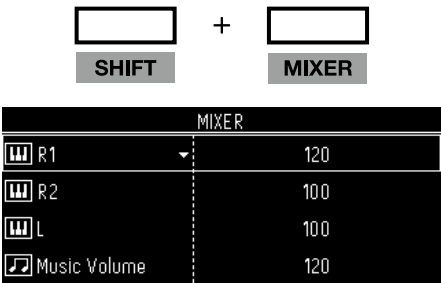


Mixer

The Mixer allows you to adjust the volume balance across different channels.

1. Hold down [SHIFT] and press the [MIXER] button to enter the Mixer menu.
2. Use the MENU [^]/[v] buttons to select a channel, then use the data dial to adjust the volume of the selected channel. Press the data dial to restore the default volume of the current channel.

Mixer Channel	Range
R1	0 ~ 127
R2	0 ~ 127
L	0 ~ 127
Music Volume	0 ~ 127
Metronome	0 ~ 127
Percussion	0 ~ 127
Drum	0 ~ 127
Bass	0 ~ 127
Chord1	0 ~ 127
Chord2	0 ~ 127
Chord3	0 ~ 127
Phrase1	0 ~ 127
Phrase2	0 ~ 127



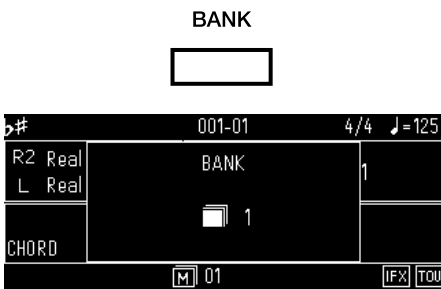
Performance Memory

You can save the panel settings to one of the performance memory buttons for future instant recall. The instrument has 32 memory banks. Each bank has 6 memory slots.

Recalling a Panel Setting

Select a Memory Bank

1. Press the [BANK] button to select a memory bank. The screen displays the bank icon “M” and the current bank number.
2. Press the [BANK] button repeatedly to select a desired memory bank. Alternatively, on the bank selection screen, you can use the data dial to quickly switch the memory bank.

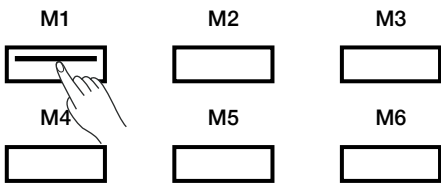


Recall a Performance Memory

Press one of the memory buttons [M1] - [M6]. It will recall the settings saved in that memory slot. It will reset the related parameters on the control panel.

Note!

Make sure the [Q.S.] button is turned off before using performance memory function.

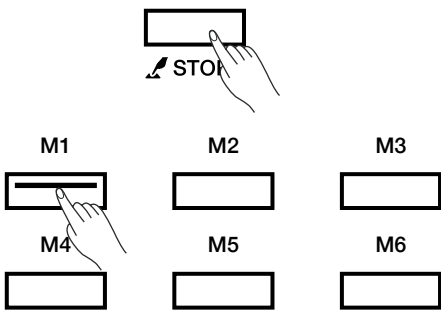


Memorizing the Panel Settings

Hold down the [STORE] button, then press one of memory buttons [M1] - [M6] to save the current panel settings to that memory slot.

Note!

This operation will overwrite the previous data in the memory slot.



Locking Parameters

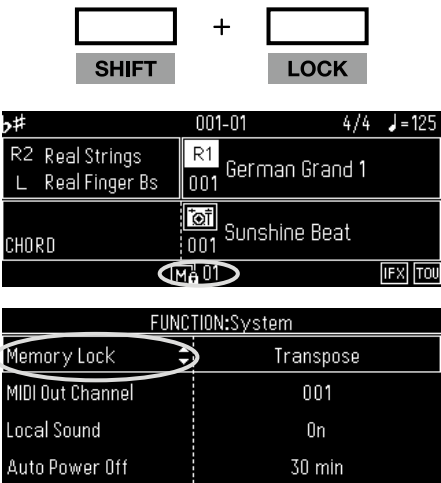
You can use the lock function to retain the setting of the locked items when you switch to another memory, so that they are preserved across different memory slots.

1. Hold down [SHIFT] and press the [LOCK] button to turn on the lock function. The lock icon will light up on screen. Now if you recall a different memory, the locked parameters will remain unchanged.

For example, when memory lock is set to “Transpose”. You first recall the [M1] settings and adjust the transpose. Then hold down [SHIFT] and press the [LOCK] button to turn on the lock function. When you recall the settings of [M2] - [M6], it will retain the same transpose as [M1].

To change the memory lock item, please refer to System Setting.

2. Hold down [SHIFT] and press the [LOCK] button again to turn off the lock function. The lock icon turns off.



You can select the memory lock item in System Setting:

Item	Description
Sound	Sound selection, part on/off, part volume, global effect, sound-related panel control, touch response setting, sustain, pitch bend range, piano effects.
Style	Style selection, style sections and playback status, chord on/off, tempo lock, chord detect mode, split point, style volume, style channel volume.
Song	Song selection, play mode, song volume, transpose lock, tempo lock.
Transpose	Transpose value.
Tempo	Tempo value.
Scale	Tune and scale setting.
Global Effect	Global effect type and parameters.
Part FX	Arpeggio or harmony type of R1, part FX on/off.
Controller	Functions assigned to the assignable pedals and Joystick down.
Style & Effect	Style, transpose, tempo, scale, global effect, part FX, controller, other.
Other	Time signature.

Part Effect

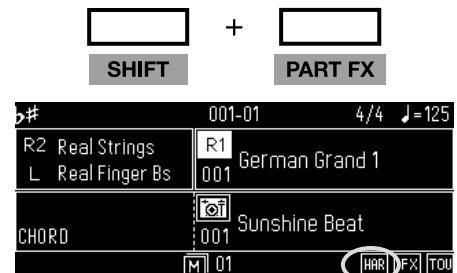
There are two groups of part effects: harmony and arpeggio, which can be applied to keyboard performance.

Harmony

Harmony is one of the most commonly used part effects. Harmony applies to sound part “R1” only.

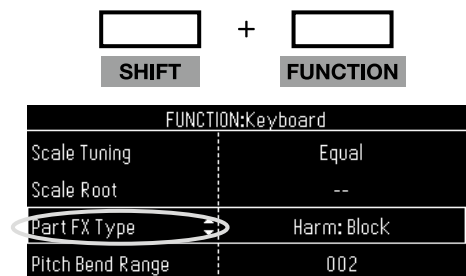
Turn Harmony On/Off

1. Hold down [SHIFT] and press the [PART FX] button to turn part effect on or off. By default, it turns on the harmony effect. The “HAR” icon lights up on screen.
2. Press the [CHORD] button to turn on the Chord mode, then play a chord in the chord area. When you play in the right hand area, it will automatically add harmony effect to the notes.
3. Hold down [SHIFT] and press the [PART FX] button again to turn off the harmony effect. The “HAR” icon turns off.



Set the Harmony Type

1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “Keyboard”.
2. Use the MENU [^]/[v] buttons to select “Part FX Type”, then use the data dial to select a harmony type.
3. Press the data dial to restore the default harmony type.

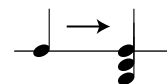


Harmony Types

The harmony group includes these effect types: harmony, echo, tremolo, and trill.

■ Harmony

Harmony is a commonly used part effect that automatically adds harmonies to the notes you play. The instrument has 13 harmony types. The harmony type “1+5” and “Octave” are not affected by chords. They will apply to the right hand notes when [CHORD] is turned on or off. The other harmony types, however, will work only in Chord mode, and will respond to chord change. Please refer to the Part FX List.



■ Echo

Echo is a natural delay that simulates sound waves bouncing off hillside valleys. The instrument has 4 echo types. Echo effects are not affected by chords.



■ Tremolo

The effect is a rapid repetition of single or multiple notes.
The instrument has 4 tremolo types. Tremolo effects are not affected by chords.



■ Trill

Trill is a type of grace note, which is the result of two notes alternate rapidly.
The instrument has 4 trill types. Trill effects are not affected by chords.



Notes!

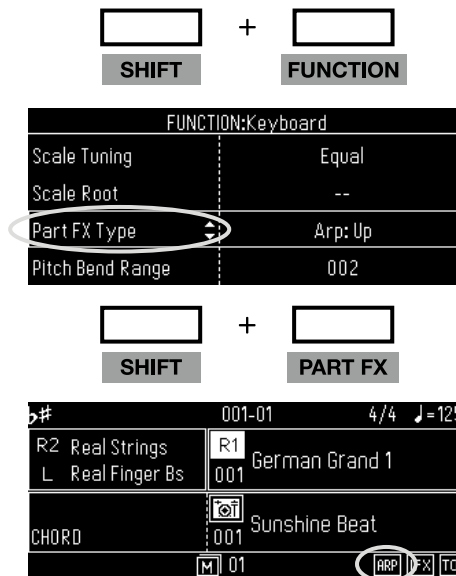
1. The harmony type “1+5” and “Octave”, the “Echo” type, the “Tremolo” type, and the “Trill” type will apply when [CHORD] is turned on or off. The other harmony types will work only in chord mode and by playing a chord in the chord area.
2. Harmony and Arpeggio cannot be opened at the same time. The current part effect may change when you change the sound selection.

Arpeggio

The arpeggio function converts one or more keys you play into an arpeggio sequence, and play it back according to certain rules. Arpeggios apply to the sound part “R1” only.




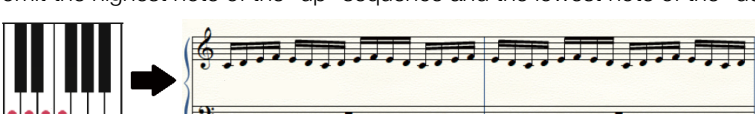
Turn Arpeggio On/Off

1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “Keyboard”. Use the MENU [^]/[v] buttons to select “Part FX Type”, then use the data dial to select an arpeggio type.
2. Hold down [SHIFT] and press the [PART FX] button to turn on the part effect. The “ARP” icon lights up on screen.
3. Hold down [SHIFT] and press the [PART FX] button again to turn off the arpeggio effect. The “ARP” icon turns off.



Arpeggio Types

The instrument provides 12 arpeggio types. The system will convert the notes you play into an arpeggio sequence in real time according to these rules: Up, Down, Up and Down, As Played, or Random. Each of them also includes the Hold function. Using a type with Hold, the arpeggio will continue playing when the keys are released. Using a type without Hold, the arpeggios will stop when the keys are released.

Arpeggio type	Description
Up, Up (Hold)	Sort all pitches of currently played notes from low to high. 
Down, Down (Hold)	Sort all pitches of currently played notes from high to low. 
Alt1, Alt1 (Hold)	Sort all pitches of currently played notes from low to high, then from high to low. 
Alt2, Alt2 (Hold)	Sort all pitches of currently played notes from low to high, then from high to low, but will omit the highest note of the “up” sequence and the lowest note of the “down” sequence. 
Asplayed, Asplayed (Hold)	Sort all pitches of currently played notes according to the order they were played.
Random, Random (Hold)	Sort all pitches of currently played notes randomly.

DSP Effects

This instrument provides powerful DSP effects which are divided into several modules.

Global Effect

The instrument has 2 global effect modules that can be applied simultaneously: GFX1 (reverb), GFX2 (chorus).

Effect	Description
Reverb	Simulates a spacial atmosphere.
Chorus	Simulates a doubled track to widen the sound.

1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “Effect”. Use the MENU [^]/[v] buttons to go to the global effect section and select an item, then use the data dial to change the setting.
2. In the Effect menu, you can select the global reverb type and global chorus type, set the master effect level and the effect level for each sound part. Please refer to Effect Setting.

SHIFT

+

FUNCTION

FUNCTION:Effect	
GFX1 Type	Real Hall
GFX1 Master Level	120
GFX1 R1 Send	000
GFX1 R2 Send	085

Master EQ

Master EQ is used to adjust the tonal quality of the overall sound. The instrument provides 5 types of EQ presets. You can choose a preset to better suit the piece you are performing or the song you are playing back.

Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “Effect”. Use the MENU [^]/[v] buttons to select “Master EQ”, then use the data dial to select an EQ type.

FUNCTION:Effect	
IFX R2 Level	--
IFX L Type	Attack
IFX L Level	030
Master EQ	Flat

Insert Effect

The insert effect is turned on by default. The “IFX” icon lights up on screen.

Hold down [SHIFT] and press the [IFX] button to turn off the insert effect. The “IFX” icon turns off. Repeat the operation to turn on the effect.

Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “Effect”. Use the MENU [^]/[v] buttons to go to the IFX section and select an item, then use the data dial to change the setting.

SHIFT

+

IFX

b#

001-01

4/4

♩=125

R2 Real Strings

R1

001 German Grand 1

L Real Finger Bs

CHORD

001 Sunshine Beat

M 01

IFX

FUNCTION:Effect	
IFX R1 Type	Bypass
IFX R1 Level	--
IFX R2 Type	Bypass
IFX R2 Level	--

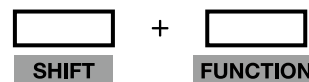
Notes!

1. Some IFX bound with the instrument sound are not open for editing. Those IFX types will show “Bypass”.
2. When adjusting the IFX, make sure the related sound part is turned on, otherwise, you will not hear the sound.

Function Setting

Function Setting includes several groups of settings: Keyboard setting, Piano Effects setting, Controllers setting, Effect setting, and System setting.

1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select a group menu. In function setting, you can also hold down [SHIFT] and press the MENU [^]/[v] to switch the group menu.
2. Use the MENU [^]/[v] buttons to select an item in the current group, then use the data dial to change the setting.



Keyboard Setting

In this section, it will describe the setting operation for Scale Tuning, Scale Root, and Pitch Bend Range. For the other parameters in the Keyboard setting menu, please refer to the their related chapter.

1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “Keyboard”.
2. Use the MENU [^]/[v] buttons to select a parameter, then use the data dial to change the setting.

FUNCTION:Keyboard	
Touch Response	Medium
Split Point	E4
Chord Detect	Full Range
Scale Tuning	Equal

Parameters and their range in Keyboard setting:

Parameter	Range	Default
Touch Response	Soft1, Soft2, Medium, Hard1, Hard2	Medium
Split Point	A0 ~ C8	F#3
Chord Detect	Fingered, Multi-fingered, Bass Invert, Full Range	Fingered
Scale Tuning	Equal, Pythagorean, Pure Major, Pure Minor, Werckmeister, Kirnberger	Equal
Scale Root	C, C#, D, D#, E, F, F#, G, G#, A, A#, B	--
Part FX Type	Harm:Duet, Harm:Country Duet, Harm:Rock Duet, Harm:Trio, Harm:Country Trio, Harm:Full Chord, Harm:-Block, Harm:4 Close 1, Harm:4 Close 2, Harm:4 Open, Harm:Octave, Harm:1+5, Harm:Strum, Harm:Echo 4, Harm:Echo 6, Harm:Echo 8, Harm:Echo 12, Harm:Tremolo 8, Harm:Tremolo 12, Harm:Tremolo 16, Harm:Tremolo 32, Harm:Trill12, Harm:Trill16, Harm:Trill24, Harm:Trill32	--
	Arp:Up, Arp:Up(Hold), Arp:Down, Arp:Down(Hold), Arp:Alt 1, Arp:Alt 1(Hold), Arp:Alt 2, Arp:Alt 2(Hold), Arp:Asplayed, Arp:Asplayed(Hold), Arp:Random, Arp:Random(Hold)	Up
Pitch Bend Range	000 ~ 012	--

Scale Tuning

This instrument presets some classical temperaments that are useful when playing older music, such as music from the Renaissance period.

In the Keyboard setting menu, use the MENU [^]/[v] buttons to select “Scale Tuning”, then use the data dial to change the setting. The default setting is “Equal”.

FUNCTION:Keyboard	
Scale Tuning	Equal
Scale Root	--
Part FX Type	Arp: Up
Pitch Bend Range	002

Scale	Description
Equal	Twelve-Tone Equal Temperament is a tuning system that divides an octave into 12 equal intervals. This temperament has only one type of semitone and one type of whole tone, making it easy to transpose. Most keyboard instruments worldwide are tuned in this temperament.
Pythagorean	Pythagorean Tuning is the earliest known tuning system in history, also known as the “cycle of fifths”. It is named after Pythagoras, who developed this system based on the pure fifth interval. Compared to Equal Temperament, Pythagorean Tuning has larger whole tones and smaller half-tones.
Pure Major	Just Intonation Major and Minor (Pure Major and Minor) is a tuning system that generates all other intervals using natural fifths and thirds. It works best for harmonies such as choral singing or solo singing. However, due to the existence of two types of whole tones and half-tones, it is not suitable for keyboard instruments’ design and performance.
Pure Minor	
Werckmeister	Werckmeister Temperament is an improvement on the Pythagorean tuning system, proposed by the German organ craftsman and music theorist Andreas Werckmeister. Its fifth interval preserves the essence of natural tuning and can play twelve different keys without the need for retuning. It was therefore praised by Bach as a temperament close to Equal Temperament. Each key has a distinct color, which is an important basis for classical and romantic music’s use of key names in titles, and the underlying reason for the revival of classical music scales.
Kirnberger	Kirnberger Temperament is a tuning system proposed by Johann Philipp Kirnberger, a student of Johann Sebastian Bach. After studying Bach’s “Well-Tempered Clavier,” Kirnberger developed a tuning system that is somewhat a combination of Mean-Tone Temperament and Just Intonation, and an improvement to the Mean-Tone Temperament.

Scale Root

Establishing a standard key is crucial while using classical scales other than the Twelve-Tone Equal Temperament (Equal). Temperament is based on the standard key that is used as a reference point for tuning the other keys. Changing the standard key will alter the foundation for tuning, resulting in different pitches across different keys and scales. To ensure proper tonality, it is recommended to set a standard pitch in accordance with the current piece when using non-Equal temperaments.

Scale Root is editable only when Scale Tuning is non-“Equal”. When Scale Tuning is set to “Equal”, it will use the default scale root of “C”, and this parameter is not editable.

FUNCTION:Keyboard	
Scale Tuning	Equal
Scale Root	--
Part FX Type	Arp: Up
Pitch Bend Range	002

Pitch Bend Range

You can set the Pitch Bend range to specify the maximum range of pitch change.

In the Keyboard setting menu, use the MENU [^]/[v] buttons to select “Pitch Bend Range”, then use the data dial to change the range from 000 ~ 012.

Now you can use the Joystick to apply pitch bend when playing the keyboard.

FUNCTION:Keyboard	
Scale Tuning	Equal
Scale Root	--
Part FX Type	Arp: Up
Pitch Bend Range	002

Piano Effects

You can adjust the piano parameters to obtain rich and nuanced sounds for your piano performance.

1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “Piano Effects”.
2. Use the MENU [^]/[v] buttons to select a piano parameter, then use the data dial to change the setting.

FUNCTION:Piano Effects	
String Resonance	003
Damper Resonance	003
Damper Noise	003

The instrument provides three piano parameters:

Parameter	Range	Default	Description
String Resonance	000 ~ 005	003	Simulate the strings' overtone resonance produced by pressing keys successively. Adjust to set the degree of overtone resonance.
Damper Resonance	000 ~ 005	003	Simulate the string resonance effect when playing additional notes after pressing down the damper pedal. Adjust to set the degree of resonance.
Damper Noise	000 ~ 005	003	Simulate the physical noise generated by the movement of the damper pedal and string dampers while pedaling. Adjust to set the audibility of the noise.

Controller Setting

The instrument provides some powerful assignable controllers, giving you more flexibility over your performance.

1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “Controller”.
2. Use the MENU [^]/[v] buttons to select a controller, then use the data dial to assign a function to that controller.

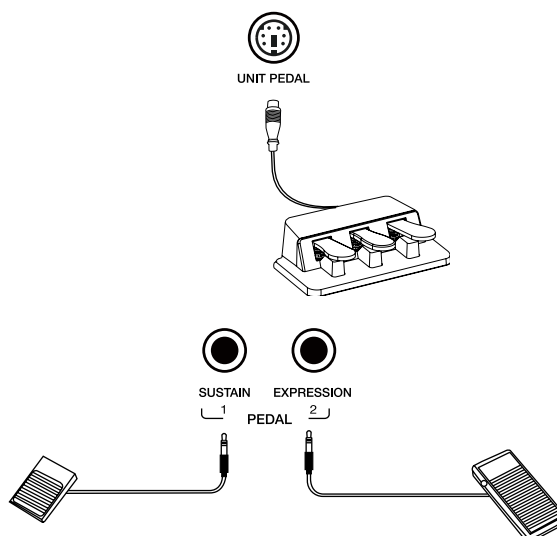
FUNCTION:Controller	
Soft Pedal	Soft
Sustain Pedal	Sustain
Expression Pedal	Master Volume
Joystick Down	Off

Pedals

You can use the included pedal unit, or connect an optional sustain pedal or expression pedal, then assign functions to the connected pedal.

In the Controller setting menu, use the MENU [^]/[v] buttons to select a pedal, then use the data dial to change the setting.

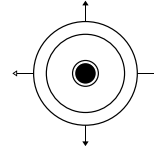
Parameter	Range	Default
Soft Pedal	Soft, Start/Stop, Memory	Soft
Single Sustain Pedal	Sustain, Soft, Start/Stop, Memory	Sustain
Expression Pedal	Master Volume, Modulation, Cutoff, Resonance, Filter	Master Volume



Joystick

The instrument has a four-direction Joystick, which can be pushed at any direction and will automatically return to the center position when released. You can assign a function to Joystick Down.

Joystick Operation	Default function
X- ←	Pitch bend down
X+ →	Pitch bend up
Y+ ↑	Modulation
Y- ↓	- -



In the Controller setting menu, use the MENU [^]/[v] buttons to select “Joystick Down”, then use the data dial to change the setting.

FUNCTION:Controllers	
Soft Pedal	Soft
Single Sustain Pedal	Sustain
Expression Pedal	Master Volume
Joystick Down	Off

Parameter	Range	Default
Joystick Down	Off, Filter, Sound Volume, Release	Off

Effect Setting

The Effect setting menu includes settings of the global effects, the insert effects and the master EQ. Details of using these effects, please refer to the related chapters. Detailed effect types, please refer to Effect List.

1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “Effect”.
2. Use the MENU [^]/[v] buttons to select a parameter, then use the data dial to change the setting.

FUNCTION:Effect	
GFX1 Type	Real Hall
GFX1 Master Level	120
GFX1 R1 Send	000
GFX1 R2 Send	085

Parameters in Effect setting:

Parameter	Description
GFX1 Type	Select the reverb type.
GFX1 Master Level	Set the reverb level of all sound parts.
GFX1 R1 Send	Set the reverb level of “R1”.
GFX1 R2 Send	Set the reverb level of “R2”.
GFX1 L Send	Set the reverb level of “L”.
GFX2 Type	Select the chorus type.
GFX2 Master Level	Set the chorus level of all sound parts.
GFX2 R1 Send	Set the chorus level of “R1”.
GFX2 R2 Send	Set the chorus level of “R2”.
GFX2 L Send	Set the chorus level of “L”.
IFX R1 Type	Select the insert effect type of “R1”.
IFX R1 Level	Set the insert effect level of “R1”.
IFX R2 Type	Select the insert effect type of “R2”.
IFX R2 Level	Set the insert effect level of “R2”.
IFX L Type	Select the insert effect type of “L”.
IFX L Level	Set the insert effect level of “L”.
Master EQ	Select the Master EQ type.

System Setting

1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select "System".
2. Use the MENU [^]/[v] buttons to select a parameter, then use the data dial to change the setting.

FUNCTION: System	
Tune	00
Metronome Time	4/4
Play Mode	Folder
Memory Lock	Sound

Parameters and their ranges in System setting:

Parameter	Range	Default	Description
Tune	-50 ~ +50	00	Adjust the pitch of the entire keyboard up or down by 2 cents.
Metronome Time Signature	1/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 8/4, 9/4, 3/8, 6/8	4/4	The numerator indicates how many beats in each bar. The denominator indicates the note value of each beat.
Play Mode	Single, Folder, Single Loop, Folder Loop	Folder	Specify how songs will be played back.
Memory Lock	Sound, Style, Song, Transpose, Tempo, Scale, Global Effect, Part FX, Controller, Style & Effect, Other	Style	Specify the locked item which will be retained when switching memories.
MIDI Out Channel	001 ~ 016	001	Specify the MIDI output channel of sound "R1"
Local Sound	Off, On	On	When set to "On" (by default), the keyboard will produce sound using its built-in sound source. When set to "Off", the instrument's internal sound source will be disabled. It will not produce sound but will output MIDI messages.
Auto Power Off	Never, 30 min, 60 min	30 min	The instrument will automatically shut down after a specified period of inactivity. You can set the time or disable the function entirely by selecting "Never".
Export to USB	Information, User Song, Memory	Information	Specify the type of data to be exported to the connected USB drive.
Format USB	Confirm	Confirm	Format the connected USB drive.
Restore Factory	Confirm	Confirm	Restore to factory default setting.
Clear User Data	Clear All Data, Clear User Sound, Clear User Style, Clear User Song, Clear Memory	Clear All Data	Select the data that you want to delete. It will permanently delete the selected user data.

MIDI

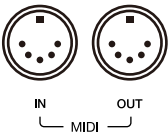
By using the MIDI functions you can expand your musical possibilities.

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

MIDI Interface

Different MIDI devices can be connected by MIDI cables to exchange MIDI messages with each other. This instrument has two MIDI ports: [MIDI IN] and [MIDI OUT]. [MIDI IN] is used for receiving MIDI messages from other MIDI devices or a computer. [MIDI OUT] is used for transmitting messages of this instrument to other MIDI devices. This instrument can also send or receive MIDI messages through the [USB TO HOST] interface.



Notes!

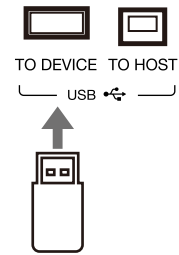
1. Before connecting the instrument with a USB cable, make sure your computer is awake from Sleep or Standby mode.
2. Connect the USB cable to the instrument and computer before turning on the power.
3. MIDI input:
This instrument can receive MIDI messages via either [MIDI IN] or [USB TO HOST] at a time. When both ports are connected, MIDI input from [USB TO HOST] has higher priority.
4. MIDI output:
MIDI messages can be transmitted via [MIDI IN], [USB TO HOST] at the same time.

Connecting a USB Drive

The instrument supports USB drives of FAT32 format only. It supports storing 512 files under the root directory of the USB drive. Exceeding this file number will make it unable to save or record to the USB drive.

Entering the USB Menu

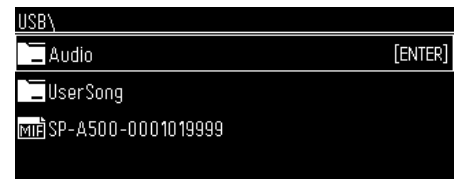
1. Insert a compatible USB drive to the [USB TO DEVICE] jack of the instrument. When the USB drive is recognized, the USB icon will light up on screen.



USB



2. Press the [USB] button to enter the USB menu. The screen will show the files and folders under the root directory of the USB drive.










Notes!

1. When you record audio to the USB drive, it will automatically create a folder named "Audio" under the USB root directory. Your audio recording will be stored to this folder.
2. When you export/save user songs to the USB drive, it will automatically create a folder named "UserSong" under the USB root directory to store the user songs.

Executing Files

In the USB menu, use the data dial to select a file or folder, then follow the on-screen instruction to execute it.

File Type	On-screen Icon	Execution & Description
Folder		Press the [ENTER] button to enter the folder.
Style File		Press the [ENTER] button to load a user style. After loading, you can find the user style in the user style category of the Style selection menu. It supports loading up to 50 user styles. Press the [▶/■] button to start/stop playing the style.
MIDI File		Press the [ENTER] button to load a user song. After loading, you can find the user song in the user song category of the Song selection menu. It supports loading up to 5 user songs. Press the [▶/■] button to start/stop playing the song.
Audio File	 	Press the [▶/■] button to start/stop playing the WAV or MP3.
Performance Memory File		Press the [ENTER] button to load to a specific memory bank. After loading, you can select the memory bank and then press the memory buttons to recall the settings.
Expansion File		Press the [ENTER] button to install the Expansion pack. After the installation, you can find the expansion styles in the Expansion category of the Style selection menu. It supports installing up to 50 expansion styles. Notes: 1. It supports installing expansion styles included in the Expansion pack only. 2. You can create or manage your Expansion pack with the application "GrandSuite". 3. Each time when you install an Expansion pack, previous expansion data on the instrument will be overwritten. Check the prompt messages before execution.

Saving to USB Drive

- 1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly select “System”.
- 2. Use the MENU [^]/[v] buttons to select “Export to USB”.
- 3. Use the data dial to select the type of data. Press the [ENTER] button to export the data to the USB drive. Data that can be exported to the USB drive: user song, performance memory, the instrument’s information.

SHIFT

+

FUNCTION

FUNCTION: System	
Export to USB	User Song [ENTER]
Format USB	Confirm
Restore Factory	Confirm
Clear User Data	Clear User Song

Notes!	<div><div>1. The performance memory saved to the USB drive will be named as “Bank_xxx.mem”. The “xxx” indicates the bank number, such as “Bank_004.mem”.</div><div>2. You can save the instrument’s information file (“mif”) to the USB drive, then export it to GrandSuite for editing. Please refer to the instructions on GrandSuite.</div></div>
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Formatting the USB Drive

- 1. Hold down [SHIFT] and press the [FUNCTION] button repeatedly to select “System”.
- 2. Use the MENU [^]/[v] buttons to select “Format USB”. Press the [ENTER] button to format the USB drive.

FUNCTION: System	
Export to USB	User Song
Format USB	Confirm [ENTER]
Restore Factory	Confirm
Clear User Data	Clear User Song

Troubleshooting

Problem	Possible Cause and Solution
There's slight noise when powering on or off.	This is normal and not a cause for concern.
The speakers of the instrument do not produce sound when playing the keyboard or rolling playbacks.	Check if the [VOLUME] knob is set too low. If so, turn clockwise to increase the volume.
	Check if the volume for each sound part or playback is set too low in the Mixer. If so, adjust accordingly.
	Check if the Fade icon is turned on. If so, turn off the Fade function.
	Check if headphones or converters are plugged into the [PHONES] jacks. If so, unplug them.
	Check if the "Local Sound" in System Setting is turned off. If so, turn it on.
The instrument makes noise.	When using a mobile phone nearby (especially when receiving calls), the instrument might make noise due to interference. Move the mobile phone slightly away from the instrument.
The sound is distorted or noisy.	Some volume settings may not be adjusted properly. Check and adjust accordingly.
	Some effect parameter values may not be set reasonably. Check and adjust accordingly.
	Some effects will produce noise when being adjusted. This is normal and not a cause for concern.
After selecting a sound from the menu, it's not responding.	Check if the sound part to which the sound is being assigned is turned on.
Different keys have similar pitch or sound when selecting some sounds.	This is normal and not a cause for concern.
The pitch is not accurate.	Check if the classical temperament is set to non-"Equal". If so, set it to back to "Equal".
	Check if the tune value is set to non-"0". If so, reset it to "0".
There's no sound when pressing the [START/STOP] button to start the style.	Check if a piano style is being selected. Pressing the [START/STOP] will start the percussion tracks. Piano styles don't have percussion tracks.
No response after playing "Cancel" chord in the chord area.	Cancel and Cancel 2 chords are supported in Multi-fingered and Bass Invert modes only. Check and set the chord detect mode accordingly.
When pressing the Sustain pedal, it doesn't sustain the notes.	It's recommended to use the official pedal. If you're using a sustain pedal with polarity switch, please adjust the pedal. Try pressing the pedal and then powering on again.
MIDI files or Style files cannot be opened.	The file size may be too large. In such a case, it will prompt you on screen.
The auto accompaniment does not play back even when sync start is engaged and a key is pressed.	You may be playing keys in the right hand range of the keyboard. To start auto accompaniment with sync start, make sure to play keys in the left-hand range.
The harmony function doesn't work.	Harmony function is not available when the upper sound is a drum kit.
Part of the text is displayed in squares.	The file name contains characters that the system cannot recognize.
The boot time seems to get longer.	When there's too much user data on the instrument, the boot time may get longer.
The file names on the USB drive are not displayed correctly.	The instrument supports using English and Chinese. If the file name contains characters that the system cannot recognize, it may not be displayed correctly.
It cannot read/save to the USB drive.	Make sure your USB drive is in FAT32 format.
When connecting to computer, the instrument cannot be recognized.	Check if the USB cable is firmly connected. Try connecting another USB port on the computer. This instrument is plug and play and should work without installing a driver.
It shuts down after a period of time.	The auto power off function will turn off the instrument after a preset period of time when the instrument is not in use. You can disable this function in the Function Setting.

Specifications

Keyboard	88 keys, Graded Action Compact Keyboard
Touch Response	OFF / Soft 1 / Soft 2 / Normal / Hard 1 / Hard 2
Display	Full Dot Matrix LCD
Language	English
Polyphony	256
Sound	750 Sounds + 50 Users, Sound Edit
Keyboard Part	L (Left), R1 (Right 1), R2 (Right 2)
DSP Effect	32 Reverb + 64 Chorus 24 IFX 5 Master EQ D.A.S (turned on by default, cannot be turned off)
Part Effect	13 Harmony + 4 Echo + 4 Tremolo + 4 Trill 6 Basic Arpeggios
Chord	39 Chord Types
Style	280 Styles + 50 Expansion Styles + 50 Users
Style Control	Start/Stop, Sync Start, Intro/Ending, Main A/Fill A, Main B/Fill B, Main C/Fill C, Main D/Fill D, Chord On/Off, Fade In/Out
Q.S.	4 for Each Style
Song	90 Preset Songs + 50 Lesson Songs + 5 User Songs
Song Control	Song Select, Start/Stop, Pause, Fast Forward, Rewind, Section loop.
Song Recording	MIDI Recording, 16 Tracks 5 User Songs (10000 Events Per Song)
Album	50
Audio Recording	WAV (44.1KHz/16bit), MP3 (320kbps)
Audio Playback	WAV, MP3 Audio recording is not possible when audio is playing back.
Demo Song	3
Tempo	5 ~ 320
Pitch Adjustment	Transpose (± 12) Octave (± 12), editable in Twinova mode only Tune (± 50)
Performance Memory	6 x 32 Banks, Lock
Real-time Controller	3 Assignable Pedals 1 Joystick (Pitch Bend, Modulation)
Mixer	Yes

Other Control	Volume Knob, Data Dial, Tempo < / > , Metro., Mixer, Function, USB, Menu ^ / v , Exit, Transpose < / > , Octave < / > , IFX, Sustain, Touch, Sound Selection buttons, Part switch, Q.S
USB Storage Device	Save User Data (User Songs, User Memory), Instrument Information Play Back User Song (SMF, MP3, WAV), User Style Install Expansion Pack Supports up to 512 files in the USB drive directory.
Connectivity	2 Phones (1 x 1/4" + 1/8"), Aux In (1 x 1/4"), 2 Line Out (L/L+R, R) (2 x 1/4"), Sustain Pedal (assignable), Expression Pedal (assignable), USB To Device, USB To Host, MIDI In, MIDI Out, Unit Pedal (Soft Pedal assignable).
Other Setting	Piano Effects, Tune, Metronome Time Signature, Split Point, Reverb Type, Chorus Type, Master EQ, Harmony Type, Arpeggio Type, Lock, Pedal Function, Joystick Down, Play Mode, MIDI Send Channel, Auto Power Off, Factory Reset
Expansion Data	Edit user data (user style, expansion style) on GrandSuite.
Application	GrandSuite
Power	DC 12V
Amplifier	2 x 23 watt 2 x 23 watt
Speaker	2 x (16 x 7) cm oval 2 x 3 cm
Dimension	1310 X 294 X 124 mm
Weight	13.2 kg

* All specifications are subject to change without notice.

Sound List

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
Piano					
1	121	10	0	German Grand Piano 1	German Grand 1
2	121	11	0	German Grand Piano 2	German Grand 2
3	121	11	1	Real Bright Piano	Real Bright Pno
4	121	12	0	Mellow Grand Piano	Mellow Piano
5	121	12	1	Rock Piano	Rock Piano
6	121	11	3	Real Honky Tonk	Real HonkyTonk
7	121	15	0	Octave Grand Piano 1	Octave Piano 1
8	121	16	0	Octave Grand Piano 2	Octave Piano 2
9	121	16	1	Piano & EP 1	Piano&EP 1
10	121	10	1	Bright Grand Piano	Bright Grand Pno
11	121	14	0	Warm Grand Piano	Warm Grand Pn
12	121	14	1	Octave Bright Piano	Oct Bright Pno
13	121	13	0	Live Grand Piano	Live Grand Pno
14	121	10	3	Live Honky Tonk	Live HonkyTonk
15	121	10	6	Real Harpsichord	Real Harpsi
16	121	11	6	Octave Harpsichord	Octave Harpsi
17	121	0	6	Live Harpsichord	Live Harpsi
18	121	10	2	CP Electric Piano 1	CP E.Piano 1
19	121	0	2	CP Electric Piano 2	CP E.Piano 2
20	121	13	1	Pop Piano	Pop Piano
21	121	17	0	Piano & Strings	Piano&Strings
22	121	18	0	Piano & Pad	Piano&Pad
23	121	19	0	Piano & Choir	Piano&Choir
24	121	17	1	Piano & EP 2	Piano&EP 2
25	121	12	2	Ballad Electric Piano	Ballad E.Piano
26	121	12	6	Dark Harpsichord	Dark Harpsi
E.Piano					
27	121	10	4	Vintage Electric Piano 1	Vintage EP 1
28	121	11	5	Dream Electric Piano 1	Dream E.Piano 1
29	121	10	5	Classic Electric Piano	Classic EP
30	121	0	5	Japanese Electric Piano	Japanese EP
31	121	3	4	60's Electric Piano	60's E.Piano
32	121	12	5	Modern Electric Piano	Modern EP
33	121	11	4	Jazz Electric Piano 1	Jazz E.Piano 1
34	121	13	5	Cool Electric Piano 1	Cool E.Piano 1
35	121	12	4	Cool Electric Piano 2	Cool E.Piano 2
36	121	13	4	Phase Electric Piano	Phase E.Piano
37	121	14	4	Vintage Electric Piano 2	Vintage EP 2
38	121	16	4	Jazz Electric Piano 2	Jazz E.Piano 2
39	121	18	4	Tremolo EP 1	Tremolo EP 1
40	121	20	4	Standard Electric Piano	Standard EP
41	121	3	5	Dream Electric Piano 2	Dream E.Piano 2
42	121	22	4	Tremolo EP 2	Tremolo EP 2
43	121	2	5	Super Electric Piano	Super E.Piano
44	121	10	7	Stereo Clavi	Stereo Clavi
45	121	0	7	Classic Clavi	Classic Clavi
46	121	1	7	Wah Clavi	WaClavi
47	121	30	4	Massiveness Electric Piano	Massiveness EP
48	121	32	4	Bright Electric Piano	Bright E.Piano
49	121	34	4	Wire Electric Piano	Wire E.Piano

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
50	121	35	4	Aah Electric Piano	Aah E.Piano
51	121	35	5	Pop Electric Piano	Pop E.Piano
52	121	30	7	Rock Electronic Clavi	Rock Elec Clavi
53	121	34	7	Bright Electronic Clavi	Brt Elec Clavi
54	121	35	7	Warm Electronic Clavi	Warm Elec Clavi
55	121	37	7	Dark Electronic Clavi	Dark Elec Clavi
Organ					
56	121	0	16	Stereo Drawbar Organ	Stereo Draw Org
57	121	0	17	Classic Percussive Organ	Classic Perc Org
58	121	13	18	Stereo Rock Organ	Stereo Rock Org
59	121	0	19	Real Church Organ	Real Church Org
60	121	11	18	Power Rotary Organ	Power Rotr Org
61	121	2	17	Stereo Percussive Organ	Stereo Perc Org
62	121	1	19	Octave Church Organ	Oct Church Org
63	121	2	19	Cool Church Organ	Cool Church Org
64	121	1	17	Cool Percussive Organ	Cool Perc Organ
65	121	0	18	Live Rock Organ	Live Rock Organ
66	121	12	18	Rotary Organ	Rotary Organ
67	121	11	17	Pop Organ	Pop Organ
68	121	10	17	Jazz Organ 1	Jazz Organ 1
69	121	10	18	Cool Rock Organ	Cool Rock Org
70	121	11	16	Electronic Organ	Electronic Organ
71	121	1	16	Live Drawbar Organ	Live Draw Organ
72	121	2	16	Jazz Organ 2	Jazz Organ 2
73	121	12	17	Live Percussive Organ	Live Perc Organ
74	121	14	16	60's Organ	60's Organ
75	121	3	16	Cool Drawbar Organ	Cool Draw Org
76	121	13	19	Live Church Organ	Live Church Org
77	121	15	16	Mellow Organ	Mellow Organ
78	121	0	20	Real Reed Organ	Real Reed Organ
79	121	1	20	Cool Puff Organ	Cool Puff Organ
80	121	30	16	Dark Drawbar Organ	Dark Draw Org
81	121	33	16	Bright 60's Organ	Bright 60's Org
82	121	34	16	Detuned Classic Organ	Det Classic Org
83	121	37	16	Bright Rotary Organ	Bright Rotary
84	121	30	17	Bright Percussive Organ	Bright Perc Org
85	121	31	17	Jazz Percussive Organ	Jazz Perc Organ
86	121	32	17	Rock Percussive Organ	Rock Perc Org
87	121	33	17	Octave Percussive Organ	Octave Perc Org
88	121	31	18	Dark Rock Organ	Dark Rock Org
89	121	32	18	Mellow Rock Organ	Mellow Rock Org
90	121	36	18	Wah Rock Organ	Wah Rock Org
91	121	32	19	Mellow Church Organ	Mel Church Org
92	121	34	19	Vintage Rock Organ	VintageRockOrg
93	121	35	19	Vintage Pop Organ	Vintage Pop Org
94	121	37	19	Vintage Percussive Organ	Vintage PercOrg
95	121	36	20	Jazz Puff Organ	Jazz Puff Org
Accordion					
96	121	10	21	Musette 1	Musette 1
97	121	11	21	Real Accordion	Real Accordion
98	121	10	22	Sweet Harmonica	Sweet Harmonic

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
99	121	11	22	Soft Harmonica	Soft Harmonica
100	121	0	23	Real Tango Accordion	RI Tango Accord
101	121	11	23	Ballroom Accordion	Ballroom Accord
102	121	0	21	Cool Accordion	Cool Accordion
103	121	10	23	Solo Accordion 1	Solo Accordion 1
104	121	30	21	Dark Musette	Dark Musette
105	121	31	21	Bright Musette	Bright Musette
106	121	31	22	Bright Harmonica	Bright Harmonic
107	121	33	22	Wide Harmonica	Wide Harmonica
108	121	13	23	Solo Accordion 2	Solo Accordion 2
109	121	31	23	Bright Accordion	Bright Accordion
Guitar					
110	121	10	24	Real Nylon Guitar	Real Nylon Gt
111	121	10	25	Real Steel Guitar	Real Steel Gt
112	121	11	29	Rock Guitar	Rock Guitar
113	121	11	27	Cool Funk Guitar	Cool Funk Guitar
114	121	10	27	Real Clean Guitar	Real Clean Gt
115	121	11	25	Slide Steel Guitar	Slide Steel Gt
116	121	12	27	Slide Clean Guitar	Slide Clean Gt
117	121	2	25	Sweet Mandolin	Sweet Mandolin
118	121	17	27	Cool Lead Guitar	Cool Lead Guitar
119	121	10	26	Real Jazz Guitar	Real Jazz Gt
120	121	13	27	60's Clean Guitar	60's Clean Gt
121	121	12	25	Harmonics Steel Guitar	Harmonic St Gt
122	121	11	24	Harmonics Nylon Guitar	Harmonic Ny Gt
123	121	13	25	12-Strings Guitar	12Str Guitar
124	121	10	29	Blues Guitar	Blues Guitar
125	121	0	27	Solo Clean Guitar	Solo Clean Gt
126	121	11	30	Guitar Feedback	Gt Feedback
127	121	12	30	5th Distortion Guitar	5thDistortion Gt
128	121	14	25	Velocity Steel Guitar	Velocity Stel Gt
129	121	14	27	Delay Guitar	Delay Guitar
130	121	15	27	Vintage Guitar	Vintage Guitar
131	121	11	26	Solo Jazz Guitar	Solo Jazz Gt
132	121	13	30	Rhythm Guitar	Rhythm Guitar
133	121	14	26	Jazz Lead Guitar 1	Jazz Lead Gt 1
134	121	0	26	Jazz Lead Guitar 2	Jazz Lead Gt 2
135	121	10	28	Solo Muted Guitar	Solo Muted Gt
136	121	1	26	Pedal Guitar	Pedal Guitar
137	121	14	30	Distortion Lead Guitar 1	Dist Lead Gt 1
138	121	13	26	Octave Guitar	Octave Guitar
139	121	24	27	Tremolo Guitar	Tremolo Guitar
140	121	15	30	Metal Guitar	Metal Guitar
141	121	20	27	Clean Rhythm Guitar	Clean RhythmGt
142	121	15	26	Jazz Guitar & EP	JazzGt&EP
143	121	0	30	Distortion Lead Guitar 2	Dist Lead Gt 2
144	121	26	27	12-Strings Electric Guitar	12Str E.Guitar
145	121	0	28	Muted Rhythm Guitar	MutedRhythmGt
146	121	27	27	Funk Guitar	Funk Guitar
147	121	0	29	Overdrive Lead Guitar	Odrive Lead Gt
148	121	30	25	Chorus Steel Guitar	Chorus Stel Gt

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
149	121	33	25	Nylon Guitar & Steel Guitar	NyGt&StelGt
150	121	34	25	Jazz Guitar & Steel Guitar	JazzGt&StelGt
151	121	31	26	Bright Jazz Guitar	Bright Jazz Gt
152	121	32	26	Overdrive Jazz Guitar	Odrive Jazz Gt
153	121	34	26	Overdrive Octave Guitar	Odrive OctaveGt
154	121	36	26	Jazz Octave Guitar	Jazz Octave Gt
155	121	31	27	Vintage Funk Guitar	Vintage Funk Gt
156	121	32	27	Overdrive Funk Guitar	Odrive Funk Gt
157	121	34	27	Clean Vintage Guitar	Clean Vintage Gt
158	121	35	27	Dark Vintage Guitar	Dark Vintage Gt
159	121	36	27	Bright Vintage Guitar	Brt Vintage Gt
160	121	30	28	Dark Muted Guitar	Dark Muted Gt
161	121	32	28	Overdrive Muted Guitar	Odrive Muted Gt
162	121	37	28	Funk Muted Guitar	Funk Muted Gt
163	121	30	29	Dark Overdrive Guitar	Dark Odrive Gt
164	121	31	29	Bright Overdrive Guitar	Brt Odrive Gt
165	121	32	29	Soft Overdrive Guitar	Soft Odrive Gt
166	121	31	30	Dark Distortion Guitar	Dark Dist Gt
167	121	33	30	Velocity Lead Guitar	Vel Lead Gt
168	121	35	30	Bright Lead Guitar	Bright Lead Gt
169	121	36	30	Modern Distortion Guitar	Modern Dist Gt
Bass					
170	121	12	33	Real Finger Bass	Real Finger Bs
171	121	11	32	Real Acoustic Bass	Real Acoust Bs
172	121	11	34	Real Pick Bass	Real Pick Bass
173	121	11	35	Real Fretless Bass	Real Fret Bass
174	121	11	36	Power Slap Bass	Power Slap Bass
175	121	10	39	Attack Pulse	Attack Pulse
176	121	10	38	House Bass	House Bass
177	121	10	37	Funk Slap Bass	Funk Slap Bass
178	121	11	39	Resonant Bass 1	Resonant Bass1
179	121	13	39	Resonant Bass 2	Resonant Bass2
180	121	14	39	Resonant Synth Bass	Reson Syn Bass
181	121	10	34	Rock Bass 1	Rock Bass 1
182	121	0	34	Rock Bass 2	Rock Bass 2
183	121	11	33	Finger Slap Bass	Finger Slap Bs
184	121	10	32	Acoustic Bass & Cymbal	Bass&Cymbal
185	121	15	39	Analog Bass	Analog Bass
186	121	10	36	Resonant Slap Bass	Reson Slap Bass
187	121	16	39	Warm Synth Bass	Warm Syn Bs
188	121	17	39	Hammer	Hammer
189	121	3	39	Rubber Synth Bass	Rubber Syn Bs
190	121	10	33	Pop Bass	Pop Bass
191	121	31	33	Overdriven Finger Bass	Over Finger Bs
192	121	37	33	Dark Slap Bass	Dark Slap Bass
193	121	30	34	Bright Pick Bass	Bright Pick Bass
194	121	31	34	Dark Pick Bass	Dark Pick Bass
195	121	32	34	Overdrive Pick Bass	Odrive Pick Bs
196	121	37	34	Hard Rock Bass	Hard Rock Bass
197	121	31	35	Overdriven Fretless Bass	Over Fret Bass
198	121	34	35	Muted Fretless Bass	Muted Fret Bass

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
199	121	35	35	Dark Fretless Bass	Dark Fret Bass
200	121	31	36	Chorus Slap Bass	Chorus Slap Bs
201	121	33	36	Bright Resonant Slap Bass	Brt Rsn Slap Bs
202	121	34	36	Dark Resonant Slap Bass	Dk Rsn Slap Bs
203	121	37	36	Warm Resonant Slap Bass	Wm Rsn Slap Bs
204	121	30	37	Dark Power Slap Bass	Dk Powr Slap Bs
205	121	31	37	Bright Power Slap Bass	Brt Powr Slap Bs
206	121	32	37	Distortion Power Slap Bass	Dt Powr Slap Bs
207	121	35	37	Chorus Power Slap Bass	Cho Powr Slp Bs
208	121	37	37	Warm Power Slap Bass	Wm Powr Slp Bs
209	121	31	38	Bright Analog Bass	Brt Analog Bass
210	121	32	38	Chorus Analog Bass	Cho Analog Bass
211	121	36	38	Hammer Analog Bass	Hammer Ana Bs
212	121	37	38	Dark Hammer Bass	Dark HammerBs
213	121	30	39	Bright Attack Bass	Bright Attack Bs
214	121	31	39	Pulse Attack Bass	Pulse Attack Bs
215	121	32	39	Bright Pulse Bass	Brt Pulse Bass
216	121	33	39	Octave Analog Bass	Oct Analog Bass
217	121	34	39	Power Analog Bass	Powr Analog Bs
218	121	35	39	Power Pulse Bass	Powr Pulse Bass
Strings					
219	121	10	48	Real Strings	Real Strings
220	121	0	48	Classic Strings	Classic Strings
221	121	1	48	Orchestra Tutti	Orchestra Tutti
222	121	10	40	Sweet Violin	Sweet Violin
223	121	10	42	Real Cello	Real Cello
224	121	11	48	Concert Strings	Concert Strings
225	121	10	49	Live Strings	Live Strings
226	121	0	46	Real Harp	Real Harp
227	121	12	48	Live Orchestra	Live Orchestra
228	121	13	48	Live Contrabass	Live Contrabass
229	121	12	49	Slow Strings	Slow Strings
230	121	19	48	Strings & Flute	Strings&Flute
231	121	15	48	Arco Strings 1	Arco Strings 1
232	121	0	52	Live Choir Aahs	Live Choir Aahs
233	121	0	53	Live Choir Oohs	Live Choir Oohs
234	121	0	54	Synth Choir 1	Synth Choir 1
235	121	16	48	Orchestra	Orchestra
236	121	17	48	Arco Strings 2	Arco Strings 2
237	121	18	48	Brilliant Strings	Brilliant Str
238	121	0	44	Live Tremolo Strings	Live Tremolo Str
239	121	0	45	Live Pizzicato Strings	Live Pizz Str
240	121	10	51	Movie Strings	Movie Strings
241	121	0	50	Cool Synth Strings	Cool Synth Str
242	121	0	51	Soft Synth Strings	Soft Synth Str
243	121	0	40	Real Violin	Real Violin
244	121	0	41	Real Viola	Real Viola
245	121	0	42	Live Cello	Live Cello
246	121	0	43	Real Contrabass	Real Contrbs
247	121	10	52	Soft Choir Aahs	Soft Choir Aahs
248	121	1	53	Soft Choir Oohs	Soft Choir Oohs

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
249	121	1	54	Synth Choir 2	Synth Choir 2
250	121	0	55	Live Orchestra Hit	Live Orch Hit
251	121	1	55	Synth Bass Hit	Synth Bass Hit
252	121	2	55	Power Hit 1	Power Hit 1
253	121	3	55	Power Hit 2	Power Hit 2
254	121	30	40	Cool Violin	Cool Violin
255	121	33	40	Slow Violin	Slow Violin
256	121	34	40	Dark Violin	Dark Violin
257	121	35	40	Bright Violin	Bright Violin
258	121	30	41	Slow Viola	Slow Viola
259	121	31	41	Dark Viola	Dark Viola
260	121	32	41	Bright Viola	Bright Viola
261	121	30	42	Slow Cello	Slow Cello
262	121	31	42	Dark Cello	Dark Cello
263	121	32	42	Bright Cello	Bright Cello
264	121	30	43	Dark Contrabass	Dark Contrbs
265	121	31	43	Bright Contrabass	Bright Contrbs
266	121	33	43	Slow Contrabass	Slow Contrbs
267	121	30	44	Dark Tremolo Strings	Dark Tremo Str
268	121	31	44	Bright Tremolo Strings	Bright Tremo Str
269	121	32	44	Slow Tremolo Strings	Slow Tremo Str
270	121	30	45	Dark Pizzicato Strings	Dark Pizz Str
271	121	31	45	Bright Pizzicato Strings	Bright Pizz Str
272	121	30	46	Dark Harp	Dark Harp
273	121	31	46	Bright Harp	Bright Harp
274	121	0	104	India Sitar	India Sitar
275	121	0	105	Folk Banjo	Folk Banjo
276	121	0	106	Japanese Shamisen	JP Shamisen
277	121	0	107	Japanese Koto	Japanese Koto
278	121	0	110	Vintage Fiddle	Vintage Fiddle
Brass					
279	121	10	56	Sweet Trumpet	Sweet Trumpet
280	121	10	57	Sweet Trombone	Sweet Tromb
281	121	10	59	Sweet Muted Trumpet	Sweet Mt Trump
282	121	10	58	Live Tuba	Live Tuba
283	121	10	60	Live French Horn	Live FrenchHorn
284	121	16	60	Wide French Horn	WideFrenchHorn
285	121	10	61	Real Brass Section	Real Brass
286	121	11	61	Pop Brass Section	Pop Brass
287	121	11	56	Jazz Trumpet	Jazz Trumpet
288	121	12	56	Solo Trumpet	Solo Trumpet
289	121	13	56	Trumpet Ensemble	Trump Ensemble
290	121	0	57	Live Trombone	Live Trombone
291	121	14	57	Solo Flugelhorn	Solo Flugelhorn
292	121	0	59	Solo Muted Trumpet	Solo MtTrumpet
293	121	11	57	Solo Trombone	Solo Trombone
294	121	12	57	Soft Trombone	Soft Trombone
295	121	19	57	Wide Trombone	Wide Trombone
296	121	13	57	Dark Trombone	Dark Trombone
297	121	18	57	Synth Trombone	Synth Trombone
298	121	20	57	Analog Bass Brass	Ana Bs Brass

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
299	121	12	61	Octave Brass Section	Oct Brs Section
300	121	0	61	Classic Brass Section	Classic Brass
301	121	17	61	Dark Brass	Dark Brass
302	121	13	61	Cool Synth Brass	Cool Syn Brass
303	121	14	61	Live Brass Section	Live Brass
304	121	15	61	Sforzato Brass	Sforzato Brass
305	121	18	61	Big Brass Section	Big Brass
306	121	20	61	Bright Brass Section	Bright Brass
307	121	21	61	Mellow Brass Section	Mellow Brass
308	121	11	60	Modern Synth Brass	Modern Syn Brs
309	121	12	60	Soft Synth Brass	Soft Syn Brass
310	121	10	62	80's Brass	80's Brass
311	121	23	61	Soft Brass Section	Soft Brass
312	121	13	60	Big Band	Big Band
313	121	24	61	Power Brass Section	Power Brass
314	121	25	61	Dance Synth Brass	Dance Syn Brs
315	121	28	61	Brass Hit	Brass Hit
316	121	2	62	Analog Brass	Analog Brass
317	121	2	63	Soft Analog Brass	Soft Ana Brass
318	121	15	60	Echo Brass	Echo Brass
319	121	30	56	Warm Trumpet	Warm Trumpet
320	121	31	56	Bright Trumpet	Bright Trumpet
321	121	33	56	Double Trumpet	Double Trumpet
322	121	30	57	Warm Trombone	Warm Trombone
323	121	31	57	Bright Trombone	Bright Trombone
324	121	33	57	Double Trombone	Double Tromb
325	121	30	58	Dark Tuba	Dark Tuba
326	121	31	58	Bright Tuba	Bright Tuba
327	121	32	58	Warm Tuba	Warm Tuba
328	121	35	58	Slow Tuba	Slow Tuba
329	121	30	59	Dark Muted Trumpet	Dark MtTrump
330	121	31	59	Bright Muted Trumpet	Bright MtTrump
331	121	32	59	Warm Muted Trumpet	Warm MtTrump
332	121	30	60	Dark French Horn	Dark Fr Horn
333	121	31	60	Bright French Horn	Brt French Horn
334	121	32	60	Warm French Horn	Warm Fr Horn
335	121	37	60	Slow French Horn	Slow Fr Horn
336	121	30	61	Dark Brass Section	Dark Brass
337	121	32	61	Warm Brass Section	Warm Brass
338	121	35	61	Slow Brass Section	Slow Brass
339	121	31	62	Bright Synth Brass	Brt Syn Brass
340	121	35	62	Slow Synth Brass	Slow Syn Brass
341	121	30	63	Dark Analog Synth Brass	Dk Ana Syn Brs
342	121	31	63	Bright Analog Synth Brass	Brt Ana Syn Brs
343	121	32	63	Warm Analog Synth Brass	Warm Ana Syn Brs
344	121	35	63	Slow Analog Synth Brass	Slw Ana Syn Brs
Sax & Woodwind					
345	121	10	66	Sweet Tenor Sax	Sweet TenorSax
346	121	10	65	Sweet Alto Sax	Sweet Alto Sax
347	121	10	64	Sweet Soprano Sax	Sweet Sopr Sax
348	121	10	67	Live Baritone Sax	Live Barit Sax

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
349	121	11	66	Real Tenor Sax	Real Tenor Sax
350	121	11	65	Real Alto Sax	Real Alto Sax
351	121	10	73	Sweet Flute	Sweet Flute
352	121	10	71	Sweet Clarinet	Sweet Clarinet
353	121	10	75	Sweet Pan Flute	Sweet Pan Flute
354	121	10	68	Sweet Oboe	Sweet Oboe
355	121	0	69	Classic English Horn	Cl English Horn
356	121	0	70	Classic Bassoon	Classic Bassoon
357	121	0	72	Classic Piccolo	Classic Piccolo
358	121	12	73	Classic Flute 1	Classic Flute 1
359	121	0	64	Soprano Sax	Soprano Sax
360	121	0	66	Tenor Sax	Tenor Sax
361	121	0	65	Alto Sax	Alto Sax
362	121	0	67	Baritone Sax	Baritone Sax
363	121	11	73	Flute & Sax	Flute&Sax
364	121	13	65	Sax Section	Sax Section
365	121	11	64	Sax Band 1	Sax Band 1
366	121	12	64	Sax Band 2	Sax Band 2
367	121	12	65	Octave Saxes	Octave Saxes
368	121	11	67	Soft Sax Band	Soft Sax Band
369	121	11	75	Cool Pan Flute	Cool Pan Flute
370	121	0	77	Cool Shakuhachi	Cool Shakuhachi
371	121	0	71	Classic Clarinet	Classic Clarinet
372	121	0	73	Classic Flute 2	Classic Flute 2
373	121	0	68	Classic Oboe	Classic Oboe
374	121	0	78	Mellow Whistle	Mellow Whistle
375	121	0	74	Classic Recorder	Classic Record
376	121	0	76	Sweet Blown Bottle	Sw Blown Bottle
377	121	0	79	Mellow Ocarina	Mellow Ocarina
378	121	30	72	Dark Piccolo	Dark Piccolo
379	121	31	72	Bright Piccolo	Bright Piccolo
380	121	34	72	Slow Piccolo	Slow Piccolo
381	121	30	73	Dark Flute	Dark Flute
382	121	31	73	Bright Flute	Bright Flute
383	121	34	73	Slow Flute	Slow Flute
384	121	30	75	Dark Pan Flute	Dark Pan Flute
385	121	31	75	Bright Pan Flute	Bright Pan Flute
386	121	35	75	Slow Pan Flute	Slow Pan Flute
387	121	30	76	Dark Blown Bottle	Dk Blown Bottle
388	121	31	76	Bright Blown Bottle	Brt Blown Bottle
389	121	34	76	Slow Blown Bottle	Slow Blow Bottle
390	121	30	77	Dark Shakuhachi	Dark Shaku
391	121	31	77	Bright Shakuhachi	Bright Shaku
392	121	34	77	Slow Shakuhachi	Slow Shaku
393	121	30	78	Bright Whistle	Bright Whistle
394	121	0	111	Vintage Shanai	Vintage Shanai
395	121	0	109	Vintage Bag Pipe	Vt Bag Pipe
Lead & Pad					
396	121	10	80	Wire Lead	Wire Lead
397	121	16	84	Dance Lead	Dance Lead
398	121	11	87	Techno Lead	Techno Lead

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
399	121	12	81	Trance Lead	Trance Lead
400	121	15	80	Super Square	Super Square
401	121	17	81	Super Sawtooth	Super Sawtooth
402	121	18	81	Pop Lead	Pop Lead
403	121	10	87	Octave Line	Octave Line
404	121	12	82	Pan Lead	Pan Lead
405	121	10	86	Rising	Rising
406	121	12	87	Octave Lead	Octave Lead
407	121	13	81	Fire Wire Lead	FireWire Lead
408	121	10	91	Live Choir Pad	Live Choir Pad
409	121	13	91	Vox Pad	Vox Pad
410	121	15	91	Dream New Age	Dream New Age
411	121	20	91	Heaven Pad	Heaven Pad
412	121	11	95	Messenger Pad	Messenger Pad
413	121	10	98	Echo Crystal	Echo Crystal
414	121	10	102	Echo Drops	Echo Drops
415	121	12	80	Sine Solo	Sine Solo
416	121	11	80	Matrix Lead	Matrix Lead
417	121	13	80	Hip Hop Lead 1	Hip Hop Lead 1
418	121	14	80	Hip Hop Lead 2	Hip Hop Lead 2
419	121	10	81	Bauble Lead	Bauble Lead
420	121	11	81	Super Analog	Super Analog
421	121	15	81	Blaster Lead	Blaster Lead
422	121	16	81	Skyline Lead	Skyline Lead
423	121	10	84	Soft Sine 1	Soft Sine 1
424	121	12	84	Wah Lead	Wah Lead
425	121	14	84	Corrie	Corrie
426	121	21	81	Big Lead	Big Lead
427	121	10	82	Flying Lead	Flying Lead
428	121	16	80	Mini Lead	Mini Lead
429	121	13	87	Massiveness	Massiveness
430	121	11	82	Soft Calliope	Soft Calliope
431	121	14	87	Soft Sine 2	Soft Sine 2
432	121	15	87	Jazz Lead	Jazz Lead
433	121	22	81	Trumpet Saw	Trumpet Saw
434	121	23	81	Circus Lead	Circus Lead
435	121	24	81	Thick Square	Thick Square
436	121	30	80	Wah Sine Solo	Wah Sine Solo
437	121	32	80	Dark Wire Lead	Dark Wire Lead
438	121	31	81	Chorus Soft Mini	Chorus Soft Mini
439	121	34	81	Soft Analog	Soft Analog
440	121	35	81	Bright Analog	Bright Analog
441	121	36	81	Toys Analog	Toys Analog
442	121	30	82	Corrie Calliope	CorrieCalliope
443	121	32	82	Bright Calliope	Bright Calliope
444	121	35	82	Analog Calliope	Alg Calliope
445	121	31	83	Bright Chiff Lead	Bright Chiff Ld
446	121	33	83	Charang Chiff Lead	Charang Chiff Ld
447	121	36	83	Corrie Chiff Lead	Corrie Chiff Ld
448	121	37	83	Stardust Warp	Stardust Warp
449	121	30	84	Soft Funky Lead	Soft Funky Ld

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
450	121	32	84	Wire Funky Lead	Wire Funky Ld
451	121	33	84	Soft Octave Lead	Soft Octave Ld
452	121	36	84	Calliope Octave Lead	Calliope Oct Ld
453	121	37	84	Big Octave Lead	Big Octave Lead
454	121	30	85	Bright Voice Lead	Bright Voice Ld
455	121	37	85	Big Voice Lead	Big Voice Lead
456	121	30	86	Soft Rising	Soft Rising
457	121	32	86	Bright Rising	Bright Rising
458	121	30	87	Soft Bass Lead	Soft Bass Lead
459	121	32	87	Voice Bass Lead	Voice Bass Lead
460	121	34	87	Calliope Bass Lead	Calliope Bass Ld
461	121	35	87	Analog Bass Lead	Analog Bass Ld
462	121	11	91	Gospel Pad	Gospel Pad
463	121	12	91	Live Humming Pad	Live Humm Pad
464	121	14	91	Sweet New Age	Sweet New Age
465	121	16	91	Soft Vox	Soft Vox
466	121	17	91	Vox Choir Pad	Vox Choir Pad
467	121	18	91	Sunbeam Pad	Sunbeam Pad
468	121	23	91	Air Choir Pad	Air Choir Pad
469	121	27	91	Choir & Organ	Choir & Organ
470	121	10	88	Cool New Age	Cool New Age
471	121	10	89	Space Pad	Space Pad
472	121	11	89	PWM Pad	PWM Pad
473	121	15	89	Cyber Pad	Cyber Pad
474	121	10	95	Cool Sweep Pad	Cool Sweep Pad
475	121	12	95	Wave Pad	Wave Pad
476	121	10	90	Poly Synth Pad 1	Poly Synth Pad1
477	121	11	90	Poly Synth Pad 2	Poly Synth Pad2
478	121	10	93	Mystery Pad	Mystery Pad
479	121	12	94	Evening Stars	Evening Stars
480	121	13	88	Atmosphere Pad	Atmosphere Pad
481	121	28	91	Utopia Pad	Utopia Pad
482	121	12	93	Glass Pad	Glass Pad
483	121	13	93	Fantasia	Fantasia
484	121	17	89	DX Pad	DX Pad
485	121	13	95	Dream Sweep Pad	Dream Sweep Pd
486	121	18	89	Analog Pad	Analog Pad
487	121	15	88	New Age & Bowed Pad	NewAge&BowPd
488	121	16	88	Golden Age	Golden Age
489	121	17	88	Space Halo Pad	Space Halo Pad
490	121	18	88	Time Travel	Time Travel
491	121	19	89	Time Machine	Time Machine
492	121	20	89	Slow Warm Pad	Slow Warm Pad
493	121	30	88	Bright New Age Pad	Brt NewAge Pad
494	121	35	88	Warm New Age Pad	Wm NewAge Pd
495	121	36	88	Dipolar New Age Pad	Dipol NewAge Pd
496	121	30	89	Dream Warm Pad	Dream Warm Pd
497	121	31	89	Cool Warm Pad	Cool Warm Pad
498	121	33	89	Organ Pad	Organ Pad
499	121	35	89	Modern Pad	Modern Pad
500	121	31	90	Bright Poly Synth Pad	Brt PolySyn Pad

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
501	121	34	90	Calliope Poly Synth Pad	Calio PolySynPd
502	121	35	90	Harmonica Poly Synth Pad	Harm PolySynPd
503	121	37	90	Square Poly Synth Pad	Sqr PolySyn Pad
504	121	32	91	Soft Utopia Pad	Soft Utopia Pd
505	121	33	91	Square Utopia Pad	Sqr Utopia Pad
506	121	35	91	Analog Utopia Pad	Ana Utopia Pad
507	121	30	92	Bright Bowed Pad	Brt Bowed Pad
508	121	31	92	Soft Bowed Pad	Soft Bowed Pd
509	121	34	92	Congregate Bowed Pad	Cong Bowed Pad
510	121	30	93	Bright Metallic Pad	Brt Metal Pad
511	121	31	93	Soft Metallic Pad	Soft Metal Pad
512	121	35	93	Congregate Metallic Pad	Cong Metal Pad
513	121	36	93	Calliope Metallic Pad	Calio Metal Pad
514	121	30	94	Bright Halo Pad	Bright Halo Pad
515	121	31	94	Soft Halo Pad	Soft Halo Pad
516	121	33	94	PWM Halo Pad	PWM Halo Pad
517	121	34	94	Bowed Halo Pad	Bowed Halo Pad
518	121	36	94	Metal Halo Pad	Metal Halo Pad
519	121	37	94	Corrie Halo Pad	Corrie Halo Pad
520	121	30	95	Soft Dipolar Pad	Soft Dipolar Pad
521	121	33	95	Metallic Dipolar Pad	Metal Dipol Pad
522	121	34	95	Warm Dipolar Pad	Warm Dipol Pad
523	121	36	95	Calliope Dipolar Pad	Calio Dipol Pad
524	121	37	95	Corrie Dipolar Pad	Corrie Dipol Pad
525	121	11	102	Sun Bell	Sun Bell
526	121	12	102	Echo Bell	Echo Bell
527	121	13	102	Bell Pad	Bell Pad
528	121	31	98	Soft Crystal Echo	Soft Crys Echo
529	121	37	98	Chorus Crystal Echo	Cho Crys Echo
530	121	30	102	Soft Echo	Soft Echo
531	121	32	102	Bright Echo	Bright Echo
Perc. & Drums					
532	121	1	11	Cool Vibraphone	Cool Vibraphone
533	121	10	11	Rigid Vibraphone	Rigid Vibra
534	121	1	12	Real Marimba	Real Marimba
535	121	10	8	Real Celesta	Real Celesta
536	121	0	11	Live Vibraphone	Live Vibraphone
537	121	11	11	Jazz Vibraphone	Jazz Vibraphone
538	121	0	12	Cool Marimba	Cool Marimba
539	121	0	13	Live Xylophone	Live Xylophone
540	121	0	8	Live Celesta	Live Celesta
541	121	0	9	Live Glockenspiel	Live Glocken
542	121	0	10	Dream Music Box	Dream MusicBox
543	121	0	14	Live Tubular Bells	Live Tubu Bells
544	121	1	14	Church Bell	Church Bell
545	121	2	14	Carillon	Carillon
546	121	0	15	Santur	Santur
547	121	0	108	Africa Kalimba	Africa Kalimba
548	120	0	0	Standard Set	Standard Set
549	120	0	40	Brush Set	Brush Set
550	120	0	72	Studio Set	Studio Set

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
551	120	0	73	Mix Set	Mix Set
552	120	0	70	Dance Set	Dance Set
553	120	0	8	Room Set	Room Set
554	120	0	32	Jazz Set	Jazz Set
555	120	0	87	Acoustic Set	Acoustic Set
556	120	0	16	Power Set	Power Set
557	120	0	24	Electronic Set	Electronic Set
558	120	0	25	Analog Set	Analog Set
559	120	0	48	Orchestra Set	Orchestra Set
560	120	0	77	Latin Set	Latin Set
561	120	0	81	R&B Set	R&B Set
562	120	0	83	Hip Hop Set	Hip Hop Set
563	120	0	76	Fusion Set	Fusion Set
564	120	0	82	Vintage Set	Vintage Set
565	120	0	84	Pop Set	Pop Set
566	120	0	85	Funk Set	Funk Set
567	120	0	88	Symphony Set	Symphony Set
568	120	0	80	Percussion Set	Percussion Set
569	120	0	78	SFX Set 1	SFX Set 1
570	120	0	79	SFX Set 2	SFX Set 2
571	121	0	47	Orchestra Timpani	Orch Timpani
572	121	0	116	Live Taiko Drum	Live Taiko Drum
573	121	1	116	Concert Bass Drum	Concert Bs Drum
574	121	0	117	Acoustic Tom 1	Acoustic Tom 1
575	121	1	117	Acoustic Tom 2	Acoustic Tom 2
576	121	0	118	Synth Tom	Synth Tom
577	121	1	118	Rhythm Tom	Rhythm Tom
578	121	2	118	Electric Drum	Electric Drum
579	121	0	114	Live Steel Drums	Live StelDrums
580	121	0	113	Agogo Bell	Agogo Bell
581	121	0	119	Cymbal SFX	Cymbal SFX
SFX & GM					
582	121	0	120	Guitar SFX 1	Guitar SFX 1
583	121	1	120	Guitar SFX 2	Guitar SFX 2
584	121	2	120	Acoustic Bass String Slap	Bass String Slap
585	121	0	121	Breathy Voice	Breathy Voice
586	121	1	121	Flute Key Click	Flute Key Click
587	121	0	122	Sea Wave	Sea Wave
588	121	1	122	Rain	Rain
589	121	2	122	Thunder	Thunder
590	121	3	122	Wind	Wind
591	121	4	122	Stream	Stream
592	121	5	122	Bubble	Bubble
593	121	0	123	Birds 1	Birds 1
594	121	1	123	Dog	Dog
595	121	2	123	Horse Gallop	Horse Gallop
596	121	3	123	Birds 2	Birds 2
597	121	0	124	Telephone Bell 1	Telephone Bell 1
598	121	1	124	Telephone Bell 2	Telephone Bell 2
599	121	2	124	Door Creaking	Door Creaking
600	121	3	124	Door	Door

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
601	121	4	124	Scratch	Scratch
602	121	5	124	Wind Chime	Wind Chime
603	121	0	125	Helicopter Engine	Helicopt Engine
604	121	1	125	Car Engine	Car Engine
605	121	2	125	Car Stop	Car Stop
606	121	3	125	Car Pass	Car Pass
607	121	4	125	Car Crash	Car Crash
608	121	5	125	Siren	Siren
609	121	6	125	Train	Train
610	121	7	125	Jetplane	Jetplane
611	121	8	125	Starship	Starship
612	121	9	125	Burst Noise	Burst Noise
613	121	0	126	Live Applause	Live Applause
614	121	1	126	Laughing	Laughing
615	121	2	126	Screaming	Screaming
616	121	3	126	Punch	Punch
617	121	4	126	Heart Beat	Heart Beat
618	121	5	126	Footsteps	Footsteps
619	121	0	127	Gun	Gun
620	121	1	127	Machine Gun	Machine Gun
621	121	2	127	Lasergun	Lasergun
622	121	3	127	Explosion	Explosion
623	0	0	0	Acoustic Grand Piano	Grand Piano
624	0	0	1	Bright Acoustic Piano	Bright Piano
625	0	0	2	Electric Grand Piano	Electric Grand
626	0	0	3	Honky Tonk Piano	Honky Tonk
627	0	0	4	Electric Piano	E.Piano 1
628	0	0	5	Electric Piano 2	E.Piano 2
629	0	0	6	Harpsichord	Harpsichord
630	0	0	7	Clavi	Clavi
631	0	0	8	Celesta	Celesta
632	0	0	9	Glockenspiel	Glockenspiel
633	0	0	10	Music Box	Music Box
634	0	0	11	Vibraphone	Vibraphone
635	0	0	12	Marimba	Marimba
636	0	0	13	Xylophone	Xylophone
637	0	0	14	Tubular Bells	Tubular Bells
638	0	0	15	Dulcimer	Dulcimer
639	0	0	16	Drawbar Organ	Drawbar Organ
640	0	0	17	Percussive Organ	Perc Organ
641	0	0	18	Rock Organ	Rock Organ
642	0	0	19	Church Organ	Church Organ
643	0	0	20	Reed Organ	Reed Organ
644	0	0	21	Accordion	Accordion
645	0	0	22	Harmonica	Harmonica
646	0	0	23	Tango Accordion	Tango Accord
647	0	0	24	Nylon Guitar	Nylon Guitar
648	0	0	25	Steel Guitar	Steel Guitar
649	0	0	26	Jazz Electric Guitar	Jazz E.Guitar
650	0	0	27	Clean Electric Guitar	Clean E.Guitar
651	0	0	28	Muted Electric Guitar	Muted E.Guitar

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
652	0	0	29	Overdriven Guitar	Overdriven Gt
653	0	0	30	Distortion Guitar	Distortion Gt
654	0	0	31	Guitar Harmonics	Guitar Harmonic
655	0	0	32	Acoustic Bass	Acoustic Bass
656	0	0	33	Finger Electric Bass	Finger Bass
657	0	0	34	Pick Electric Bass	Pick Bass
658	0	0	35	Fretless Bass	Fretless Bass
659	0	0	36	Slap Bass	Slap Bass 1
660	0	0	37	Slap Bass 2	Slap Bass 2
661	0	0	38	Synth Bass	Synth Bass 1
662	0	0	39	Synth Bass 2	Synth Bass 2
663	0	0	40	Violin	Violin
664	0	0	41	Viola	Viola
665	0	0	42	Cello	Cello
666	0	0	43	Contrabass	Contrabass
667	0	0	44	Tremolo Strings	Tremolo Strings
668	0	0	45	Pizzicato Strings	Pizz Strings
669	0	0	46	Orchestral Harp	Orchestral Harp
670	0	0	47	Timpani	Timpani
671	0	0	48	String Ensembles	Str Ensembles 1
672	0	0	49	String Ensembles 2	Str Ensembles 2
673	0	0	50	Synth Strings	Synth Strings 1
674	0	0	51	Synth Strings 2	Synth Strings 2
675	0	0	52	Aahs Choir	Choir Aahs
676	0	0	53	Oohs Voice	Voice Oohs
677	0	0	54	Synth Voice	Synth Voice
678	0	0	55	Orchestra Hit	Orchestra Hit
679	0	0	56	Trumpet	Trumpet
680	0	0	57	Trombone	Trombone
681	0	0	58	Tuba	Tuba
682	0	0	59	Muted Trumpet	Muted Trumpet
683	0	0	60	French Horn	French Horn
684	0	0	61	Brass Section	Brass Section
685	0	0	62	Synth Brass	Synth Brass 1
686	0	0	63	Synth Brass 2	Synth Brass 2
687	0	0	64	Soprano Sax	Soprano Sax
688	0	0	65	Alto Sax	Alto Sax
689	0	0	66	Tenor Sax	Tenor Sax
690	0	0	67	Baritone Sax	Baritone Sax
691	0	0	68	Oboe	Oboe
692	0	0	69	English Horn	English Horn
693	0	0	70	Bassoon	Bassoon
694	0	0	71	Clarinet	Clarinet
695	0	0	72	Piccolo	Piccolo
696	0	0	73	Flute	Flute
697	0	0	74	Recorder	Recorder
698	0	0	75	Pan Flute	Pan Flute
699	0	0	76	Blown Bottle	Blown Bottle
700	0	0	77	Shakuhachi	Shakuhachi
701	0	0	78	Whistle	Whistle
702	0	0	79	Ocarina	Ocarina

No.	Bank MSB	Bank LSB	Program	Full Name	Short Name
703	0	0	80	Square Lead	Square Lead
704	0	0	81	Sawtooth Lead	Sawtooth Lead
705	0	0	82	Calliope Lead	Calliope
706	0	0	83	Chiff Lead	Chiffer Lead
707	0	0	84	Charang Lead	Charang Lead
708	0	0	85	Voice Lead	Voice Lead
709	0	0	86	Fifths Lead	Fifths Lead
710	0	0	87	Bass Lead	Bass&Lead
711	0	0	88	New Age Pad	New Age Pad
712	0	0	89	Warm Pad	Warm Pad
713	0	0	90	Poly Synth Pad	Poly Synth
714	0	0	91	Choir Pad	Choir Pad
715	0	0	92	Bowed Pad	Bowed Pad
716	0	0	93	Metallic Pad	Metallic Pad
717	0	0	94	Halo Pad	Halo Pad
718	0	0	95	Sweep Pad	Sweep Pad
719	0	0	96	Rain FX	FX 1 Rain
720	0	0	97	Sound Track FX	FX 2 SoundTrack
721	0	0	98	Crystal FX	FX 3 Crystal
722	0	0	99	Atmosphere FX	FX4 Atmosphere
723	0	0	100	Brightness FX	FX 5 Brightness
724	0	0	101	Goblins FX	FX 6 Goblins
725	0	0	102	Echoes FX	FX 7 Echoes
726	0	0	103	Sci-Fi FX	FX 8 Sci-Fi
727	0	0	104	Sitar	Sitar
728	0	0	105	Banjo	Banjo
729	0	0	106	Shamisen	Shamisen
730	0	0	107	Koto	Koto
731	0	0	108	Kalimba	Kalimba
732	0	0	109	Bag Pipe	Bag Pipe
733	0	0	110	Fiddle	Fiddle
734	0	0	111	Shanai	Shanai
735	0	0	112	Tinkle Bell	Tinkle Bell
736	0	0	113	Agogo	Agogo
737	0	0	114	Steel Drums	Steel Drums
738	0	0	115	Woodblock	Woodblock
739	0	0	116	Taiko Drum	Taiko Drum
740	0	0	117	Melodic Tom	Melodic Tom
741	0	0	118	Synth Drum	Synth Drum
742	0	0	119	Reverse Cymbal	ReverseCymbal
743	0	0	120	Guitar Fret Noise	Gt Fret Noise
744	0	0	121	Breath Noise	Breath Noise
745	0	0	122	Seashore	Seashore
746	0	0	123	Bird Tweet	Bird Tweet
747	0	0	124	Telephone Ring	Telephone Ring
748	0	0	125	Helicopter	Helicopter
749	0	0	126	Applause	Applause
750	0	0	127	Gunshot	Gunshot

Style List

No.	Full Name	Short Name
Pop & Beat		
1	Sunshine Beat	Sunshine Beat
2	60's Classic Beat	60's Classic Beat
3	Heart Beat	Heart Beat
4	70's Pop Rock	70's Pop Rock
5	80's Pop Rock	80's Pop Rock
6	Guitar Pop	Guitar Pop
7	Soft Beat	Soft Beat
8	Modern Pop	Modern Pop
9	6-8 Pop	6-8 Pop
10	80's Golden Song	80's Golden Song
11	Cool 8Beat	Cool 8Beat
12	16Beat R&B	16Beat R&B
13	70's Love Song	70's Love Song
14	Modern Beat	Modern Beat
15	Classic Pop 1	Classic Pop 1
16	Classic Pop 2	Classic Pop 2
17	8Beat Pop 1	8Beat Pop 1
18	Classic 16Beat	Classic 16Beat
19	Pop Jazz	Pop Jazz
20	Sweet 8Beat	Sweet 8Beat
21	British Pop 1	British Pop 1
22	British Pop 2	British Pop 2
23	Rhythm & 8Beat 1	Rhythm & 8Beat 1
24	Rhythm & 8Beat 2	Rhythm & 8Beat 2
25	Pop Fusion	Pop Fusion
26	8Beat Pop 2	8Beat Pop 2
27	16Beat Pop	16Beat Pop
28	16Beat 1	16Beat 1
29	Modern 16Beat	Modern 16Beat
30	Pop Hit	Pop Hit
31	16Beat 2	16Beat 2
32	16Beat 3	16Beat 3
33	Pop Shuffle	Pop Shuffle
34	Piano Pop	Piano Pop
35	Electronic Pop	Electronic Pop
Rock		
36	Rock & Roll 1	Rock & Roll 1
37	Blues Rock 1	Blues Rock 1
38	Blues Rock 2	Blues Rock 2
39	Classic Rock	Classic Rock
40	80's Metal	80's Metal
41	British Rock	British Rock
42	Standard Rock	Standard Rock
43	70's Rock	70's Rock
44	Slow Rock	Slow Rock
45	New Wave	New Wave
46	Ska	Ska
47	Pop Rock 1	Pop Rock 1
48	Pop Rock 2	Pop Rock 2
49	Folk Rock	Folk Rock

No.	Full Name	Short Name
50	Soft Rock	Soft Rock
51	Old Rock	Old Rock
52	Easy Rock	Easy Rock
53	New Shuffle	New Shuffle
54	Pop Rock 3	Pop Rock 3
55	Hard Rock	Hard Rock
56	Synth Rock	Synth Rock
Ballad		
57	Guitar Ballad 1	Guitar Ballad 1
58	Blues Ballad 1	Blues Ballad 1
59	Golden Song	Golden Song
60	Movie Ballad 1	Movie Ballad 1
61	Unplugged	Unplugged
62	Movie Ballad 2	Movie Ballad 2
63	Blues Ballad 2	Blues Ballad 2
64	Simple Love Song	Simple Love Song
65	Love Ballad 1	Love Ballad 1
66	90's Ballad	90's Ballad
67	Sweet Ballad	Sweet Ballad
68	8Beat Ballad	8Beat Ballad
69	16Beat Ballad 1	16Beat Ballad 1
70	16Beat Ballad 2	16Beat Ballad 2
71	Piano Ballad 1	Piano Ballad 1
72	Guitar Ballad 2	Guitar Ballad 2
73	Pop Beat	Pop Beat
74	6-8 Pop Ballad	6-8 Pop Ballad
75	R&B Ballad	R&B Ballad
76	Guitar Ballad 3	Guitar Ballad 3
77	Ballad Rock	Ballad Rock
78	Piano Ballad 2	Piano Ballad 2
79	Soft Ballad	Soft Ballad
80	16Beat Ballad 3	16Beat Ballad 3
81	Natural Ballad	Natural Ballad
82	Love Ballad 2	Love Ballad 2
83	Easy Ballad	Easy Ballad
84	Slow Ballad	Slow Ballad
85	Folk Ballad	Folk Ballad
86	Pop Ballad	Pop Ballad
87	EP Ballad	EP Ballad
88	Rock Ballad	Rock Ballad
Dance		
89	Club DJ	Club DJ
90	House	House
91	Club Mix	Club Mix
92	Hip Hop 1	Hip Hop 1
93	Hip Hop 2	Hip Hop 2
94	Easy Hip-Hop	Easy Hip-Hop
95	Club Dance 1	Club Dance 1
96	Garage	Garage
97	80's Disco	80's Disco
98	Crazy Disco	Crazy Disco

No.	Full Name	Short Name
99	Club Dance 2	Club Dance 2
100	Beat Dance	Beat Dance
101	Pop Dance 1	Pop Dance 1
102	Techno	Techno
103	16Beat Dance	16Beat Dance
104	Pop Dance 2	Pop Dance 2
105	Euro Dance	Euro Dance
106	DJ Mix	DJ Mix
107	Dutch Electronic Dance	DutchElectronicDance
108	Pop House	Pop House
109	Electronic Dance Pop	Electronic Dance Pop
110	Galaxy House	Galaxy House
111	Party Dance	Party Dance
112	Summer Dance	Summer Dance
113	4 Beat Dance	4 Beat Dance
114	Jitterbug	Jitterbug
Ballroom		
115	Cha Cha Dance	Cha Cha Dance
116	Rumba 1	Rumba 1
117	Salsa 1	Salsa 1
118	Tango 1	Tango 1
119	Twist 1	Twist 1
120	Twist 2	Twist 2
121	Tango 2	Tango 2
122	Tango 3	Tango 3
123	Slow Fox	Slow Fox
124	Slow Waltz 1	Slow Waltz 1
125	Swing Fox	Swing Fox
126	Big Band Fox	Big Band Fox
127	Cha Cha 1	Cha Cha 1
128	Cha Cha 2	Cha Cha 2
129	Beguine 1	Beguine 1
130	Beguine 2	Beguine 2
131	Spain Matador	Spain Matador
132	Samba 1	Samba 1
133	Samba 2	Samba 2
134	Jive	Jive
135	Fox Trot	Fox Trot
Soul & Funk		
136	Funk 1	Funk 1
137	New Soul	New Soul
138	Modern R&B 1	Modern R&B 1
139	Pop R&B	Pop R&B
140	Classic Funk	Classic Funk
141	New R&B	New R&B
142	Gospel Swing 1	Gospel Swing 1
143	Gospel	Gospel
144	Funk 2	Funk 2
145	16Beat Funk 1	16Beat Funk 1
146	Fusion Shuffle	Fusion Shuffle
147	Jay R&B	Jay R&B

No.	Full Name	Short Name
148	16 Beat Funk 2	16 Beat Funk 2
149	Groove Funk	Groove Funk
150	Rubber Funk	Rubber Funk
151	Cool Funk	Cool Funk
152	Jazz Funk	Jazz Funk
153	Pop Funk 1	Pop Funk 1
154	Pop Funk 2	Pop Funk 2
155	Cool Beat	Cool Beat
156	Groove	Groove
157	Soul	Soul
158	Hip Hop Soul	Hip Hop Soul
159	Hip Hop Beat	Hip Hop Beat
160	Pop Funk 3	Pop Funk 3
161	Soul Beat	Soul Beat
162	Modern R&B 2	Modern R&B 2
163	British Soul Pop	British Soul Pop
164	Funk Beat	Funk Beat
Swing & Jazz		
165	Modern Big Band 1	Modern Big Band 1
166	Jazz Love Song 1	Jazz Love Song 1
167	Christmas Swing	Christmas Swing
168	Big Band 1	Big Band 1
169	Jazz Love Song 2	Jazz Love Song 2
170	Piano Jazz	Piano Jazz
171	Smooth Jazz 1	Smooth Jazz 1
172	Dixieland 1	Dixieland 1
173	Broadway Big Band	Broadway Big Band
174	Gospel Swing 2	Gospel Swing 2
175	Smooth Jazz 2	Smooth Jazz 2
176	Fusion	Fusion
177	Dixieland 2	Dixieland 2
178	Guitar Swing 1	Guitar Swing 1
179	Latin Jazz	Latin Jazz
180	Cool Jazz Ballad	Cool Jazz Ballad
181	Modern Big Band 2	Modern Big Band 2
182	Big Band 2	Big Band 2
183	Swing Shuffle	Swing Shuffle
184	Big Band 3	Big Band 3
185	Acoustic Jazz	Acoustic Jazz
186	Guitar Swing 2	Guitar Swing 2
187	Ragtime	Ragtime
188	Modern Jazz Ballad	Modern Jazz Ballad
189	Swing Ballad	Swing Ballad
190	Orchestra Swing	Orchestra Swing
191	5-4 Beat Jazz	5-4 Beat Jazz
Country		
192	Country Roads	Country Roads
193	Country Folk 1	Country Folk 1
194	70's Country Rock	70's Country Rock
195	Country Pop 1	Country Pop 1
196	Bluegrass	Bluegrass

No.	Full Name	Short Name
197	Country Pop 2	Country Pop 2
198	Country Pop 3	Country Pop 3
199	Ballad Country 1	Ballad Country 1
200	Modern Country 1	Modern Country 1
201	Southern Country	Southern Country
202	Ballad Country 2	Ballad Country 2
203	8Beat Country	8Beat Country
204	Modern Country 2	Modern Country 2
205	2-4 Country	2-4 Country
206	Country Quick Steps	Country Quick Steps
207	Country Folk 2	Country Folk 2
208	Country Shuffle	Country Shuffle
Latin Dance		
209	Latin 1	Latin 1
210	Bossa Nova	Bossa Nova
211	Cuba Samba	Cuba Samba
212	Latin Rock	Latin Rock
213	New Reggae	New Reggae
214	Pop Cha Cha 1	Pop Cha Cha 1
215	Reggae Dance	Reggae Dance
216	Paso Doble	Paso Doble
217	Lite Bossa	Lite Bossa
218	Latin 2	Latin 2
219	Beguine 3	Beguine 3
220	Slow Bolero	Slow Bolero
221	Disco Samba	Disco Samba
222	Mambo	Mambo
223	Meneito	Meneito
224	Rumba 2	Rumba 2
225	Rumba 3	Rumba 3
226	Sting Latin	Sting Latin
227	Lambada	Lambada
228	Pop Cha Cha 2	Pop Cha Cha 2
229	Salsa 2	Salsa 2
230	Tikitikita	Tikitikita
Traditional		
231	Waltz	Waltz
232	Old Waltz	Old Waltz
233	English Waltz	English Waltz
234	German Waltz	German Waltz
235	Mazurka 1	Mazurka 1
236	Mexican Waltz	Mexican Waltz
237	Vienna Waltz	Vienna Waltz
238	Slow Waltz 2	Slow Waltz 2
239	Jazz Waltz	Jazz Waltz
240	Vienna March	Vienna March
241	Polka	Polka
242	6-8 March	6-8 March
243	German Polka	German Polka
244	Party Polka	Party Polka
245	Army March	Army March

No.	Full Name	Short Name
246	March	March
247	American March	American March
248	Musette	Musette
249	French Musette	French Musette
250	Mazurka 2	Mazurka 2
China&World		
251	Korea Folk	Korea Folk
252	Laendler	Laendler
253	Hawaiian	Hawaiian
254	Sirtaki	Sirtaki
255	Dangdut	Dangdut
256	6-8 Flipper	6-8 Flipper
257	New Age	New Age
258	Tarantella	Tarantella
259	Scottish	Scottish
260	Mexican Folk	Mexican Folk
Pianist		
261	Pianist 1	Pianist 1
262	Pianist 2	Pianist 2
263	Pianist 3	Pianist 3
264	Jazz 1	Jazz 1
265	Jazz 2	Jazz 2
266	Jazz Pub	Jazz Pub
267	Piano Rock	Piano Rock
268	Pop Bossa	Pop Bossa
269	March 1	March 1
270	March 2	March 2
271	Piano Beat	Piano Beat
272	Piano Bar	Piano Bar
273	Blues	Blues
274	Pop Waltz	Pop Waltz
275	Piano Waltz	Piano Waltz
276	Ballad 1	Ballad 1
277	Ballad 2	Ballad 2
278	6-8 Ballad	6-8 Ballad
279	Pop 1	Pop 1
280	Pop 2	Pop 2

Song & Demo List

No.	Full Name	LCD Name
Folk & Country		
1	Christmas Sound	Christmas Sound
2	Long Long Ago	Long Long Ago
3	Old Folks at Home	Old Folks at Home
4	Republic Battle Hymn	Republic Battle Hymn
5	The Old Gray Mare	The Old Gray Mare
6	American Patrol	American Patrol
7	Christmas Is Coming	Christmas Is Coming
8	Red River Valley	Red River Valley
9	Wave Of The Danube	Wave Of The Danube
10	On London Bridge	On London Bridge
Golden & Pop		
11	Ave Maria	Ave Maria
12	O Sole Mio	O Sole Mio
13	Der Deitcher's Dog	Der Deitcher's Dog
14	Joy To The World	Joy To The World
15	Silent Night	Silent Night
16	Carlos	Carlos
17	Go Tell It On The Mountain	Go Tell It On The Mountain
18	Jeanie With Brown Hair	Jeanie With Brown Hair
19	Rumba Romance	Rumba Romance
20	Entertainer	Entertainer
21	Annie Laurie	Annie Laurie
22	The Old King Cole	The Old King Cole
Jazz & Fusion		
23	Samba In June	Samba In June
24	The Hip Hop's Night	The Hip Hop's Night
25	Blue Lunch	Blue Lunch
26	Cobweb	Cobweb
27	Wine	Wine
28	Jazz Old Man	Jazz Old Man
29	Dark Eyes	Dark Eyes
Piano		
30	Lyrical Rondo	Lyrical Rondo
31	Rialto Ripples (Rag)	Rialto Ripples (Rag)
32	Neapolitan Song	Neapolitan Song
33	Waltzes	Waltzes
34	Strange Land and People	Strange Land and People
35	Minuet In D Major	Minuet In D Major
36	Inquietude	Inquietude
37	Italian Polka	Italian Polka
38	Moment Musical	Moment Musical
39	Prelude In C-Sharp Major	Prelude C-Sharp Maj
40	The Happy Farmer	The Happy Farmer
41	The Rag-Time Dance	The Rag-Time Dance
42	Mazurka	Mazurka
43	Prelude In E Major	Prelude In E Major
44	Sonata A Maj, K.331. I	Sonata A Maj, K.331. I
45	Waltz G-Sharp Minor	Waltz G-Sharp Minor
46	Pretty Girl Ragtime	Pretty Girl Ragtime
47	L' Arabesque	L' Arabesque

No.	Full Name	LCD Name
48	Austria Variation	Austria Variation
49	Op.12 No.1, Arietta	Op.12 No.1, Arietta
50	To A Wild Rose	To A Wild Rose
51	Gavotte I	Gavotte I
52	Le Cygne	Le Cygne
53	BWV Anh. 116	BWV Anh. 116
54	Innocence	Innocence
55	Tchaikovsky Waltz	Tchaikovsky Waltz
56	Barcarolle	Barcarolle
57	Traumerei	Traumerei
58	Consolation	Consolation
59	BWV Anh. 114	BWV Anh. 114
60	Sonata C Maj, K.545	Sonata C Maj, K.545
61	Norwegian Dance No.2	Norwegian Dance No.2
62	The Small Gathering	The Small Gathering
63	The Return	The Return
64	The Wagtail	The Wagtail
65	Bulie Dance	Bulie Dance
66	Tender Blossom	Tender Blossom
67	La Gracieuse	La Gracieuse
68	Progress	Progress
69	Eclogue	Eclogue
70	The Limpid Stream	The Limpid Stream
71	The Chatterbox	The Chatterbox
72	Tarantella	Tarantella
73	Frankness	Frankness
74	The Farewell	The Farewell
75	The Chase	The Chase
76	Habanera	Habanera
77	Prelude In C Major	Prelude In C Major
78	Piano Sonate Op.49-2	Piano Sonate Op.49-2
79	Maple Leaves Ragtime	Maple Leaves Ragtime
80	Op.68 No.1, 'Melody'	Op.68 No.1, 'Melody'
81	Gipsy Rondo	Gipsy Rondo
82	Fountain	Fountain
83	Fur Elise	Fur Elise
84	Dove	Dove
85	Pastorale	Pastorale
86	Menuett G-Dur 4	Menuett G-Dur 4
87	Invention No.13	Invention No.13
88	The Entertainer	The Entertainer
89	Swallow	Swallow
90	Minute Waltz	Minute Waltz

Lesson Song		
No.	Full Name	LCD Name
1	Hanon Piano Fingering 1	Hanon Fingering 1
2	Hanon Piano Fingering 2	Hanon Fingering 2
3	Hanon Piano Fingering 3	Hanon Fingering 3
4	Hanon Piano Fingering 4	Hanon Fingering 4
5	Hanon Piano Fingering 5	Hanon Fingering 5
6	Hanon Piano Fingering 6	Hanon Fingering 6
7	Hanon Piano Fingering 7	Hanon Fingering 7
8	Beyer Tutorial 8	Beyer Tutorial 8
9	Beyer Tutorial 12	Beyer Tutorial 12
10	Beyer Tutorial 13	Beyer Tutorial 13
11	Beyer Tutorial 14	Beyer Tutorial 14
12	Beyer Tutorial 15	Beyer Tutorial 15
13	Beyer Tutorial 16	Beyer Tutorial 16
14	Beyer Tutorial 18	Beyer Tutorial 18
15	Beyer Tutorial 19	Beyer Tutorial 19
16	Beyer Tutorial 20	Beyer Tutorial 20
17	Beyer Tutorial 21	Beyer Tutorial 21
18	Beyer Tutorial 29	Beyer Tutorial 29
19	Beyer Tutorial 45	Beyer Tutorial 45
20	Beyer Tutorial 50	Beyer Tutorial 50
21	Beyer Tutorial 52	Beyer Tutorial 52
22	Beyer Tutorial 55	Beyer Tutorial 55
23	Beyer Tutorial 59	Beyer Tutorial 59
24	Beyer Jump Etude	Beyer Jump Etude
25	BeyerTutorial C Maj	Beyer Tutorial C Maj
26	Beyer Tutorial 65	Beyer Tutorial 65
27	Beyer Tutorial 66	Beyer Tutorial 66
28	BeyerTutorial G Maj	BeyerTutorial G Maj
29	Beyer Tutorial 70	Beyer Tutorial 70
30	Beyer Tutorial 72	Beyer Tutorial 72
31	Beyer Tutorial 73	Beyer Tutorial 73
32	Beyer Tutorial 74	Beyer Tutorial 74
33	Turkish March	Turkish March
34	Hey Diddle Diddle	Hey Diddle Diddle
35	Douce Plainte	Douce Plainte
36	Old Folks At Home(Piano)	OldFolks AtHome(Pno)
37	Yankee Doodle (Piano)	Yankee Doodle
38	Kaiser Walzer	Kaiser Walzer
39	Moseta Dance	Moseta Dance
40	Fantasia	Fantasia
41	Swan Lake	Swan Lake
42	Jesus Saviour Pilot Me	JesusSaviourPilotMe
43	Old Macdonald Had A Farm	Old Mac Had A Farm
44	Away In A Manger	Away In A Manger
45	Did You Ever See A Lassie	DidYouEverSeeALassie
46	Old France	Old France
47	Santa Coming To Town	Santa Coming To Town
48	Jack & Jill	Jack & Jill
49	Angles We Have Heard	AnglesWeHaveHeard
50	Chopsticks	Chopsticks

Demo Song	
No.	Name
1	Demo Song 1
2	Demo Song 2
3	Demo Song 3

Album List

No.	Music
1	What's Your Name
2	Youth Cultivation Manual
3	Always
4	Intoxicating Sunset
5	Pink Memories
6	Life Carnival
7	Love And Passion
8	Night Blossom
9	Journey To West - Theme
10	Journey To West - Ending
11	Lemon Tree
12	Brother Louie
13	Lambada
14	Pretty Women
15	Careless Whisper
16	Every Breath You Take
17	Close To You
18	Stand By Me
19	The Girl From Ipanema
20	Jambalaya
21	It's So Easy
22	Achy Breaky Heart
23	Sway
24	Perhaps Perhaps Perhaps
25	What A Wonderful World
26	Baby
27	Yellow
28	Over The Rainbow
29	Sailing
30	Take Me Home Country Roads
31	Hey Jude
32	Crazy Frog
33	How Deep Is Your Love
34	Moonlight Shadow
35	I Just Called To Say I Love You
36	Price Tag
37	Sparks Fly
38	Don't Start Now
39	Nothing's Gonna Change My Love For You
40	Wonderful Tonight
41	Rivers Of Babylon
42	Smooth
43	Bin Bin
44	An Der Schonen Blauen
45	Radetzky March
46	Danny Boy
47	House Of The Rising Sun
48	Beauty And Beast
49	Amapola
50	Oh Susanna

Effect List

Insert Effect	
No.	Name
1	Hall 1
2	Room 1
3	Real Piano
4	Tempo Delay
5	Tempo Echo
6	Cross Delay
7	Chorus 1
8	Celeste
9	GM Rotary 2
10	Classic Flanger
11	Dual Rotary 1
12	Phaser 2
13	Tempo Phaser
14	Overdrive
15	Solid
16	Classic Amp 2
17	Metal Distortion
18	Low
19	Hi-Fi
20	Limiter
21	Attack
22	Classic Tremolo
23	Auto Wah
24	Tempo Auto Wah
25	Bypass

Global Effect		
No.	Effect	Name
1	Reverb	Real Room
2		Room 1
3		Room 2
4		Real Hall
5		Basic Hall
6		Ballad Hall
7		Light Hall
8		Piano Hall
9		Hall 1
10		Hall 2
11		Modern Hall 1
12		Modern Hall 2
13		Modern Hall 3
14		Standard
15		Classic Room 1
16		Classic Room 2
17		Classic Room 3
18		Classic Hall 1
19		Classic Hall 2
20		Classic Church
21		Stage 1
22		Stage 2
23		Plate 1
24		Plate 2
25		Tunnel
26		Drum Theater
27		Drum Studio
28		Drum Garage
29		Church
30		Cave
31		Garage
32		Real Church
1	Chorus	Room 1
2		Room 2
3		Room 3
4		Modern Room 1
5		Modern Room 2
6		Modern Room 3
7		Real Piano
8		Basic Hall
9		Ballad Hall
10		Hall 1
11		Hall 2
12		Hall 3
13		Modern Hall 1
14		Modern Hall 2
15		Modern Hall 3
16		Stage 1
17		Stage 2

Global Effect		
No.	Effect	Name
18	Chorus	Opera House
19		Church
20		Cave
21		Tempo Delay
22		Tempo Echo
23		Cross Delay
24		Tempo Cross
25		LCR Delay 1
26		LCR Delay 2
27		LR Delay
28		Echo
29		Chorus 1
30		Chorus 2
31		Chorus 3
32		Chorus 4
33		GM Chorus 1
34		GM Chorus 2
35		Real Chorus
36		Celeste 1
37		Celeste 2
38		Flanger 1
39		Flanger 2
40		Flanger 3
41		GM Flanger
42		Classic Flanger
43		GM Rotary 1
44		GM Rotary 2
45		Dual Rotary 1
46		Dual Rotary 2
47		Dual Rotary 3
48		Dual Rotary 4
49		Dual Rotary 5
50		Phaser 1
51		Phaser 2
52		Phaser 3
53		EP Phaser 1
54		EP Phaser 2
55		Tempo Phaser 1
56		Tempo Phaser 2
57		Tremolo 1
58		Tremolo 2
59		Auto Pan 1
60		Auto Pan 2
61		Clis Tremolo
62		Auto Wah 1
63		Auto Wah 2
64		Tempo Auto Wah

Part Effect	
No.	Name
1	Harm: Duet
2	Harm: Country Duet
3	Harm: Rock Duet
4	Harm: Trio
5	Harm: Country Trio
6	Harm: Full Chord
7	Harm: Block
8	Harm: 4 Close 1
9	Harm: 4 Close 2
10	Harm: 4 Open
11	Harm: Octave
12	Harm: 1 + 5
13	Harm: Strum
14	Harm: Echo 4
15	Harm: Echo 6
16	Harm: Echo 8
17	Harm: Echo 12
18	Harm: Tremolo 8
19	Harm: Tremolo 12
20	Harm: Tremolo 16
21	Harm: Tremolo 32
22	Harm: Trill 12
23	Harm: Trill 16
24	Harm: Trill 24
25	Harm: Trill 32
26	Arp: Up
27	Arp: Up(Hold)
28	Arp: Down
29	Arp: Down(Hold)
30	Arp: Alt1
31	Arp: Alt1(Hold)
32	Arp: Alt2
33	Arp: Alt2(Hold)
34	Arp: Asplayed
35	Arp: Asplayed(Hold)
36	Arp: Random
37	Arp: Random(Hold)

MIDI Implementation Chart

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1ch 1-16ch	All 1-16ch	
Mode	Default Messages Altered	× × *****	3 mono, poly ×	
Note Number	Note True Voice	0-127 *****	0-127 0-127	
Velocity	Note on Note off	○ 99H,V=1-127 ○ 99H,V=0	○ 9nH,V=1-127 ○ 9nH,V=0;8nH,V=0-127	
After Touch	key's Ch's	× ×	× ×	
Pitch Bend		○	○	
Control Change	0 1 5 6 7 10 11 32 64 65 66 67 80 81 91 93 120 121 123	○ ○ ○ ○ ○ ○ × ○ ○ ○ ○ ○ × × ○ ○ × × ○	○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ × × ○ ○ ○ ○ ○	Bank Select Modulation Portamento Time Data Entry Volume Pan Expression Bank Select Sustain Pedal Portamento On/Off Sostenuto Pedal Soft Pedal Reverb Program Chorus Program Reverb Level Chorus Level All Sound Off Reset All Controllers All Notes Off
Program Change	True Number	○ *****	○ 0-127	
System Exclusive		×	○	
System Common	Song Position Song Select Tune Request	× × ×	× × ×	
System Real Time	Clock Commands	○ ×	× ×	
Aux Messages	Local ON/OFF All Notes Off Active Sensing System Reset	× ○ × ×	× ○ ○ ○	
Notes:				

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

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

○ : YES
× : NO

