ACCOMPANIMENT KEYBOARD

Owner's Manual

INFORMATION FOR YOUR SAFETY!

THE FCC REGULATION WARNING (for USA)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

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

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

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

CAUTION

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

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

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

Power Supply
Please connect the designated DC adapter to an AC outlet of the correct voltage.

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

Unplug the DC power adapter when not using the instrument, or during electrical storms.

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

Location
Do not expose the instrument to the following conditions to avoid deformation, discoloration, or more serious damage:
■ Direct sunlight
■ Extreme temperature or humidity
■ Excessive dusty or dirty location
■ Strong vibrations or shocks
■ Close to magnetic fields

Interference with other electrical devices
Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

Cleaning
Clean only with a soft, dry cloth.
Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.

Handling
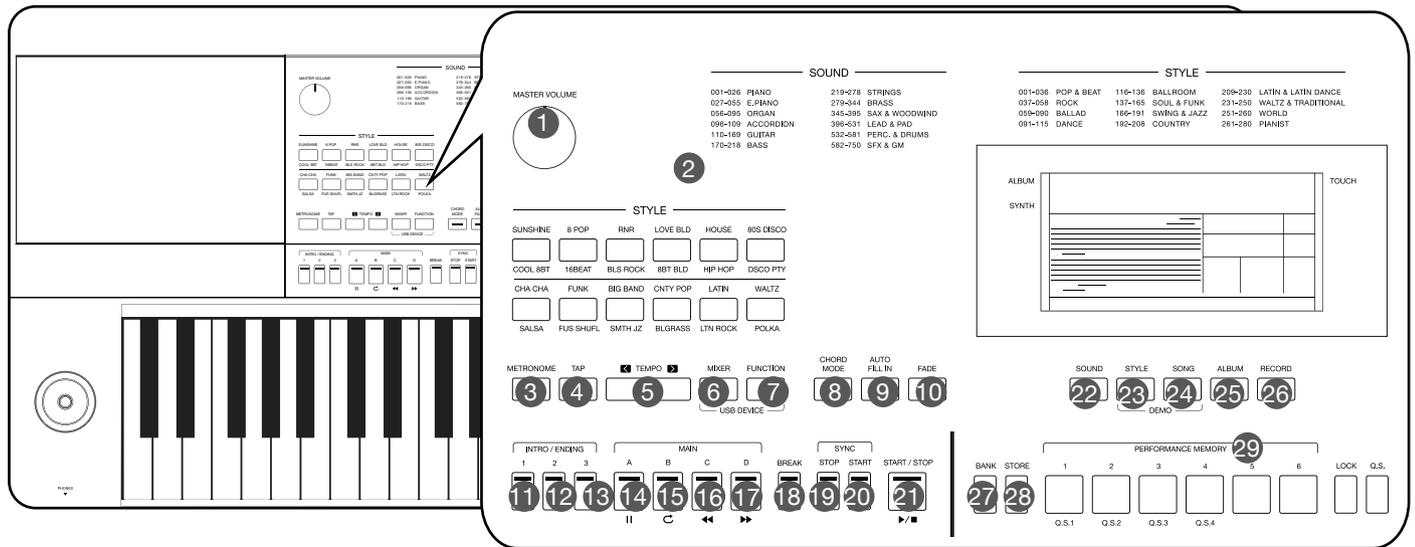Do not apply excessive force to the switches or controls.

Do not let paper, metallic, or other objects into the instrument. If this happens, remove the electric plug from the outlet. Then have the instrument inspected by qualified service personnel.

Disconnect all cables before moving the instrument.

Contents

Panel & Display Description

Front Panel

1. VOLUME Knob
Adjust the master volume.

2. STYLE Selection Button
Select directly a preset Style.

3. METRONOME Button
Turn the metronome on and off.

4. TAP Button
Input tempo by tapping.

5. TEMPO <, > Buttons
Adjust the current tempo.

6. MIXER Button
Enter Mixer menu.

7. FUNCTION Button
Enter Function menu.

6&7. USB Button
Press the MIXER and FUNCTION buttons at the same time to enter the USB flash drive menu.

8. CHORD MODE Button
Turn on, off and set the chord mode.

9. AUTO FILL IN Button
Turn Auto Fill In on and off.

10. FADE Button
Turn Fade In or Out, on and off.

SONG MODE:

14. PAUSE Button
Pause playing a song.

15. LOOP Button
Set the song cycle mode. Whole song loop-single song loop.

16. REW Button
Rewind the song.

17. FF Button
Fast forward the song.

21. START/STOP Button
Start or stop playing the song.

STYLE MODE:

11. INTRO1/ENDING1 Button
Play the Intro or Ending 1.

12. INTRO2/ENDING2 Button
Play the Intro or Ending 2.

13. INTRO3/ENDING3 Button
Play the Intro or Ending 3.

14. MAIN A Button
Play the main A part of the Style.

15. MAIN B Button
Play the main B part of the Style.

16. MAIN C Button
Play the main C part of the Style.

17. MAIN D Button
Play the main D part of the Style.

18. BREAK Button
Play the break of the selected style.

19. SYNC STOP Button
Turn Sync Stop on and off.

20. SYNC START Button
Turn Sync Start on and off.

21. START/STOP Button
Start or stop the playing.

22. SOUND Button
Enter the Sound mode.
Press repeatedly to switch R1-R2-L.

23. STYLE Button
Enter the Style mode.

24. SONG Button
Enter the Song mode.

25. ALBUM Button
Turn Album function on and off.

26. RECORD Button
Enter the record mode.

27. BANK Button
Select a Performance Memory bank.

28. STORE Button
Save current panel settings to one of the Performance Memory slots.

29. PERFORMANCE MEMORY 1 - 6 Buttons
Recall the memorised setting.
QUICK SETTING
Recall the Sound setting for the current Style.
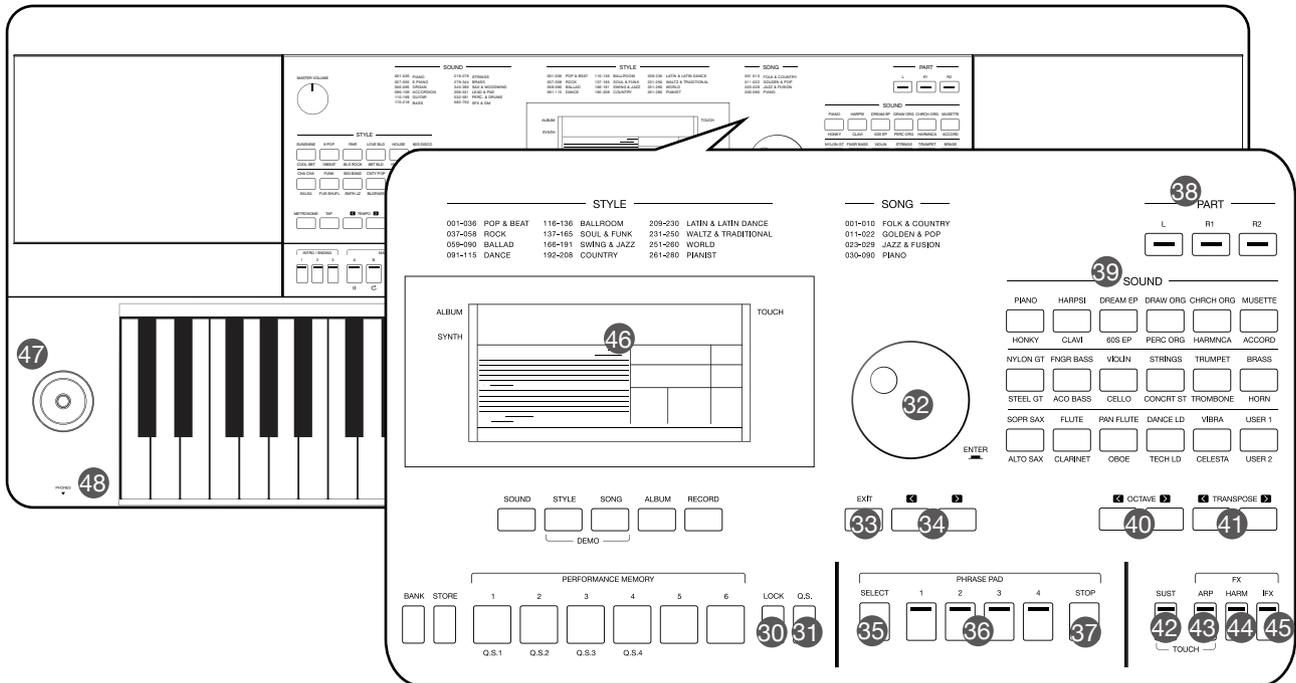
30. LOCK Button
Turn the LOCK function on or off.

31. Q.S. Button
Access Quick Setting.

32. Data Dial / ENTER Button
Increase and decrease the values, or provide confirmation when pressed.

33. EXIT Button
Exit Menu or Cancel.

34. <, > Buttons
Decrease or increase values.

35. PHRASE PAD SELECT Button
Select a desired Phrase Pad Bank.

36. PHRASE PAD 1 – 4 Buttons
Start the percussion and melodic phrases playback.

37. PHRASE PAD STOP Button
Stop the percussion and melodic phrases playback.

38. PART Buttons
Turn each Sound part on and off.

39. SOUND Selection Buttons
Select directly a preset Sound.

40. Octave <, > Buttons
Adjust the octave value.

41. TRANSPOSE <, > Buttons
Adjust the transpose value.

42. SUSTAIN Button
Turn the sustain on and off.

43. ARPEGGIO Button
Turn the arpeggio on and off.

42&43. Touch Button
Press the SUSTAIN and ARPEGGIO Button at the same time to turn Touch mode on and off.

44. HARMONY Button
Turn the harmony effect on and off.

45. IFX Button
Turn the Insert Effect on and off.

46. LCD
Show all the important settings for the current operation.

47. JOYSTICK
Control the pitch bend, modulation or assign functions of the keyboard.

48. PHONES Output Jack
For connecting headphones to the keyboard.

Joystick

The instrument has a four-direction joystick. Move the Joystick up, down, left, or right to change keyboard pitch or sound effects. After releasing it, the Joystick will return to the neutral position.

The assigned parameters:
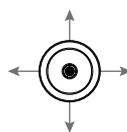
X- ←	Pitch Bend Down
X+ →	Pitch Bend Up
Y+ ↑	Modulation
Y- ↓	(Assignable)

Panel & Display Description

Rear Panel
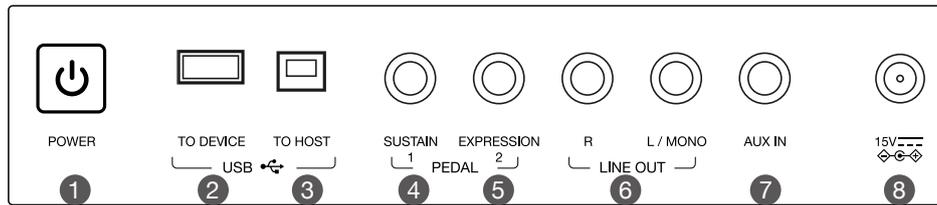
1. **POWER Button**
   Turn the power on and off.

2. **USB TO DEVICE Port**
   For Connecting an USB flash drive device.

3. **USB TO HOST Port**
   For connecting to a computer.

4. **SUSTAIN PEDAL Jack**
   For connecting a sustain pedal (assignable).

5. **EXPRESSION PEDAL Jack**
   For connecting an expression pedal (assignable).

6. **LINE OUTPUT Jacks**
   For connecting to external speakers or a PA system.

7. **AUX INPUT Jack**
   For connecting an external audio source, such as an MP3 or CD player.

8. **POWER Jack**
   Connect DC 15V power adaptor.

LCD
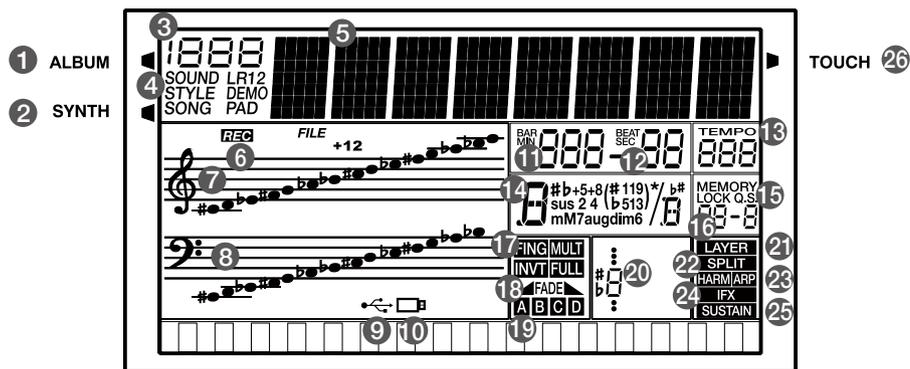
1. ALBUM
2. SYNTH
3. SERIAL NUMBER
4. SOUND / STYLE / SONG / DEMO / PAD
5. INFROMATION
6. RECORD
7. TREBLE CLEF
8. BASS CLEF
9. USB

10. USB DEVICE
11. BAR / MINUTE
12. BEAT / SECOND
13. TEMPO
14. CHORD
15. MEMORY / LOCK / QUICK SETTING
16. MEMORY SETTING STORE/BANK
17. CHORD MODE
18. FADE

19. SECTION A/B/C/D
20. NUMBERED NOTATION
21. LAYER
22. SPLIT
23. HARMONY / ARPEGGIO
24. IFX
25. SUSTAIN
26. TOUCH

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

Power Supply

1. Before connecting to power supply, please set the master volume to zero.

2. Connect the AC adaptor to the DC 15V jack of this keyboard.

3. Plug the AC adaptor into an AC outlet.

4. Press the [POWER] button, the LCD will be lit, which indicates the instrument is powered on.

5. When turning the power off, set the master volume to zero.

6. Press and hold [<]/[>] buttons at the same time, and then press the [POWER] button to turn on the piano, which will clear all user data in the piano, including user songs, user style, user sound and user memory.
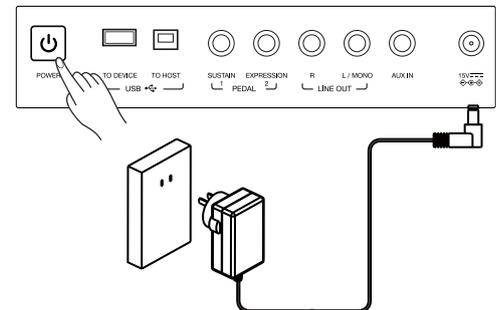
Notes:

1. In order to save energy, the instrument will automatically shutdown in 30 minutes if it is not used. (Please refer to Auto Power Off).
2. For your safety, please unplug the instrument when it is not in use or during a thunderstorm.

Music Stand

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

Connecting the Headphones

When a pair of stereo headphones (not included) is connected to the [PHONES] jack, the speakers will automatically switch off so that sound will only be heard in the headphones.

Note:

To prevent hearing damage, do not use headphones at high volume or for long periods of time.
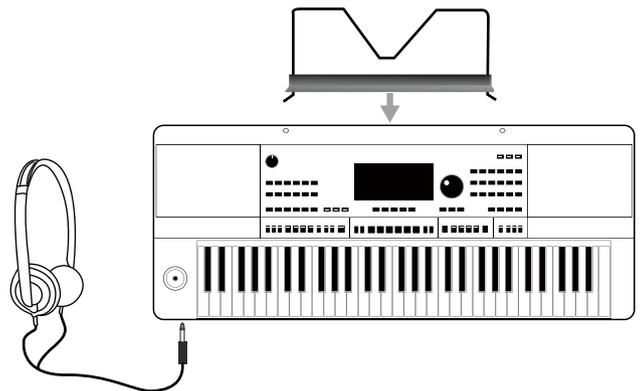
Connecting Pedals

Connecting a Sustain Pedal

Plug in a sustain pedal or switch here to apply dampening effects to your playing.

Connecting an Expression Pedal

An optional expression pedal can be plugged into the expression jack for assigning an available function as desired.
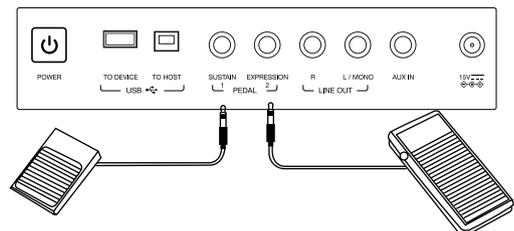
Connections

Connecting to external PA systems

Use an audio cable to connect the LINE OUT jack of the instrument to the audio INPUT jack of the external equipment. When L/MONO jack is used, both L and R signals are merged and output in mono.

Note:

To avoid damaging the speakers, please set the master volume to zero before connecting the power and other devices.

Connecting an MP3/CD Player

Connect an external audio source to the AUX IN jack on the rear panel. The input signal is mixed with the instrument signal.
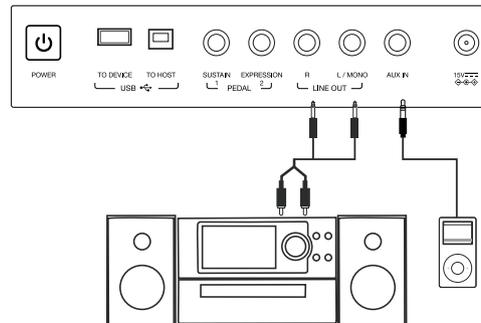
Connecting a Computer

Please connect the USB TO HOST jack of the instrument to the USB port of a computer.

Note:

This instrument comes with both USB MIDI and USB Audio features.

Connecting a USB Flash Drive

Connect a USB flash drive to the instrument, you can save the data such as Performance memory settings, recorded data to the USB flash drive, or load and play back files saved in the USB flash drive on the instrument.

Note:

To avoid error or damaging the USB flash drive, do not remove it when reading or writing is in progress.
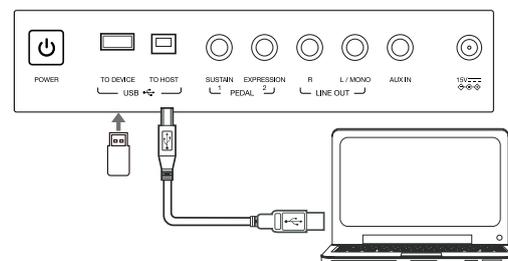
Sounds

The instrument has three parts: L, R1 and R2. You can use the [PART] button to switch these parts ON or OFF.

Playing Sounds

Turning on the Part Switch, Selecting and Playing a Sound
1. Press the [PART R1] button to turn it on, LCD shows "SOUND R1" and the current sound number and name.

2. There are two ways to select sounds:
Press one of the [SOUND SELECT] buttons to select the sound you want to play, LCD shows the current sound number and name.

Press the [SOUND] button to enter the SOUND mode, then use the data dial or [<] / [>] buttons to select the sound you want to play. LCD shows the current sound number and name.
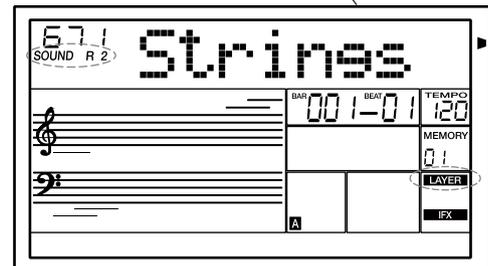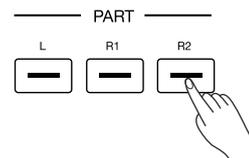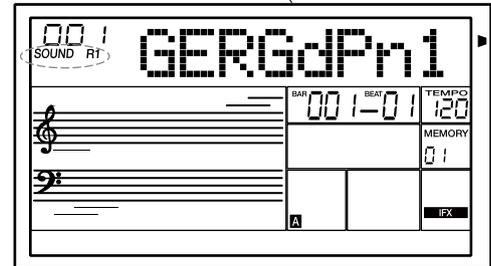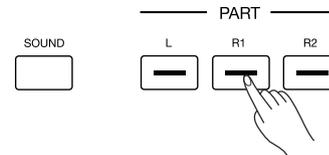
Playing Two Sounds Simultaneously
1. Press the [PART R2] button to turn the part on. "LAYER" light up on display.

2. Selecting a sound for SOUND R2. Use the data dial or [<] / [>] buttons to select the R2 sound.

3. After selecting a sound for two parts, play the keyboard and you will hear a layered, ensemble sound combining two parts.
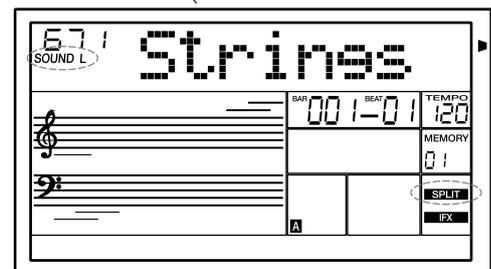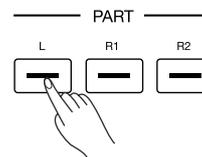
Playing Different Sounds with Both Hands
1. Press the [PART L] button to turn the part on. The keyboard is split into the left and right areas, each with a different sound. "SOUND L" and "SPLIT" light up on display. LCD shows the current sound number and name.

2. Selecting a sound for SOUND L. Use the data dial or [<] / [>] buttons to select the L sound.

Split Point
The key that separates sound L and sound R1/R2 is called the "split point". The split point is set to F#3 at the factory setting. This can be changed to any other key in Setting.

Setting the Keyboard Touch Sensitivity
This instrument features several different touch sensitivity curves programmed to simulate the touch response of various model acoustic pianos.

1. Press the [SUST] button and [ARP] button simultaneously, to open or close touch sensitivity setting.

2. There are five built-in touch types, namely Soft2, Soft1, Medium, Hard1, Hard2.
The default type is Medium.

3. If you select Off, the keyboard touch is fixed, the touch sign in the upper right corner will go out.

Sounds
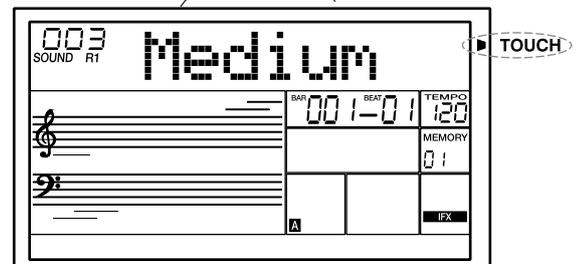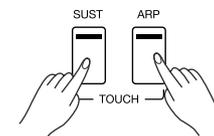
Transpose & Octave

Transpose

The transpose function allows the overall pitch of the instrument, including Styles and Songs, to be transposed up or down by a maximum of one octave in semitone steps.

1. Press [TRANSPOSE <] or [TRANSPOSE >] button to adjust the value from-12 to +12 semitones.

2. Press [TRANSPOSE <] or [TRANSPOSE >] button simultaneously, it will reset the value to default: 0.
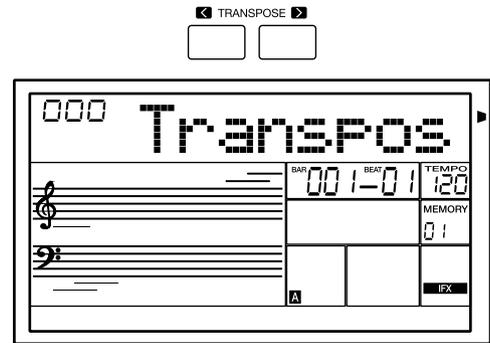
Octave

You can also shift the pitch of a specific part or track up or down by full octaves. Octave shift is not available for Style and Song modes.

1. Press [OCTAVE <] or [OCTAVE >] button to change the octave value within the range of -2 to +2.

2. Press [OCTAVE <] or [OCTAVE >] button simultaneousl, it will set the value to default: 0.
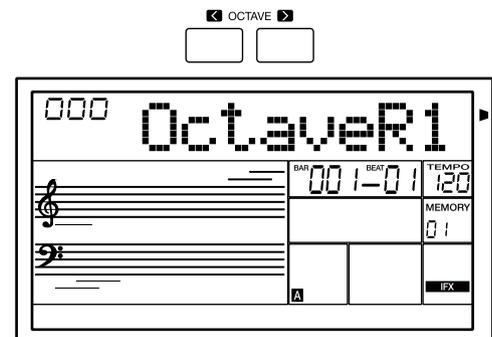
Note:

The sound octave adjusted depends on the current sound layer.

Sustain

1. Press the [SUST] button to turn the SUSTAIN effect on or off.

2. When the sustain is turned on, "SUSTAIN" lights up on display, and all notes you play will have a longer sustain.
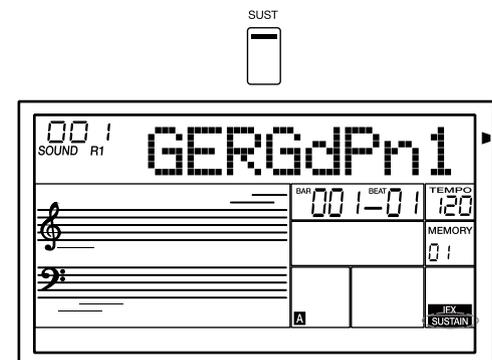
Synth

You can use the Synth function to create your own sound based on the built-in sound samples.

Entering the Synth

Press [FUNCTION] button and go to Synth to access the Synth function.
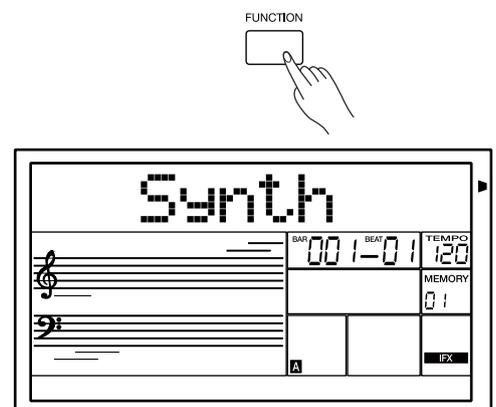
Creating user sound

1. LCD will first display "Edit Snd" and sound number. The Synth flag will be lit. Use [<] / [>] buttons to select a desired user sound slot.
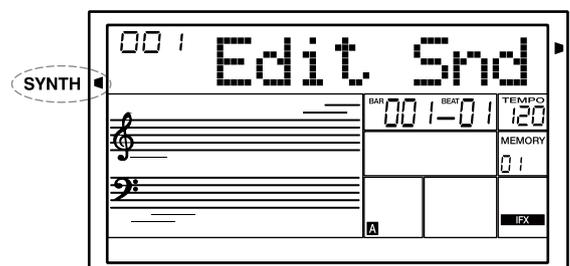
2. Press [ENTER] button to enter the next menu. Then use the Data Dial to select "Snd_Edit" or "Delete". Press [ENTER] to go forward or press [EXIT] to return to the previous menu.

3. If you select "Snd_Edit" and press [ENTER], the LCD will display "PCMSound" and sample sound number. Use [<] / [>] buttons to adjust the sound. Use Data Dial to select sound parameter, the sound parameter will display on the LCD as follows "PCMSound", "Cutoff", "Resonance", "Env Attk", "Env Dcy", "Env Sust", "Env Rls", "VibRate", "VibDepth", "VibDelay". Use [<] / [>] buttons to adjust the value, you can play the keyboard to listen to the sound effect.
If you press [EXIT] button,LCD displays "Save?",press [ENTER] button to save the user sound or press [EXIT] button without saving.
If after saving, you can find your edited user sound in the last serial number of sound mode.

4. If you select the "Delete" menu and press [ENTER] button, LCD displays "Sure?", press [ENTER] button to delete the current user sound, and then return to previous menu. If you press [EXIT] button cancel the operation, and then return to previous menu.
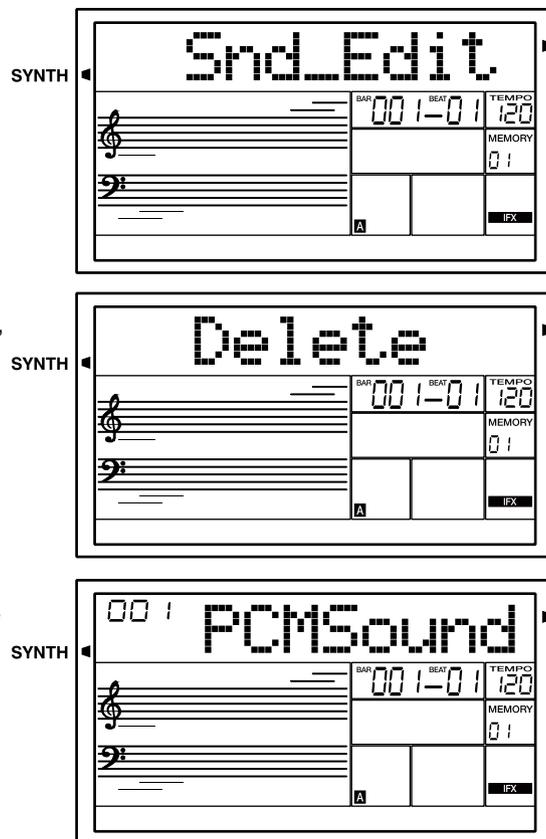
Parameter name	Range	Default	Note
PCMSound	001 - n	001	n is the number of actual PCM's used in the keyboard.
Cutoff	000 - 127	064	Adjust the filter cutoff of the sound. As the value is turned higher, the sound becomes brighter.
Resonanc	000 - 127	064	Adjust the filter resonance of the sound. As the value is turned higher, the resonance effect becomes stronger.
Env Attk	000 - 127	064	Determines the time it takes for a sound to reach maximum volume after the key is pressed and sound begins. As the value is turned lower, the sound begins faster.
Env Dcy	000 - 127	064	Determines the time it takes for a sound to reach its sustain level volume after the attack. As the value is turned lower, the sound decays faster.
Env Rls	000 - 127	064	Determines the time from the key is released until the sound decays to silence. As the value turned lower, the sound disappears faster.
VibRate	000 - 127	064	Determines how fast one vibrato effect cycle is played. As the value is turned higher, the vibrato speed becomes faster.
VibDepth	000 - 127	064	Determines the strength of the vibrato effect. As the value is turned higher, the effect becomes stronger.
VibDelay	000 - 127	064	Determines how quickly the vibrato effect starts after the sound begins. As the value is turned higher, the vibrato starts later.

Style

Using Styles

Selecting Various Styles
Press one of the [STYLE SELECT] buttons to select the style you want to play, LCD shows the current style number and name.

Press the [STYLE] button to enter the STYLE mode, then use the data dial or [<] / [>] buttons to select the style you want to play . LCD shows the current style number and name.

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 the Style mode, press the [START/STOP] button. The style will immediately start with only the percussion track.

2. Press the [START/STOP] button again to stop the style playback.

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.
Play all the tracks of a style as follows:

1. Press the [CHORD MODE] button to turn on chord detection.

2. Press the [SYNC START] button to turn on the Sync Start function.

3. Press a chord in the chord area. It will start playing auto accompaniment of all tracks.
Experiment with playing different chords with your left hand and playing the melody with your right hand.
The automatic accompaniment will enhance your performance.

Style Playback

Style Variations
There are many preprogrammed variations of automatic accompaniment.

[INTRO1/ENDING1] - [INTRO3/ENDING3]
This instrument features three built-in Intro/Ending sections.

1. Press one of the [INTRO 1] - [INTRO 3] buttons before starting style playback. The [INTRO] button LED will light up. Press the [START/STOP] button or play a chord on the keyboard (if [SYNC START] is enabled) to start playing the Intro pattern.
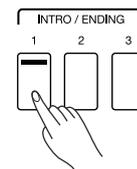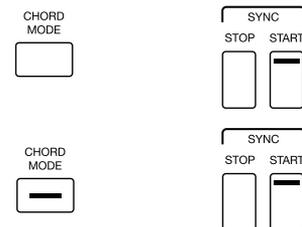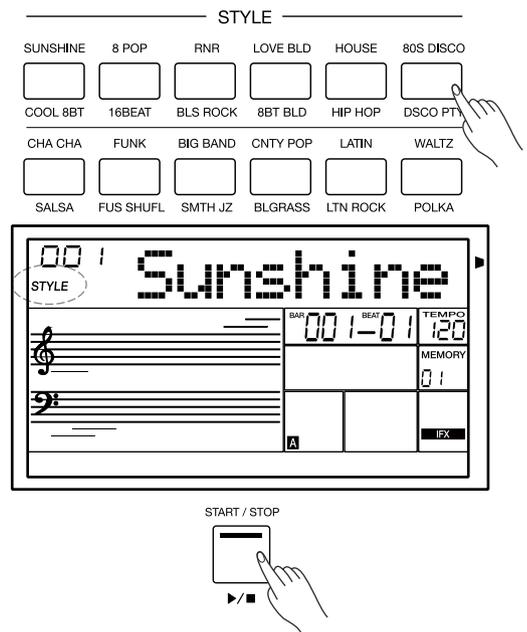
2. An Ending is commonly used at the end of a performance. This instrument features three built-in Ending sections. Press one of the [ENDING 1] - [ENDING 3] buttons to start the Ending section in the next measure. The Style play back will stop when the Ending finishes.

[MAIN A] - [MAIN D]
Main is used for the loop part of the song. This instrument features four built-in Main sections.

Press the [MAIN A] - [MAIN D] buttons during style playback to shift between different patterns. The new Main section will start playing at the next measure.
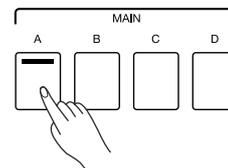
[BREAK]
When in Style playback, using a Break section can give even more dynamics to the Main section loop.
As the Style plays, press the [BREAK] button to play a Break section in the next measure.
After the Break plays, it will automatically return to the Main loop section.
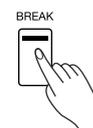
Control Buttons

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

[SYNC START]
Start Style playback when playing the keyboard.
When [CHORD MODE] is turned off, turn on the [SYNC START] button, and the percussion channels will start playing when you press any key.
When [CHORD MODE] and [SYNC START] are both turned on, the Style playback will be triggered by playing a chord in the keyboard chord detect area.

[SYNC STOP]
To stop the style when releasing the chord, press the [SYNC STOP] button. This only happens when [CHORD MODE] is enabled.
When [SYNC STOP] is turned on, the style stops when you release the chord. [SYNC START] will then automatically turn on for you to easily control the Style start and stop.

[AUTO FILL IN]
Turn on [AUTO FILL IN] by pressing the button. It will automatically play a Fill when you switch between Main Patterns. Putting Fills in your Style performance gives variation to the song between Main parts. This instrument features four built-in Fill sections. After the Fill plays, it will automatically return to the Main loop section.
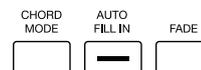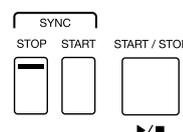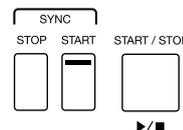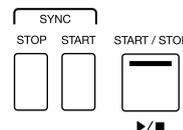
Style

[FADE IN]
Starting the Style with Fade In produces a smooth beginning, with the volume increasing from low to high. Press the[FADE] button when Style playback is stopped. The [FADE] LED will light up. When the Fade In is complete, the [FADE] LED will go out.

[FADE OUT]
Stopping the Style with Fade Out produces a smooth ending, with the volume tapering from high to low. Press the [FADE] button during Style playback. The [FADE] LED will light up. When the Fade Out is complete, the Style will automatically stop and the LED will go out. The keyboard volume will also become lower if you are playing.
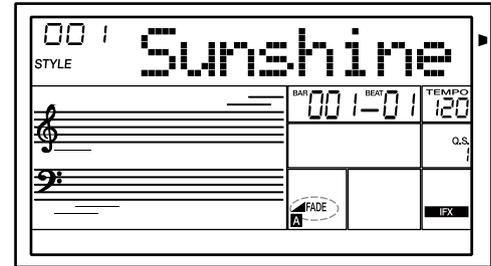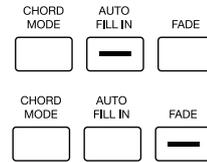
Chord Mode

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

Chord Construction

1. 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.

2. 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".

3. 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.
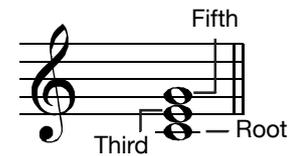
• When the root pitch is a perfect fifth away from the fifth note and a major or minor third from the third note, they are called "major chords" and "minor chords".
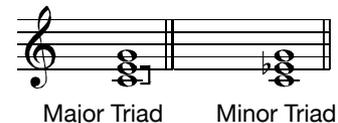
• When the root pitch is a major third and an augmented fifth or a minor triad and a diminished fifth from the third note and fifth note, they are called the "augmented chord" and "diminished chord".

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.

14

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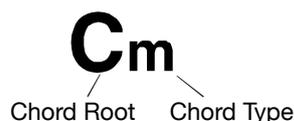
Please refer to a chord chart or use a chord reference for more information on chord names.

Cm

Chord Root   Chord Type

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 a single finger.

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 forexample 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 $CM(9)$	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_{7sus4}	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_{7aug}	30 C_{7aug}	31 $Csus_4$	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: enclosed in parentheses ✪ 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.

Style

Setting Chord Detect Mode
Which fingering to use depends on the setting of the chord detect mode.

Entering Chord Mode
1. Press the [CHORD MODE] button to enter Chord mode.

2. Press the [CHORD MODE] button repeatedly to circulate between "FINGERED-MULTI-INVENT-FULL".

3. In FINGERED, MULTI, INVENT mode, the keyboard is divided into two sections. The chord section is in the left hand area. In SMART FULL RANGE mode, the entire keyboard is chord section.
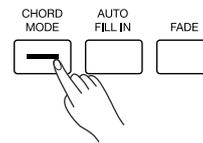
Playing in Chord Mode
1. Press the [SYNC START] button to engage the sync start function.

2. Play a chord in the chord section, it will start playing auto accompaniment of all tracks. Or press the [START/STOP] button to start percussion playback, then play a chord in the chord section to start playing all tracks.
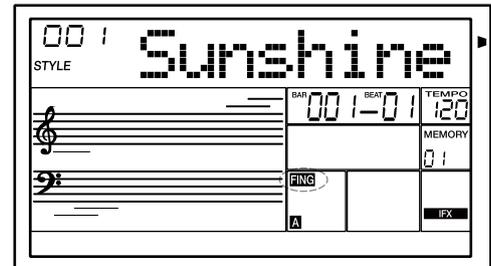
Quick Setting (Q.S.)
When Quick Setting is switched on, you can instantly recall all auto accompaniment related settings including sound selection and effects simply with a single touch of a button.

1. Press the [Q.S.] button to turns on Quick Setting for current style. [Q.S.1] - [Q.S.4] buttons are now active.

2. Press one of the [Q.S.1] - [Q.S.4] buttons to engage the desired setting.
Various panel settings (such as sound, effect, etc.) that match the selected style can be instantly recalled. Sync start is automatically turned on when Q.S. is engaged.
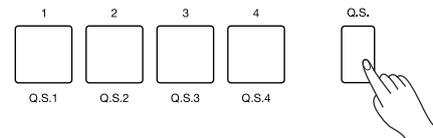
Quick Setting parameter list:
Part ON/OFF (Sound R1,R2 and L)
Sound Number (Sound R1,R2 and L)
Sound Volume (Sound R1,R2 and L)
Sound IFX Level (Sound R1,R2 and L)
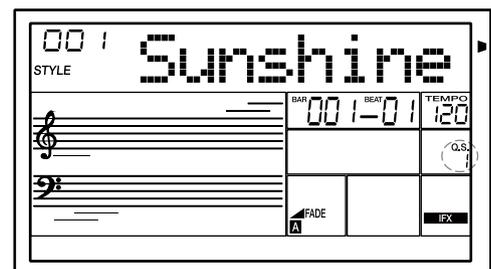
Songs and Audio

Playing Songs and Audio
You can also play audio files (WAV / MP3) and MIDI files from a USB device through the built-in speakers.

Selecting Songs
1. Press the [SONG] button to enter the SONG mode, then use the data dial or [<] / [>] buttons to select the song you want to play.
LCD shows the current song number and name.

Playing Songs
1. Press the [START/STOP] button, it will stop playing. Press the button again, it will play the current song repeatedly.

2. When the songs is stopped, pressing [STYLE] button will exit the song mode.

Song control

REW, FF and PAUSE
When the song is playing.
Press the [▶▶] button to fast forward the song.
Press the [◀◀] button to rewind the song.
Press the [II] button to pause the playing song, press it again to continue playing.

LOOP
Press the [↻] button for a single song loop (LED red).
The default on powering-on is all song loop (LED blue).

MIDI Recording
In MIDI recording, you can save your recording as a user song on the instrument, or export it to a connected USB disk. The saved user songs will not be lost when you turn off the power.

Preparing and starting Recording
1. Press the [RECORD] button to enter the user song menu. The LCD shows the current empty user song number, such as "No File!". Use the data dial or [<] / [>] buttons to select a location to save your recording. If there is a location of the recording file, "User sng" will be displayed.

2. Press the [RECORD] button again to enter the recording preparation state. The "REC" indicator will glimmer. Now you can select the desired sound, style, tempo etc.

3. Press the [START/STOP] button or simply play the keyboard to start recording. Alternatively, turn on the Chord Mode and SYNC START. Recording will start when you play a chord in the chord section.
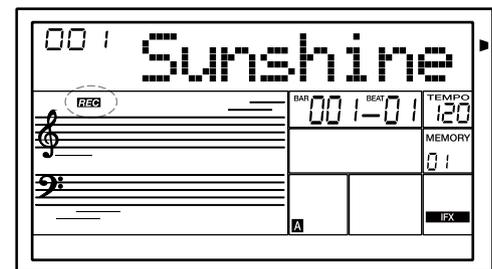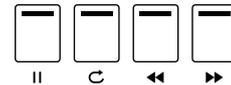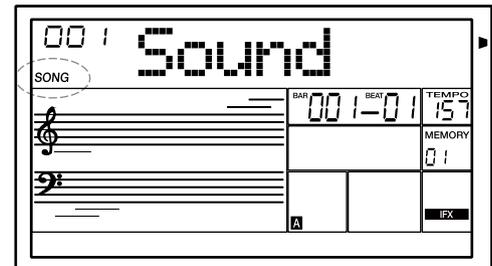
Songs and Audio

Stopping Recording
During recording, press the [RECORD] button. It will stop recording and save the recorded song automatically.
If the storage become used up during recording, recording will stop and be saved automatically.
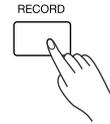
Note:
If the selected user song has data, the previous data will be overwritten by new recording.

Playing back Recording
1. After recording, the recorded song will be automatically selected. Or press [SONG] button to enter the Song interface, then use data dial or [<] / [>] buttons to select a user song.

2. Press the [START/STOP] button to start the playback.
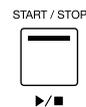
Deleting Recording
Hold down the [RECORD] and [SONG] buttons at the same time, then turn on the power. This operation will delete all user songs.
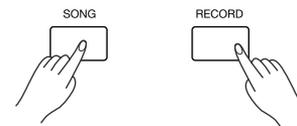
Audio Recording
In audio recording, you can save your recording as MP3/WAV files to a USB flash drive.

1. Connect your USB storage device via the USB TO DEVICE jack. The audio files you recorded will be saved to this device. Please make sure your USB device has sufficient storage.

2. Press the [RECORD] button to start recording. The LCD will temporarily show "RecStart". All the sounds that you hear from the instrument will be recorded, such as accompaniment, keyboard sounds, song playback, demo playback, music from Aux In etc.

3. Press the [RECORD] button to stop recording. The "REC" indicator will turn off. The recorded song will be saved to the USB storage device, and be named as "AudioXXX".

4. Press the [START/STOP] button to play back this recorded song. Alternatively, you can select to play back the recorded song from the USB play menu. See Connecting an USB storage device.
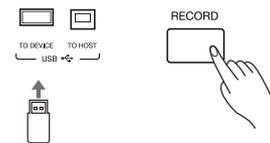
Note:
1. Do not disconnect the USB storage device from the instrument during recording, otherwise the file may be corrupted. Keep the instrument power on during audio recording.
2. You cannot play audio files while recording audio.
3. Audio recording supports up to 90 minutes of recording, and will be automatically saved when the time is up.
4. Audio recording does not support recording DEMO.
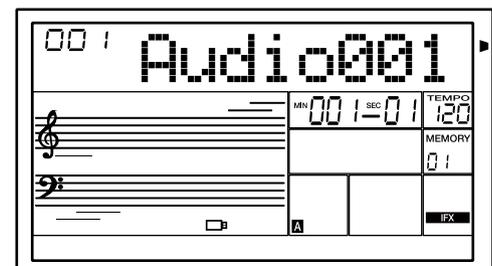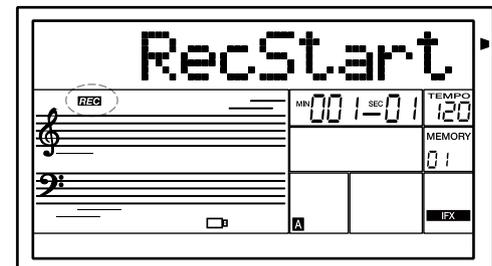
Metronome

1. Press the [Metronome] button to turn on the metronome, the beat will sound. The beat indicat or on the LCD will start counting.

2. Press the [Metronome] button again to turn off the metronome function.

METRONOME
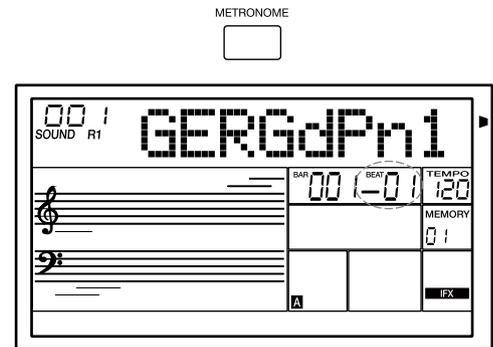
Tempo

Each style of the instrument has been set with a default or standard tempo, which can be changed by using the [TEMPO<] / [TEMPO>] buttons.

1. Changing the tempo
Use the [TEMPO<] / [TEMPO>] button to change the tempo. Or use the Data Dial to make a quick change when the value is flashing on LCD.

2. To restore the default tempo setting, press the [TEMPO<] / [TEMPO>] buttons simultaneously.

You can also use the Tap Tempo feature to change the current tempo, which is an efficient way to get the desired tempo.

1. When the Style or Song is playing, you can press the [TAP] button several times to change the tempo.

2. When the Style or Song stops, press the [TAP] button several times in succession, and the Style or Song will start playing at the tempo you tapped.

TEMPO
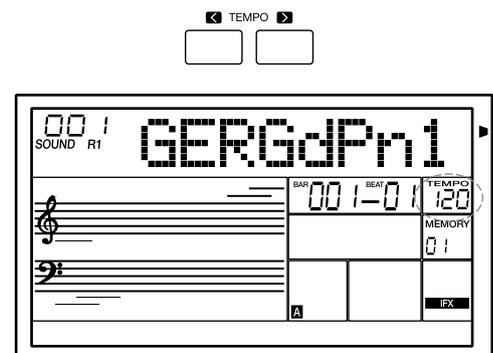
Phrase Pads

A Phrase Pad offers a short rhythmic sequence or sequence of phrases. Similar types of sequences are combined to form a Phrase Pad Bank.

Selecting a Phrase Pad Bank

Press the [PHRASE PAD SELECT] button to enter the Phrase Pad selection menu, then use data dial or [<] / [>] buttons to select a phrase pads.

Playing Phrase Pads

Playing One or More Phrase Pads

Press any [PHRASE PAD] button to start playback. Now, the LED lights of the corresponding buttons will light up and the pad will play according to the current system tempo.

During playback, press the same Phrase Pad again and it will play again from the start.

You can play several Phrase Pads at the same time. The new Phrase Pad will start immediately after pressing it.

Stopping Playing Phrase Pads

Press the [PHRASE PAD STOP] button to stop all phrase Pads at the same time. The LED lights will all go out.

If several Phrase Pads are playing at the same time, you can hold [PHRASE PAD STOP] and press one of the Phrase Pads to stop it immediately. The other Phrase Pads will keep playing.

The instrument has two types of sequences: Loop sequences and Single sequences. The loop sequence will loop when playing. Single sequences will stop automatically after playing one time.

Setting Phrase Pads to Standby Status

Press [PHRASE PAD SELECT] and hold it. Press one or more Phrase Pads at the same time. The corresponding Phrase Pads can be set to standby state, in which their LEDs keep flashing.

Now, press [PHRASE PAD SELECT] and hold it. Press one of the Phrase Pads that is in standby state, and it will play immediately. Other Phrase Pads will remain in standby state.

If you want to play all of the Phrase Pads that are in standby state at the same time, just press any of them.

When [CHORD ON/OFF] is off, playing the keyboard will trigger all Phrase Pads that are in standby state.

If you need to cancel the standby state, hold [PHRASE PAD STOP] and press the Phrase Pad you want to cancel at the same time.
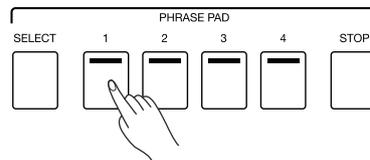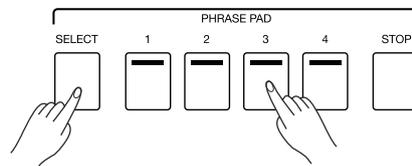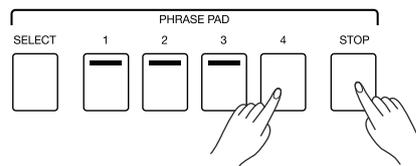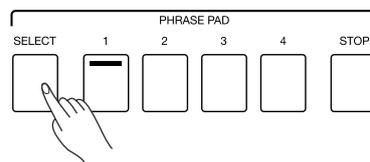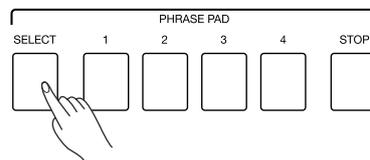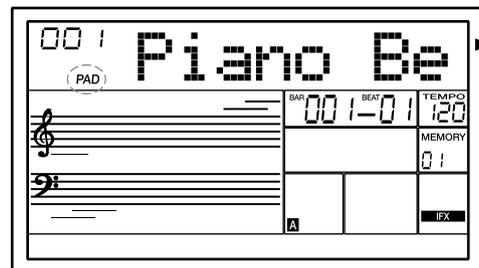
Playing Phrase Pads with Chord Mode

Many Phrase Pads in this instrument respond to chords. When you play different chords, the notes in the phrase sequences will change.
Press the [CHORD MODE] button to turn this function on. The left side of the keyboard becomes the chord Range.

Choose a Phrase Pad and play different chords with your left hand in the chord area. Playing a chord while the [CHORD MODE] is on will also immediately play the Phrase Pad at the same time.

Notes:

1. Phrase Pads can be accompanied by a Style to give your performance additional flexibility.

2. When the Style is played, press the Phrase Pad to have the Phrase Pad play in sync with the Style. The Phrase Pad does not respond to Cancel and Cancel2 chords.

CHORD MODE

Split Point: F#3
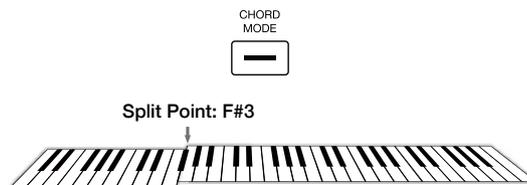
Album

When you find and select a song in the Album, the instrument automatically sets the best setting for this song.

1. Press the [ALBUM] buttons to turn on this function. LCD shows the current album name and number.

2. Use the data dial or [<] / [>] buttons to select a desired album.

ALBUM
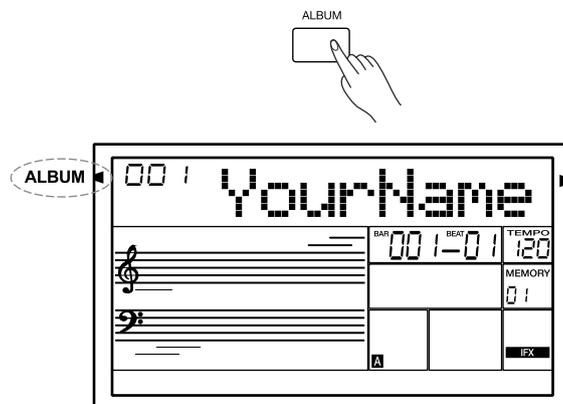
Demo

1. Press [STYLE]+[SONG] buttons to enter Demo mode, then use the data dial, the [<] button or the [>] button to select a demo song.

2. Press [STYLE]+[SONG] buttons simultaneously again or press the [START/STOP] button to stop playing and exit the demo mode.
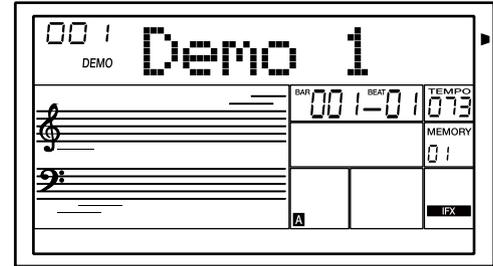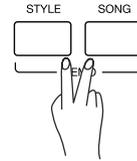
Mixer

1. Press the [MIXER] button to enter the Mixer menu, LCD shows the parameter item.

2. Use the data dial to select a parameter item, then use the [<] button or the [>] buttons to adjust the volume of the selected item.

3. Press the [<] / [>] buttons simultaneously to restore the default value.
Press the [<] / [>] buttons simultaneously again to turn off the volume of the selected item.
Press [<] / [>] buttons simultaneously again to turn on the part volume.
Press [EXIT] button to quit the Mixer menu.
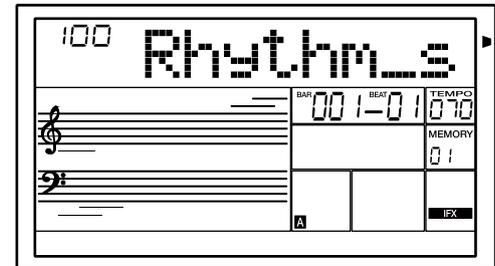
Note:
It will exit the Mixer Menu if there is no operation in 5 seconds.
Parameter items and the volume range in the Mixer menu:

LCD Display	Parameter	Range
XXX Rhythm_s	Rhythms VOLUME	0 - 127
XXX Rhythm_m	Rhythmm VOLUME	0 - 127
XXX Bass	BASS VOLUME	0 - 127
XXX Chord1	Chord 1 VOLUME	0 - 127
XXX Chord2	Chord 2 VOLUME	0 - 127
XXX Chord3	Chord 3 VOLUME	0 - 127
XXX Phrase1	Phrase 1 VOLUME	0 - 127
XXX Phrase2	Phrase 2 VOLUME	0 - 127
XXX Style	Style total VOLUME	0 - 127
XXX Upper1	R1 VOLUME	0 - 127
XXX Upper2	R2 VOLUME	0 - 127
XXX Lower	L VOLUME	0 - 127
XXX WAV/MP3	USB Device WAV/MP3 VOLUME	0 - 127
XXX Metro	Metronome VOLUME	0 - 127
XXX Phra Pad	Phrase Pad VOLUME	0 - 127
XXX AuxIn&BT	AUX In and Bluetooth VOLUME	0 - 127
XXX Song	MIDI Song VOLUME	0 - 127

Performance Memory

Using Performance Memory

Memorizing the Panel Settings

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

Note:
This operation will overwrite the previous data.

Recalling a Panel Setting

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

Note:
Performance memory cannot be recalled when Q.S. function is in use.

Selecting a Memory Bank

1. Press the [BANK] button. The LCD shows the current bank number.

2. Press and hold the [BANK] button to quickly switch memory banks.

Note:
Hold down both the [STORE] and [M1] buttons, then turn on the power. This operation will reset the performance memory to factory default setting.

Locking Parameters

Depending on your performance, you may want to keep special settings. Use the settings lock to retain the locked items of the current setting when you switch to another memory.
Press the [LOCK] button to turn the lock function on or off.
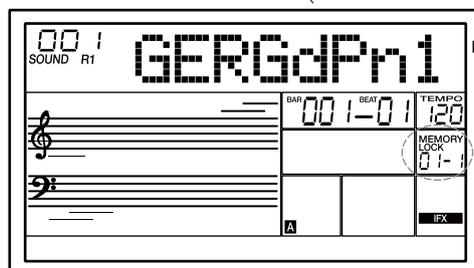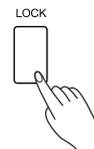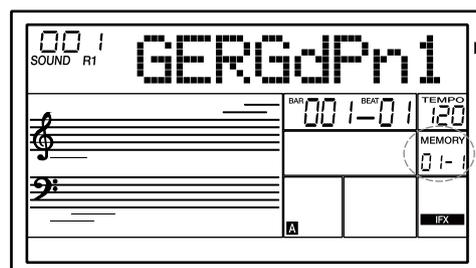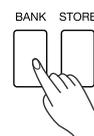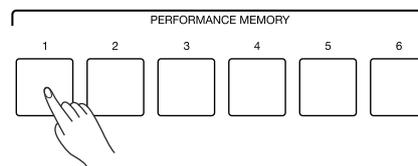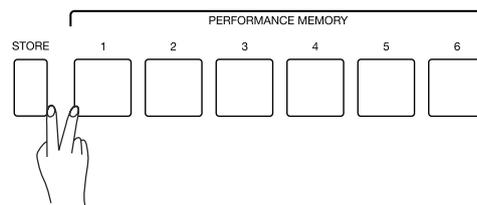
Effects

Insert Effects

The instrument has a variety of preset insert effects, including Chorus, Flanger, Phaser, Tremolo, EQ, Distortion, Wah and Compressor that can be applied to each sound part.

1. The insert effect is set on when the keyboard is powered on. Press [IFX] button to turn off the effect function and the IFX indicator light will turn off.

2. Press [FUNCTION] button and go to IFX to enter the IFX effect selection menu. The effect applied to the last-pressed sound part is now controlled. Press [ENTER] button to select Type, Preset, Parameter1 and Parameter2.In the Type and Preset interface, press [ENTER] button to enter, and use the data dial to select the desired type.
In the Parameter interface, use [<] / [>] buttons to adjust the parameters. Press [EXIT] button to return to the previous menu.

3. The insert effect settings will be saved automatically when you exit from the IFX mode. The next time you enter the IFX mode, it will use the same effect settings as your last operation. Changing to another sound will change the IFX setting back to default.

Note:
Part of IFX bound with sound is not open, so it cannot be adjusted, this kind of IFX and LCD are displayed in type and preset "Untitled".
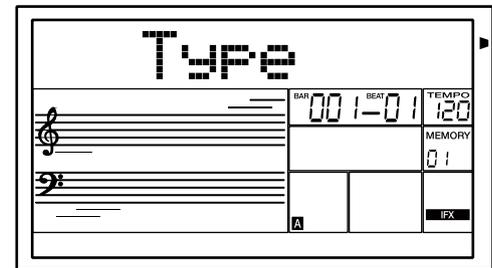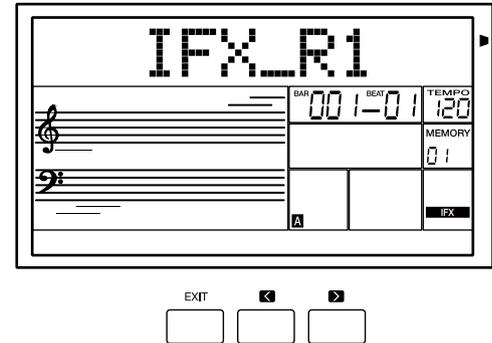
Global Effects

This instrument has 2 global effect modules that may be applied simultaneously: GFX1 (reverb) and GFX2 (chorus).

1. Adjusting Global Effects
Press [FUNCTION] button and go to GFX1 or GFX2. Press [ENTER] button to enter the next level.
The first menu item is the total level of each effect applied to the master that can be adjusted from 0 to 127.

2. Selecting Global Effects
At this time, turn the Data Dial and press [ENTER] button to select Type and Preset.

3. Adjusting Global Effect Parameters
After selecting Type and Preset, please return to the previous level, turn the Data Dial, then go to the parameter item, and use [<] / [>] buttons to adjust the parameters.
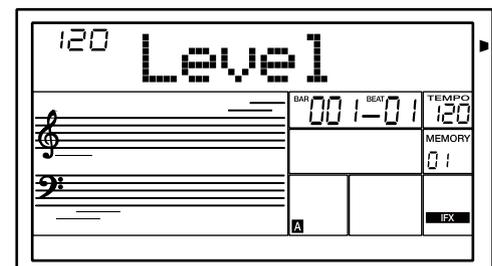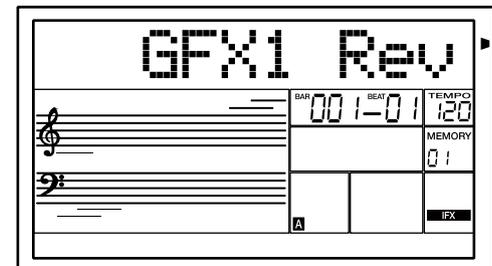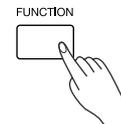
4. Adjusting Global Effect part levels
After 2 detail effect parameters, there is sound part level adjustment. This sets the effect level applied to the last-pressed sound part.

Note:
After all adjustments are completed, you can press [EXIT] button to return to the main interface step by step or press [FUNCTION] button directly to return to the main interface.
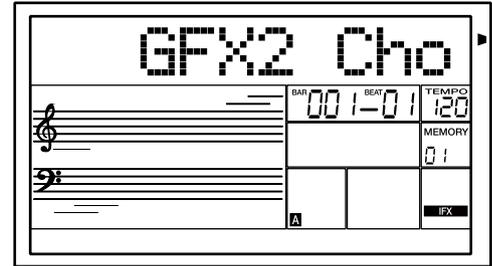
Master EQ

1. Press [FUNCTION] button and go to EQ to enter the EQ setting page, and switch the PRESET and press [ENTER] button to set type and parameters (Low, mid1, ..., High) via the Data Dial and [<] / [>] buttons.

2. Press [EXIT] button to return to the previous menu.

Type	EQ				
Preset	Classical	Flat	Rock	Pop	Dance
Parm 1	Low	Low	Low	Low	Low
Parm 2	Mid 1	Mid 1	Mid 1	Mid 1	Mid 1
Parm 3	Mid 2	Mid 2	Mid 2	Mid 2	Mid 2
Parm 4	Mid 3	Mid 3	Mid 3	Mid 3	Mid 3
Parm 5	Mid 4	Mid 4	Mid 4	Mid 4	Mid 4
Parm 6	Mid 5	Mid 5	Mid 5	Mid 5	Mid 5
Parm 7	High	High	High	High	High
Range	-12~+12	-12~+12	-12~+12	-12~+12	-12~+12
Note	Value is dB.				
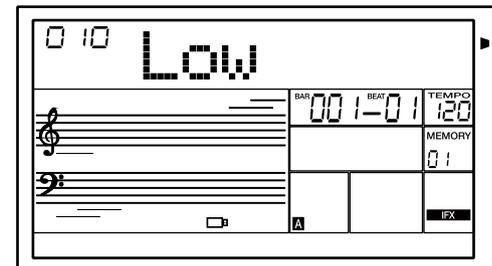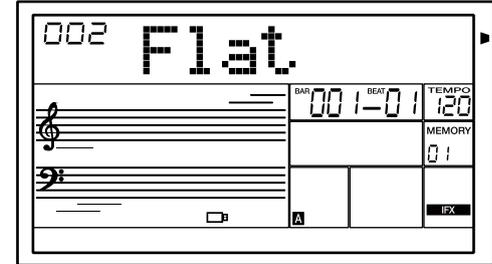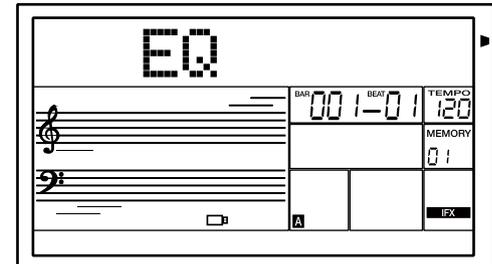
Performance Enhancement

Arpeggio

Press the [ARP] button turn on the arpeggio. The "ARP" indicator lights up on LCD. Repeat this operation to turn off the arpeggio. Arp can be turned on or off at each Sound layer.
As long as one layer of Sound turns on Arp, the LCD display will light up. All sound layers turn off Arp, and LCD display will turn off.
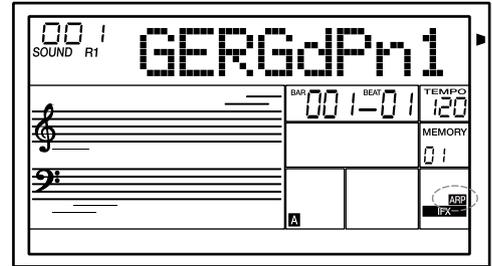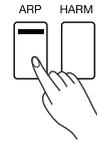
Harmony

The Harmony function will automatically add harmony effect to the notes you play in the right hand area.

Turning on the harmony function.

Press the [HARM] button to turn on the harmony function, "HARM" lights up on display.
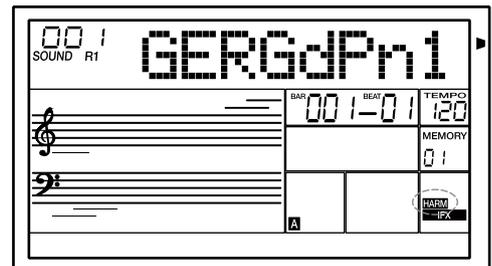
Playing with harmony effect.

Turn on the chord function, then play a chord in the left hand area. It will add harmony effect to the sound.

Turning the harmony off.

Press the [HARM] button again to turn off the function. The "HARM" lights off.

Setting the harmony type.

You can set the harmony type in Setting.

Note:

1. Only either one of the Arp and Harmony can be opened in the same sound layer.
2. L Sound cannot turn on Harmony function.

USB Storage Devices

The instrument recognizes USB flash drives, sized from 16M to 256G in the format of FAT16 and FAT32. It does not support USB partition. We recommend you format the USB flash drive on the instrument before using. Do not edit the backup files saved in the USB flash drive.

Common Operation

1. Press [MIXER] + [FUNCTION] buttons simultaneously to enter USB Device mode, press the [EXIT] button to exit the function.

2. If you connect a USB flash drive to the instrument, LCD will show "USB disk sign". If the initialization succeeds, LCD will show "Play", otherwise, it will show "DiskErr". If the USB Flash Drive is not connected, LCD will show "NoDisk!".

3. In the USB Device mode, you can use [<] / [>] button or Data dial to choose menu, press [ENTER] button to go forward or press [EXIT] button to return to previous menu.
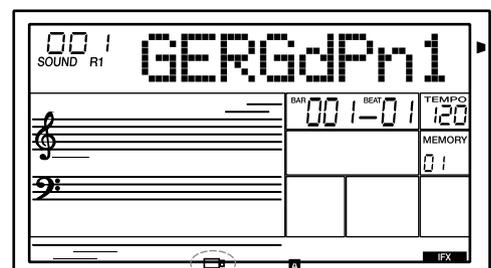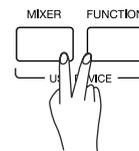
4. In USB Device mode, you can press [EXIT] / [STYLE] / [SONG] button or a STYLE select button to exit the mode.

5. When playing a file, it is possible to use the Mixer to adjust the playing volume.

Play

Select the menu "Play" and press [ENTER] button, the Play USB sub-menu is displayed on LCD, which includes "Song" or "Style". You can select one by using Data Dial.

Playing Song:
1. Select "Play" menu and "Song" sub-menu.

2. Press [ENTER] button, use [<] / [>] button or Data Dial to select a file. Press [START/ STOP] button to play it. Press [START/STOP] button again to stop playing, press [EXIT] button to return to previous menu.

3. If there is no recognizable file in the current directory, LCD will display "No File!".

Playing Style:
1. Select "Play" menu and "Style" sub-menu.

2. Press [ENTER] button, use [<] / [>] button or Data Dial to select a file. Operate Style playing in the same way as operating the on-board Styles.

3. If there is no recognizable file in the current directory, LCD will display "No File!".
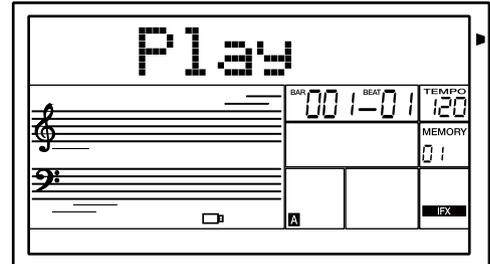
Save

Select the menu "Save" and press [ENTER] button, the Save sub menu is displayed on LCD, which includes "Song" & "Dev Info". You can select one by using Data Dial.

Saving Song:
1. Select the "Song" sub-menu, then press [ENTER] button to save all the user song.

2. Press [ENTER] button and the LCD will show "Succeed".

3. After saving successfully, you can enter the Play-Song menu to view the saved user song file "User00X".

4. If the Song file is empty, it will prompt "No File!".

Saving instrument information
1. Select the "Dev Info" menu, then press [ENTER] button and the LCD will show "Succeed".

2. After that, you can see a file in .mif format in the USB interface of the computer. This file contains your instrument information.

3. If the USB disk memory is full, it will prompt "Full!".
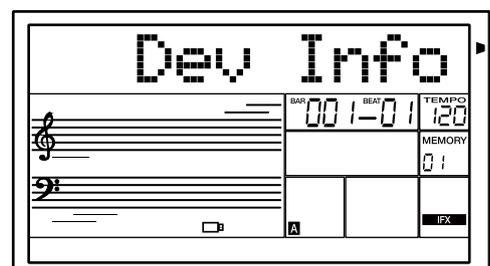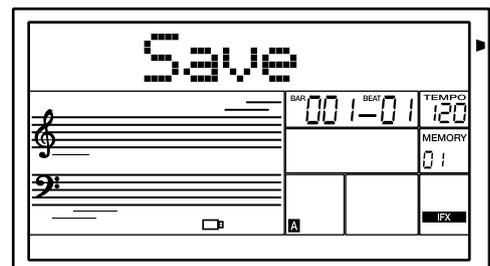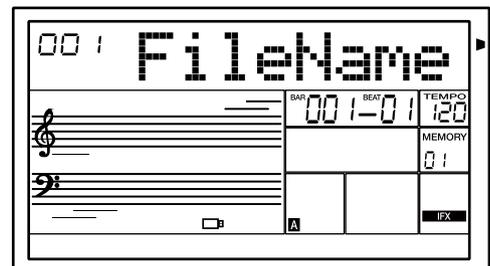
USB Storage Devices

Note:
The mif file downloaded to the USB flash disk can be imported into the grandsuite downloaded on the official website for operation. The grand-suite software has relevant operation instructions.

Load
Select the menu "Load" and press [ENTER] button, the Load sub menu is displayed on LCD, which includes "Song" & "ExpStyle". Use Data Dial to select one.

Loading Song:
1. Use Data Dial to select a user song number.

2. Press [ENTER] button LCD will display MIDI file in USB flash drive. Now select one of the files and press [ENTER] button to load the file. After the save is successful, the LCD displays "Succeed". If the saved slot has user songs, it will prompt "Rewrite?", please press [ENTER] button to continue, or press [EXIT] button directly without saving.

3. Press the [SONG] button to view the saved songs in the last song number.

4. If the Song file is empty, it will prompt "No File!"

Loading Expansion Style:
1. Download the GrandSuite in official website, make an extension file with Grandsuite and save it as an mpk file (there are instructions for relevant operations in grandsuite), or download the expanded style directly from official website, and save it to the U disk.

2. Insert the U disk into the electric piano. Enter the USB flash drive, enter the Load interface and select Style.

3. Press [ENTER] button, if the save is successful, LCD will display "suc-ceed". If the U disk format is wrong or the style file is wrong, LCD will display "Erorr!".

4. Press the [STYLE] button, and you can view the saved expansion package style in the last style serial number.It's time to play.

Note:
The piano only supports loading extended styles,extended arpeggio and sound load are not supported.

Deleting Style:
Hold down the [RECORD] and [STYLE] buttons at the same time, then turn on the power. This operation will delete all user songs.

Format
Select the menu "Format" and press [ENTER] button, "Sure?" are dis-played on LCD. Press [ENTER] button to format the USB Storage Device, or press [EXIT] button to cancel.

Note:
Formatting will delete all data in the USB flash drive!
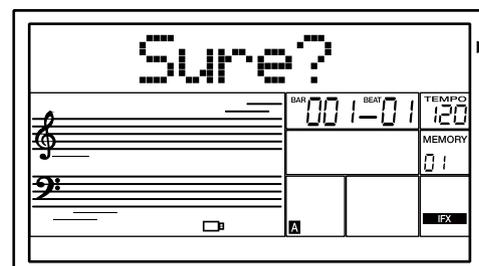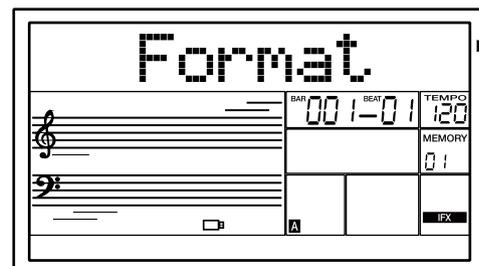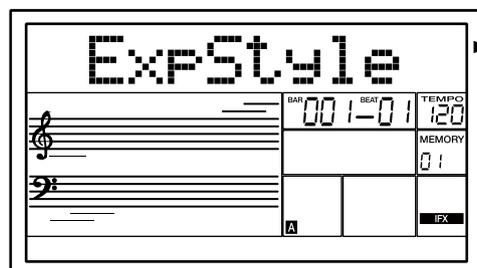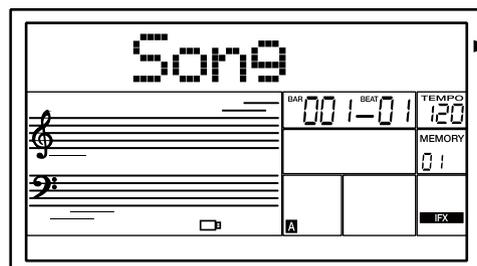
Press [FUNCTION] button and then select Setting to enter Setting menu.LCD shows the current parameter.
Use the data dial to find the parameter you wish to adjust. Anytime press [EXIT] button to quit this menu.
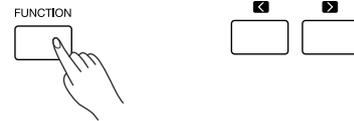
Parameter items and the value range in the Function Menu:
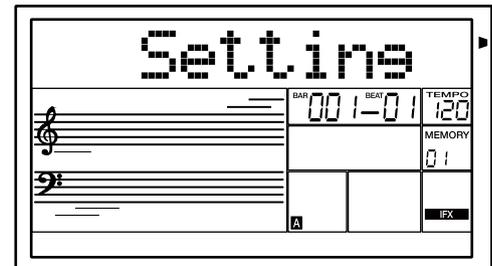
No.	Parameter	LCD Display	Range	Default
1	Tune	Tune	-50 ~ +50	0
2	Metronome Time Signature	Metro	0, 2 ~ 9	4
3	Fade In/Out Time	Fadetime	1 ~ 20	10
4	Split Point	SplitPt	C2 (01) ~ C7 (61)	F#3 (19)
5	Harmony Type	Harmony	Duet, Trio, Octave, 1+5, Country Duet, Block, 4 Close 1, 4 Close 2, 4 Open ...	Duet
6	Arpeggio Type	Arp Type	Up, Down, Alt1, Alt2, Asplayed (Order), Random	Up
7	Arpeggio Hold	Arp Hold	On, Off	Off
8	Lock	Lock	Sound, Split point, Style, Song, Transpose, Tempo, Global Effects, Pedals setting, Phrase pad, Mixer	Style
9	Sustain Pedal	Sust Ped	Sustain (All sound parts) Soft (All sound parts) Start/stop: Style start/stop	Sustain
10	Expression Pedal	Expr Ped	Volume Modulation Cutoff Resonance Filter	Volume
11	Joystick Down	JS Down	Off, Filter, Volume, Release	Off
12	Recorder Mode	Rec Mode	SMF, WAV, MP3	SMF
13	MIDI Out Channel	MIDI Out	1 ~ 16	1
14	Auto Power Off	Poweroff	Never, 30 min, 60 min	30 min

Tune
1. Select the Tune menu. Use [<] / [>] buttons to change tune value. Its range is from -50 to 50.

2. Press [<] / [>] buttons together will set the tune value to its default setting.
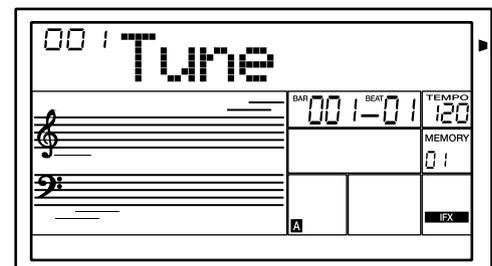
Metronome Time Signature
This function sets the time signature over the range from 0, 2-9.

1. Select the Beat menu. Use [<] / [>] buttons to change the time signature.

2. Press [<] / [>] buttons together will reset to the default time signature.

Setting
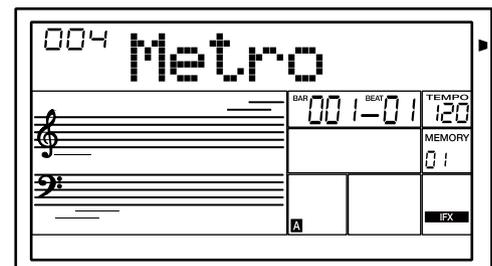
Fade In/Out Time
Select the Fadetime menu. Use [<] / [>] buttons to change Fade In time. The range is form 1 to 20 second.

```
010  Fadetime
                    BAR 001-01  TEMPO 120
                              MEMORY 01
                    A            IFX
```
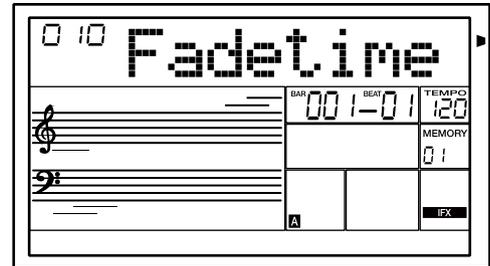
Split Point
This function sets the point that separates the entire keyboard to two sections.

1. Select the Split Point menu. Use [<] / [>] buttons to change Split Point. You can also press a key to assign the Split Point to that key.

2. Press [<] / [>] buttons together will reset to the default Split Point.

```
019  SplitPt
                    BAR 001-01  TEMPO 120
                              MEMORY 01
                    A            IFX
```
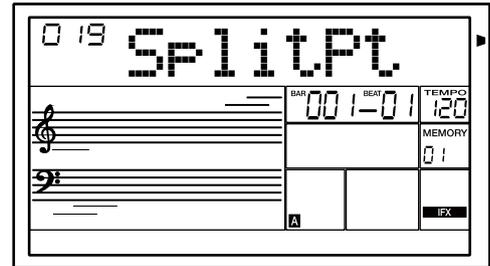
Harmony Type
1. Select the Harmony menu, then press the [ENTER] button.

2. Use the [<] / [>] buttons or Data Dial to select a harmony type. There are 25 harmony effects for you to select.

```
     Harmony
                    BAR 001-01  TEMPO 120
                              MEMORY 01
                    A            IFX
```
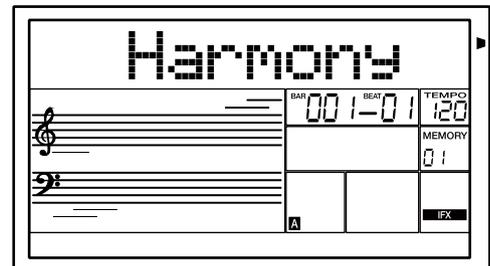
Arpeggio Type
1. Select the Arp Type menu, then press the [ENTER] button and use the [<] / [>] buttons or Data Dial to select a Arp Type.

2. This instrument contains six commonly used types of Arpeggios. When turned on, the system will convert the notes you play into an arpeggio sequence in real time according to the rules of Up, Down, Up and Down, As Played, and Random.

```
     Arp Type
                    BAR 001-01  TEMPO 120
                              MEMORY 01
                    A            IFX
```
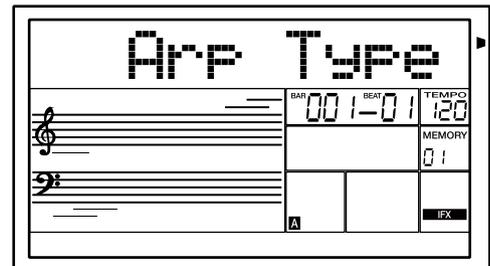
Arpeggio Hold
1. Select the Arp Hold menu, then use the [<] / [>] buttons to select Arp Hold on or off.

2. When Arpeggio Hold is turned on, the arpeggio played when keys are pressed will continue playing when the keys are released. When it is off, the arpeggios will stop playing when the keys are released.

```
OFF  Arp Hold
                    BAR 001-01  TEMPO 120
                              MEMORY 01
                    A            IFX
```
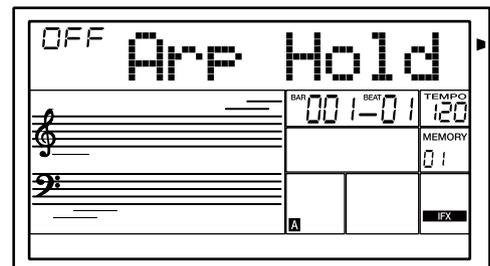
Lock
1. Select the Lock menu, then press the [ENTER] button and use the [<] / [>] buttons or Data Dial to select a Lock type.

2. With Performance Memory, use Lock to retain the locked items of the current setting when you switch to another Memory, so that they are preserved across different Memory slots.

```
     Lock
                    BAR 001-01  TEMPO 120
                              MEMORY 01
                    A            IFX
```
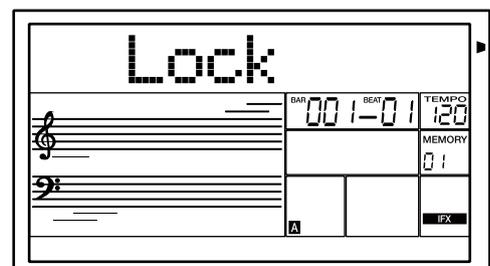
Sustain Pedal

Select the Sust Ped menu, then press the [ENTER] button and use the [<] / [>] buttons or Data Dial to select a Pedal type.
You can assign other functions to the sustain pedal. Please refer to Setting.

1. Sustain

If the pedal is assigned as "Ped Sust", step on the sustain pedal, all notes played on the keyboard have a longer sustain.

2. Soft

If the pedal is assigned as "Ped Soft", step on the soft pedal, all notes played on the keyboard have a softer effect.

3. Start / Stop

If the pedal is assigned as "Ped St/T step on the pedal to start/stop accompaniment.

Expression Pedal

1. Select the Expr Ped menu, then press the [ENTER] button and use the [<] / [>] buttons or Data Dial to select a Expression Pedal type.

2. The expression pedal can be assigned in Setting to control volume, modulation, cutoff, resonance or lo-pass filter.

Joystick Down

1. Select the JS Down menu, then press the [ENTER] button and use the [<] / [>] buttons or Data Dial to select a Joystick Down type.

2. The following parameters are available: Sound Filter, Volume or Envelope Release. The default is off.

Recorder Mode

Select the Rec Mode menu, then press the [ENTER] button and use the [<] / [>] buttons or Data Dial to select a Recorder Mode type. Type: MIDI, WAV, MP3. (MP3/WAV format can only be selected when the U disk is inserted)

MIDI Out Channels

Select the MIDI Out menu, then use the [<] / [>] buttons to select MIDI Out Channel.
The default setting is "001", channel 1~16 can be selected.

Auto Power Off

This function will set the time after which the instrument will shut down if it is not used.
Select the Poweroff menu, then press the [ENTER] button and use the [<] / [>] buttons or Data Dial to select Auto Power Off time.
Range: Never, 30min, 60min. Default: 30min.
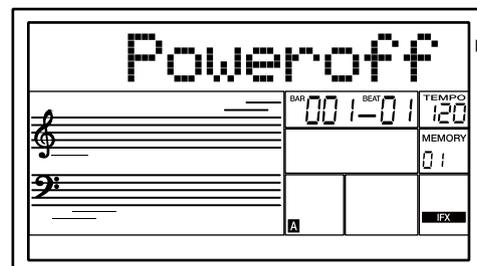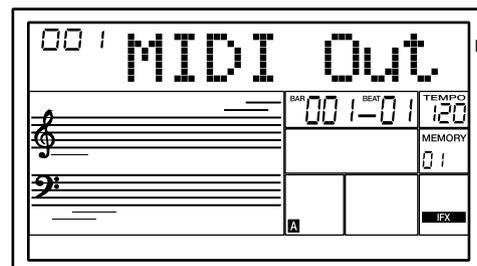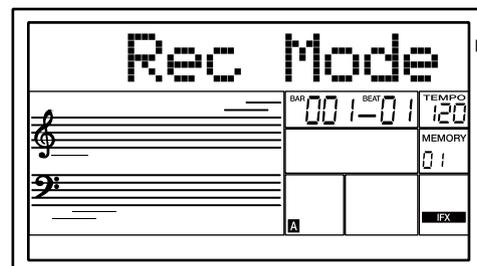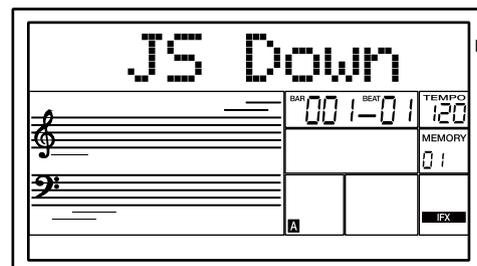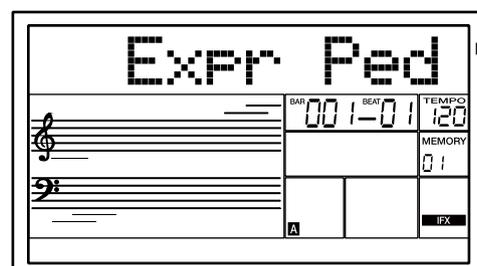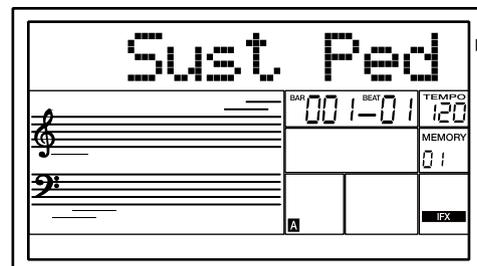
MIDI

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

What's MIDI?

1. 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.

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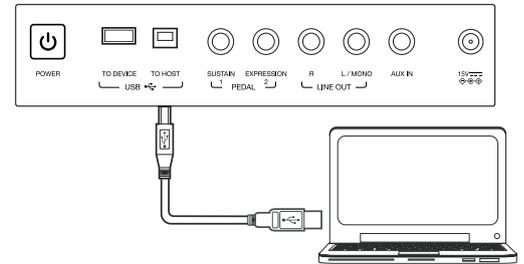
Troubleshooting

Problem	Possible Cause and Solution
The speakers produce a pop sound whenever the power is turned ON or OFF.	This is normal and is no cause for alarm.
No sound when the keyboard is played.	Check if the master volume is set too low or if headphones are plugged into the PHONES Jack. The R1/R2/L sound volume (Mixer) settings could be set too low. Make sure the sound volume are set at appropriate levels.
When using a mobile phone, noise is produced.	Using a mobile phone in close proximity to the instrument may produce interference. To prevent this, turn off the mobile phone or use it further away from the instrument.
The auto accompaniment does not play back even Sync is in standby condition and a key is pressed.	You may be trying to start accompaniment by playing a key in the righthand range of the keyboard. To start the accompaniment with Sync Start, make sure to play a key in the left-hand range of the keyboard.
Certain notes sound at wrong pitch.	Make sure that the tuning value is set to 0 . Press and hold the [<] / [>] buttons at the same time, then turning the power on will set INSTRUMENT to default.
The Harmony function does not operate.	And Harmony cannot be turned on when a drum kit is selected for the sound R1 and R2.
After connecting with a computer, the instrument cannot be recognized.	Please check if the USB cable is being connected firmly, or try connecting another USB port on the computer, without the need to install another driver on the PC.
It cannot read/save to the USB flash drive.	It support USB flash drive in the FAT16/FAT32 format only and does not support USB partition. Please format your USB flash drive into FAT16/FAT32 on computer before using.
It shuts down after a period of time.	Normally, the auto power off function will turn off the instrument after a preset period of time if the instrument is not used. You can turn off the function in the Function Menu.

Keyboard	61 Keys (Touch-sensitive)
Touch Response	5 Levels (Soft1, 2 / Normal / Hard1, 2)
Display	Backlit LCD 4.5" x 2.4"
Language	English
Polyphony	256
Sound	750 Preset 50 User Synth mode to edit on-board PCM data
Keyboard Part	L, R1, R2
Effect	32 x Reverb types 64 x Chorus types 24 x Insert Effect types 5 x Preset EQ types and 7 band controls D.A.S. (Loudness-compensated Volume, fixed)
Part Effect	13 x Harmony types 4 x Echo types 4 x Tremolo types 4 x Trill types 6 x Arpeggio types
Chord	39 Chord types 4 x Chord Detection modes (Fingered, Multi Fingered, Bass Invert, Smart Full Range) Chord Reference
Style	280 Preset 50 User
Style Control	Start / Stop Sync Start / Sync Stop Intro 1 / Ending 1 Intro 2 / Ending 2 Intro 3 / Ending 3 Main A / Fill in A Main B / Fill in B Main C / Fill in C Main D / Fill in D Break Auto Fill in Chord Mode Fade in / out
Quick Setting	4 for each Style
Song	90 Preset
Song Control	Song Select Start/Stop Pause Loop Playback (Single song / All songs) FF RW
Song Recording	5 User 16 Tracks Maximum 20,000 MIDI notes per song
Album	50 Preset
Audio Recording	WAV (44.1KHz / 16bit) MP3 (320 kbps)
Audio Playback	WAV MP3
Demo Song	3
Phrase Pad	4 x 100 Banks
Tempo	5 ~ 320 BPM
Scale Setting	Transpose (-12 ~ +12) Octave (-2 ~ +2) Tuning (-50 ~ +50 cents)
Performance Memory	6 x 32 Banks Parameter Lock function

Specifications

Controller	1 x Sustain Pedal (Assignable) 1 x Expression Pedal (Assignable) 1 x Joystick (Pitchbend, Modulation and an assignable parameter)
Mixer	17 Parts
Other Controller	Volume knob, Data dial with Enter button, < / > buttons, Exit button, Tempo < / >, Metronome, Tap Tempo buttons, Mixer, Function, USB access, Demo buttons, Transpose < / >, Octave < / > buttons, IFX, Arpeggio, Harmony buttons, Touch sens, Sustain button, Sound and Style direction selection buttons, Sound part on / off buttons, Q.S. 1 ~ 4 buttons
USB Storage Device	Playback: Song (MID / WAV / MP3), Style Saving: Song, Device Information Loading: Song (MID), Expansion Style Maximum 256GB storage device handling
Connectivity	1 x 1/4" Stereo Headphones Output 1 x 1/4" Stereo AUX Input 2 x 1/4" Line Output (L/Mono, R) 1 x 1/4" Sustain Pedal Input (Assignable) 1 x 1/4" Expression Pedal Input (Assignable) 1 x USB-B (MIDI & Audio) 1 x USB-A (Device)
Other Setting	Tuning, Metronome Time Signature, Fade In/Out Time, Split Point, Harmony Type, Arpeggio Type, Arpeggio Hold on/off, Lock (Parameters), Sustain Pedal Assignment, Expression Pedal Assignment, Joystick Assignment (Down), Recorder Mode, MIDI Out channel, Auto Power Off, Factory Reset
Expansion Data	PC software kit which can edit user data
Software & App	GrandSuite
Power	DC15V
Amplifier	Woofer: 2 x 25W Tweeter: 2 x 15W
Speakers	2 x 12 cm 2 x 3 cm
Dimensions	971 (W) x 390 (D) x 130 (H) mm
Weight	9.9 Kg

* Specifications and descriptions here in are for information only and are subject to change without prior notice.

Sound List

NO.	Bank MSB	Bank LSB	Program	Full Name	Short Name
Piano					
1	121	10	0	German Grand Piano 1	GERGdPn1
2	121	11	0	German Grand Piano 2	GERGdPn2
3	121	11	1	Real Bright Piano	RelBrPno
4	121	12	0	Mellow Grand Piano	MelGdPno
5	121	12	1	Rock Piano	RkPiano
6	121	11	3	Real Honky Tonk	RealHonk
7	121	15	0	Octave Grand Piano 1	OtPiano1
8	121	16	0	Octave Grand Piano 2	OtPiano2
9	121	16	1	Piano & EP 1	Pno&EP1
10	121	10	1	Bright Grand Piano	BrtGdPno
11	121	14	0	Warm Grand Piano	WrmGdPno
12	121	14	1	Octave Bright Piano	OtBrPno
13	121	13	0	Live Grand Piano	LiveGdPn
14	121	10	3	Live Honky Tonk	LiveHonk
15	121	10	6	Real Harpsichord	RlHarpsi
16	121	11	6	Octave Harpsichord	OtHarpsi
17	121	0	6	Live Harpsichord	LvHarpsi
18	121	10	2	CP Electric Piano 1	CPE.Pno1
19	121	0	2	CP Electric Piano 2	CPE.Pno2
20	121	13	1	Pop Piano	PopPiano
21	121	17	0	Piano & Strings	Pno&Str
22	121	18	0	Piano & Pad	Piano&Pd
23	121	19	0	Piano & Choir	Pno&Chor
24	121	17	1	Piano & EP 2	Pno&EP2
25	121	12	2	Ballad Electric Piano	BldE.Pno
26	121	12	6	Dark Harpsichord	DkHarpsi
E.Piano					
27	121	10	4	Vintage Electric Piano 1	VtE.Pno1
28	121	11	5	Dream Electric Piano 1	DreamEP1
29	121	10	5	Classic Electric Piano	ClassEP
30	121	0	5	Japanese Electric Piano	JapanEP
31	121	3	4	60's Electric Piano	60'sEP
32	121	12	5	Modern Electric Piano	ModenEP
33	121	11	4	Jazz Electric Piano 1	JzE.Pno1
34	121	13	5	Cool Electric Piano 1	CoolEP1
35	121	12	4	Cool Electric Piano 2	CoolEP2
36	121	13	4	Phase Electric Piano	PhaseEP
37	121	14	4	Vintage Electric Piano 2	VtE.Pno2
38	121	16	4	Jazz Electric Piano 2	JzE.Pno2
39	121	18	4	Tremolo EP 1	TremoEP1
40	121	20	4	Standard Electric Piano	StandEP
41	121	3	5	Dream Electric Piano 2	DreamEP2
42	121	22	4	Tremolo EP 2	TremoEP2
43	121	2	5	Super Electric Piano	SprE.Pno
44	121	10	7	Stereo Clavi	SteClavi
45	121	0	7	Classic Clavi	ClsClavi
46	121	1	7	Wah Clavi	WaClavi
47	121	30	4	Massiveness Electric Piano	MassinEP
48	121	32	4	Bright Electric Piano	BrtE.Pno
49	121	34	4	Wire Electric Piano	WirE.Pno
50	121	35	4	Aah Electric Piano	AahE.Pno
51	121	35	5	Pop Electric Piano	PopE.Pno
52	121	30	7	Rock Electronic Clavi	RkEClavi
53	121	34	7	Bright Electronic Clavi	BrEClavi

Sound List

54	121	35	7	Warm Electronic Clavi	WmEClavi
55	121	37	7	Dark Electronic Clavi	DkEClavi
Organ					
56	121	0	16	Stereo Drawbar Organ	SteDraOr
57	121	0	17	Classic Percussive Organ	ClsPerOr
58	121	13	18	Stereo Rock Organ	SteRokOr
59	121	0	19	Real Church Organ	RelChuOr
60	121	11	18	Power Rotary Organ	PowRotOr
61	121	2	17	Stereo Percussive Organ	StePerOr
62	121	1	19	Octave Church Organ	OctChuOr
63	121	2	19	Cool Church Organ	ColChuOr
64	121	1	17	Cool Percussive Organ	ColPerOr
65	121	0	18	Live Rock Organ	LivRokOr
66	121	12	18	Rotary Organ	RotaOrg
67	121	11	17	Pop Organ	PopOrgan
68	121	10	17	Jazz Organ 1	JzOrgan1
69	121	10	18	Cool Rock Organ	ColRkOr
70	121	11	16	Electronic Organ	E.Organ
71	121	1	16	Live Drawbar Organ	LivDraOr
72	121	2	16	Jazz Organ 2	JzOrgan2
73	121	12	17	Live Percussive Organ	LivPerOr
74	121	14	16	60's Organ	60'sOrg
75	121	3	16	Cool Drawbar Organ	ColDraOr
76	121	13	19	Live Church Organ	LivChuOr
77	121	15	16	Mellow Organ	MellOrg
78	121	0	20	Real Reed Organ	RelRdOrg
79	121	1	20	Cool Puff Organ	ColPfOrg
80	121	30	16	Dark Drawbar Organ	DkDraOrg
81	121	33	16	Bright 60's Organ	Br60'sOr
82	121	34	16	Detuned Classic Organ	DeClsOrg
83	121	37	16	Bright Rotary Organ	BrtRoOrg
84	121	30	17	Bright Percussive Organ	BrPerOrg
85	121	31	17	Jazz Percussive Organ	JzPerOrg
86	121	32	17	Rock Percussive Organ	RkPerOrg
87	121	33	17	Octave Percussive Organ	OPerOrg
88	121	31	18	Dark Rock Organ	DkRokOrg
89	121	32	18	Mellow Rock Organ	MelRkOrg
90	121	36	18	Wah Rock Organ	WahRkOrg
91	121	32	19	Mellow Church Organ	MelChuOr
92	121	34	19	Vintage Rock Organ	VintRkOr
93	121	35	19	Vintage Pop Organ	VitPopOr
94	121	37	19	Vintage Percussive Organ	VitPerOr
95	121	36	20	Jazz Puff Organ	JzPufOrg
Accordion					
96	121	10	21	Musette	Musette
97	121	11	21	Real Accordion	RelAcord
98	121	10	22	Sweet Harmonica	SwtHarm
99	121	11	22	Soft Harmonica	SoftHarm
100	121	0	23	Real Tango Accordion	RlTanAcd
101	121	11	23	Ballroom Accordion	BalrmAcd
102	121	0	21	Cool Accordion	CoolAcd
103	121	10	23	Solo Accordion 1	SoloAcd1
104	121	30	21	Dark Musette	DkMuset
105	121	31	21	Bright Musette	BrtMuset
106	121	31	22	Bright Harmonica	BritHarm
107	121	33	22	Wide Harmonica	WideHarm

108	121	13	23	Solo Accordion 2	SoloAcd2
109	121	31	23	Bright Accordion	BritAcd
Guitar					
110	121	10	24	Real Nylon Guitar	RealNyGt
111	121	10	25	Real Steel Guitar	RelStlGt
112	121	11	29	Rock Guitar	RockGtr
113	121	11	27	Cool Funk Guitar	ColFukGt
114	121	10	27	Real Clean Guitar	RelClnGt
115	121	11	25	Slide Steel Guitar	SldStlGt
116	121	12	27	Slide Clean Guitar	SldClnGt
117	121	2	25	Sweet Mandolin	SwMandln
118	121	17	27	Cool Lead Guitar	CoolLdGt
119	121	10	26	Real Jazz Guitar	RealJzGt
120	121	13	27	60's Clean Guitar	60'sClnG
121	121	12	25	Harmonics Steel Guitar	HarStlGt
122	121	11	24	Harmonics Nylon Guitar	HarNyGt
123	121	13	25	12-Strings Guitar	12-StrG
124	121	10	29	Blues Guitar	BluesGtr
125	121	0	27	Solo Clean Guitar	SolClnGt
126	121	11	30	Guitar Feedback	GtFedbk
127	121	12	30	5th Distortion Guitar	5thDstGt
128	121	14	25	Velocity Steel Guitar	VelStlGt
129	121	14	27	Delay Guitar	DelayGtr
130	121	15	27	Vintage Guitar	VintGtr
131	121	11	26	Solo Jazz Guitar	SolJzGtr
132	121	13	30	Rhythm Guitar	RythGtr
133	121	14	26	Jazz Lead Guitar 1	JazLdGt1
134	121	0	26	Jazz Lead Guitar 2	JazLdGt2
135	121	10	28	Solo Muted Guitar	SoloMtGt
136	121	1	26	Pedal Guitar	PedalGtr
137	121	14	30	Distortion Lead Guitar 1	DstLdGt1
138	121	13	26	Octave Guitar	OctaveGt
139	121	24	27	Tremolo Guitar	TremGtr
140	121	15	30	Metal Guitar	MetalGtr
141	121	20	27	Clean Rhythm Guitar	ClnRthGt
142	121	15	26	Jazz Guitar & EP	JazGt&EP
143	121	0	30	Distortion Lead Guitar 2	DstLdGt2
144	121	26	27	12-Strings Electric Guitar	12-StrGt
145	121	0	28	Muted Rhythm Guitar	MtRythGt
146	121	27	27	Funk Guitar	FunkGtr
147	121	0	29	Overdrive Lead Guitar	OvdrLdGt
148	121	30	25	Chorus Steel Guitar	ChoStlGt
149	121	33	25	Nylon Guitar & Steel Guitar	NyG&StlG
150	121	34	25	Jazz Guitar & Steel Guitar	JzG&StlG
151	121	31	26	Bright Jazz Guitar	BrtJazGt
152	121	32	26	Overdrive Jazz Guitar	OvdJazGt
153	121	34	26	Overdrive Octave Guitar	OvdOctGt
154	121	36	26	Jazz Octave Guitar	JazOctGt
155	121	31	27	Vintage Funk Guitar	VitFukGt
156	121	32	27	Overdrive Funk Guitar	OvdFukGt
157	121	34	27	Clean Vintage Guitar	ClnVitGt
158	121	35	27	Dark Vintage Guitar	DkVintGt
159	121	36	27	Bright Vintage Guitar	BrtVitGt
160	121	30	28	Dark Muted Guitar	DarkMtGt
161	121	32	28	Overdrive Muted Guitar	OvdrMtGt
162	121	37	28	Funk Muted Guitar	FunkMtGt

163	121	30	29	Dark Overdrive Guitar	DkOvdrGt
164	121	31	29	Bright Overdrive Guitar	BrOvdrGt
165	121	32	29	Soft Overdrive Guitar	SoOvdrGt
166	121	31	30	Dark Distortion Guitar	DkDstGtr
167	121	33	30	Velocity Lead Guitar	VelLdGtr
168	121	35	30	Bright Lead Guitar	BrtLdGtr
169	121	36	30	Modern Distortion Guitar	MdnDtGtr
Bass					
170	121	12	33	Real Finger Bass	RelFgrBs
171	121	11	32	Real Acoustic Bass	RelAcBs
172	121	11	34	Real Pick Bass	RelPikBs
173	121	11	35	Real Fretless Bass	RlFretBs
174	121	11	36	Power Slap Bass	PowSlpBs
175	121	10	39	Attack Pulse	AtckPls
176	121	10	38	House Bass	HousBass
177	121	10	37	Funk Slap Bass	FukSlpBs
178	121	11	39	Resonant Bass 1	RsnBass1
179	121	13	39	Resonant Bass 2	RsnBass2
180	121	14	39	Resonant Synth Bass	RsnSyBs
181	121	10	34	Rock Bass 1	RockBas1
182	121	0	34	Rock Bass 2	RockBas2
183	121	11	33	Finger Slap Bass	FgSlpBs
184	121	10	32	Acoustic Bass & Cymbal	AcBs&Cym
185	121	15	39	Analog Bass	AnaBass
186	121	10	36	Resonant Slap Bass	RsnSlpBs
187	121	16	39	Warm Synth Bass	WmSynBs
188	121	17	39	Hammer	Hammer
189	121	3	39	Rubber Synth Bass	RubSynBs
190	121	10	33	Pop Bass	PopBass
191	121	31	33	Overdriven Finger Bass	OvdrFgBs
192	121	37	33	Dark Slap Bass	DkSlpBs
193	121	30	34	Bright Pick Bass	BrPikBas
194	121	31	34	Dark Pick Bass	DkPikBs
195	121	32	34	Overdrive Pick Bass	OvdrPkBs
196	121	37	34	Hard Rock Bass	HardRkBs
197	121	31	35	Overdriven Fretless Bass	OvdrF.Bs
198	121	34	35	Muted Fretless Bass	MtFretBs
199	121	35	35	Dark Fretless Bass	DkFretBs
200	121	31	36	Chorus Slap Bass	ChSlpBs
201	121	33	36	Bright Resonant Slap Bass	BrRnS.Bs
202	121	34	36	Dark Resonant Slap Bass	DkRnS.Bs
203	121	37	36	Warm Resonant Slap Bass	WmRnS.Bs
204	121	30	37	Dark Power Slap Bass	DkPwSlpB
205	121	31	37	Bright Power Slap Bass	BrPwSlpB
206	121	32	37	Distortion Power Slap Bass	DtPwSlpB
207	121	35	37	Chorus Power Slap Bass	ChPwSlpB
208	121	37	37	Warm Power Slap Bass	WmPwSlpB
209	121	31	38	Bright Analog Bass	BrtAnBs
210	121	32	38	Chorus Analog Bass	ChorAnBs
211	121	36	38	Hammer Analog Bass	HamrAnBs
212	121	37	38	Dark Hammer Bass	DkHamrBs
213	121	30	39	Bright Attack Bass	BrAtckBs
214	121	31	39	Pulse Attack Bass	PlsAkBs
215	121	32	39	Bright Pulse Bass	BrPlsBs
216	121	33	39	Octave Analog Bass	OctAnBs
217	121	34	39	Power Analog Bass	PwAnBs

218	121	35	39	Power Pulse Bass	PwPlsBs
Strings					
219	121	10	48	Real Strings	RealStr
220	121	0	48	Classic Strings	ClasStr
221	121	1	48	Orchestra Tutti	OrcTutti
222	121	10	40	Sweet Violin	SwViolin
223	121	10	42	Real Cello	RelCello
224	121	11	48	Concert Strings	ConceStr
225	121	10	49	Live Strings	LiveStr
226	121	0	46	Real Harp	RealHarp
227	121	12	48	Live Orchestra	LiveOrch
228	121	13	48	Live Contrabass	LvContbs
229	121	12	49	Slow Strings	SlowStr
230	121	19	48	Strings & Flute	St&Flute
231	121	15	48	Arco Strings 1	ArcoStr1
232	121	0	52	Live Choir Aahs	LivChoAh
233	121	0	53	Live Choir Oohs	LivChoOh
234	121	0	54	Synth Choir 1	SynChor1
235	121	16	48	Orchestra	Orchestr
236	121	17	48	Arco Strings 2	ArcoStr2
237	121	18	48	Brilliant Strings	BrilStrs
238	121	0	44	Live Tremolo Strings	LivT.Str
239	121	0	45	Live Pizzicato Strings	LivPzStr
240	121	10	51	Movie Strings	MovieStr
241	121	0	50	Cool Synth Strings	ColSynSt
242	121	0	51	Soft Synth Strings	SofSynSt
243	121	0	40	Real Violin	RealVln
244	121	0	41	Real Viola	RealVla
245	121	0	42	Live Cello	LivCello
246	121	0	43	Real Contrabass	RealCtbs
247	121	10	52	Soft Choir Aahs	SofChoAh
248	121	1	53	Soft Choir Oohs	SofChoOh
249	121	1	54	Synth Choir 2	SynCho2
250	121	0	55	Live Orchestra Hit	LvOrcHit
251	121	1	55	Synth Bass Hit	SynBsHit
252	121	2	55	Power Hit 1	PowHit1
253	121	3	55	Power Hit 2	PowHit2
254	121	30	40	Cool Violin	CoolVln
255	121	33	40	Slow Violin	SlwVioln
256	121	34	40	Dark Violin	DkVioln
257	121	35	40	Bright Violin	BrtVioln
258	121	30	41	Slow Viola	SlwViola
259	121	31	41	Dark Viola	DkViola
260	121	32	41	Bright Viola	BrtViola
261	121	30	42	Slow Cello	SlCello
262	121	31	42	Dark Cello	DkCello
263	121	32	42	Bright Cello	BrtCello
264	121	30	43	Dark Contrabass	DkContbs
265	121	31	43	Bright Contrabass	BrContbs
266	121	33	43	Slow Contrabass	SlContbs
267	121	30	44	Dark Tremolo Strings	DkTreSt
268	121	31	44	Bright Tremolo Strings	BrtTreSt
269	121	32	44	Slow Tremolo Strings	SlwTreSt
270	121	30	45	Dark Pizzicato Strings	DkPzStr
271	121	31	45	Bright Pizzicato Strings	BrtPzStr
272	121	30	46	Dark Harp	DarkHarp

273	121	31	46	Bright Harp	BrtHarp
274	121	0	104	India Sitar	INSitar
275	121	0	105	Folk Banjo	FoBanjo
276	121	0	106	Japanese Shamisen	JPShami
277	121	0	107	Japanese Koto	JapanKto
278	121	0	110	Vintage Fiddle	VtFiddle
Brass					
279	121	10	56	Sweet Trumpet	SweetTrp
280	121	10	57	Sweet Trombone	SwtTrom
281	121	10	59	Sweet Muted Trumpet	SwtMtTrp
282	121	10	58	Live Tuba	LiveTuba
283	121	10	60	Live French Horn	LivFrHon
284	121	16	60	Wide French Horn	WdFrHon
285	121	10	61	Real Brass Section	RealBrs
286	121	11	61	Pop Brass Section	PopBrass
287	121	11	56	Jazz Trumpet	JazzTrp
288	121	12	56	Solo Trumpet	SoloTrp
289	121	13	56	Trumpet Ensemble	TrpEn
290	121	0	57	Live Trombone	LiveTrom
291	121	14	57	Solo Flugelhorn	SolFghon
292	121	0	59	Solo Muted Trumpet	SolMtTrp
293	121	11	57	Solo Trombone	SoloTrom
294	121	12	57	Soft Trombone	SoftTrom
295	121	19	57	Wide Trombone	WideTrom
296	121	13	57	Dark Trombone	DarkTrom
297	121	18	57	Synth Trombone	SynTrom
298	121	20	57	Analog Bass Brass	AnBsBras
299	121	12	61	Octave Brass Section	OctBrsSc
300	121	0	61	Classic Brass Section	ClasBras
301	121	17	61	Dark Brass	DarkBras
302	121	13	61	Cool Synth Brass	CoolBras
303	121	14	61	Live Brass Section	LiveBras
304	121	15	61	Sforzato Brass	SfztBras
305	121	18	61	Big Brass Section	BigBrass
306	121	20	61	Bright Brass Section	BrtBras
307	121	21	61	Mellow Brass Section	MelBrass
308	121	11	60	Modern Synth Brass	MdnBrass
309	121	12	60	Soft Synth Brass	SoBras
310	121	10	62	80's Brass	80'sBras
311	121	23	61	Soft Brass Section	SofBrsSc
312	121	13	60	Big Band	BigBand
313	121	24	61	Power Brass Section	PowBrass
314	121	25	61	Dance Synth Brass	DancBras
315	121	28	61	Brass Hit	BrassHit
316	121	2	62	Analog Brass	AnaBras
317	121	2	63	Soft Analog Brass	SoAnBras
318	121	15	60	Echo Brass	EchoBras
319	121	30	56	Warm Trumpet	WarmTrp
320	121	31	56	Bright Trumpet	BritTrp
321	121	33	56	Double Trumpet	DubTrump
322	121	30	57	Warm Trombone	WarmTrom
323	121	31	57	Bright Trombone	BritTrom
324	121	33	57	Double Trombone	DubTrom
325	121	30	58	Dark Tuba	DarkTuba
326	121	31	58	Bright Tuba	BritTuba
327	121	32	58	Warm Tuba	WarmTuba

328	121	35	58	Slow Tuba	SlowTuba
329	121	30	59	Dark Muted Trumpet	DkMtTrp
330	121	31	59	Bright Muted Trumpet	BrtMtTrp
331	121	32	59	Warm Muted Trumpet	WrmMtTrp
332	121	30	60	Dark French Horn	DkFrHorn
333	121	31	60	Bright French Horn	BrFrHorn
334	121	32	60	Warm French Horn	WmFrHorn
335	121	37	60	Slow French Horn	SlFrHorn
336	121	30	61	Dark Brass Section	DBrsSect
337	121	32	61	Warm Brass Section	WarmBras
338	121	35	61	Slow Brass Section	SlowBras
339	121	31	62	Bright Synth Brass	BrtSyBrs
340	121	35	62	Slow Synth Brass	SlwSyBrs
341	121	30	63	Dark Analog Synth Brass	DkAnBras
342	121	31	63	Bright Analog Synth Brass	BrAnBras
343	121	32	63	Warm Analog Synth Brass	WmAnBras
344	121	35	63	Slow Analog Synth Brass	SlAnBras
Sax & Woodwind					
345	121	10	66	Sweet Tenor Sax	SwtTnoSx
346	121	10	65	Sweet Alto Sax	SwtAtoSx
347	121	10	64	Sweet Soprano Sax	SwSprnSx
348	121	10	67	Live Baritone Sax	LivBriSx
349	121	11	66	Real Tenor Sax	RelTnoSx
350	121	11	65	Real Alto Sax	RelAtoSx
351	121	10	73	Sweet Flute	SwtFlute
352	121	10	71	Sweet Clarinet	SwtClar
353	121	10	75	Sweet Pan Flute	SwtPanFl
354	121	10	68	Sweet Oboe	SwtOboe
355	121	0	69	Classic English Horn	ClassEH
356	121	0	70	Classic Bassoon	ClassBn
357	121	0	72	Classic Piccolo	ClasPico
358	121	12	73	Classic Flute 1	ClassFl1
359	121	0	64	Soprano Sax	SprnSax
360	121	0	66	Tenor Sax	TenorSax
361	121	0	65	Alto Sax	AltoSax
362	121	0	67	Baritone Sax	BariSax
363	121	11	73	Flute & Sax	Flut&Sax
364	121	13	65	Sax Section	SaxSect
365	121	11	64	Sax Band 1	SaxBand1
366	121	12	64	Sax Band 2	SaxBand2
367	121	12	65	Octave Saxes	OctSaxes
368	121	11	67	Soft Sax Band	SoSxBand
369	121	11	75	Cool Pan Flute	CoolPFl
370	121	0	77	Cool Shakuhachi	ColShaku
371	121	0	71	Classic Clarinet	ClasClar
372	121	0	73	Classic Flute 2	ClassFl2
373	121	0	68	Classic Oboe	ClasOboe
374	121	0	78	Mellow Whistle	MelWhist
375	121	0	74	Classic Recorder	ClasRecd
376	121	0	76	Sweet Blown Bottle	SwBottle
377	121	0	79	Mellow Ocarina	MelOcari
378	121	30	72	Dark Piccolo	DarkPico
379	121	31	72	Bright Piccolo	BrtPico
380	121	34	72	Slow Piccolo	SlowPico
381	121	30	73	Dark Flute	DkFlute
382	121	31	73	Bright Flute	BrtFlute

383	121	34	73	Slow Flute	SlwFlute
384	121	30	75	Dark Pan Flute	DkPanFl
385	121	31	75	Bright Pan Flute	BrPanFl
386	121	35	75	Slow Pan Flute	SlPanFl
387	121	30	76	Dark Blown Bottle	DkBottle
388	121	31	76	Bright Blown Bottle	BrBottle
389	121	34	76	Slow Blown Bottle	SlBottle
390	121	30	77	Dark Shakuhachi	DkShaku
391	121	31	77	Bright Shakuhachi	BrtShaku
392	121	34	77	Slow Shakuhachi	SlwShaku
393	121	30	78	Bright Whistle	BrtWhist
394	121	0	111	Vintage Shanai	VtShanai
395	121	0	109	Vintage Bag Pipe	VtBagPp
Lead & Pad					
396	121	10	80	Wire Lead	WireLd
397	121	16	84	Dance Lead	DanceLed
398	121	11	87	Techno Lead	TechLed
399	121	12	81	Trance Lead	TranceLd
400	121	15	80	Super Square	SuperSqu
401	121	17	81	Super Sawtooth	SuperSaw
402	121	18	81	Pop Lead	PopLead
403	121	10	87	Octave Line	OctLine
404	121	12	82	Pan Lead	PanLead
405	121	10	86	Rising	Rising
406	121	12	87	Octave Lead	OctLead
407	121	13	81	Fire Wire Lead	FirWirLd
408	121	10	91	Live Choir Pad	LivChoPd
409	121	13	91	Vox Pad	VoxPad
410	121	15	91	Dream New Age	DreamNA
411	121	20	91	Heaven Pad	HevenPd
412	121	11	95	Messenger Pad	MesengPd
413	121	10	98	Echo Crystal	EchoCrys
414	121	10	102	Echo Drops	EchoDrp
415	121	12	80	Sine Solo	SineSolo
416	121	11	80	Matrix Lead	MatrxLed
417	121	13	80	Hip Hop Lead 1	HiHpLed1
418	121	14	80	Hip Hop Lead 2	HiHpLed2
419	121	10	81	Bauble Lead	BaubleLd
420	121	11	81	Super Analog	SuperAna
421	121	15	81	Blaster Lead	BlasLead
422	121	16	81	Skyline Lead	SkyLead
423	121	10	84	Soft Sine 1	SofSine1
424	121	12	84	Wah Lead	WahLead
425	121	14	84	Corrie	Corrie
426	121	21	81	Big Lead	BigLead
427	121	10	82	Flying Lead	FlyLead
428	121	16	80	Mini Lead	MiniLead
429	121	13	87	Massiveness	Massines
430	121	11	82	Soft Calliope	SoCal
431	121	14	87	Soft Sine 2	SofSine2
432	121	15	87	Jazz Lead	JazzLead
433	121	22	81	Trumpet Saw	TrumpSaw
434	121	23	81	Circus Lead	CirLead
435	121	24	81	Thick Square	ThickSqu
436	121	30	80	Wah Sine Solo	WaSinSol
437	121	32	80	Dark Wire Lead	DkWireLd

438	121	31	81	Chorus Soft Mini	ChSoMini
439	121	34	81	Soft Analog	SoftAna
440	121	35	81	Bright Analog	BritAna
441	121	36	81	Toys Analog	ToysAna
442	121	30	82	Corrie Calliope	CoreCal
443	121	32	82	Bright Calliope	BrtCalio
444	121	35	82	Analog Calliope	AnaCalio
445	121	31	83	Bright Chiff Lead	BrtChiLd
446	121	33	83	Charang Chiff Lead	ChaChiLd
447	121	36	83	Corrie Chiff Lead	CreChiLd
448	121	37	83	Stardust Warp	StardWap
449	121	30	84	Soft Funky Lead	FunkyLd
450	121	32	84	Wire Funky Lead	WirFukLd
451	121	33	84	Soft Octave Lead	SofOctLd
452	121	36	84	Calliope Octave Lead	CalOctLd
453	121	37	84	Big Octave Lead	BigOctLd
454	121	30	85	Bright Voice Lead	BrtVocLd
455	121	37	85	Big Voice Lead	BigVocLd
456	121	30	86	Soft Rising	SofRise
457	121	32	86	Bright Rising	BrtRise
458	121	30	87	Soft Bass Lead	SofBsLd
459	121	32	87	Voice Bass Lead	VocBsLd
460	121	34	87	Calliope Bass Lead	CaloBsLd
461	121	35	87	Analog Bass Lead	AnaBsLd
462	121	11	91	Gospel Pad	GospelPd
463	121	12	91	Live Humming Pad	HummPad
464	121	14	91	Sweet New Age	SwNewAge
465	121	16	91	Soft Vox	SoftVox
466	121	17	91	Vox Choir Pad	VoxChoPd
467	121	18	91	Sunbeam Pad	SunPad
468	121	23	91	Air Choir Pad	AirChoPd
469	121	27	91	Choir & Organ	Ch&Organ
470	121	10	88	Cool New Age	CoolNA
471	121	10	89	Space Pad	SpacePd
472	121	11	89	PWM Pad	PWMPad
473	121	15	89	Cyber Pad	CyberPad
474	121	10	95	Cool Sweep Pad	ColSwpPd
475	121	12	95	Wave Pad	WavePad
476	121	10	90	Poly Synth Pad 1	PolSyPd1
477	121	11	90	Poly Synth Pad 2	PolSyPd2
478	121	10	93	Mystery Pad	MysterPd
479	121	12	94	Evening Stars	EvenStar
480	121	13	88	Atmosphere Pad	AtmospPd
481	121	28	91	Utopia Pad	UtopiPd
482	121	12	93	Glass Pad	GlassPad
483	121	13	93	Fantasia	Fantasia
484	121	17	89	DX Pad	DXPad
485	121	13	95	Dream Sweep Pad	D.SwpPad
486	121	18	89	Analog Pad	AnalogPd
487	121	15	88	New Age & Bowed Pad	NA&BowPd
488	121	16	88	Golden Age	GoldAge
489	121	17	88	Space Halo Pad	SpcHloPd
490	121	18	88	Time Travel	TimeTrav
491	121	19	89	Time Machine	TimeMach
492	121	20	89	Slow Warm Pad	SlWrmPad

493	121	30	88	Bright New Age Pad	BrtNAPad
494	121	35	88	Warm New Age Pad	WarmNAPd
495	121	36	88	Dipolar New Age Pad	DipoNAPd
496	121	30	89	Dream Warm Pad	D.WrmPad
497	121	31	89	Cool Warm Pad	CoolWmPd
498	121	33	89	Organ Pad	OrganPad
499	121	35	89	Modern Pad	ModernPd
500	121	31	90	Bright Poly Synth Pad	BrtPSyPd
501	121	34	90	Calliope Poly Synth Pad	CalPSyPd
502	121	35	90	Harmonica Poly Synth Pad	HmPSyPd
503	121	37	90	Square Poly Synth Pad	SquPSyPd
504	121	32	91	Soft Utopia Pad	SoUtoPd
505	121	33	91	Square Utopia Pad	SquUtoPd
506	121	35	91	Analog Utopia Pad	AnaUtoPd
507	121	30	92	Bright Bowed Pad	BrBowPd
508	121	31	92	Soft Bowed Pad	SoBowPd
509	121	34	92	Congregate Bowed Pad	CongBoPd
510	121	30	93	Bright Metallic Pad	BrMetPd
511	121	31	93	Soft Metallic Pad	SofMetPd
512	121	35	93	Congregate Metallic Pad	CogMetPd
513	121	36	93	Calliope Metallic Pad	CalMetPd
514	121	30	94	Bright Halo Pad	BrHaloPd
515	121	31	94	Soft Halo Pad	SoHaloPd
516	121	33	94	PWM Halo Pad	PWMHloPd
517	121	34	94	Bowed Halo Pad	BowHloPd
518	121	36	94	Metal Halo Pad	MetHloPd
519	121	37	94	Corrie Halo Pad	CoreHoPd
520	121	30	95	Soft Dipolar Pad	SoDipoPd
521	121	33	95	Metallic Dipolar Pad	MetDipPd
522	121	34	95	Warm Dipolar Pad	WmDipoPd
523	121	36	95	Calliope Dipolar Pad	CalDipPd
524	121	37	95	Corrie Dipolar Pad	CreDipPd
525	121	11	102	Sun Bell	SunBell
526	121	12	102	Echo Bell	EchoBell
527	121	13	102	Bell Pad	BellPad
528	121	31	98	Soft Crystal Echo	SoCrysEc
529	121	37	98	Chorus Crystal Echo	ChCrysEc
530	121	30	102	Soft Echo	SoftEcho
531	121	32	102	Bright Echo	BritEcho
Perc. & Drums					
532	121	1	11	Cool Vibraphone	ColVibra
533	121	10	11	Rigid Vibraphone	RigVibra
534	121	1	12	Real Marimba	RelMarim
535	121	10	8	Real Celesta	RelCeles
536	121	0	11	Live Vibraphone	LivVibra
537	121	11	11	Jazz Vibraphone	JazVibra
538	121	0	12	Cool Marimba	ColMarim
539	121	0	13	Live Xylophone	LivXylop
540	121	0	8	Live Celesta	LivCeles
541	121	0	9	Live Glockenspiel	LivGlock
542	121	0	10	Dream Music Box	DreamMBx
543	121	0	14	Live Tubular Bells	LvTubuBl
544	121	1	14	Church Bell	ChurBell
545	121	2	14	Carillon	Carillon
546	121	0	15	Santur	Santur

547	121	0	108	Africa Kalimba	AfricaKa
548	120	0	0	Standard Set	StdSet
549	120	0	40	Brush Set	BrushSet
550	120	0	72	Studio Set	StudoSet
551	120	0	73	Mix Set	MixSet
552	120	0	70	Dance Set	DanceSet
553	120	0	8	Room Set	RoomSet
554	120	0	32	Jazz Set	JazzSet
555	120	0	87	Acoustic Set	AcousSet
556	120	0	16	Power Set	PowSet
557	120	0	24	Electronic Set	ElectSet
558	120	0	25	Analog Set	AnalSet
559	120	0	48	Orchestra Set	OrchSet
560	120	0	77	Latin Set	LatinSet
561	120	0	81	R&B Set	R&BSet
562	120	0	83	Hip Hop Set	HiHpSet
563	120	0	76	Fusion Set	FusioSet
564	120	0	82	Vintage Set	VintSet
565	120	0	84	Pop Set	PopSet
566	120	0	85	Funk Set	FunkSet
567	120	0	88	Symphony Set	SympSet
568	120	0	80	Percussion Set	PercSet
569	120	0	78	SFX Set 1	SFXSet1
570	120	0	79	SFX Set 2	SFXSet2
571	121	0	47	Orchestra Timpani	OrchTimp
572	121	0	116	Live Taiko Drum	LvTaDrum
573	121	1	116	Concert Bass Drum	ConBsDrm
574	121	0	117	Acoustic Tom 1	AcousTm1
575	121	1	117	Acoustic Tom 2	AcousTm2
576	121	0	118	Synth Tom	SynthTom
577	121	1	118	Rhythm Tom	RhythmTm
578	121	2	118	Electric Drum	E.Drum
579	121	0	114	Live Steel Drums	LvStlDr
580	121	0	113	Agogo Bell	AgogoBel
581	121	0	119	Cymbal SFX	CymbSFX
SFX & GM					
582	121	0	120	Guitar SFX 1	GtrSFX1
583	121	1	120	Guitar SFX 2	GtrSFX2
584	121	2	120	Acoustic Bass String Slap	BsStSlap
585	121	0	121	Breathy Voice	BrthVoic
586	121	1	121	Flute Key Click	FlKeyClk
587	121	0	122	Sea Wave	SeaWave
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	Birds1
594	121	1	123	Dog	Dog
595	121	2	123	Horse Gallop	HorseGlp
596	121	3	123	Birds 2	Birds2
597	121	0	124	Telephone Bell 1	TelpBel1
598	121	1	124	Telephone Bell 2	TelpBel2
599	121	2	124	Door Creaking	DoorCrek
600	121	3	124	Door	Door

Sound List

601	121	4	124	Scratch	Scratch
602	121	5	124	Wind Chime	WindChim
603	121	0	125	Helicopter Engine	HelEngin
604	121	1	125	Car Engine	CarEngin
605	121	2	125	Car Stop	CarStop
606	121	3	125	Car Pass	CarPass
607	121	4	125	Car Crash	CarCrash
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	BurtNoiz
613	121	0	126	Live Applause	LivAppla
614	121	1	126	Laughing	Laughing
615	121	2	126	Screaming	Scream
616	121	3	126	Punch	Punch
617	121	4	126	Heart Beat	HeartBet
618	121	5	126	Footsteps	Footstep
619	121	0	127	Gun	Gun
620	121	1	127	Machine Gun	MachnGun
621	121	2	127	Lasergun	Lasergun
622	121	3	127	Explosion	Explosio
623	0	0	0	Acoustic Grand Piano	AcGdPno
624	0	0	1	Bright Acoustic Piano	BritPno
625	0	0	2	Electric Grand Piano	E.GrdPn
626	0	0	3	Honky Tonk Piano	HnkyTonk
627	0	0	4	Electric Piano	E.Piano
628	0	0	5	Electric Piano 2	E.Piano2
629	0	0	6	Harpsichord	Harpsi
630	0	0	7	Clavi	Clavi
631	0	0	8	Celesta	Celesta
632	0	0	9	Glockenspiel	Glocken
633	0	0	10	Music Box	MusicBx
634	0	0	11	Vibraphone	Vibra
635	0	0	12	Marimba	Marimba
636	0	0	13	Xylophone	Xylopho
637	0	0	14	Tubular Bells	TubulBl
638	0	0	15	Dulcimer	Dulcimer
639	0	0	16	Drawbar Organ	DrawOrg
640	0	0	17	Percussive Organ	PercOrg
641	0	0	18	Rock Organ	RockOrg
642	0	0	19	Church Organ	ChurOrg
643	0	0	20	Reed Organ	ReedOrg
644	0	0	21	Accordion	Acordin
645	0	0	22	Harmonica	Harmnic
646	0	0	23	Tango Accordion	TangoAcd
647	0	0	24	Nylon Guitar	NylonGt
648	0	0	25	Steel Guitar	SteelGtr
649	0	0	26	Jazz Electric Guitar	JazzGtr
650	0	0	27	Clean Electric Guitar	CleanGt
651	0	0	28	Muted Electric Guitar	MtE.Gtr
652	0	0	29	Overdriven Guitar	OvdrGtr
653	0	0	30	Distortion Guitar	DistGtr
654	0	0	31	Guitar Harmonics	GtrHarmo
655	0	0	32	Acoustic Bass	A.Bass
656	0	0	33	Finger Electric Bass	FgrBass

657	0	0	34	Pick Electric Bass	PikBass
658	0	0	35	Fretless Bass	FretBs
659	0	0	36	Slap Bass	SlapBs
660	0	0	37	Slap Bass 2	SlapBs2
661	0	0	38	Synth Bass	SynBass
662	0	0	39	Synth Bass 2	SynBass2
663	0	0	40	Violin	Violin
664	0	0	41	Viola	Viola
665	0	0	42	Cello	Cello
666	0	0	43	Contrabass	Contrbs
667	0	0	44	Tremolo Strings	TremStr
668	0	0	45	Pizzicato Strings	PizzStr
669	0	0	46	Orchestral Harp	Harp
670	0	0	47	Timpani	Timpani
671	0	0	48	String Ensembles	Strings
672	0	0	49	String Ensembles 2	Strings2
673	0	0	50	Synth Strings	SynStrs
674	0	0	51	Synth Strings 2	SynStrs2
675	0	0	52	Aahs Choir	AahChor
676	0	0	53	Oohs Voice	OhVoice
677	0	0	54	Synth Voice	SyVoice
678	0	0	55	Orchestra Hit	OrchHit
679	0	0	56	Trumpet	Trumpet
680	0	0	57	Trombone	Trmbone
681	0	0	58	Tuba	Tuba
682	0	0	59	Muted Trumpet	MuteTrp
683	0	0	60	French Horn	FrHorn
684	0	0	61	Brass Section	Brass
685	0	0	62	Synth Brass	SynBras
686	0	0	63	Synth Brass 2	SynBras2
687	0	0	64	Soprano Sax	SprnSax
688	0	0	65	Alto Sax	AltoSax
689	0	0	66	Tenor Sax	TenoSax
690	0	0	67	Baritone Sax	BariSax
691	0	0	68	Oboe	Oboe
692	0	0	69	English Horn	EngHorn
693	0	0	70	Bassoon	Bassoon
694	0	0	71	Clarinet	Clarine
695	0	0	72	Piccolo	Piccolo
696	0	0	73	Flute	Flute
697	0	0	74	Recorder	Recorder
698	0	0	75	Pan Flute	PanFlut
699	0	0	76	Blown Bottle	Bottle
700	0	0	77	Shakuhachi	Shakhch
701	0	0	78	Whistle	Whistle
702	0	0	79	Ocarina	Ocarina
703	0	0	80	Square Lead	SquarLd
704	0	0	81	Sawtooth Lead	SawLead
705	0	0	82	Calliope Lead	CalioLd
706	0	0	83	Chiff Lead	ChiffLd
707	0	0	84	Charang Lead	CharaLd
708	0	0	85	Voice Lead	VoiceLd
709	0	0	86	Fifths Lead	FifthLd
710	0	0	87	Bass Lead	BassLd
711	0	0	88	New Age Pad	NewAgPd
712	0	0	89	Warm Pad	WarmPad

713	0	0	90	Poly Synth Pad	PolSyPd
714	0	0	91	Choir Pad	ChoirPd
715	0	0	92	Bowed Pad	BowedPd
716	0	0	93	Metallic Pad	MetalPd
717	0	0	94	Halo Pad	HaloPad
718	0	0	95	Sweep Pad	SweepPd
719	0	0	96	Rain FX	Rain
720	0	0	97	Sound Track FX	SoudTrk
721	0	0	98	Crystal FX	Crystal
722	0	0	99	Atmosphere FX	Atmosph
723	0	0	100	Brightness FX	Bright
724	0	0	101	Goblins FX	Goblins
725	0	0	102	Echoes FX	Echoes
726	0	0	103	Sci-Fi FX	Sci-Fi
727	0	0	104	Sitar	Sitar
728	0	0	105	Banjo	Banjo
729	0	0	106	Shamisen	Shamise
730	0	0	107	Koto	Koto
731	0	0	108	Kalimba	Kalimba
732	0	0	109	Bag Pipe	BagPipe
733	0	0	110	Fiddle	Fiddle
734	0	0	111	Shanai	Shanai
735	0	0	112	Tinkle Bell	TnklBel
736	0	0	113	Agogo	Agogo
737	0	0	114	Steel Drums	SteelDr
738	0	0	115	Woodblock	Wodblok
739	0	0	116	Taiko Drum	TaikoDr
740	0	0	117	Melodic Tom	MelodTm
741	0	0	118	Synth Drum	SynDrum
742	0	0	119	Reverse Cymbal	RevCymbl
743	0	0	120	Guitar Fret Noise	GtFeNoz
744	0	0	121	Breath Noise	BrthNoz
745	0	0	122	Seashore	Seashor
746	0	0	123	Bird Tweet	Tweet
747	0	0	124	Telephone Ring	Telphon
748	0	0	125	Helicopter	Helicptr
749	0	0	126	Applause	Applause
750	0	0	127	Gunshot	Gunshot

NO.	English Name	LCD Name
Pop & Beat		
1	Sunshine Beat	SunBeat
2	60's Classic Beat	60ClsBet
3	Heart Beat	HeartBet
4	70's Pop Rock	70PoRock
5	80's Pop Rock	80PoRock
6	Guitar Pop	GtrPop
7	Soft Beat	SoftBeat
8	Modern Pop	ModenPop
9	6-8 Pop	6-8Pop
10	80's Golden Song	80GSong
11	Cool 8Beat	Cool8Bet
12	16Beat R&B	16BtR&B
13	70's Love Song	70LSong
14	Modern Beat	ModernBt
15	Classic Pop 1	ClasPop1
16	Classic Pop 2	ClasPop2
17	8Beat Pop 1	8BtPop1
18	Classic 16Beat	Clas16Bt
19	Pop Rock 1	PopRock1
20	Pop Jazz	PopJazz
21	8Beat Rock	8BtRock
22	Sweet 8Beat	Sweet8Bt
23	British Pop 1	BritPop1
24	British Pop 2	BritPop2
25	Rhythm & 8Beat 1	Rhy&8Bt1
26	Rhythm & 8Beat 2	Rhy&8Bt2
27	Pop Fusion	PopFusn
28	8Beat Pop 2	8BtPop2
29	16Beat Pop 1	16BtPop1
30	16Beat Pop 2	16BtPop2
31	16Beat 1	16Beat1
32	Modern 16Beat	Modn16Bt
33	Pop Hit	PopHit
34	16Beat 2	16Beat2
35	16Beat 3	16Beat3
36	Pop Shuffle	PopShfl
Rock		
37	Rock & Roll 1	Rok&Rol1
38	Blues Rock 1	BluesRk1
39	Blues Rock 2	BluesRk2
40	Classic Rock	ClasRock
41	80's Metal	80Metal
42	British Rock	BritRock
43	Standard Rock	StandRk
44	70's Rock	70'sRock
45	Slow Rock	SlowRock
46	Rock & Roll 2	Rok&Rol2
47	Rock Shuffle	RockShfl
48	New Wave	NewWave
49	Ska	Ska
50	Pop Rock 2	PopRock2
51	Pop Rock 3	PopRock3
52	Folk Rock	FolkRock
53	Soft Rock	SoftRock

NO.	English Name	LCD Name
54	Old Rock	OldRock
55	Easy Rock	EasyRock
56	New Shuffle	NewShufl
57	Pop Rock 4	PopRock4
58	Hard Rock	HardRock
Ballad		
59	Guitar Ballad 1	GtrBald1
60	Blues Ballad 1	BluBald1
61	Golden Song	GoldSong
62	Movie Ballad 1	MovBald1
63	Unplugged	Unplug
64	Movie Ballad 2	MovBald2
65	Blues Ballad 2	BlueBld2
66	Simple Love Song	SimLSong
67	Love Ballad 1	LoveBld1
68	90's Ballad	90'sBld
69	Sweet Ballad	SweetBld
70	8Beat Ballad	8BtBalld
71	16Beat Ballad 1	16BtBld1
72	16Beat Ballad 2	16BtBld2
73	Piano Ballad 1	PnoBald1
74	Guitar Ballad 2	GtrBald2
75	Pop Beat	PopBeat
76	6-8 Pop Ballad	6-8PoBld
77	R&B Ballad	R&BBalld
78	Guitar Ballad 3	GtrBald3
79	Ballad Rock	BaldRock
80	Piano Ballad 2	PnoBald2
81	Soft Ballad	SoftBald
82	16Beat Ballad 3	16BtBld3
83	Natural Ballad	NatraBld
84	Love Ballad 2	LoveBld2
85	Easy Ballad	EasyBald
86	Miami Folk	MiamiFok
87	Slow Ballad	SlowBald
88	Folk Ballad	FolkBald
89	Pop Ballad	PopBald
90	EP Ballad	EPBallad
Dance		
91	Club DJ	ClubDJ
92	House 1	House1
93	Club Mix	ClubMix
94	Hip Hop 1	HipHop1
95	Hip Hop 2	HipHop2
96	Progressive House 1	ProHous1
97	Club Dance 1	ClbDanc1
98	Garage	Garage
99	80's Disco	80sDisco
100	Crazy Disco	CrzDisco
101	Club Dance 2	ClbDanc2
102	Beat Dance 1	BtDance1
103	Beat Dance 2	BtDance2
104	Pop Dance 1	PopDanc1
105	Techno 1	Techno1
106	Disco Party	DscParty
107	70's Disco	70sDisco

Style List

108	House 2	House2
109	Techno 2	Techno2
110	Progressive House 2	ProHous2
111	Soft Disco	SofDisco
112	70's Disco Funk	70'sFunk
113	16Beat Dance	16BtDanc
114	Pop Dance 2	PopDanc2
115	Euro Dance	EuroDanc
Ballroom		
116	Cha Cha Dance	ChaChaD
117	Rumba 1	Rumba1
118	Salsa 1	Salsa1
119	Tango 1	Tango1
120	Twist 1	Twist1
121	Twist 2	Twist2
122	Tango 2	Tango2
123	Tango 3	Tango3
124	Slow Fox	SlowFox
125	Slow Waltz 1	SlowWlz1
126	Swing Fox	SwingFox
127	Big Band Fox	BandFox
128	Cha Cha 1	ChaCha1
129	Cha Cha 2	ChaCha2
130	Beguine 1	Beguine1
131	Beguine 2	Beguine2
132	Spain Matador	Matador
133	Samba 1	Samba1
134	Samba 2	Samba2
135	Jive	Jive
136	Fox Trot	FoxTrot
Soul & Funk		
137	Funk 1	Funk1
138	New Soul	NewSoul
139	Modern R&B 1	ModnR&B1
140	Pop R&B	PopR&B
141	Classic Funk	ClasFunk
142	New R&B	NewR&B
143	Gospel Swing 1	GosSwin1
144	Gospel	Gospel
145	Funk 2	Funk2
146	16Beat Funk 1	16BtFuk1
147	Fusion Shuffle	FusioSfl
148	Jay R&B	JayR&B
149	16Beat Funk 2	16BtFuk2
150	Groove Funk	GrooveFk
151	Rubber Funk	RubberFk
152	Cool Funk	CoolFunk
153	Jazz Funk	JazzFunk
154	Pop Funk 1	PopFunk1
155	Pop Funk 2	PopFunk2
156	16Beat Funk 3	16BtFuk3
157	Cool Beat	CoolBeat
158	Groove	Groove
159	Soul	Soul
160	Hip Hop Soul	HipHopSl
161	Hip Hop Beat	HipHopBt

162	Pop Funk 3	PopFunk3
163	Soul Beat	SoulBeat
164	Modern R&B 2	ModnR&B2
165	British Soul Pop	BritSoul
Swing & Jazz		
166	Modern Big Band 1	MdnBand1
167	Jazz Love Song 1	JzLSong1
168	Christmas Swing	ChriSwin
169	Big Band 1	BigBand1
170	Jazz Love Song 2	JzLSong2
171	Piano Jazz	PianoJaz
172	Smooth Jazz 1	SmothJz1
173	Dixieland 1	Dixland1
174	Broadway Big Band	BwayBand
175	Gospel Swing 2	GosSwin2
176	Smooth Jazz 2	SmothJz2
177	Fusion	Fusion
178	Dixieland 2	Dixland2
179	Guitar Swing 1	GtSwing1
180	Latin Jazz	LatinJaz
181	Cool Jazz Ballad	CoolJzBd
182	Modern Big Band 2	MdnBand2
183	Big Band 2	BigBand2
184	Swing Shuffle	SwingSfl
185	Big Band 3	BigBand3
186	Acoustic Jazz	AcoustJz
187	Guitar Swing 2	GtSwing2
188	Ragtime	Ragtime
189	Modern Jazz Ballad	MdnJzBld
190	Swing Ballad	SwingBld
191	Orchestra Swing	OrchSwin
Country		
192	Country Roads	CntyRoad
193	Country Folk 1	CnyFolk1
194	70's Country Rock	70'sCnty
195	Country Pop 1	CntyPop1
196	Bluegrass	Bluegras
197	Country Pop 2	CntyPop2
198	Country Pop 3	CntyPop3
199	Ballad Country 1	BldCnty1
200	Modern Country 1	ModCnty1
201	Southern Country	SouthCny
202	Ballad Country 2	BldCnty2
203	8Beat Country	8BtCntry
204	Modern Country 2	ModCnty2
205	2-4 Country	2-4Cntry
206	Country Quick Steps	QuickStp
207	Country Folk 2	CnyFolk2
208	Country Shuffle	CnyShufl
Latin & Latin Dance		
209	Latin 1	Latin1
210	Bossa Nova	BosaNova
211	Cuba Samba	CubSamba
212	Latin Rock	LatinRok
213	New Reggae	NewRegga
214	Pop Cha Cha 1	PChaCha1

215	Reggae Dance	DanceReg
216	Paso Doble	PasoDobl
217	Lite Bossa	LteBossa
218	Latin 2	Latin2
219	Beguine 3	Beguine3
220	Slow Bolero	SlBolero
221	Disco Samba	DscSamba
222	Mambo	Mambo
223	Meneito	Meneito
224	Rumba 2	Rumba2
225	Rumba 3	Rumba3
226	Sting Latin	StiLatin
227	Lambada	Lambada
228	Pop Cha Cha 2	PChaCha2
229	Salsa 2	Salsa2
230	Tikitikita	Tikitkta
Waltz & Traditional		
231	Waltz	Waltz
232	Old Waltz	OldWaltz
233	English Waltz	EngWaltz
234	German Waltz	GemWaltz
235	Mazurka 1	Mazurka1
236	Mexican Waltz	MexWaltz
237	Vienna Waltz	VinaWltz
238	Slow Waltz 2	SlowWlz2
239	Jazz Waltz	JazzWltz
240	Vienna March	VieMarch
241	Polka	Polka
242	6-8 March	6-8March
243	German Polka	GemPolka
244	Party Polka	PtyPolka
245	Army March	ArmMarch
246	March	March
247	American March	AmMarch
248	Musette	Musette
249	French Musette	FMusette
250	Mazurka 2	Mazurka2
World		
251	Korea Folk	KorFolk
252	Laendler	Laendler
253	Hawaiian	Hawaiian
254	Sirtaki	Sirtaki
255	Dangdut	Dangdut
256	6-8 Flipper	6-8Flper
257	New Age	NewAge
258	Tarantella	Tarantel
259	Scottish	Scottish
260	Mexican Folk	MexFolk
Pianist		
261	Pianist 1	Pianist1
262	Pianist 2	Pianist2
263	Pianist 3	Pianist3
264	Jazz 1	Jazz1
265	Jazz 2	Jazz2
266	Jazz Pub	JazzPub
267	Piano Rock	PnoRock

268	Pop Bossa	PopBossa
269	March 1	March1
270	March 2	March2
271	Piano Beat	PianoBt
272	Piano Bar	PianoBar
273	Blues	Blues
274	Pop Waltz	PopWaltz
275	Piano Waltz	PnoWaltz
276	Ballad 1	Ballad1
277	Ballad 2	Ballad2
278	6-8 Ballad	6-8Bald
279	Pop 1	Pop1
280	Pop 2	Pop2

Song List

No.	English Name	LCD Name
Folk & Country		
1	Christmas Sound	Sound
2	Long Long Ago	LongAgo
3	Old Folks at Home	OldFolks
4	Battle Hymn Of The Republic	BatlHyme
5	The Old Gray Mare	GrayMare
6	American Patrol	USPatrol
7	Christmas Is Coming	IsComing
8	Sippin' Cider Through A Straw	SipinCid
9	Wave Of The Danube	Danube
10	On London Bridge	LdBridge
Golden & Pop		
11	Go Tell It On The Mountain	GoTellIt
12	O Sole Mio	OSoleMio
13	Der Deitcher's Dog	GirlsDog
14	Joy To The World	JoyWorld
15	Silent Night	SltNight
16	Five Hundred Miles	500Miles
17	It's Beginning To Look A Lot Like Christmas	LikeXmas
18	Jeanie With The Light Brown Hair	Jeanie
19	Music Box Dancer	Dancer
20	Entertainer	Entertai
21	Annie Laurie	AnnieLa
22	The Old King Cole	OldKingC
Jazz & Fusion		
23	Samba In June	Samba
24	The Hip Hop's Night	HHNight
25	Blue Lunch	BluLunch
26	Cobweb	Cobweb
27	Wine	Wine
28	Jazz Old Man	JzOldMan
29	Dark Eyes	DarkEyes
Piano		
30	Lyrical Rondo	Rondo1
31	Rialto Ripples (Rag)	Ripples
32	Neapolitan Song	Neapoli
33	Waltzes	Waltzes
34	Schos Doll's Dance No.2	DollNo2
35	Minuet In D Major	MinuetD
36	Inquietude	Inquietd
37	Italian Polka	Polka
38	Moment Musical	Moment
39	Prelude In C-Sharp Major	Prelude1
40	The Happy Farmer	HpFarmer
41	The Rag-Time Dance	RagTime1
42	Mazurka	Mazurka
43	Prelude In E Major	Prelude2
44	Piano Sonata In A Major, K.331. I	Sonata1
45	Waltz For Piano In g-Sharp Minor	WaltzMin
46	Pretty Girl Ragtime	Ragtime2
47	L' Arabesque	L'Arab
48	Austria Variation	AVariati
49	Schos Doll's Dance No. 7	DollNo7
50	To A Wild Rose	WildRose
51	Gavotte I	GavotteI
52	Waltz	Waltz
53	Minuet In G Major (BWV Anh. 116)	Minuet1
54	Innocence	Innocenc
55	Tchaikovsky Waltz	TkyWaltz
56	Barcarolle	Barcarol
57	Robot Doll	RobtDoll
58	Consolation	Consolat
59	Minuet In G Major (BWV Anh. 114)	Minuet2
60	Piano Sonata In C Major, K.545.	Sonata2
61	Norwegian Dance No.2	Norwegn
62	The Small Gathering	Gatherin
63	The Return	Return
64	The Wagtail	Wagtail
65	Bulie Dance	BulieDn
66	Tender Blossom	Blossom
67	La Gracieuse	Gracieus
68	Progress	Progress
69	Eclogue	Eclogue
70	The Limpid Stream	Stream
71	The Chatterbox	Chatter
72	Tarantella	Tarante
73	Frankness	Franknes
74	The Farewell	Farewell
75	The Chase	TheChase
76	Habanera	Habanera
77	Prelude In C Major	Prelude3
78	Piano Sonata Op.49-2	Sonata3
79	Maple Leaves Ragtime	Ragtime3
80	Chicken Pecking Ragtime	Ragtime4
81	Gipsy Rondo	Rondo2
82	Fountain	Fountain
83	Fur Elise	FurElise
84	Dove	Dove
85	Knight	Knight
86	Menuett G-Dur 4	Menuett
87	Gavotte	Gavotte
88	The Entertainer	ThEntert
89	Swallow	Swallow
90	Minute Waltz	MinWaltz

Phrase Pad List

No.	Full Name	Short Name
Keyboard Patterns		
1	Piano Beat	PianoBt
2	Piano Arpeggio	PianoArp
3	Piano Glissando	PnoGliss
4	Latin Beat	LatinBt
5	Rock Piano	RokPiano
String Patterns		
6	Electric Guitar 16Beat	EGt16Bt
7	Funk Guitar	FunkGtr
8	Electric Guitar Shuffle 1	EGtShfl1
9	Electric Guitar Shuffle 2	EGtShfl2
10	6-8 Electric Guitar	6-8E.Gtr
11	Rhythm Electric Guitar	RthE.Gt
12	Rock Guitar	RockGtr
13	Rhythm Steel Guitar	RthStlG
14	Steel Guitar Chord 1	StlGCrd1
15	Steel Guitar Chord 2	StlGCrd2
16	Steel Triplet	StlTrip
17	Pick Steel Guitar	PkStlGt
18	Nylon Guitar 1	NylonGt1
19	Nylon Guitar 2	NylonGt2
20	Bossa Nova Guitar	BossaGt
21	Flamenco Guitar	FlmecoGt
Guitar Patterns		
22	Brilliant Strings	BrillStr
23	Strings Accomp	StAccomp
24	Classical String	ClascStr
25	Classic Strings	ClassStr
26	Orchestra Hit	OrchHit
27	Harp Arpeggio	HarpArp
28	Harp Glissando	HrpGliss
Brass Patterns		
29	Big Band 1	BigBand1
30	Big Band 2	BigBand2
31	Trumpet Swing	TrpSwing
32	Brass Beat	BrassBt
33	Brass Chord 1	BrasCrd1
34	Brass Chord 2	BrasCrd2
35	Brass SFX	BrassSFX
36	Synth Brass SFX	SyBrsSFX
Electric Patterns		
37	Trance 1	Trance1
38	Trance 2	Trance2
39	Techno 1	Techno1
40	Techno 2	Techno2
Rhythm Patterns		
41	Latin 1	Latin1
42	Latin 2	Latin2
43	Conga & Bongo	Cnga&Bgo
44	Carnival Percussion	CarnPerc
45	Rumba	Rumba
46	Samba	Samba
47	Brush	Brush
48	Maracas & Tambourine	Mara&Tam
49	Africa	Africa

No.	Full Name	Short Name
50	Pop Percussion	PopPerc
51	Bossa Nova	BosNova
52	Salsa	Salsa
53	Reggae	Reggae
Dance Patterns		
54	House	House
55	Break Beat	BreakBt
56	Hip Hop 1	HipHop1
57	Hip Hop 2	HipHop2
58	R&B	R&B
59	Snare	Snare
Percussion		
60	Cymbals	Cymbals
61	Magic Bells	MagicBel
62	Arabic 1	Arabic1
63	Arabic 2	Arabic2
64	Latin Kit 1	LatinKt1
65	Latin Kit 2	LatinKt2
66	Latin Kit 3	LatinKt3
67	Latin Kit 4	LatinKt4
68	Oriental Kit	OrienKit
69	Acoustic Tom	AcousTom
70	Acoustic Snare	AcousSn
71	Crash Cymbals	CrashCym
72	Standard Kit 1	StdKit1
73	Standard Kit 2	StdKit2
74	Dance Kit	DanceKit
75	Electric Kit 1	ElecKit1
76	Electric Kit 2	ElecKit2
Club DJ Patterns		
77	Club DJ 1	ClubDJ1
78	Club DJ 2	ClubDJ2
79	House DJ 1	HouseDJ1
80	House DJ 2	HouseDJ2
81	Electric House 1	E.House1
82	Electric House 2	E.House2
83	Hip Hop DJ 1	HipHpDJ1
84	Hip Hop DJ 2	HipHpDJ2
85	Electric DJ 1	ElecDJ1
86	Electric DJ 2	ElecDJ2
87	House Pad 1	HousePd1
88	House Pad 2	HousePd2
89	Electro Step 1	ElecStp1
90	Electro Step 2	ElecStp2
91	MIX DJ 1	MIXDJ1
92	MIX DJ 2	MIXDJ2
93	Progressive House 1	ProHous1
94	Progressive House 2	ProHous2
95	Club House 1	ClbHous1
96	Club House 2	ClbHous2
SFX		
97	Sound Effects	SdEffect
98	Car SFX	CarSFX
99	Natural SFX 1	NatrSFX1
100	Natural SFX 2	NatrSFX2

Insert Effect List

No.	Type	Full Name	Short Name	Parameter
1		Hall 1	Hall1	Time
2				Dry/Wet
3	Reverb	Room 1	Room1	Time
4				Dry/Wet
5		Real Piano	RealPno	Time
6				Dry/Wet
7		Tempo Delay	TempDely	Delay Time
8	Tempo Delay			Dry/Wet
9		Tempo Echo	TempEcho	Delay Time
10				Dry/Wet
11	Pan Delay	Cross Delay	CrossDly	Delay Time L&R
12				Dry/Wet
13		Chorus 1	Chorus1	LFO Depth
14				Dry/Wet
15		Celeste	Celeste	LFO Depth
16	Chorus			Dry/Wet
17		GM Rotary 2	GM Rota2	LFO Depth
18				Dry/Wet
19		Cls Flanger	Cls Flan	LFO Depth
20				Dry/Wet
21	Rotary	D Rotary 1	DRotary1	Speed
22				Dry/Wet
23	Phaser	Phaser 2	Phaser2	LFO Freq.
24				Depth
25	Tempo Phaser	Tp Phaser	TpPhaser	LFO Freq.
26				Depth
27	Overdrive	Overdrive	Overdriv	Drive
28				Output Level
29		Solid	Solid	Drive
30	Amp			Output Level
31		Clas Amp 2	ClasAmp2	Drive
32				Output Level
33	Distortion	Metal Dist	MetaDist	Drive
34				Output Level
35		Low	Low	Low Gain
36	EQ			Hi Gain
37		Hi-Fi	Hi-Fi	Low Gain
38				Hgh Gain
39		Limiter	Limiter	Threshold
40	Compressor			Attack
41		Attack	Attack	Threshold
42				Attack
43	Tremolo/Pan	Cls Tremolo	ClsTremo	LFO Freq.
44				AM Depth
45	Auto Wah	Auto Wah	Auto Wah	LFO Freq.
46				Depth
47	Tempo Wah	Tempo Auto Wah	TpAutoWa	LFO Freq.
48				Depth

Reverb Module

Module	No.	Type	Full Name	Short Name	Parameter
Reverb	1	Room	RealRoom	RealRoom	Time
	2				HPF Cutoff
	3		Room 1	Room1	Time
	4				HPF Cutoff
	5		Room 2	Room2	Time
	6				HPF Cutoff
	7	Hall	Real Hall	RealHall	Time
	8				HPF Cutoff
	9		Basic Hall	BasiHall	Time
	10				HPF Cutoff
	11		Ballad Hall	BldHall	Time
	12				HPF Cutoff
	13		Light Hall	L Hall	Time
	14				HPF Cutoff
	15		Piano Hall	PnoHall	Time
	16				HPF Cutoff
	17		Small Hall 1	SmlHall1	Time
	18				HPF Cutoff
	19		Small Hall 2	SmlHall2	Time
	20				HPF Cutoff
	21		M Hall 1	M Hall1	Time
	22				HPF Cutoff
	23		M Hall 2	M Hall2	Time
	24				HPF Cutoff
	25		M Hall 3	M Hall3	Time
	26				HPF Cutoff
	27	Classic	Standard	Standard	Time
	28				HPF Cutoff
	29		Clas Room 1	ClaRoom1	Time
	30				HPF Cutoff
	31		Clas Room 2	ClaRoom2	Time
	32				HPF Cutoff
	33		Clas Room 3	ClaRoom3	Time
	34				HPF Cutoff
	35		Clas Hall 1	ClaHall1	Time
	36				HPF Cutoff
	37		Clas Hall 2	ClaHall2	Time
	38				HPF Cutoff
	39		Clas Church	ClasChur	Time
	40				HPF Cutoff
	41	Other	Stage 1	Stage1	Time
	42				HPF Cutoff
	43		Stage 2	Stage2	Time
	44				HPF Cutoff
	45		Plate 1	Plate1	Time
	46				HPF Cutoff
	47		Plate 2	Plate2	Time
	48				HPF Cutoff
	49		Tunnel	Tunnel	Time
	50				HPF Cutoff
	51		Drum Theater	DrTheate	Time
	52				HPF Cutoff
	53		Drum Studio	DrStudio	Time
	54				HPF Cutoff
	55		Drum Garage	DrGarage	Time
	56				HPF Cutoff
	57		Church	Church	Time
	58				HPF Cutoff
	59		Cave	Cave	Time
	60				HPF Cutoff
	61		Garage	Garage	Time
	62				HPF Cutoff
	63		Real Church	RealChur	Time
	64				HPF Cutoff

Chorus Module

Module	No.	Type	Full Name	Short Name	Parameter
Chorus	1	Reverb	Room 1	Room1	Time
	2				HPF Cutoff
	3		Room 2	Room2	Time
	4				HPF Cutoff
	5		Room 3	Room3	Time
	6				HPF Cutoff
	7		M Room 1	M Room1	Time
	8				HPF Cutoff
	9		M Room 2	M Room2	Time
	10				HPF Cutoff
	11		M Room 3	M Room3	Time
	12				HPF Cutoff
	13		Real Piano	RealPno	Time
	14				HPF Cutoff
	15		Basic Hall	BasiHall	Time
	16				HPF Cutoff
	17		Ballad Hall	BldHall	Time
	18				HPF Cutoff
	19		Hall 1	Hall1	Time
	20				HPF Cutoff
	21		Hall 2	Hall2	Time
	22				HPF Cutoff
	23		Hall 3	Hall3	Time
	24				HPF Cutoff
	25		M Hall 1	M Hall1	Time
	26				HPF Cutoff
	27		M Hall 2	M Hall2	Time
	28				HPF Cutoff
	29		M Hall 3	M Hall3	Time
	30				HPF Cutoff
	31		Stage 1	Stage1	Time
	32				HPF Cutoff
	33		Stage 2	Stage2	Time
	34				HPF Cutoff
	35		Opera House	Op House	Time
	36				HPF Cutoff
	37		Church	Church	Time
	38				HPF Cutoff
	39		Cave	Cave	Time
	40				HPF Cutoff
	41	Tempo Delay	Tempo Delay	TempDely	Delay Time
	42				FB Level
	43		Tempo Echo	TempEcho	Delay Time
	44				FB Level
	45	Pan Delay	Cross Delay	CrossDly	Delay Time
	46				F/B Level
	47	Tempo Pan Delay	Tempo Cross	TemCross	Delay Time
	48				F/B Level
	49	LCR Delay	LCR Delay 1	LCR Dly1	Main Delay
	50				F/B Level
	51		LCR Delay 2	LCR Dly2	Main Delay
	52				F/B Level
	53	LR Delay	LR Delay	LR Delay	Main Delay
	54				F/B Level
	55	Stereo Echo	Echo	Echo	Main Delay
	56				F/B Level

57	Chorus	Chorus 1	Chorus1	LFO Freq.
58				LFO Depth
59		Chorus 2	Chorus2	LFO Freq.
60				LFO Depth
61		Chorus 3	Chorus3	LFO Freq.
62				LFO Depth
63		Chorus 4	Chorus4	LFO Freq.
64				LFO Depth
65		GM Chorus 1	GM Chor1	LFO Freq.
66				LFO Depth
67		GM Chorus 2	GM Chor2	LFO Freq.
68				LFO Depth
69		Real Chorus	RealChor	LFO Freq.
70				LFO Depth
71		Celeste 1	Celeste1	LFO Freq.
72				LFO Depth
73		Celeste 2	Celeste2	LFO Freq.
74				LFO Depth
75		Flanger 1	Flanger1	LFO Freq.
76				LFO Depth
77		Flanger 2	Flanger2	LFO Freq.
78				LFO Depth
79		Flanger 3	Flanger3	LFO Freq.
80				LFO Depth
81		GM Flanger	GM Flan	LFO Freq.
82				LFO Depth
83		Cls Flanger	Cls Flan	LFO Freq.
84				LFO Depth
85		GM Rotary 1	GM Rota1	LFO Freq.
86				LFO Depth
87		GM Rotary 2	GM Rota2	LFO Freq.
88				LFO Depth
89	Rotary	D Rotary 1	DRotary1	Rot Speed
90				Drive
91		D Rotary 2	DRotary2	Rot Speed
92				Drive
93		D Rotary 3	DRotary3	Rot Speed
94				Drive
95		D Rotary 4	DRotary4	Rot Speed
96				Drive
97		D Rotary 5	DRotary5	Rot Speed
98				Drive
99	Phaser	Phaser 1	Phaser1	LFO Freq.
100				Depth
101		Phaser 2	Phaser2	LFO Freq.
102				Depth
103		Phaser 3	Phaser3	LFO Freq.
104				Depth
105		EP Phaser 1	EP Phas1	LFO Freq.
106				Depth
107		EP Phaser 2	EP Phas2	LFO Freq.
108				Depth
109	Tp Phaser	Tp Phaser 1	TpPhase1	LFO Freq.
110				Depth
111		Tp Phaser 2	TpPhase2	LFO Freq.
112				Depth

113	Tremolo/ Pan	Vibrator 1	Vibrato1	LFO Freq.
114				AM Depth
115		Vibrator 2	Vibrato2	LFO Freq.
116				AM Depth
117		Auto Pan 1	AutoPan1	LFO Freq.
118				AM Depth
119		Auto Pan 2	AutoPan2	LFO Freq.
120				AM Depth
121		Cls Tremolo	ClsTremo	LFO Freq.
122				AM Depth
123	Auto Wah	Auto Wah 1	Auto Wa1	LFO Freq.
124				Depth
125		Auto Wah 2	Auto Wa2	LFO Freq.
126				Depth
127	Tempo Wah	Tp Auto Wah	TpAutoWa	LFO Freq.
128				Depth

Part Effect List

Part Effect Category	Name
Arpeggio - Basic	Up
	Down
	Alt 1
	Alt 2
	As Played
	Random
Harmony	Duet
	Country Duet
	Rock Duet
	Trio
	Country Trio
	Full Chord
	Block
	4 Close 1
	4 Close 2
	4 Open
	Octave
	1 + 5
	Strum
Echo	Echo 4
	Echo 6
	Echo 8
	Echo 12
Tremelo	Tremolo 8
	Tremolo 12
	Tremolo 16
	Tremolo 32
Trill	Trill 12
	Trill 16
	Trill 24
	Trill 32

Chord List

Chord Name	Abbreviation	Normal Voicing	Display for root "C"
Major	M	1+3+5	C
Sixth	6	1+(3)+5+6	C6
Major seventh	M7	1+3+(5)+7	CM7
Major seventh add sharp eleventh	M7(#11)	1+(2)+3+#4+5+7	CM7(#11)
Add ninth	(9)	1+2+3+5	C(9)
Major seventh ninth	M7(9)	1+2+3+(5)+7	CM7(9)
Sixth ninth	6(9)	1+2+3+(5)+6	C6(9)
Augmented	aug	1+3+#5	Caug
Minor	m	1+b3+5	Cm
Minor sixth	m6	1+b3+5+6	Cm6
Minor seventh	m7	1+b3+(5)+b7	Cm7
Minor seventh flatted fifth	m7b5	1+b3+b5+b7	Cm7b5
Minor add ninth	m(9)	1+2+b3+5	Cm(9)
Minor seventh ninth	m7(9)	1+2+b3+(5)+b7	Cm7(9)
Minor seventh eleventh	m7(11)	1+(2)+b3+4+5+(b7)	Cm7(11)
Minor major seventh	mM7	1+b3+(5)+7	CmM7
Minor major seventh ninth	mM7(9)	1+2+b3+(5)+7	CmM7(9)
Diminished	dim	1+b3+b5	Cdim
Diminished seventh	dim7	1+b3+b5+6	Cdim7
Seventh	7	1+3+(5)+b7	C7
Seventh suspended fourth	7sus4	1+4+5+b7	C7sus4
Seventh flatted fifth	7b5	1+3+b5+b7	C7b5
Seventh ninth	7(9)	1+2+3+(5)+b7	C7(9)
Seventh add sharp eleventh	7(#11)	1+(2)+3+#4+5+b7	C7(#11)
Seventh add thirteenth	7(13)	1+3+(5)+6+b7	C7(13)
Seventh flatted ninth	7(b9)	1+b2+3+(5)+b7	C7(b9)
Seventh add flatted thirteenth	7(b13)	1+3+5+b6+b7	C7(b13)
Seventh sharp ninth	7(#9)	1+#2+3+(5)+b7	C7(#9)
Major seventh augmented	M7aug	1+(3)+#5+7	CM7aug
Seventh augmented	7aug	1+3+#5+b7	C7aug
Suspended fourth	sus4	1+4+5	Csus4
One plus two plus five	sus2	1+2+5	Csus2
Flatted Fifth	b5	1+3+b5	Cb5
Major seventh flatted fifth	M7(b5)	1+3+b5+7	CM7b5
Minor major seventh flatted fifth	mM7(b5)	1+b3+b5+7	CmM7(b5)
1+8	1+8	1+8	C1+8
1+5	1+5	1+5	C1+5
Cancel	/	1+b2+2	Cancel
Cancel2	/	1+b2+2+b3	Cancel/C

MIDI Implementation Chart

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

- Mode 1: OMNI ON, POLY
- Mode 2: OMNI ON, MONO
- Mode 3: OMNI OFF, POLY
- Mode 4: OMNI OFF, MONO

o: YES
x: NO