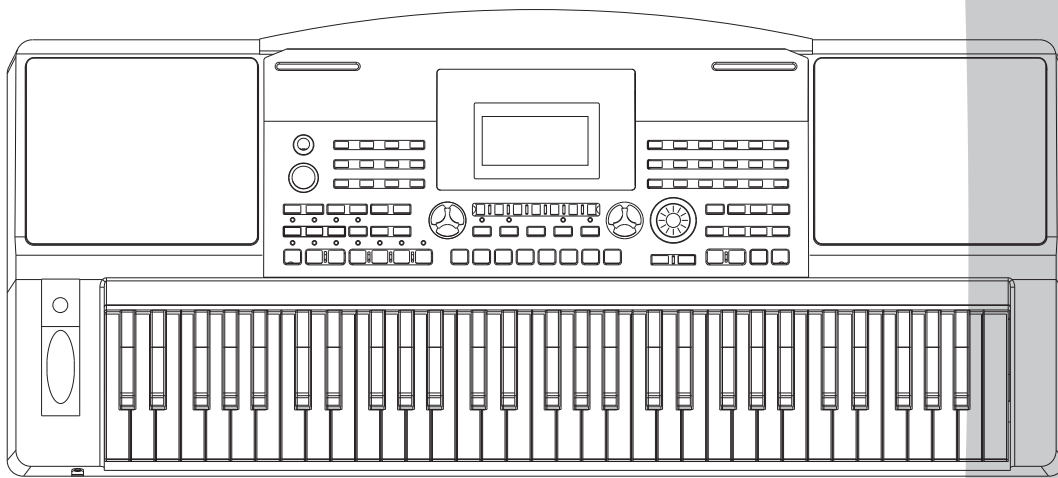


# ELECTRONIC KEYBOARD



## Owner's Manual

GENERAL  
**MIDI**

# INFORMATION FOR YOUR SAFETY!

## THE FCC REGULATION WARNING (for USA)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

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

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

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

## CAUTION

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

## PRECAUTIONS

### PLEASE READ CAREFULLY BEFORE PROCEEDING

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

#### Power Supply

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

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

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

#### Connections

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

#### Location

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

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

#### Interference with other electrical devices

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

#### Cleaning

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

#### Handling

Do not apply excessive force to the switches or controls.

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

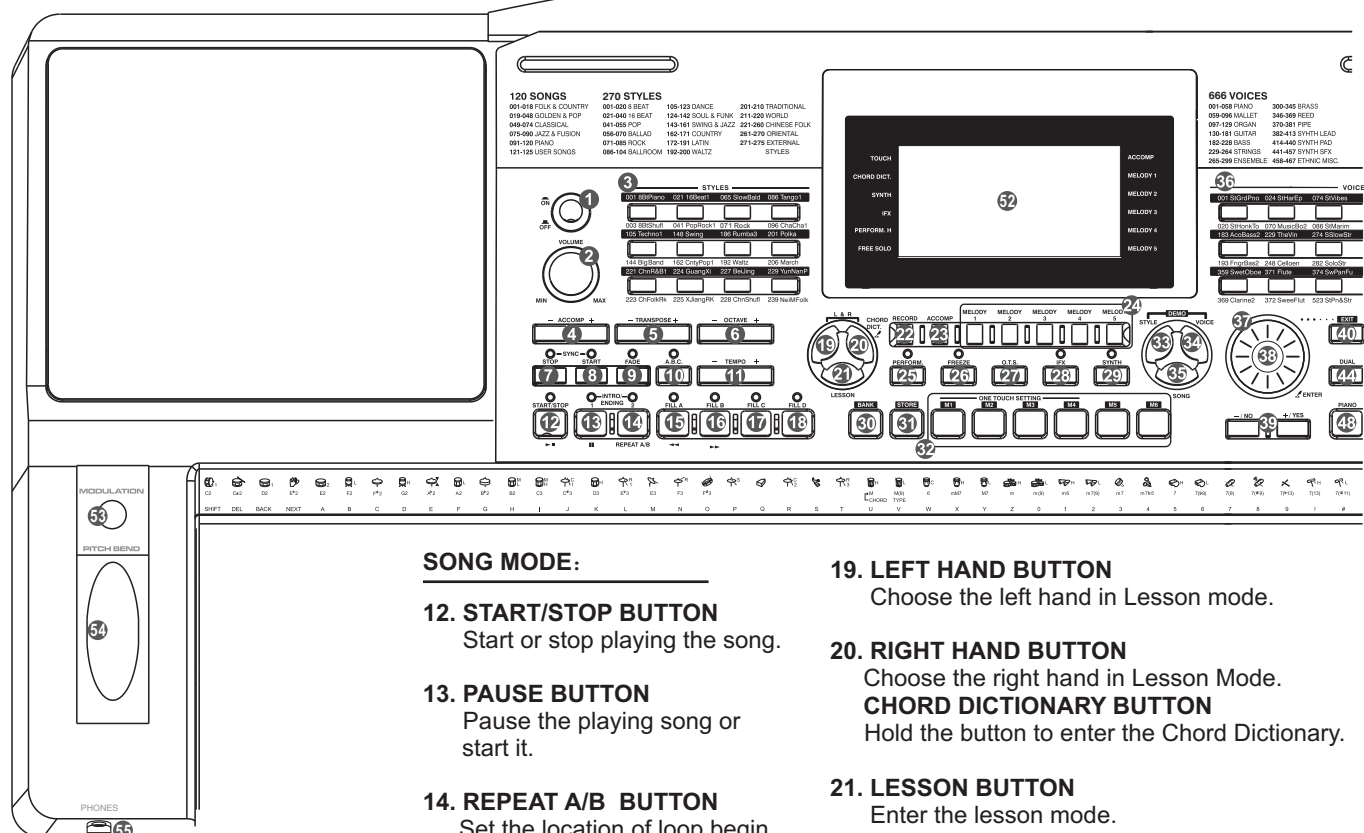
Disconnect all cables before moving the instrument.

# Contents

<b>Panel &amp; Display Description</b>	
Front Panel.....	4
Rear Panel.....	5
Display.....	6
<b>Setup</b>	
Power Supply.....	7
Setting a Music Stand.....	7
Connecting a Footswitch.....	7
Connecting a Volume Pedal.....	7
<b>Connections</b>	
Connecting a pair of Headphones.....	8
Connecting an Audio Equipment.....	8
Connecting an MP3/CD Player.....	8
Connecting a Computer.....	8
Connecting to Other Device.....	9
<b>Playing the Demos</b> .....	10
<b>Playing Voices</b>	
Playing Voices.....	10
Playing Two Voices Simultaneously-DUAL.....	11
Playing Different Voices with Both Hands-LOWER.....	11
Touch.....	11
Sustain.....	12
Pitch Bend Wheel.....	12
Modulation.....	12
Transpose.....	12
Octave.....	13
Piano.....	13
Metronome.....	13
Freesolo.....	14
<b>Auto Accompaniment</b>	
Playing Auto Accompaniment (rhythm track only).....	14
Playing Auto Accompaniment (all tracks).....	15
Accompaniment Sections.....	15
Playing Different Accompaniment Sections.....	15
Fade In/Out.....	16
Accompaniment Volume.....	16
Chord Fingering.....	16
Tempo.....	18
One Touch Setting.....	18
<b>Harmony</b>	
Turning on the Harmony effect.....	19
Applying the Harmony effect.....	19
<b>IFX</b> .....	20
<b>Performance Assistant</b>	
What's the performance assistant?.....	21
Enter the Performance Assistant.....	21
Guitar Mode.....	21
Playing in the Guitar Mode.....	22
Piano Mode.....	22
Playing in the Piano Mode.....	22
Chinese Traditional Instruments Mode.....	23
Play in the Chinese Traditional Instruments Mode.....	23
Exit the Performance Assistant.....	23
<b>Synth</b>	
Enter the synth.....	24
Create user voice.....	24
<b>DSP Effect</b> .....	25
<b>Mixer</b> .....	25
<b>Pedal Function</b>	
Volume Pedal.....	26
Foot Switch.....	26
<b>Other Functions</b>	
Tune.....	27
Beat.....	27
Split Point.....	28
Pedal Assign.....	28
Fade In.....	28
Fade Out.....	28
Harmony.....	29
Reverb Level.....	29
Chorus Level.....	29
MIDI In.....	29
MIDI Out.....	29
<b>Registration Memory</b>	
Registering the Panel Settings.....	30
Recalling the Registered Panel Settings.....	30
Selecting a Registration Bank.....	30
Freezing the Accompaniment Parameter.....	30
<b>Song Recording</b>	
Start Recording.....	31
Stop Recording.....	32
Playback Recording.....	32
Delete User Song.....	32
<b>Song</b>	
Listening to the Songs.....	33
Song Control.....	33
Lesson Mode.....	33
<b>Chord Dictionary</b>	
DICT1 (Chord Learning Mode).....	35
DICT2 (Chord Examining Mode).....	35
<b>Connecting a USB Device</b>	
USB Device Operation.....	36
Play.....	36
Load.....	37
Save.....	38
Delete.....	38
Format.....	38
Keyboard and ASCII Character Relative Table.....	39
<b>MIDI Functions</b>	
What's MIDI?.....	40
MIDI Terminals.....	40
Downloading Data from the Computer.....	40
<b>Troubleshooting</b> .....	41
<b>Specifications</b> .....	41
<b>Appendices</b>	
Voice List.....	42
Style List.....	47
Song List.....	49
Demo List.....	49
Chord List.....	50
MIDI Implementation Chart.....	51

# Panel & Display Description

## Front Panel



**1. POWER ON/OFF BUTTON**  
Turn the power on and off.

**2. MASTER VOLUME Knob**  
Set a volume level with it control.

**3. STYLE DIRECT SELECT BUTTON**  
Select a direct style.

**4. ACCOMP VOLUME +/- BUTTON**  
Adjust ACCOMP volume.

**5. TRANSPOSE +/- BUTTON**  
Adjust TRANSPOSE value.

**6. OCTAVE +/- BUTTON**  
Adjust OCTAVE value.

**7. SYNC STOP BUTTON**  
Turn the Sync Stop on and off.

**8. SYNC START BUTTON**  
Turn the Sync Start on and off.

**9. FADE BUTTON**  
Turn the Fade in or Fade out on.

**10. A.B.C. BUTTON**  
Turn the A.B.C. MODE on and off.

**11. TEMPO +/- BUTTON**  
Adjust the current tempo.

### SONG MODE:

**12. START/STOP BUTTON**  
Start or stop playing the song.

**13. PAUSE BUTTON**  
Pause the playing song or start it.

**14. REPEAT A/B BUTTON**  
Set the location of loop begin and loop end to the current song.

**15. REW BUTTON**  
Rewind the song.

**16. FF BUTTON**  
Fast forward the song.

### STYLE MODE:

**12. START/STOP BUTTON**  
Start or stop playing the style.

**13. INTRO1/ENDING1 BUTTON**  
Play the Intro or Ending 1.

**14. INTRO2/ENDING2 BUTTON**  
Play the Intro or Ending 2.

**15. FILL-IN A BUTTON**  
A Fill-in A plays.

**16. FILL-IN B BUTTON**  
A Fill-in B plays.

**17. FILL-IN C BUTTON**  
A Fill-in C plays.

**18. FILL-IN D BUTTON**  
A Fill-in D plays.

### 19. LEFT HAND BUTTON

Choose the left hand in Lesson mode.

### 20. RIGHT HAND BUTTON

Choose the right hand in Lesson Mode.

### CHORD DICTIONARY BUTTON

Hold the button to enter the Chord Dictionary.

### 21. LESSON BUTTON

Enter the lesson mode.

### 22. RECORD BUTTON

Enter the record mode.

### 23. ACCOMP BUTTON

Select the accomp track to record.

### 24. MELODY 1-5 BUTTON

Select the melody1-5 track to record.

### 25. PERFORM. BUTTON

Enter the Performance Assistant.

### 26. FREEZE BUTTON

Freeze the style's parameter.

### 27. ONE TOUCH SETTING BUTTON

Enter the One Touch Setting Mode.

### 28. IFX BUTTON

Turn the Insert Effect on and off.  
Hold the button to enter the Insert Effect Menu.

### 29. SYNTH BUTTON

Enter the Synth menu.

### 30. BANK BUTTON

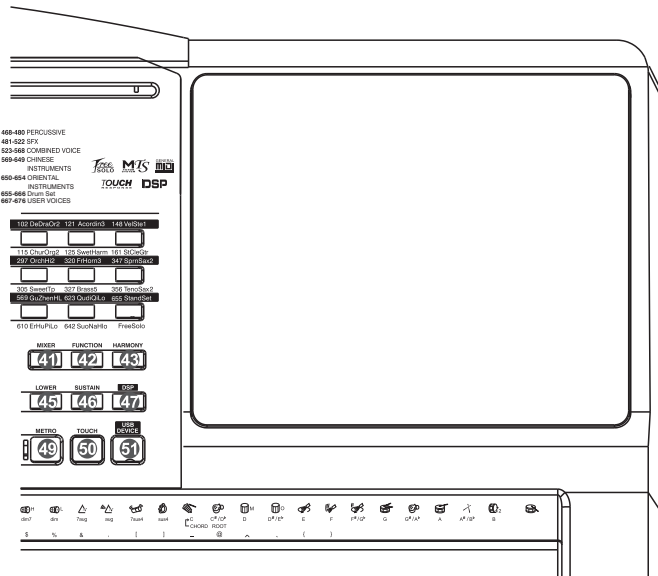
Select a bank.

### 31. STORE BUTTON

Save a registered panel settings.



## Panel & Display Description



### 32. M1-M6 BUTTON

Register the panel settings.

#### ONE TOUCH SETTING

Press the One Touch Button to instantly reconfigure all relevant settings.

### 33. STYLE BUTTON

Enter the Style Mode.

### 34. VOICE BUTTON

Enter the Voice Mode.

### 35. SONG BUTTON

Enter the Song Mode.

### 36. VOICE DIRECT SELECT BUTTON

Select a direct voice.

### 37. DATA DIAL

Increase and decrease the value.

### 38. ENTER BUTTON

Enter Menu or Affirm.

### 39. - / NO, + / YES BUTTON

Decrease and Increase the value.

### 40. EXIT BUTTON

Exit Menu or Cancel.

### 41. MIXER BUTTON

Enter mixer menu.

### 42. FUNCTION BUTTON

Enter function menu.

### 43. HARMONY BUTTON

Turn the harmony effect on and off.

### 44. DUAL BUTTON

Turn the Voice R2 on and off.

### 45. LOWER BUTTON

Turn the Voice L on and off.

### 46. SUSTAIN BUTTON

Turn the sustain on and off.

### 47. DSP BUTTON

Turn the DSP effect on and off.

### 48. PIANO BUTTON

Turn the piano mode on and off.

### 49. METRO BUTTON

Turn the metronome on and off.

### 50. TOUCH BUTTON

Enter the Touch Setting menu.

### 51. USB DEVICE BUTTON

Enter the USB Device menu

### 52. LCD Display

Show all important settings for the instrument.

### 53. MODULATION BUTTON

Apply a vibrato effect.

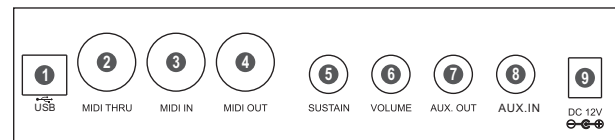
### 54. PITCH BEND

Bend notes up or down.

### 55. PHONES

Connect headphones to the unit.

## Rear Panel



### 1. USB JACK

Connect to a computer.

### 2. MIDI THRU

Use MIDI cable to link the MIDI THRU port to other MIDI instrument MIDI IN port.

### 3. MIDI IN

Connect the MIDI OUT of other Device to the MIDI IN jack on the rear panel

### 4. MIDI OUT

Connect the MIDI IN of other Device to the MIDI OUT jack on the rear panel

### 5. SUSTAIN JACK

Connect a sustain pedal.

### 6. VOLUME JACK

Connect a volume pedal

### 7. AUX. OUT

Connect the audio equipment.

### 8. AUX. IN

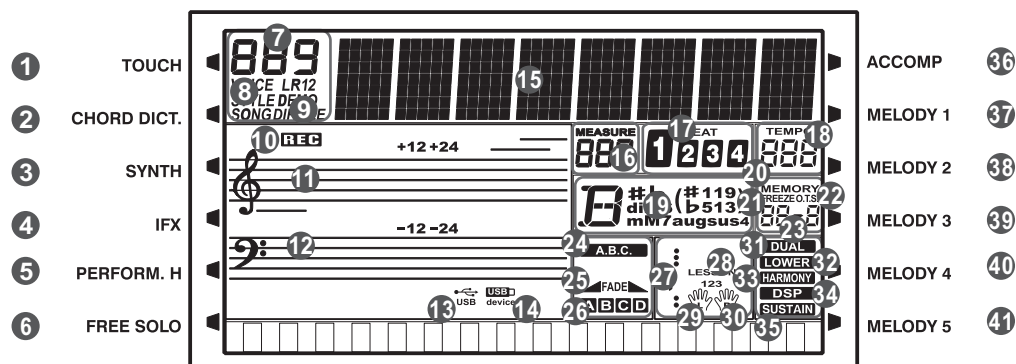
Connect the MP3/CD player

### 9. DC 12V

Connect DC 12V power adaptor.(Optional)

## Panel & Display Description

### Display



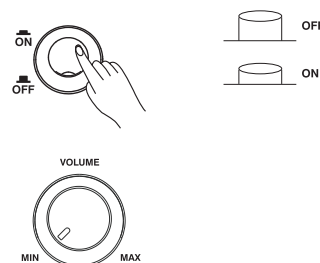
- |                          |                       |                     |
|--------------------------|-----------------------|---------------------|
| 1. TOUCH                 | 14. USB DEVICE        | 27. NOTE INDICATION |
| 2. CHORD DICT.           | 15. STRING            | 28. LESSON          |
| 3. SYNTH                 | 16. MEASURE           | 29. LEFT HAND       |
| 4. IFX                   | 17. BEAT              | 30. RIGHT HAND      |
| 5. PERFORM. H            | 18. TEMPO             | 31. DUAL            |
| 6. FREE SOLO             | 19. CHORD             | 32. LOWER           |
| 7. SERIAL NUMBER         | 20. MEMORY FLAG       | 33. HARMONY         |
| 8. VOICE/STYLE/DEMO/SONG | 21. FREEZE FLAG       | 34. DSP             |
| 9. DIR/FILE              | 22. ONE TOUCH SETTING | 35. SUSTAIN         |
| 10. RECORD               | 23. MEMORY NUMBER     | 36. ACCOMP          |
| 11. TREBLE CLEF          | 24. A.B.C.            | 37-41. MELODY1--5   |
| 12. BASS CLEF            | 25. FADE              |                     |
| 13. USB                  | 26. SECTION A/B/C/D   |                     |

# Setup

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

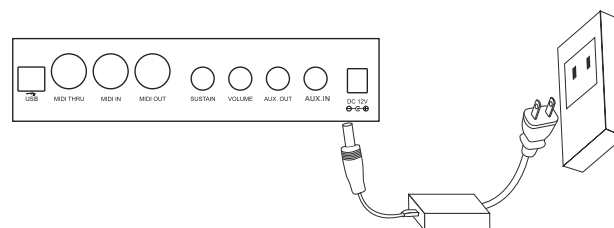
## Power Supply

1. First, please make sure that POWER ON/OFF switch of the instrument is set to OFF. Then turn the MASTER VOLUME control to the minimum volume level.
2. Connect the AC adaptor to the power supply jack.
3. Plug the AC adaptor into an AC outlet. And when turning the power OFF, simply reverse the procedure please.
4. Turn the power ON.



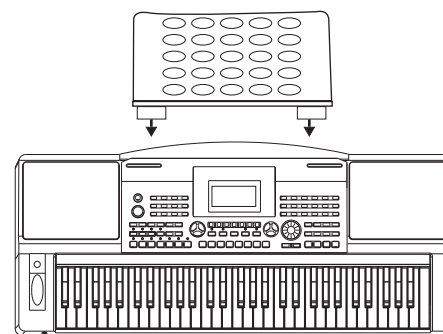
### Note:

When the keyboard is not in use or in the time of thunderstorm, please disconnect the power for safety purpose.



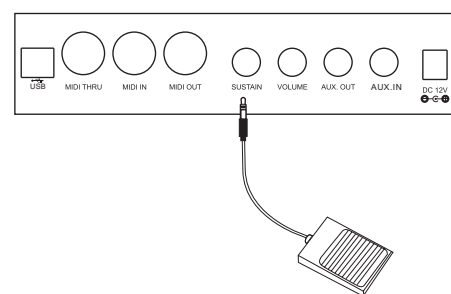
## Setting a Music Stand

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



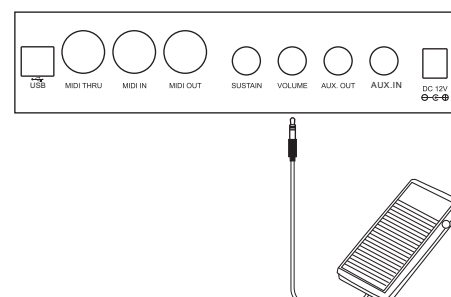
## Connecting a Footswitch

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



## Connecting a Volume Pedal

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



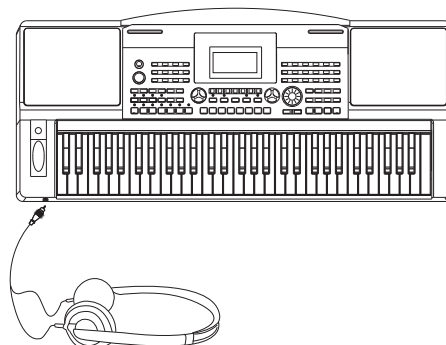
# Connections

## Connecting a pair of Headphones

A standard pair of stereo headphones can be plugged in here for private practice or late-night playing. The internal stereo speaker system is automatically shut off when a pair of headphones is plugged into the PHONES jack.

**Note:**

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

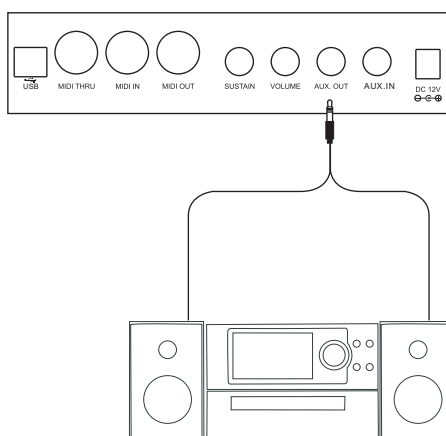


## Connecting an Audio Equipment

The rear-panel AUX.OUT jack delivers the output of the instrument for connection to a keyboard amplifier, stereo sound system, a mixing console, or tape recorder. Use an audio cord to plug into the AUX.OUT jack located on the rear panel then plug the other end of the cord into AUX.IN of the amplifier.

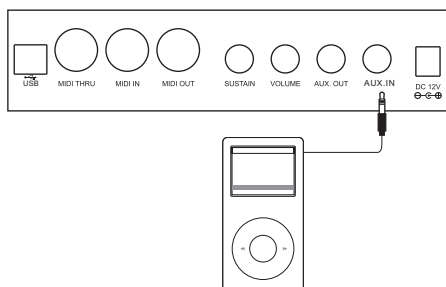
**Note:**

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



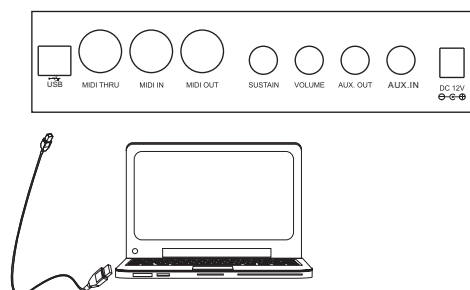
## Connecting an MP3/CD Player

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



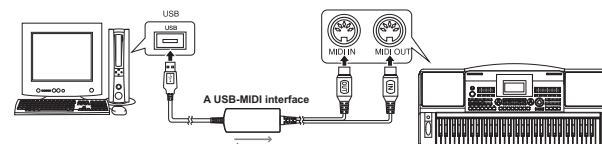
## Connecting a Computer

The instrument receives and transmits MIDI messages via the USB connector.



## Connections

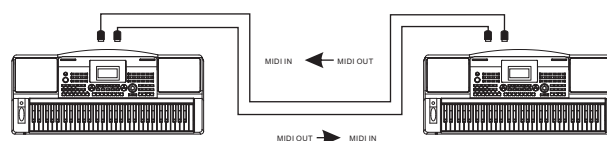
Connecting the MIDI IN /OUT to Computer via The MIDI/USB converter.



### Connecting to other device

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

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



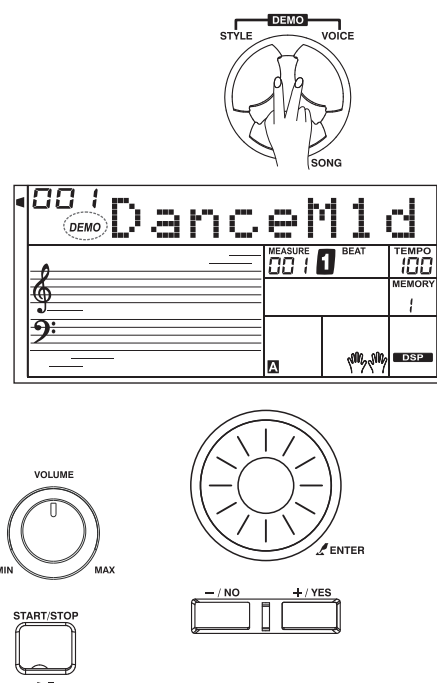
# Playing the Demos

The instrument features 5 wonderful demos. Please refer to **DEMO LIST**.

1. Press the [STYLE] and [VOICE] buttons simultaneously to start playing the demo.
2. Select a demo song.  
Use the data dial, the [+ / YES] button or the [- / NO] button to select a demo song.
3. Set a volume level with the [MASTER VOLUME] knob.
4. Press the [STYLE] and [VOICE] buttons simultaneously again or press the [START/STOP] button to stop playing and exit the demo Mode.

**Note:**

In the DEMO mode, all buttons except START/STOP, TEMPO+, TEMPO-, + / YES, - / NO, VOLUME, POWER ON/OFF will be not available.



# Playing Voices

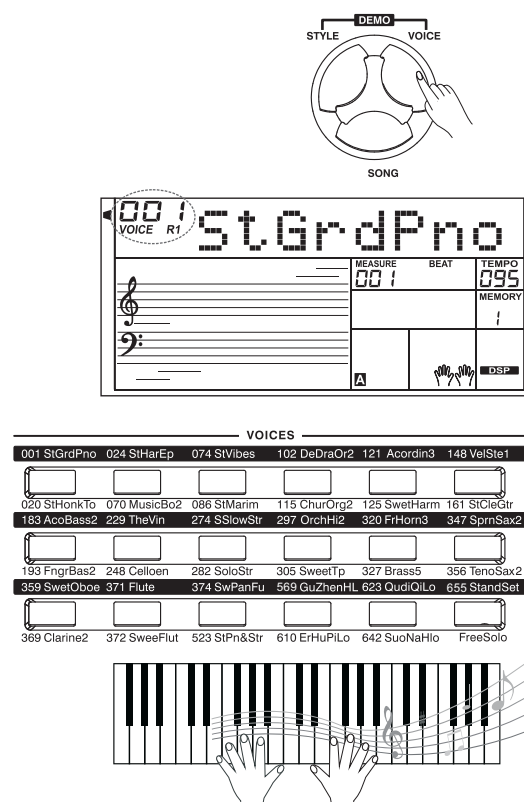
The instrument has a variety of exceptionally realistic voices in addition to 10 user voices. Please refer to **Voice List**.

## Playing Voices

1. Press the [VOICE] button  
Enter the VOICE mode. LCD shows "VOICE R1" and the voice number.
2. Select a voice.  
Use the data dial, the [+ / YES] button, the [- / NO] button to select the voice you want to play. You can also use the Voice Direct Button to select a voice. 2 direct voices for each button (upper & lower key).
3. Play the voice.  
You can play the keyboard and listen to the wonderful voice.

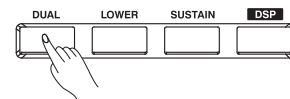
**Note:**

While changing a voice, pay attention to the rules. If you press the same button, the voice will be changed between the upper and lower key. When the upper/lower voice is on, and then you press another direct button, the corresponding upper/lower voice will be selected.



## Playing two Voices Simultaneously-DUAL

1. Press the [DUAL] button.



2. Play the voices.

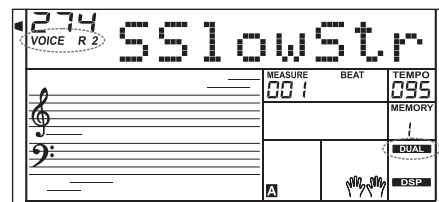
Two different voices are sounded simultaneously in a layer. The number of the dual voice will be displayed on the LCD.

3. Selecting a voice for VOICE R2.

When the number of the dual voice is displayed, you can select a voice for Voice R2. Use the data dial, [+ / YES] and [- / NO] button, or Voice Direct Buttons.

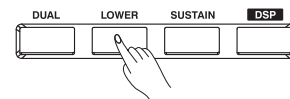
### Note:

While the keyboard has split, only the right hand area can respond to the dual voice, the left hand area can't respond to it.



## Playing Different Voices with Both Hands-LOWER

1. Press the [LOWER] button.



2. Play the voices.

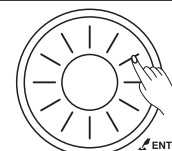
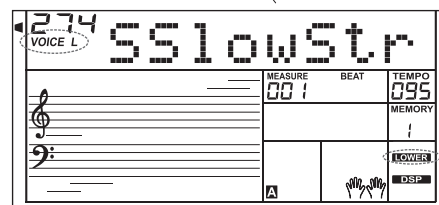
The notes you play with your right and left hands sound two different voices. The number of the lower voice will be displayed on the LCD.

3. Selecting a voice for VOICE L.

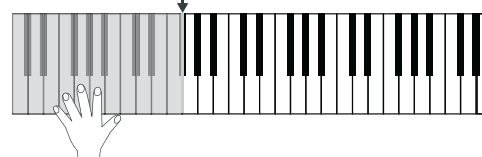
When the number of the lower voice is displayed, you can select a voice for Voice L. Use the data dial, the [+ / YES] button or the [- / NO] Button.

### Split Point

The Point on the keyboard that separates voice L and voice R1/R2 is called the "split point". The split point is set to F#3/G3 at the factory setting. However you can set this to any key you want. Refer to **Setting The Split Point**.



Default Split Point



## Touch

The keyboard is equipped with a touch response feature that lets you dynamically and expressively controls the level of the voice with your playing strength just as on an acoustic instrument.

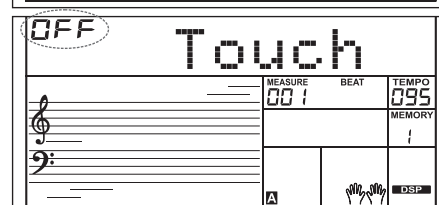
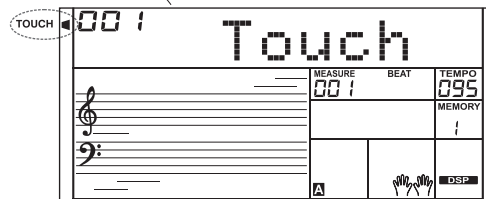
1. Press the [TOUCH] button. The LCD shows the touch value that ranging from off to level 3.

2. Use the data dial, the [+ / YES] button, the [- / NO] button or the [TOUCH] button to change the touch response level.

Default level of touch response is 2.

If the value is set to OFF, that means no touch response to keyboard.

TOUCH





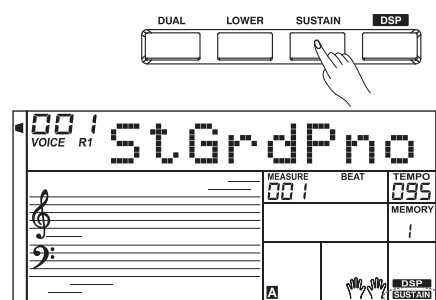
## Playing the Voices

### Sustain

1. When the sustain is turned on, all notes will play with a longer sustain.
2. Press the [SUSTAIN] button to turn the SUSTAIN effect ON or OFF.

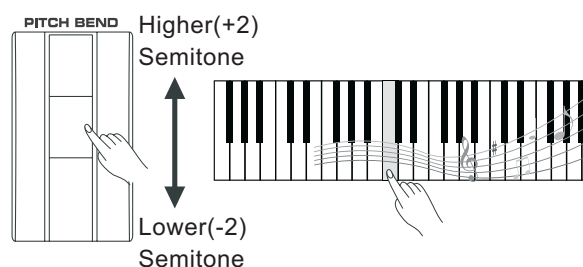
**Note:**

When you step on the "sustain pedal", the sustain effect is stronger than the effect by pressing the [SUSTAIN] button.



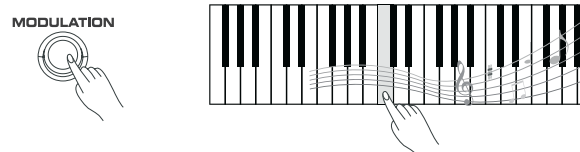
### Pitch Bend Wheel

Use the pitch bend wheel to bend notes up (roll the wheel away you) or down (roll the wheel toward you) while playing the keyboard. The pitch bend wheel is self-centering and will automatically return to normal pitch when released.



### Modulation

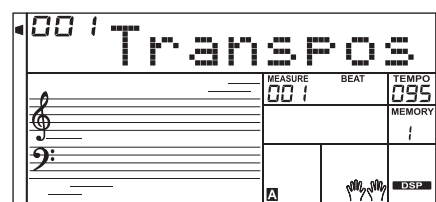
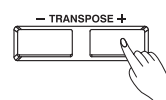
The Modulation function applies a vibrato effect to notes played on the keyboard. Press the [MODULATION] button while playing the keyboard then you will hear the vibrato effect.



### Transpose

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

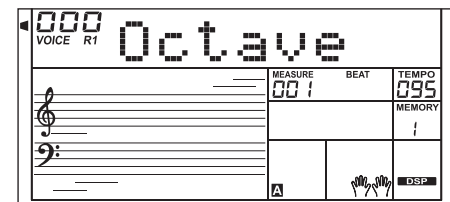
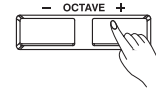
1. Press [TRANPOSE +] or [TRANPOSE -] to adjust the value from -12 to +12 semitones.
2. Press [TRANPOSE +] and [TRANPOSE -] or press [+ / YES] and [- / NO] simultaneously will set the value to default: 0.



## Octave

Octave function determines the relative octave setting for the keyboard played voice R1,R2 and L.

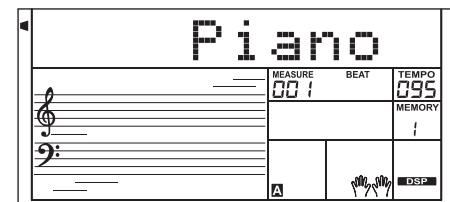
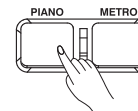
1. Press [OCTAVE +] or [OCTAVE -] to change the octave value.  
This function can change the keyboard from -1 to +1 octave.
2. Press [OCTAVE +] and [OCTAVE -] or press [+ / YES] and [- / NO] simultaneously will set value to default: 0.



## Piano

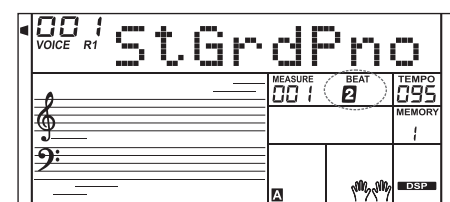
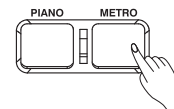
No matter what setting you've made from the panel, you can instantly call up the piano setting by a single button press.

1. Press [PIANO] button to enter piano and exit piano mode.
2. In the PIANO mode, you can start a style. Press the [START/ STOP] button to play.



## Metronome

1. Press the [METRO] button to turn the metronome on.
2. Press the [METRO] button again to turn the metronome off.

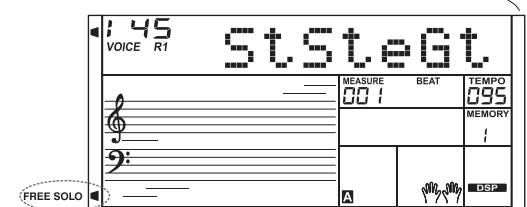
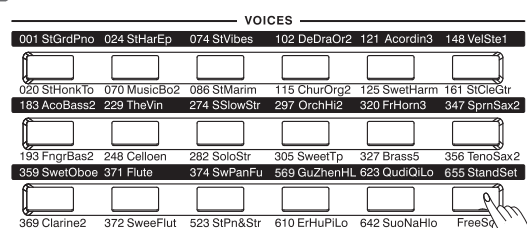


## Playing the Voices

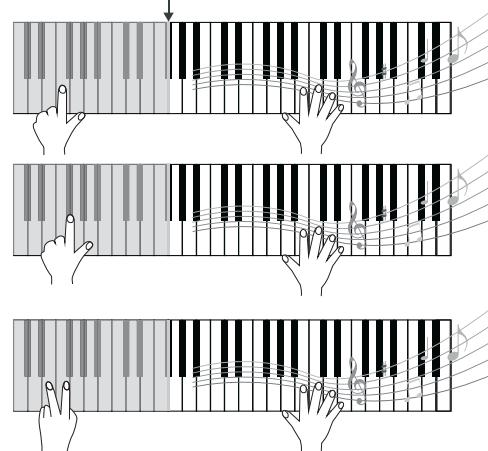
### Freesolo

Using the freesolo function, you can switch voice fast, accurately, seamlessly, and play a variety of real instrument special skills. Furthermore, you can play closer to the real sense of musical instruments by using real sound sampling techniques.

1. Press [Freesolo] button to enter freesolo function, then auto bass chord, dual voice and lower voice function will be turned off.
2. You can use the right area keyboard to play and use the left area keyboard to switch voice after turn on the freesolo function.
3. Press and holding a white key of the left area keyboard, the first layer voice will be valid. Release the key, the first layer voice will be invalid and the basic voice will be valid;  
**Press** and holding a black key of the left area keyboard, the second layer voice will be valid. Release the key, the second layer voice will be invalid and the basic voice will be valid;  
**Press** two or more white keys of the left area keyboard simultaneously, the first layer voice will be valid. Release these white keys, the current voice will not change.  
**Press** two or more black keys of the left area keyboard simultaneously, the second layer voice will be valid. Release these black keys, the current voice will not change.



Default Split Point

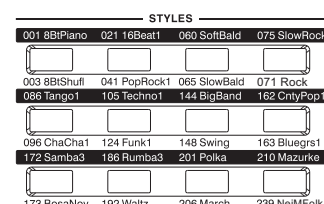
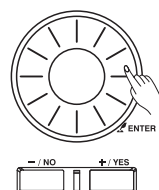
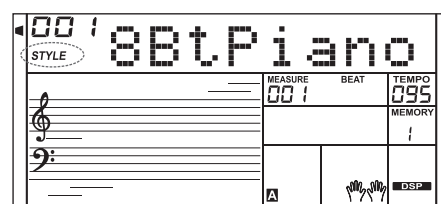
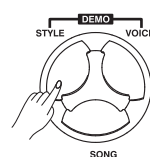


## Auto Accompaniment

The auto accompaniment feature puts a full backing band at your fingertips. To use it, all you have to do is play the chords with your left hand as you perform and the selected accompaniment style matching your music will automatically play along, instantly following the chords you play. With auto accompaniment, even a solo performer can enjoy playing with the backing of entire band or orchestra. The instrument features 270 styles in a variety of different musical genres. Try selecting some of the different styles (Refer to **Style List**) and play with the auto accompaniment.

### Playing Auto Accompaniment (rhythm track only)

1. Press the [STYLE] button.  
Enter the STYLE mode. LCD shows "STYLE" and the style number.
2. Select a style.  
Use the Data Dial, the [+ / YES] button, the [- / NO] button to select the style you want to play. Also, you can use the Style Direct Select Button to select a style. 2 direct styles for each button (upper & lower key).
3. Press the [START/STOP] button to start the rhythm tracks of the auto accompaniment.



#### Note:

While changing a style, pay attention to the rules. If the same button has been pressed twice, the style will be swapped from one to another. When the upper/lower style is on, and you then press another Direct Select Button, the corresponding upper/lower style will be selected.

## Auto Accompaniment

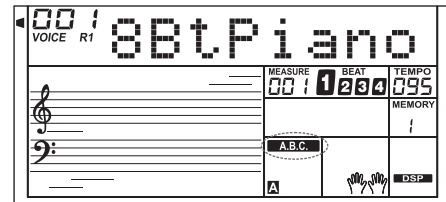
### Playing Auto Accompaniment (all tracks)

1. Press the [STYLE] button.

2. Select a style.

3. Turn on the A.B.C. .

When the [A.B.C.] is switched on, the chords you played in the specified Chord section of the keyboard will be automatically detected and will be used to control the playback of the selected style.

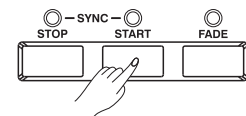
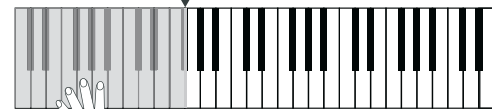


4. Turn SYNCHRONIZED START ON.

Press the [SYNC START] button, now the beat lamp flashes in time with the tempo. This condition is called synchronized start standby.

It will start the accompaniment as soon as you start playing in Chord section. For example, play a C major chord to start the auto accompaniment.

Default Split Point #F3



5. Try playing other chord with your left hand.

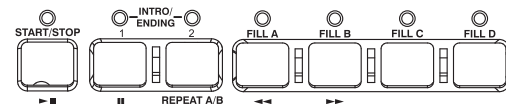
6. Press the [START/STOP] button again to stop the accompaniment



### Accompaniment Sections

There are various types of Auto Accompaniment sections that allow you to vary the arrangement of the accompaniment to match the song you are playing.

They are: Intro (1, 2), Main (A, B,C,D), Fill-in (A, B,C,D) and Ending(1, 2). By switching among them during your performance you can easily produce the dynamic elements of a professional-sounding arrangement in your performance.



#### INTRO Section

The intro is an opening section of the song. When the intro pattern finished, the system will automatically shift to the main section.

#### MAIN Section

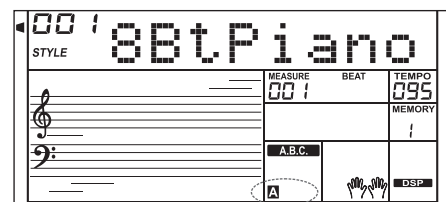
The main is an important section of the song. And it plays an accompaniment pattern and repeat infinitely until another section's button is pressed.

#### FILL IN Section

Auto fill in function automatically adds a fill to your performance. When the fill-in is finished, accompaniment shifts to the Main section (A,B,C,D).

#### ENDING Section

Ending is used for the ending of the song. When the ending is finished, accompaniment automatically stops. The length of the ending differs depending on the selected style.



### Playing Different Accompaniment Sections

1. Press the [STYLE] button.

2. Select a style.

3. Turn the A.B.C. on.

4. Turn SYNC START on.

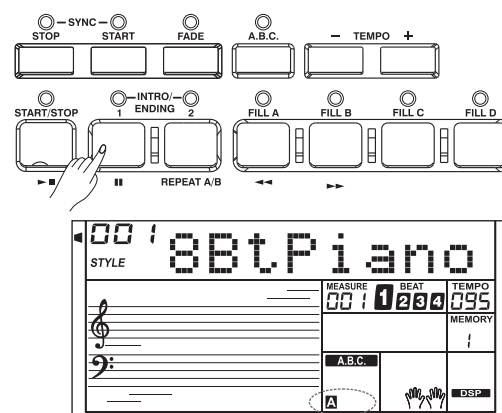
5. Press the [FILL-IN A] button.

## Auto Accompaniment

- Press the [INTRO/ENDING] button. Now the "A" flashes on LCD, the style is ready to play.
- It will start the accompaniment as soon as you start playing in Chord section. When the playback of the intro1 is finished, it automatically leads into Main A section.
- Press the [FILL-IN B] / [FILL-IN C] / [FILL-IN D] button. A fill-in plays, automatically followed by the Main B/C/D section.
- Press the [INTRO/ENDING] again will lead it into the Ending Section. When the ending is finished, the auto accompaniment automatically stops.

### Note:

Hold down the FILL-IN A/B/C/D button when the style is playing, the selected FILL pattern repeats continuously until button is released. Press FILL-IN A/B/C/D when style stop, it will change to the normal section, the icon A/B/C/D on LCD will be lightened.



## Fade In/Out

### Fade In

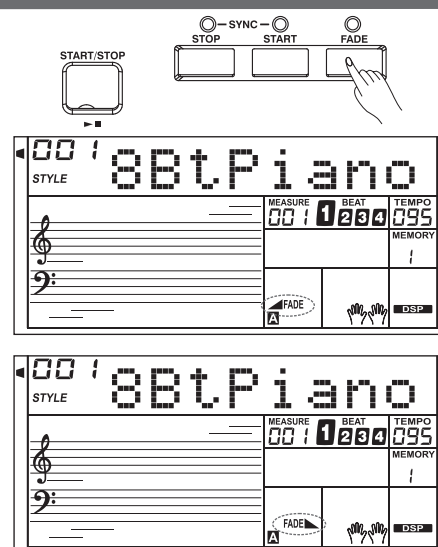
Starting the style with fade in produces a smooth beginning, the volume increases from low to high.

Press the [FADE] button when Style playback is stopped and press the [START/STOP] button to start Style playback.

### Fade Out

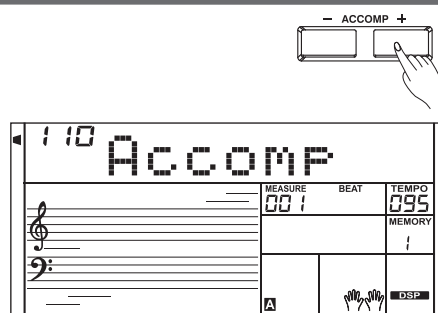
Stopping the style with fade out produces a smooth ending, the volume increases from high to low.

Press the [FADE] button during style playback.



## Accompaniment Volume

- Press [ACCOMP+] or [ACCOMP -] button to adjust ACCOMP volume, LCD displays Accomp volume which ranging from 0 to 127.
- Press [ACCOMP +] and [ACCOMP -] button simultaneously to turn off ACCOMP volume.
- Press [ACCOMP +] and [ACCOMP -] button simultaneously again to turn on ACCOMP volume.

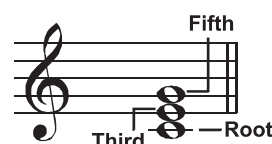


## Chord Fingering

How the chords are played or indicated with your left hand (in the auto accompaniment section of the keyboard) is referred to as "fingering". There are 2 types of fingerings as described below.

### Chord Basics

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



## Auto Accompaniment

### Triad Type

There are following basic triad types:

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

### Chord Inversion

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

### Chord Name

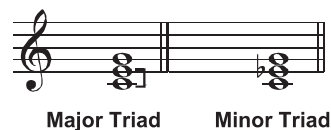
The chord name contains two parts content: Chord root and Chord type.

### SINGLE FINGER

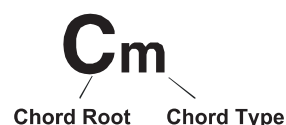
Single-finger makes it simple to produce major, seventh, minor and minor seventh chords by pressing a minimum number of keys on the auto accompaniment section.

### MULTI FINGER

Multi-finger allows you to play chords in normal fingering. Try playing the 32 chord types in C scale as listed on the right.



Root Position First Inversion Second Inversion



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

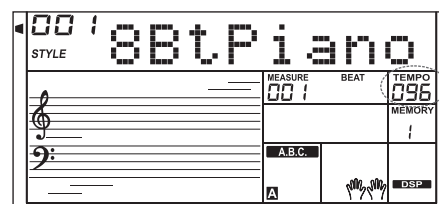
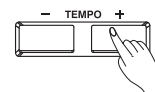
<b>0</b> C 	<b>1</b> C6 	<b>2</b> CM7 	<b>3</b> CM7(#11) 	<b>4</b> CM(9) 	<b>5</b> CM7(9) 
<b>6</b> C6(9) 	<b>7</b> Caug 	<b>8</b> Cm 	<b>9</b> Cm6 	<b>10</b> Cm7 	<b>11</b> Cm7(b5) 
<b>12</b> Cm(9) 	<b>13</b> Cm7(9) 	<b>14</b> Cm7(11) 	<b>15</b> CmM7 	<b>16</b> CmM7(9) 	<b>17</b> Cdim 
<b>18</b> Cdim7 	<b>19</b> C7 	<b>20</b> C7sus4 	<b>21</b> C7(b5) 	<b>22</b> C7(9) 	<b>23</b> C7(#11) 
<b>24</b> C7(13) 	<b>25</b> C7(b9) 	<b>26</b> C7(b13) 	<b>27</b> C7(#9) 	<b>28</b> CM7aug 	<b>29</b> C7aug 
<b>30</b> Csus4 	<b>31</b> C1+2+5 	Notes enclosed in parentheses are optional; the chords could be recognized without them.			

# Auto Accompaniment

## Tempo

Each style of the instrument has been set with a default or standard tempo; however, this can be changed by using the [TEMPO+]/[TEMPO-] buttons.

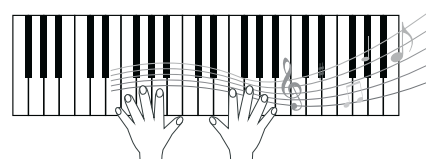
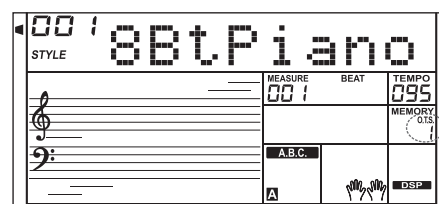
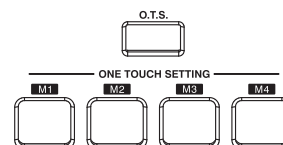
1. Change the tempo  
Use the [TEMPO+] or [TEMPO-] button to change the tempo. While the tempo data is flashing, use the Data Dial can also change the tempo.
2. To restore the default tempo setting, press the [TEMPO+]/[TEMPO-] buttons simultaneously.



## One Touch Setting

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

1. Press the [O.T.S.] button to turn on the One Touch Setting for current style.
2. Press one of the [ONE TOUCH SETTING] buttons [M1]-[M4].  
Various panel settings (such as voice, effect, etc.) that match the selected style can be instantly recalled with just a single button Press. Auto accompaniment is automatically turned on during mode.
3. Play the keyboard.



### One Touch Setting parameter list:

Part ON/OFF (VOICER1,R2,L)  
Voice Change(VOICER1,R2,L)  
Voice Volume(VOICER1,R2,L)  
Voice Reverb Level(VOICER1,R2,L)  
Voice Chorus Level(VOICER1,R2,L)



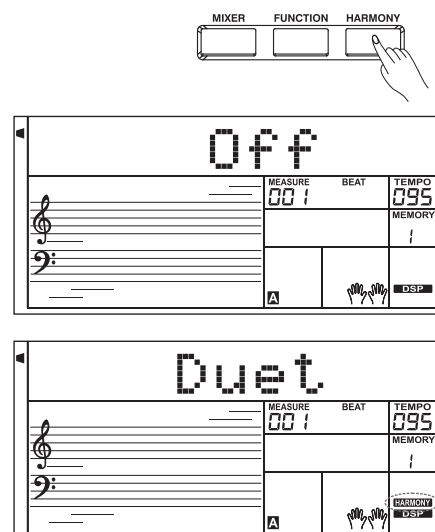
# Harmony

You can add a variety of harmony notes to the keys you played in the right-hand section.

## Turning on the Harmony effect

Press the [HARMONY] button to turn on or off the harmony effect.

In the main mode and harmony is off, press the [HARMONY] button, the LCD will display "off". Press the [HARMONY] button again to turn on the harmony and the LCD will display the current harmony type and the harmony flag.



## Applying the Harmony effect

1. Press the [A.B.C.] button to turn auto accompaniment on.
2. Play a chord with your left hand.
3. Play some notes in the right-hand range of the keyboard.  
When a harmony type is selected, this type automatically add one or more harmony notes to a single-note melody played in the right-hand.

### Note:

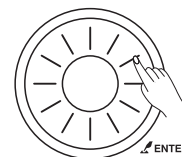
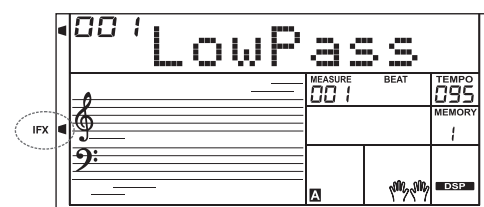
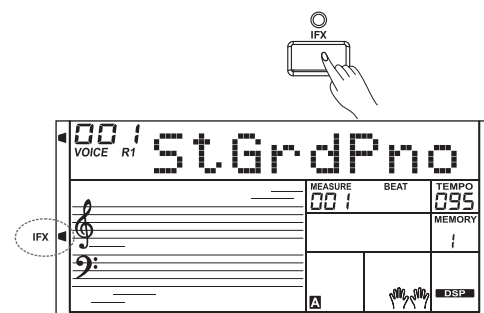
While "1+5" or "octave" is selected to a harmony type, you can use the harmony effect without playing the chord.

**You can select the harmony effect type in the function menu.**

# IFX

There are 45 preset insert effects in all, including Chorus、Flanger、Phaser、Tremolo、EQ、Distortion、Wah、Compressor and LowPass Filter.

1. The insert effect is set to off when the keyboard is power on. Press [IFX] button to turn on the effect function, the insert effect flag will be lighted. Press [IFX] button again to turn off the effect function and the insert effect flag will be turn off.
2. Press and holding [IFX] button about two second to enter the insert effect menu selection mode, use [+ / YES] / [- / NO] or Data Dial to select the effect type you want. If the insert effect is turned on, you can feel the effect by playing the keyboard. Press [ENTER] button to enter the next menu if the current effect has parameter.
3. Use [+ / YES] / [- / NO] button or Data Dial to select the parameter you want and press [ENTER] button to enter the parameter setting mode. Use [+ / YES] / [- / NO] button or Data Dial to set the value. Press [ENTER] / [EXIT] button to return to previous menu. At any time, Press other button to quit the effect menu selection mode.
4. The switch status of the effect will not change after quit the effect selection menu display. LCD displays the first type effect when you enter the menu after power on. When you enter the menu next time, you will find the effect type is the same as last time except you restart the keyboard.
5. The effect is applied to keyboard channel. The specific effects and parameters as follow table, each parameter value range from 0 to 127. If the flag "-" mark in the table indicate the parameter is inexistence. Insert effect type and parameter:



NO	type	Param1	Param2	NO	type	Param1	Param2
1	LowPass	CutOff	-	24	Mid Cut	-	-
2	STD CHR	Mix	Rate	25	LoMidCut	-	-
3	Lite CHR	Mix	Rate	26	HiMidCut	-	-
4	Deep CHR	Mix	Rate	27	High Cut	-	-
5	Warm CHR	Mix	Rate	28	S-Hi Cut	-	-
6	BRT CHR	Mix	Rate	29	Enhance	-	-
7	STD FLG	Mix	Rate	30	Loudness	-	-
8	Lite FLG	Mix	Rate	31	Add Air	-	-
9	Deep FLG	Mix	Rate	32	Live EQ	-	-
10	CrazyFLG	Mix	Rate	33	PhoneSim	-	-
11	STD PHS	Mix	Rate	34	RadioSim	-	-
12	Lite PHS	Mix	Rate	35	Dist	Mix	Gain
13	HeavyPHS	Mix	Rate	36	Overdriv	Mix	Gain
14	VTG TRM	Mix	Rate	37	Fuzz	Mix	Gain
15	MDN TRM	Mix	Rate	38	ST A.Wah	Mix	Rate
16	Panner	Mix	Rate	39	LT A.Wah	Mix	Rate
17	BasBoost	-	-	40	DP A.Wah	Mix	Rate
18	BasPunch	-	-	41	ST S.Wah	Mix	Sense
19	MidBoost	-	-	42	LT S.Wah	Mix	Sense
20	LM Boost	-	-	43	DP S.Wah	Mix	Sense
21	HM Boost	-	-	44	CR S.Wah	Mix	Sense
22	Hi Boost	-	-	45	Comp	Threshold	Ratio
23	Low Cut	-	-				

## Note:

Press andhold the [STORE] and [IFX] buttons at the same time, then turning the power on will set all param eters to default.

# Performance Assistant

## What's the performance assistant?

Performance assistant is an easy-to-use function. With this function you will find playing will be more interesting. Even if you are not a keyboard player, the performance assistant will help you to play your familiar instrument voice on the keyboard. If you're a pianist, you can easier to achieve many hard perform skills on the keyboard with the help of this function.

Performance assistant will provided many wonderful phrases. Just use several keys and you will perform your own wonderful music.

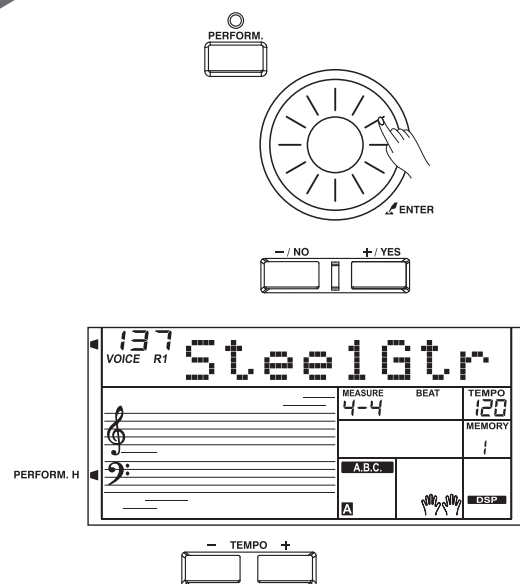
## Enter the Performance Assistant

There are 7 voices you can select to perform: GUITAR, PIANO, GUZHENG, PIPA, SANXIAN, YANGQIN, and SANXIAN.

Press the [PERFORM.] button you can enter the perform mode. The default setting is Guitar Mode and the LCD will display Guitar's voice name. You can use the Data Dial, [+ / YES] or [- / NO] button to change the voice you want to perform.

In the measure field in LCD, the "4-4" will be displayed. It means the default beat value is the 4/4 and you can use [ENTER] or [EXIT] button to change the beat value you want. There are 4 kinds of beat you can select: 2-4, 3-4, 4-4 and 6-8.

In Performance Assistant mode, use [TEMPO+] or [TEMPO-] to change the tempo.



## Guitar Mode

### Guitar key map

The Guitar Mode makes you perform a guitar voice with keyboard just like you're playing a real guitar. In this mode you can use some perform skills like strum (5), broken chord (5), echoism (5) and also 2 endings.

### Chord part

C2 to B3 is the chord part area. Play a chord in this area.

### Sub Area 1

C4 to B4 (only white keys) is the sub area 1. 5 types broken chord are provided in this area.

### Sub Area 2

The 6 keys: C5 to A5 (only white keys) is just like real guitar's 6 strings. Play a free solo in this area.

### Rhythm Area

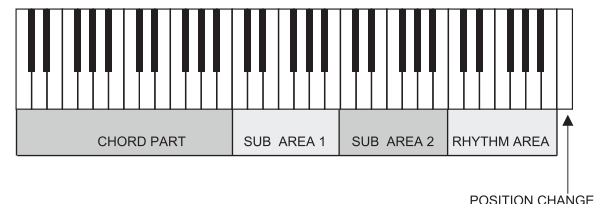
C6 to G6 (only white keys) is the rhythm area. Wonderful styles and strums are provided in this area. Use A6 to B6 to play an ending.

### Position Change

Press C7, the guitar position will be changed.

The guitar key map is as the picture.

GUITAR KEY MAP



## Performance Assistant

### Playing in the Guitar Mode

#### Play a chord in the chord part.

A chord type will be displayed on the LCD and the guitar base will be sounded.

#### Play a broken chord in the sub area 1.

When the chord type displayed, press a white key in the sub area 1, a wonderful broken chord phrase will start. Try to change the white key and you will hear some different type of phrase. Change the chord with your left hand; you will hear the broken chord phrase has a little bit change

#### Play a free solo in the sub area 2.

When the chord type displayed, press a white key in the sub area 2 you can play guitar free solo, sounds like you're playing a real one. Try to change the chord with your left hand, and play your free solo. The last white key B5 is invalid.

#### Play a strum rhythm in the rhythm area.

When the chord type displayed, press a white key in the rhythm area you can play the magic strum rhythm. Try to change the chord with your left hand, and play your strums.

#### End the guitar performing.

Press the A6 or B6 to end your guitar performs. When the ending is finished, the phrase stops automatically.

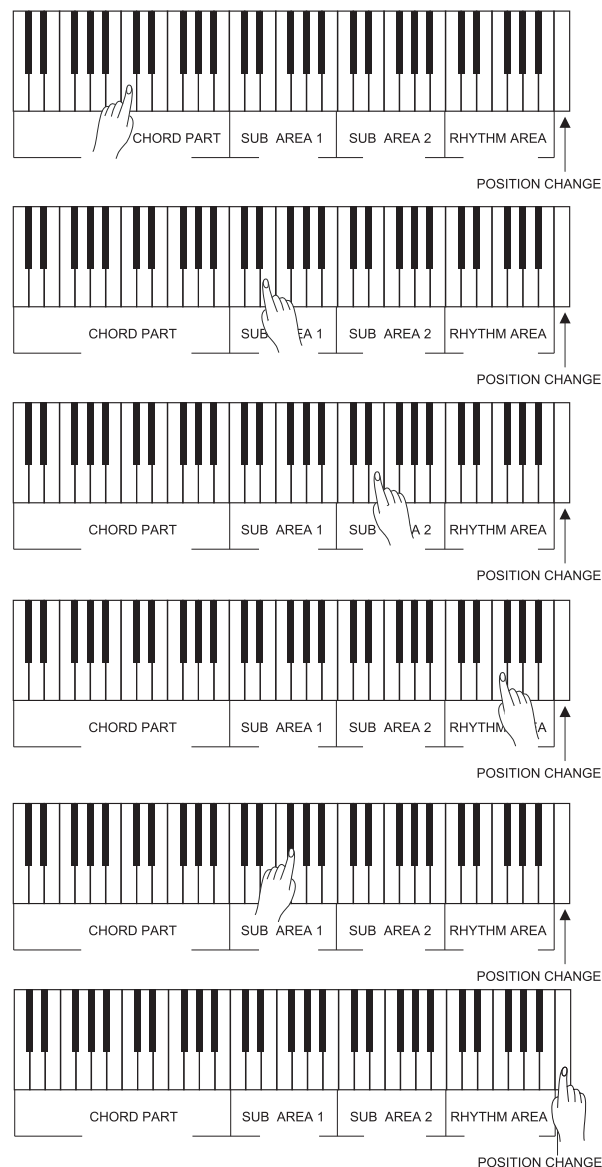
#### Play the echoism.

All of black keys on Sub area 1, Sub area 2 and Rhythm area are echoism keys. There are 5 kinds of echoism to arrange on the C#, D#, F#, G#, A# circularly.

#### Change the position

Press the C7, the PERFORM.H icon will be lightened on the LCD. It means that the guitar position has been changed to the High position. Try to play the white keys in sub area 1, Sub area 2 and Rhythm area, listen to the phrase you are performing now.

GUITAR KEY MAP



### Piano Mode

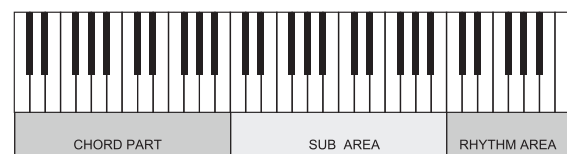
#### Piano Key Map

In Piano Mode, you can easily to achieve many hard piano perform skills just like playing the acoustic one. In this mode you can use some perform skills like piano rhythm (5), broken chord (5) and also 3 endings.

The piano key map is similar with the guitar key map. Press A6 to C7 will start ending. All the black keys above C4 are invalid.

The piano key map is as the picture.

PIANO KEY MAP



### Playing in the Piano Mode

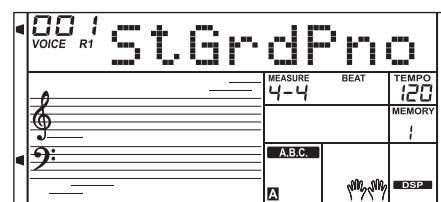
#### 1. Select Piano Mode.

In performance assistant mode, use Data Dial,[+ /YES] or [- /NO] button to select Piano Mode.

#### 2. Play a chord in chord part.

Use Sub area and Rhythm area to play some phrases.

#### 3. Press the A6,B6 or C7 to ending your piano perform. When the ending is finished, the phrase stops automatically.



## Chinese Traditional Instruments Mode

### Chinese Traditional Instruments Key Map

In this mode, a keyboard player can play some Chinese instrument voice easily by using the keyboard. There are 5 instruments you can select to perform: GUZHENG, PIPA, SANXIAN, YANGQIN and ZHONRUAN. You can use some perform skills like Chinese Traditional rhythm or Chinese Traditional broken chord (5), Arpeggio (5), special perform skills (3-5) and also 3 endings (there are only 2 endings in GUZHENG Mode).

### Chord Part

C2 to B3 is the chord part area. Play a chord in this area.

### Sub Area

C4 to B5 (only white keys) is the sub area. Chinese Traditional rhythm and broken chord are provided in this area.

### Rhythm Area

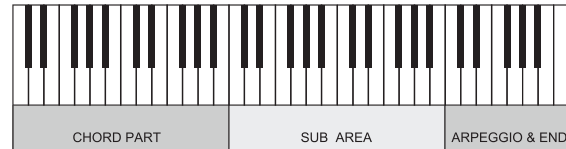
C6 to G6 (only white keys) is Arpeggio area. Magic styles and strums are provided in this area.

In PIPA, SANXIAN, YANGQIN and MIDRUAN Mode, use A6 to C7 to play an ending. There are only 2 endings in GUZHENG Mode. In GUZHENG Mode, press C7 will enter the FAST ARPEGGIO Mode.

All the black keys above C4 are invalid.

The Chinese Traditional Instruments key map is as the picture:

Chinese Traditional Instruments KEY MAP



## Playing in the Chinese Traditional Instruments Mode

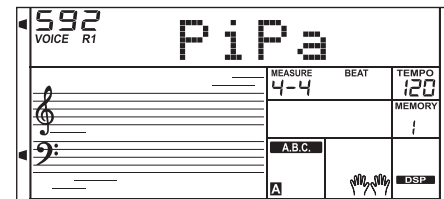
1. Select the Chinese Traditional Instruments Mode.
2. In the Performance Assistant, use Data Dial, [+ / YES] or [- / NO] button to change to this mode. Play a chord in chord part.
3. Use Sub area and Arpeggio area to play some phrases.
4. End the performing.

### Fast Arpeggio Mode

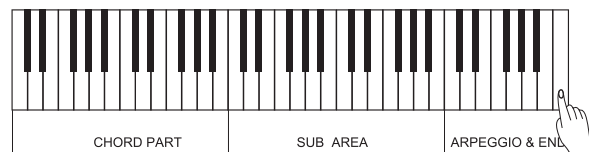
In GUZHENG Mode, press C7 to enter the Fast Arpeggio Mode. In this mode, from C4 to B6 are equal the C, D, E, G, A, c1, d1, e1, g1, a1, c2, d2, e2, g2, a2, c3, d3, e3, g3, a3 and c4 as the 21 strings of the real GuZheng. Press the C7 again in Fast Arpeggio Mode will back to the GuZheng mode. Use the Fast Arpeggio Mode, try to play a free solo of GuZheng voice.

### Note:

In Chinese Traditional Instruments Mode, the chord response is different from the Guitar Mode and the Piano Mode. Only the Major and the Minor chord will be responded.



Chinese Traditional Instruments KEY MAP



## Exit the Performance Assistant

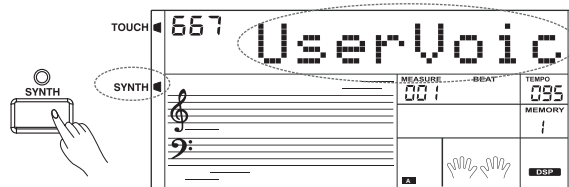
When the phrase stops, press the [VOICE], [STYLE], [SONG], [DEMO], [PERFORM.] and the Direct Select Button to exit the Performance Assistant.

# Synth

You can use the synth function to create yourself voice on the basis of the built-in voice samples.

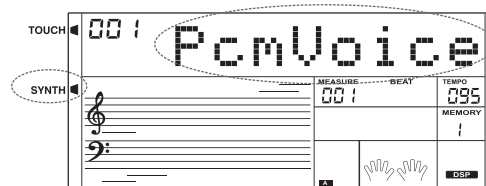
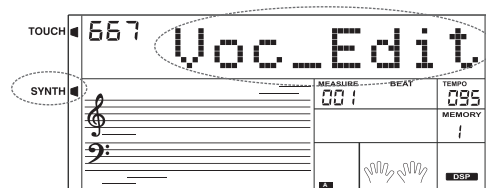
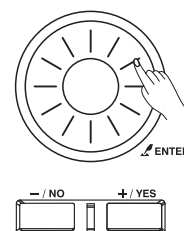
## Enter the synth

Press [SYNTH] button to enter synth function mode, lower, dual, auto accompaniment, piano, harmony and function will be turned off.



## Create user voice

1. Press [SYNTH] button to enter the user voice number select mode, LCD displays "UserVoic" and the user voice number. The synth flag will be lighted. Use [+/YES]/[-/NO] button or Data Dial to select a voice number you want.
2. Press [ENTER] button to enter the next menu. There are two menus: "Voc\_Edit" and "Delete". Use [+/YES]/[-/NO] button or Data Dial to select the menu and you can press [EXIT] button to return to the previous menu.
3. Press [ENTER] button to enter voice parameter selection after you select the "Voc\_Edit" menu, LCD displays "PcmVoice" and sample voice number. Use [+/YES]/[-/NO] button or Data Dial to select voice parameter, the voice parameter will display on the LCD as follows "PcmVoice", "Vib Rate", "VibDepth", "VibDelay", "EnvAttac", "EnvRelea", "EnvDecay". If you select the "Delete" menu and press [ENTER] button, LCD displays "Sure?". Press [+/YES] button to delete the user voice, and then return to previous menu; If you press [-/NO] button to cancel the operation, and then return to previous menu. You can also press [SYNTH] or [EXIT] button to return to previous menu.
4. Press [ENTER] button to enter the parameter value setting mode after you select a voice parameter. At this mode, the parameter value will flash on LCD. Use [+/YES] /[-/NO] button or Data Dial to adjust the value, you can play the keyboard to feel the voice effect.
5. Press [SYNTH] button and LCD displays "Sure?". Press [+/YES] button to save the user voice , and then return to previous menu, If you press [-/NO] button to cancel the operation, and then return to previous menu.
6. At any time, press [EXIT] button to return to the previous menu.



### User voice parameter:

Parameter name	Range	Default
User voice number	667 - 676	667
PcmVoice	001 - 654	001
Vib Rate	000 - 127	064
VibDepth	000 - 127	064
VibDelay	000 - 127	064
EnvAttac	000 - 127	064
EnvRelea	000 - 127	064
EnvDecay	000 - 127	064

#### NOTE:

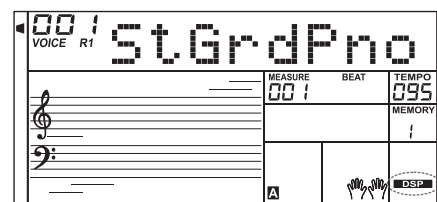
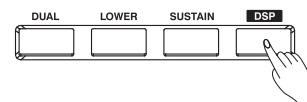
The voice editing function is invalid at the song playing, demo playing, recording and USB Device mode.

# DSP Effect

With the built in digital effects, you can add ambiance and depth to your music in a variety of ways such as adding reverb that makes you sound like you are playing in a concert hall or adding harmony notes for a full, rich sound.

1. The DSP effect is set to ON when keyboard is power on.

2. Press [DSP] button to switch DSP effect on or off.



# Mixer

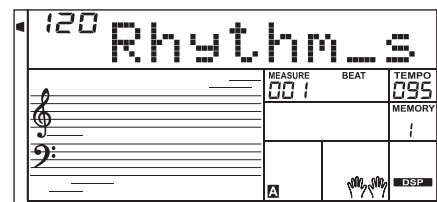
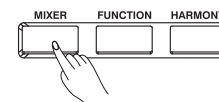
1. Press the [MIXER] button.

Now you have entered the menu of MIXER. Use the [MIXER] button to select a part to change its volume.

2. Adjust the volume of a musical part. To adjust the selected volume setting, please use the Data Dial or the [+ / YES] / [- / NO] button.

Press [+ / YES] and [- / NO] button simultaneously to turn off part volume.

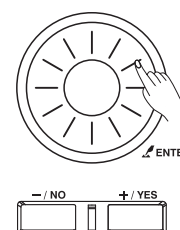
Press [+ / YES] and [- / NO] button simultaneously again to turn on part volume.



3. Any time press [EXIT] to quit this menu.

The option and parameters are as the follows:

Option	LCD Display	Range
Rhythm s VOLUME	XXX Rhythm_s	0 - 127
Rhythm m VOLUME	XXX Rhythm_m	0 - 127
BASS VOLUME	XXX Bass	0 - 127
Chord 1 VOLUME	XXX Chord1	0 - 127
Chord 2 VOLUME	XXX Chord2	0 - 127
Chord 3 VOLUME	XXX Chord3	0 - 127
Phrase 1 VOLUME	XXX Phrase1	0 - 127
Phrase 2 VOLUME	XXX Phrase2	0 - 127
VOICE R1 VOLUME	XXX Upper1	0 - 127
VOICE R2 VOLUME	XXX Upper2	0 - 127
VOICE L VOLUME	XXX Lower	0 - 127
USB Device Midi Play Volume	XXX U_Disk	0 - 127





# Pedal Function

## Volume Pedal

You can step the volume pedal to control the volume.

## Foot Switch

The keyboard can assign the pedal in function menu. (See FUNCTION)

### 1. Pedal Sustain

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

### 2. Pedal Soft

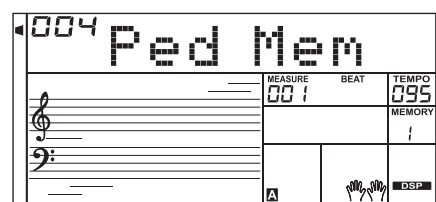
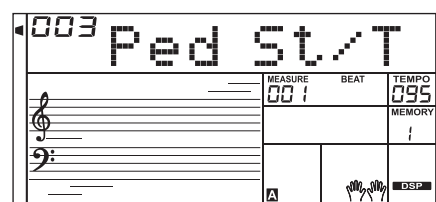
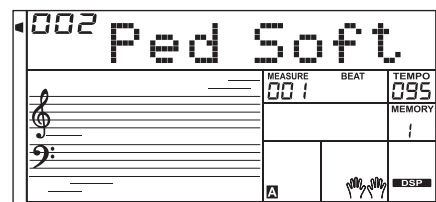
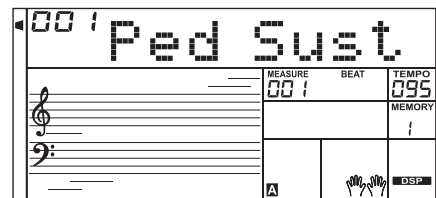
If pedal assign is set as "Ped Soft", step on the soft pedal, all notes played on the keyboard have a softer effect.

### 3. Pedal Start/Stop

If pedal assign is set as "Ped St/S", the pedal will have the same function as [START/STOP] button.

### 4. Pedal Memory Select

If pedal assign is set as "Ped Mem", it will load the next memory parameter when you step the pedal.



# Other Functions

Press [FUNCTION] button to enter function menu. The default option of the menu is "Tune". When you enter the menu next time, you will find the option is the same as last time. Use [FUNCTION] button to select the option to set. Use [+ /YES] /[- /NO] or Data Dial to set parameter. Any time press [EXIT] to quit this menu.

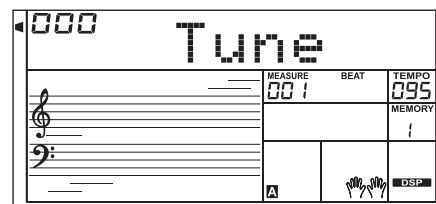
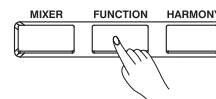
The option and parameters are as the follows:

Option	LCD Display	Range	Default
TUNE	XXX Tune	-50...50	000
BEAT	XXX Beat	0,2...9	004
SPLIT POINT	XXX Split Pt	1...61	019
PEDAL ASSIGN	00X Ped ****	Sust、Soft、St/S、Mem	Sust (001)
FADE IN	0XX Fade In	1-20	010
FADE OUT	0XX Fade Out	1-20	010
HARMONY	00X Duet	Duet、1+5、Octave、 CtryDuet、Trio、 Block、4 Close1、4 Close2、4 Open	Duet (001)
REVERB LEVEL	XXX Rev Lev	0—127	Follow voice
CHORUS LEVEL	XXX Chr Lev	0—127	Follow voice
MIDI RECEIVE	XXX Midi In	1-16、ALL	ALL
MIDI TRANSMIT	XXX Midi Out	1-16	001

## Tune

This function sets the pitch of entire keyboard by steps of cents.

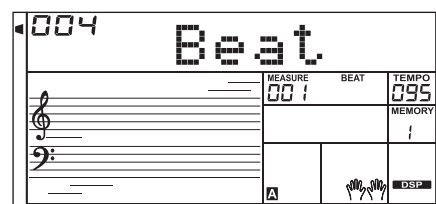
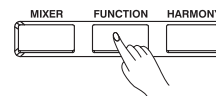
1. The LCD displays the tune value. Use [+ /YES] /[- /NO] or Data Dial to change tune value. Its range is from -50 to 50 cents .
2. Press [+ /YES] and [- /NO] together will set the tune value to its default setting.



## Beat

This function sets the beat value range from 0, 2-9.

The LCD displays beat value. Use [+ /YES] /[- /NO] or Data Dial to change the beat value.

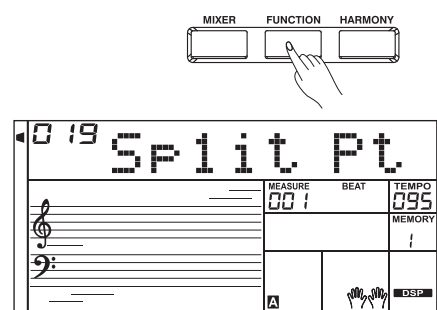


## Other Functions

### Split Point

This function sets the point that separates the entire keyboard to two sections.

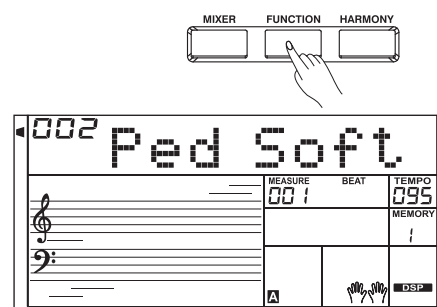
1. The LCD displays split point value. Use [+/YES]/[-/NO] or Data Dial to change split point. The keyboard can also be used to change split point.
2. The part below the split point is the part of the chord area.



### Pedal Assign

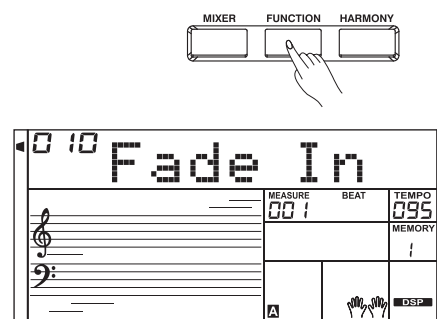
This function sets pedal type as sustain pedal, soft pedal, start/stop pedal or memory select pedal.

1. The LCD displays the type of pedal. Use [+/YES]/[-/NO] or Data Dial to change pedal assign. The pedal can be set as sustain pedal, soft pedal, start/stop pedal or memory select pedal.
2. The default pedal type is sustain pedal.



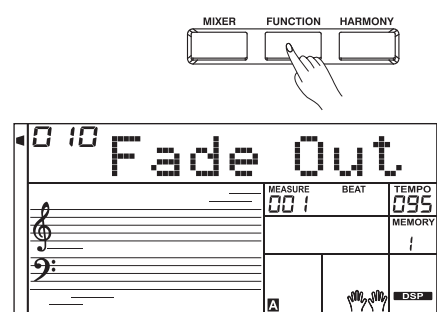
### Fade In

The LCD displays Fade In value. Use [+/YES]/[-/NO] or Data Dial to change Fade In time. The range is form 1 to 20 second.



### Fade Out

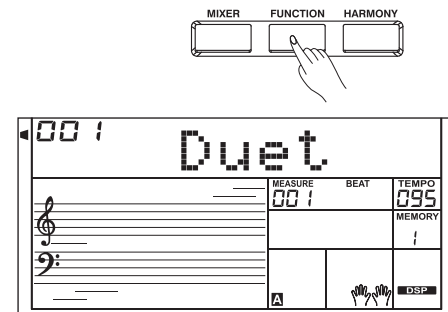
The LCD displays Fade Out value. Use [+/YES]/[-/NO] or Data Dial to change Fade Out time. The range is form 1 to 20 second.



## Other Functions

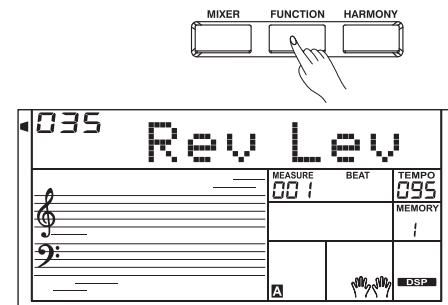
### Harmony

There are 9 harmony effects for you to select, including Duet, 1+5, Octave, CtryDuet, Trio, Block, 4 Close1 and 4 Close2, 4 Open. Use [+ /YES] /[- /NO] or Data Dial to select.



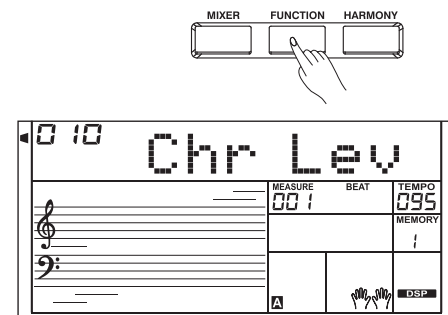
### Reverb Level

The LCD displays reverb level. Use [+ /YES] /[- /NO] or Data Dial to change reverb level. The level ranges from 0 to 127.



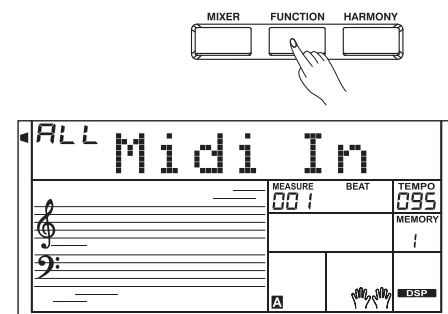
### Chorus Level

The LCD displays chorus level. Use [+ /YES] /[- /NO] or Data Dial to change chorus level. The level ranges from 0 to 127.



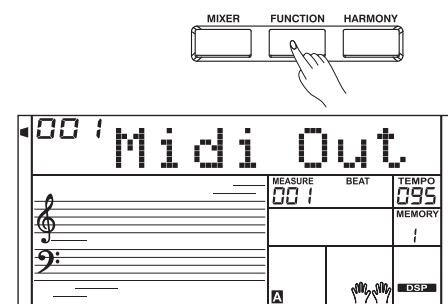
### MIDI In

You can set the channel of MIDI IN by RECEIVE. The default setting is "ALL", channel 1~16 can also be selected. Use [+ /YES] /[- /NO] button or Data Dial to select the channel.



### MIDI Out

You can set the channel of MIDI OUT by TRANSMIT. The default setting is "001", channel 2~16 can also be selected. Use [+ /YES] /[- /NO] button or Data Dial to select the channel.



# Register Memory

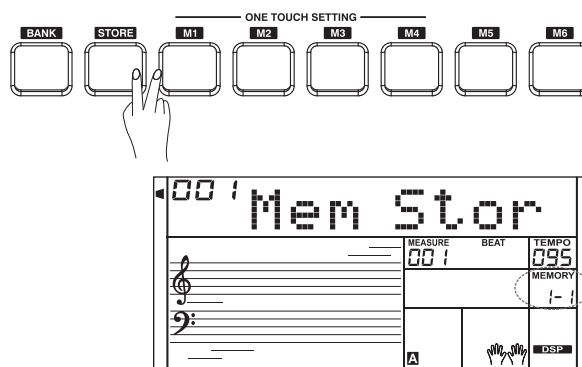
The keyboard is an instrument with a variety of controls and functions, the Registration Memory feature can make your performance more easily and efficiently. It allows you to save virtually all panel settings to a Registration Memory setting, and you can instantly recall custom panel settings by pressing a single button.

## Registering the Panel Setting

There are 8 memory banks, each bank has 6 memories (M1-M6).

While holding the [STORE] button, press one of the REGISTRATION MEMORY buttons: [M1] - [M6].

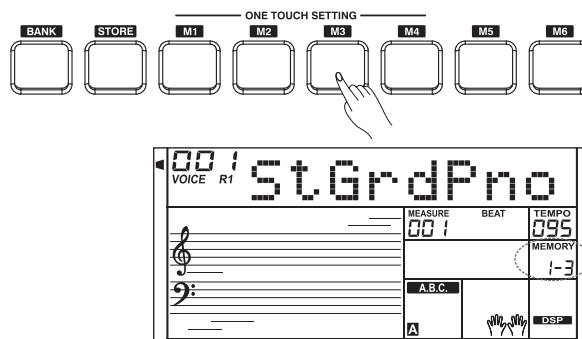
Notice that the new settings will replace the previous memory data.



## Recalling the Registered Panel Settings

Press one of the REGISTRATION MEMORY buttons:

[M1] - [M6]. In this example, the panel settings stored in the memory 3 of bank 1 are recalled.



### Note:

Registration data cannot be recalled when the One Touch Setting function is on.

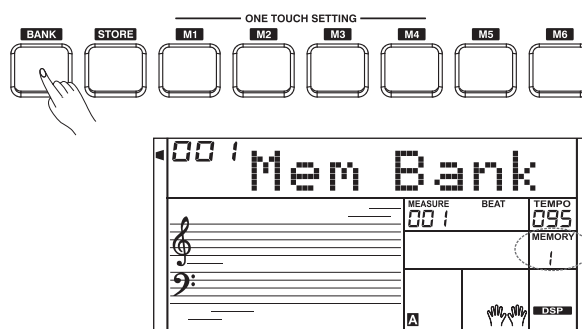
## Selecting a Registration Bank

### 1. Press the [BANK] button.

There are 8 banks at all and each bank has 6 memories (M1-M6). Press the [BANK] button, the LCD displays "Mem Bank"

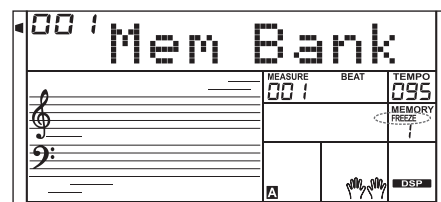
### 2. Select a bank

Use the Data Dial, [+]/YES or [-]/NO button to select a bank.



## Freezing the Accompaniment Parameter

When you use memory, the parameter of the Accompaniment will not change (including the style number, section, volume, tempo, transpose, chord status, mixer, split point) after freeze function is turn on.



# Song Recording

With the easy-to-use song recording features, you can record your own keyboard performances as a User song. 5 user songs can be recorded with 6 tracks (1 ACCOMP track, 5 MELODY tracks) each.

Among them, the accompaniment track is used for recording style and this recorded track is users song's accomp; Melody tracks are used for recording melodies.

Accomp track and melody track can be recorded together, but you can not record two melody tracks at the same time, Of course you can only record accomp or melody; Accomp and melody track can be multiple, simultaneous playback. The recorded data will not lost when you turn off the power.

## Start Recording

Before you start recording, you need to select a user song to keep the recording song, and set the recording tracks

1. Press [RECORD] button to enter user song selection mode.

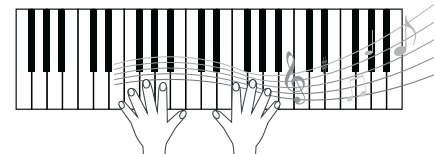
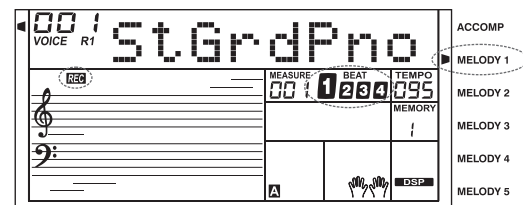
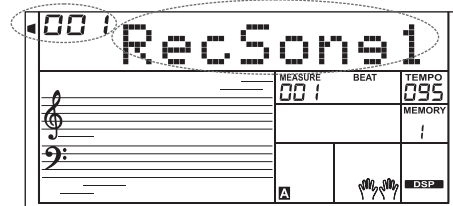
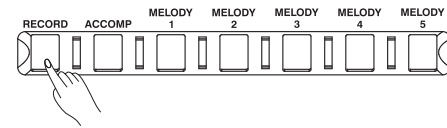
The LCD lightens "RecSong1" and sequence number.5 user songs can be recorded.

Press [+ / YES] / [- / NO] button to select the user song you want to record.

2. Press [RECORD] button again to enter record preparation mode. LCD lightens the "REC" flag. Four beats and the keyboard automatically selected empty track "Melody 1"(or other track) on LCD flash, indicates waiting for recording.

3. In the recording preparation status, you can adjust parameters such as the voice, style and tempo. When recording a new song, the keyboard will automatically select "Melody 1" as the recorded track. Press "Accomp" (or "Melody 2" to "Melody 5") to make your own selection.

4. Press [START/STOP] button or play the keyboard to start recording. When choosing the accomp tack and "A.B.C." was open, play an effective chords in the area of the left hand would start recording.



### Note:

Style can only be recorded in "Accomp" track.

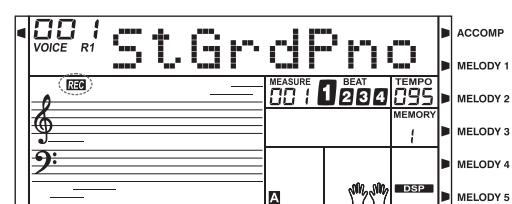
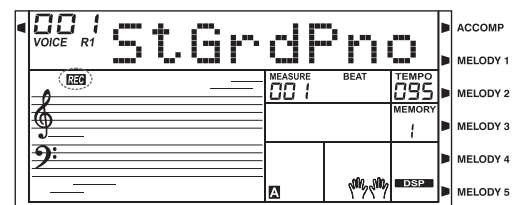
The recording track instructions cursor has three states: Blinking, Light, Go out.

Blinking: Means the track was choose for recording. If the track have recorded data, this original data will be replaced.

Light: Means this track have data, the recording process will have recorded data synchronization playback.

Go out: Means this track have no data or have data but forbidden playback.

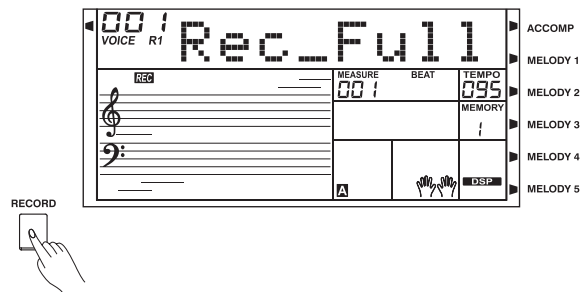
When recording an existing song, the keyboard will automatically select the empty track next to the occupied track. For example, if "Melody 1" is occupied, "Melody 2" will be selected as the record track. When all 6 tracks have been recorded and a specific track needs to be revised, press the button of the desired track and start recording. The original data will be replaced.



## Song Recording

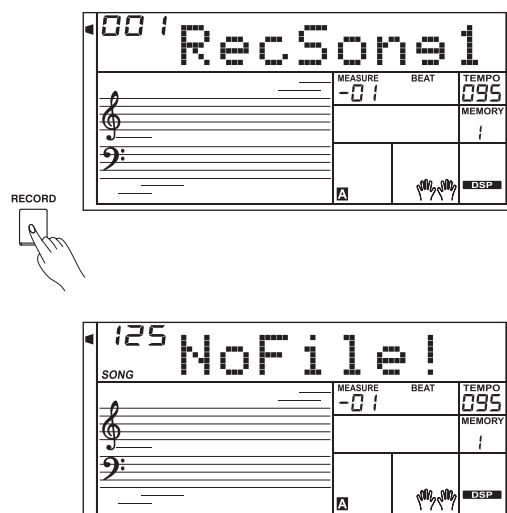
### Stop Recording

1. When recording is in process, you can press [RECORD] button to stop recording.
2. When recording is in process, if the memory is full, the recording will stop and save automatically, the LCD displayed "Rec\_Full".
3. If you choose the accomp recording, the recording will stop automatically when the ending of rhythm is finished.



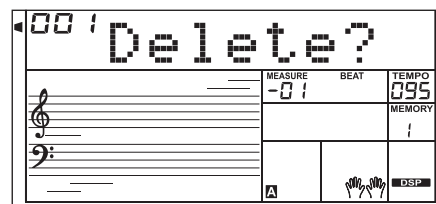
### Playback Recording

1. Press [RECORD] button when recording is in process, it will stop recording and enter the song play mode, and the current recorded song will play automatically in circle.
2. Press the [SONG] button to enter the song mode and it will play all songs circularly. Use the Data Dial, [+ / YES] or [- / NO] button to select a song, there are 125 songs in all, including 5 user songs (1-5). If there is no data in the selected user song, it will play "No file" and stop playing. You can also select one user song in song stop playing mode, press [PLAY/STOP] button, this user song will play circularly.



### Delete User Song

1. Pressing and holding [RECORD] and [SONG] button together and turn power on simultaneously, the user song will be erased.
2. In the recording preparation status, pressing and holding [RECORD] button for two second, the LCD will display "Delete?". Press the "Accomp" (or "Melody2" to "Melody 5") button to select the track you want to delete, when the track cursor is lightened, it indicated that the track data you want to delete, otherwise, it indicated that the track date you want to keep. If all the track cursor are lightened, the whole user song will be erase after confirm.
3. Choose the track you want to delete, press [+ / YES] to confirm and the recorded data in this track will be erased, press [- / NO] to quit this step, and back to the recording preparation status.



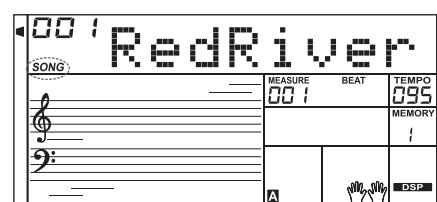
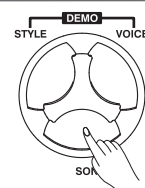


# Song

The keyboard has 125 songs in all, including 5 user songs.

## Listening to the Songs

1. Press the [SONG] button to enter the song mode and it will play all songs circularly.
2. Use the Data Dial, [+ / YES] or [- / NO] button to select a song.
3. Once you start playing a song by pressing [START/STOP] button, it will play current song repeatedly.
4. When the song is stopped, press [STYLE], [VOICE], [DUAL] or [LOWER] will exit the song mode.



## Song Control

### 1. Introductory beat

Before song start playing, it has the introductory beat, the measure starts from negative value. It begins to play song when the measure goes to 1.

### 2. REW, FF and PAUSE

When the song is playing:

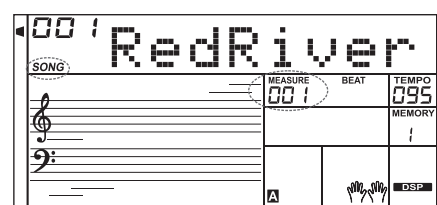
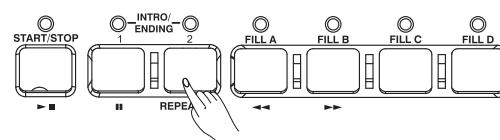
Press the [FF] button to fast forward the song.

Press the [REW] button to rewind the song (base on the measure).

Press the [PAUSE] button to pause the playing song.

### 3. Song Repeat

When playing the song, press [REPEAT A/B] button to set the location of loop begin and loop end to the current song. Press the [REPEAT A/B] to set the loop begin and press it again to set the loop end. When in loop status, press [REPEAT A/B] again to quit the loop playing status.



## Lesson Mode

In the instrument, there are 2 different ways to practice the songs: time value training and note correction training. And the keyboard has a grading system to help you to know well about your progress.

### 1. Press the [LESSON] button.

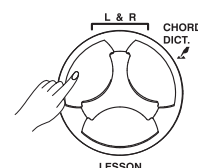
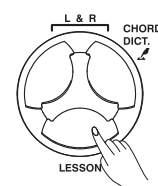
In Song mode, press the [LESSON] button will enter the lesson mode.

### 2. Select the practice hand.

There are 3 levels of the lessons. Use [LEFT] or [RIGHT] button to select which hand you want to practice. If neither hand is selected, the keyboard will automatically select the right hand practice for you.

### Note:

According to the type of the song, the content of your practice by left hand is different. If you choose a chord song, the left hand practices the chord, otherwise, practices the melody. When the song is playing, the staff and the keyboard displayed on the LCD indicate the melody and chord position, the numbered musical notation displayed on LCD shows the last note played by RIGHT track, and it will be convenient for you to practice.

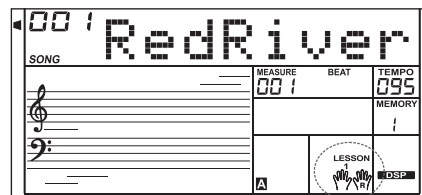
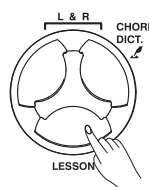


# Song

## Lesson 1 - Practice timing

1. Press the [LESSON] button to enter the lesson mode.  
Press [LESSON] button to enter the lesson mode, the lesson 1 icon is lightened on the LCD.

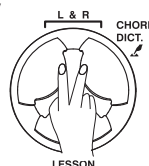
In Lesson 1 mode, the keyboard only grade the time value of the playing, don't care the correction of the note.



2. Press the [START/STOP] button to start practice.  
If [RIGHT] is selected, it will mute melody of right hand and you will have to follow the time value of the right hand. As long as the time value is correct, the melody will sound.



If [LEFT] is selected, it will mute the changing chord and melody by left hand. You will have to follow time value of the left hand. As long as the time value is correct, the chord/melody will sound.

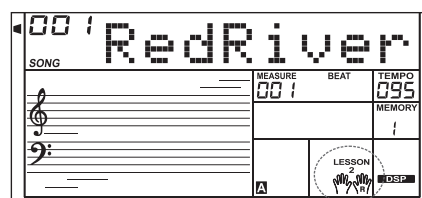
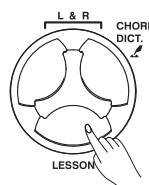


If [LEFT] and [RIGHT] are selected, the chord/melody on left hand and the melody on right hand will be muted. You will have to follow time value on both left and right hand.

## Lesson 2 - Practice note accuracy

1. Press the [LESSON] button again to enter the lesson 2 mode.

In LESSON 2 mode, the keyboard only grades your practice by the note; doesn't care about the correctness of the timing. Only when you play the correct note, the song will continue to the next note.



2. Press the [START/STOP] button to start to practice.

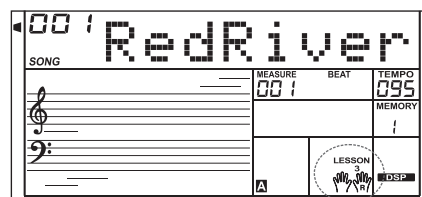
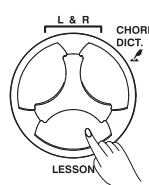


## Lesson 3 - Performance

1. Press the [LESSON] button in LESSON 2 to enter the lesson 3 mode.

In LESSON 3 mode, it will score your practice by the correction of the time value and note.

2. Press the [START/STOP] button to start to practice.



# Chord Dictionary

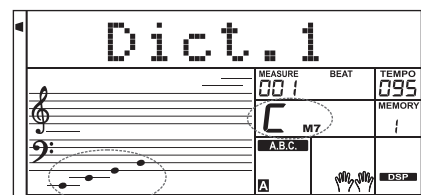
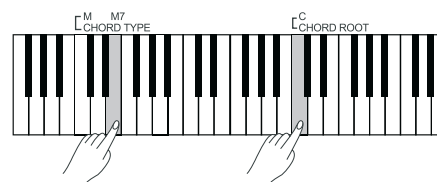
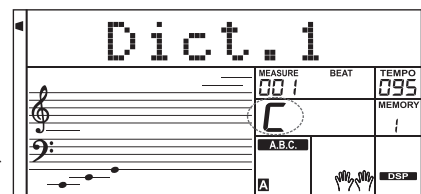
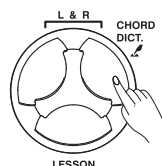
If you know the name of a chord but don't know how to play it, you can use the Chord Dictionary function. You can learn the chord and test in this features.

## DICT 1 (Chord Learning Mode)

Press the [CHORD DICT.] button and hold it for longer than 2 seconds to enter the DICT 1 mode.

In DICT 1 mode, the key above C4 are used to assign the Chord Type, the keys above C6 are used to assign the Chord Root. When the Chord Type and Chord Root are confirmed, the LCD will display the Chord and its keyboard position. For example, if you want to play a CM7 Chord, press the C6 key in the section of the keyboard labeled CHORD ROOT. The root note you set will be shown on the LCD but the note doesn't sound.

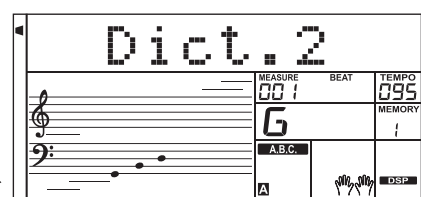
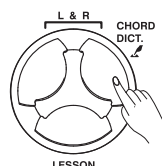
Press the E4 key in the section of CHORD TYPE which has labeled M7. The notes you should pay for the specified chord (root and chord type) are shown in the LCD as the notation and also in the keyboard diagram. When the Chord Type and Chord Root are confirmed, the LCD will display the chord and its keyboard position. A prompt sound will be heard when you play it correctly.



## DICT 2 (Chord Examining Mode)

Press the [CHORD DICT.] button again to enter the DICT 2 mode. This is an Examining mode. The chord area on the LCD will display a random chord while the keyboard position doesn't display anything on LCD.

When you play the correct chord within 3 seconds, the next chord (random) will be displayed on LCD to wait for the correct chord playing. If not, LCD will display the corresponding keyboard position automatically. In DICT 2 mode, press the [CHORD DICT.] button again to turn off chord dictionary.



24 Chords will be displayed in the dictionary mode as follows:

### Chord Root:

Note	Chord Root	Note	Chord Root
C6	C	F6#	F#/Gb
C6#	C#/Db	G6	G
D6	D	A6b	Ab/G#
E6b	Eb/D#	A6	A
E6	E	B6b	Bb/A#
F6	F	B6	B

### Chord Type:

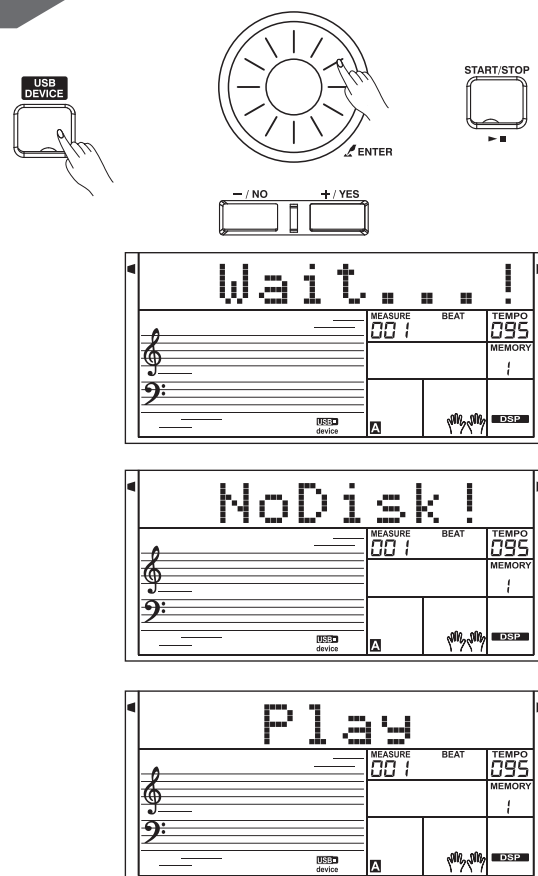
Note	Chord Type	Note	Chord Type
C4	M	C5	7(b9)
C4#	M(9)	C5#	7(9)
D4	6	D5	7(#9)
E4b	mM7	E5b	7(b13)
E4	M7	E5	7(13)
F4	m	F5	7(#11)
F4#	m(9)	F5#	dim7
G4	m6	G5	dim
Ab4	m7(9)	A5b	7aug
A4	m7	A5	aug
B4b	m7b5	B5b	7sus4
B4	7	B5	sus4

# Connecting a USB Device

There is a standard USB Storage Device external interface which supports the USB Storage Device of 16M ~ 32G capability. It is compatible with the file system format of the FAT 16/32. It is better to use the USB Storage Device which is formatted by the keyboard. Please don't edit these files which come from the keyboard at PC.

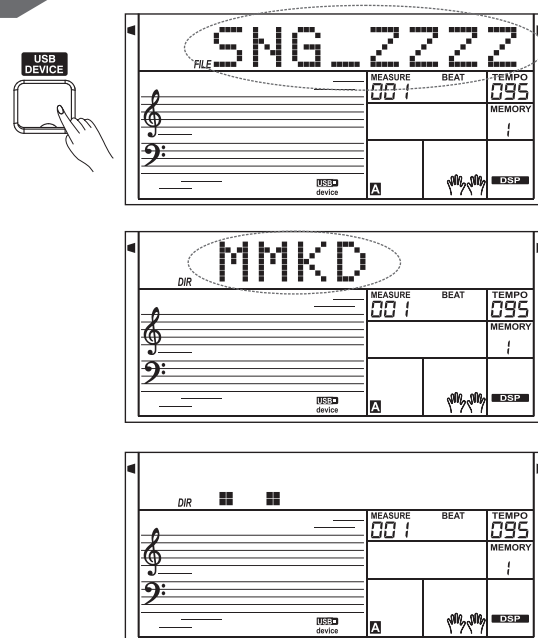
## USB Device Operation

1. In the USB Device mode, you can use the key as follows:[USB DEVICE],[ENTER],[EXIT],[+/YES],[-/NO],Data Dial and [START/STOP].
2. Press [USB DEVICE] button to enter USB Device mode, press again to exit USB Device mode.
3. The LCD will display "Wait...!" after you press [USB DEVICE] button, then if a USB Storage Device connect to the keyboard and the USB Storage Device initialize ok, the LCD display "play", if the USB Storage Device initialize fail, LCD display "DiskErr!", if the keyboard don't connect any USB Storage Device, LCD display "NoDisk!".
4. In the USB Device mode, you can use [+/YES]/[-/NO] button or Data Dial to choose menu, press [ENTER]button to enter the next operation, press [EXIT]to return to previous menu and press[USB DEVICE] button to exit USB Device mode.
5. If the midi file in USB Storage Device could be identified and selected, LCD will display file name and the "FILE" flag sign, if there is no midi file identified inside the current directory, LCD will display the sub-directory name and the "DIR" sign. The file name will display in ascending order, but you can only select the previous 512 files of the directory. When saving, loading, deleting, formatting, all key will be invalid and LCD display "Wait...!". You can press [STYLE],[SONG]and Style Direct Select button to exit USB Device mode.
6. When playing midi, press [MIXER]button to adjust the playing volume, the volume range from 0 to 127.
7. You can only deal with file in the "MMKD" directory except play and format. The LCD will not display directory name when you execute loading, saving and deleting operation.



## Play

1. Press [USB DEVICE] button to enter USB Device mode, LCD will display "Play", and then you can use [+/YES]/[-/NO]button or Data Dial to select other menu(Load, Save, Delete, Format).
2. Select the menu "Play" and press [ENTER] button, LCD will display the MIDI files and directories in the root of the USB Storage Device. If the midi file in USB Storage Device could be identified and selected, LCD will display file name and the "FILE" sign.
3. If there is no midi file identified inside the current directory, LCD will display the sub-directory name and the "DIR" sign. Press [ENTER] button to enter the current sub-directory, then new midi files or sub-directories of the directory will be displayed.
4. If there is neither midi file nor sub-directory in the current directory, LCD will display ". . ." and the "DIR" sign, you can press [ENTER] button to exit the directory.
5. Use [+/YES]/[-/NO] button or Data Dial to select a midi file. Press [START/STOP] button to play it repeatedly. Press [ENTER] button to play all files in the current directory circularly. Press [START/STOP]button again to stop playing, press [EXIT]button to return to previous menu or press [USB DEVICE] button to exit the USB Device mode.

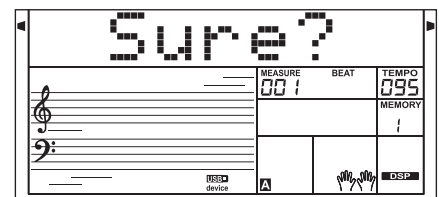
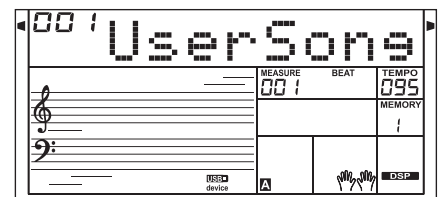
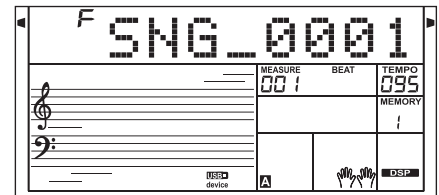
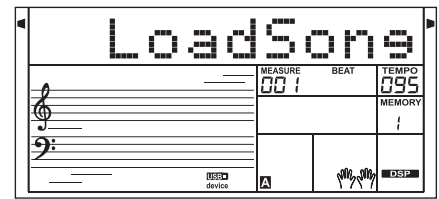


### Load

Select the menu "Load" and press [ENTER] button, the Load sub menu are displayed on LCD, it includes "LoadSong", "LoadSty", "LoadMem" and "LoadVoic". Use [+ / YES], [- / NO] button or Data Dial to select one.

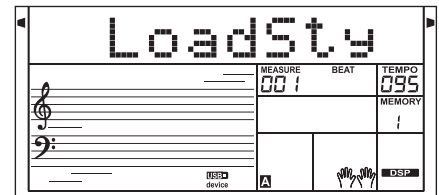
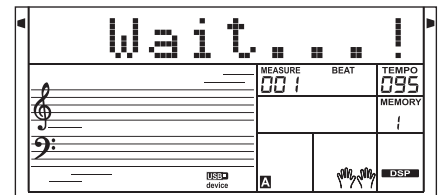
#### Load Song:

1. Select the menu "LoadSong" and press [ENTER] button, the MIDI files in the "SONG" directory of USB Storage Device are displayed on the LCD, the main name of the file includes 8 characters, the postfix name is .mid. You can select songs by using [+ / YES], [- / NO] button or Data Dial.
2. Press [ENTER] button to affirm the desired file, the user song number will be displayed on LCD, you can select them by using [+ / YES], [- / NO] button or Data Dial.
3. Press [ENTER] button, "Sure?" will be displayed on LCD, you can press [ENTER] / [+ / YES] button to load the file or press [EXIT] / [- / NO] button to cancel.



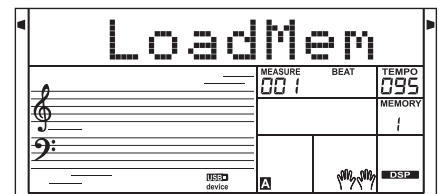
#### Load Style:

1. Select the menu "LoadSty" and press [ENTER] button, the Sty files in the "STYLE" directory of USB Storage Device are displayed on LCD, the main name of the file includes 8 characters, the postfix name is .sty. You can select styles by using [+ / YES], [- / NO] button or Data Dial.
2. Press [ENTER] button to affirm the desired file, the user style number will be displayed on LCD, you can select them by using [+ / YES], [- / NO] button or Data Dial.
3. Press [ENTER] button, "Sure?" will be displayed on LCD, you can press [ENTER] / [+ / YES] button to load the file or press [EXIT] / [- / NO] button to cancel.



#### Load Memory:

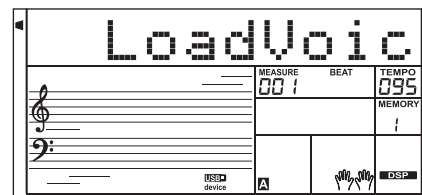
1. Select the menu "LoadMem" and press [ENTER] button, the Mem files in the "MEMORY" directory of USB Storage Device are displayed on LCD, the main name of the file includes 8 characters, the postfix name is .mem. You can select styles by using [+ / YES], [- / NO] button or Data Dial.
2. Press [ENTER] button to affirm the desired file, the user memory number will be displayed on LCD, you can select them by using [+ / YES], [- / NO] button or Data Dial.
3. Press the [ENTER] button, "Sure?" will be displayed on LCD, you can press [ENTER] / [+ / YES] button to load the file or press [EXIT] / [- / NO] button to cancel.



## Connecting a USB Device

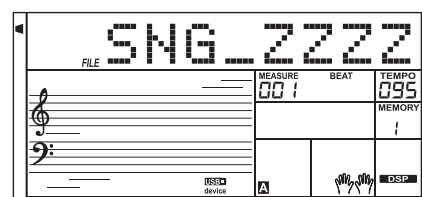
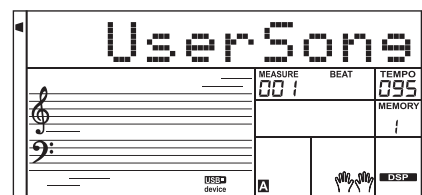
### Load Voice:

1. Select the menu "LoadVoic" and press [ENTER] button, the Voic files in the "VOICE" directory of USB Storage Device are displayed on LCD, the main name of the file includes 8 characters, the postfix name is .voc You can select styles by using [+ /YES], [- /NO] button or Data Dial.
2. Press [ENTER] button to affirm the desired file, the user voice number will be displayed on LCD, you can select them by using [+ /YES], [- /NO] button or Data Dial.
3. Press the [ENTER] button, "Sure?" will be displayed on LCD, you can press [ENTER] / [+ /YES] button to load the file or press [EXIT] / [- /NO] button to cancel.



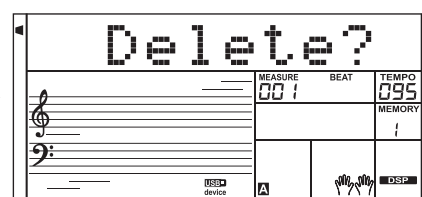
## Save

1. Select the menu "Save" and press [ENTER] button, the Save sub menu are displayed on LCD, it includes "SaveSong", "SaveSty", "SaveMem" and "SaveVoic". You can select them by using [+ /YES], [- /NO] button or Data Dial.
2. Select what you want and press [ENTER] button, if the desired file is empty, LCD will display "NoFile!", and then LCD will display the previous menu after about two second, otherwise, you can play the keyboard to input the file name, you can only input the file name in capital letters, the shift key is invalid in this mode, the maximum of the file name length is 8 letter. Each type of the data has the default file name.
3. Press [ENTER] button to save the file after the file name inputs finish, if the current directory have the same name, "SameName" will be displayed on LCD. Otherwise, "Sure?" will be displayed on LCD. You just need to press [ENTER] or [+ /YES] button to save the file.



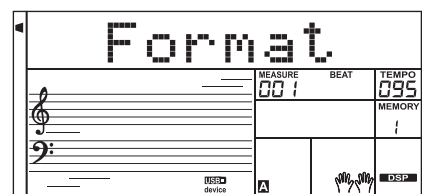
## Delete

1. Select the menu "Delete" and press [ENTER] button, the delete sub menu are displayed on LCD, it includes "UserSong", "UserSty", "UserMem" and "UserVoic". Use [+ /YES], [- /NO] button or Data Dial to select one.
2. Select the menu you want and press [ENTER] button, if the default directory have the file which accord with the menu, the file name will be displayed on LCD, otherwise, LCD display "NoFile!", and then LCD will display the previous menu after about two second.
3. Select the file that you want to delete and Press [ENTER] button, "Sure?" will be displayed on LCD, press [ENTER] or [+ /YES] button to delete the file.



## Format

Select the menu "Format" and press [ENTER] button, "Sure?" are displayed on LCD. Press [ENTER] button to format the USB Storage Device.



## Connecting a USB Device

### Keyboard and ASCII Character Relative Table

NOTE	C2	C#2	D2	Eb2	E2	F2	F#2	G2	Ab2	A2	Bb2	B2
LETTER	SHIFT	DEL	BACK	NEXT	A	B	C	D	E	F	G	H

NOTE	C3	C#3	D3	Eb3	E3	F3	F#3	G3	Ab3	A3	Bb3	B3
LETTER	I	J	K	L	M	N	O	P	Q	R	S	T

NOTE	C4	C#4	D4	Eb4	E4	F4	F#4	G4	Ab4	A4	Bb4	B4
LETTER	U	V	W	X	Y	Z	0	1	2	3	4	5

NOTE	C5	C#5	D5	Eb5	E5	F5	F#5	G5	Ab5	A5	Bb5	B5
LETTER	6	7	8	9	!	#	\$	%	&	,	[	]

NOTE	C6	C#6	D6	Eb6	E6	F6	F#6	G6	Ab6	A6	Bb6	B6
LETTER	-	@	^	`	{	}						



# MIDI

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

## What's MIDI?

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

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

## Midi Terminals

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

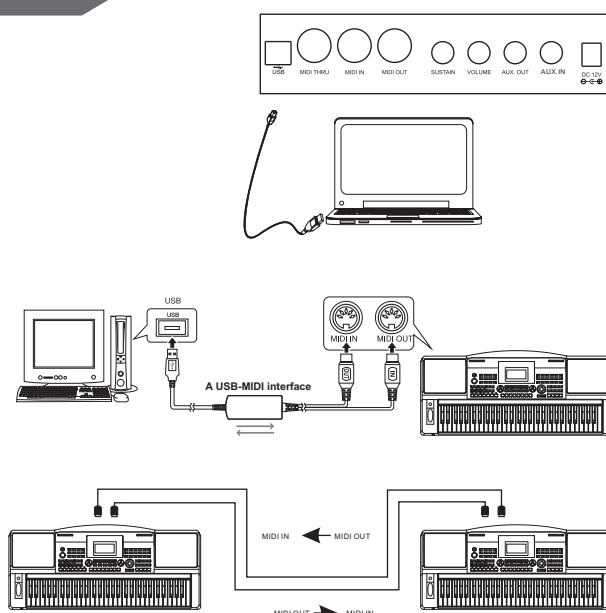
**MIDI IN:** Receives MIDI data from a computer.

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

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

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

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



## Downloading Data from the Computer

Connect a standard USB cable between the rear-panel of the USB jack of the instrument and the USB jack on your computer.

Power on the instrument first, and then open the PCSUITE software in your computer, the "PCLink.." will be displayed on LCD. The PCSUITE will connect successfully with the instrument.

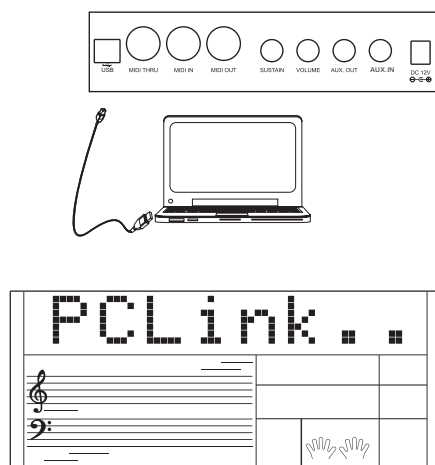
You can download SMF MIDI files to the keyboard as user songs or upload the user songs.

You can upload user styles to the computer as a backup or download them to the keyboard.

You can upload user voices to the computer as a backup or download them to the keyboard.

You can upload memory files to the computer as a backup or download them to the keyboard.

Concrete operating methods see software operation instructions!





# Troubleshooting

Problem	Possible Cause and Solution
The speakers produce a “pop” sound whenever the power is turned ON or OFF.	This is normal and is no cause for alarm.
No sound when the keyboard is played.	The R1/R2/L voice volume (Mixer) settings could be set too low. Make sure the voice volumes are set at appropriate levels.
When using a mobile phone, noise is produced.	Using a mobile phone in close proximity to the instrument may produce interference. To prevent this, turn off the mobile phone or use it further away from the instrument.
The auto accompaniment does not play back even Sync is in standby condition and a key is pressed.	You may be trying to start accompaniment by playing a key in the right-hand range of the keyboard. To start the accompaniment with Sync Start, make sure to play a key in the left-hand range of the keyboard.
Certain notes sound at wrong pitch.	Make sure that the tuning value is set to “0” . Press and hold the [+ /YES] and [- /NO] 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 voice R1.

# Specifications

## LCD Display

Multi-functional LCD

## Keys

61

## Polyphony

128

## Voice

654 melody voices (including 81 Chinese voices) + 12 drum sets (including 299 percussive voices) + 10 user voices

## Style

270 preset styles, 5 user styles

## Song

120 preset songs, 5 user songs

## Demo

5

## Control button

Power on/off switch, Volume, Perform., IFX, Tempo+/-, Mixer, Function, Lesson, Left, Right/Chord Dict., Bank, Store, M1-M6, Freeze, O.T.S., Enter, Back, +/Yes, -/No, Style, Voice, Demo, Song, Piano, Metro, Dual, Touch, Sustain, Lower, DSP, Harmony, Synth, USB Device.

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

## Accompaniment Control

Start/Stop, Sync stop, Sync start, Intro1/Ending1 [Pause], Intro2/Ending2[REPEAT A/B ], Fill-in A [FF], Fill-in B [Rew], Fill-in C, Fill-in-D, Fade, A.B.C.

## Record Function

Record, Accomp, Melody 1, Melody 2, Melody 3, Melody 4, Melody 5.

## Panel Memory

48

## Connectors

DC IN, Headphones, AUX IN, AUX OUT, Sustain-pedal, Volume Pedal, USB, MIDI IN, MIDI OUT, MIDI THRU, U-HOST.

## Power Supply

DC IN

## Speaker

15W+15W, 25W+25W

## Dimensions

970(L)X390(W)X160(H)MM

## Weight

9Kg

# Voice List

No.	Name	LCD Name
<b>PIANO</b>		
1	Stereo Grand Piano	StGrdPno
2	Acoustic Grand Piano (wide)	GrandPnW
3	Acoustic Grand Piano (wide) 2	GrandPW2
4	Acoustic Grand Piano (dark)	GrandPnD
5	Octave Piano 1	OctPno1
6	Octave Piano 2	OctPno2
7	Dreamscape	Dreamscp
8	Piano & Strings	Pno&Str
9	Piano & Choir	Pno&Cho
10	Acoustic Grand Piano	GrandPno
11	Stereo Bright Piano	StBrnPno
12	Bright Acoustic Piano	BritePno
13	Bright Acoustic Piano (wide)	BritePnW
14	Bright Acoustic Piano (wide) 2	BritePW2
15	Chorus Piano	ChoruPno
16	Piano Pad	PianoPad
17	Piano & Vibraphone	Pno&Vib
18	Electric Grand Piano	E.Grand
19	Electric Grand Piano (wide)	E.GrandW
20	Stereo Honk-Tonk	StHonkTo
21	Honky-tonk Piano	HnkyTonk
22	Honky-tonk Piano (wide)	HnyTonkW
23	Honky-tonk Piano (wide) 2	HnyTonW2
24	Stereo Hard Electric Piano	StHarEp
25	Detuned Electric Piano 1	DetunEP1
26	Detuned Electric Piano 2	DetunEP2
27	Detuned Electric Piano 3	DetunEP3
28	Electric Piano 1	E.Piano1
29	Electric Piano 2	E.Piano2
30	Electric Piano (wide) 1	EPnoW1
31	Electric Piano (wide) 2	EPnoW2
32	EP Legend	EPLegend
33	EP Phase	EPPhase
34	60's Electric Piano	60'sEP
35	Electric Piano 1 (velocity mix)	E.PnoV1
36	Electric Piano 2 (velocity mix)	E.PnoV2
37	Velocity Crossfade Electric Piano	VeCrosEP
38	Layered Electric Piano 1	LayerEp1
39	Layered Electric Piano 2	LayerEp2
40	Nylon Electric Piano	NylonEP
41	Warm Electric Piano	WarmEp
42	Cloudy Electric Piano	CloudyEp
43	Grand Harpsichord	GraHarps
44	Harpsichord	Harpsi
45	Harpsichord 2	Harpsi2
46	Harpsichord (wide)	HarpsiW
47	Harpsichord (octave mix)	HarpsiO
48	Harpsichord (octave mix) 2	HarpsiO2
49	Harpsichord Release	HarpsiR
50	Harpsichord (with key off)	HarpsiOf
51	Piano & Harpsichord	Pno&Harp
52	Stereo Clavichord	StClavi
53	Clavi	Clavi
54	Clavi 2	Clavi2

No.	Name	LCD Name
55	Clavi (wide) 1	ClaviW1
56	Clavi (wide) 2	ClaviW2
57	Clavi Wah	ClaviWa
58	Pulse Clavi	PluseClv
<b>CHROMATIC PERCUSSION</b>		
59	Celesta	Celesta
60	Celesta 2	Celesta2
61	Birght Celesta	BirCelea
62	Celesta & Sine	Celes&Si
63	Reecho Bell	RechBell
64	Celesta & Music Box	Celes&MB
65	Glockenspiel	Glocken
66	Glockenspiel 2	Glocken2
67	Glockenspiel & Sine	Glock&Si
68	Glockenspiel & Celesta	Glock&Ce
69	Music Box	MusicBox
70	Music Box 2	MusicBo2
71	Music Box 3	MusicBo3
72	Toy Box	ToyBox
73	Music Box & Harp	Mbx&Harp
74	Stereo Vibrapho	StVibes
75	Rigid Vibraphone	RigiVibe
76	Vibraphone	Vibra
77	Vibraphone 2	Vibra2
78	Vibraphone (wide)	VibraW
79	Vibraphone (wide) 2	VibraW2
80	Vibraphone & Bell	Bell&Vib
81	Vibraphone & Harpsichord	Vib&Harp
82	Marimba	Marimba
83	Marimba 2	Marimba2
84	Marimba (wide)	MarimbaW
85	Sine Marimba	SinMmb
86	Stereo Marimba	StMarim
87	Marimba & Vibraphone	Mar&Vib
88	Wood Drum	WoodDrum
89	Xylophone	Xylophon
90	Xylophone 2	Xylopho2
91	Tubular Bells	TubulBel
92	Church Bell	ChurBell
93	Carillon	Carillon
94	Dulcimer	Dulcimer
95	Santur	Santur
96	Shorty	Shorty
<b>ORGAN</b>		
97	Drawbar Organ	DrawOrgn
98	Drawbar Organ 2	DrawOrg2
99	Soft Stereo Drawbar Organ	SfDrawOr
100	Mellow Drawbar Organ	MellDrOr
101	Detuned Drawbar Organ	DeDraOrg
102	Detuned Drawbar Organ 2	DeDraOr2
103	Italian 60's Organ	60'sOrgn
104	1970 Percussive Organ	1970PcOr
105	Percussive Organ	PercOrgn
106	Percussive Organ 2	PercOrg2
107	Light Click Organ	LClickOr

No.	Name	LCD Name
108	Detuned Percussive Organ	DePerOrg
109	Stereo Rotary Organ	StRotaOr
110	Rock Organ	RockOrgn
111	Rotary Organ	RotaOrgn
112	Slow Rotary Organ	SloRotOr
113	Detuned Church Organ	DeChuOrg
114	Church Organ	ChurOrgn
115	Church Organ 2	ChurOrg2
116	Church Organ (octave mix)	ChurOrgO
117	Reed Organ	ReedOrgn
118	Puff Organ	PuffOrgn
119	Accordion	Acordion
120	Accordion 2	Acordin2
121	Accordion 3	Acordin3
122	Chorus Accordion	ChAccord
123	Mustte	Mustte
124	Accord It Solo	AccordSo
125	Sweet Harmonica	SwetHarm
126	Harmonica	Harmonica
127	Harmonica 2	Harmonic2
128	Detuned Harmonica	DetHarmo
129	Tango Accordion	TangoAcad
<b>GUITAR</b>		
130	Acoustic Guitar (nylon)	NylonGtr
131	Acoustic Guitar (nylon 2)	NylonGt2
132	Acoustic Guitar (nylon + key off)	NylGtrOf
133	Ukulele	Ukulele
134	Velocity Nylon Guitar	NylnGtVe
135	Chorus Nylon Guitar	ChoNyGt
136	Bright Nylon Guitar	BrNyGt
137	Acoustic Guitar (steel)	SteelGtr
138	Acoustic Guitar (steel) 2	SteelGt2
139	Steel Guitar with Body Sound	SteelBdy
140	Tremolo Steel Guitar	TremGt
141	Mandolin	Mandolin
142	12-Strings Guitar	12StrGtr
143	Chorus Steel Guitar	ChoSteGt
144	Nylon & Steel Guitar	Ny&SteGt
145	Stereo Steel Guitar	StSteGt
146	Steel Guitar Bend	GtBend
147	Steel Guitar Harmonics	GtHarm
148	Velocity Steel Guita 1	VelSte1
149	Velocity Steel Guita 2	VelSte2
150	Velocity Steel Guita 3	VelSte3
151	Velocity Steel Guita 4	VelSte4
152	Electric Guitar (jazz)	JazzGtr
153	Electric Guitar (jazz) 2	JazzGt2
154	Electric Guitar (pedal steel)	PedalGtr
155	Mellow Guitar	MelloGt
156	Velocity Jazz Guitar	JazzGtVe
157	Jazz Guitar Detuned	JazzGtDt
158	Mid Tone Guitar	MidTonGt
159	Electric Guitar (clean)	CleanGtr
160	Electric Guitar (clean) 2	CleanGt2
161	Stereo Clean Guitar	StCleGtr

## Voice List

No.	Name	LCD Name
162	Velocity Clean Guitar	CleGtVel
163	Electric Guitar (detuned clean)	DetClnGt
164	Electric Guitar (muted velo-sw)	MutVelGt
165	Electric Guitar (muted)	MutedGtr
166	Electric Guitar (funky cutting)	FunkGt
167	Jazz Man	JazzMan
168	Stereo Muted Guitar	StMuGt
169	Guitar Pinch	GtPinch
170	Overdriven Guitar	Ovrdrive
171	Detuned Overdriven Guitar	DtOdrvGt
172	Distortion Guitar	DistGtr
173	Distortion Guitar 2	DistGt2
174	Distortion Guitar (with feedback)	FeedbkGt
175	Distortion Guitar (with feedback) 2	FeedbkG2
176	Distorted Rhythm Guitar	DistRyth
177	5th Distortion	5thDist
178	Distortion Guitar Octave	DistGtO
179	Stereo Distorted Guitar	StDistor
180	Guitar Feedback	GtrFedbck
181	Guitar Harmonics	GtrHarmo
<b>BASS</b>		
182	Acoustic Bass	AcoBass
183	Acoustic Bass 2	AcoBass2
184	Acoustic Bass Detuned	AcosBaDt
185	Acoustic Bass Filter	AcBasFil
186	Jazz Style	JazzSty
187	A.Bass & Mute G.T.	Bs&GtMu
188	Resonant Bass	ResBass
189	Velocity Crossfade Bass	VelCBass
190	Wah Bass 1	WahBass1
191	Wah Bass 2	WahBass2
192	Electric Bass (finger)	FngrBass
193	Electric Bass (finger) 2	FngrBas2
194	Electric Bass (finger) 3	FngrBas3
195	Detuned Finger Bass	DtFngrBa
196	Dark Finger Bass	DarkFiBs
197	Finger Slap Bass	FngrSlap
198	Resonant Finger Bass	ResoFnBa
199	Wah Finger Bass	WahFnBs
200	Bass & Distorted Elec Guitar	Ba&DtEG
201	Electric Bass (pick)	PickBass
202	Electric Bass (pick) 2	PickBas2
203	Mute Pick Bass	MuPkBass
204	Detuned Pick Bass	DetPicBs
205	Fretless Bass	Fretless
206	Fretless Bass 2	Fretlss2
207	1990 Bass	90Bass
208	Fretless Bass & Sine	Fret&Sin
209	Fretless Bass Detuned 1	FretDet1
210	Fretless Bass Detuned 2	FretDet2
211	Fretless Bass Detuned 3	FretDet3
212	Slap Bass 1	SlapBas1
213	Slap Bass 2	SlapBas2
214	Slap Bass 3	SlapBas3
215	Slap Bass 4	SlapBas4

No.	Name	LCD Name
216	Power Slap Bass	PowSlap
217	Lash Thumb Bass	LashThm
218	Resonant Slap Bass	ResonSlp
219	Velocity Switch Slap Bass	VeloSSlp
220	Synth Bass 1	SynBass1
221	Synth Bass 2	SynBass2
222	Synth Bass 3 (resonance)	ResoBass
223	Synth Bass 4 (attack)	AtackBas
224	Synth Bass (warm)	WarmBass
225	Clavi Bass	ClavBass
226	Hammer	Hammer
227	Synth Bass (rubber)	RubbBass
228	Attack Pulse	AtackPls
<b>STRINGS &amp; ORCHESTRAL INSTRUMENTS</b>		
229	The Violin	TheVin
230	Violin	Violin
231	Violin 2	Violin2
232	Violin (slow attack)	SlViolin
233	Mono Violin	MonoVin
234	Octave Violin	OctVin
235	Electric Violin	EViolin
236	Violin & Viola	Vin&Vio
237	Two Violin	TwoVin
238	Soft Violin	SoftVin
239	Velocity Violin	VelVioli
240	Viola	Viola
241	Viola 2	Viola2
242	Viola 3	Viola3
243	Dark Viola	ViolaD
244	Cello	Cello
245	Cello 2	Cello2
246	Cello 3	Cello3
247	Cello 4	Cello4
248	Celloen 16'	Celloen
249	Chamber Music	Chamber
250	Contrabass	Contrabs
251	Contrabass 2	Contrbs2
252	Tremolo Strings	TremStr
253	Tremolo Strings 2	TremStr2
254	Slow Tremolo Strings 1	SlwTrSt1
255	Slow Tremolo Strings 2	SlwTrSt2
256	Pizzicato Strings	PizzStr
257	Pizzicato Strings 2	PizzStr2
258	Octave Pizzicato	OctoPizz
259	Orchestral Harp	Harp
260	Orchestral Harp 2	Harp2
261	Yang Chin	YangChin
262	Africa	Africa
263	Timpani	Timpani
264	Timpani 2	Timpani2
<b>ENSEMBLE</b>		
265	The Strings	TheStr
266	String Ensembles 1	Strings1
267	String Ensembles 2	Strings2
268	Synth Strings 1	SynStrs1

No.	Name	LCD Name
269	Synth Strings 2	SynStrs2
270	Synth Strings 3	SynStrs3
271	Synth Strings 4	SynStrs4
272	Synth Strings 5	SynStrs5
273	Resonant Strings	ResonSt
274	Stereo Slow Strings	SSlowStr
275	Slow Strings	SlowStr
276	Strings and Brass	Str&Bras
277	Legato Strings	LegatStr
278	Orchestra	Orchstr
279	Arco Strings	ArcoStr
280	60's Strings	60'sStr
281	1970 Strings	70'sStr
282	Solo Strings	SoloStr
283	Choir Aahs	ChoirAah
284	Choir Aahs 2	ChoirAh2
285	Choir Aahs 3	ChoirAh3
286	Choir Aahs 4	ChoirAh4
287	Mellow Choir	MelCho
288	Stereo Choir Aahs	StChoir
289	Strings & Choir	StrChoir
290	Humming	Humming
291	Voice Oohs	VoiceOoh
292	Analog Voice	AnaVoice
293	Synth Voice	SynVoice
294	Choral	Choral
295	Bass Hit Plus	BassHit
296	Orchestra Hit	OrchHit
297	Orchestra Hit 2	OrchHi2
298	Euro Hit	EuroHit
299	6th Hit	6thHit
<b>BRASS</b>		
300	Trumpet	Trumpet
301	Trumpet 2	Trumpet2
302	Trumpet 3	Trumpet3
303	Dark Trumpet Soft	DarkTrp
304	Resonant Trumpet	ResoTp
305	Sweet Trumpet	SweetTp
306	Wah Trumpet	WahTp
307	Trombone	Trombone
308	Trombone 2	Trmbone2
309	Bright Trombone	BritBone
310	Dark Trombone	DarkTrom
311	Strings & Trombone	Str&Trb
312	Tuba	Tuba
313	Tuba 2	Tuba2
314	Tuba Solo	TubaSolo
315	Soft Tuba	SoftTuba
316	Muted Trumpet	MuteTrp1
317	Muted Trumpet 2	MuteTrp2
318	French Horn	FrHorn
319	French Horn 2 (warm)	FrHorn2
320	French Horn 3	FrHorn3
321	Stereo French Horn	StFrHorn
322	Horn Orchestra	5thHornO

# Voice List

No.	Name	LCD Name
323	Brass Section	Brass
324	Brass Section 2 (octave mix)	Brass2
325	Brass Section 3	Brass3
326	Brass Section 4	Brass4
327	Brass Section 5	Brass5
328	Brass Swell	BrasSwel
329	Brass Band	BrasBand
330	Bright Brass Section	BrBraSec
331	Dark Brass	DarkBras
332	Mute Brass Ensemble	MuteEns
333	Sforzato Brass	SfrzBras
334	Brass & Strings	Bras&Str
335	Synth Brass 1	SynBras1
336	Synth Brass 2	SynBras2
337	Synth Brass 3	SynBras3
338	Synth Brass 4	SynBras4
339	Analog Synth Brass 1	AnaBras1
340	Analog Synth Brass 2	AnaBras2
341	Jump Brass	JumpBras
342	Octave Synth Brass	SynBraOc
343	Synth Brass & Strings 1	SyBr&St1
344	Synth Brass & Strings 2	SyBr&St2
345	Echo Brass	EchoBr
<b>REED</b>		
346	Soprano Sax	SprnoSax
347	Soprano Sax 2	SprnSax2
348	Soprano Sax Soft	SopSaxSf
349	Slow Soprano Sax	SlSopSax
350	Sweet Soprano Sax	SweSpSax
351	Alto Sax	AltoSax
352	Soft Alto Sax	SoftAlto
353	Super Alto Sax	SuprAlto
354	Sax Band	SaxBand
355	Tenor Sax	TenorSax
356	Tenor Sax 2	TenoSax2
357	Baritone Sax	BariSax
358	Soft Baritone Sax	SoftBari
359	Sweet Oboe	SwetOboe
360	Oboe	Oboe
361	Oboe 2	Oboe2
362	English Horn	EngHorn
363	English Horn 2	EngHorn2
364	Analog Horns	AnaHorns
365	Woodwinds	Woodwind
366	Bassoon	Bassoon
367	Bassoon 2	Basson2
368	Clarinet	Clarinet
369	Clarinet 2	Clarine2
<b>PIPE</b>		
370	Piccolo	Piccolo
371	Flute	Flute
372	Sweet Flute	SweeFlut
373	Recorder	Recorder
374	Sweet Pan Flute	SwPanFu
375	Pan Flute	PanFlute

No.	Name	LCD Name
376	Dark Pan Flute	DarPanFu
377	Blown Bottle	Bottle
378	Shakuhachi	Shakhchi
379	Whistle	Whistle
380	Whistle 2	Whistle2
381	Ocarina	Ocarina
<b>SYNTH LEAD</b>		
382	Lead 1 (square)	SquareLd
383	Square	Square
384	Lead 1b (sine)	SineLead
385	Slow Square Lead	SlwSquLd
386	Sine Solo	SineSolo
387	Square Lead 1	SquarLd1
388	Lead 1a (square 2)	SquarLd2
389	Thick Square	ThickSqu
390	Corrie	Corrie
391	Quint	Quint
392	2 Oscillators Lead	2OscLd
393	Lead 2a (sawtooth 2)	SawLead2
394	Lead 2d (sequenced analog)	SquAnaLd
395	Wavy Sawtooth	WavySaw
396	Lead 2 (sawtooth)	SawLead1
397	Lead 2b (saw + pulse)	SawPlsLd
398	Super Analog	SuperAna
399	Big Lead	BigLead
400	Lead 2c (double sawtooth)	DubSawLd
401	Bauble Lead	BaubleLd
402	PWM 4th	PWM4th
403	Lead 3 (calliope)	CaliopLd
404	Lead 4 (chiff)	ChiffLd
405	Lead 5 (charang)	CharanLd
406	Lead 5a (wire lead)	WireLead
407	Lead 6 (voice)	VoiceLd
408	Lead 7 (fifths)	FifthsLd
409	Fifths Lead Soft	FiftLdSf
410	Fifth Lead	FifLead
411	Lead 8 (bass + lead)	BassLead
412	Massiness	Massin
413	Lead 8a (soft wrt)	SftWrtLd
<b>SYNTH PAD</b>		
414	Pad 1 (new age)	NewAgePd
415	Slow Square	SlowSqu
416	New Year Pad	NewYrPd
417	Pad 2 (warm)	WarmPad
418	PWM Pad	PWMPad
419	Pad 2a (sine pad)	SinePad
420	Warmly Pad	WarmlyPd
421	Horn Pad	HornPad
422	Pad 3 (polysynth)	PolySyPd
423	Pad 3 (polysynth) 2	PolySyP2
424	Click Pad	ClickPd
425	Analog Pad	AnaloPad
426	Poly Pad	PolyPad
427	Pad 4 (choir)	ChoirPad
428	Pad 4a (itopia)	ItopiaPd

No.	Name	LCD Name
429	Pad 5 (bowed)	BowedPad
430	Pad 5 (bowed) 2	BowdPad2
431	Pad 6 (metallic)	MetalPad
432	Pad 6 (metallic) 2	MetaPad2
433	Pan Pad	PanPad
434	Pad 7 (halo)	HaloPad
435	Pad 7 (halo) 2	HaloPad2
436	Pad 8 (sweep)	SweepPad
437	Pad 8 (sweep) 2	SweePad2
438	Dipolar Pad	DipolPad
439	Rising	Rising
440	Congregate	Congrega
<b>SYNTH SFX</b>		
441	FX 1 (rain)	FXRain
442	FX 2 (soundtrack)	Soundtrk
443	Progenitor	Progenit
444	FX 3a (synth mallet)	SynMalet
445	FX 3 (crystal)	Crystal
446	FX 4 (atmosphere)	Atmosphr
447	Warm Air	WarmAir
448	FX 5 (brightness)	Bright
449	Smog	Smog
450	FX 6 (goblins)	Goblins
451	Choir Bell	ChoirBel
452	FX 7 (echoes)	Echoes
453	FX 7 (echoes) 2	Echoes2
454	FX 7a (echo bell)	EchoBell
455	FX 7a (echo bell) 2	EchoBel2
456	FX 7b (echo pan)	EchoPan
457	FX 8 (sci-fi)	Sci-Fi
<b>ETHNIC MISC.</b>		
458	Sitar	Sitar
459	Sitar 2 (bend)	Sitar2
460	Banjo	Banjo
461	Shamisen	Shamisen
462	Koto	Koto
463	Taisho Koto	TaishoKt
464	Kalimba	Kalimba
465	Bag Pipe	Bagpipe
466	Fiddle	Fiddle
467	Shanai	Shanai
<b>PERCUSSIVE</b>		
468	Tinkle Bell	TnklBell
469	Agogo	Agogo
470	Steel Drums	SteelDrm
471	Woodblock	WoodBlok
472	Castanets	Castanet
473	Taiko Drum	TaikoDum
474	Concert Bass Drum	ConBasDm
475	Melodic Tom	MelodTom
476	Melodic Tom 2 (power)	MeldTom2
477	Synth Drum	SynDrum
478	Rhythm Box Tom	RhythBox
479	Electric Drum	ElecDrum
480	Reverse Cymbal	RevCymbI

## Voice List

No.	Name	LCD Name
<b>SFX</b>		
481	Guitar Fret Noise	FretNoiz
482	Guitar Cutting Noise	GtCtNoiz
483	Acoustic Bass String Slap	BsStSlap
484	Breath Noise	BrthNoiz
485	Flute Key Click	FlKeyClk
486	Seashore	Seashore
487	Rain	Rain
488	Thunder	Thunder
489	Wind	Wind
490	Stream	Stream
491	Bubble	Bubble
492	Bird Tweet	Tweet
493	Dog	Dog
494	Horse Gallop	HouseGlP
495	Bird Tweet 2	Tweet2
496	Sheep	Sheep
497	Telephone Ring	Telephone
498	Telephone Ring 2	Telphon2
499	Door Creaking	DoorCrek
500	Door	Door
501	Scratch	Scratch
502	Wind Chime	WindChim
503	Helicopter	Helicptr
504	Car Engine	CarEngin
505	Car Stop	CarStop
506	Car Pass	CarPass
507	Car Crash	CarCrash
508	Siren	Siren
509	Train	Train
510	Jetplane	Jetplane
511	Starship	Starship
512	Burst Noise	BurtNois
513	Applause	Applause
514	Laughing	Laughing
515	Screaming	Scream
516	Punch	Punch
517	Heart Beat	HeartBet
518	Footsteps	Footstep
519	Gunshot	Gunshot
520	Machine Gun	MachnGun
521	Laser gun	Laser gun
522	Explosion	Explosio
<b>COMBINED VOICE</b>		
523	Stereo Piano & Strings Pad	StPn&Str
524	Stereo Piano & Choir	StPn&Cho
525	Stereo Piano & Synth Strings	StPn&Syn
526	Stereo Piano & Warm Pad	StPn&Pad
527	Stereo Piano & Soft Ep	StPn&Ep
528	FM Electric Piano	FMEp
529	Digital Piano	DigiPn
530	E.Piano & Strings	EP&Str
531	E.Piano & Ac Guitar	EP&Gt
532	E.Piano & Vibraphone	Ep&Vib
533	E.Piano 2 & Pad	Ep&Pad

No.	Name	LCD Name
534	E.Piano 2 & Strings	Ep2&Str
535	Harpichord & Stereo Strings	Harps&St
536	Music Box & Stereo Strings	Mxb&Str
537	Vibraphone & Stereo Strings	Vib&Str
538	Vibraphone Octave	VibOct
539	Vibraphone & Marimba & Kalimba	VibMK
540	Marimba & Kalimba	Mar&Kal
541	Marimba Delay	MarDel
542	Xylophone Octave	XylopOct
543	Organ & Stereo Strings	Org&Str
544	Stereo Organ & Piano	StOr&Pno
545	Rock Organ & Strings	RoOr&Str
546	Church Organ & Choir	ChuOr&Ch
547	Church Organ & Strings	ChuOr&St
548	Acoustic Guitar & Flute	Gt&Fl
549	Acoustic Guitar & Clav	Gt&Cl
550	24 String Guitar	24Gt
551	Steel Guitar & Warm Pad	StGt&Pad
552	Stereo Strings & Horn	StStr&Hn
553	Orchestra	Orchest
554	Full Strings 1	FullStr1
555	Full Strings 2	FullStr2
556	Symphonic	Symphon
557	Stereo Choir & Strings	StCh&Str
558	Stereo Choir & Steel Guitar	Ch&Gt
559	3 Trumpet Loose	3Trump
560	Trombone & Stereo Strings	Tb&StStr
561	3 Trombones Loose	3Tromb
562	3 Muted Trumpets Loose	3MuTrumb
563	Club Brass	ClubBras
564	Brass & Woodwinds	Br&Wood
565	Woodwinds & Strings	Wind&Str
566	Section Woods Small	WoodSma
567	Pan Flute & Strings Pad	PanFu&St
568	Koto & Shamisen	Koto&Sh
<b>CHINESE INSTRUMENTS</b>		
569	GuZheng	GuZheng
570	GuZheng YaoZhi	GuZhenYZ
571	GuZheng Harmonic	GuZhenHa
572	GuZheng YaoZhi/Long	GuZhenYL
573	GuZheng Harmonic/Long	GuZhenHL
574	GuZheng YaoZhi/Harmonic	GuZhenYH
575	GuZhen Long/YaoZhi/Harmonic	GuZheLYH
576	GuZheng & YangQin	GuZhenYQ
577	YueQin	YueQin
578	YueQin & PiPa	YueQinPi
579	YangQin	YangQin
580	Yangqin LunZhi	YangLunZ
581	Yangqin FanZhu	YangFanZ
582	Yangqin LunZhi/Long	YangLunL
583	Yangqin FanZhu/Long	YangFanL
584	Yangqin LunZhi/FanZhu	YangLunF
585	Yangqin Long/LunZhi/FanZhu	YangLoLF
586	SanXian	SanXian
587	SanXian & PiPa	SanXianP

## Voice List

No.	Name	LCD Name
588	DaRuan	DaRuan
589	DaRuan & ZhongRuan	DaRuanZR
590	Midiruan	Midiruan
591	GuQin	GuQin
592	PiPa	PiPa
593	PiPa YaoZhi	PiPaYaoZ
594	PiPa Harmonic	PiPaHarm
595	PiPa YaoZhi/Long	PiPaYaZL
596	PiPa Harmonic/Long	PiPaHarL
597	PiPaYaoZhi/Harmonic	PiPaYaZH
598	PiPaLong/YaoZhi/Harmonic	PiPaLoYH
599	PiPa & YangQin	PiPaYang
600	LiuQin	LiuQin
601	ReWaPu	ReWaPu
602	DuXianQin	DuXian
603	Banhu	Banhu
604	BanHu & GaoHu	BanHGaoH
605	Zhonghu	Zhonghu
606	ErHu 1	ErHu1
607	Erhu Tremolo	ErhuTrem
608	Erhu Pizz	ErhuPizz
609	Erhu Tremolo/Long	ErhuTrLo
610	Erhu Pizz/Long	ErhuPiLo
611	Erhu Tremolo/Pizz	ErhuTrPi
612	Erhu Long/Tremolo/Pizz	ErhuLoTP
613	ErHu 2	ErHu2
614	GaoHu	GaoHu
615	Jinghu	Jinghu
616	ErHugang	ErHuang
617	Zhuiqin	Zhuiqin
618	BaWu	BaWu
619	QuDi	QuDi
620	Qudi ShuangTu	QudiShTu
621	Qudi QiZhenYin	QudiQiYi
622	Qudi ShuangTu/Long	QudiShLo
623	Qudi QiZhenYin/Long	QudiQiLo
624	Qudi ShuangTu/QiZhenYin	QudiShQi
625	Qudi Long/ShuangTu/QiZhenYin	QudiLoSQ
626	QuDi & BangDi	QudiBaDi
627	Bandi	Bandi
628	Xindi	Xindi
629	XInDi & KouDi	XDKouDi
630	Koudi	Koudi
631	Hulusi	Hulusi
632	LuSheng 1	LuShen1
633	LuSheng 2	LuShen2
634	Xiao	Xiao
635	GuanZi & Xiao	GuanZiXi
636	Xun	Xun
637	Xun & Xiao	Xun&Xiao
638	SuoNa	SuoNa
639	SuoNa Tremolo	SuoNaTre
640	SuoNa HuaShe	SuoNaHua
641	SuoNa Tremolo/Long	SuoNaTLo
642	SuoNa HuaShe/Long	SuoNaHlo

No.	Name	LCD Name
643	SuoNa Tremolo/HuaShe	SuoNaTrH
644	SuoNa Long/Tremolo/HuaShe	SuoNaLTH
645	HiSuoNa	HiSuoNa
646	GuanZi	GuanZi
647	HouGuan	HouGuan
648	Huang	Huang
649	PaiXiao	PaiXiao
ORIENTAL INSTRUMENTS		
650	Kanoun	Kanoun
651	Aoud	Aoud
652	Bouzouk	Bouzouk
653	Nay	Nay
654	Mizmar	Mizmar
DRUM SET		
655	Standard Set	StandSet
656	Room Set	RoomSet
657	Power Set	PowerSet
658	Electronic Set	ElectSet
659	Analog Set	AnalgSet
660	Jazz Set	JazzSet
661	Brush Set	BrushSet
662	Orchestra Set	OrcheSet
663	SFX Set	SFXSet
664	Chinese Set	ChineSet
665	Chinese Set (Mix)	ChineMix
666	Arabic Set	ArabiSet



# Style List

No.	Name	LCD Name
<b>8 BEAT</b>		
1	8Beat Piano	8BtPiano
2	8Beat 1	8Beat1
3	8Beat Shuffle	8BtShuf1
4	Guitar Pop 1	GtPop1
5	8Beat Hip Hop	8BtHlHop
6	8Beat R&B	8BeatR&B
7	8Beat Pop	8BtPop
8	Pop Funk 1	PopFunk1
9	Rhythm & Beat 1	Rhy&Bt1
10	8Beat Disco 1	8BtDisc1
11	8Beat Rock	8BtRock
12	Guitar Pop 2	GtPop2
13	8Beat 2	8Beat2
14	Sweet Beat	SweetBt
15	8Beat Dance	8BtDance
16	8Beat Disco 2	8BtDisc2
17	Pop Funk 2	PopFunk2
18	8Beat 3	8Beat3
19	60' s 8Beat	60's8Bt
20	Rhythm & Beat 2	Rhy&Bt2
<b>16 BEAT</b>		
21	16Beat 1	16Beat1
22	16Beat Funk 1	16BtFuk1
23	16Beat Ballad 1	16BtBld1
24	16Beat R&B	16BtR&B
25	Pop 16Beat 1	Pop16Bt1
26	16Beat Funk 2	16BtFuk2
27	16Beat Dance	16BDanc
28	Pop 16Beat 2	Pop16Bt2
29	16Beat 2	16Beat2
30	Pop 16Beat 3	Pop16Bt3
31	Pop 16Beat 4	Pop16Bt4
32	Modern 16Beat	Modm16B
33	16Beat Hot	16BtHot
34	16Beat Modern	16BModr
35	16Beat Funk 3	16BtFuk3
36	16Beat 3	16Beat3
37	Cool Beat	CoolBeat
38	16Beat Ballad 2	16BtBld2
39	16Beat 4	16Beat4
40	Pop Shuffle	PopShuf1
<b>POP</b>		
41	Pop Rock 1	PopRock1
42	Pop Dance 1	PopDanc1
43	Pop Fusion	PopFusn
44	Analog Night 1	AnalgNt1
45	6/8 Pop	6/8Pop
46	Brit. Pop 1	BritPop1
47	Brit. Pop 2	BritPop2
48	Pop Hit	PopHit
49	Fusion Shuffle	FusShuf1
50	Analog Night 2	AnalgNt2
51	Guitar Pop 3	GtPop3
52	Pop Beat	PopBeat

No.	Name	LCD Name
53	Soft Beat	SoftBeat
54	60' s Pop	60' sPop
55	Sting Latin	StigLatn
<b>BALLAD</b>		
56	R&B Ballad 1	R&BBad1
57	Guitar Ballad	GtBallad
58	Ballad Rock	BalladRk
59	Piano Pop	PianoPop
60	Soft Ballad	SoftBald
61	Natural Ballad	NatuBld
62	Love Ballad	LoveBld
63	Easy Ballad	EasyBld
64	Miami Ballad	MiamiBld
65	Slow Ballad	SlowBald
66	Folk Ballad	FolkBld
67	Pop Ballad 1	PopBld1
68	Pop Ballad 2	PopBld2
69	EP Ballad	EPBallad
70	New R&B Ballad	NewRBBld
<b>ROCK</b>		
71	Rock	Rock
72	New Wave	NewWave
73	Ska	Ska
74	Pop Rock 2	PopRock2
75	Slow Rock	SlowRock
76	70's Rock & Roll	70'sRock
77	Folk Rock	FolkRock
78	Soft Rock	SoftRock
79	Old Rock	OldRock
80	Easy Rock	EasyRock
81	New Shuffle	NewShuf1
82	Rock Hip Hop	RkHipHop
83	Rock&Roll 1	R'N'R1
84	Rock Shuffle	RockShfl
85	Rock & Roll 2	R'N'R2
<b>BALLROOM</b>		
86	Tango 1	Tango1
87	Spain Matador	Matador
88	Twist 1	Twist1
89	Twist 2	Twist2
90	Big Band Fox	BandFox
91	Tango 2	Tango2
92	Slow Fox	SlowFox
93	Slow Waltz 1	SlowWltz1
94	Swing Fox	SwingFox
95	Salsa 1	Salsa1
96	Cha Cha 1	ChaCha1
97	Cha Cha 2	ChaCha2
98	Beguine 1	Beguine1
99	Beguine 2	Beguine2
100	Rumba 1	Rumba1
101	Samba 1	Samba1
102	Samba 2	Samba2
103	Jive	Jive
104	Fox Trot	FoxTrot

No.	Name	LCD Name
<b>DANCE</b>		
105	Techno 1	Techno1
106	Hip Hop 1	HipHop1
107	Dream Dance	DrmDance
108	House	House
109	Pop Dance 2	PopDanc2
110	Down Beat	DownBeat
111	Techno 2	Techno2
112	Progressive	Progress
113	Rap 1	Rap1
114	Rap 2	Rap2
115	Disco	Disco
116	Soft Disco	SoftDisc
117	Disco Party	DscParty
118	70's Disco	70'sDisc
119	70's Disco Funk	70'sFunk
120	Club Dance	ClubDanc
121	Euro Dance	EuroDanc
122	Hip Hop 2	HipHop2
123	Garage	Garage
<b>SOUL &amp; FUNK</b>		
124	Funk 1	Funk1
125	Classic Funk	ClasFunk
126	Jay R&B	JayR&B
127	Gospel Swing	GopSwing
128	Gospel	Gospel
129	Funk 2	Funk2
130	Electric Funk	ElecFunk
131	Groove Funk	GrooveFk
132	Rubber Funk	RubberFk
133	Cool Funky	ColFunky
134	Jazz Funk	JazzFunk
135	Groove	Groove
136	Soul	Soul
137	Hip Hop Soul	HipHopSl
138	Hip Hop Beat	HipHopBt
139	R&B	R&B
140	Soul Beat	SoulBeat
141	R&B Ballad 2	R&BBld2
142	British Soul Pop	BritSoul
<b>SWING&amp;JAZZ</b>		
143	Latin Jazz 1	LatinJz1
144	Big Band	BigBand
145	Dixieland 1	Dixland1
146	Guitar Swing 1	GtSwing1
147	Broadway Big Band	BwayBand
148	Swing	Swing
149	Latin Jazz 2	LatinJz2
150	Fusion	Fusion
151	Acid Jazz	AcidJazz
152	Cool Jazz Ballad	CoolJzBd
153	Swing Shuffle	SwingSfl
154	Big Band Medium	BandMid
155	Dixieland 2	Dixland2
156	Acoustic Jazz	AcoustJz

# Style List

No.	Name	LCD Name
157	Guitar Swing 2	GtSwing2
158	Ragtime	Ragtime
159	Modern Jazz Ballad	MdJzBald
160	Swing Ballad	SwingBal
161	Orchestra Swing	OrhSwing
COUNTRY		
162	Country Pop 1	CntyPop1
163	Bluegrass 1	Bluegrs1
164	Country 8Beat	Ct8Beat
165	Modern Country	ModernCt
166	Country Pop 2	CntyPop2
167	Bluegrass 2	Bluegrs2
168	2/4 Country	2/4Cntry
169	Country Quick Steps	QuickStp
170	Country Folk	CntyFolk
171	Country Shuffle	CnyShufl
LATIN		
172	Samba 3	Samba3
173	Bossa Nova	BosaNov
174	Latin	Latin
175	New Reggae	NewReggae
176	Dance Reggae	DanReggae
177	Pasodoble	Pasodobl
178	Lite Bossa	LteBossa
179	Latin Rock	LatinRck
180	Beguine 3	Beguine3
181	Slow Bolero	SlBolero
182	Disco Samba	DscSamba
183	Mambo	Mambo
184	Meneito	Meneito
185	Rumba 2	Rumba2
186	Rumba 3	Rumba3
187	Tikitikita	Tikitikta
188	Lambada	Lambada
189	Pop Cha Cha 1	PChaCha1
190	Pop Cha Cha 2	PChaCha2
191	Salsa 2	Salsa2
WALTZ		
192	Waltz	Waltz
193	Old Waltz	OldWaltz
194	English Waltz	EngWaltz
195	German Waltz	GemWaltz
196	Italian Mazurka	ItaMazuk
197	Mexico Waltz	MexWaltz
198	ViennaWaltz	VinaWtz
199	Slow Waltz 2	SlwWltz2
200	Jazz Waltz	JzWaltz
TRADITIONAL		
201	Polka	Polka
202	6/8 March	6/8March
203	German Polka	GerPolka
204	Party Polka	PtyPolka
205	Army March	ArmMarch
206	March	March
207	US March	USMarch

No.	Name	LCD Name
208	Musette	Musette
209	French Musette	FMusette
210	Mazurke	Mazurke
WORLD		
211	Enka Ballad	EnkaBald
212	Laendler	Laendler
213	Hawaiian	Hawaiian
214	Sirtake	Sirtake
215	Dangdut	Dangdut
216	6/8 Flipper	6/8Flipp
217	New Age	NewAge
218	Tarantella	Tarantel
219	Scottish	Scottish
220	Norteno	Norteno
CHINESE FOLK		
221	Chinese R&B 1	ChnR&B1
222	Chinese Hip Hop 1	ChHiHop1
223	Chinese Folk Rock	ChFolkRk
224	GuangXi Folk	GuangXi
225	XinJiang Rock	XJiangRK
226	Chinese Disco	ChnDisco
227	BeiJing Beat	BeiJing
228	Chinese Shuffle	ChnShufl
229	YunNan Pop	YunNanP
230	Chinese Funk	ChnFunk
231	Chinese Rock	ChnRock
232	Chinese R&B 2	ChnR&B2
233	Chinese Folk 1	ChnFolk1
234	Chinese Beat	ChnBeat
235	Chinese R&B 3	ChnR&B3
236	JiangNan Pop	JNanPop
237	Chinese Folk 2	ChnFolk2
238	Chinese Hip Hop 2	ChHiHop2
239	NeiMeng Folk	NeiMFolk
240	Chinese Techno	ChTechno
241	DaiZu Folk	DaiZu
242	XinJiang Dance	XinJiang
243	New Folk 1	NewFolk1
244	New Folk 2	NewFolk2
245	JiangNan Folk1	JangNan1
246	Korea Folk	Korea
247	Kazak Folk	Hasake
248	ZangZu Folk	ZangZu
249	XinJiang Folk	XJangFok
250	Folk Band 1	FolkBnd1
251	Folk Band 2	FolkBnd2
252	YangGe	YangGe
253	HeNan	HeNan
254	YunNan	YunNan
255	Nei Meng Gu	NeiMeng
256	JiangNan Folk 2	JangNan2
257	Jubilance	Jubilanc
258	Oriental Modern Dance	OrlDance
259	Oriental	Oriental
260	GuangDong	GungDong

No.	Name	LCD Name
ORIENTAL		
261	Zarb 6/8	Zarb 6/8
262	Zarb Tempo	ZarbTemp
263	Bandary	Bandary
264	Zarb Daf	Zarb Daf
265	Pop 4/4	Pop 4/4
266	Saidi IR	Saidi IR
267	Cifte	Cifte
268	Baladi	Baladi
269	Masmoudi	Masmoudi
270	Wehda	Wehda



# Song List

No.	Name	LCD Name
<b>FOLK &amp; COUNTRY</b>		
1	Red River Valley	RedRiver
2	Troika	Troika
3	Susanna	Susanna
4	Wave of Danube	Danube
5	Long Long Ago	LongAgo
6	Cai Yun Zhui Yue	CaiYun
7	Cai Cha Pu Die	CaChPDie
8	Give You A Rose	GiveRose
9	Flowing Rill	FlowRill
10	Santa Lucia	SantaLuc
11	Jambalaya	Jambalay
12	Ding! Dong! Merrily On High	DingDong
13	Battle Hymne Of The Republic	Battle
14	The Old Gray Mare	GrayMare
15	American Patrol	USPatrol
16	Christmas Is Coming	IsComing
17	Sippin' Cider Through A Straw	SCTStraw
18	Christmas Sound	Sound
<b>GOLDEN &amp; POP</b>		
19	On London Bridge	LdBridge
20	Are You Lonesome Tonight	Lonesome
21	Only You	OnlyYou
22	End Of The World	EndWorld
23	House Of Rising Sun	HouseSun
24	Solveig's Song	Solveig
25	The Blue-Bells Of Scotland	BlueBell
26	Over The Rainbow	Rainbow
27	Beautiful Dreamer	Dreamer
28	It'S Been A Long Long Time	LongTime
29	Edelweiss	Edelweis
30	O Sole Mio	OSoleMio
31	Der Deitcher's Dog	DerDDog
32	Joy to The World	JoyWorld
33	Silent Night	SlttNight
34	Ave Maria	AveMaria
35	Five Hundred Miles	FHMiles
36	Happy New Year	HappyNY
37	It's Beginning To Look A Lot Like Christmas	LikeXmas
38	Jeanie With The Light Brown Hair	LighHair
39	My Bonnie	MyBonnie
40	Song Of The Pearlfisher	SongOfTP
41	Summer Palace	SummerPa
42	Go Tell It On The Mountain	GoTellIt
43	Entertainer	Entertai
44	Annie Laurie	AnnieLau
45	Rumba Romance	Romance
46	El Bimbo	ElBimbo
47	Last Rose Of Summer	LastRose
48	The Old King Cole	OldKingC
<b>CLASSICAL</b>		
49	Pianosonatan 08 IN Cm IN Pathetique	Piano08
50	Brahms Waltz	BrmsWaltz
51	Aida	Aida
52	Carmen-Prelude	Carmen2

No.	Name	LCD Name
53	L'Arlesienne	L'Arlesi
54	Uungarische Tanz	Uungaris
55	Mazurka	Mazurka
56	Pizzicato Polka	Polka
57	Menuett	Menuett
58	Rigoletto	Rigolett
59	Serenade	Serenade
60	Song Without Words	SongNoWd
61	Swan	Swan
62	Prelude To Act 2 (Swan Lake)	SwanLak1
63	Valse (Swan lake)	SwanLak2
64	The Happy Farmer	HpFarmer
65	The Sleeping Beauty	SleepBty
66	La Traviata	LaTravia
67	Wiegenlied	Wiegenli
68	Mov.2 Adagio Non Troppo	Sonata9
69	Piano Sonata No.9 In D	Sonata11
	Mov.1 Andante Grazioso	
70	Piano Sonata No.11 In A	Sonata11
	[Alla TurSonata11ca]	
70	Prelude In C	Prelude
71	Chinese Dance	ChDance
72	Emperors Waltz	EmprWaltz
73	March Militaire	MilMar1
74	Symphony No.40	Symphony
<b>JAZZ &amp; FUSION</b>		
75	ShanZhaShu	ShanZhaS
76	You Are My Sunshine	MySun
77	June Samba	JunSamba
78	Funk	Funk
79	I Can.....	I Can...
80	Sea Shore	SeaShore
81	Guitar&Saxphone	Gt&Sax
82	The Hip Hop's Night	HipHopNt
83	Blue Lunch	BluLunch
84	Cobweb	Cobweb
85	Wine	Wine
86	Jazz Old Man	JzOldMan
87	Dark Eyes	DarkEyes
88	Carlos	Carlos
89	Sad	Sad
90	The Jazz	TheJazz
<b>PIANO</b>		
91	Fur Elise	FurElise
92	Military March	MMarch
93	Habanera	Habanera
94	Minuet	Minuet
95	Austria Variation	AVariati
96	Old Macdonald Had A Farm	OldAFarm
97	Wedding March	Wedding
98	2-Part Invention #13 In A Minor:B.W. iii	Invtion
99	Minuet In G	MinuetG
100	Turkish March	TurkishM
101	Hey Diddle Diddle	HeDiddle

No.	Name	LCD Name
102	Italian Polka	ItaPolka
103	Moseta Dance	MosetaDn
104	Bulie Dance	BulieDn
105	Fantasia	Fantasia
106	Wild Rose	WildRose
107	Away In A Manger	AwayInAM
108	Jack & Jill	JackJill
109	Angles We Have Heard On High	Angles
110	Waltz	Waltz
111	Did You Ever See A Lassie	Lassie
112	Chopsticks	Chopstik
113	Four Little Swans	FLSwans
114	Old France	OldFranc
115	Jesus Saviour Pilot Me	PilotMe
116	Eclogue	Eclogue
117	Santa Claus Is Coming To Town	SantaCT
118	Brave Cavalier	Cavalier
119	America The Beautiful	USFair
120	Music Box Dancer	Dancer

## Demo List

No.	Name	LCD Name
1	Dancing Melody	DanceMld
2	Mystic River	MystRivr
3	Dream Of Freedom	Dream
4	Jazz	Jazz
5	Fusion	Fusion

# Chord List

Chord Name (Abbreviation)	Normal Voicing	Chord	Display
Major [M]	1-3-5	C	C
Major sixth [6]	1-(3)-5-6	C6	C6
Major seventh [M7]	1-3-(5)-7	CM7	CM7
Major seventh sharp eleventh [M7#11]	1-(2)-3-#4-(5)-7	CM7#11	CM7#11
Major add ninth [Madd9]	1-2-3-5	Cmadd9	CM(9)
Major ninth [M9]	1-2-3-(5)-7	CM9	CM7(9)
Major sixth add ninth [6 9]	1-2-3-(5)-6	C6 9	C6(9)
Augmented [aug]	1-3-#5	Caug	Caug
Minor [m]	1-b3-5	Cm	Cm
Minor sixth [m6]	1-b3-5-6	Cm6	Cm6
Minor seventh [m7]	1-b3-(5)-b7	Cm7	Cm7
Minor seventh flatted fifth [m7b5]	1-b3-b5-b7	Cm7b5	Cm7b5
Minor add ninth [madd9]	1-2-b3-5	Cmadd9	Cm(9)
Minor ninth [m9]	1-2-b3-(5)-b7	Cm9	Cm7(9)
Minor eleventh [m11]	1-(2)-b3-4-5-(b7)	Cm11	Cm7(11)
Minor major ninth [mM7]	1-b3-(5)-7	CmM7	CmM7
Minor major ninth [mM9]	1-2-b3-(5)-7	CmM9	CmM7(9)
Diminished [dim]	1-b3-b5	Cdim	Cdim
Diminished seventh [dim7]	1-b3-b5-6	Cdim7	Cdim7
Seventh [7]	1-3-(5)-b7	C7	C7
Seventh suspended fourth [7sus4]	1-4-5-b7	C7sus4	C7sus4
Seventh flatted fifth [7b5]	1-3-b5-b7	C7b5	C7b5
Seventh ninth [7 9]	1-2-3-(5)-b7	C7 9	C7(9)
Seventh sharp eleventh [7#11]	1-2-3-#4-(5)-b7 or 1-(2)-3-#4-5-b7	C7#11	C7(#11)
Seventh thirteenth [7 13]	1- 3-(5)-6-b7 or 2- 3-5-6-b7	C7 13	C7(13)
Seventh flatted ninth [7b9]	1-b2-3-(5)-b7	C7b9	C7(b9)
Seventh flatted thirteenth [7b13]	1-3-5-b6-b7	C7b13	C7(b13)
Seventh sharp ninth [7#9]	(1)-#2-3-(5)-b7	C7#9	C7(#9)
Major seventh augmented [M7aug]	1-3-#5-7	CM7aug	CM7aug
Seventh augmented [7aug]	(1)-3-#5-b7	C7aug	C7aug
Suspended fourth [sus4]	1-4-5	Csus4	Csus4
One plus two plus five [1+2+5]	1-2-5	C1+2+5	C

## MIDI Implementation Chart

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

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

- Mode 3: OMNI OFF, POLY
- Mode 4: OMNI OFF, MONO x: NO

A800\_EN11

