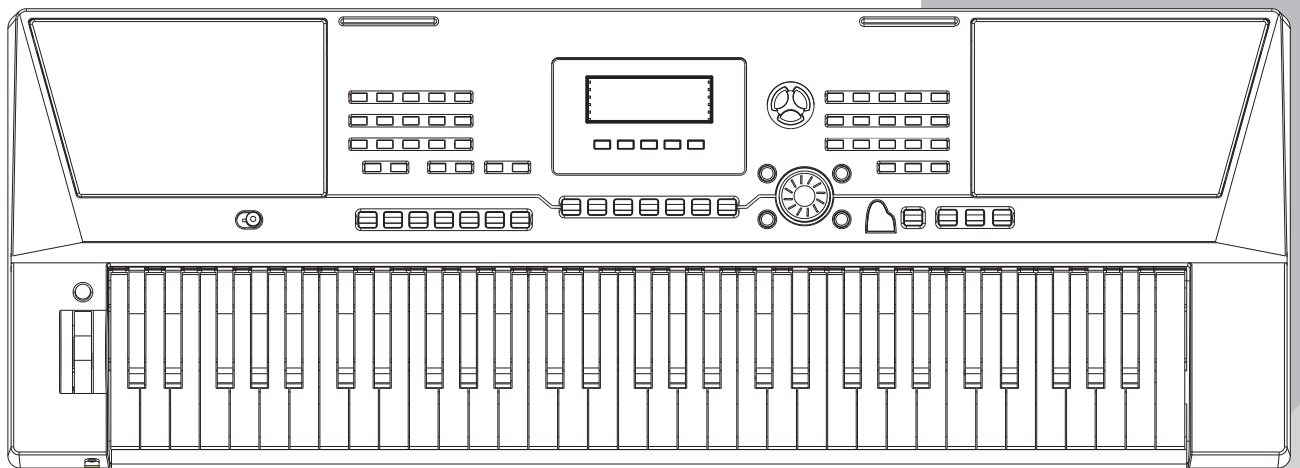


ELECTRONIC KEYBOARD



Owner's Manual

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.

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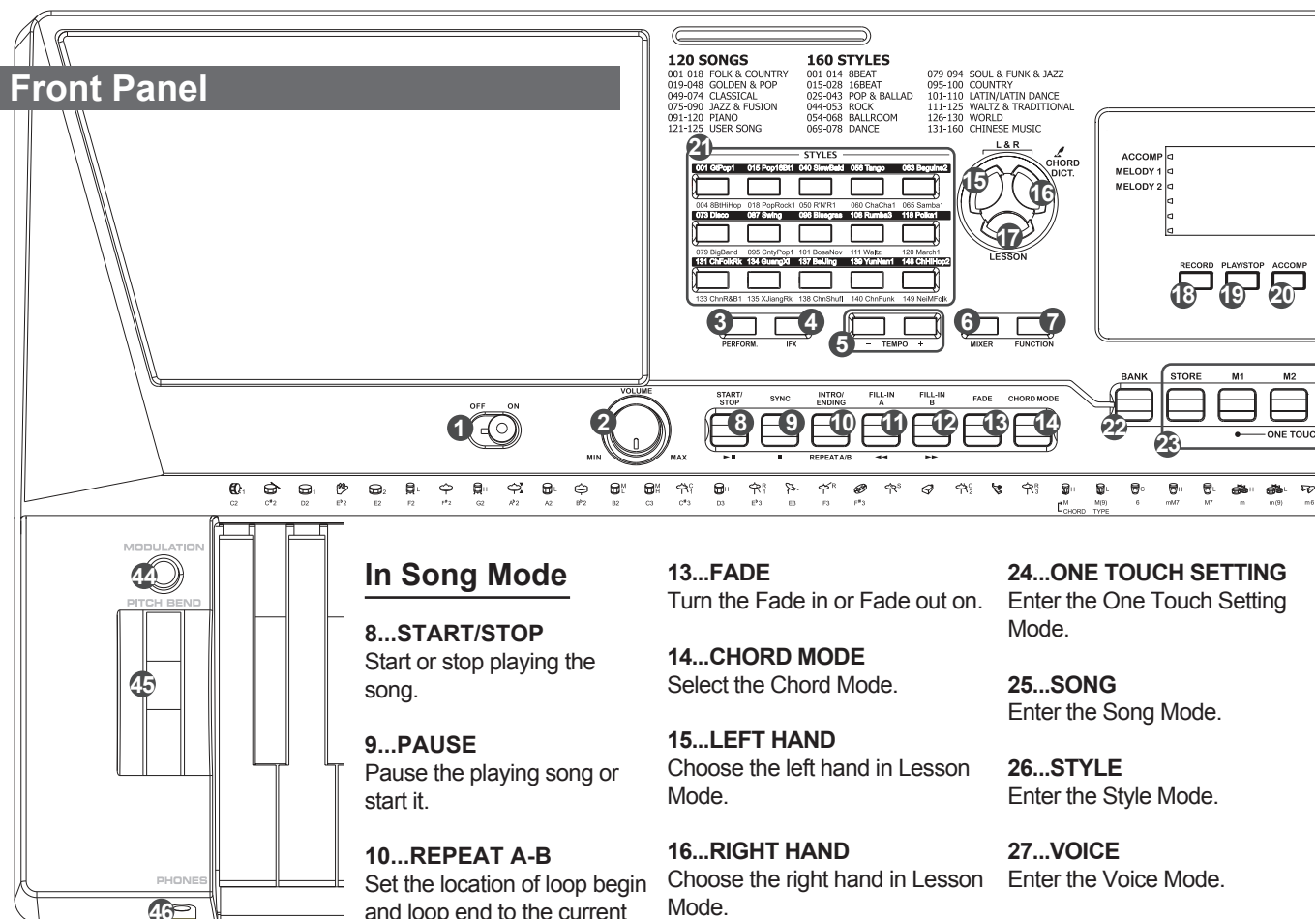
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Panel & Display Description

Front Panel



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

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

3...PERFORM
Enter the Performance Assistant.

4...IFX
Turn the Insert Effect on and off.

5...TEMPO - , TEMPO +
Adjust the current tempo.

6...MIXER
Enter the Mixer menu.

7...FUNCTION
Enter the Function menu.

In Song Mode

8...START/STOP
Start or stop playing the song.

9...PAUSE
Pause the playing song or start it.

10...REPEAT A-B
Set the location of loop begin and loop end to the current song.

11...REW
Rewind the song.

12...FF
Fast forward the song.

In Style Mode

8...START/STOP
Start or stop playing the style.

9...SYNC START
Turn the Sync Start on and off.

10...INTRO/ENDING
Play the Intro or Ending.

11...FILL-IN A
A Fill-in A plays.

12...FILL-IN B
A Fill-in B plays.

13...FADE
Turn the Fade in or Fade out on.

14...CHORD MODE
Select the Chord Mode.

15...LEFT HAND
Choose the left hand in Lesson Mode.

16...RIGHT HAND
Choose the right hand in Lesson Mode.

CHORD DICTIONARY
Hold the button to enter the Chord Dictionary.

17...LESSON
Enter the Lesson Mode.

18...RECORD
Enter the Record Mode.

19...PLAY/STOP
Start or stop playing the user song.

20...ACCOMP
Select the accomp track to recording.

21...STYLE DIRECT SELECT BUTTON
Select a direct style.

22...BANK
Select a bank.

23...STORE M1-M4, ONE TOUCH SETTING
Register the panel settings. Press the One Touch Button to instantly reconfigure all relevant settings.

24...ONE TOUCH SETTING
Enter the One Touch Setting Mode.

25...SONG
Enter the Song Mode.

26...STYLE
Enter the Style Mode.

27...VOICE
Enter the Voice Mode.

28...DUAL
Turn the Voice R2 on and off.

29...TOUCH
Enter the Touch Setting menu.

30...SUSTAIN
Turn the Sustain effect on and off.

31...PIANO
Enter the Piano Mode.

32...METRONOME
Turn the Metronome on and off.

33...LOWER
Turn the Voice L on and off.

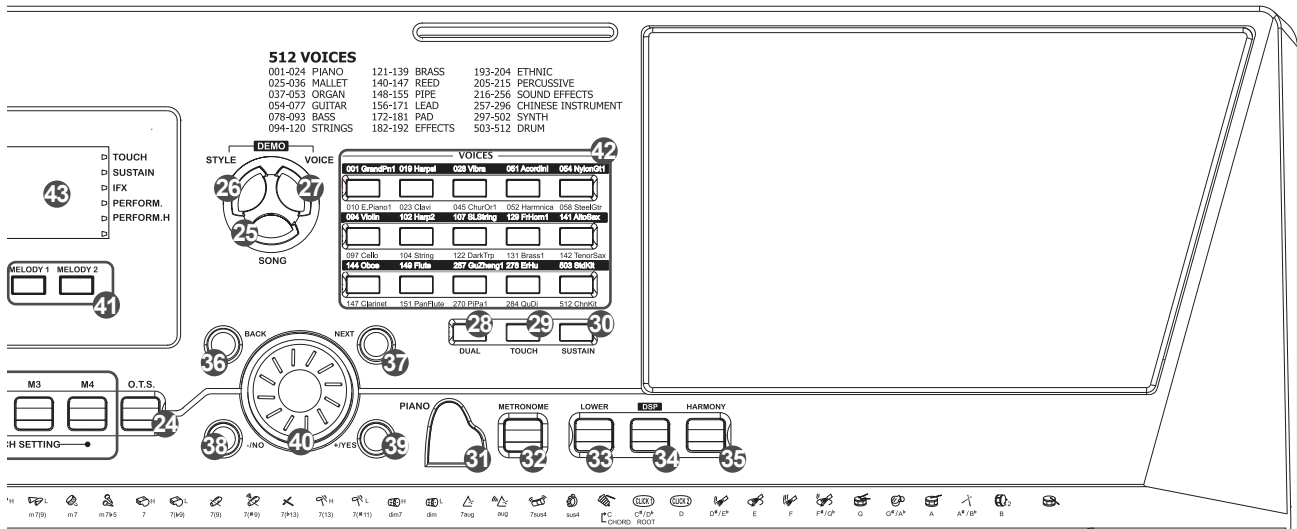
34...DSP
Turn the DSP effect on and off.

35...HARMONY
Turn the harmony effect on and off.

36...BACK
Retrace your steps.

37...NEXT
Trace your steps.

Panel & Display Description



38...- / NO

Decrease the displayed value by 1.

39...+ / YES

Increase the displayed value by 1.

40...DATA DIAL

Increase and decrease the value.

41...MELODY 1, MELODY 2

Select the melody1, melody 2 track to record.

42...VOICE DIRECT

SELECT BUTTON Select a direct voice.

43...LCD DISPLAY

Show all important settings for the instrument.

44...MODULATION

Apply a vibrato effect.

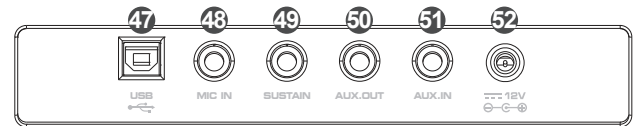
45...PITCH BEND

Bend notes up or down.

46...PHONES

Connect headphones to the unit.

Rear Panel



47...USB JACK

Connect to a computer.

48...MIC IN

Connect a microphone.

49...SUSTAIN

Connect a sustain pedal.

50...AUX.OUT

Connect the audio equipment.

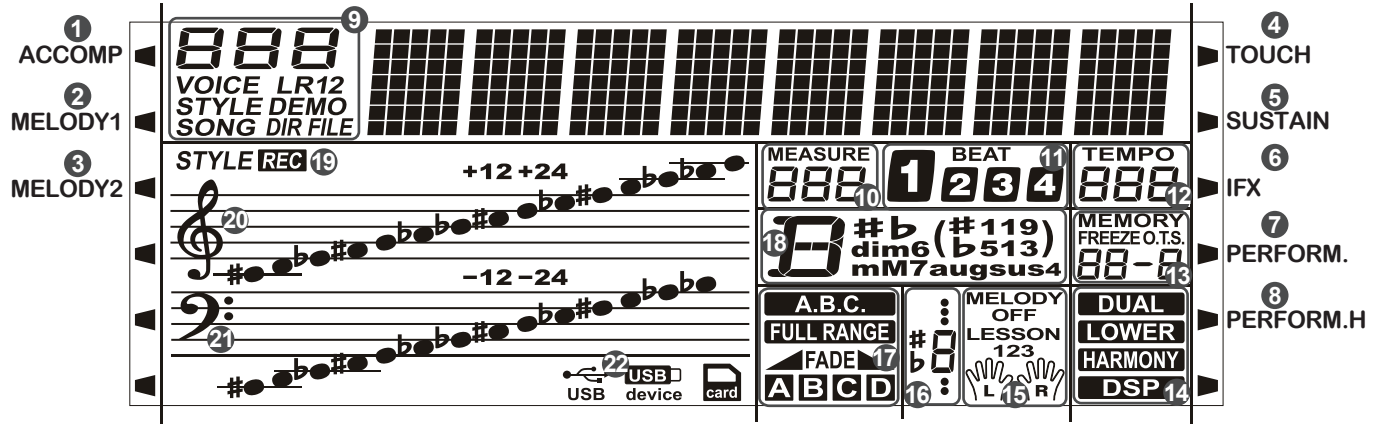
51...AUX.IN

Connect the audio equipment.

52...DC 12V

Connect DC 12V power adapter. (Optional)

Display



1...ACCOMP

2...MELODY 1

3...MELODY 2

4...TOUCH

5...SUSTAIN

6...IFX

7...PERFORM.

8...PERFORM.H

9...VOICE/STYLE/DEMO/SONG

10...MEASURE

11...BEAT

12...TEMPO

13...STORE M1-M6/ONE TOUCH SETTING

14...DUAL/LOWER/HARMONY/DSP

15...LEFT/RIGHT HAND LESSON MODE

16...NOTE INDICATION

17...A.B.C./FULL RANGE/FADE/A/B

18...CHORD

19...RECORD

20...TREBLE CLEF

21...BASS CLEF

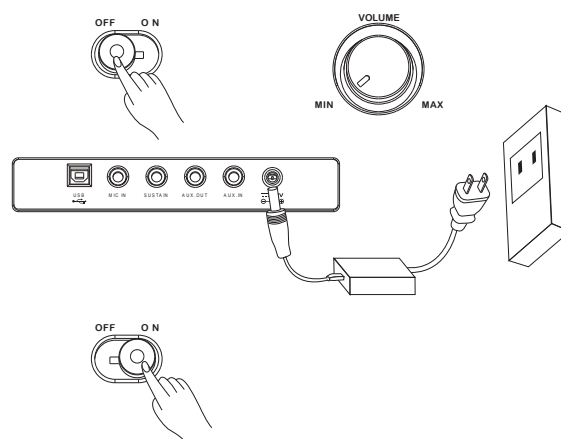
22...USB

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. Make sure that the keyboard is turned off. Before you switch your keyboard on or off, turn down the volume of keyboard and any connected audio equipments first.
2. Connect the AC adaptor to the power supply jack of this keyboard.
3. Plug the AC adaptor into an AC outlet.
4. Turn the [POWER SWITCH] ON, the LCD is lighted, which indicates the keyboard has powered on.
5. If you are ready to turn off the keyboard, turn the [POWER SWITCH] OFF.

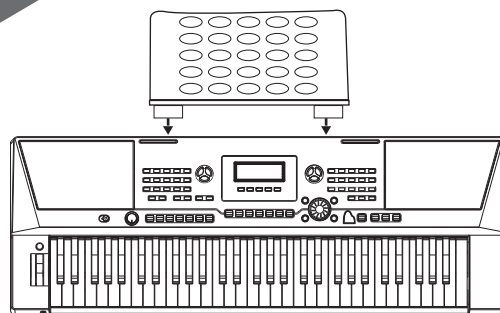


Notes:

1. In the IDLE mode, the keyboard will automatically shutdown in 30 minutes later if you do not take any action on the keyboard.
2. When the keyboard is not in use or during thunderstorm, please disconnect the power for safety purpose.

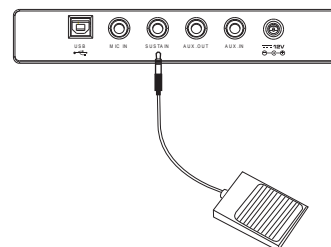
Setting a Music Stand

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.

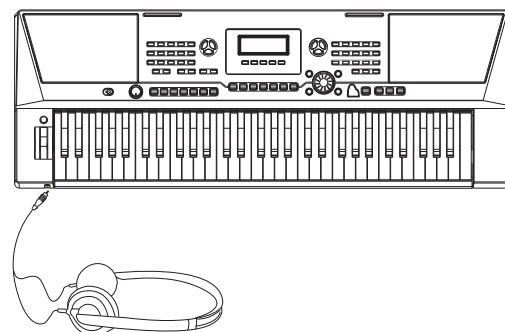


Connecting a pair of Headphones

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.

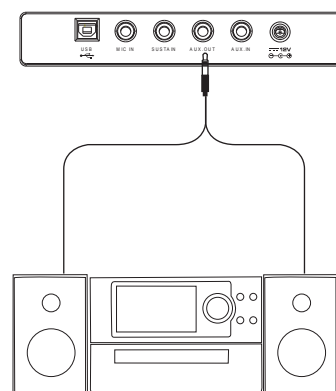


Connecting an Audio Equipment

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.

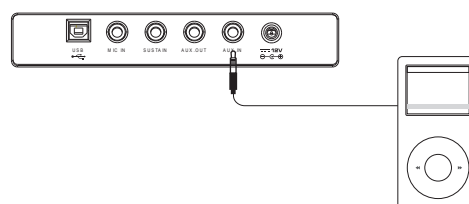
Note:

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



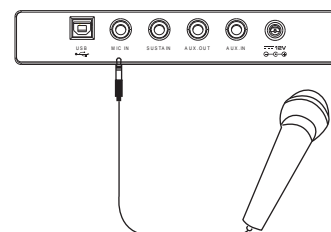
Connecting an MP3/CD Player

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.



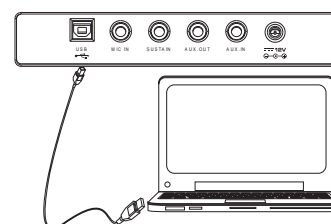
Connecting a Microphone

You can connect an external microphone to MIC IN jack.



Connecting a Computer

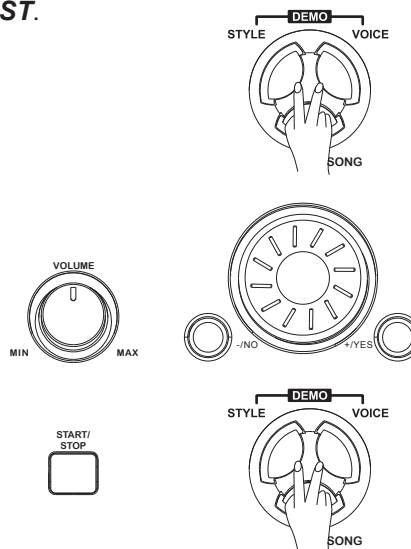
The instrument receives and transmits MIDI messages via the USB connector.



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:

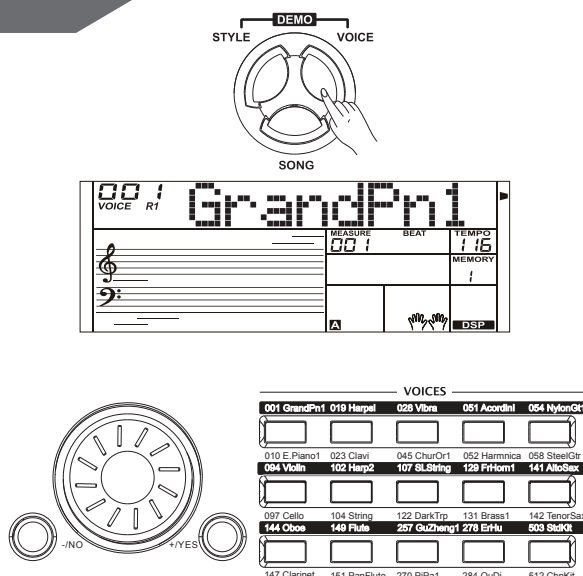
In the DEMO mode, all buttons except START/STOP, TEMPO+, TEMPO-, + / YES, - / NO, VOLUME, POWER ON/OFF will not be available.

Playing Voices

The keyboard has 583 remarkably realistic built-in voices, including Piano, Woodwind, Saxophone, Drum Kits and many more. Please refer to **Voice List**.

Selecting a Voice

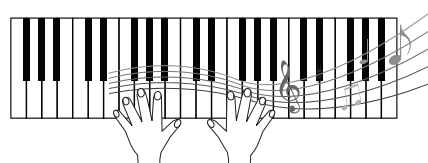
1. Press the [VOICE] button.
Enter the VOICE mode. LCD shows "VOICE R1" and the voice number.
2. Select a voice.
Use the data dial, the [+ / YES] button, the [- / NO] button to select the voice you want to play. You can also use the Voice Direct Button to select a voice. 2 direct voices for each button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



Note:

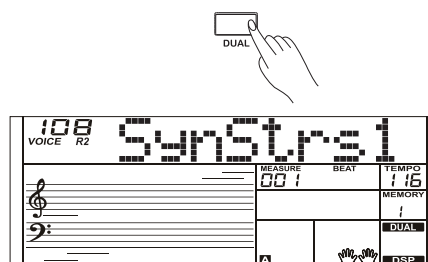
While changing a voice, pay attention to the rules. If you press the same button, the voice will be changed between the upper and lower key.

When the upper/lower voice is on, and then you press another direct button, the corresponding upper/lower voice will be selected.



Playing Two Voice 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.

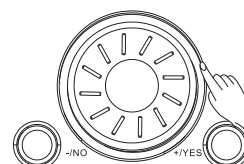
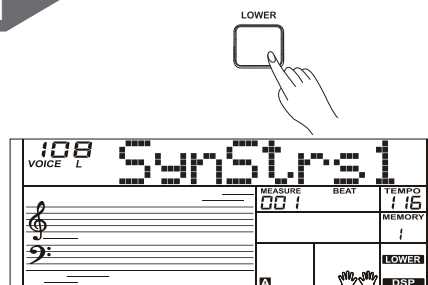


Note:

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

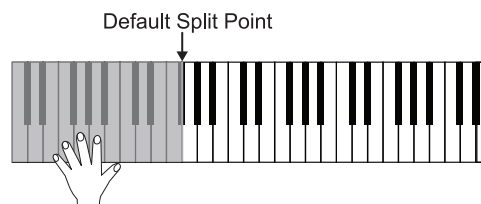
Playing Different Voices with the Left and Right Hands-LEFT

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



Split Point

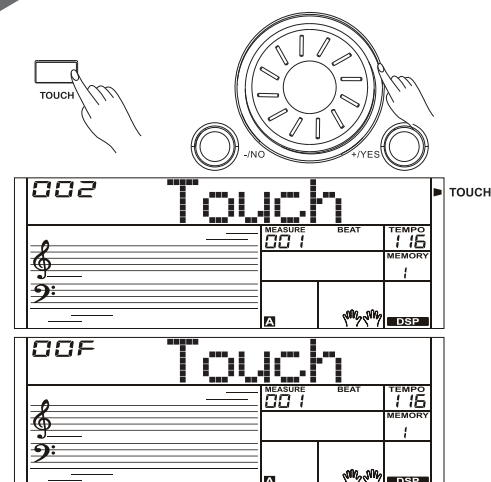
The Point on the keyboard that separates voice L and voice R1/R2 is called the "split point". The split point is set to F#3/G3 at the factory setting. However you can set this to any key you want. Refer to **setting the split point**.



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 that the touch value 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.



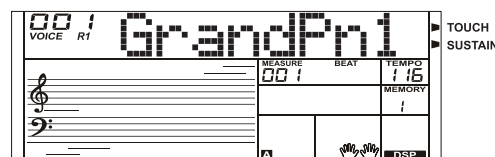
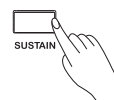
Playing Voices

Sustain

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

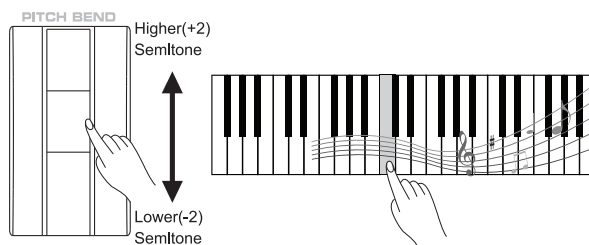
Note:

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



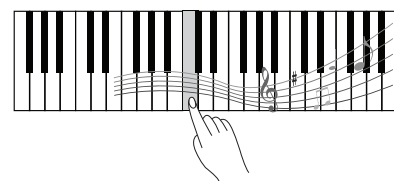
Pitch Bend Wheel

Use the pitch bend wheel to bend notes up (roll the wheel away from 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 increments. Refer to **setting the transpose**.

Octave

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

Piano

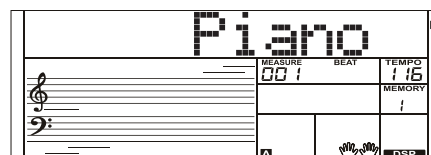
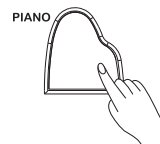
No matter what setting you've made from the panel, you can instantly call up the piano setting by a single button press.

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.

Note:

The MIXER and FUNCTION menu can be entered.



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 160 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.

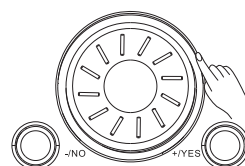
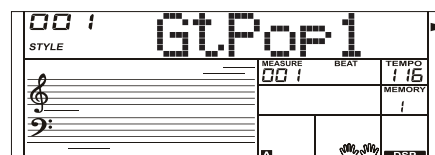
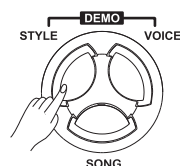
Also, you can use the Style Direct Button to select a style. 2 direct styles for each button (upper & lower key).

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 button, the corresponding upper/lower style will be selected.



STYLES				
001 GtPop1	016 Pop16St1	040 SlowBall	069 Tango	093 Beguine2
004 BBH-Hop	018 PopRock1	050 RNR1	060 ChaCha1	065 Samba1
073 Disco	087 Swing	098 Bluesgrs	108 Rumba3	118 Polka1
079 BigBand	095 CntyPop1	101 BossaNov	111 Waltz	120 March1
131 ChFolkRk	134 Guang20	137 Belting	139 YunNan1	148 Ch-Hip2
133 ChnR&B1	135 XJiangRk	138 ChnShuff	140 ChnFunk	149 NeiMFolk

Playing Auto Accompaniment (all tracks)

1. Press the [STYLE] button.

2. Select a style.

3. Turn on the CHORD MODE.

4. Press the [CHORD MODE] button, 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.

5. Turn SYNCHRONIZED START on.

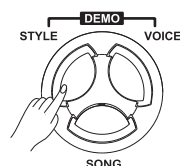
Press the [SYNC] button, now the beat lamp flashes in time with the tempo. This condition is called synchronized start standby.

It will start the accompaniment as soon as you start playing in Chord section.

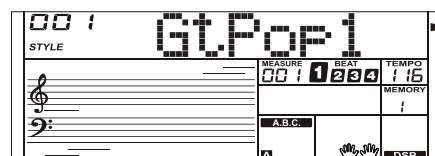
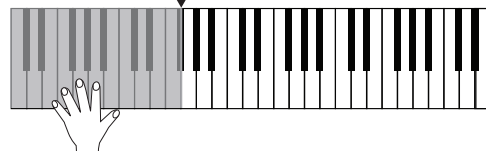
For example, play a C major chord to start the auto accompaniment.

6. Try playing other chord with your left hand.

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



Default Split Point



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, Main (A, B), Fill-in (A, B) and Ending. By switching among them during your performance you can easily produce the dynamic elements of a professional-sounding arrangement in your performance.

1. INTRO Section

The intro is an opening section of the song.

Each preset style features two different patterns. When the intro pattern finished, the system will automatically shift to the main section.

2. MAIN Section

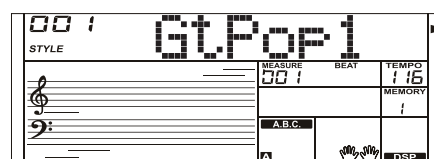
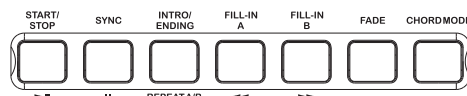
The main is an important section of the song. And it plays an accompaniment pattern and repeat infinitely until another section's button is pressed.

3. 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,).

4. 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 CHORD MODE on.

4. Turn SYNCHRONIZED START on.

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

6. Press the [INTRO/ENDING] button.

Now the "A" flashes on LCD, the style is ready to play.

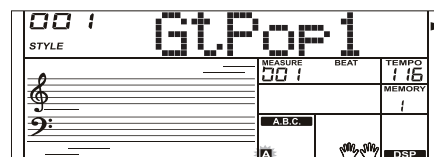
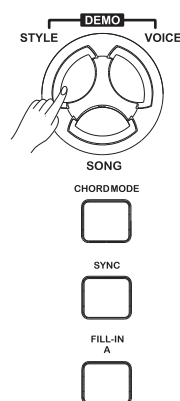
7. It will start the accompaniment as soon as you start playing in Chord section. When the playback of the intro is finished, it automatically leads into main A section.

8. Press the [FILL-IN B] button.

A fill-in plays, automatically followed by the main B section.

9. Press the [INTRO/ENDING] button.

Now 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 button when the style is playing, the selected FILL pattern repeats continuously until button is released.

Press FILL-IN A/B when style stop, it will change to the normal section, the icon A/B on LCD will be lightened.

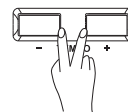
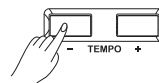
Tempo

Each style of the instrument has been programmed 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, the data dial also change the tempo.



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

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.

For details on setting the Fade In time, refer to **Fade in**

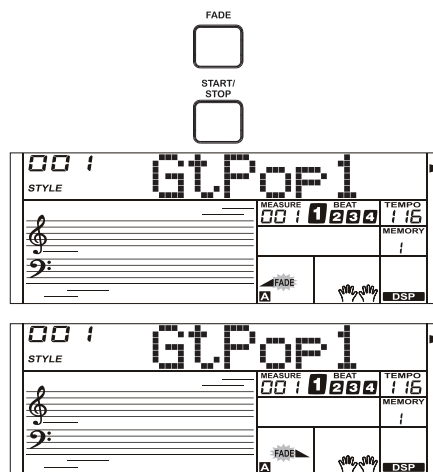
Duration.

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.

For details on setting the Fade Out time, Refer to **Fade out**

Duration.

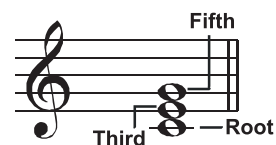


Chord Fingering

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. They are multi-finger mode and Full Range mode.

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".



Major Triad Minor Triad



Augmented Triad Diminished Triad



Root Position First Inversion Second Inversion

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.

Cm

Chord Root 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.

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

MULTI-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.

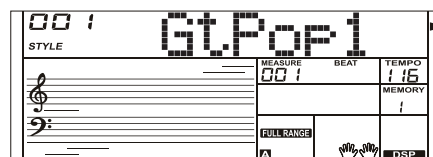
0 C 	1 C ₆ 	2 Cm ₇ 	3 CM ₇ (#11) 	4 CM(9) 	5 CM ₇ (9)
6 C ₆ (9) 	7 Caug 	8 Cm 	9 Cm ₆ 	10 Cm ₇ 	11 Cm ₇ (b5)
12 Cm(9) 	13 Cm ₇ (9) 	14 Cm ₇ (11) 	15 CmM ₇ 	16 CmM ₇ (9) 	17 Cdim
18 Cdim ₇ 	19 C ₇ 	20 C ₇ sus ₄ 	21 C ₇ (b5) 	22 C ₇ (9) 	23 C ₇ (#11)
24 C ₇ (13) 	25 C ₇ (b9) 	26 C ₇ (b13) 	27 C ₇ (#9) 	28 CM ₇ aug 	29 C ₇ aug
30 C ₇ sus ₄ 	31 C ₁ +2+5 	Notes enclosed in parentheses are optional; the chords could be recognized without them.			

The FULL RANGE mode

When the chord detection is in the FULL RANGE mode, the instrument will automatically create appropriate accompaniment while you play just about anything using both hands, anywhere on the keyboard.

You do not have to worry about specifying the accompaniment chords. The name of detected chord will be displayed. In the FULL RANGE mode, the split point setting for the auto accompaniment will be ignored.

Press the [CHORD MODE] button twice, the icon “Full Range” will be lightened in the LCD.



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.

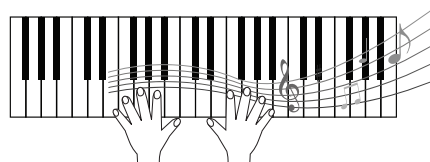
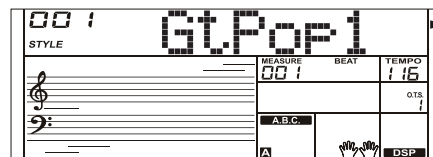
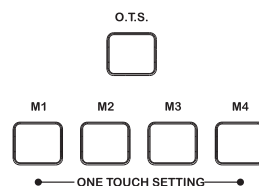
1. Press the [O.T.S.] button to turn on the One Touch Setting for current style.

2. Press one of the [ONE TOUCH SETTING] buttons [1]-[4]. 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 O.T.S. mode.

3. Play the keyboard.

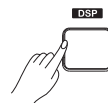
4. Stop the accompaniment.



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.

DSP

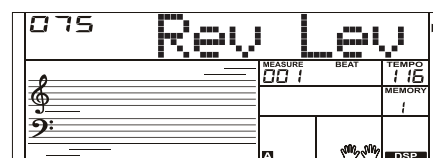
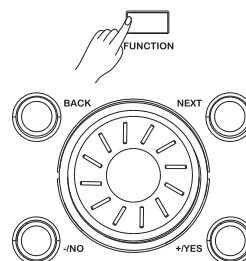
The effect will be applied. Press the DSP button, you can turn on or turn off the DSP effect.



Reverb

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

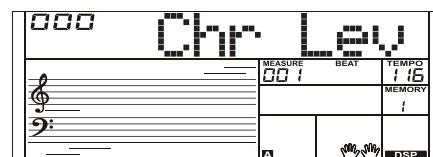
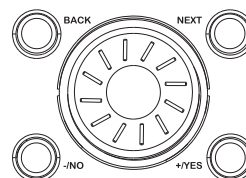
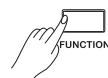
1. Press the [FUNCTION] button.
2. Select "REVERB LEVEL".
Use the [FUNCTION], [BACK] or [NEXT] button to select REVERB LEVEL. The LCD displays the reverb level. The level ranges from 0 to 127.
3. Change the reverb level.
Use the data dial, [+ / YES] or [- / NO] button to change the reverb level. Press [+ / YES] and [- / NO] simultaneously to set the default reverb level
4. Play the keyboard to hear the change.



Chorus

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

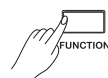
1. Press the [FUNCTION] button.
2. Select "CHORUS LEVEL".
Use the [FUNCTION], [BACK] or [NEXT] button to select CHORUS LEVEL. The LCD displays the chorus level. The level ranges from 0 to 127.
3. Change the chorus level.
Use the data dial, [+ / YES] or [- / NO] button to change the chorus level.
Press [+ / YES] and [- / NO] simultaneously to set the default chorus level.
4. Play the keyboard to hear the change.



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

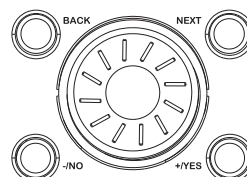
Selecting a Harmony type

1. Press the [FUNCTION] button.



2. Select "DUET".

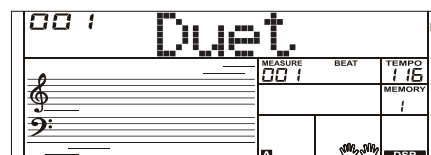
Use the [FUNCTION], [BACK] or [NEXT] button to select Duet. The LCD displays Duet and it is the default harmony type.



3. Change the harmony type.

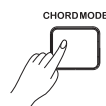
Use the data dial, [+/YES] or [-/NO] button to change the harmony type. The type of harmony can be chosen as Duet, 1+5, Octave, CtryDuet, Trio, Block, 4Close1, 4Chlose2 and 4Open.

Press [+/YES] and [-/NO] simultaneously to set the default harmony type.



Applying the Harmony effect

1. Press the [CHORD MODE] button to turn AUTO ACCOMPANIMENT on.



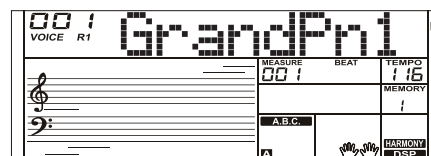
2. Press the [HARMONY] button to turn the harmony effect on.



3. Play a chord with your left hand.

4. 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:

Harmony can not be turned on when the Full Range fingering mode is selected.

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

1. Press the [IFX] button.

Turn on the IFX and the icon “IFX” will be lightened. The LCD displays “Chorus”, it means the default effect setting is Chorus.

2. Turn off the effect.

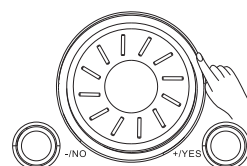
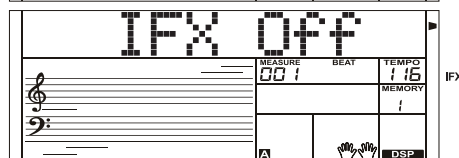
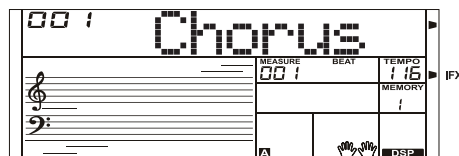
Press the [IFX] button again in the IFX mode will turn off the insert effect and the icon “IFX” will disappear.

3. Change the effect type.

Press the [FUNCTION] button and use the [BACK] or [NEXT] to select Chorus. Use the data dial, [+ /YES] or [- /NO] button to change the IFX type. There are totally 7 types of insert effects: Chorus, Flanger, Phaser, Tremolo, Distort, Wah and Dynamic.

Note:

Effect is only valid for the Voice R1.



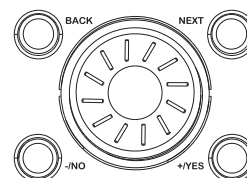
Mixer

1. Press the [MIXER] button.

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

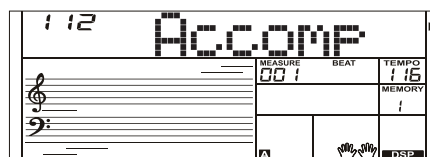
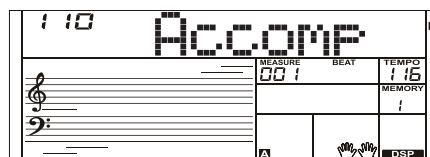
2. Adjust the volume of a musical part.

To adjust the selected volume setting, please use the data dial, the [+ /YES] or the [- /NO] button.



The option and the parameters are as the follows:

Option	LCD Display	Range	Description
Accomp VOLUME	XXX Accomp	0-127	110
Rhythm_s VOLUME	XXX Rhythm_s	0-127	120
Rhythm_m VOLUME	XXX Rhythm_m	0-127	120
BASS VOLUME	XXX Bass	0-127	110
Chord 1 VOLUME	XXX Chord1	0-127	120
Chord 2 VOLUME	XXX Chord2	0-127	120
Chord 3 VOLUME	XXX Chord3	0-127	120
Phrase 1 VOLUME	XXX Phrase1	0-127	120
Phrase 2 VOLUME	XXX Phrase2	0-127	120
VOICE R1 VOLUME	XXX Voice R1	0-127	120
VOICE R2 VOLUME	XXX Voice R2	0-127	90
VOICE L VOLUME	XXX Lower	0-127	50



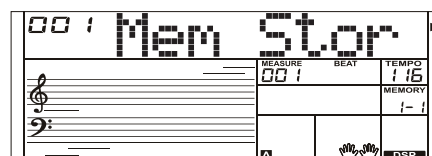
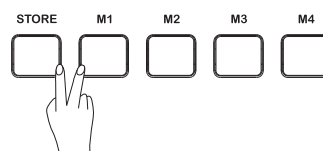
The keyboard is an instrument with a variety of controls and functions, the Registration Memory feature can make your performance more easily and efficiently. It allows you save virtually all panel settings to a Registration Memory setting, and you can instantly recall custom panel settings by pressing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

Registering the Panel Settings

There are 4 memory banks, each bank has 4 memories (M1-M4).

1. While holding the [STORE] button, press one of the REGISTRATION MEMORY buttons: [M1] - [M4].

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



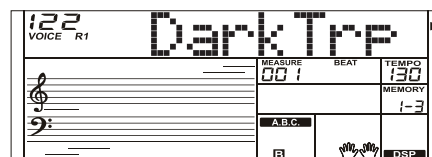
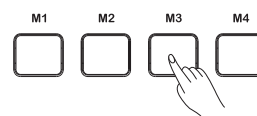
Recalling the Registered Panel Settings

Press one of the REGISTRATION MEMORY buttons:

[M1] - [M4]. 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.



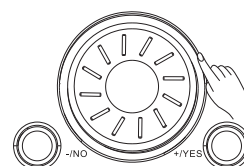
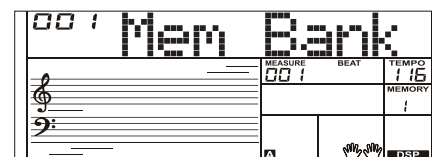
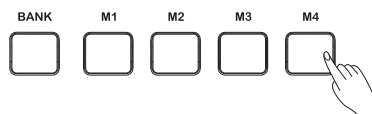
Selecting a Registration Bank

1. Press the [BANK] button.

There are 4 banks at all and each bank has 4 memories (M1-M4). Press the [BANK] button, the LCD displays "Men Bank".

2. Select a bank.

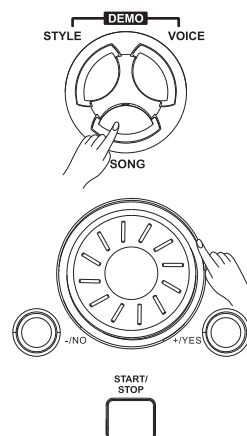
Use the data dial, [+ / YES] or [- / NO] button to select a bank.



The keyboard has a music library of 120 preset songs. Each song can be practiced in LESSON mode.

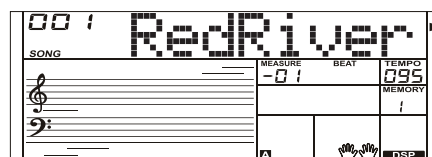
Listening to the Songs

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



Song Control

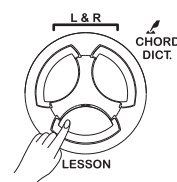
1. Introductory beat
Before the song starts playing, it has the introductory beat; the measure starts from negative value. It begins to play the song when the measure goes to 1.
2. REW, FF and PAUSE
When the song is playing:
Press the [FF] button to fast forward the song.
Press the [Rew] button to rewind 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

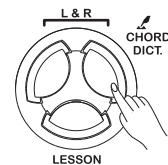
In the instrument, there are 2 different ways to practice the songs: time value training and note correction training. And the keyboard has a grading system to help you to know well about your progress.

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:

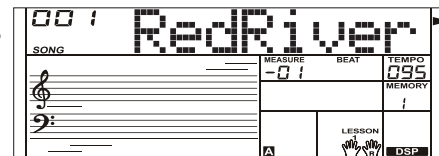
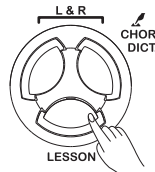
According to the type of the song, the content of your practice by left hand is different. If you choose a chord song, the left hand practices the chord, otherwise, practices the melody. When the song is playing, the staff and the keyboard displayed on the LCD indicate the melody and chord position,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

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.

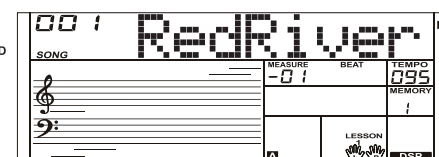
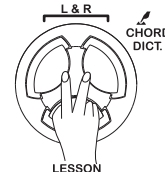
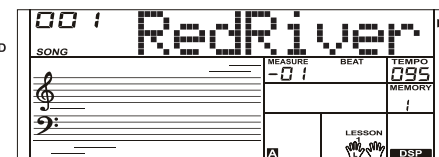
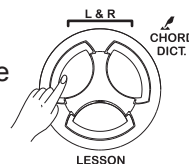
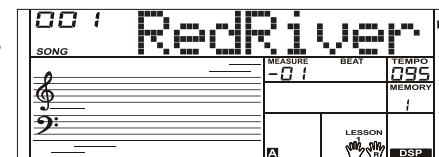
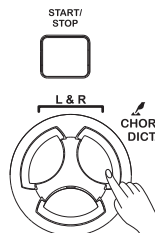


2. Press the [START/STOP] button to start to practice.

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.

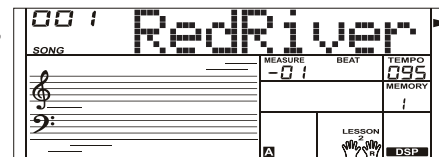
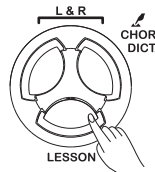
If [LEFT] and [RIGHT] are selected, the chord/melody on left hand and the melody on right hand will be muted. You will have to follow time value on both left and right hand.



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.



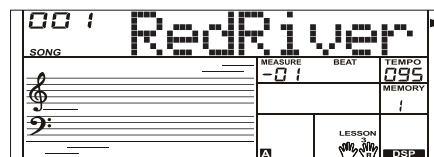
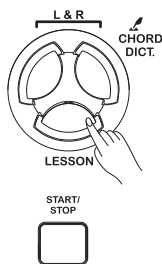
Song

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.



Downloading MIDI Song

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.

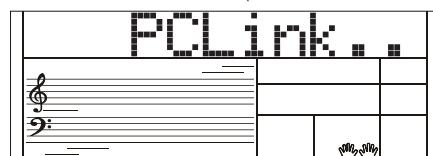
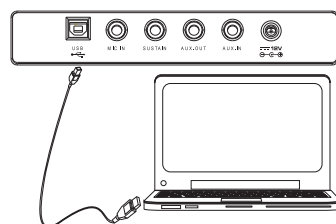
You can download up to 5 SMF MIDI files to the keyboard as user songs.

Note:

The MIDI file capacity you load should not be more than 64K.

The MIDI file track you load should not be more than 14.

If you do not load the user song, LCD prompt No File. After loading the user song, LCD will display the file name.



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

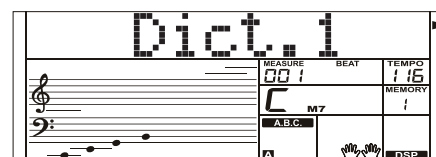
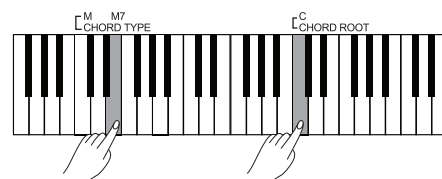
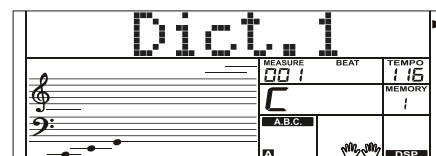
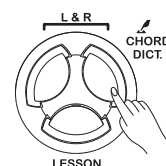
Press the [CHORD DICT] button and hold it for longer than 2 seconds to enter the DICT 1 mode.

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 C 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 M7 key in the section of the keyboard which has labeled CHORD TYPE. 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.

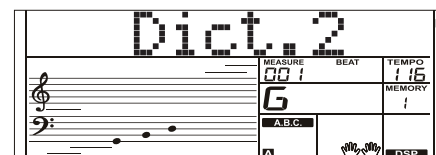
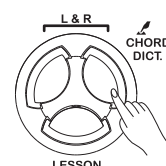


DICT2 – Chord Examining Mode

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

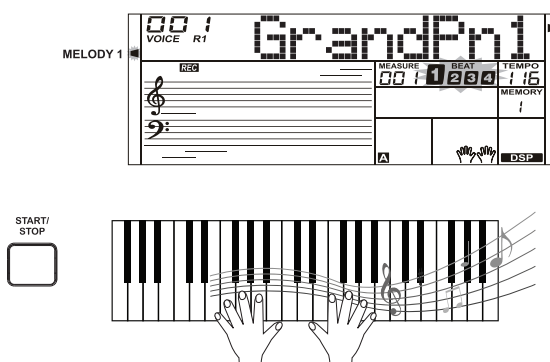
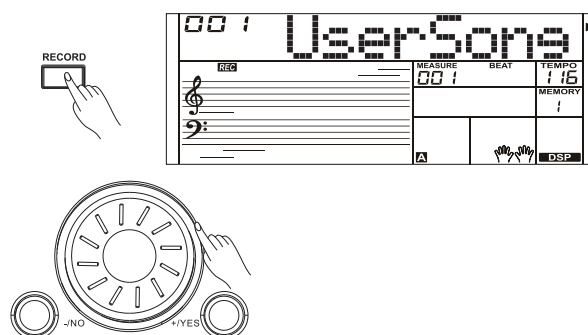
Chord Type:

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

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 3 tracks (1 ACCOMP track, 2 MELODY tracks) each.

Starting Recording

1. Press [RECORD] button to enter the user song selection mode. The "REC" icon, "UserSong" and sequence number will be displayed on the LCD.
2. Use data dial, [+ / YES] or [- / NO] button to select the user song you want to record.
Press [RECORD] button again to enter the record mode. Now four beats and "MELODY 1" (or other tracks) on LCD is flashing, indicates waiting for recording.
3. Parameters such as voice, style and tempo can be revised.
When recording a new song, the keyboard will automatically select "melody 1" as the recorded track. Press other track buttons to make your own selection.
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 recorded track.
When all 3 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.
Press [START/STOP] button or play the keyboard to start recording.



Choosing Tracks

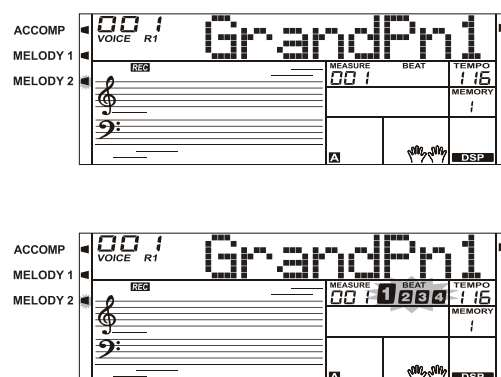
There are 3 status of the track cursor on the left side of the LCD: Lighten Flashing and Darken.

When the cursor is flashing, it indicates the flashing track is the track to be recorded.

When the cursor is lightened, it indicates there has recorded data in this track. The data in this track will be played while recording for another track.

When the cursor is darkened, it indicates there's no data in this track or there's data in this track but it's forbid to play while recording another track.

You can press "Accomp" (or "Melody 1" to "Melody 2") to select the desired track. The corresponding track will be switched from the above three states by pressing the track button repeatedly.



Note:

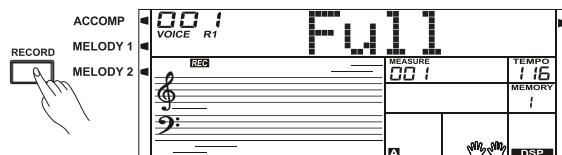
2 melody tracks can't be recorded at the same time. However, you are allowed to record 1 melody track and 1 accomp track simultaneously. Style can only be recorded in "Accomp" track.

Stopping Recording

Press [RECORD] again while recording can stop this action immediately.

When the capacity is full, the recording will be stopped automatically.

When the record ending is finished, the recording will be stopped automatically.



Playing back the User Song

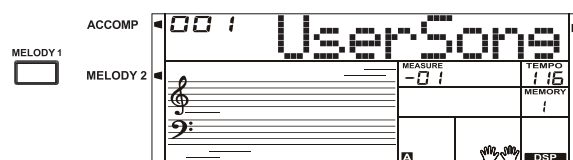
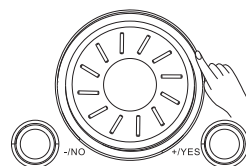
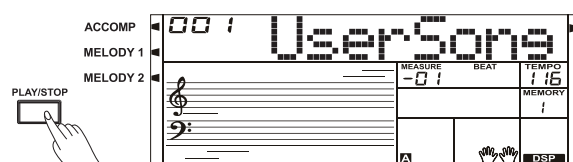
1. Press [PLAY/STOP] button to enter the user song selected mode. LCD displays the sequence number of user's song and "UserSong".

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

On the left side of LCD, cursor indicates whether the track data has been recorded or not. If there's data on this track, the cursor will be lightened.

To mute a track, simply press the button of selected track and cursor will be darkened. This track will not sound when the song is played.

3. Press [PLAY/STOP] button again to play the user song. If there is no user song you have recorded it will exit the user song selected mode.

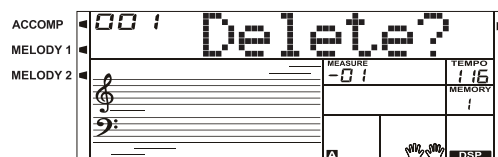
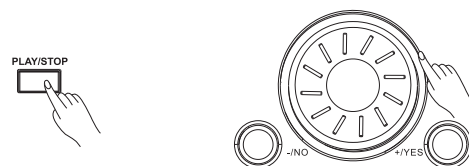


Deleting the User Song

1. Press [PLAY/STOP] button to enter the user song selection mode.

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

3. Press [RECORD] button, LCD displays "Delete?". Press the [+ / YES] button to delete the user song.



Note:

Hold down [RECORD] and [PLAY/STOP] button then power on, all recorded data will be erased.

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.

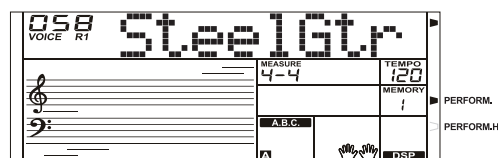
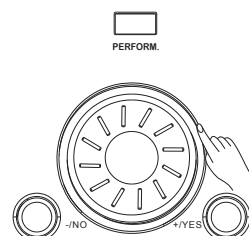
Enter the Performance Assistant

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

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 on LCD, the "4-4" will be displayed. It means the default beat value is the 4/4 and you can use [BACK] or [NEXT] button to change the beat value you want. There are 4 kinds of time signatures you can select: 2-4, 3-4, 4-4 and 6-8.

In Performance Assistant mode, use the [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

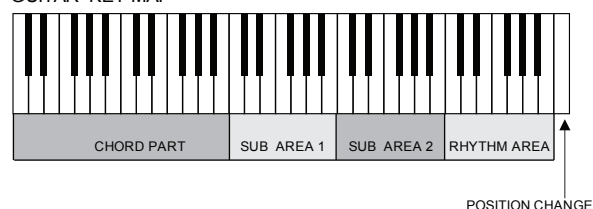
C6 to G6 (only white keys) is the rhythm area. Wonderful styles and strums are provided in this area. Use A6 to B6 to play an ending.

Position Change

Press C7, the guitar position will be changed.

The guitar key map is as the picture.

GUITAR KEY MAP



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.

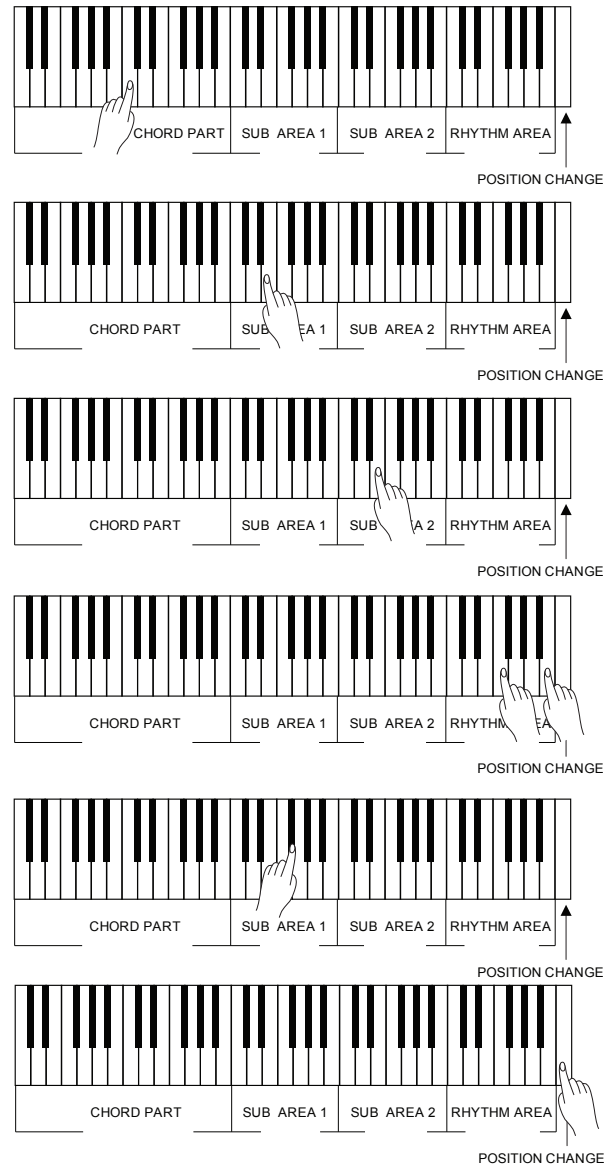
Play the echoism.

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 position 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

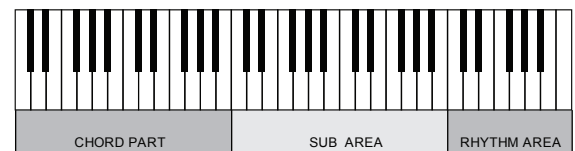
Piano Key Map

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 to the guitar key map. Press A6 to C7 will start ending. All the black keys above C4 are invalid.

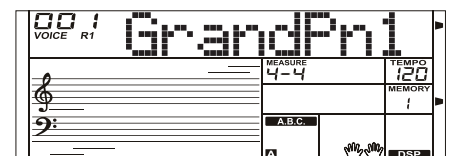
The piano key map is as the picture.

PIANO KEY MAP



Playing in the Piano Mode

1. In the Performance Assistant, use data dial, [+ / YES] or [- / NO] button to change to the 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

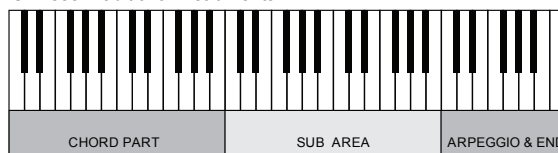
C4 to B5 (only white keys) is the sub area. Chinese Traditional rhythm and broken chord are provided in this area.

Rhythm Area

C6 to G6 (only white keys) is the Arpeggio area. Wonderful styles and strums are provided in this area. In PIPA, SANXIAN, YANGQIN and ZHONRUAN 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.

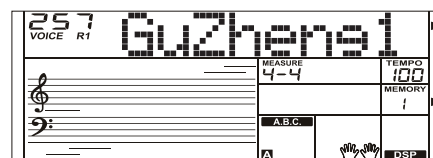
The Chinese Traditional Instruments key map is as the picture:

Chinese Traditional Instruments KEY MAP

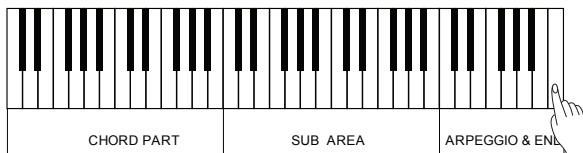


Playing in the Chinese Traditional Instruments Mode

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



Chinese Traditional Instruments KEY MAP



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:

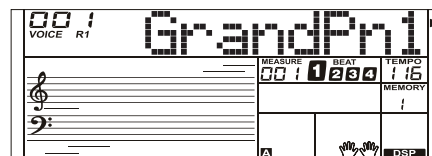
In Chinese Traditional Instruments Mode, the chord response is different from the Guitar Mode and the Piano Mode. Only the Major and the Minor chord will be responded.

Exit the Performance Assistant

When the phrase stops, press the [VOICE], [STYLE], [SONG], [PERFORM.] and the direct button to exit the Performance Assistant.

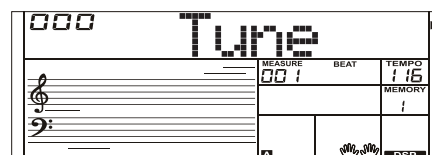
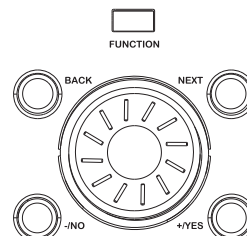
Turning the Metronome ON/OFF

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



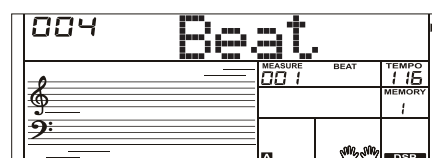
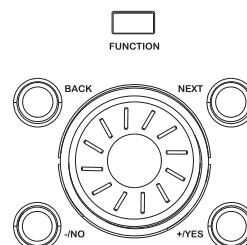
Tuning

1. Press the [FUNCTION] button.
2. Select "TUNE".
Use [FUNCTION], [BACK] or [NEXT] button to select TUNE.
The LCD displays the tune value. The value ranges from -50 to 50 and the default value is 0.
The function sets the overall pitch of the instrument.
3. Change the tune value.
Use the data dial, [+ / YES] or [- / NO] button to change the tune value.
Press [+ / YES] and [- / NO] simultaneously to set the default tune value.



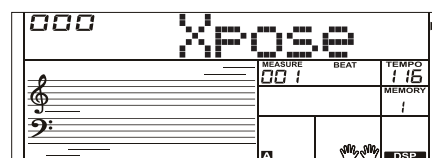
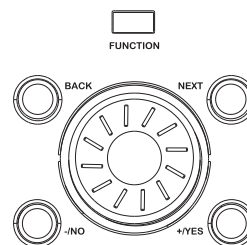
Selecting the Beat

1. Press the [FUNCTION] button.
2. Select "BEAT".
Use [FUNCTION], [BACK] or [NEXT] button to select BEAT.
The LCD displays the beat value. The value ranges from 2-9 and 0. The default value is 4.
3. Change the beat value.
Use the data dial, [+ / YES] or [- / NO] button to change the beat value.
Press [+ / YES] and [- / NO] simultaneously to set the default beat value.



Setting the Transpose

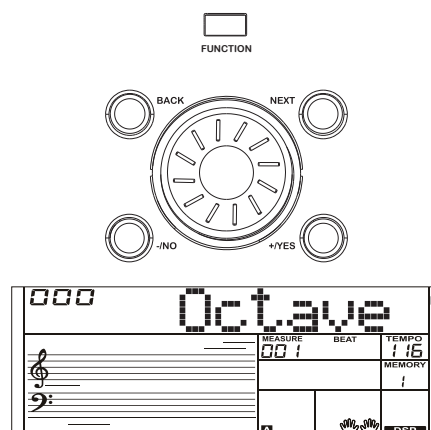
1. Press the [FUNCTION] button.
2. Select "XPOSE".
Use [FUNCTION], [BACK] or [NEXT] button to select XPOSE. The LCD displays the transpose value. The value ranges from -12 to 12 and the default value is 0.
This function allows the overall pitch of the instrument to be transposed up or down by a maximum of one octave in semitone increments.
3. Change the transpose value.
Use the data dial, [+ / YES] or [- / NO] button to change the transpose value.
Press [+ / YES] and [- / NO] simultaneously to set the default transpose value.



Other Functions

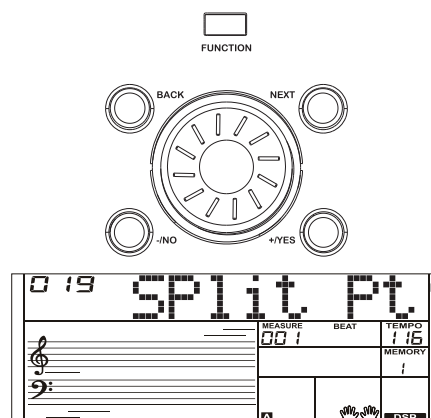
Setting the Octave

1. Press the [FUNCTION] button.
2. Select "OCTAVE".
Use [FUNCTION], [BACK] or [NEXT] button to select OCTAVE. The LCD displays the octave value. The value ranges from -1 to 1 and the default value is relevance to the voice.
This function determines the relative octave setting for the keyboard-played voice R1, R2 and L.
3. Change the octave value.
Use the data dial, [+YES] or [-NO] button to change the octave value.
Press [+YES] and [-NO] simultaneously to set the default octave value.



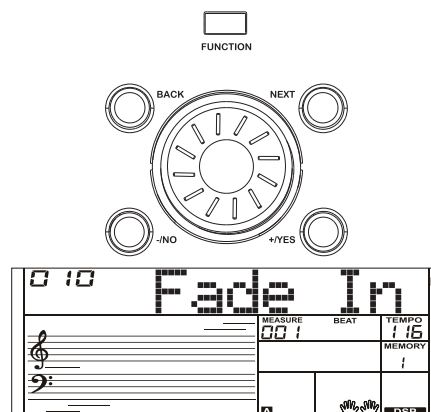
Setting the Split Point

- The point on the keyboard that separates the auto accompaniment section and the right-hand section of the keyboard is called the "split point".
- When the auto accompaniment is on, keys played to the left of the split point are used for controlling the auto accompaniment.
- When the auto accompaniment is off, keys played to the left of the split point are used for playing voice lower.
1. Press the [FUNCTION] button.
 2. Select "SPLIT POINT".
Use [FUNCTION], [BACK] or [NEXT] button to select SPLIT POINT. The LCD displays the default split point is 19 (#F3/G3).
 3. Change the split.
Use the data dial, [+YES] or [-NO] button to change the split point and you can simply press a key on the keyboard to set it as the split point.
Press [+YES] and [-NO] simultaneously to set the default split point.



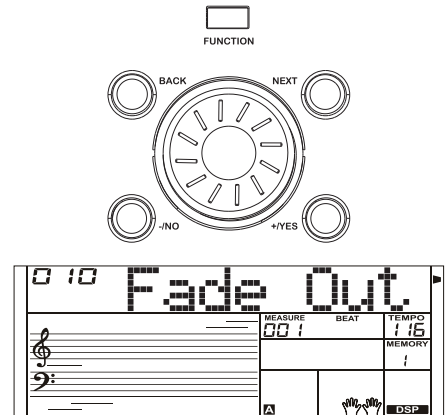
Fade in Duration

1. Press the [FUNCTION] button.
2. Select "FADE IN".
Use [FUNCTION], [BACK] or [NEXT] button to select FADE IN. The LCD displays the time value. The value ranges from 1 to 30 seconds and the default value is 10.
3. Change the time value.
Use the data dial, [+YES] or [-NO] button to change the fade in time value.
Press [+YES] and [-NO] simultaneously to set the default value.



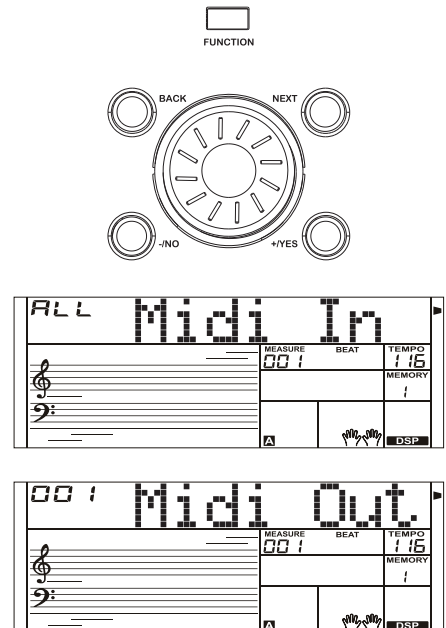
Fade Out Durat

1. Press the [FUNCTION] button.
2. Select "FADE OUT".
Use [FUNCTION], [BACK] or [NEXT] button to select FADE OUT. The LCD displays the time value. The value ranges from 1 to 30 seconds and the default value is 10.
3. Change the time value.
Use the data dial, [+ / YES] or [- / NO] button to change the fade out time value.
Press [+ / YES] and [- / NO] simultaneously to set the default value.



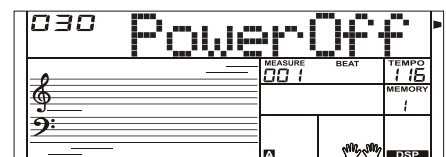
MIDI Setting

1. Press the [FUNCTION] button.
2. Select "Midi In" or "Midi Out".
Use [FUNCTION], [BACK] or [NEXT] button to select Midi In.
MIDI IN
The default setting is "all". Otherwise, channel 1 to 16 can also be selected.
MIDI OUT
The default setting is "001". Otherwise, there are total of 16 channels for selection.
3. Change the channel.
Use the data dial, [+ / YES] or [- / NO] button to select the channel.
Press [+ / YES] and [- / NO] simultaneously to set the default setting.



Automatic Shutdown

1. Press the [FUNCTION] button.
2. Select "Power Off".
Use [FUNCTION], [BACK] or [NEXT] button to select Power Off.
The LCD displays the time value. The value ranges OFF, 30 and 60, the default value is 30.
3. Change the time value.
Use the data dial, [+ / YES] or [- / NO] button to change the Power Off time value.
Press [+ / YES] and [- / NO] simultaneously to restore the default value: 30 minutes.



MIDI Functions

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.

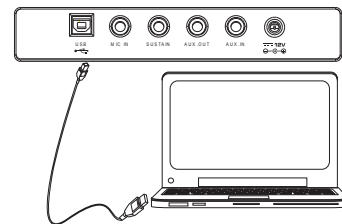
MIDI IN: Receives MIDI data from a computer.

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

Note:

Activate the computer from a sleep/suspended/standby mode before connecting the USB cable.

Connect the USB cable to the instrument and a computer before turning the power of the instrument on.



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 PortaTone may produce interference. To prevent this, turn off the mobile phone or use it further away from the PortaTone.
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.	Harmony cannot be turned on when the Full Keyboard fingering mode is selected. And Harmony cannot be turned on when a drum kit is selected for the voice R1.

Specifications

LCD Display

Multi-functional LCD

Keys

61

Polyphony

64

Voice

512

Style

160

Song

120+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-M4, O.T.S., Back, Next, +/Yes, -/No, Style, Voice, Demo, Song, Piano, Metronome, Dual, Touch, Sustain, Lower, DSP, Harmony

Accompaniment Control

Start/Stop, Sync [Pause], Intro/End/Repeat A-B, Fill-in A [FF], Fill-in B [Rew], Fade, Chord Mode

Record Function

Record, Play/Stop, Accomp, Melody 1, Melody 2

Panel Memory

16

Connectors

DC IN, Headphones, AUX IN, AUX OUT, Sustain, USB, MIC IN

Speaker

4Ω, 10W + 10W

Dimensions

990(W)X350(D)X140(H)MM

Weight

6KG

Voice List

No.	Name	LCD Name	57	Nylon Guitar 2	NylonGt2	116	Ana Voice	AnaVoice
PIANO			58	Steel Guitar	SteelGtr	117	Orchestra Hit	OrchHit
1	Acoustic Grand Piano	GrandPn1	59	12 String Guitar	12StrGtr	118	Bass Hit	BassHit
2	Stereo Grand Piano 1	StGrPn1	60	Mandolin	Mandolin	119	6th Hit	6thHit
3	Grand Piano	GrandPn2	61	Steel+Body	Stel+Bdy	120	Europe Hit	EuroHit
4	Bright Piano	BrightPn	62	Jazz Guitar	JazzGtr	BRASS		
5	Stereo Grand Piano 2	StGrPn2	63	Pedal Steel	PdlSteel	121	Trumpet	Trumpet
6	Electric Grand Piano	E.Grand	64	Clean Guitar	CleanGtr	122	Dark Trumpet	DarkTrp
7	Grand Piano / W	GrPnoW	65	Clean Harf	ClnHarf	123	Trombone 1	Trmbone1
8	Honky-Tonk	HnkyTonk	66	Mid Tone Guitar	MidTone	124	Trombone 2	Trmbone2
9	Honky-Tonk / W	HonkyTW	67	Mute Guitar	MuteGtr	125	Brite Bone	BritBone
10	E.Piano 1	E.Piano1	68	Funk Guitar 1	FunkGt1	126	Tuba	Tuba
11	Detuned E.P 1	DetEP1	69	Funk Guitar 2	FunkGt2	127	Mute Trumpet 1	MuteTrp1
12	E.Piano 1 / V	EP1V	70	Jazz Man	JazzMan	128	Mute Trumpet 2	MuteTrp2
13	60's E.Piano	60'sEP	71	Overdrive Guitar	Ovrdrive	129	French Horns 1	FrHorn1
14	E.Piano 2	E.Piano2	72	Guitar Pinch	GtPinch	130	French Horns 2	FrHorn2
15	Detuned E.P 2	DetEP2	73	Distortion Guitar	DistGtr	131	Brass Section 1	Brass1
16	E.Piano 2 / V	EP2V	74	Feedback Guitar	FeedbkGt	132	Brass Section 2	Brass2
17	E.Piano Legend	EPLegend	75	DistRythm Guitar	DistRyth	133	Synth Brass 1	SynBras1
18	E.Piano Phase	EPPHase	76	Guitar Harmonics	GtrHarmo	134	Synth Brass 2	SynBras2
19	Harpsichord	Harpsi	77	Guitar Feedback	GtFeedbk	135	Oct Synth Brass	OcSynBrs
20	Coupl Harpsichord	CouplHps	BASS			136	Jump Brass	JmpBrass
21	Harpsichord / W	HarpsW	78	Acoustic Bass	AcoBass	137	Synth Brass 3	SynBras3
22	Harpsikd / O	HarpsOff	79	Finger Bass	FingBass	138	Synth Brass 4	SynBras4
23	Clavichord	Clavi	80	Finger Jazz Bass	FingJBas	139	Velo Brass	VeloBras
24	Pulse Clavichord	PulseClv	81	Pick Bass	PickBass	REED		
MALLET			82	Fretless Bass	Fretless	140	Soprano Sax	SprnoSax
25	Celesta	Celesta	83	Slap Bass 1	SlapBas1	141	Alto Sax	AltoSax
26	Glockenspiel	Glocken	84	Slap Bass 2	SlapBas2	142	Tenor Sax	TenorSax
27	Music Box	MusicBox	85	Synth Bass 1	SynBass1	143	Bariton Sax	BariSax
28	Vibraphone	Vibra	86	Synth Bass 101	SynBs101	144	Oboe	Oboe
29	Vibraphone / W	VibraW	87	Acid Bass	AcidBass	145	English Horn	EngHorn
30	Marimba	Marimba	88	Clavichord Bass	ClaviBas	146	Bassoon	Bassoon
31	Marimba / W	MarimbaW	89	Hammer	Hammer	147	Clarinet	Clarinet
32	Xylophone	Xylophon	90	Synth Bass 2	SynBass2	PIPE		
33	Tubular Bell	TubulBel	91	Beef FM Bass	BeefFMBs	148	Piccolo	Piccolo
34	Church Bell	ChurBell	92	Rubber Bass	RubBass	149	Flute	Flute
35	Carillon	Carillon	93	Attack Pulse	AtackPls	150	Recorder	Recorder
36	Dulcimer	Dulcimer	STRINGS			151	Pan Flute	PanFlute
ORGAN			94	Violin	Violin	152	Bottle Blow	Bottle
37	Drawbar Organ	DrawOrgn	95	Slow Violin	SlowVln	153	Shakuhachi	Shakhchi
38	Detuned Organ 1	DetunOr1	96	Viola	Viola	154	Whistle	Whistle
39	60's Organ	60'sOrgn	97	Cello	Cello	155	Ocarina	Ocarina
40	Organ 1	Organ1	98	Contrabass	Contrabs	LEAD		
41	Perc Organ	PercOrgn	99	Tremolo Strings	TremStr	156	Square Wave	SquareLd
42	Detune Organ 2	DetunOr2	100	Pizzicato Strings	PizzStr	157	Square	Square
43	Organ 2	Organ2	101	Orchestral Harp 1	Harp1	158	Sine Wave	SineWave
44	Rock Organ	RockOrgn	102	Orchestral Harp 2	Harp2	159	Saw Wave	SawLead
45	Church Organ 1	ChurOr1	103	Timpani	Timpani	160	Saw	Saw
46	Church Organ 2	ChurOr2	104	Strings	String	161	Doctor Solo	DoctSolo
47	Church Organ 3	ChurOr3	105	Orchestra	Orkestra	162	Natural Lead	NatuLead
48	Reed Organ	ReedOrgn	106	60's Strings	60'Str	163	Sequenced Saw	SequSaw
49	Puff Organ	PuffOrgn	107	Slow Strings	SLString	164	Synth Calliope	CaliopLd
50	Accordion	Acordion	108	Synth Strings 1	SynStrs1	165	Chiffer Lead	ChiffLd
51	Accordion Italy	AcordinI	109	Synth Strings 2	SynStrs2	166	Charang	CharanLd
52	Harmonica	Harmnica	110	Synth Strings 3	SynStrs3	167	Wire Lead	WireLead
53	Tango Accordion	TangoAcd	111	Choir Aahs 1	ChoirAh1	168	Solo Voice	VoiceLd
GUITAR			112	Choir Aahs 2	ChoirAh2	169	5th Saw Wave	FifthLd
54	Nylon Guitar 1	NylonGt1	113	Voice Oohs	VoiceOoh	170	Bass & Lead	Bass&Ld
55	Ukulele	Ukulele	114	Hamming	Hamming	171	Delay Lead	DelayLd
56	Nylon Open	NylonO	115	Synth Voice	SynVoice	PAD		

PAD			228	Dog	Dog	288	HuLuSi	HuLuSi
172	NewAge Pad	NewAgePd	229	Horse Gallop	HorseGlp	289	LuSheng	LuSheng
173	Warm Pad	WarmPad	230	Bird Tweet 2	Tweet2	290	Xiao	Xiao
174	Sine Pad	SinePad	231	Telephone 1	Telphon1	291	Xun	Xun
175	Poly Synth	PolySyPd	232	Telephone 2	Telphon2	292	SuoNa	SuoNa
176	Space Choir	ChoirPad	233	Door Creak	DoorCrek	293	GuanZi	GuanZi
177	Itopia	Itopia	234	Door	Door	294	HouGuan	HouGuan
178	Bowed Glass	BowedPad	235	Scratch	Scratch	295	Huang	Huang
179	Metal Pad	MetalPad	236	Wind Chimes	WindChm	296	PaiXiao	PaiXiao
180	Halo Pad	HaloPad	237	Helicopter	Helicptr	SYNTH		
181	Sweep Pad	SweepPad	238	Car-Engine	CarEngin	297	Slow Piano	SlPiano
EFFECTS			239	Car-Stop	Car-Stop	298	Mix Piano	MixPiano
182	Fx Rain	FxRain	240	Car-Pass	Car-Pass	299	Synthesis 1	Sythesis1
183	Sound Track	SoundTrk	241	Car-Crash	Car-Crsh	300	Lfo EP	LfoEP
184	Crystal	Crystal	242	Siren	Siren	301	Slow EP	SlowEP
185	Syn Mallet	SynMalet	243	Train	Train	302	Mix EP	MixEP
186	Atmosphere	Atmosphr	244	Jetplane	Jetplane	303	Pad 1	Pad1
187	Brightness	Bright	245	Starship	Starship	304	Lfo Honky	LfHonky
188	Goblins	Goblins	246	Burst Noise	BurtNois	305	Lfo Harpsichord	LfHarp
189	Echo Drops	Echoes	247	Applause	Applause	306	Mix Harpsichord	MxHarp
190	Echo Bell	EchoBell	248	Laughing	Laughing	307	Harpsichord+Vibra	VibHarp
191	Echo Pan	EchoPan	249	Screaming	Screming	308	Ad PiPa	Ad-PiPa
192	Star Theme	Sci-Fi	250	Punch	Punch	309	Br LiuQin	BrLvQin
ETHNIC			251	Heart Beat	HeartBet	310	Tremolo Tango 1	TriTang
193	Sitar 1	Sitar1	252	Footsteps	Footstep	311	Pad 2	Pad2
194	Sitar 2	Sitar2	253	Gunshot	Gunshot	312	Harpsi Bowed	Harpsi
195	Banjo	Banjo	254	Machine Gun	MachnGun	313	Fx+Harpsichord 1	FxHarp1
196	Shamisen	Shamisen	255	Laser Gun	LaserGun	314	Fx+EP 1	EPFx1
197	Koto	Koto	256	Explosion	Explosio	315	Fx+EP Rhd 1	EPRhd1
198	Taisho Koto	TaishoKt	CHINESE INSTRUMENT			316	EP+Accordion	EPAccd
199	Kalimba	Kalimba	257	GuZheng	GuZheng1	317	EP+Brass	EPBrass
200	Bag Pipe	BagPipe	258	GuZheng Harmonic	GuZheng2	318	EP+Clavichord	EPClav
201	Fiddle	Fiddle	259	GuZheng / Harmonic	GuZheng3	319	EP+Glocken	EPGlock
202	Shanai	Shanai	260	YueQin	YueQin	320	Fx+Harpsichord 2	FxHarp2
203	Tinkle Bell	TnklBell	261	YangQin	YangQin1	321	EP+Harmonica	EPHrm
204	Agogo	Agogo	262	YangQin Tremolo	YangQin2	322	Fx+Tango 1	FxTang
PERCUSSIVE			263	YangQin / Tremolo	YangQin3	323	EP+MusicBox	EPBox
205	Steel Drums	SteelDrm	264	SanXian	SanXian1	324	Harpsichord+Grand	HarpGrd
206	Wood Block	WoodBlok	265	SanXian Tremolo	SanXian2	325	EP+Strings	EPStr
207	Castanet	Castanet	266	SanXian / Tremolo	SanXian3	326	Fx Pad	FxPad
208	Taiko	TaikoDrm	267	DaRuan	DaRuan	327	EP+Tango	EPTgo
209	Concert Bass Drum	ConctBD	268	ZhongRuan	ZhonRuan	328	Harpsichord Strings	HarpStr
210	Melody Tom 1	MeldTom1	269	GuQin	GuQin	329	Dream EP	DrmEP
211	Melody Tom 2	MeldTom2	270	PiPa	PiPa1	330	Pad 3	Pad3
212	Synth Drum	SynDrum	271	PiPa Tremolo	PiPa2	331	Clavichord+Vibraphon	ClavVib
213	808 Tom Electric	808Tom	272	PiPa / Tremolo	PiPa3	332	Fx Clavichord	FxClav
214	Percussion	ElecPerc	273	LiuQin	LiuQin	333	Mix Clavichord	MxClav
215	Reverse Cymba	RevCymba	274	ReWaPu	ReWaPu	334	Lfo Clavichord	LfClav
SOUND EFFECTS			275	DuXianQin	DuXian	335	Mix Vibraphon	VibMx
216	Guitar Noise	GtNoise	276	BanHu	BanHu	336	Lfo Organ	OrgLf
217	Guitar Cut Noise	GtCutNos	277	ZhongHu	ZhongHu	337	Mix Organ	MxOrg
218	Slap String Bass	SlapStBs	278	ErHu	ErHu	338	Fx+RockOrgan 1	RkOrgFx1
219	Breath Noise	Brtnoise	279	GaoHu	GaoHu	339	Synth 1	Synth1
220	Flut Key Click	FlKeyClk	280	JingHu	JingHu	340	Harpsichord Bowed	BwdHarp
221	Seashore	Seashore	281	ErHuang	ErHuang	341	Fx+RockOrgan 2	RkOrgFx2
222	Rain	Rain	282	ZhuiQin	ZhuiQin	342	Stereo RockOrgan 1	SterOrg1
223	Thunder	Thunder	283	BaWu	BaWu	343	Fx+EP 2	EPFx2
224	Wind	Wind	284	QuDi	QuDi	344	Tremolo Organ	TrmlOrg
225	Stream	Stream	285	BangDi	BangDi	345	Tremolo RockOrgan 1	RkOrgT1
226	Bubble	Bubble	286	XinDi	XinDi	346	Mute+Organ	MtOrg
227	Bird Tweet 1	Tweet1	287	KouDi	KouDi	347	Bass Organ	BsOrg

Voice List

348	Tremolo Tango 2	TrlTango	409	XinDi+Clavichord 1	XDiClav1	470	Bl-Pad	Bl-Pad
349	Accord Bass	AccBass	410	Br-EP	BrEP	471	Dream Lead	DreamLd
350	Fx+Accordion 1	FxAcc1	411	Tuba+Ehorn 1	TubaEhn1	472	Wah Lead	WahLd
351	Harpsichord+Accordion	HarpAcc	412	Fx+Trumpet 2	FxTrump2	473	Double Lead	DoublLd
352	Fx+Tango 2	FxTango	413	Brass+Tango 1	BrTang1	474	Lead Saw 3	LeadSaw3
353	Accordion+Percussion	AdPercu	414	Stereo RockOrgan 2	SterOrg2	475	Voice Brass 5	VoBrass5
354	EP+Marimba	MrbEP	415	Bright Strings	BritStr	476	Lead Saw 4	LeadSaw4
355	Et Steel 1	ESteel1	416	Brass+Harmonica 1	BrHarm1	477	Sht+Saw 2	ShtSaw2
356	Ad Synth Bass	AdSynBs	417	Tuba+Ehorn 2	TubaEhn2	478	Synthesis 3	Sythesis3
357	Organ Guitar	OrganGtr	418	Pizzicato Strings Honky	PizHonky	479	Dream Pad 3	DrmPad3
358	Guitar Honky 1	GtHonky1	419	Tremolo RockOrgan 3	RkOrgT3	480	Fm Strings	FmStr
359	Mix Guitar	MixGt	420	Voice Brass 1	VoBrass1	481	Magic Pad 2	MagicPd2
360	Wah Guitar	WahGt	421	New Banjo	NewBanjo	482	Sea Pad	SeaPad
361	Reverse Overdrive Guitar	RevsGt	422	Power Reed	PwrReed	483	Synth Pad 3	SythPad3
362	Mix Overdrive 1	MixOD1	423	Brass+Harmonica 2	BrHarm2	484	Synth Pad 4	SythPad4
363	Harpsichord+Honky	HkyHarp	424	Sax+Reed 2	SaReed2	485	Fx Ehorn 2	FxEhorn2
364	Mix Overdrive 2	MixOD2	425	Pad 4	Pad4	486	Pad 6	Pad6
365	Fx+Accordion 2	FxAcc2	426	Fx Distortion Guitar	FxDsGt	487	Fx Pad	FxPad
366	Fx+Harpsichord 3	FxHarp3	427	Sax+Reed 3	SaReed3	488	Synth 3	Synth3
367	Mix Clean	MixCln	428	Sax+Piccolo	SaPicco	489	GuQin+GuZheng	GuQinGZ
368	Fx+EP Rhd 2	EPRhd2	429	BK Clavichord 1	BKClarn1	490	MidiHu+YueQin 2	MdYvQin2
369	Guitar+Bass	GtBass	430	Wave Form Lead	WFmLead	491	Xiao+Sitar	XiaoSita
370	Lfo Sitar	LfoSitar	431	WD Oboe+Clarinet	WDClarn	492	Xun+XinDi	XunXDi
371	Guitar+Sitar	GtSitar	432	Fx+Trumpet 3	FxTrump3	493	ZhongQin	ZhQin
372	Dream Sitar	DrmSitar	433	Pad 5	Pad5	494	Pad PiPa	PadPiPa
373	Fx+Harpsichord 4	FxHarp4	434	Fx Mute Trumpet 1	FxTrump1	495	World SanXian	WdSanX
374	MidiHu+YueQin 1	MdYvQin1	435	Fx Ehorn 1	FxEhorn1	496	Pan Koto	PanKoto
375	Synth 2	Synth2	436	Tuba Ehorn 2	TubaEhn	497	Mt+Tubulbe	Tubub
376	Fx Guitar 1	FxGt1	437	Flute+XinDi 1	FlutXDi1	498	Mt+Voice	MtVoic
377	Sax+Reed 1	SaReed1	438	Fx Mute Trumpet 2	FxTrump2	499	Big Wind	BigWind
378	Mix Distortion Guitar	MixDsGt	439	Brass+Tango 2	BrTang2	500	Brass+LiuQin	BrLiuQin
379	World Guitar	WldGt	440	Fx Synthesis 1	FxSyth1	501	Ad-PiPa	AdPiPa
380	Et Steel 2	ESteel2	441	Brass+Harmonica 3	BrHarm3	502	XinDi+Clavichord 2	XDiClav2
381	Guitar+Flute	GtFlute	442	Brass Vibraphon	BrVbr	SYNTH		
382	Guitar+YueQin	GtYvQin	443	Sht+Saw 1	ShtSaw1	503	Standard Kit	StdKit
383	Fx+Harpsichord 5	FxHarp5	444	Fx Brass	FxBrass	504	Room Kit	RoomKit
384	Tremolo RockOrgan 2	RkOrgT2	445	Fx Harmonica	FxHarm	505	Power Kit	PowerKit
385	Guitar Honky 2	GtHonky2	446	Fx+Trumpet 4	FxTrump4	506	Electric Kit	ElecKit
386	Fx+Accordion 3	FxAcc3	447	Voice Brass 2	VoBrass2	507	Analog Kit	AnlgKit
387	Guitar+PiPa	GtPiPa	448	Fx+Accordion 5	FxAcc5	508	Jazz Kit	JazzKit
388	Fx Guitar 2	FxGt2	449	Brass+Marimba	BrMarimb	509	Brush Kit	BrushKit
389	Feedback+Overdrive	Fb+Od	450	Voice Brass 3	VoBrass3	510	Orchestra Kit	OkstKit
390	Jazz YangQin	JazzYQin	451	Electric Bass 2	ElBass2	511	Sfx Kit	SfxKit
391	Tremolo Gt Honky	TlHonky	452	Magic Pad 1	MagicPd1	512	Chinese Kit	ChnKit
392	Fx+Accordion 4	FxAcc4	453	Ds Brass	DsBrass			
393	Fx+Trumpet 1	FxTrump1	454	Synthesis 2	Sythesis2			
394	Wah Overdrive	WahOD	455	Flute+Steel Guitar	FlutGt			
395	Electric Bass 1	ElBass1	456	Flute+XinDi 2	FlutXDi2			
396	Music Bass 1	MzBass1	457	Lead Saw 1	LeadSaw1			
397	Fx+RockOrgan 3	RkOrgFx3	458	Dream Pad 2	DrmPad2			
398	Music Bass 2	MzBass2	459	Lead Saw 2	LeadSaw2			
399	Guitar Honky 3	GtHonky3	460	Magic Flute	MgcFlute			
400	Voice Stings	VoStr	461	BK Clavichord 2	BKClarn2			
401	Strings+Marimba	StMarmb	462	Synth Pad 1	SythPad1			
402	Strings Piano	StrPiano	463	Fx Calliop	FCalliop			
403	Dream Pad 1	DrmPad1	464	Movie Pad	MoviePad			
404	Xiao+Viola	XiaoVla	465	Fx Setting	FxSetin			
405	Fx Oboe	FxOboe	466	Voice Brass 4	VoBrass4			
406	XiPi+Violin	XPiVln	467	Synth Pad 2	SythPad2			
407	Mt+Strings	M-Str	468	Fx Synthesis 2	FxSyth2			
408	Delay PizzStr	DlyPizz	469	Bp-Trigo	Bp-Trigo			

No.	Name	LCD Name
8BEAT		
1	Guitar Pop 1	GtPop1
2	8Beat Shuffle	8BtShufl
3	8Beat Piano	8BtPiano
4	8Beat Hip Hop	8BtHiHop
5	8Beat R&B	8BeatR&B
6	8Beat Pop	8BtPop
7	Pop Funk	PopFunk
8	Rhythm & Beat	Rhy&Bt2
9	8Beat Disco	8BtDisco
10	8Beat Rock	8BtRock
11	Guitar Pop 2	GtPop2
12	8Beat 1	8Beat1
13	8Beat Dance	8BtDance
14	8Beat 2	8Beat2
16BEAT		
15	Pop 16Beat 1	Pop16Bt1
16	16Beat Funk 1	16BtFuk1
17	16Beat R&B	16BtR&B
18	Pop Rock 1	PopRock1
19	Pop 16Beat 2	Pop16Bt2
20	16Beat Funk 2	16BtFuk2
21	16Beat Dance	16BtDanc
22	Pop 16Beat 3	Pop16Bt3
23	16Beat 1	16Beat1
24	16Beat Hot	16BtHot
25	16Beat Modern	16BtModr
26	Cool Beat	CoolBeat
27	16Beat 2	16Beat2
28	Pop Shffle	PopShfl
POP& BALLAD		
29	6/8 Pop	6/8Pop
30	Pop Dance	PopDance
31	Pop Fusion	PopFusn
32	Pop Hit	PopHit
33	Fusion Shuffle	FusShufl
34	Analog Night	AnalogNt
35	Guitar Pop 3	GtPop3
36	Pop Beat	PopBeat
37	Soft Ballad	SoftBald
38	Natural Ballad	NatuBld
39	Love Ballad	LoveBld
40	Slow Ballad	SlowBald
41	Pop Ballad	PopBld
42	Piano Pop	PianoPop
43	Sweet Pop	SweetPop
ROCK		
44	Slow Rock	SlowRock
45	70's Rock & Roll	70'sRock
46	Soft Rock	SoftRock
47	Pop Rock 2	PopRock2
48	Easy Rock	EasyRock
49	New Shuffle	NewShufl
50	R'N'R 1	R'N'R1
51	Rock Shuffle 1	RockShf1
52	R'N'R 2	R'N'R2
53	Rock Shuffle 2	RockShf2

BALLROOM		
54	Twist	Twist
55	Big Band Fox	BandFox
56	Tango	Tango
57	Slow Fox	SlowFox
58	Slow Waltz 1	SlowWlz1
59	Salsa 1	Salsa1
60	Cha Cha 1	ChaCha1
61	Cha Cha 2	ChaCha2
62	Beguine 1	Beguine1
63	Beguine 2	Beguine2
64	Rhumba 1	Rhumba1
65	Samba 1	Samba1
66	Samba 2	Samba2
67	Jive	Jive
68	Foxtrot	FoxTrot
DANCE		
69	Down Beat	DownBeat
70	Techno	Techno
71	Hip Hop 1	HipHop1
72	Rap	Rap
73	Disco	Disco
74	Soft Disco	SoftDisc
75	Disco Party	DscParty
76	70's Disco Funk	70'sFunk
77	Sky	Sky
78	Hip Hop 2	HipHop2
SOUL & FUNK&JAZZ		
79	Big Band	BigBand
80	Jay R&B	JayR&B
81	Gospel Swing	GopSwing
82	Groove Funk	GrooveFk
83	Rubber Funk	RubberFk
84	Soul	Soul
85	Hip Hop Beat	HipHopBt
86	R & B	R&B
87	Swing	Swing
88	Latin Jazz	LatinJz
89	Acid Jazz	AcidJazz
90	Cool Jazz Ballad	CoolJzBd
91	Swing Shuffle	SwingSfl
92	Big Band 40's	Band40's
93	Modern Jazz Ballad	MdJzBald
94	Orchestra Swing	OrhSwing
COUNTRY		
95	Country Pop 1	CntyPop1
96	Bluegrass	Bluegras
97	Modern Country	ModernCt
98	Country Pop 2	CntyPop2
99	2/4 Country	2/4Cntry
100	Country Folk	CntyFolk
LATIN/LATIN DANCE		
101	Bossa Nova	BosaNov
102	Latin	Latin
103	Dance Reggae	DanRegga
104	Pasodoble	Pasodobl
105	Disco Samba	DscSamba
106	Mambo	Mambo

107	Rumba 2	Rumba2
108	Rumba 3	Rumba3
109	Pop Cha Cha	PChaCha
110	Salsa 2	Salsa2
WALTZ & TRADITIONAL		
111	Waltz	Waltz
112	Old Waltz	OldWaltz
113	German Waltz	GemWaltz
114	Italian Mazurka	ItaMazuk
115	Mariachi Waltz	MariWltz
116	Vienna Waltz	VinaWltz
117	Slow Waltz 2	SlwWltz2
118	Polka 1	Polka1
119	German Polka	GerPolka
120	March 1	March1
121	Polka 2	Polka2
122	US March	USMarch
123	Musette	Musette
124	Mazurke	Mazurke
125	March 2	March2
WORLD		
126	Enka Ballad	EnkaBald
127	Venezia	Venezia
128	6/8 Flipper	6/8Flipp
129	Norteno	Norteno
130	Dangdut	Dangdut
CHINESE MUSIC		
131	Chinese Folk Rock	ChFolkRk
132	Chinese Hip Hop 1	ChHiHop1
133	Chinese R&B 1	ChnR&B1
134	GuangXi Flok	GuangXi
135	XinJiang Rock	XJiangRk
136	Chinese Disco	ChnDisco
137	BeiJing Beat	BeiJing
138	Chinese Shuffle	ChnShufl
139	YunNan Pop	YunNan1
140	Chinese Funk	ChnFunk
141	Chinese Rock	ChnRock
142	Chinese R&B 2	ChnR&B2
143	Chinese Folk 1	ChnFolk1
144	Chinese Beat	ChnBeat
145	Chinese R&B 3	ChnR&B3
146	JiangNan Pop	JNanPop
147	Chinese Folk 2	ChnFolk2
148	Chinese Hip Hop 2	ChHiHop2
149	NeiMeng Folk	NeiMFolk
150	Chinese Techno	ChTechno
151	DaiZu Folk	DaiZu
152	XinJiang Dance	XinJiang
153	JiangNan Folk	JiangNan
154	Korea Folk	Korea
155	ZangZu Folk	ZangZu
156	XinJiang Folk	XJiangFk
157	YunNan	YunNan2
158	NeiMeng Gu	NeiMeng
159	Jubilance	Jubilanc
160	Oriental Modern Dance	OrlDance

Song List

No.	Name	LCD Name
FOLK & COUNTRY		
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	Bridge	Bridge
13	Battle Hymne Of The Republic	Battle
14	The Old Gray Mare	GrayMare
15	American Patrol	USPatrol
16	In The Rain	InRain
17	Sippin'Cider Through A Straw	SCTStraw
18	Country	Country
GOLDEN & POP		
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	SlitNight
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	The Stage Coach	TheStage
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

CLASSICAL		
49	Pianosonatan 08 IN Cm IN Pathetique	Piano08
50	Brahms Waltz	BrmsWalz
51	Aida	Aida
52	Carmen-Prelude	Carmen2
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 Piano Sonata No.9 In D	Sonata9
69	Mov.1 Andante Grazioso Piano Sonata No.11 In A [Alla TurSonata11ca]	Sonata11
70	Prelude In C	Prelude
71	Chinese Dance	ChDance
72	Emperors Waltz	EmprWalz
73	March Militaire	MilMar1
74	Symphony No.40	Symphony
JAZZ & FUSION		
75	ShanZhaShu	ShanZhaS
76	You Are My Sunshine	MySun
77	June Samba	JunSamba
78	Funk	Funk
79	I Can.....	ICan...
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
PIANO		
91	Fur Elise	FurElise
92	Military March	MMarch
93	Habanera	Habanera
94	Minuet	Minuet
95	Bagatelle No.3	DittyNo3
96	Old Macdonald Had A Farm	OldAFarm

97	Wedding March	Wedding
98	2-Part Invention #13 In A Minor.B.W. Iii	Invntion
99	Minuet In G	MinuetG
100	Turkish March	TurkishM
101	Hey Diddle Diddle	HeDiddle
102	March	March
103	Moseta Dance	MosetaDn
104	Bulie Dance	BulieDn
105	Aria	Aria
106	Germanic Dance	GerDance
107	Away In A Manger	AwayInAM
108	Jack&Jill	JackJill
109	Angels We Have Heard On High	Angels
110	Humpty Dumpty	HumptyD
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 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	×	3	
	Messages	×	3	
	Altered	*****	×	
Note Number	Note	0—127	0—127	
	:True voice	*****	0—127	
Velocity	Note on	○ 9nH,V=1-127	○ 9nH,V=1-127	
	Note off	× (9nH,V=0)	×(9nH,V=0; 8nH,V=0-127)	
After Touch	key's	×	×	
	Ch's	×	×	
Pitch Bend		○	○	
Control Change	0	○	○	Bank Select
	1	○	○	Modulation
	5	×	○	Portamento Time
	6	○	○	Data Entry
	7	○	○	Volume
	10	×	○	Pan
	11	×	○	Expression
	64	○	○	Sustain Pedal
	65	×	○	Portamento ON/OFF
	66	×	○	Sostenuto Pedal
	67	○	○	Soft Pedal
	80	○	○	Reverb Program
	81	○	○	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		×	○	
System Common	:SongPosition	×	×	
	:Song Select	×	×	
	:Tune	×	×	
System Real Time	:Clock	×	×	
	:Commands	× *1	× *1	
Aux Messages	:LOCAL ON/OFF	×	×	
	:All Notes Off	○	○	
	:Active sense	×	○	
	:Reset	×	○	
Notes: *1 When the accompaniment is started, an FAH message is transmitted. When accompaniment is stopped, an FCH message is transmitted. When an FAH message is received, accompaniment is started. When an FCH message is received, accompaniment is stopped.				

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

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