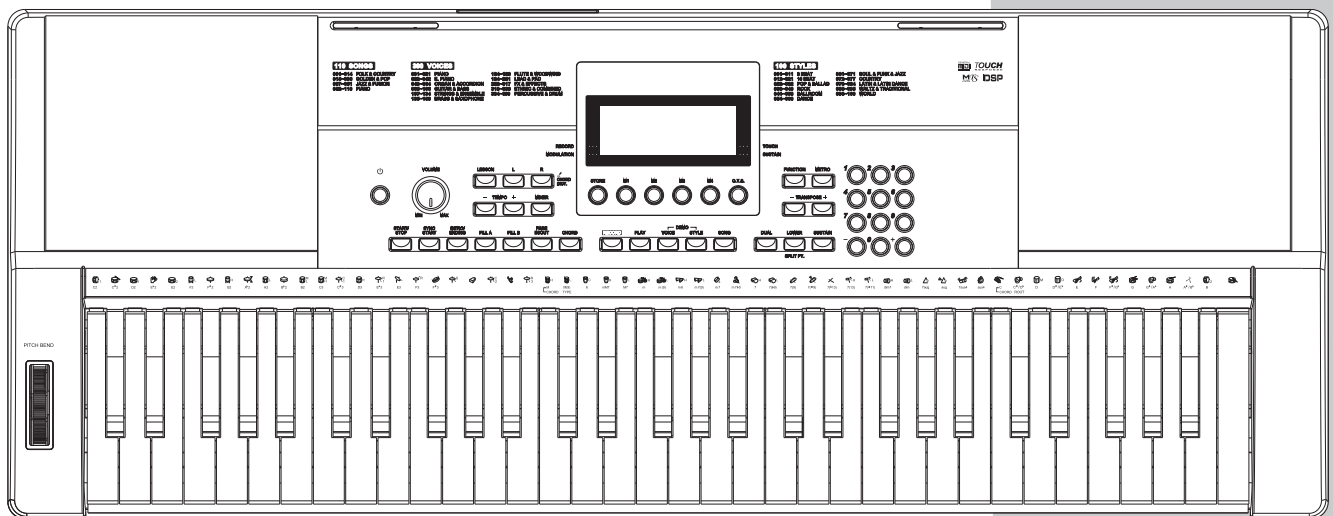


# ELECTRONIC KEYBOARD



## Owner's Manual

## THE FCC REGULATION WARNING (for USA)

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

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

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

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

### CAUTION

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

## 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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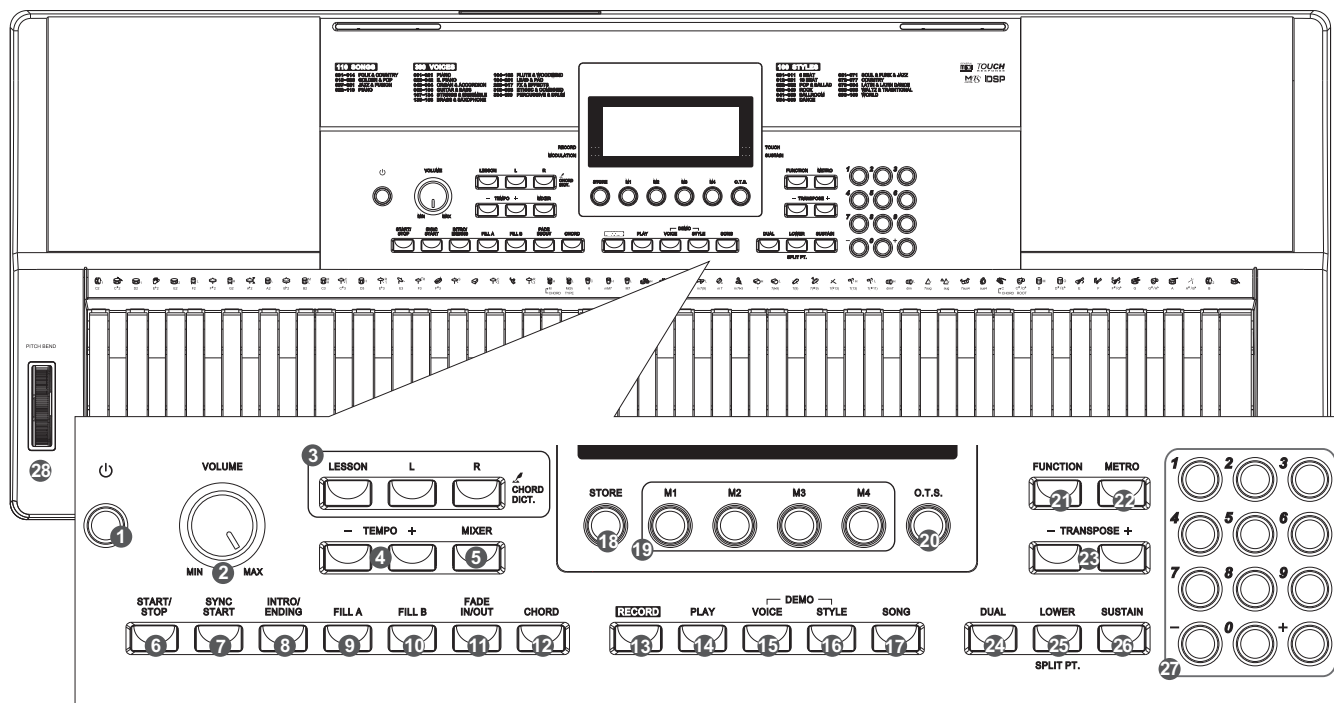
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# Panel & Display Description

## Front Panel



### 1. POWER ON/OFF

Turn the power on or off.

### 2. MASTER VOLUME

Adjust the master volume.

### 3. CHORD DICT./LESSON

Change the Lesson mode.  
Enter the Chord Dictionary.

### 4. TEMPO +/-

Change the current tempo.

### 5. MIXER

Change the volume of each music parts and keyboard layers.

### 6. START/STOP

Start or stop playing the song in Song Mode.  
Start or stop playing the style in Style Mode.

### 7. SYNC START

Turn the SYNC START on or off.

### 8. INTRO/ENDING

Select Intro/Ending of style.

### 9. FILL A

Select Fill in A/Main A of style.

### 10. FILL B

Select Fill in B/Main B of style.

### 11. FADE IN/OUT

Fade in or out current style playback.

### 12. CHORD

Changes the chord detect mode.

### 13. RECORD

Start or stop real-time recording.

### 14. PLAY

Play back the recorded user song.

### 15. VOICE

Enter the Voice Mode.  
Press simultaneously with STYLE button will start the DEMO playback.

### 16. STYLE

Enter the Style Mode. Press simultaneously with VOICE button will start the DEMO playback.

### 17. SONG

Enter the Song Mode.

### 18. STORE

Save current panel settings to a certain memory.

### 19. M1-M4

Recall the memory settings.

### 20. O.T.S.

Turns on or off the One-Touch-Setting for styles.

### 21. FUNCTION

Open the function menu and fine tune the parameters.

### 22. METRO

Turn the metronome on or off.

### 23. TRANSPOSE +/-

Change the global transpose.

### 24. DUAL

Turn the DUAL layer on or off.

### 25. LOWER

Turn the LOWER layer on or off.

### 26. SUSTAIN

Turn the Sustain effect on or off.

### 27. NUMERIC BUTTONS

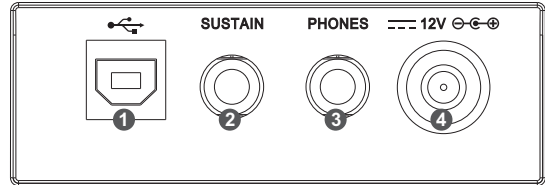
Select the number or set parameters value.

### 28. PITCH BEND

Bend notes up or down.

## Rear Panel

1. **USB**  
Connect to computer to work as a USB-MIDI device.
2. **SUSTAIN PEDAL**  
Connect the sustain pedal.
3. **PHONES / OUTPUT**  
Connect a pair of headphones or external audio equipment.
4. **DC 12V**  
Connect DV 12V power adaptor (optional).



## Display

- |                          |                                 |                     |
|--------------------------|---------------------------------|---------------------|
| 1. RECORD                | 7. BEAT                         | 13. A.B.C./FADE/A/B |
| 2. MODULATION            | 8. TEMPO                        | 14. CHORD           |
| 3. TOUCH                 | 9. M1-M4/ONE TOUCH SETTING      | 15. TREBLE CLEF     |
| 4. SUSTAIN               | 10. DUAL/LOWER/DSP              | 16. BASS CLEF       |
| 5. VOICE/STYLE/DEMO/SONG | 11. LEFT/RIGHT HAND LESSON MODE | 17. USB             |
| 6. MEASURE               | 12. NOTE INDICATION             |                     |

# 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.

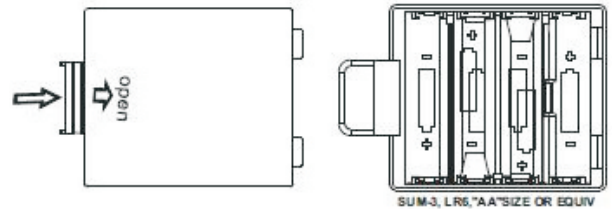
## Power Supply

You can power the unit either by batteries or by power adaptor. Follow the instructions described below.

### Using Batteries

6 pieces of AA size (SUM-3 or Lr6) or equivalent alkaline batteries must first be installed into the battery compartment.

1. Open the battery compartment cover located on the bottom cabinet of the unit.
2. Insert the batteries, carefully follow the polarity markings on the cabinet.
3. Replace the compartment cover, making sure that it locks firmly in place.

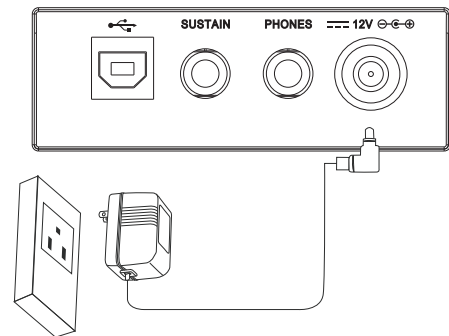


### Caution:

Do not mix old and new batteries.  
Always use same types of batteries.  
Always remove the batteries from the unit when it is not being used for an extended period of time.

### Using Power Adapter

1. First, please make sure that the instrument is powered off.
2. Connect the AC adaptor to the power supply jack.
3. Plug the AC adaptor into an AC outlet. And when turning the power OFF, simply reverse the procedure please. This will automatically cut off the battery power supply.
4. Turn the power ON.



### Note:

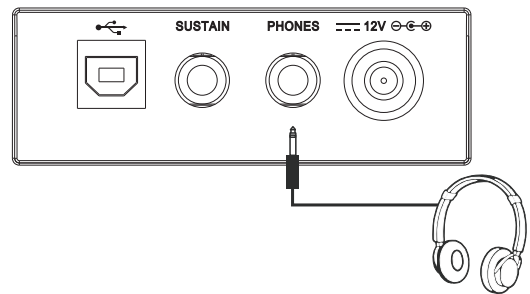
When the keyboard is not in use or in the time of thunderstorm, please disconnect the power for safety purpose.

## Connecting a pair of Headphones

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

**Note:**

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

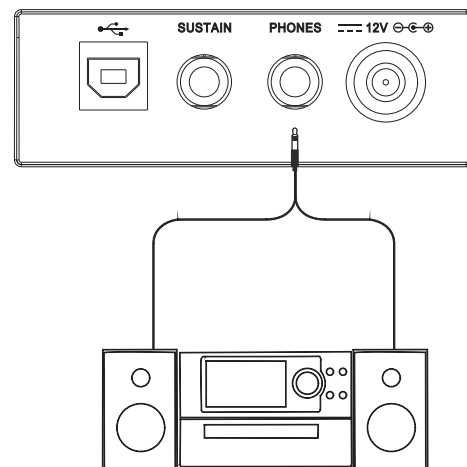


## Connecting an Amplifier

Plug an audio cord into the PHONES jack. Then plug the other end of the cord into AUX. IN of the amplifier.

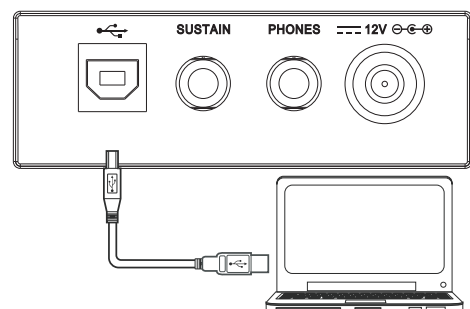
**Note:**

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 a Computer

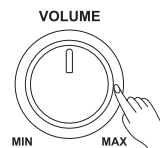
The instrument receives and transmits MIDI messages via the USB connector.



# Basic Operation

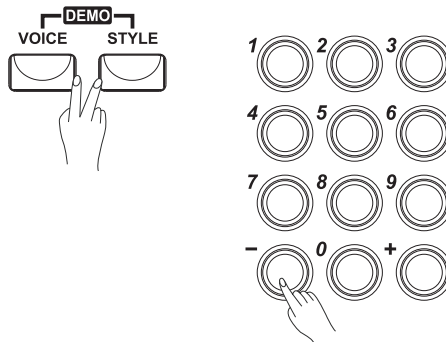
## Master Volume

Use the [MASTER VOLUME] knob to adjust the volume to an appropriate level.



## DEMO

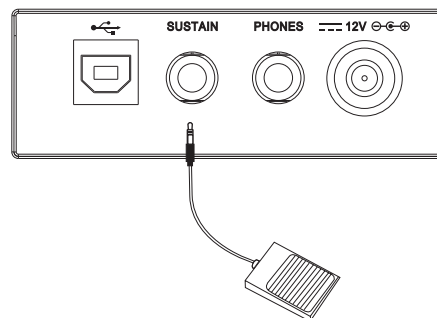
1. Press the [STYLE] and [VOICE] buttons simultaneously to enter the DEMO mode.
2. Select a demo song.  
The first demo song will start playing after 4 beats. And all demos will be played in circularly. If you want to select a demo song, use the numeric buttons, the [+] button or the [-] button to select the desired one. It has 8 demo songs for your choice.
3. Press the [STYLE] and [VOICE] buttons simultaneously again or press the [START/STOP] button to stop playing and exit the demo mode.



## Using Sustain Pedal

When using a sustain pedal in playing, your performance will remain an elegant sustain with hands out of keys, which makes the performance more expressive and abundant.

When the sustain pedal is closed, the pedal sustain is on; when the pedal is released, the pedal sustain is off.



## Voice

### Voice Number

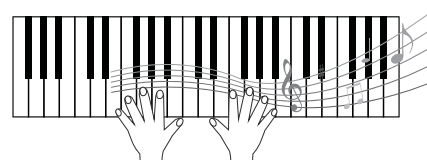
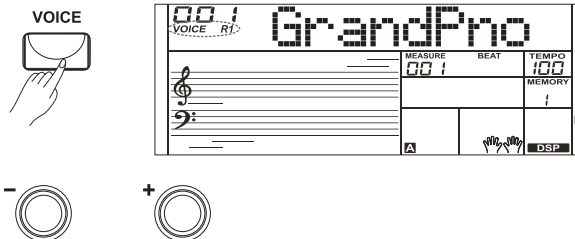
The keyboard has 390 remarkably realistic built-in voices, including Piano, Woodwind, Saxophone, Drum Kits and many more. Please refer to Voice List.

### Voice Setting

The default VOICE R1 is No.001, LCD displays "VOICE R1" and its name. Press the [+]/[-] button or use numeric button to select the voice you want.

### Note:

If the Dual or Lower is turned on, pressing the [VOICE] button repeatedly can navigate the current voice selection of VOICE R1, R2 and Lower.





## Other Voice Functions

### DUAL

The instrument has the dual voice. You can use this function to play two layers of tones simultaneously.

1. Press the [DUAL] button to turn on the DUAL VOICE, LCD displays "VOICE R2", and the DUAL icon will be lightened. The current dual voice name is also displayed on the LCD. Then, you can get two different sounds at the same time when you press one key.
2. Press the [+]/[-] button, or numeric buttons to select your desired voice.
3. Press the [DUAL] button again to turn off the DUAL VOICE.

### Note:

When DUAL VOICE is turned on, only the right area of keyboard has the dual voice.

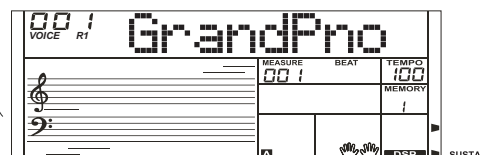
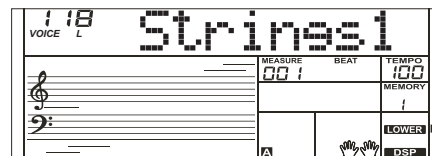
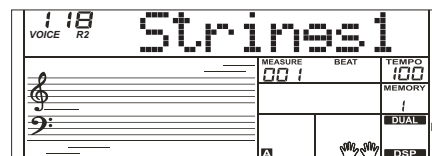
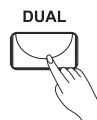
### LOWER

You can split the keyboard to right and left area by this function.

1. Press the [LOWER] button to turn on the LOWER VOICE, LCD lights the LOWER VOICE icon and displays "VOICE L" and its name. When you play in real time, you can activate Split Mode simply by pressing this button.
2. Press the [+]/[-] button, or numeric button to select the voice you want.
3. Press the [LOWER] button again to turn off the LOWER VOICE. LCD turns its icon off.

### SUSTAIN

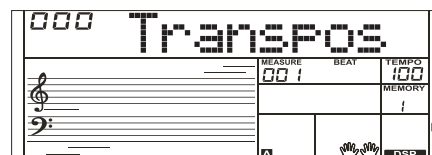
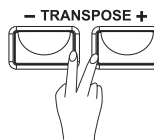
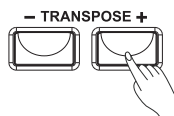
When the Sustain is turned ON, all notes played on the keyboard would have a longer sustain. Press the [SUSTAIN] button to turn the SUSTAIN effect ON or OFF.



## 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.

1. Press the [Transpose +]/[Transpose -] button to adjust the pitch of the instrument. The LCD displays "XXX Transpos".
2. Press the [Transpose +]/[Transpose -] buttons to adjust the pitch of the instrument within -12~+12 semitone.
3. Press the [Transpose +]/[Transpose -] buttons simultaneously to reset the transpose to 0.

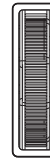


# Basic Operation

## 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.

PITCH BEND

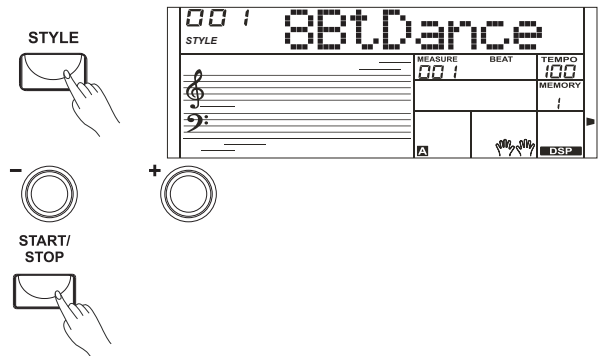


## Auto Accompaniment

The auto accompaniment feature puts a full backing band at your fingertips. To use it, all you have to do is play the chords with your left hand as you perform and the selected accompaniment style matching your music will automatically play along, instantly following the chords you play. With auto accompaniment, even a solo performer can enjoy playing with the backing of entire band or orchestra. The instrument features 100 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.

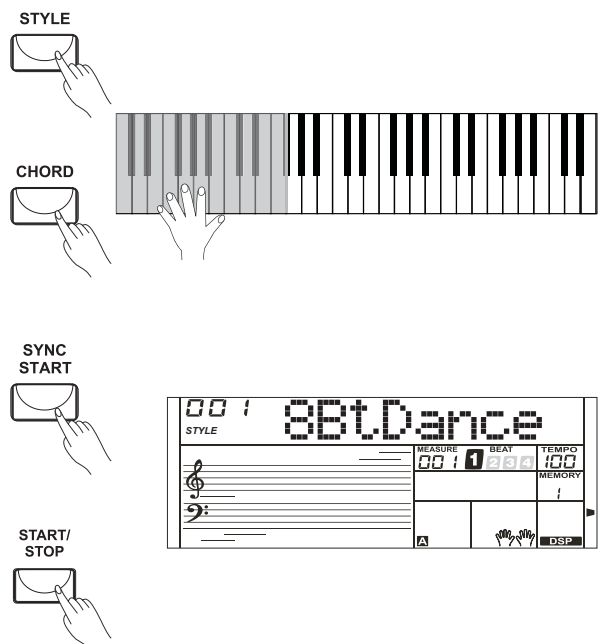
### Playing Auto Accompaniment (rhythm track only)

1. Press the [STYLE] button.  
Enter the STYLE mode. LCD shows "STYLE" and the current style selection.
2. Select a style.  
Use the [+] or [-] button to select the style you want to play.
3. Press the [START/STOP] button to start the rhythm tracks of the auto accompaniment.



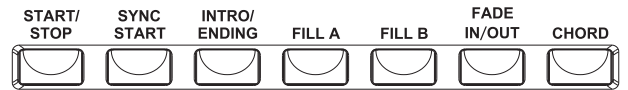
### Playing Auto Accompaniment (all tracks)

1. Press the [STYLE] button.
2. Select a style.
3. Turn on the CHORD detect mode.  
Press the [CHORD] 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.
4. Turn SYNCHRONIZED START on.  
Press the [SYNC START] button, now the beat lamp flashes in time with the tempo. This condition is called synchronized start standby. It will start the accompaniment as soon as you start playing in Chord section.
5. Try playing other chord with your left hand.
6. Press the [START/STOP] button again to stop the accompaniment.



## Accompaniment Sections

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

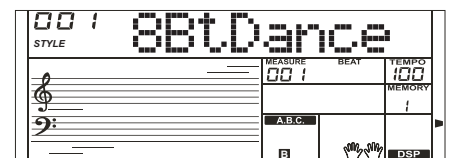
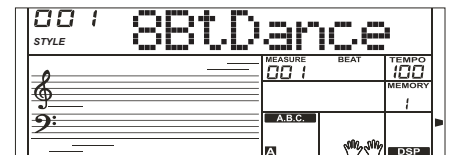
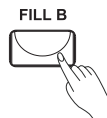
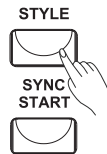


### 4. ENDING Section

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, select a style.
2. Turn the CHORD detect mode on, turn SYNC START on.
3. Press the [FILL A] button.
4. Press the [INTRO/ENDING] button.  
Now the "A" flashes on LCD, the style is ready to play.
5. 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.
6. Press the [FILL B] button.  
A fill-in plays, automatically followed by the main B section.
7. 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:

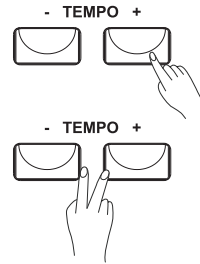
Hold down the FILL button when the style is playing, the FILL pattern repeats continually until you release the button.

# Basic Operation

## Tempo

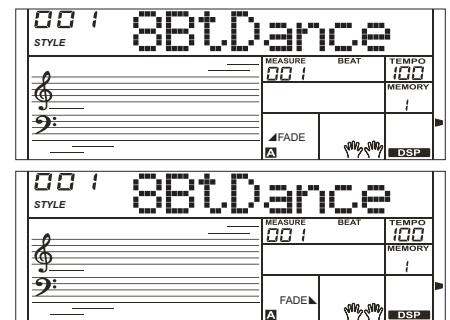
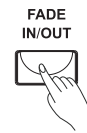
Each style of the instrument has been programmed with a default or standard tempo; however, this can be changed by using the [TEMPO+]/[TEMPO-] buttons.

1. Change the tempo.  
Use the [TEMPO+] or [TEMPO-] button to change the tempo.
2. To restore the default tempo setting, press the [TEMPO+]/[TEMPO-] buttons simultaneously.



## Fade In/Out

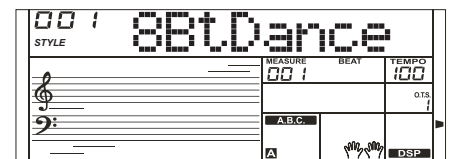
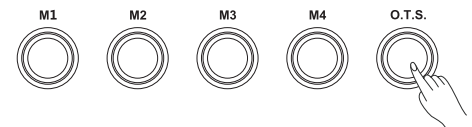
1. Fade In  
Starting the style with fade in produces a smooth beginning, the volume increases from low to high. Press the [FADE IN/OUT] button when Style playback is stopped and press the [START/STOP] button to start Style playback.
2. Fade Out  
Stopping the style with fade out produces a smooth ending, the volume increases from high to low. Press the [FADE IN/OUT] button during Style playback.



## One Touch Setting

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

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

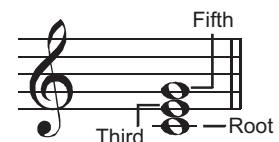


## Chord Fingering

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.



## 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



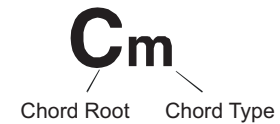
Root Position      First Inversion      Second Inversion

## 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.



### 1. Single Finger

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

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.

### 2. Multi Finger

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

### 3. 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] button twice, the icon "Full Range" will be lightened in the LCD.

### Some chord types

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

# Other Function

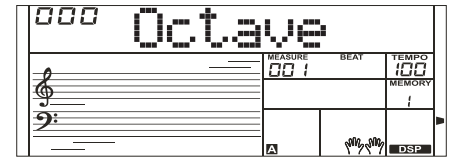
## Function Menu

Press the [FUNCTION] button to enter the menu of functions. The default option of the menu is "Octave". When you enter the menu next time, you will find the option is the same as last time. Press the [FUNCTION] button repeatedly, select the option to be set. Use the [+]/[-] button or the numeric button to set the parameter.

The option and the parameters are as the follows:

Content	LCD Display	Range
Octave	XXX Octave	-1~+1
DSP	DSP	ON/OFF
Reverb Type	XXX Rev Type	0~7
Reverb Level	XXX Rev Lev	0~32
Chorus Type	XXX Chr Type	0~7
Chorus Level	XXX Chr Lev	0~32
Modulation	Modul	ON/OFF
Touch	Touch	1/2/3/OFF
Beat	XXX Beat	0,2...9
Tune	XXX Tune	-50...50
MIDI Receive	XXX Midi In	01~16、ALL
MIDI Transmit	XXX Midi Out	01~16
Automatic Shutdown	XXX PowerOff	30,60,OFF

FUNCTION



### Note:

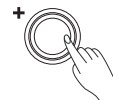
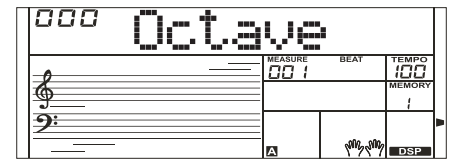
If you don't press any button for 5 seconds after entering FUNCTION menu, it will quit automatically.

### OCTAVE

Press the [FUNCTION] button to set the octave. The LCD displays the current octave value "xxx Octave". Use the [+]/[-] button to select the octave value. This function can change the keyboard from -1 to +1 octaves.

The default octave value is 0. Use the [+]/[-] button or the numeric button to change the value.

FUNCTION



### DSP

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.

Press the [FUNCTION] button to enter the DSP effect settings and you can switch it ON/OFF by pressing the [+]/[-] button.

### Note:

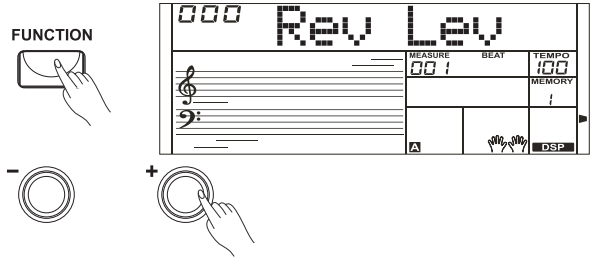
The DSP effect is default set to ON when keyboard power on.

### REVERB TYPE

Press the [FUNCTION] button to select the reverb type settings. The LCD displays the name as "xxx Rev Type", the range of value is 0~7, you can press the [+]/[-] button to change the reverb type.

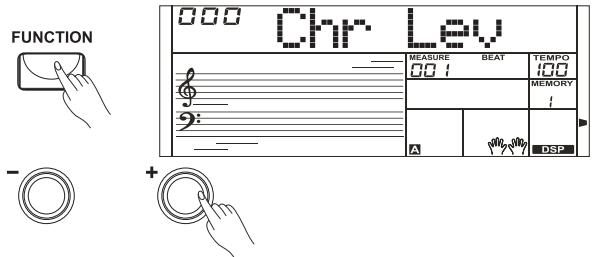
## REVERB LEVEL

Press the [FUNCTION] button to select the reverb level settings. The LCD displays the name as “xxx Rev Lev”, the range of value is 0~32, you can press the [+]/[-] button to adjust the reverb level.



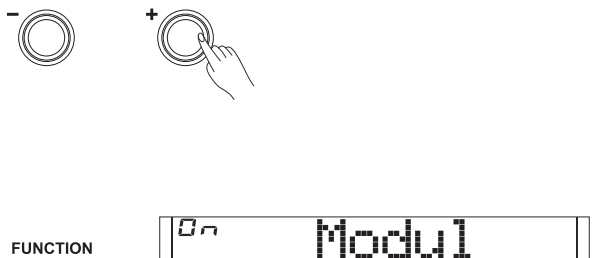
## CHORUS TYPE

Press the [FUNCTION] button to select the chorus type settings. The LCD displays the name as “xxx Chr Type”, the range of value is 0~7, you can press the [+]/[-] button to change the chorus type.



## CHORUS LEVEL

Press the [FUNCTION] button to select the chorus level settings. The LCD displays the name as “xxx Chr Lev”, the range of value is 0~32, you can press the [+]/[-] button to adjust the chorus level.



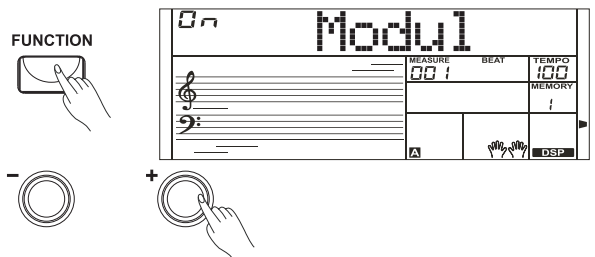
## MODULATION

The Modulation function applies a vibrato effect to notes played on the keyboard.

Press the [FUNCTION] button to enter the modulation settings, the LCD displays “Modul” and you can switch it ON/OFF by pressing the [+]/[-] button.

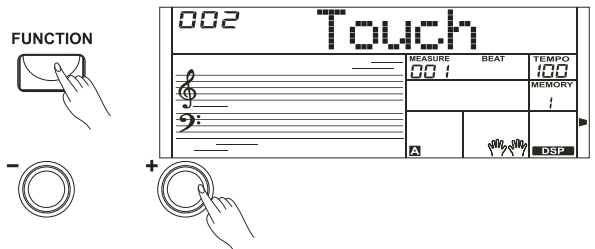
### Note:

The modulation effect is invalid to percussion voice.



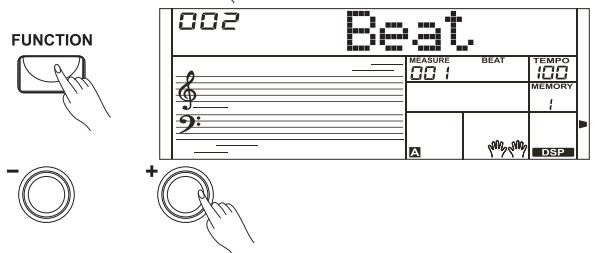
## TOUCH

Press the [FUNCTION] button to select the touch level settings. The LCD displays “TOUCH”, the default value is 2, you can use the [+]/[-] button to select different curves. When the Touch is turned on, the TOUCH icon lights up in the LCD display. Turns touch OFF means the keyboard won't have any velocity sensitivity, and the LCD displays the TOUCH turned OFF.



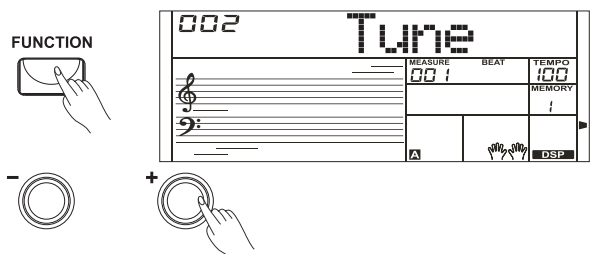
## BEAT

Press the [FUNCTION] button to set the beat function, LCD displays “xxx Beat”. Press the [+] or [-] button to change the beat value: 0 2 3 4 5 6 7 8 9. The default value is 4.



## TUNE

Press the [FUNCTION] button to select the Tune settings. The LCD displays the tune value as “xxx Tune”. Use the [+]/[-] to change the tune value. Its range is from -50 to +50 cents only by the right area of keyboard. Press the [+] and [-] buttons together will set the TUNE to its default value.



### Note:

The tune setting will be applied to both keyboard and style.

# Other Function

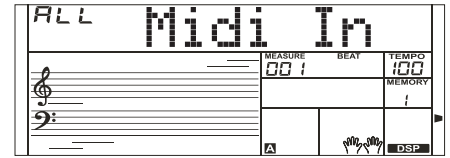
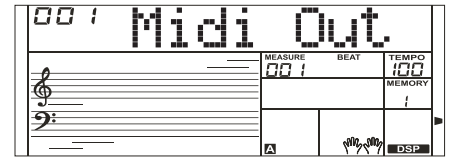
## MIDI SETTING

Press the [FUNCTION] button to select the MIDI IN/OUT settings. The LCD displays the name as “xxx Midi In” and “xxx Midi Out”.

You can set the channel of MIDI OUT by TRANSMIT. The default setting is “001”, channel 2~16 can also be selected. Use the [+]/[-] button to select the channel.

You can set the channel of MIDI IN by RECEIVE. The default setting is “all”, channel 1~16 can also be selected. Use the [+]/[-] button to select the channel.

FUNCTION



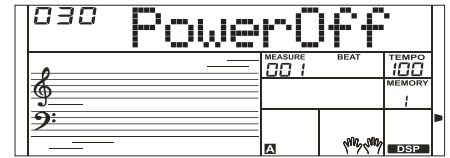
## Automatic Power Off

1. Press the [FUNCTION] button repeatedly until the LCD displays “Power Off”.

2. The LCD displays the time value. The value ranges OFF, 30 and 60, the default value is 30. Change the time value.

3. Use the [+]/[-] button to change the Power Off time value. Press the [+]/[-] simultaneously to restore the default value: 30 minutes.

FUNCTION

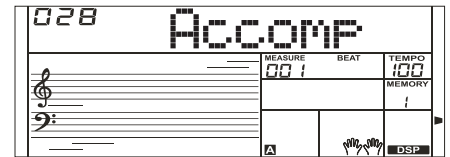


## Mixer

Press the [MIXER] button to enter the menu of MIXER. The default option of the menu is “Accomp”, When you enter this menu next time, you will find the option is the same as last time. Press the [MIXER] button, select the option you want to set. Use the [+]/[-] to set the parameter.

The option and the parameters are as the follows:

MIXER



Content	LCD Display	Range
Accompaniment VOLUME	XXX Accomp	0-32
Rhythm Sub. VOLUME	XXX Rhythm_s	0-32
Rhythm Main VOLUME	XXX Rhythm_m	0-32
Bass VOLUME	XXX Bass	0-32
Chord 1 VOLUME	XXX Chord 1	0-32
Chord 2 VOLUME	XXX Chord 2	0-32
Chord 3 VOLUME	XXX Chord 3	0-32
Phrase 1 VOLUME	XXX Phrase 1	0-32
Phrase 2 VOLUME	XXX Phrase 2	0-32
Voice R1 VOLUME	XXX Upper1	0-32
Voice R2 VOLUME	XXX Upper2	0-32
Voice L VOLUME	XXX Lower	0-32

### Note:

If you don't press any buttons for 5 seconds after entering the MIXER menu, it will quit automatically.

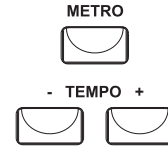


## Metronome

Press the [METRONOME] button to turn on the metronome.

Press the [METRONOME] button again to turn off the metronome.

Press the [TEMPO+] / [TEMPO-] button to change the tempo of the metronome.



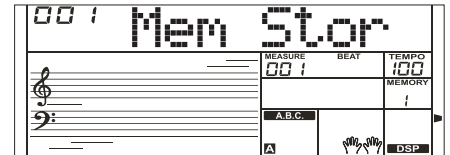
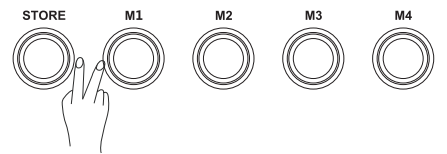
## Memory

The keyboard is an instrument with a variety of controls and functions, the Registration Memory feature can make your performance more easily and efficiently. It allows you 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

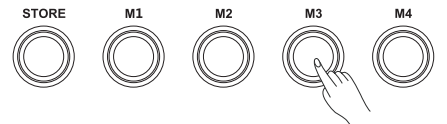
While holding the [STORE] button, press one of the REGISTRATION MEMORY buttons: [M1] - [M4].

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 are recalled.



### Note:

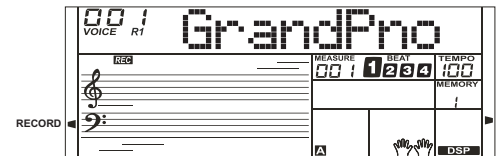
Registration data cannot be recalled when the One Touch Setting function is on.

The stored settings will be returned to the default settings after you turned off the power.

## Record

You can record your performance, and the accompaniment.

1. Press the [RECORD] button, the record icon appears on the left of LCD, the beat flashes.
2. Play the notes you want to record or press the [START/STOP] button to start recording. If you want to record your performance accompanied with the style, please turn on the A.B.C, and play the chords on the left of the keyboard.
3. Press the [RECORD] button again to stop recording. The record icon disappears.
4. Press the [PLAY] button to play the notes you recorded.
5. Press the [PLAY] button again to stop it. The play icon disappears. When recording, press the [PLAY] button can stop recording and playback the notes you recorded.



### Note:

If you turned off the keyboard, the data you have recorded will be lost.

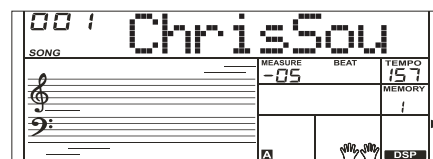
# Other Function

## Song

The instrument features 110 songs (Refer to Song List). Each song can be practised in LESSON mode.

### Listening to the Songs

1. Press the [SONG] button to enter the song mode. It will play all songs circularly. The display indicates "SONG" and the number of the current song.
2. In song mode, use the numeric buttons, [+] or [-] button to select a song.
3. Once you start playing a song by pressing the [START/STOP] button, it will play current song repeatedly. Press the [START/STOP] button again, it will stop the current song but not exit the song mode.



## Lesson Mode

In the instrument, there are 3 levels to score the performance of your playing and the keyboard has a grading system to help you to know well about your progress.

The three levels of the lesson are as follows:

### 1. LESSON 1

Press the [LESSON] button to enter the lesson mode, the lesson icon lights up. In this mode, the instrument only grade the timing of the playing, do not care the correctness of the notes.

Use the [RIGHT] to practice; it will mute the melody of right hand.  
Use the [LEFT] to practice; it will mute the melody by left hand.  
Practice with the [LEFT] and [RIGHT], the melody of both left and right hands will be muted. Only when you play the keyboard following the correct tempo, the song will continue to play.

### 2. LESSON 2

Press the [LESSON] button again to enter the lesson 2. In this mode, the instrument only grade your practice by the pitch of notes, do not care the correctness of the timing.

Only when you play the correct note, the song will continue to play the next note.

### 3. LESSON 3

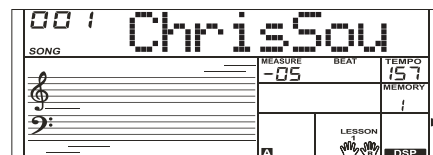
Press the [LESSON] button in LESSON 2 to enter the LESSON 3. In this mode, it will score your practice by the correctness of both the timing and pitch of notes.

### 4. Grade

In lesson mode, when you finished learning the current the song, the keyboard will play the prompt sound to tell you the level you get.

- Level 1: Try again
- Level 2: OK
- Level 3: Very Good
- Level 4: Excellent

After grading, the song will be played again, you can learn it again.



## 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.

### DICT 1 – Chord Learning Mode

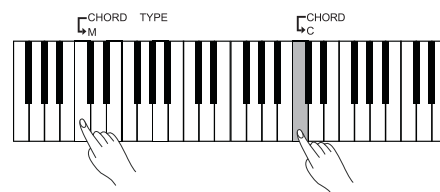
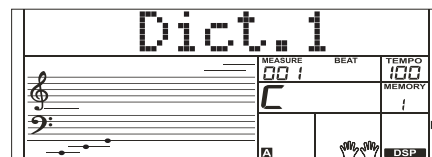
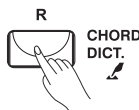
Press and hold the [R/CHORD DICT] button for two seconds to enter DICT 1 mode.

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 play for the specified chord (root and chord type) are shown in the LCD as the notation and also in the keyboard diagram.

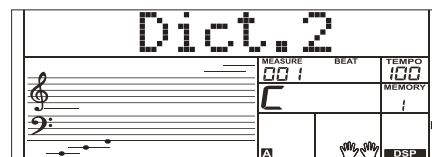
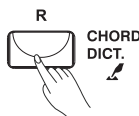
When the Chord Type and Chord Root are confirmed, the LCD will display the chord and its keyboard position. A prompt sound will be heard when you play it correctly.



### DICT 2 – Chord Examining Mode

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

When you play the correct chord within 3 seconds, the next chord (random) will be displayed on LCD to wait for the correct chord playing. If not, LCD will display the corresponding keyboard position automatically.



In DICT 2 mode, press the [CHORD DICT] button again to exit chord dictionary.

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

#### Chord Root

Name	Root	Name	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

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

## Other Function

### MIDI

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

#### What's MIDI?

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

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

#### MIDI Terminals

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

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

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

#### 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.

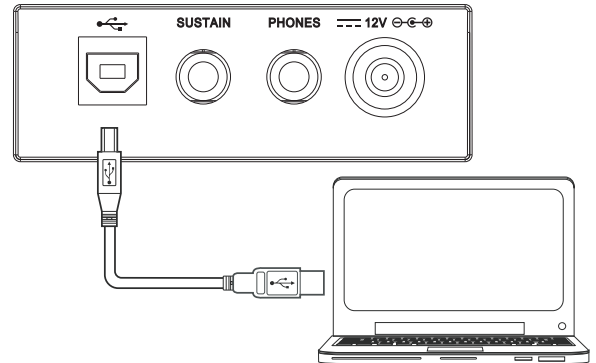
#### System Requirements

**CPU:** Pentium 2, 300MHz or better

**RAM:** 64M or more

**OS:** MICROSOFT WINDOWS XP SP3 or later version

Use the USB cable to connect the instrument and computer.



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 results when the keyboard is played.	Make sure the master volume is set at appropriate levels.
When using a mobile phone, noise is produced.	Using a mobile phone in close proximity to the instrument may produce interference. To prevent this, turn off the mobile phone or use it further away from the instrument.
The auto accompaniment does not play back even Sync is in standby condition and a key is pressed.	You may be trying to start accompaniment by playing a key in the right-hand range of the keyboard. To start the accompaniment with Sync Start, make sure to play a key in the left-hand range of the keyboard.

## Specifications

### Keyboard

61 keys with touch response (3 curves).

### Display

Multi-functional LCD

### Polyphony

64

### Voice

390 voices

### Style

100 styles

### Song

110 songs

### Demo

8 demo songs

### Tempo

30-280

### Registration Memory

4

### Control button

Power on/off switch, Master Volume, Lesson, L, R/Chord Dict., Tempo+/-, Mixer, Record, Store, M1~M4, O.T.S., Play, Voice, Style, Song, Function, Transpose+/-, Numeric buttons, +, -, Metronome, Sustain, Dual, Lower

### Accompaniment Control

Start/Stop, SYNC Start, Intro/Ending, Fill A/B, Fade In/Out, Chord,

### Record Function

Record, Play

### Connectors

DC IN, Headphones, USB

### Power Supply

DC IN 12V

### Speaker

4Ω, 10W + 10W

### Dimensions

955 X 360 X 145mm

### Weight

4.5 KG

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

# Voice List

No.	Full Name	Short Name
<b>Piano</b>		
1	Acoustic Grand Piano	GrandPno
2	Acoustic Grand Piano /wide	GrandPnW
3	Acoustic Grand Piano /dark	GrandPnD
4	Bright Acoustic Piano	BritePno
5	Bright Acoustic Piano /wide	BritePnW
6	Octave Grand Piano 1	OctPno1
7	Octave Grand Piano 2	OctPno2
8	Piano & Strings 1	Pno&Str1
9	Piano & Pad 1	Pno&Pad1
10	Piano & Choir 1	Pno&Cho1
11	Piano & EP 1	Pno&EP1
12	Electric Grand Piano	E.Grand
13	Electric Grand Piano /wide	E.GrandW
14	Electric Grand Piano /dark	E.GrPnoD
15	Honky Tonk Piano	HnkyTonk
16	Honky Tonk Piano /wide	HnyTonkW
17	Honky Tonk Piano /dark	HonkToDa
18	Harpsichord	Harpsi
19	Harpsichord /octave mix	HarpsiO
20	Harpsichord /wide	HarpsiW
21	Harpsichord /with key off	HarpsiOf
<b>E. Piano</b>		
22	Electric Piano 1	E.Piano1
23	Electric Piano 2	E.Piano2
24	Detuned Electric Piano 1	DetunEP1
25	Detuned Electric Piano 2	DetunEP2
26	60's Electric Piano	60'sEP
27	Electric Piano 1 /velocity mix	E.PnoV1
28	Electric Piano 2 /velocity mix	E.PnoV2
29	EP Legend	EPLegend
30	Phase EP 1	PhaseEP1
31	Phase EP 2	PhaseEP2
32	Funk EP	FunkEP1
33	Tremolo EP	TremoEP1
34	Wah EP	WahEP1
35	Warm EP	WarmEP1
36	Modern EP 1	ModenEP1
37	Choir EP	ChoirEP1
38	EP & Strings 1	EP&Str1
39	Clavi	Clavi
40	Pulse Clavi	PluseClv
41	Phase Clavi	PhaseClv
42	Wah Clavi	WahClavi
<b>Organ &amp; Accordion</b>		
43	Drawbar Organ	DrawOrgn
44	Detuned Drawbar Organ	DeDraOrg
45	Italian 60's Organ	60'sOrgn
46	Drawbar Organ 2	DrawOrg2
47	Percussive Organ	PercOrgn
48	Detuned Percussive Organ	DePerOrg
49	Percussive Organ 2	PercOrg2
50	70's Percussive Organ	70'sPcOr
51	Rock Organ	RockOrgn
52	Rock Organ 2	RockOrg2
53	Rotary Organ 1	RotaOrg1

54	Church Organ	ChurOrgn
55	Church Organ /octave mix	ChurOrgO
56	Detuned Church Organ	DeChuOr1
57	Church Organ 2	ChurOrg2
58	Reed Organ	ReedOrgn
59	Puff Organ	PuffOrgn
60	Accordion	Acordion
61	Accordion 2	Acordin2
62	Harmonica	Harmnica
63	Harmonica 2	Harmnic2
64	Tango Accordion	TangoAcD
<b>Guitar &amp; Bass</b>		
65	Acoustic Guitar /nylon	NylonGtr
66	Ukulele	Ukulele
67	Acoustic Guitar /nylon + key off	NylGtrOf
68	Acoustic Guitar /nylon 2	NylonGt2
69	Velocity Nylon Guitar	NylnGtVe
70	Acoustic Guitar /steel	SteelGtr
71	12-Strings Guitar	12StrGtr
72	Mandolin	Mandolin
73	Mandolin 2	Mandoli2
74	Steel Guitar with Body Sound	SteelBdy
75	Electric Guitar /jazz	JazzGtr
76	Electric Guitar /pedal steel	PedalGtr
77	Electric Guitar /clean	CleanGtr
78	Electric Guitar /detuned clean	DetClnGt
79	Mid Tone Guitar	MidTonGt
80	Electric Guitar /muted	MutedGtr
81	Electric Guitar /funky cutting	FunkGt
82	Electric Guitar /muted velo-sw	MutVelGt
83	Jazz Man	JazzMan
84	Overdriven Guitar	Ovrdrive
85	Guitar Pinch	GtPinch
86	Distortion Guitar	DistGtr
87	Distortion Guitar /with feedback	FeedbkGt
88	Distorted Rhythm Guitar	DistRyth
89	Guitar Harmonics	GtrHarmo
90	Guitar Feedback	GtrFedbck
91	Acoustic Bass	AcoBass
92	Electric Bass /finger	FngrBass
93	Finger Slap Bass	FngrSlap
94	Electric Bass /pick	PickBass
95	Fretless Bass	Fretless
96	Slap Bass 1	SlapBas1
97	Slap Bass 2	SlapBas2
98	Synth Bass 1	SynBass1
99	Synth Bass 2	SynBass2
100	Synth Bass /warm	WarmBass
101	Synth Bass 3 /resonance	ResoBass
102	Clavi Bass	ClavBass
103	Hammer	Hammer
104	Synth Bass 4 /attack	AtackBas
105	Synth Bass /rubber	RubbBass
106	Attack Pulse	AtackPls
<b>Strings &amp; Ensemble</b>		
107	Violin	Violin
108	Violin /slow attack	SIViolin

109	Viola	Viola
110	Cello	Cello
111	Contrabass	Contrabs
112	Tremolo Strings	TremStr
113	Tremolo Strings 2	TremStr2
114	Pizzicato Strings	PizzStr
115	Orchestral Harp	Harp
116	Yang Chin	YangChin
117	Timpani 1	Timpani1
118	String Ensembles 1	Strings1
119	String Ensembles 2	Strings2
120	Strings & Brass	Str&Bras
121	60's Strings	60'sStr
122	Synth Strings 1	SynStrs1
123	Synth Strings 2	SynStrs2
124	Synth Strings 3	SynStrs3
125	Choir Aahs	ChoirAah
126	Choir Aahs 2	ChoirAh2
127	Voice Oohs	VoiceOoh
128	Humming	Humming
129	Synth Voice	SynVoice
130	Anlong Voice	AnlVoice
131	Orchestra Hit	OrchHit
132	Bass Hit Plus	BassHit
133	6th Hit	6thHit
134	Euro Hit	EuroHit
<b>Brass &amp; Saxophone</b>		
135	Trumpet	Trumpet
136	Dark Trumpet Soft	DarkTrp
137	Trombone	Trombone
138	Trombone 2	Trmbone2
139	Bright Trombone	BritBone
140	Tuba	Tuba
141	Muted Trumpet	MuteTrp1
142	Muted Trumpet 2	MuteTrp2
143	French Horn	FrHorn
144	French Horn 2 /warm	FrHorn2
145	Brass Section	Brass
146	Brass Section 2 /octave mix	Brass2
147	Brass Section 3	Brass3
148	Synth Brass 1	SynBras1
149	Synth Brass 2	SynBras2
150	Synth Brass 3	SynBras3
151	Synth Brass 4	SynBras4
152	Analog Synth Brass 1	AnaBras1
153	Analog Synth Brass 2	AnaBras2
154	Jump Brass	JumpBras
155	Soprano Sax	SprnoSax
156	Soprano Sax 2	SprnSax2
157	Alto Sax	AltoSax
158	Alto Sax 2	AltoSax2
159	Tenor Sax	TenorSax
160	Tenor Sax 2	TenoSax2
161	Baritone Sax	BariSax
162	Baritone Sax 2	BariSax2
163	Sax Band	SaxBand
<b>Flute &amp; Woodwind</b>		

164	Oboe	Oboe
165	Oboe 2	Oboe2
166	English Horn	EngHorn
167	English Horn 2	EngHorn2
168	Bassoon	Bassoon
169	Bassoon 2	Bassoon2
170	Clarinet	Clarinet
171	Clarinet 2	Clarinet2
172	Piccolo	Piccolo
173	Piccolo 2	Piccolo2
174	Flute	Flute
175	Flute 2	Flute2
176	Sweet Flute	SweetFlut
177	Recorder	Recorder
178	Pan Flute	PanFlute
179	Sweet Pan Flute	SwPanFlu
180	Blown Bottle	Bottle
181	Shakuhachi	Shakhchi
182	Whistle	Whistle
183	Ocarina	Ocarina
<b>Lead &amp; Pad</b>		
184	Lead 1 /square	SquareLd
185	Lead 1a /square 2	SquarLd2
186	Lead 1b /sine	SineLead
187	Lead 2 /sawtooth	SawLead1
188	Lead 2a /sawtooth 2	SawLead2
189	Lead 2b /saw + pulse	SawPlsLd
190	Lead 2c /double sawtooth	DubSawLd
191	Lead 2d /sequenced analog	SquAnaLd
192	Lead 3 /calliope	CalliopLd
193	Lead 4 /chiff	ChiffLd
194	Lead 5 /charang	CharanLd
195	Lead 5a /wire lead	WireLead
196	Lead 6 /voice	VoiceLd
197	Lead 7 /fifths	FifthsLd
198	Lead 8 /bass + lead	BassLead
199	Lead 8a /soft wrl	SftWrILd
200	Pad 1 /new age	NewAgePd
201	Pad 2 /warm	WarmPad
202	Pad 2a /sine pad	SinePad
203	Pad 3 /polysynth	PolySyPd
204	Pad 4 /choir	ChoirPad
205	Pad 4a /itopia	ItopiaPd
206	Pad 5 /bowed	BowedPad
207	Pad 6 /metallic	MetalPad
208	Pad 7 /halo	HaloPad
209	Pad 8 /sweep	SweepPad
210	Square	Square
211	Slow Square Lead	SlwSquLd
212	Sine Solo	SineSolo
213	Square Lead	SquareLd
214	Wavy Sawtooth	WavySaw
215	Super Analog	SuperAna
216	Big Lead	BigLead
217	Bauble Lead	BaubleLd
218	PWM 4th	Rezz4th
219	PWM 4th Soft	Rezz4thS

# Voice List

220	Synth Calliope Soft	CalioLdS
221	Chiffer Lead 2	ChiffLd2
222	Chiffer Lead 3	ChiffLd3
223	Charang 2	CharaLd2
224	Wire Lead 2	WireLd2
225	Charang 3	CharaLd3
226	Soft Vox	SVoiceLd
227	5th SawWave 2	FifthLd2
228	Fifth Lead Soft	FiftLdSf
229	Fifth Lead	FifLead
230	Massiness	Massin
231	Delayed Lead 2	DlyLead2
232	Delayed Lead 3	DlyLead3
233	New Age Pad 2	NewAgPd2
234	New Age Pad 3	NewAgPd3
235	Warm Pad 2	WarmPad2
236	PWM Pad	PWMPad
237	Warmly Pad	WarmlyPd
238	Poly Synth 2	PlySyPd2
239	Click Pad	ClickPad
240	Analog Pad	AnaloPad
241	Space Voice	ChoirPd2
242	Bowed Pad 2	BowedPd2
243	Bowed Pad 3	BowedPd3
244	Metallic Pad 2	MetalPd2
245	Pan Pad 1	PanPad1
246	Pan Pad 2	PanPad2
247	Halo Pad 2	HaloPad2
248	Halo Pad 3	HaloPad3
249	Sweep Pad 2	SweepPd2
250	Dipolar Pad	DipolPad
251	Rising	Rising
<b>FX &amp; Effects</b>		
252	FX 1 /rain	FXRain
253	FX 2 /soundtrack	Soundtrk
254	Prelude	Prelude
255	FX 3 /crystal	Crystal
256	FX 3a /synth mallet	SynMalet
257	Crystal 2	Crystal2
258	FX 4 /atmosphere	Atmosphr
259	Warm Air	WarmAir
260	FX 5 /brightness	Bright
261	Smog	Smog
262	FX 6 /goblins	Goblins
263	Goblin 2	Goblins2
264	FX 7 /echoes	Echoes
265	FX 7a /echo bell	EchoBell
266	FX 7b /echo pan	EchoPan
267	Echo Drops 2	Echoes2
268	Echo Bell 2	EchoBel2
269	FX 8 /sci-fi	Sci-Fi
270	Sci-Fi 2	Sci-Fi2
271	Guitar Fret Noise	FretNoiz
272	Guitar Cutting Noise	GtCtNoiz
273	Acoustic Bass String Slap	BsStSlap
274	Guitar Fret Noise 2	FreNoiz2
275	Guitar Cutting Noise 2	GtCtNoz2
276	Acoustic Bass String Slap 2	BsStSlp2

277	Breath Noise	BrthNoiz
278	Flute Key Click	FlKeyClk
279	Breath Noise 2	BrthNoz2
280	Flute Key Click 2	FlKeyCk2
281	Seashore	Seashore
282	Rain	Rain
283	Thunder	Thunder
284	Wind	Wind
285	Stream	Stream
286	Bubble	Bubble
287	Seashore 2	Seashor2
288	Bird Tweet	Tweet
289	Dog	Dog
290	Horse Gallop	HouseGlp
291	Bird Tweet 2	Tweet2
292	Telephone Ring	Telephone
293	Telephone Ring 2	Telphon2
294	Door Creaking	DoorCrek
295	Door	Door
296	Scratch	Scratch
297	Wind Chime	WindChim
298	Helicopter	Helicptr
299	Car Engine	CarEngin
300	Car Stop	CarStop
301	Car Pass	CarPass
302	Car Crash	CarCrash
303	Siren	Siren
304	Train	Train
305	Jetplane	Jetplane
306	Starship	Starship
307	Burst Noise	BurtNoiz
308	Applause	Applause
309	Laughing	Laughing
310	Screaming	Scream
311	Punch	Punch
312	Heart Beat	HeartBet
313	Footsteps	Footstep
314	Gunshot	Gunshot
315	Machine Gun	MachnGun
316	Lasergun	Lasergun
317	Explosion	Explosio
<b>Ethnic &amp; Combined</b>		
318	Sitar	Sitar
319	Sitar 2 /bend	Sitar2
320	Banjo	Banjo
321	Banjo 2	Banjo2
322	Shamisen	Shamisen
323	Shamisen 2	Shamise2
324	Koto	Koto
325	Taisho Koto	TaishoKt
326	Kalimba	Kalimba
327	Kalimba 2	Kalimba2
328	Bag Pipe	Bagpipe
329	Bag pipe 2	Bagpipe2
330	Fiddle	Fiddle
331	Fiddle 2	Fiddle2
332	Shanai	Shanai
333	Shanai 2	Shanai2

<b>Percussive &amp; Drum</b>		
334	Celesta	Celesta
335	Celesta 2	Celesta2
336	Glockenspiel 1	Glocken
337	Glockenspiel 2	Glocken2
338	Music Box	MusicBox
339	Music Box 2	MusicBo2
340	Vibraphone	Vibra
341	Vibraphone /wide	VibraW
342	Marimba	Marimba
343	Marimba /wide	MarimbaW
344	Xylophone	Xylophon
345	Xylophone 2	Xylopho2
346	Tubular Bells	TubulBel
347	Church Bell	ChurBell
348	Carillon	Carillon
349	Dulcimer	Dulcimer
350	Santur	Santur
351	Tinkle Bell	TnklBell
352	Tinkle Bell 2	TnkBell2
353	Tinkle Bell 3	TnkBell3
354	Agogo	Agogo
355	Agogo 2	Agogo2
356	Agogo 3	Agogo3
357	Steel Drums	SteelDrm
358	Steel Drums 2	StelDrm2
359	Steel Drums 3	StelDrm3
360	Woodblock	WoodBlok
361	Castanets	Castanet
362	Woodblock 2	WoodBlo2
363	Castanets 2	Castant2
364	Woodblock 3	WoodBlo3
365	Castanets 3	Castan3
366	Taiko Drum	TaikoDrm
367	Taiko Drum 2	TaikDrm2
368	Taiko Drum 3	TaikDrm3
369	ConcertBass Drum	ConBasDm
370	ConcertBass Drum 2	ConBasD2
371	ConcertBass Drum 3	ConBasD3
372	Melodic Tom	MelodTom
373	Melodic Tom 2 /power	MeldTom2
374	Melodic Tom 3	MeldTom3
375	Synth Drum	SynDrum
376	Rhythm Box Tom	RhythBox
377	Electric Drum	ElecDrum
378	Electric Drum 2	ElecDrm2
379	Electric Drum 3	ElecDrm3
380	Electric Drum 4	ElecDrm4
381	Reverse Cymbal	RevCymb
382	Standard Set	StandSet
383	Room Set	RoomSet
384	Power Set	PowerSet
385	Electronic Set	ElectSet
386	Analog Set	AnalgSet
387	Jazz Set	JazzSet
388	Brush Set	BrushSet
389	Orchestra Set	OrcheSet
390	SFX Set	SFXSet



# Style List

No.	Full Name	Short Name
<b>8BEAT</b>		
1	8Beat Dance	8BtDance
2	8Beat Piano 1	8BtPian1
3	8Beat Piano 2	8BtPian2
4	Guitar Pop 1	GtPop1
5	8Beat Ballad	8BtBld
6	8Beat Pop	8BtPop
7	Pop Funk	PopFunk
8	Rhythm & Beat	Rhy&Bt
9	Guitar Pop 2	GtPop2
10	8Beat 1	8Beat1
11	8Beat 2	8Beat2
<b>16BEAT</b>		
12	Pop 16Beat 1	Pop16Bt1
13	16Beat R&B	16BtR&B
14	Pop 16Beat 2	Pop16Bt2
15	16Beat Funk 2	16BtFuk2
16	16Beat Dance	16BtDanc
17	Pop 16Beat 3	Pop16Bt3
18	16Beat 1	16Beat1
19	Cool Beat	CoolBeat
20	16Beat 2	16Beat2
21	Pop Shffle	PopShfl
<b>POP &amp; BALLAD</b>		
22	6/8 Pop	6/8Pop
23	Pop Dance	PopDance
24	Pop Fusion	PopFusn
25	Fusion Shuffle	FusShufl
26	Analog Night	AnalogNt
27	Pop Beat	PopBeat
28	Soft Ballad	SoftBald
29	Natural Ballad	NatulBld
30	Love Ballad	LoveBld
31	Slow Ballad	SlowBald
32	Sweet Pop	SweetPop
<b>ROCK</b>		
33	Slow Rock	SlowRock
34	Soft Rock	SoftRock
35	Pop Rock 2	PopRock2
36	Easy Rock	EasyRock
37	New Shuffle	NewShufl
38	R'N'R 1	R'N'R1
39	Rock Shuffle 1	RockShf1
40	Rock Shuffle 2	RockShf2
<b>BALLROOM</b>		
41	Twist	Twist
42	Big Band Fox	BandFox
43	Tango	Tango
44	Slow Fox	SlowFox
45	Slow Waltz 1	SlowWlz1
46	Salsa 1	Salsa1
47	Cha Cha 1	ChaCha1
48	Cha Cha 2	ChaCha2
49	Beguine 1	Beguine1
50	Rhumba 1	Rhumba1

51	Samba 1	Samba1
52	Samba 2	Samba2
53	Jive	Jive
<b>DANCE</b>		
54	Down Beat	DownBeat
55	Techno	Techno
56	Hip Hop 1	HipHop1
57	Rap	Rap
58	Disco Party	DscParty
59	Sky	Sky
60	Hip Hop 2	HipHop2
<b>SOUL &amp; FUNK &amp; JAZZ</b>		
61	Big Band	BigBand
62	Jay R&B	JayR&B
63	Gospel Swing	GopSwing
64	Groove Funk	GrooveFk
65	Hip Hop Beat	HipHopBt
66	R & B	R&B
67	Swing	Swing
68	Cool Jazz Ballad	CoolJzBd
69	Big Band 40's	Band40's
70	Modern Jazz Ballad	MdJzBald
71	Orchestra Swing	OrhSwing
<b>COUNTRY</b>		
72	Modern Country	ModernCt
73	Bluegrass	Bluegras
74	Country Pop 1	CntyPop1
75	Country Pop 2	CntyPop2
76	2/4 Country	2/4Cntry
77	Country Folk	CntyFolk
<b>LATIN/LATIN DANCE</b>		
78	Bossa Nova	BosaNov
79	Latin	Latin
80	Dance Reggae	DanRegga
81	Pasodoble	Pasodobl
82	Rumba 2	Rumba2
83	Pop Cha Cha	PChaCha
84	Salsa 2	Salsa2
<b>WALTZ &amp; TRADITIONAL</b>		
85	Waltz	Waltz
86	Italian Mazurka	ItaMazuk
87	Mariachi Waltz	MariWltz
88	Vienna Waltz	VinaWltz
89	Slow Waltz 2	SlowWlz2
90	Polka 1	Polka1
91	German Polka	GerPolka
92	March 1	March1
93	Polka 2	Polka2
94	US March	USMarch
95	Mazurka	Mazurka
<b>WORLD</b>		
96	Enka Ballad	EnkaBald
97	Venezia	Venezia
98	6/8 Flipper	6/8Flipp
99	Norteno	Norteno
100	Dangdut	Dangdut

# Song List

No.	Full Name	Short Name
<b>FOLK &amp; COUNTRY</b>		
1	Christmas Sound	ChrisSou
2	Red River Valley	RedRiver
3	Susanna	Susanna
4	Wave Of Danube	Danube
5	Long Long Ago	LongAgo
6	Jambalaya	Jambalay
7	Bridge	Bridge
8	Battle Hymne Of The Republic	Battle
9	The Old Gray Mare	GrayMare
10	American Patrol	USPatrol
11	In The Rain	InRain
12	Sippin'Cider Through A Straw	SCTStraw
13	Country	Country
14	Old Folks at Home	OldFolks
<b>GOLDEN &amp; POP</b>		
15	On London Bridge	LdBridge
16	House Of Rising Sun	HouseSun
17	The Blue-Bells Of Scotland	BlueBell
18	It's Been A Long Long Time	LongTime
19	Edelweiss	Edelweis
20	Der Deitcher's Dog	DerDDog
21	Silent Night	SltNight
22	Ave Maria	AveMaria
23	Five Hundred Miles	FHMiles
24	It's Beginning To Look A Lot Like Christmas	LikeXmas
25	Jeanie With The Light Brown Hair	LighHair
26	Song Of The Pearlfisher	SongOfTP
27	The Stage Coach	TheStage
28	Entertainer	Entertai
29	Annie Laurie	AnnieLau
30	Rumba Romance	Romance
31	Last Rose Of Summer	LastRose
32	The Old King Cole	OldKingC
33	Auld Lang Syne	AuldLaSy
34	Ding! Dong! Merrily On High	DingDong
35	Christmas Coming	ChrisCom
36	Go Tell It On The Mountain	GoTellIt
<b>JAZZ &amp; FUSION</b>		
37	You Are My Sunshine	MySun
38	June Samba	JunSamba
39	Funk	Funk
40	I Can.....	ICan...
41	Sea Shore	SeaShore
42	Guitar&Saxphone	Gt&Sax
43	The Hip Hop's Night	HipHopNt
44	Blue Lunch	BluLunch
45	Cobweb	Cobweb
46	Wine	Wine
47	Jazz Old Man	JzOldMan
48	Dark Eyes	DarkEyes
49	Carlos	Carlos
50	Sad	Sad
51	Beautiful Awakening	Awaken
<b>PIANO</b>		
52	Fur Elise	FurElise

53	Robot Doll	RobtDoll
54	Habanera	Habanera
55	Turkish March	TukMarch
56	Consolation	Consolat
57	2-Part Invention #13 In A Minor.B.W. Iii	Invention
58	Minuet In G Major (BWV Anh. 114)	MinuetG1
59	Turkish March 2	TukMarh2
60	Barcarolle	Barcarle
61	Norwegian Dance No.2	NwnDance
62	Moseta Dance	MosetaDn
63	Bulie Dance	BulieDn
64	The Small Gathering	Party
65	The Return	Return
66	The Wagtail	Wagtail
67	Tender Blossom	Blossom
68	Grace	Grace
69	Cherish The Memories	Memories
70	Chopsticks	Chopstik
71	Four Little Swans	FLSwans
72	Old France	OldFranc
73	Progress	Progress
74	Eclogue	Eclogue
75	The Limpid Stream	Stream
76	Brave Cavalier	Cavalier
77	The Chatterbox	Chatbox
78	Ave Maria 2	AveMari2
79	Prelude In C-Sharp Major	Prelude
80	Innocence	Innocenc
81	The Happy Farmer	HapFarme
82	L' Arabesque	L'Arabes
83	Austria Variation	AustVari
84	Schos Doll's Dance No. 7	DollDan7
85	The Rag-Time Dance	Rag-Time
86	Minuet In G Major (BWV Anh. 116)	Minuet
87	Schos Doll's Dance No. 2	DollDan2
88	Italian Polka	ItaPolka
89	Piano Sonata In C Major, K.330. III	Sonata
90	To A Wild Rose	WildRose
91	Gavotte I	Gavottel
92	Waltz	Waltz
93	Tarantella	Taratela
94	Inquietude	Inquietu
95	Frankness	Franknes
96	Mazurka	Mazurka
97	Tchaikovsky Waltz	TchWaltz
98	Harmony Of The Angels	Harmony
99	Gavotte	Gavotte
100	Neapolitan Song	Neapolit
101	Minuet In D Major	Minuet
102	Prelude In E Major	Prelude
103	The Chase	TheChase
104	Piano Sonata In A Major, K.331. I	Sonata2
105	Waltz For Piano In G-Sharp Minor	Waltz2
106	Moment Musical	Moment
107	Tender Grieving	Grieving
108	Waltzes	Waltzes
109	The Farewell	Farewell
110	Suite Dance	SuitDanc

No.	Full Name	Short Name
1	Ballad	Ballad
2	Funk	Funk
3	Jazz Band	JazzBand
4	Dancing Melody	DanceMld
5	Mystic River	MystRivr
6	Jazz Piano	JazzPiano
7	Dream Of Freedom	Dream
8	Fusion	Fusion

## Chord List

Chord Name (Abbreviation)	Normal Voicing	Chord	Display
Major [M]	1-3-5	C	C
Major sixth [6]	1-(3)-5-6	C6	C6
Major seventh [M7]	1-3-(5)-7	CM7	CM7
Major seventh sharp eleventh [M7#11]	1-(2)-3-#4-(5)-7	CM7#11	CM7#11
Major add ninth [Madd9]	1-2-3-5	CMadd9	CM(9)
Major ninth [M9]	1-2-3-(5)-7	CM9	CM7(9)
Major sixth add ninth [6 9]	1-2-3-(5)-6	C6 9	C6(9)
Augmented [aug]	1-3-#5	Caug	Caug
Minor [m]	1-b3-5	Cm	Cm
Minor sixth [m6]	1-b3-5-6	Cm6	Cm6
Minor seventh [m7]	1-b3-(5)-b7	Cm7	Cm7
Minor seventh flatted fifth [m7b5]	1-b3-b5-b7	Cm7b5	Cm7b5
Minor add ninth [madd9]	1-2-b3-5	Cmadd9	Cm(9)
Minor ninth [m9]	1-2-b3-(5)-b7	Cm9	Cm7(9)
Minor eleventh [m11]	1-(2)-b3-4-5-(b7)	Cm11	Cm7(11)
Minor major ninth [mM7]	1-b3-(5)-7	CmM7	CmM7
Minor major ninth [mM9]	1-2-b3-(5)-7	CmM9	CmM7(9)
Diminished [dim]	1-b3-b5	Cdim	Cdim
Diminished seventh [dim7]	1-b3-b5-6	Cdim7	Cdim7
Seventh [7]	1-3-(5)-b7	C7	C7
Seventh suspended fourth [7sus4]	1-4-5-b7	C7sus4	C7sus4
Seventh flatted fifth [7b5]	1-3-b5-b7	C7b5	C7b5
Seventh ninth [7 9]	1-2-3-(5)-b7	C7 9	C7(9)
Seventh sharp evelenth [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 Changed	1ch 1-16ch	1-16ch 1-16ch	
Mode	Default Messages Altered	x x *****	3 x x	
Note Number	:True voice	0—127 *****	0—127 0—127	
Velocity	Note on Note off	o 9nH,V=1-127 x (9nH,V=0)	o 9nH,V=1-127 x (9nH,V=0; 8nH,V=0-127)	
After Touch	key's Ch's	x x	x x	
Pitch Bend		o	o	
Control Change	0 1 5 6 7 10 11 64 65 66 67 80 81 91 93 120 121 123	o o x x x x o o x x x x x x x x o	o o o o o o o o o o o o o o o o o	Bank Select Modulation Portamento Time Data Entry Volume Pan Expression Sustain Pedal Portamento ON/OFF Sostenuto Pedal Soft Pedal Reverb Program Chorus Program Reverb Level Chorus Level All Sound Off Reset All Controllers All Notes Off
Program Change	:true	o *****	o 0—127	
System Exclusive		x	o	
System Common	:SongPosition :Song Select :Tune	x x x	x x x	
System Real Time	:Clock :Commands	o x	x x	
Aux Messages	:LOCAL ON/OFF :All Notes Off :Active sense :Reset	x x o x	x o o o	
Notes:				

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

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