

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 DC 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 DC 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, remove the electric plug from the outlet. Then have the instrument inspected by qualified service personnel.

Disconnect all cables before moving the instrument.

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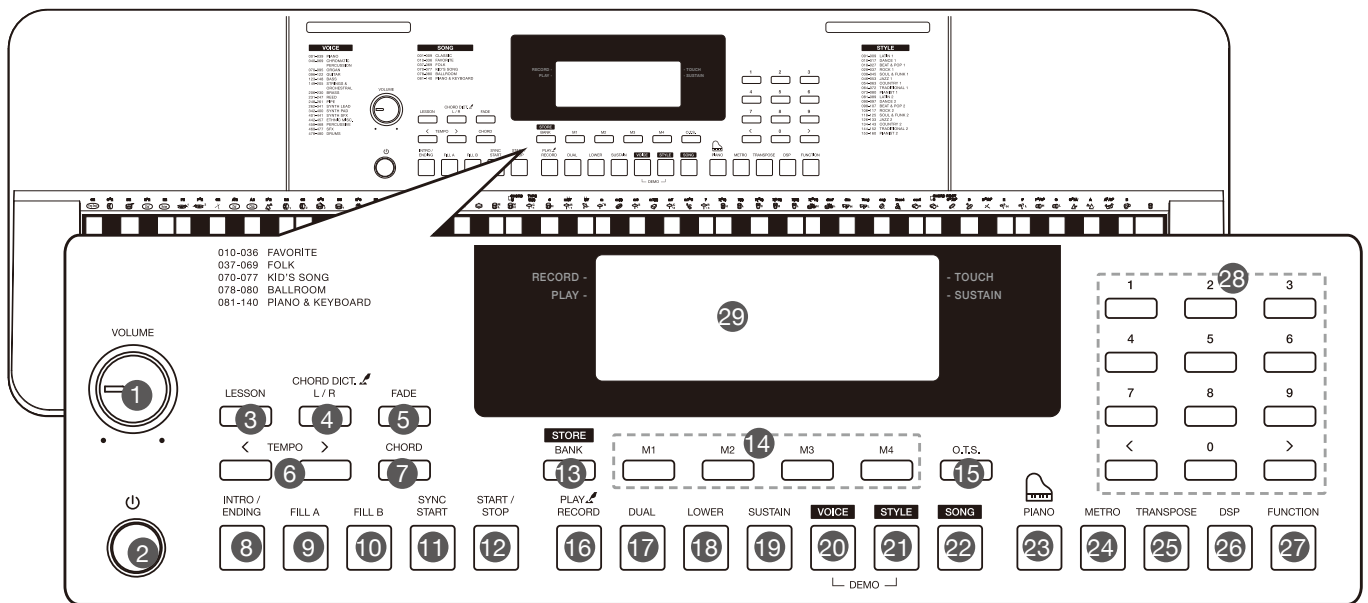
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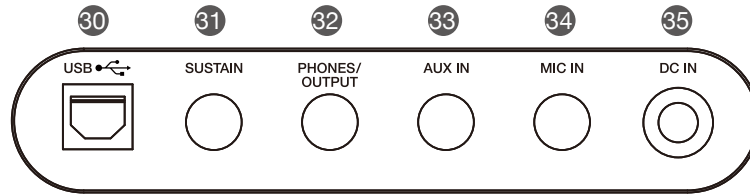
Panel & Display Description

Front Panel



1. **[VOLUME] Knob**
Adjust the master volume.
2. **[] Button**
Turn the power on or off.
3. **[LESSON] Button**
Enter the lesson mode.
4. **[L/R] Button**
Choose to practice the left hand or right hand part.
[CHORD DICT.] Button
Turn the chord dictionary function on or off.
5. **[FADE] Button**
Turn the Fade In/Out function on or off.
6. **[TEMPO +/-] Buttons**
Adjust the current tempo value.
7. **[CHORD] Button**
Enter the Chord Mode.
8. **[INTRO/ENDING] Button**
Play the Intro or Ending pattern.
9. **[FILL A] Button**
Play the fill-in pattern A.
10. **[FILL B] Button**
Play the fill-in pattern B.
11. **[SYNC START] Button**
Turn the Sync Start function on or off.
12. **[START/STOP] Button**
Start or stop playing the style or song.
13. **[BANK] Button**
Switch between memory banks.
[STORE] Button
Register the current panel settings.
14. **[M1]~[M4] Buttons**
Recall the registered panel settings.
15. **[O.T.S.] Button**
Turn the One Touch Setting function on or off.
16. **[RECORD] Button**
Enter the Record Mode.
[PLAY] Button
Play back the recording.
17. **[DUAL] Button**
Turn the dual function on or off.
18. **[LOWER] Button**
Turn the lower function on or off.
19. **[SUSTAIN] Button**
Turn the sustain function on or off.
20. **[VOICE] Button**
Switch to Voice Mode.
Press [VOICE] and [STYLE] at the same time to enter Demo Mode.
21. **[STYLE] Button**
Switch to Style Mode.
Press [VOICE] and [STYLE] at the same time to enter Demo Mode.
22. **[SONG] Button**
Switch to Song Mode.
23. **[PIANO] Button**
Turn the Piano Mode on or off.
24. **[METRO] Button**
Turn the metronome on or off.
25. **[TRANPOSE] Button**
Adjust the Transpose value.
26. **[DSP] Button**
Turn the DSP effect on or off.
27. **[FUNCTION] Button**
Enter the function menu.
28. **[+]/[-] and Number Buttons**
Set parameters value or select the number.
29. **LCD Display**
Display all parameters and values related to the current operation.

Rear Panel



30. USB Jack

Connect to a computer.

31. SUSTAIN Jack

Connect a sustain pedal.

32. PHONES/OUTPUT Jack

Connect a pair of headphones or an audio equipment.

33. AUX IN Jack

Connect an external audio source, such as MP3 or CD player.

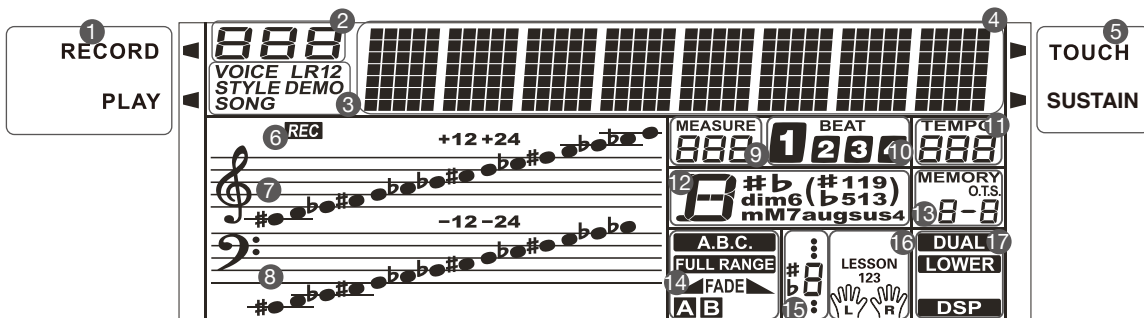
34. MIC Jack

Connect a microphone.

35. DC IN Jack

Connect the DC 12V power adapter.

Display



1. RECORD/PLAY

2. NUMBER

3. VOICE/STYLE/DEMO/SONG

4. CHARACTER

5. TOUCH/SUSTAIN

6. RECORD

7. TREBLE CLEF

8. BASS CLEF

9. MEASURE

10. BEAT

11. TEMPO

12. CHORD

13. MEMORY/O.T.S.

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

15. NOTE INDICATION

16. LESSON

17. DUAL/LOWER/DSP

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.

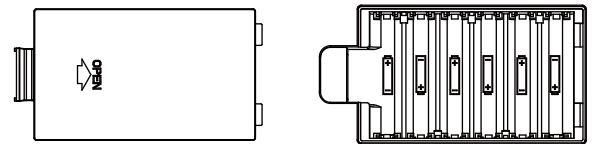
Power Supply

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

Using Batteries

The instrument needs 6 pieces of AA (NO.5) or equivalent alkaline batteries for power supply.

1. Open the battery cabinet cover located on the bottom of the instrument.
2. Insert the batteries, carefully following the polarity markings on the cabinet.
3. Replace the cabinet cover. Make sure it locks firmly in place.

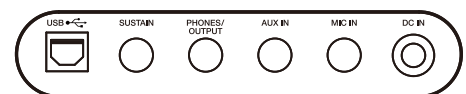
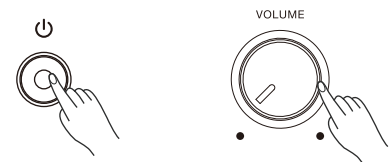


Notes:

1. Do not mix using any used and new batteries.
2. Always use the same types of batteries.
3. Remove the batteries when the instrument is not in use for a long period of time.

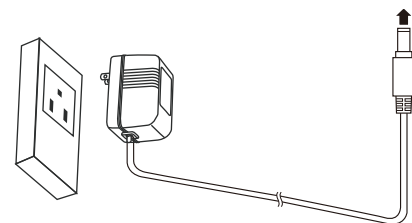
Using Power Adaptor

1. Turn down the volume before connecting to power supply.
2. Connect the adaptor to the DC IN jack of the instrument.
3. Plug the adaptor into an AC outlet. This will automatically cut off the battery power supply.



Notes:

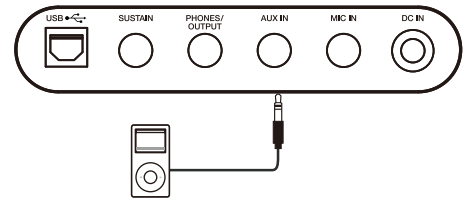
1. In order to save energy, the instrument will automatically shut down after 30 minutes if it is not used. (Please refer to **Auto Power Off**).
2. For your safety, please unplug the instrument when it is not in use or during a thunderstorm.



Connecting an MP3/CD Player

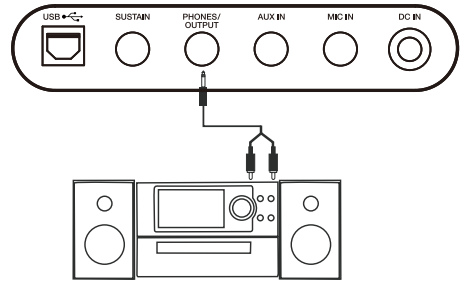
The rear-panel AUX IN jack receives audio signals from an external audio source such as an MP3 or a CD player.

Use an audio cable to connect the AUX IN jack of the instrument to the OUTPUT jack of the MP3/CD player. The instrument's speakers will play the music transmitted from the external player, and you can play along.



Connecting an Audio Equipment

The rear-panel PHONES/OUTPUT jack delivers the output of the instrument to an external audio equipment such as a keyboard amplifier, a stereo sound system, a mixing console, or a recorder. Use an audio cable to connect the PHONES/OUTPUT jack of the instrument to the INPUT jack of the external audio equipment.



Notes:

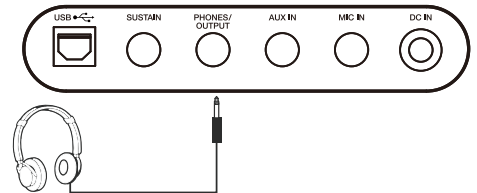
1. Turn off the power to all units before connecting or disconnecting the external equipment.
2. To avoid damaging the speakers, please set the master volume to minimum level before turning on the power.

Connecting a pair of Headphones

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

Note:

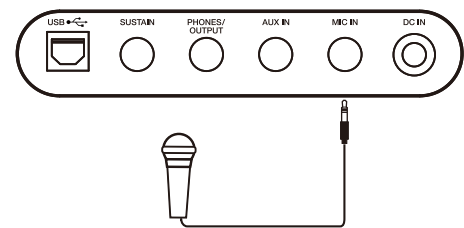
Do not listen with the headphones at high volume for long periods of time. Doing so may cause hearing loss.



Connecting a Microphone

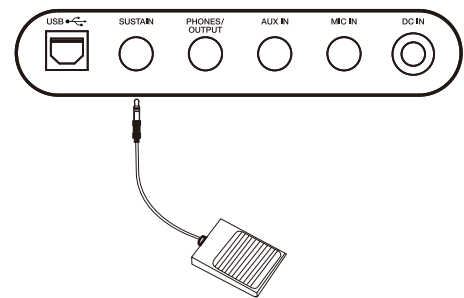
You can plug a microphone to the MIC jack to sing along with your keyboard performance or song playback.

1. Set the master volume to minimum level before connecting or disconnecting a microphone.
2. Plug a microphone into the MIC jack.
3. Adjust the master volume to an appropriate level.



Connecting a Sustain Pedal

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

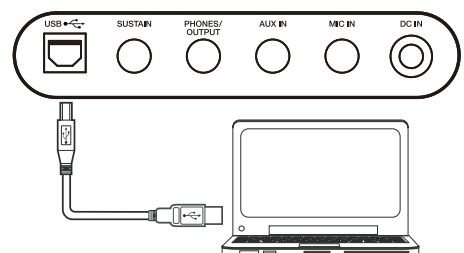


Connecting a Computer

Use a standard USB cable to connect the USB jack of the instrument to the USB port of a computer. You can transmit MIDI messages between the instrument and the computer.

Notes:

1. Do not set the USB device to be input and output simultaneously when setting the software on the computer. Otherwise, the sound will be overlapped when playing the keyboard.
2. We recommend using a USB2.0 interface to connect the instrument to computer.

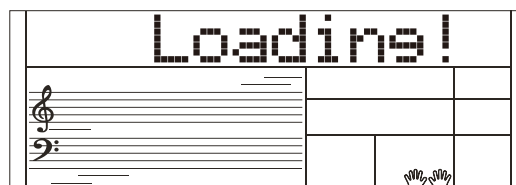
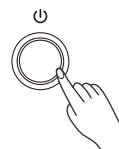


Power Switch and Master Volume

Power Switch

Before you switch your instrument on, please turn down the volume of instrument and the connected audio equipment first.

1. Make sure the instrument is properly connected to power supply.
2. Press POWER SWITCH, the LCD screen is lit, and displays "Loading!", indicating the instrument is powered on.

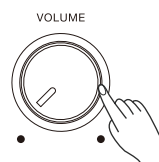


Master Volume

Rotate the [VOLUME] knob clockwise to increase the master volume or counter-clockwise to decrease it. You can use the knob to set the desired volume level.

Note:

If the speakers do not produce sound, please check if the master volume is set too low or if headphones are plugged into the PHONES jack.



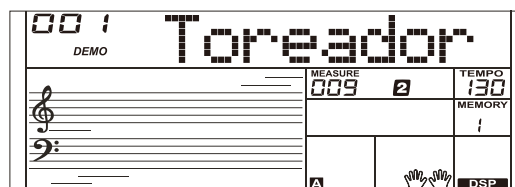
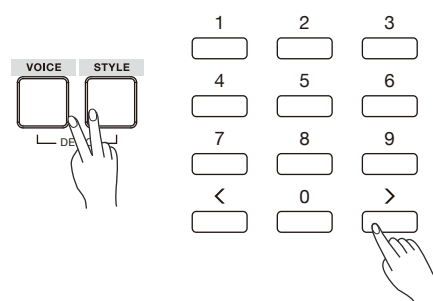
Playing the Demos

The instrument features a variety of demo songs.

1. Press the [STYLE] and [VOICE] buttons simultaneously to start playing all demo songs in a loop. The LCD will display the current demo number and name.
2. Select a demo song.
Use the number keys, the [+]/[-] buttons to select the desired demo song.
3. Press the [STYLE] and [VOICE] buttons simultaneously again or press the [START/STOP] button to stop playing and exit the demo mode.

Note:

During demo playback, only the following buttons will work: [START/STOP], [TEMPO -]/[TEMPO +], [+]/[-], the Number buttons, [VOLUME] and [POWER].



Playing the Voices

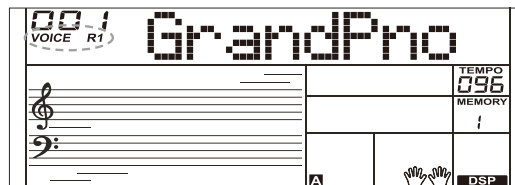
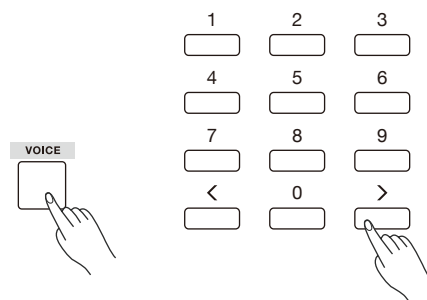
The instrument features a variety of exceptionally realistic voices. Please refer to Voice List.

Playing a Voice

1. Press the [VOICE] button.
Enter the VOICE mode. LCD shows “VOICE R1”, the voice number and the voice name.
2. Select a voice.
Use the number keys, the [+]/[-] buttons to select the voice you want to play.
3. Play the voice.
Play the keyboard and enjoy the beautiful voice.

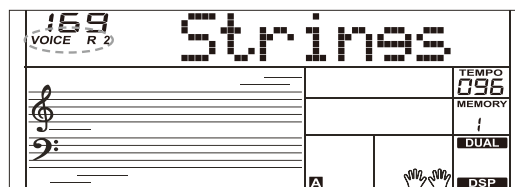
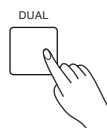
Note:

When the DUAL and LOWER function is on, you can press [VOICE] button repeatedly to choose the voice source. The corresponding LCD indicator will highlight between R1, R2, and L.



Playing Two Voice Simultaneously-DUAL

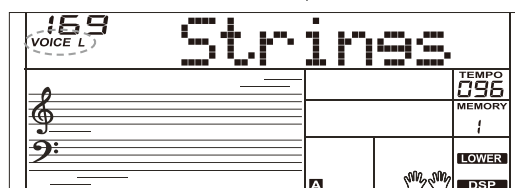
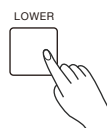
1. Press the [DUAL] button to turn on the dual function. LCD shows “VOICE R 2”, the dual voice number and name.
2. Use the number keys, the [+]/[-] buttons to select a voice for VOICE R2.
3. Play the keyboard, you will hear two different voices layered together, just like two different instruments being played at the same time.
4. Press the [DUAL] button again to turn off the dual function.



Playing Different Voices with Both hands-LOWER

The Lower function splits the keyboard into two areas so as to create different voices for each of your hands. The left hand voice is the lower voice “L” .

1. In idle mode, press the [LOWER] button to turn the lower function on.
The LCD displays the left hand voice name and number, and the indicator “VOICE L” and “LOWER”.
2. Use the number keys, the [+]/[-] buttons to select a voice for VOICE L.
3. Play the keyboard with both hands, and you will hear two different voices.
4. Press the [LOWER] button again to turn off the lower function.

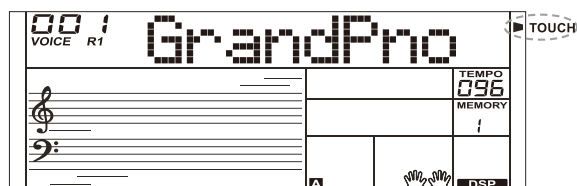


Split Point

The key on the keyboard that separates voice L and voice R1/R2 is called the “split point”. The default split point is at F#3 (19) , however you can assign it to any other key. Refer to the Function Menu.

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. Please refer to the function menu to adjust the touch level.



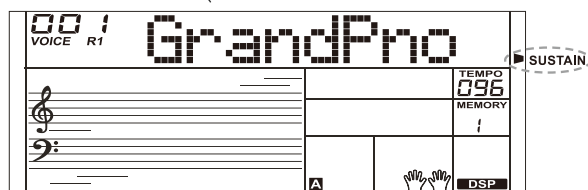
Playing Voices

Sustain

When the Sustain feature is ON, all notes played on the keyboard will have a longer sustain. Press the [SUSTAIN] button to turn sustain on or off.

Note:

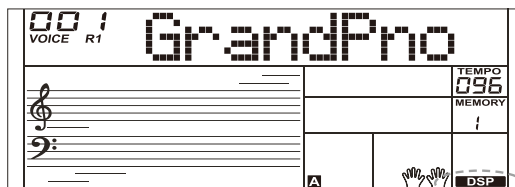
When using a sustain pedal, you can produce a much stronger and more natural sustain effect than by using the [SUSTAIN] button.



DSP Effect

The DSP simulates sounds in real environment. With the DSP effects, you can add ambiance and depth to your performance in a variety of ways.

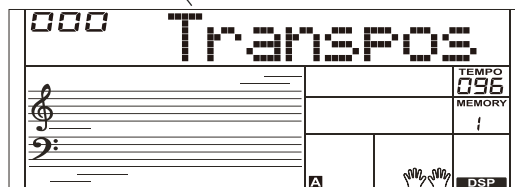
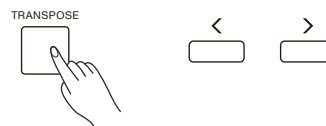
The function is turned on by default. You can press the [DSP] button to turn DSP effect on or off.



Transpose

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

1. the [TRANPOSE] button to enter transpose menu. The LCD shows the current transpose value.
2. Use [+]/ [-] buttons to adjust the transpose value.
3. Press the [+] and [-] buttons simultaneously to reset the transposition to 0.



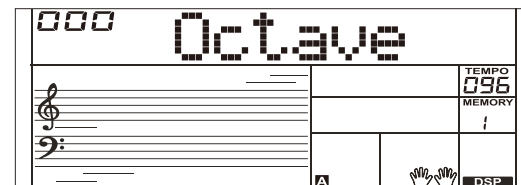
Octave

The octave function will shift the pitch of the specified voice layer up or down in the step of an octave.

You can refer to the function menu to adjust the octave value.

Note:

After adjusting the octave, notes in the highest and lowest keyboard range may not sound normally.



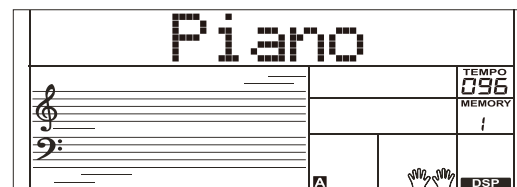
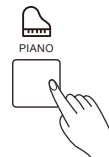
Piano Mode

This function is to set the voice of the entire keyboard to piano instantly.

1. Press [PIANO] button to enter or exit piano mode.
2. In piano mode, you can play the accompaniment as in the other modes, but it plays only the rhythm part.

Note:

In piano mode, the A.B.C. is automatically turned off.

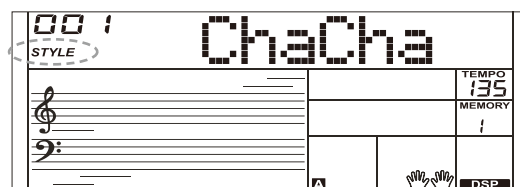
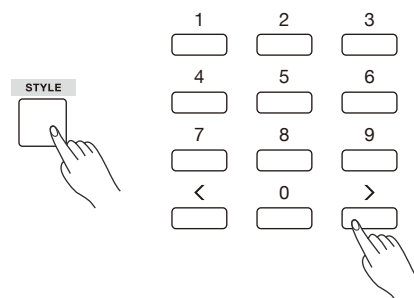


Auto Accompaniment

The auto accompaniment function puts a full backing band at your fingertips. All you have to do is to play chords with your left hand, and the accompaniment will automatically play along, instantly following the chords you play. With auto accompaniment, even a solo performer can enjoy playing with the backing of an entire band or orchestra. The instrument features a variety of styles, please refer to the Style List. Try selecting the different styles and enjoy the auto accompaniment.

Selecting a Style

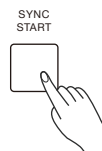
1. Press the [STYLE] button.
Enter the STYLE mode. LCD shows "STYLE", the style number and the style name.
2. Use the number keys, the [+]/[-] buttons to select the style you want to play.
3. Press the [START/STOP] button to start the rhythm tracks of the auto accompaniment.



Sync Start

When style stops, press the [SYNC START] button to turn on the function. The beats on LCD will flash along with the tempo.

1. In Sync Start mode, if the A.B.C. function is turned off, you can press a key on the keyboard to start playing auto accompaniment of the rhythm track.
2. In Sync Start mode, if the A.B.C. function is in use, you can press a key on the chord range of the keyboard to start playing auto accompaniment of all tracks.

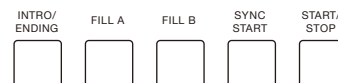
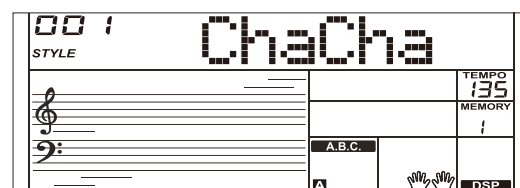
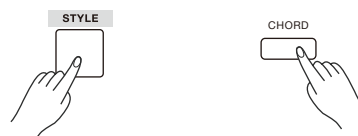


Intro/Ending

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

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

1. Press the [STYLE] button.
2. Select a style.
3. Turn the Chord Mode on.
4. Turn SYNC START on.
5. Press the [INTRO/ENDING], the "A" or "B" flashes on LCD, the style is ready to play.
6. It will start the accompaniment as soon as you start playing in Chord section. When the playback of the intro is finished, it automatically switched to main A or B section.
7. Press the [INTRO/ENDING] again to play the ending section. When the ending is finished, the auto accompaniment automatically stops.



Note:

If you press [FILL A] or [FILL B] before the ending is finished, it will play a fill-in then switch to the corresponding main section.

Auto Accompaniment

Playing a Fill

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).

Note:

If you keep pressing [FILL A]/[FILL B] buttons during style playback, the fill-in pattern will repeat playing until the button is released. Playback will then shift to the related MAIN section.

When style stops, press the [FILL A]/[FILL B] buttons to select a MAIN section. "A or B" will highlight on LCD.

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 is stopped, LCD will show FADE. Press the [START/STOP] button to start Style playing. LCD will show ▲FADE.

The Accompaniment Volume will change from 0 to the set value in about 8 seconds. The keyboard volume will change from 0 to default value at the same time.

Fade Out

Stopping the style with fade out produces a smooth ending, the volume decreases from high to low. Press the [FADE] button during Style playing. LCD will show FADE▴.

The Accompaniment Volume will change from the set value to 0 in about 8 seconds, and the style stops.

Tempo

Each style of the instrument has been programmed with a default tempo; however, you can change it as needed.

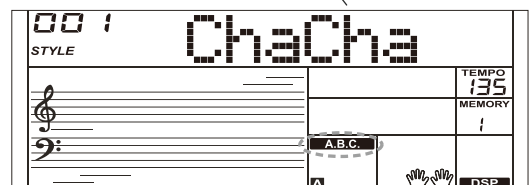
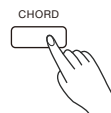
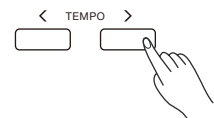
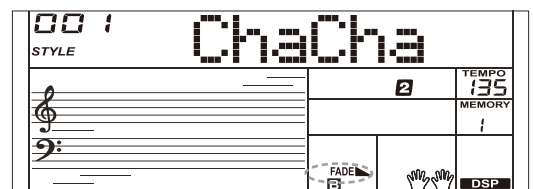
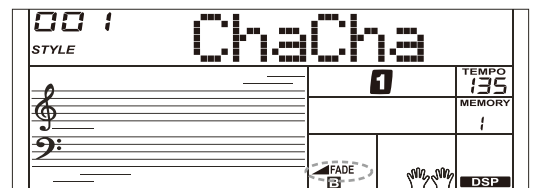
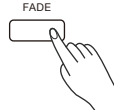
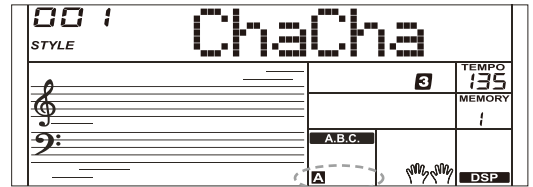
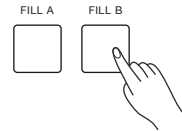
1. Use the [TEMPO -]/[TEMPO +] buttons to change the tempo. The value ranges from 5 to 280.
2. Hold down the [TEMPO -]/[TEMPO +] buttons to change the tempo quickly.
3. Press the [TEMPO+] and [TEMPO-] buttons simultaneously to restore the default tempo setting.

Auto Bass Chord

1. Press the [CHORD] button, the LCD will display the "A.B.C." indicator. The left hand section of the keyboard is the chord section. You can play different chords in the chord section.

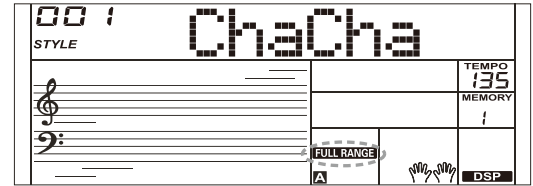
Press [CHORD] button again to enter Full Range mode. The "FULL RANGE" indicator will be lit. You can play chords over the entire keyboard in multi-fingering.

2. Play chords in the chord section, and the LCD will display the corresponding chord names.



3. Split Point Setting

Please refer to the function menu to set the split point. The split point and the keys to its left all belong to the chord section.



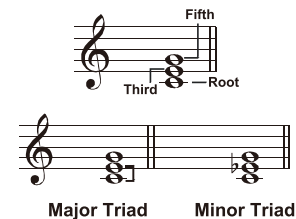
Chord Basics

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



Diminished Triad Augmented Triad



Root Position First Inversion Second Inversion

Cm

Chord Root Chord Type

Chord Inversion

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

Chord Name

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

Single Finger

Single finger 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.

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.

Note:

In full range mode, the entire keyboard will only recognize chords played in normal fingering.

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.

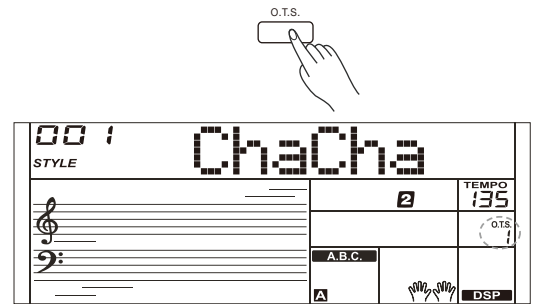
0 C	1 C ₆	2 C _{M7}	3 C _{M7} (#11)	4 C _M (9)	5 C _{M7} (9)
6 C ₆ (9)	7 C _{aug}	8 C _m	9 C _{m6}	10 C _{m7}	11 C _{m7} (b5)
12 C _m (9)	13 C _{m7} (9)	14 C _{m7} (11)	15 C _m M ₇	16 C _m M ₇ (9)	17 C _{dim}
18 C _{dim7}	19 C ₇	20 C _{7sus4}	21 C ₇ (b5)	22 C ₇ (9)	23 C ₇ (#11)
24 C ₇ (13)	25 C ₇ (b9)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

Auto Accompaniment

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. LCD shows "O.T.S.".
2. Press one of the [M1]-[M4] buttons, various panel settings (such as voice, effect, etc.) that match the selected style can be instantly recalled.
3. A.B.C. is automatically turned on during O.T.S. mode.
4. Press the [O.T.S.] button again to quit One Touch Setting mode, the "O.T.S." indicator will disappear.



Note:

In O.T.S. mode, the memory is not selectable.

Metronome

Turning on the Metronome

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

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

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

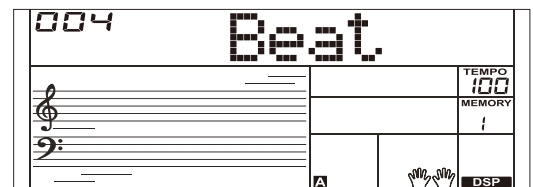


Selecting the Beat

You can set the beat type in the function menu, please refer to the function menu for details.

If you turn on the metronome during style playback, the metronome sound will start from the next beat and its beat will match the current style. When style stops, you can change the metronome beat as desired.

The metronome is not usable in song mode.



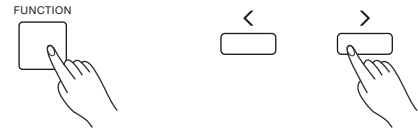
Function Menu

Press the [FUNCTION] button to enter the function menu. The LCD displays the current parameter item.

Press repeatedly the [FUNCTION] button to select an item, then use the [+] / [-] buttons to change the value of the selected item.

Parameter items and the value range in the function menu:

Parameter Item	LCD Display	Range
Octave	XXX Octave	-2 - 2
Split Point	XXX Split Pt	1 - 61
Beat Type	XXX Beat	0, 2 - 9
Accompaniment Volume	XXX Accomp	0 - 32
Touch	XXX Touch	OFF, 0 - 3
Tune	XXX Tune	-50 - 50
Reverb Level	XXX Rev Lev	0 - 127
Chorus Level	XXX Chr Lev	0 - 127
Auto Power Off	XXX PowerOff	OFF, 30, 60

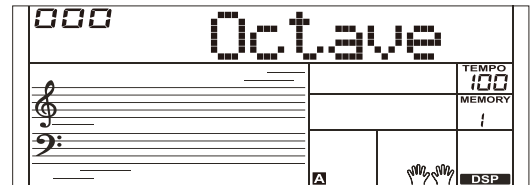


Note:

It will exit the function menu if there is no operation in 3 seconds.

Octave

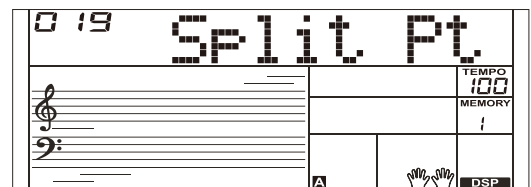
1. Repeatedly press the [FUNCTION] button to select the octave menu. The LCD displays "Octave". Use the [+] / [-] buttons to change the value over the range of -2 - 2.
2. Pressing [+] and [-] buttons at the same time will reset the octave value to default "000".



Split Point

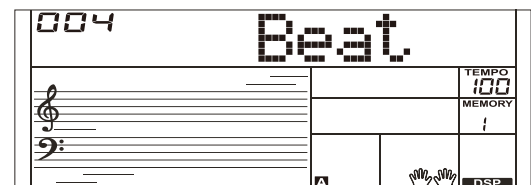
The Point on the keyboard that separates voice L and voice R1/R2 is called the "split point". Left hand section controls the auto bass chord accompaniment when the A.B.C. function is on, or it plays the lower voices when the A.B.C. function is off.

1. Repeatedly press the [FUNCTION] button to select split point menu. The LCD displays "Split Pt". Use [+] / [-] buttons to change Split Point. The range of Split Point is: 1~61.
2. Press [+] / [-] buttons simultaneously will set the split point value to its default setting: F#3 (19).



Beat Type

1. Repeatedly press the [FUNCTION] button to select the beat menu. The LCD displays "Beat". Use the [+] / [-] buttons to change the beat type.
2. Pressing [+] and [-] buttons at the same time will reset the beat type to default "004".

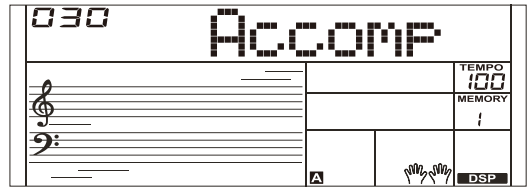


Function Menu

Accompaniment Volume

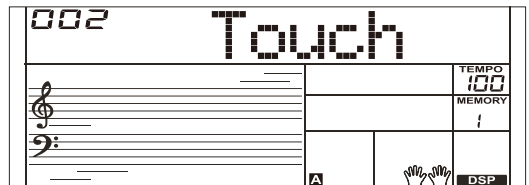
The function adjusts the accompaniment volume.

1. Repeatedly press the [FUNCTION] button to enter the function menu, and when the LCD displays "Accomp", you can adjust the volume level over the range of 0-32. LCD will show the current volume level.
2. In the function menu, press both [-] and [+] buttons simultaneously to mute the accompaniment part. LCD shows "OFF Accomp". Press both buttons again to unmute the accompaniment volume.



Touch

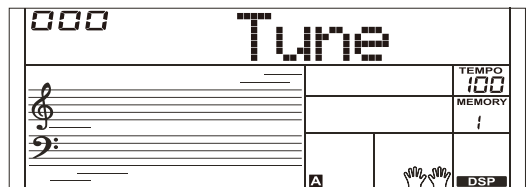
1. Repeatedly press the [FUNCTION] button to select the touch menu. The LCD displays "Touch". Use the [+]/[-] buttons to change the touch level.
2. Pressing [+] and [-] buttons at the same time will reset the touch level to default "002".



Tune

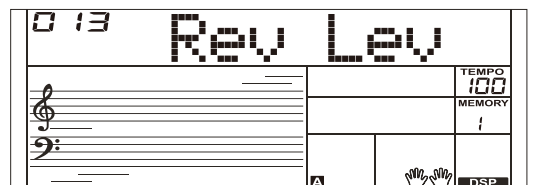
The function adjusts the pitch of the entire keyboard in a 2-cent increment.

1. Repeatedly press the [FUNCTION] button to select the tune menu. The LCD displays "Tune". Use the [+]/[-] buttons to change the value over the range of -50 - +50.
2. Pressing [+] and [-] buttons at the same time will reset the tune value to default "000". The setting applies to both accompaniment and the voice.



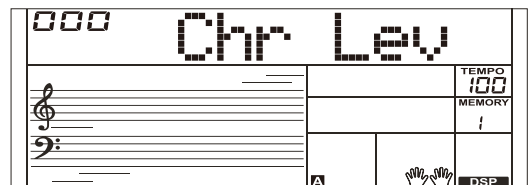
Reverb Level

1. Repeatedly press the [FUNCTION] button to select the reverb level menu. The LCD displays "Rev Lev". Use the [+]/[-] button to adjust the level over the range of 0-127.
2. Pressing [+] and [-] buttons at the same time will reset the reverb level to default.



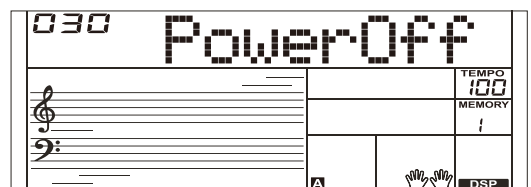
Chorus Level

1. Repeatedly press the [FUNCTION] button to select the chorus level menu. The LCD displays "Chr Lev". Use the [+]/[-] button to adjust the level over the range of 0-127.
2. Pressing [+] and [-] buttons at the same time will reset the chorus level to default.



Auto Power Off

1. Repeatedly press the [FUNCTION] button to select the power off menu. The LCD displays "PowerOff". Use the [+]/[-] button to change the time setting.
2. Pressing [+] and [-] buttons at the same time will reset the setting to default "030" (30 min).



Register Memory

The Registration Memory feature allows you to save virtually all panel settings to a registration memory, and you can instantly recall them by pressing a single button.

The instrument has 4 memory banks, and each bank has 4 memories (M1-M4).

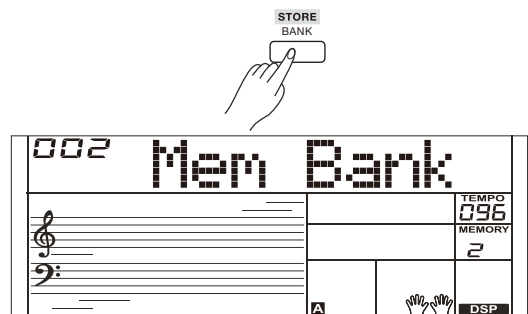
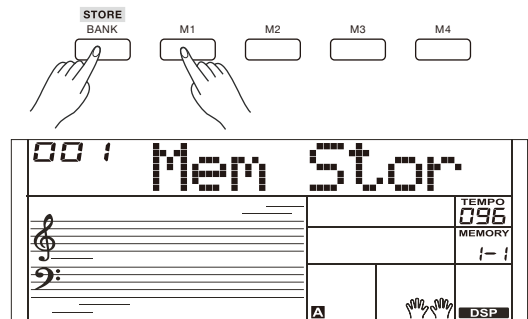
1. Hold down [STORE] button, then press one of the memory buttons [M1] - [M4] to save the panel settings. The LCD will display “Mem Stor” and the new settings will replace the previous memory data.
2. Press one of the memory buttons [M1] - [M4] to recall the panel settings saved to that memory.
3. You can save following parameters to the memory:
Voice Parameter: voice, dual, DSP.
Accompaniment Parameter: style, tempo, and chord no/off, accompaniment sections.
Function Parameter: touch, some parameters in the function menu.

Note:

Registration memory cannot be recalled when the One Touch Setting function is in use. The registration memory will reset to default settings after power off.

Selecting a Registration Bank

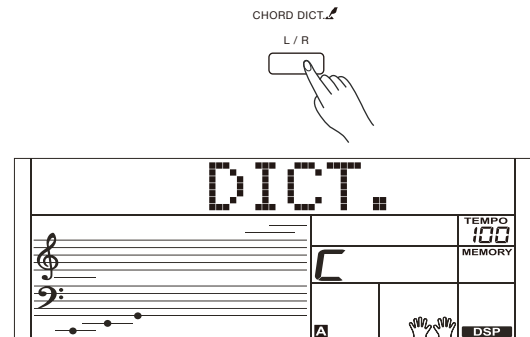
1. Press the [BANK] button. The LCD will display the bank number.
2. Repeatedly press the [BANK] button to select a bank over the range of 1-4.



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.

1. Press and hold the [CHORD DICT.] button for 2 seconds to enter this mode. The LCD displays the Chord Type and Chord Notes.
2. The keys above C4 (including C4) are used to assign the Chord Type, and the keys above C6 (including C6) are used to assign the Chord Root. When the Chord Type and Chord Root are confirmed, the LCD will display the Chord and the staff notation.
3. When you play the correct chord on the chord range of the keyboard, an applause sound will be heard.
4. Press and hold the [CHORD DICT.] button for 2 seconds again to exit this mode.

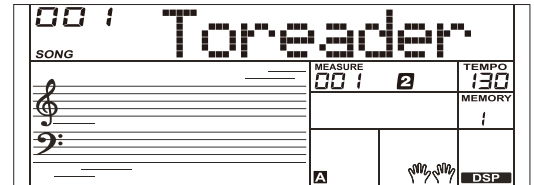


Playing the Songs

The instrument has a variety of songs (Please refer to the Song List). Each song can be practiced in LESSON mode.

Listening to the Songs

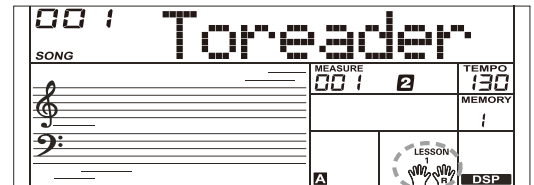
1. Press the [SONG] button to enter the song mode. It will play all songs circularly. Press the [SONG] button again, it will stop the song.
2. In song mode, use the number keys and [+]/[-] buttons to select a song.
3. During song playback, you can press the [START/STOP] button to stop the song, press it again to play the current song repeatedly.
4. Use the [TEMPO+]/[TEMPO-] buttons to change the tempo of the current song.
5. When the song is stopped, press [STYLE], [VOICE], [DUAL], [M1] - [M4] to exit the song mode.



Lesson Mode

The instrument presets 3 different ways to practice a song, as specified in Lesson 1, Lesson 2 and Lesson3. The instrument will grade your practice when you finish a lesson, helping you to keep track of your progress.

1. When song playback is stopped, press the [LESSON] button to enter the lesson mode or select a lesson to practice.
2. Press the [START/STOP] button to start the lesson. The LCD displays the note that needs to be played.
3. Press the [START/STOP] button again to stop the lesson.
4. In lesson mode, press repeatedly the [L/R] button to select to practice the left hand part, the right hand part, or both hands.
5. You can select to practice one of the three lessons. It will grade your practice when you finish a lesson.



In lesson 1, you will learn to practice at the correct time value. It doesn't matter even you play the wrong notes.

In lesson 2, you will learn to play the correct notes. The lesson will continue only when you have played correctly the note displayed on LCD.

In lesson 3, you will learn to play the correct notes at the correct time value.

When you finish a lesson, the instrument will grade your practice by telling you the level you get.

- Level 1: OK.
- Level 2: Good.
- Level 3: Very Good.
- Level 4: Excellent.

After grading, the song will play back again, and you can practice again.

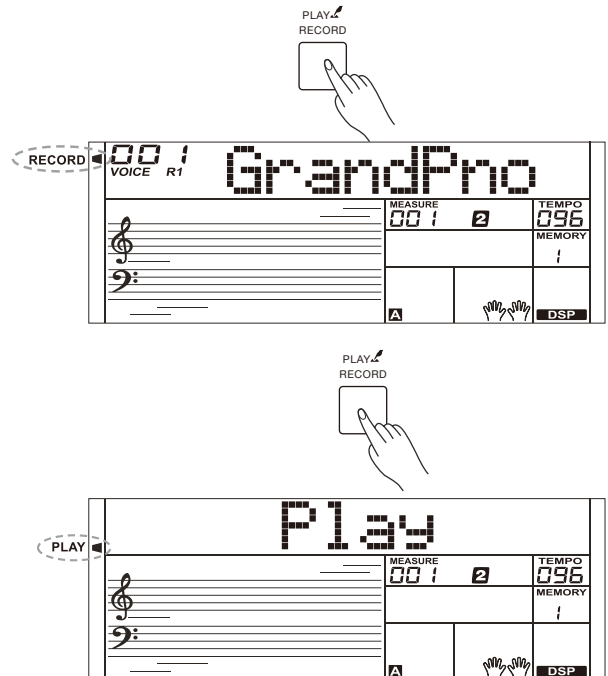
Recording and Playback

You can record your performance and then play it back.

1. Press the [RECORD] button, the RECORD indicator will be lit, and the beats will flash.
2. Play the keyboard or press the [START/STOP] button to start recording. If you want to record the accompaniment, please turn on the A.B.C. function, then play chords in the chord section of the keyboard.
3. Press the [RECORD] button again to stop recording. The RECORD indicator goes out.
4. Press and hold the [PLAY] button for 2 seconds to play back the recording. The PLAY indicator will be lit.
5. Press and hold the [PLAY] button for 2 seconds again to stop playback. The PLAY indicator goes out.

Note:

The recording data will be lost after power off.



MIDI Function

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 Connection

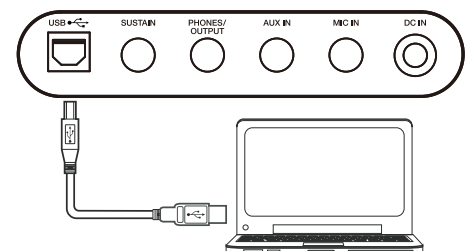
The instrument is equipped with a standard USB interface, which allows the instrument to be connected to a computer. Most computers will automatically recognize the instrument, and allow MIDI messages to be transmitted between the instrument and the computer via the USB-MIDI jack.

Use a standard USB cable to connect the USB jack of the instrument to the USB port of a computer.

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.



Trouble Shooting

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.	1. Check if the master volume is set too low. 2. Check if headphones are plugged into the PHONES jack.
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 & Display	
Keyboard	61 Keys with Touch Response
Touch Response	3 types, Off
Display	Multi-functional LCD
Voices	
Polyphony (max.)	64
Voices	480 preset
Layer	Left, Right1, Right2
Split	Yes
Styles	
Styles	160 preset
Style Control	Start / Stop Sync Start Intro / Ending Main A / Fill in A Main B / Fill in B Chord mode Fade in/out Accomp volume
O.T.S.	Yes
Chord Types	32
Effects	
Effects	DSP on / off
Reverb	128 levels
Chorus	128 levels
Song & Recording	
Music Library	140 preset Music tutorial system
Sequencer	1 user song
Demo Song	140 preset

Pitch Adjustment	
Transpose	-12 ~ +12
Octave	-2 ~ +2
Tuning	-50 ~ +50
Other Functions	
Accompaniment Volume	0~32
Performance Memory	4 preset banks x 4
Metronome	0, 2 ~ 9
Tempo	5 ~ 280
Other control	Piano Mode, Chord Dict
Connections	
Interaction & Expansion	USB MIDI
Phones	1 standard stereo
Pedals	Sustain
USB	USB MIDI
Input	Standard stereo
Output	Yes (Phones jack)
Power Supply	
Power	DC 12V / 1 A
Power Off Protection	Yes
Amplifiers & Speakers	
Amplifiers	2.5W x 2
Speakers	3W x 2
Dimensions & Weight	
Dimensions LWH (mm)	946 x 316 x 101
Weight (kg)	4

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

Voice List

No.	English Name	LCD Name
PIANO		
1	Acoustic Grand Piano	GrandPno
2	Piano Dark	GrdPnD
3	Octave Piano	OctPno
4	Octave Piano 2	OctPno2
5	Piano & Choir	Pno&Cho
6	Grand Piano / W	GrandPnW
7	Analog E.Piano	AnEPno
8	Analog E.Piano 2	AnEPno2
9	Analog E.Piano Wah	AnPnoWah
10	Bright Piano	BritPno
11	Stereo Bright Piano	BritePnS
12	Detuned Piano	DetunPno
13	Chorus Piano	ChoPno
14	Bright Piano / W	BritPnW
15	Piano & Vibraphone	Pno&Vib
16	Electric Grand Piano	EPianoG
17	Electric Grand Piano / W	E.PianoW
18	Stereo Synth E.Piano	StSyEIPn
19	Stereo Synth E.Piano 2	StSyEPn2
20	Honky-Tonk Piano	HnkyTonk
21	Honky-Tonk Dark	HnkTonkD
22	Honky-Tonk / W	HnkyTkW
23	E.Piano	E.Piano
24	50's E.Piano	50'sEP
25	E.Piano / W	EPianoW
26	E.Piano 2 / W	EPianoW2
27	E.Piano 2	E.Piano2
28	Detuned E.P.	DetunEP
29	Harpsichord	Harpsi
30	Harpsichord / W	HarpsiW
31	Harpsichord Octave	HarpsiO
32	Harpsichord Off	HarpsiOf
33	Digital E.Piano	DigiEP
34	Digital E.Piano 2	DigiEP2
35	Clavichord	Clavi
36	Stereo Clavichord	ClaviS
37	Clavichord / W	ClaviW
38	Clavichord Wah	ClaviWa
39	Synth Clav	SynClav
CHROMATIC PERCUSSION		
40	Celesta	Celesta
41	Dark Celesta	CelestD
42	Celesta & Sine	Cele&Sin
43	Reecho Bell	ReBell
44	Celesta & Music Box	Cel&Mbox
45	Glockenspiel	Glocken
46	Glockenspiel & Sine	Glkn&Sin
47	Children's Song	ChilSong
48	Analog Bell	AnaBell
49	Stereo Analog Bell	StAnaBel
50	Music Box	MusicBox
51	Vibraphone	Vibra
52	Vibraphone / W	VibraW
53	Vibraphone & Bell	Vibr&Bel

54	Vibraphone & Harpsichord	Vibr&Hrp
55	Marimba	Marimba
56	Marimba / W	MarimbaW
57	Sine Marimba	Marm&Sin
58	Stereo Marimba	MarimbaS
59	Marimba & Vibraphone	Marm&Vib
60	Wood Drum	WoodDrum
61	Rotating	Rotating
62	Dual Attack	DualAtta
63	Stereo TRI	STRI
64	Xylophone	Xylophon
65	Tubular Bells	TubuBel
66	Rotate Octave	RotateOc
67	Synth Organ Staccato	SyOrSta
68	Synth Organ Staccato 2	SyOrSta2
69	Dulcimer	Dulcimer
ORGAN		
70	Drawbar Organ	DrawOrg
71	Stereo Drawbar Organ	DrawOrgS
72	Soft Stereo Drawbar Organ	DrawOgSf
73	Mellow Drawbar Organ	MellIDOrg
74	Bright Drawbar Organ	DrawOrgB
75	Percussive Organ	PercOrgn
76	Percussive Organ Detuned	DePerOrg
77	Rock Organ	RockOrgn
78	Church Organ	ChurOrgn
79	Detuned Church Organ	DeChuOrg
80	Octave Church Organ	ChrOrgO
81	Octave Church Organ 2	ChrOrgO2
82	Finale	Finale
83	Digital Organ	DigiOrg
84	Analog Organ	AnaOrg
85	Analog Organ 2	AnaOrg2
86	Reed Organ	ReedOrgn
87	Reed Organ 2	RedOrgn2
88	Stereo Reed Organ	ReedOrgS
89	Accordion	Acordin
90	Accordion 2	Acordin2
91	Stereo Accordion	AcordinS
92	Harmonica	Harmnica
93	Dark Harmonica	HarmnicD
94	Tango Accordion	TangoAcCd
95	Dark Tango Accordion	TangAcCd
GUITAR		
96	Nylon Guitar	NylonGtr
97	Chorus Nylon Guitar	NylonGtC
98	Stereo Nylon Guitar	NylonGtS
99	Stereo Nylon Guitar 2	NylnGtS2
100	Steel Guitar	SteelGtr
101	12 String Guitar	12StrGtr
102	Detuned Steel Guitar	DetStlGt
103	Jazz. Guitar	JazzGtr
104	Clean Guitar	CleanGtr
105	Clean Guitar 2	CleanGt2
106	Stereo Clean Guitar	CleanGtS
107	Soft Clean Guitar	ClnGtSof

108	Chord Clean Guitar	ClnGtCho
109	Muted Guitar	MutedGtr
110	Stereo Muted Guitar	MutedGtS
111	Chord Muted Guitar	MutGtCho
112	Overdrive Guitar	Ovrdrive
113	Dance Lead	DancLead
114	Distortion Guitar	DistGtr
115	Analog Distortion Guitar	AnDistGt
116	5Th Distortion	5ThDist
117	5Th Distortion 2	5ThDist2
118	Analog Distortion	AnaDist
119	Analog Distortion 2	AnaDist2
120	Analog Distortion Wah	AnDisWah
121	Analog Distortion Wah 2	AnDisWa2
122	Guitar Harmonics	GtrHarmo
BASS		
123	Acoustic Bass	AcoBass
124	Acoustic Bass 2	AcoBass2
125	Acoustic Bass Detuned	DetAcoBs
126	Velocity Crossfade Bass	VelCroBs
127	Jazz Style	JazzSty
128	A.Bass & Mute G.T.	ABs&MtGT
129	Finger Bass	FngrBs
130	Finger Bass 2	FngrBs2
131	Dark Finger Bass	FngrBsD
132	Detuned Finger Bass	DetFngBs
133	Velocity Bass	VelBass
134	Bass & Distortion Guitar	Bs&DisGt
135	Pick Bass	PickBs
136	Pick Bass 2	PickBs2
137	Mute Pick Bass	PickBsM
138	Pick & Finger Bass	Pk&FgBs
139	Pick Bass & Clean Guitar	PBs&ClGt
140	Detuned Pick Bass	DetPkBs
141	Fretless Bass	Fretles
142	Fretless Bass 2	Fretles2
143	Slap Bass	SlapBas
144	Slap Bass 2	SlapBas2
145	Slap Bass 3	SlapBas3
146	Synth Bass	SynBass
147	Synth Bass 2	SynBass2
148	Synth Bass 3	SynBass3
STRINGS & ORCHESTRAL		
149	Violin	Violin
150	Violin 2	Violin2
151	2 Violin	2Violin
152	Viola	Viola
153	Viola 2	Viola2
154	2 Viola	2Viola
155	Cello	Cello
156	Cello 2	Cello2
157	2 Cello	2Cello
158	Contrabass	Contrbs
159	Contrabass 2	Contrbs2
160	Tremolo Strings	TremStr

161	Tremolo Strings 2	TremStr2
162	Pizzicato Strings	PizzStr
163	Pizzicato Strings 2	PizzStr2
164	Orchestral Harp	Harp
165	Orchestral Harp 2	Harp2
166	Stereo Harp	HarpS
167	Timpani	Timpani
168	Timpani 2	Timpani2
169	Strings Ensemble	Strings
170	Strings Ensemble 2	Strings2
171	Boiling Life	Boiling
172	Stereo Strings	StringS
173	Stereo Strings 2	StringS2
174	Synth Strings	SynStrs
175	Synth Strings 2	SynStrs2
176	Synth Strings 3	SynStrs3
177	Stereo Synth Strings	SynStrS
178	Stereo Synth Strings 2	SynStrS2
179	Analog Orchestra	AnaOrch
180	Analog String	AnaStr
181	Analog String 2	AnaStr2
182	Slow Strings	SlowStr
183	Slow Strings 2	SlowStr2
184	Choir Aahs	ChoirAah
185	Choir Aahs 2	ChoirAh2
186	Dark Aahs	ChoAhD
187	Stereo Aahs	ChoAhS
188	Stereo Aahs 2	ChoAhS2
189	Mellow Choir Aahs	ChoAhMel
190	Aahs & SynStr	Ah&SyStr
191	Big Aahs	BigAahs
192	Analog Sound	AnaSound
193	Analog Sound 2	AnSound2
194	Voice Ooh	VoiceOoh
195	Synth Voice	SynVoic
196	Stereo Synth Voice	SynVoicS
197	HK 80's	HK80's
198	Homesick	Homesick
199	Child Interest	Interest
200	Mechanical Voice	MechanVo
201	Power Voice	PoweVo
202	Child Interest Wah	InterWah
203	Orchestra Hit	OrchHit
204	Orchestra Hit Stereo	OrchHitS
205	Orchestra Hit Octave	HitOctO
BRASS		
206	Trumpet	Trumpet
207	Trumpet 2	Trumpet2
208	Dark Trumpet	TrumpetD
209	Dark Trumpet 2	TrmpetD2
210	Wah Trumpet	TrumpetW
211	Trombone	Trmbone
212	Trombone 2	Trmbone2
213	Tuba	Tuba
214	Tuba 2	Tuba2

Voice List

215	Muted Trumpet	MuteTrp
216	Muted Trumpet 2	MuteTrp2
217	Horn	Horn
218	Horn 2	Horn2
219	Stereo Synth Brass	StSyBras
220	5th Horn	5thHorn
221	Brass Ensemble	Brass
222	Majestic Unison	Unison
223	Synth Brass	SynBras
224	Synth Brass 2	SynBras2
225	Synth Brass 3	SynBras3
226	Sharp Brass	SharpBra
227	Analog Brass	AnaBrass
228	Analog Brass 2	AnaBras2
229	Dynamics Analog Brass	DyAnaBra
230	Octave Synth Brass	SynBrasO
REED		
231	Soprano Sax	SprnSax
232	Soprano Sax 2	SprnSax2
233	Alto Sax	AltoSax
234	Alto Sax 2	AltoSax2
235	Tenor Sax	TenoSax
236	Tenor Sax 2	TenoSax2
237	Baritone Sax	BariSax
238	Baritone Sax 2	BariSax2
239	Oboe	Oboe
240	Oboe 2	Oboe2
241	Sweet Oboe	SwetOboe
242	English Horn	EngHorn
243	English Horn 2	EngHorn2
244	Bassoon	Bassoon
245	Bassoon 2	Bassoon2
246	Clarinet	Clarine
247	Clarinet 2	Clarine2
PIPE		
248	Piccolo	Piccolo
249	Piccolo 2	Piccolo2
250	Flute	Flute
251	Flute 2	Flute2
252	Recorder	Recordr
253	Recorder 2	Recordr2
254	Pan Flute	PanFlut
255	Pan Flute 2	PanFlut2
256	Blown Bottle	Bottle
257	Blown Bottle 2	Bottle2
258	Shakuhachi	Shakchi
259	Shakuhachi 2	Shakchi2
260	Whistle	Whistle
261	Ocarina	Ocarina
SYNTH LEAD		
262	Square Lead	SquarLd
263	Square Lead 2	SquarLd2
264	Analog Lead	AnaLead
265	Lead Sine	SineLead
266	Lead Sine 2	SinLead2
267	Analog Electric	AnaElect

268	Slow Square Lead	SlowLead
269	Analog Classic Lead	AnClasLd
270	Thick Square	ThickSq
271	Quint	Quint
272	Sine Solo	SineSolo
273	Pulse Lead	PulseLd
274	Pulse Lead 2	PulseLd2
275	Mellow Wind	Wind
276	80's Digital	80'sDig
277	Classic TRI	ClassTRI
278	Stereo Analog Wind	StAnWind
279	Stereo Analog Wind 2	StAnWid2
280	Sawtooth Lead	SawLead
281	Sawtooth Lead 2	SawLead2
282	Stereo Sawtooth	SawLdS
283	Stereo Sawtooth 2	SawLdS2
284	Electronic Lead	ElecLead
285	Psychedelic	Psyched
286	80's Synth	80'sSyn
287	5Th Analog	5ThAna
288	5Th Analog 2	5ThAna2
289	Vitality	Vitality
290	5th Sawtooth	5thSaw
291	5th Sawtooth 2	5thSaw2
292	Comedy	Comedy
293	Comedy 2	Comedy2
294	Fazli Lead	FazliLd
295	80's Sawtooth	80'sSaw
296	Wind Chimes	WindChi
297	5Th Digital Age	5ThDigAg
298	5Th Digital Age 2	5ThDgAg2
299	5Th Square	5ThSqu
300	5Th Square 2	5ThSqu2
301	Stereo Pulse	StPulse
302	Stereo Pulse 2	StPulse2
303	Analog Signal	AnSignal
304	Analog Signal 2	AnSignl2
305	Stereo Electronic Lead	StElecLd
306	Stereo Electronic Lead 2	StEleLd2
307	Calliope Lead	CalipLd
308	Calliope Lead 2	CalipLd2
309	Grand	Grand
310	Octave Pad	OctPad
311	Classic Lead	ClassLD
312	Sawtooth Wah	SawWah
313	Chiff Lead	ChiffLd
314	Chiff Lead 2	ChiffLd2
315	Charang Lead	CharnLd
316	Fruity Lead	FruityLd
317	Voice Lead	VoiceLd
318	Robot	Robot
319	Modulation Distortion	ModDist
320	Control	Control
321	Vague Vocals	VagueVo
322	Singl Synth	SinglSyn
323	Analog Filter	AnaFilt

324	Analog Voice	AnaVo
325	Analog Voice 2	AnaVo2
326	Fifths Lead	FifthsLd
327	Ninja	Ninja
328	Ninja 2	Ninja2
329	Bass & Lead	Bs&Lead
330	Bass & Lead 2	Bs&Lead2
331	Classic Synth	ClassSyn
332	Classic Synth 2	ClassSy2
333	Electron Impac	EleImpac
334	Elastic Across	Across
335	Analog Wind	AnaWind
336	Electron Saw	EleSaw
337	Boring Sine	BorSine
338	Steel Wire	SteelWir
339	Analog Pulse	AnaPulse
340	Happiness	Happines
341	Deformation Pulse	DefPulse
SYNTH PAD		
342	New Age Pad	NewAgPd
343	New Age Pad 2	NewAgPd2
344	Rise	Rise
345	Praise	Praise
346	Intangible	Intangi
347	Warm Day	WarmDay
348	Dunhuang	Dunhuang
349	Free Space	FreeSpa
350	Plump Sawtooth	PlumpSaw
351	Square Wah	SquaWah
352	Double Pulse	DoubPul
353	Comedy Wah	ComeWah
354	Phase Shift	PhaShift
355	Warm Pad	WarmPad
356	Warm Pad 2	WarmPad2
357	Overture	Overture
358	Verve	Verve
359	Fulness Pad	FulnesPd
360	Overture Wah	OvertWah
361	Digital Age	DigitAge
362	Analog Pad	AnalPd
363	Analog Pad 2	AnalPd2
364	Analog Wah	AnaloWah
365	Sharp	Sharp
366	Warm Pulse	WarmPul
367	Happiness Pad	HappiPd
368	Sawtooth Pad	SawPad
369	Sawtooth Pad 2	SawPad2
370	Poly Synth Pad	PlySyPd
371	Poly Synth Pad 2	PlySyPd2
372	Modulation Distortion Wah	ModDiWah
373	Choir Pad	ChoPad
374	Choir Pad 2	ChoPad2
375	Plush Pad	PlushPad
376	Dawn Wah	DawnWah
377	Chorus Pad Wah	ChoPdWah

378	Electric Pad	ElecPad
379	5Th PAD	5ThPad
380	Bowed Pad	BowdPad
381	Bowed Pad 2	BowdPad2
382	Metallic Pad	MetalPad
383	Dream	Dream
384	Dream 2	Dream2
385	Dpray	Dpray
386	Digital Pad	DigiPad
387	Organ Pad Wah	OrganWah
388	Pipe Organ Pad	PipOrPd
389	Scene Pad	ScenePad
390	Halo Pad	HaloPad
391	Background	Backgrd
392	Background 2	Backgrd2
393	Sweep Pad	SweepPad
394	Star Trek	StarTrek
395	Digital Wah	DigiWah
396	Warm Wah	WarmWah
397	Pulse Wah	PulseWah
398	Digital Distortion Wah	DiDisWah
399	Pulse	Pulse
400	Pulse 2	Pulse2
SYNTH SFX		
401	Rain	Rain
402	Mysterious	Mysterio
403	Clusters of Stars	Stars
404	Additive Synthesis	AddSynth
405	Want To Go	Wanttogo
406	Additive Synth Wah	AddWah
407	Soundtrack	Soundtrk
408	Lost Garden	Garden
409	Far Away	FarAway
410	Crystal	Crystal
411	Crystal 2	Crystal2
412	Game	Game
413	Fly Into Space	Fly
414	Little Funny	Funny
415	Funny Hammer	FunnyHam
416	Surface Of The Water	Surface
417	Atmosphere	Atmosphr
418	Clouds	Clouds
419	Brightness	Bright
420	Brightness 2	Bright2
421	Life	Life
422	Life 2	Life2
423	Fresh	Fresh
424	Goblins	Goblins
425	Fantasy	Fantasy
426	Space Trojan	SpaceTro
427	Ceremony	Ceremony
428	Phonism	Phonism
429	Echoes	Echoes
430	Empty	Empty
431	Deformation	Deformat
432	Sci-Fi	Sci-Fi

Voice List

433	WindBells	WindBell
434	Artistic	Artistic
435	Artistic 2	Artisti2
436	Artistic 3	Artisti3
437	Digital Effect	DigitaEf
438	Abyss	Abyss
439	Abyss 2	Abyss2
440	Spectrum	Spectrum
441	Spectrum 2	Spectru2
ETHNIC MISC.		
442	Sitar	Sitar
443	Sitar 2	Sitar2
444	Banjo	Banjo
445	Banjo 2	Banjo2
446	Shamisen	Shamisl
447	Shamisen 2	Shamisl2
448	Koto	Koto
449	Koto 2	Koto2
450	Kalimba	Kalimba
451	Kalimba 2	Kalimba2
452	Bagpipe	Bagpipe
453	Bagpipe 2	Bagpipe2
454	Fiddle	Fiddle
455	Fiddle 2	Fiddle2
456	Shania	Shania
457	Shania 2	Shania2
PERCUSSIVE		
458	Tinkle Bell	TnklBell
459	Agogo	Agogo
460	Steel Drums	StelDrum
461	Bass Drum	BassDrum
462	Wood Block	WoodBlok
463	Snare	Snare
464	Taiko Drum	TaikoDrm
465	Melodic Tom	MelodTom
466	Synth Drum	SynDrum
467	Dynamics Jump	DynJump
468	Reverse Cymbal	RevCymbal
SFX		
469	Guitar Fret Noise	FretNoiz
470	Breath Noise	BrthNoiz
471	Seashore	Seashore
472	Bird Tweet	Tweet
473	Telephone Ring	Telephone
474	Helicopter	Helicptr
475	Applause	Applause
476	Gunshot	Gunshot
477	Fall	Fall
DRUMS		
478	Standard Drum Set	StandSet
479	Rock Drum Set	RockSet
480	Electronic Drum Set	ElecSet

Style List

No.	English Name	LCD Name
LATIN 1		
1	Cha Cha	ChaCha
2	Pop Cha Cha	P.ChaCha
3	Rhumba	Rhumba
4	Pop Rhumba	P.Rhumba
5	Bossa Nova	Bossa
6	Tango	Tango
7	Jazz Samba	JazSamba
8	Reggae	Reggae
9	Pop Reggae	P.Reggae
DANCE 1		
10	Disco	Disco
11	Disco Funk	DiscFunk
12	Dance	Dance
13	House	House
14	Rap	Rap
15	Euro Beat	EuroBeat
16	Hip Hop	HipHop
17	Techno	Techno
BEAT & POP 1		
18	8 Beat 1	8Beat1
19	8 Beat 2	8Beat2
20	60's 8 Beat	60's8Bt
21	8 Beat Ballad	8BtBld
22	8 Beat Rock	8BtRock
23	16 Beat	16Beat
24	16 Beat Pop	16BtPop
25	16 Beat Shuffle	16BtShfl
26	Ballad	Ballad
27	Slow Ballad	SlowBld
ROCK 1		
28	Rock	Rock
29	Pop Rock	PopRock
30	Fast Rock	FastRock
31	Slow Rock	SlwRock
32	Rock & Roll	RockRoll
33	Blues Boogie	B.Boogie
34	Blues	Blues
35	Blues Shuffle	B.Shufle
36	Rock Shuffle	R.Shufle
37	Charleston	Charston
SOUL & FUNK 1		
38	Funky Pop	FunkyPop
39	Jazz Funk	JazzFunk
40	Cool Funky	CoolFunk
41	Soul	Soul
42	Soul Blues	SoulBlue
43	R & B	R&B
44	6/8 Gospel	6/8Gospl
45	Pop Groove	PopGrove
JAZZ 1		
46	Swing	Swing
47	Cool Jazz	CoolJazz
48	Pop Swing	PopSwing
49	Swing Fox	SwingFox

50	Big Band	BigBand
51	Ragtime	Ragtime
52	Dixieland	Dixeland
53	Quick Step	QuickStp
COUNTRY 1		
54	Country	Country
55	Pop Country	PopCntry
56	Country Rock	CtryRock
57	Country Folk	CtryFolk
58	3/4 Country	3/4Ctry
59	Country Waltz	C.Waltz
60	Country Shuffle	CtryShfl
61	Country Boogie	C.Boogie
62	Country Quick Step	CtryStep
63	Bluegrass	Bluegras
TRADITIONAL 1		
64	March	March
65	German March	G.March
66	6/8 March	6/8March
67	Polka	Polka
68	Pop Polka	PopPolka
69	Waltz	Waltz
70	Slow Waltz	SloWaltz
71	Vienna Waltz	VieWaltz
72	Musette	Musette
PIANIST 1		
73	Piano 8 Beat	Pno8Beat
74	Piano Ballad	PnoBalad
75	Piano Boogie	PnoBogie
76	Piano Jazz	PnoJazz
77	Piano Jazz Waltz	P.JWaltz
78	Piano March	PnoMarch
79	Piano 6/8 March	Pno6/8Mr
80	Piano Waltz	PnoWaltz
LATIN 2		
81	Cha Cha-2	ChaCha2
82	Pop Cha Cha-2	P.ChaCa2
83	Rhumba-2	Rhumba2
84	Pop Rhumba-2	P.Rhumb2
85	Bossa Nova-2	Bossa-2
86	Tango-2	Tango-2
87	Jazz Samba-2	JzSamba2
88	Reggae-2	Reggae2
89	Pop Reggae-2	P.Regga2
DANCE 2		
90	Disco-2	Disco-2
91	Disco Funk-2	DiscoFk2
92	Dance-2	Dance-2
93	House-2	House-2
94	Rap-2	Rap-2
95	Euro Beat-2	EuropBt2
96	Hip Hop-2	HipHop-2
97	Techno-2	Techno-2
BEAT & POP 2		
98	8 Beat 1-2	8Beat1-2
99	8 Beat 2-2	8Beat2-2
100	60's 8 Beat-2	60's8Bt2
101	8 Beat Ballad-2	8BtBld-2
102	8 Beat Rock-2	8BtRck-2
103	16 Beat-2	16Bt-2

Style List

104	16 Beat Pop-2	16BtPop2
105	16 Beat Shuffle-2	16BtShf2
106	Ballad-2	Ballad-2
107	Slow Ballad-2	SlwBld-2
ROCK 2		
108	Rock-2	Rock-2
109	Pop Rock-2	PopRck-2
110	Fast Rock-2	FastRk-2
111	Slow Rock-2	SlwRk-2
112	Rock & Roll-2	RkRoll-2
113	Blues Boogie-2	B.Bogie2
114	Blues-2	Blues-2
115	Blues Shuffle-2	B.Shuf12
116	Rock Shuffle-2	R.Shuf12
117	Charleston-2	Charstn2
SOUL & FUNK 2		
118	Funky Pop-2	FunkPop2
119	Jazz Funk-2	JazzFk-2
120	Cool Funky-2	CoolFk-2
121	Soul-2	Soul-2
122	Soul Blues-2	SoulBlu2
123	R & B-2	R&B-2
124	6/8 Gospel-2	6/8Gosp2
125	Pop Groove-2	PopGrov2
JAZZ 2		
126	Swing-2	Swing-2
127	Cool Jazz-2	CoolJz-2
128	Pop Swing-2	PopSwin2
129	Swing Fox-2	SwinFox2
130	Big Band-2	BigBand2
131	Ragtime-2	Ragtime2
132	Dixieland-2	Dixland2
133	Quick Step-2	QuickSp2
COUNTRY 2		
134	Country-2	Cntry-2
135	Pop Country-2	PopCtry2
136	Country Rock-2	CtryRk-2
137	Country Folk-2	CtryFok2
138	3/4 Country -2	3/4Ctry2
139	Country Waltz-2	C.Waltz2
140	Country Shuffle-2	CtryShf2
141	Country Boogie-2	C.Bogie2
142	Country Quick Step-2	CtryStp2
143	Bluegrass-2	Bluegra2
TRADITIONAL 2		
144	March-2	March-2
145	German March-2	G.March2
146	6/8 March-2	6/8Marc2
147	Polka-2	Polka-2
148	Pop Polka-2	PopPoka2
149	Waltz-2	Waltz-2
150	Slow Waltz-2	SlWaltz2
151	Vienna Waltz-2	ViWaltz2
152	Musette-2	Musette2
PIANIST 2		
153	Piano 8 Beat-2	Pno8Bt-2
154	Piano Ballad-2	PnoBald2
155	Piano Boogie-2	PnoBogi2
156	Piano Jazz-2	PnoJazz2

157	Piano Jazz Waltz-2	P.JWaltz2
158	Piano March-2	PnoMarc2
159	Piano 6/8 March-2	Pno6/8M2
160	Piano Waltz-2	P.Waltz2

Song List

No.	English Name	LCD Name
CLASSIC		
1	Chanson Du Toreador	Toreador
2	Meditation	Meditati
3	Wiegenlied	WieGenli
4	A Lover's Concerto	Concerto
5	Whispering Hope	Whisper
6	From The New World	NewWorld
7	O Sole Mio	OSoleMio
8	Auf Flugeln Des Gesanges	Gesanges
9	Santa Lucia	SantaLuc
FAVORITE		
10	Deck The Halls	DeckHall
11	Old Folks At Home	OldFolks
12	Camptown Races	C.Races
13	Oh! Susanna	Susanna
14	Jeanie With The Light Brown Hair	Jeanie
15	Long Long Ago	LongAgo
16	Annie Laurie	AnnieLa
17	My Old Kentucky Home	Kentucky
18	Turkey In The Straw	TukyStaw
19	Aloha Oe	AlohaOe
20	Carry Me Back To Old Virginny	Virginny
21	The Blue-Bells Of Scotland	BlueBell
22	Joy To The World	JoyWorld
23	Jingle Bells	JingBell
24	Battle Hymne Of The Republic	BatIHyme
25	Silent Night	SitNight
26	Ode To Joy	OdeToJoy
27	My Bonnie	MyBonnie
28	La Cucaracha	Cucarach
29	Yellow Rose Of Texas	YellRose
30	The Wabash Cannon Ball	CannBall
31	Red River Valley	RedRiver
32	Dreaming Of Home And Mother	Dreaming
33	Ring Ring De Banjo	DeBanjo
34	Der Freischutz	DerFreis
35	Tales Of Hoffman	Hoffman
36	Die Forelle	Forelle
FOLK		
37	Aura Lea	AuraLea
38	When The Saints Go Marching In	Marching
39	Twinkle Twinkle Little Star	Twinkle
40	I've Been Working On The Railroad	WorkRail
41	With Games	WithGame
42	Way Home	WayHome
43	Yankee Doodle	YankeeD
44	Michael Row The Boat Ashore	RowBoat
45	Auld Lang Syne	LangSyne
46	My Darling Clementine	Clementine
47	Little Brown Jug	BrownJug
48	The House Of The Rising Sun	RiseSun
49	Danny Boy	DannyBoy
50	El Condor Pasa	EiCondor
51	Greensleeves	Sleeves
52	Heidenroslein	Heidenro

53	Wiegenlied 2	Wieglied2
54	Her Bright Smile Haunts Me Still	HerSmile
55	Old Black Joe	BlackJoe
56	Old Dog Tray	DogTray
57	Are You Lonesome Tonight?	Lonesome
58	Arirang	Arirang
59	The Quilting Party	TheParty
60	The Colorado Trail	TheTrail
61	I'D Like To Be In Texas	InTexas
62	Shenandoah	Shenando
63	Down In The Valley	Valley
64	On Top Of Old Smoky	TopSmoky
65	Barbara Allen	Allen
66	Careless Love	CaleLove
67	Sweet Betsy From Pike	SwetPike
68	Jesse James	James
69	The Cowboy's Lament	CowboyLa
KID'S SONG		
70	Skip To My Lou	SkipMyLo
71	London Bridge Is Falling Down	Bridge
72	Home On The Range	HomeRang
73	This Old Man	OldMan
74	Polly Wolly Doodle	PlyWlyDo
75	Sippin' Cider Through A Straw	SipinCid
76	Home Sweet Home	SwetHome
77	Mary Had A Little Lamb	MaryLamb
78	Valse Brillante Op 34 #3 In F Major	ValOpFMr
79	Musette In D Major	MusetDMr
80	Blue Bird Waltz	BlueBird
PIANO & KEYBOARD		
81	Yankee Doodle (Piano)	YankeeD2
82	Kaiser Walzer	Kaiser
83	Etude On Leger Lines 2	EtudeLL2
84	From A Story Book	StoryBok
85	Hanon Piano Fingering 1	Hanon1
86	Hanon Piano Fingering 2	Hanon2
87	Hanon Piano Fingering 3	Hanon3
88	Hanon Piano Fingering 4	Hanon4
89	Hanon Piano Fingering 5	Hanon5
90	Hanon Piano Fingering 6	Hanon6
91	Hanon Piano Fingering 7	Hanon7
92	Basic Tutorial Beyer Piano 8	Beyer8
93	Basic Tutorial Beyer Piano 12	Beyer12
94	Basic Tutorial Beyer Piano 13	Beyer13
95	Basic Tutorial Beyer Piano 14	Beyer14
96	Basic Tutorial Beyer Piano 15	Beyer15
97	Basic Tutorial Beyer Piano 16	Beyer16
98	Basic Tutorial Beyer Piano 18	Beyer18
99	Basic Tutorial Beyer Piano 19	Beyer19
100	Basic Tutorial Beyer Piano 20	Beyer20
101	Cuckoo	Cuckoo
102	Butterfly	Buterfly
103	Christmas Eve	XmasEve
104	Beyer Eight Degrees Jump Etude	BeyrJump
105	Old Folks At Home (Piano)	OldFolk2

Song List

106	A Little Polish Dance	PolishDc
107	Larghetto	Largheto
108	Minuet 2	Minuet2
109	Prelude	Prelude
110	Duke Aria From "The Rigoletto"	DukeAria
111	Puck	Puck
112	The Happy Farmer	HpFarmer
113	Etude	Etude
114	Dance Of The Four Swans From "Swan Lake"	SwanLake
115	Jesus Saviour Pilot Me	Jesus
116	Old Macdonald Had A Farm	OldAFarm
117	2-Part Invention No.13 In A Minor BWV 784	Invention
118	Musette	Musette
119	Bourree	Bourree
120	Carl Czerny 599 NO92	599No92
121	Away In A Manger	AwayInAM
122	Marriage Of Figaro	Marriage
123	Angels We Have Heard On High	Angles
124	Waltz	Waltz
125	Did You Ever See A Lassie	Lassie
126	Old France	OldFranc
127	Santa Claus Is Coming To Town	SantComn
128	Minuet 3	Minuet3
129	In The Theatre	Theatre
130	Alfredo And Violetta Column Tower Duet	Alfredo
131	Als Die Alte Mutter Mich Noch lehrte Singen	Mutter
132	At The Ball	AtBall
133	Dancing Raindrops	Raindrop
134	Comin'Round The Mountain	Mountain
135	Song Of The Brook	SofBrook
136	Cotton-pickin' Fingers	CtnPFngs
137	Menuett G Dur 3	MenuettG
138	Knight	Knight
139	Gavotte	Gavotte
140	The Angels Singing	Singing

MIDI Implementation Chart

Function	Transmitted	Recognized	Remarks
Basic Default	1ch	ALL	
Channel Changed	x	x	
Mode Default	x	1	
Mode Messages	x	x	
Mode Altered	*****	x	
Note Note	12-114	0-127	
Number :True voice	*****	0-127	
Velocity Note on	o 9nH,V=1-127	o 9nH,V=1-127	
Velocity Note off	x (9nH,V=0)	o(9nH,V=0; 8nH,V=0-127)	
After key's	x	x	
Touch Ch's	x	x	
Pitch Bend	o	o	
Control 0	o	o	Bank Select
Change 5	x	x	Portamento Time
6	x	o	Data Entry
7	x	o	Volume
10	x	o	Pan
11	x	o	Expression
64	o	o	Sustain Pedal
65	x	x	Portamento ON/OFF
66	x	o	Sostenuto Pedal
67	x	o	Soft Pedal
91	x	o	Reverb Level
93	x	o	Chorus Level
120	x	o	All Sound Off
121	x	o	Reset All Controllers
123	o	o	All Notes Off
Program Change :true	*****	0-127	
System Exclusive	x	o	
System :SongPosition	x	x	
Common :Song Select	x	x	
:Tune	x	x	
System :Clock	x	x	
Real Time :Commands	x	x	
Aux :LOCAL ON/OFF	x	x	
:All Notes Off	o	o	
Messages :Active sense	x	o	
:Reset	x	o	
Notes:			

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

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

- x: NO
- o: YES

