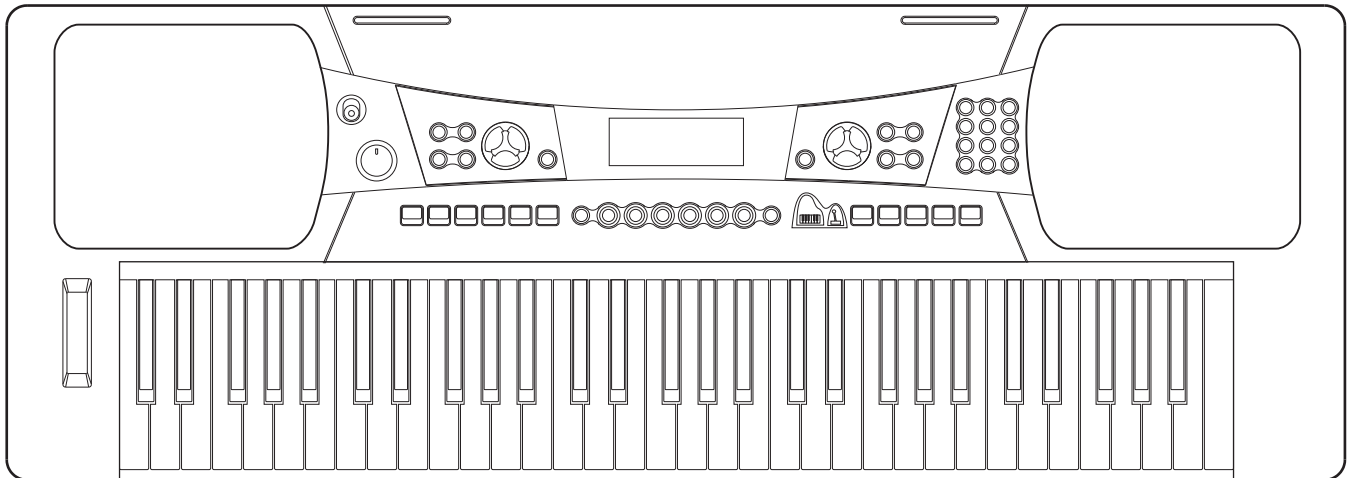


Electronic Keyboard

INSTRUCTION MANUAL



Congratulations

Congratulations on your purchase of this electronic keyboard!

This keyboard is easy-to-use, with advanced functions especially suitable for self-learning beginners. No matter you are adult or children, you will enjoy playing the keyboard as it provides amazing styles for accompaniment, expressive tones, and real time record. Other features such as numbered musical notation display chord dictionary, variety of songs will help you better master the playing skill.

You are recommended to study this manual carefully before using the unit.

Inside This Package

Please make sure the package completely contains the following:

- **The Instrument**
- **Music Stand**
- **≡ 12V Adaptor**
- **Instruction Manual**



Important Notes

Your keyboard will give you years of playing pleasure if you follow the simple rules given below:

Location

- Do not expose the unit to the following conditions to avoid deformation, discoloration, or more serious damage.
 - Direct sunlight.
 - High temperature (near a heat source, or inside a car under long exposure of sunlight).
 - Excessive humidity
 - Excessive dust
 - Strong vibration

Power Supply

- Make sure the suitable AC adaptor is used, and the AC outlet voltage at your country matches the input voltage specified on the AC adaptor's label.
- Turn the power switch OFF when the instrument is not in use.
- An AC adaptor should be unplugged from the AC outlet if the instrument is not going to be used for an extended period of time.
- Unplug the AC adaptor during electric storms.
- Avoid plugging the AC adaptor into the same AC outlets as appliances with high power consumption, such as electric heaters or ovens. Also avoid using multi-plug adaptors since this could reduce sound's quality, causes operation errors and damages.

Turn Power OFF When Making Connections

- To avoid damaging the instrument and other devices to which it is connected, turn the power switches of all related devices OFF prior to connecting or disconnecting cables.

Cleaning

- Clean the unit with a soft dry cloth.
- A slightly dampened cloth may remove stubborn grime and dirt.
- Never use cleaners such as alcohol or thinner.
- Avoid placing vinyl object on top of the unit (vinyl might discolor and stick to the surface).

Handling and Transporting

- Never apply excessive force to the controls, connectors or other parts of the instrument.
- Always unplug cables by gripping the plug firmly, but not pulling the cables.
- Disconnect all cables before moving the instrument.
- Physical shocks caused by dropping, bumping, or placing heavy objects on the instrument could result in scratches or even severe damages.

Electrical Interference

- This instrument contains digital circuitry and may cause interference if it is placed too close to radio or television receivers. If this occurs, move the instrument further away from the receivers.

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 instruction manual. In case the function could not resume, please use the product in other location.

Main Features

- **KEYBOARD**

61-key touch keyboard

- **OPERATION**

Use numeric keypad and [+ / YES] [- / NO] to select voice, style and song, Function including Beat, Split point, MIDI IN, MIDI OUT, Bank select.

- **VOICE**

395 voices in total.

- **STYLE**

150 styles in total, including 10 PIANO styles.

- **SONG**

100 songs in total. Each song has its learning mode.

- **DEMO**

2 demos.

- **SONG LESSON**

There are 3 different ways to practise the songs. Lesson1、Lesson2、Lesson3. This keyboard also offers the GRADE function in all 3 learning modes to help you know well about your progress.

- **CHORD MODE**

Both Single finger chords and Fingers chords.

- **CHORD DICTIONARY**

Provide chord information for users.

- **RECORD FEATURE**

One recorded song.

- **STYLE CONTROL**

Sync, Start/Stop, Fill/A, Fill/B, Intro/Ending

- **OTHER FEATURES**

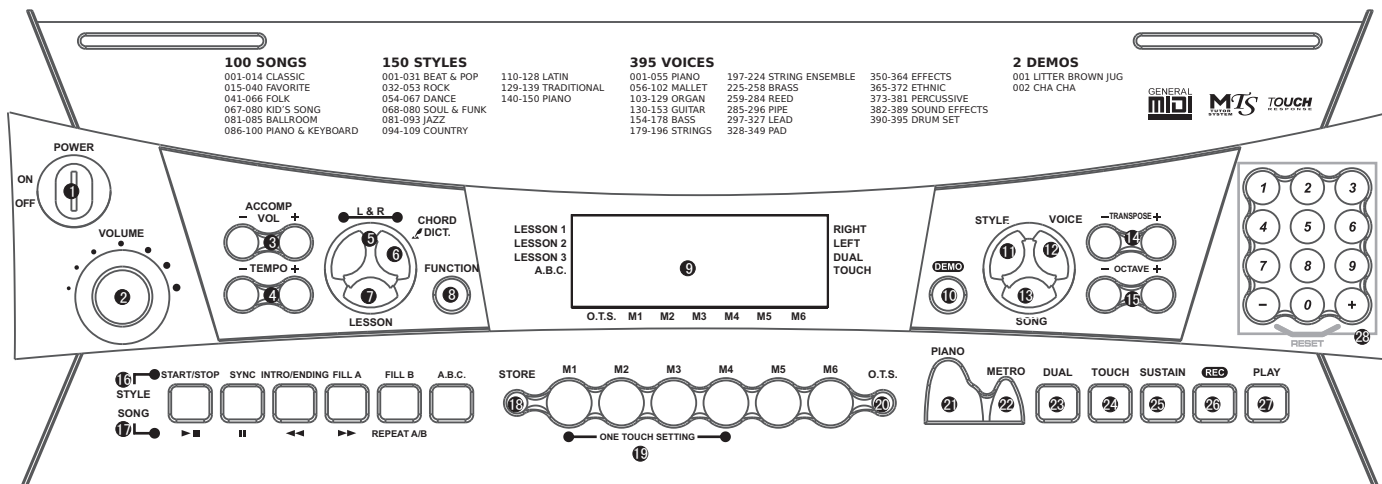
Transpose, Octave, Accomp volume, Piano, Dual, Memory, O.T.S, Touch` Metronome` Demo` Sustain, Pitch wheel and etc.

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General Guide

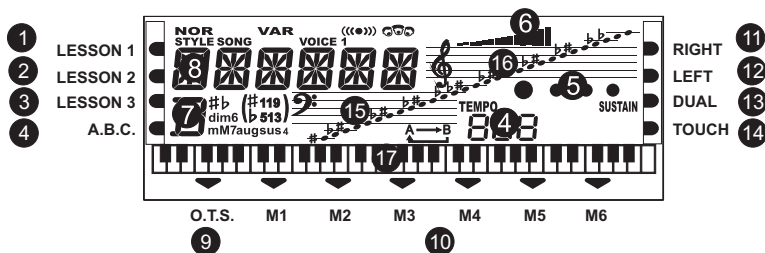
Front Panel



- 1 POWER ON/OFF
- 2 MASTER VOLUME
- 3 ACCOMP. VOLUME +/-
- 4 TEMPO +/-
- 5 LEFT/RIGHT HAND
- 6 CHORD DICTIONARY
- 7 LESSON
- 8 FUNCTION
- 9 LCD DISPLAY
- 10 DEMO
- 11 STYLE
- 12 VOICE
- 13 SONG
- 14 TRANSPOSE +/-
- 15 OCTAVE +/-
- 16 STYLE CONTROL
- START/STOP
- SYNC
- INTRO/ENDING
- FILL A
- FILL B
- AUTO BASS CHORD
- 17 SONG CONTROL
- START/STOP
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- REW
- FF
- REPEAT A/B
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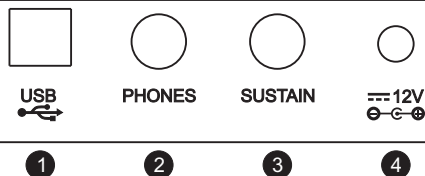
LCD Display

- 1 LESSON 1
- 2 LESSON 2
- 3 LESSON 3
- 4 A.B.C.
- 5 BEAT
- 6 VOLUJEM
- 7 CHORD
- 8 STYLE/SONG/VOICE
- 9 ONE TOUCH SETTING
- 10 STORE M1-M6
- 11 RIGHT
- 12 LEFT
- 13 DUAL
- 14 TOUCH
- 15 BASS CLEF
- 16 TREBLE CLEF
- 17 61 KEYBOARD



Rear Panel

- 1 USB JACK
- 2 PHONES JACK
- 3 SUSTAIN JACK
- 4 12V JACK



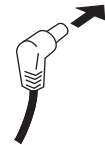
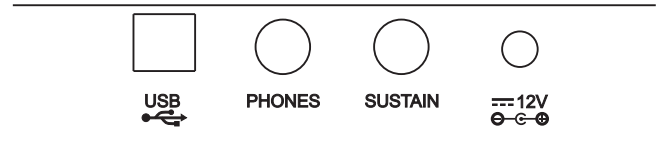
Preparation

Power Supply

This electronic keyboard can be powered by the current of a standard household wall outlet (using the specified AC adaptor) or by batteries.

1. Using The AC Adaptor

Make sure that only the AC adaptor specified for this electronic keyboard is used. The adaptor shall be 12V DC output, and center positive type. Be sure to turn off the electronic keyboard before you connect the adaptor into the AC wall outlet and the cord into the unit.



CAUTIONS!

- Use only the specified AC adaptor. Using other types of adaptor creates the risk of fire and electrical shock.
- For safety sake, be sure to unplug the AC adaptor from the wall outlet whenever leaving the electronic keyboard unattended for a long time.

2. Using Batteries

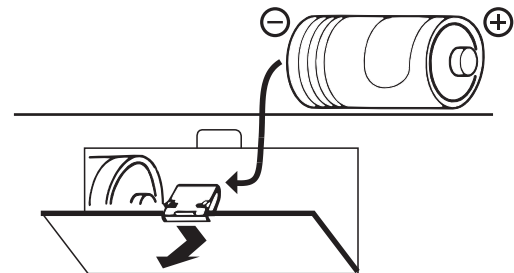
Always make sure to turn the keyboard off before inserting new batteries or replacing old ones.

● To insert batteries

Open the battery compartment on the bottom of the keyboard.

Insert 6 D-size (SUM-1, R-20) batteries into the battery compartment and follow the correct polarity.

Replace the compartment cover and make sure that it locks firmly in place.



● Low battery indications

Any of the following symptoms indicate low battery power. Replace the batteries as soon as possible whenever any of the following occurs.

A dim and difficult-to-read LCD display.

Abnormally low speaker/headphone volume.

Distortion of the sound output.

Sudden power failure when playing at high volume.

Abnormal rhythms or demo songs are played.

Dimming of the display when playing at high volume.

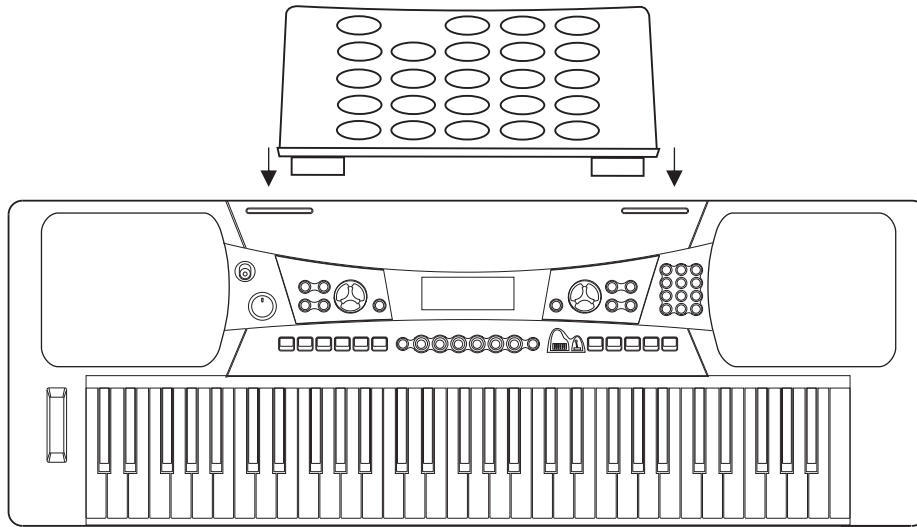
CAUTIONS!

- When inserting batteries, make sure to follow the polarity marking.
- Never use batteries of different types.
- Never mix old batteries with new ones.
- Replace the batteries as soon as possible after any sign of discharge.
- Always remove the batteries from the battery compartment when the keyboard is not expected to be used for a long period of time.

Preparation

Setting Music Stand

Please set up the music stand as the instruction below:



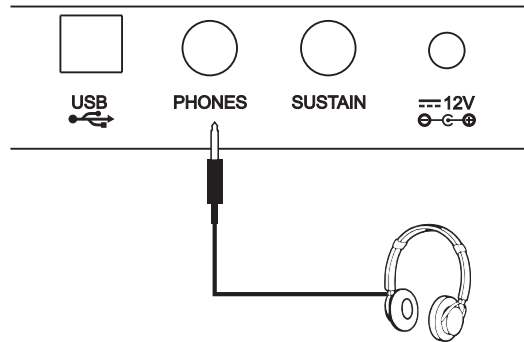
Connections

Headphones Jack

1. If you prefer to play with headphones for high quality personal monitoring, plug a set of stereo headphones into the rear panel PHONES jack and the speakers will be disabled automatically.
2. Plug a set of headphones into the PHONES jack and the speakers will be disabled automatically.

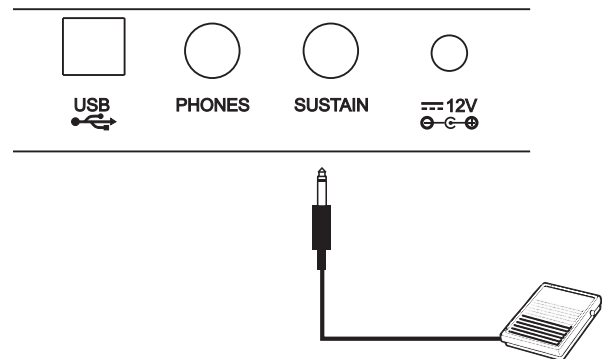
NOTE:

Never use headphones in high volume, as it may hurt your ears.



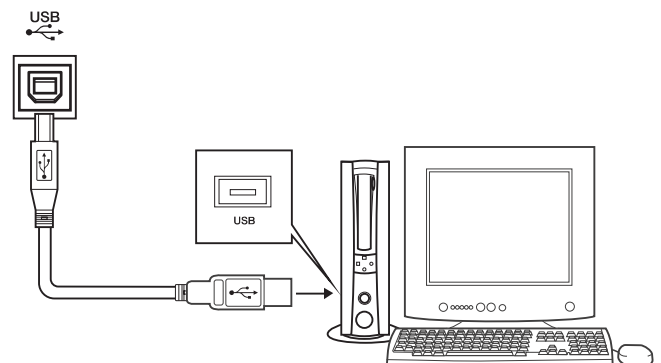
Sustain Jack

1. An optional footswitch can be plugged into the SUSTAIN jack for sustain control.
2. The footswitch functions like the damper pedal of a piano. Press for sustain, release for normal sound.



USB Jack

1. Connect PC or other USB host devices that support USB Audio.
2. For devices with USB cable, after the driver is installed and initialization is finished, you can choose USB Audio Device in the device menu of the software to transfer midi data.



⚠ WARNING

To avoid damages, turn the power switches of this keyboard and all related devices OFF if you want to plug in or unplug between this instrument with all related devices.

Basic Operation

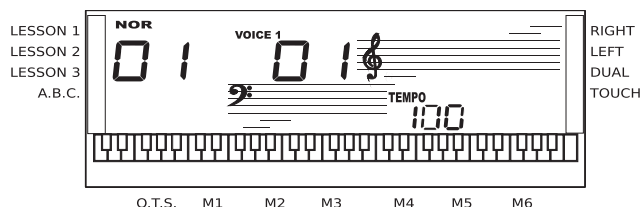
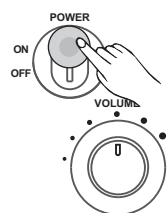
Power Switch & Volume

1. First, please ensure the correct connection has been made based on the previous instruction.

2. Turn the [POWER] switch on. The LCD display lights up.

NOTE:

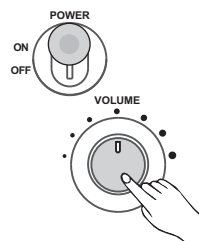
- If the LCD display does not light up after you turned on the keyboard, please check the power supply.



3. Rotate [VOLUME] button to adjust the volume.

NOTE:

- If the keyboard is silent, that means the volume has adjusted to its minimum level.



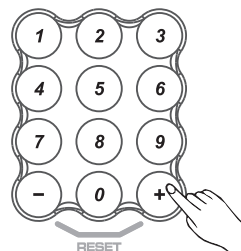
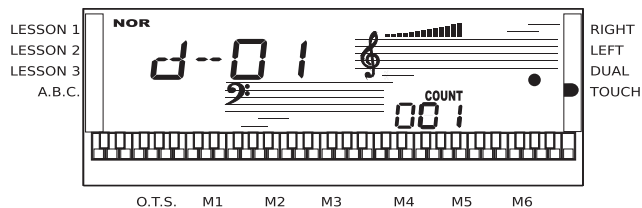
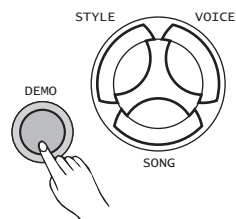
Demo

This keyboard includes 2 classic demo songs.

1. Press [DEMO] key to enter the DEMO mode.
2. Select a demo song with [+], [-] or number buttons [1] [2] .
3. Press [START/STOP] or [DEMO] key again to exit the demo mode.

NOTE:

- In the demo mode, all function keys except DEMO, START/STOP, TEMPO, +, -, No 1, No 2, MASTER VOLUME will be disabled.

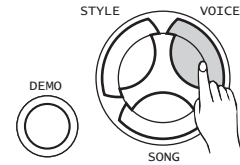


Voices and Effects

There are 395 voices in total (See appendix).

Select a Voice

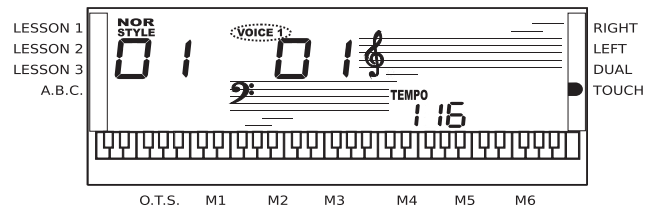
1. Press the [VOICE] button to enter the voice mode.
The default VOICE 1 is NO:01; LCD will display VOICE 1 and its number.



2. **The [+] and [-] buttons:**
Press [+] or [-] button to choose your desired voice.
The selected voice number will be shown on the display.

The number buttons:

The number buttons can be pressed directly to select your desired voice.



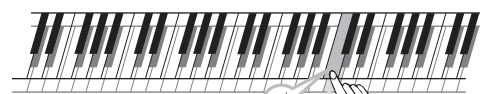
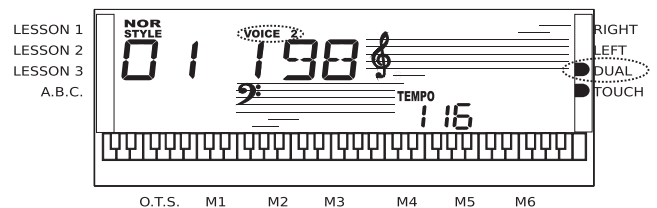
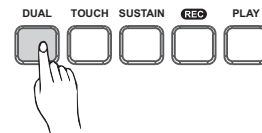
3. After selecting a voice, you can now play the keyboard.



Dual Voice

This keyboard has the "dual voice" function. This function is capable to enhance the delicacy of your music by playing two voices of musical instruments simultaneously; new combinations of voices and music could be created then. When the dual function is off, the voice indicated is VOICE 1, when the dual function is on, the voice indicated would be VOICE 2.

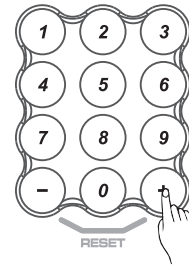
1. During the VOICE 1 status, press [DUAL] button to enter the dual voice function. "VOICE 2" and "DUAL" signal would be lightened simultaneously. The number of the dual voice will be displayed on the LCD. Now, two different sounds will be appeared at the same time just by pressing one key.



Eg. Piano
Eg. Cello
Two voice will sound at the same time.

Voices and Effects

- Press [+]/[-] button or numeric keypad to select your desired voice. The default DUAL VOICE number is NO.50 Strings2.
- Press [DUAL] button again to turn off the DUAL VOICE. VOICE 2 will be disabled, the notes you play will return to the single voice of VOICE 1.



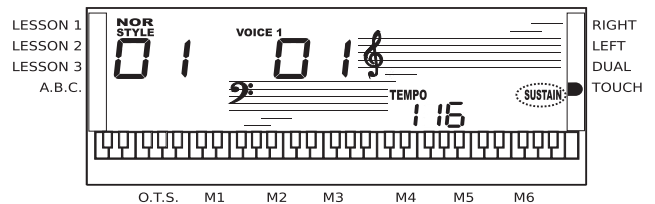
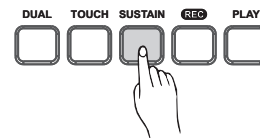
NOTE:

In DUAL VOICE status, only section above split point on keyboard has dual voice.

Sustain

This function helps you to get a voice with a sustained effect, while playing the keyboard.

- Press [SUSTAIN] button to activate the sustain effect. LCD lights the SUSTAIN flag. The keyboard will be played with a sustain effect.
- Press [SUSTAIN] button again to eliminate the sustain effect. The SUSTAIN flag will disappear.
- Default sustain is disabled accordingly.



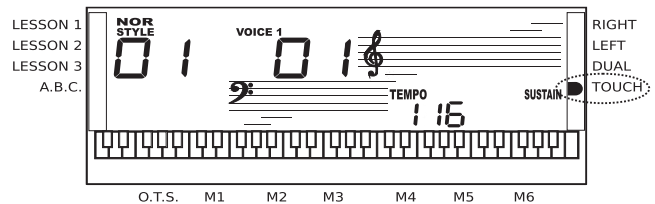
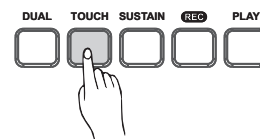
NOTE:

When you step on the sustain pedal, the sustain effect will be stronger than the effect produced by the [SUSTAIN] button.

Touch

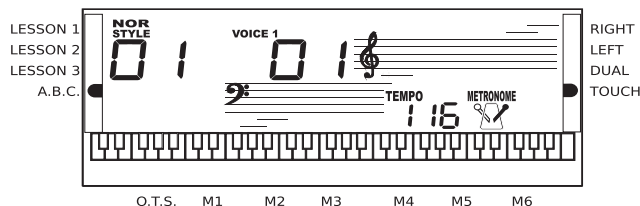
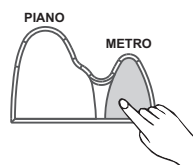
This function allows you to turn on the dynamic level while playing the keyboard.

- Press [TOUCH] button to turn off the touch response function. LCD will eliminate the TOUCH flag, it means touch response is disabled.
- Press [TOUCH] button again to turn on the touch response effect. LCD lights up the TOUCH flag.
- Default touch is activated.
- To experience the effect, play any note on the keyboard after you turn this function on.



Metronome

1. Press [METRO] button to enable to the metronome.
2. Press [METRO] button again to disable it.
3. Metronome could not be played in SONG/CHORD DICT mode.

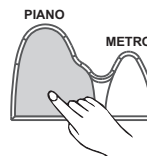
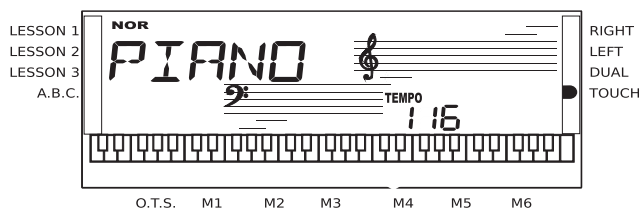


NOTE:

- Metronome can be played along with the tempo as accompaniment whenever you turn on a style.
- Metronome could be played in the recording mode, but it would not be recorded.

Piano

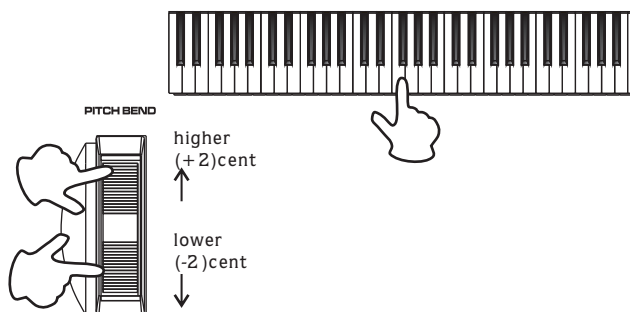
1. Press [PIANO] button to enter to the piano mode. The LCD displays PIANO, and the voice changes to piano immediately. In this mode, A.B.C. will be disabled.
2. Press [PIANO] button again to exit the PIANO mode.
3. If any of the [FUNCTION] / [DEMO] / [VOICE] / [SONG] / [STYLE] buttons has been pressed to recall the memory the piano mode will be quit.



Pitch Bend Wheel

The PITCH BEND wheel can be used to bend the note lower or higher, ranges between +/- 2 semitone.

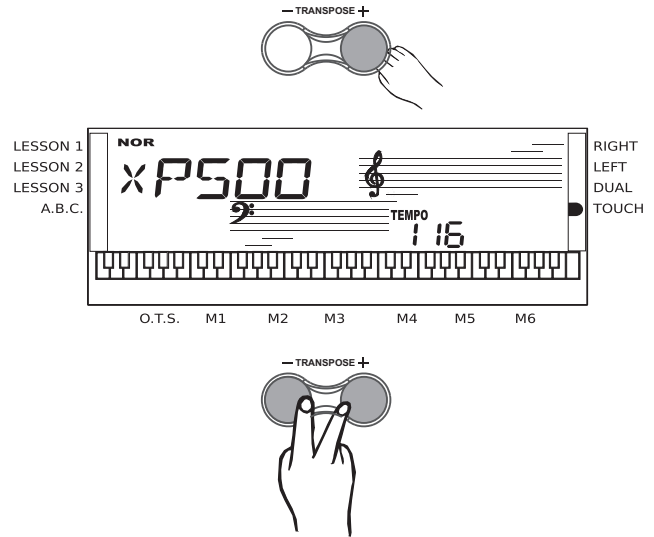
When the wheel is released, the note will be return back to the normal status.



Transpose

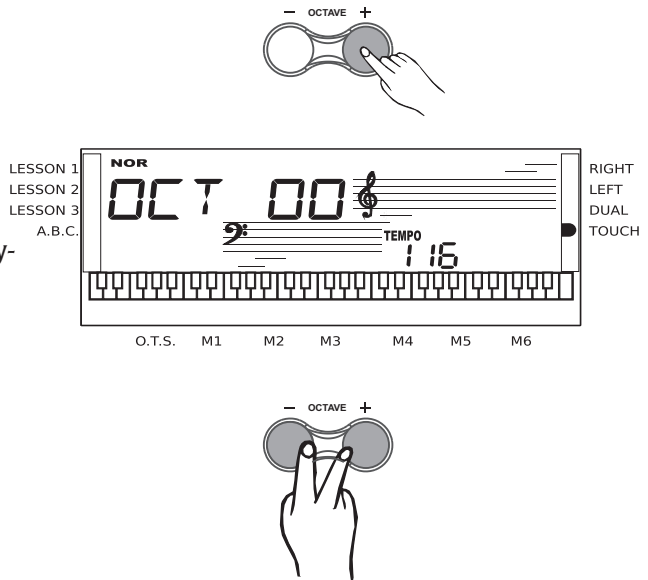
You can change the key of the entire keyboard with the **TRANPOSE** function by adjusting the pitch in semitones steps.

1. Press [TRANPOSE+] / [TRANPOSE-] button to enter TRANPOSE sub-menu. The LCD displays the current transpose value.
2. Use [TRANPOSE+] / [TRANPOSE-] to adjust the transpose value from +6 to -6 semitones only for the right area of the keyboard.
3. Press [TRANPOSE+] and [TRANPOSE-] together to set the default value:00.



Octave

1. Press [OCTAVE+]/[OCTAVE-] button to enter OCTAVE sub-menu. The LCD displays the octave value.
2. Use [OCTAVE+]/[OCTAVE-] to adjust the octave value from +1 to -1 octaves only for the right area of the keyboard.
3. Press [OCTAVE+] and [OCTAVE-] together to set the default value:00.



Style Control

The keyboard has a total of 150 styles, from 01 to 150, including 10 piano styles.

Select a Style

1. Press the [STYLE] button to set the keyboard to the style mode. The default STYLE 1 is NO:01; LCD will display the STYLE flag and its number.

2. **[+] and [-] buttons:**

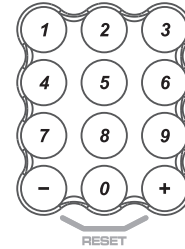
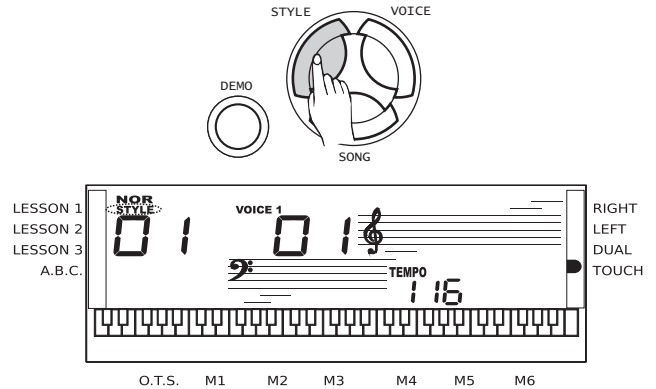
Press [+] or [-] to choose your desired style. The selected style number will be shown on the display.

The number buttons:

The number buttons can be pressed directly for selecting the number of your desired style.

3. After selecting a style, you can start playing the keyboard.

4. When a style is playing, you can select a new style at any time. The number of the new style will be displayed on the LCD immediately. If the style changes at beat one, the new style will be played at once; if the style changes at other beats, the new style will start in the next measure. The new style will be playing with the old tempo.

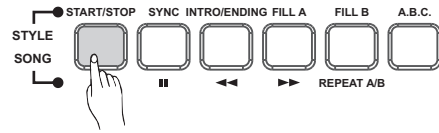


Start a Style

1. Start immediately:

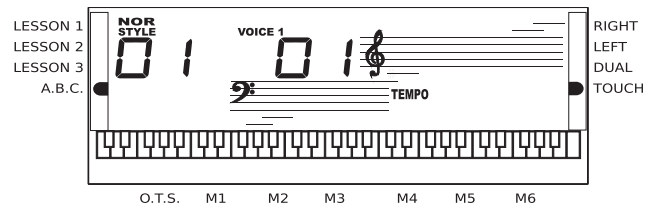
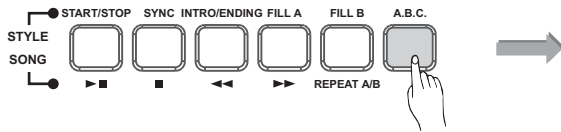
Press [START/STOP] button to start the style, the drum beats of the style will be played at once.

The beats will be shown on the LCD alternately.

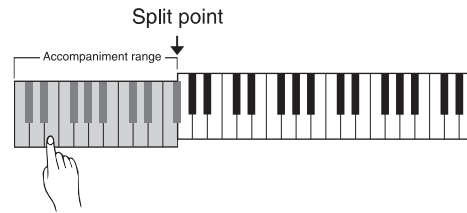


2. A.B.C. mode

The default setting of A.B.C. is disable. Press [A.B.C.] button to turn on this auto bass chord mode; the A.B.C. flag on the LCD is lightened accordingly.

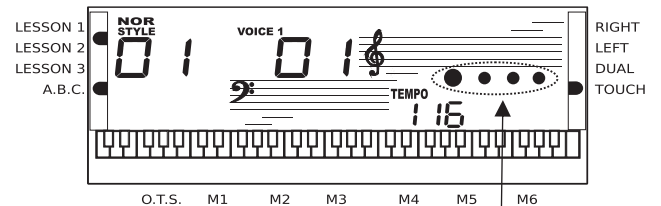
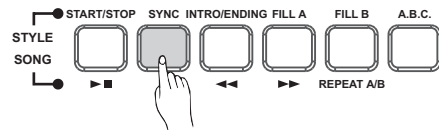


The left side of the split point is known as the chord area. When playing the chord, both the bass and the chord voices will be performed.



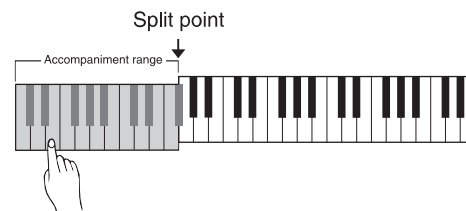
3. Sync Start

Press [SYNC] button to enter the sync start waiting mode. The beats on the LCD flash together.



If the A.B.C. mode is on, play any key on the left section of the keyboard and the style starts playing with the bass and chord.

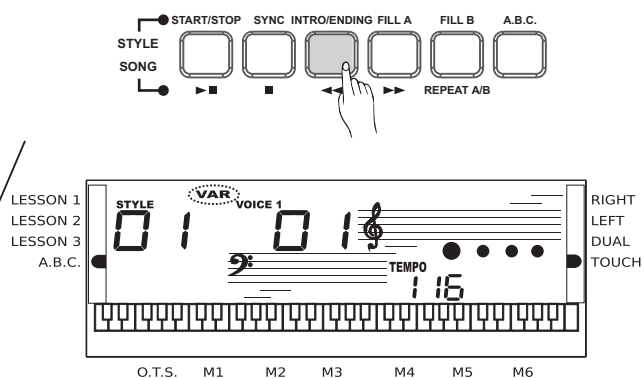
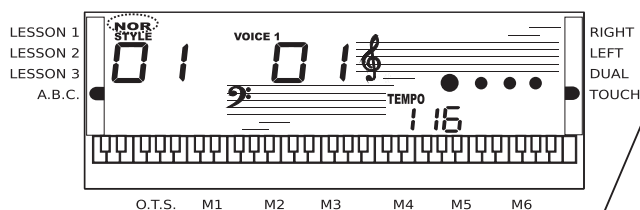
If the A.B.C. mode is off, play any key on the keyboard, and the style plays only the drum voice.



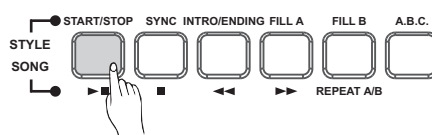
Style Control

4. Intro Start:

Press [INTRO/ENDING] button when the style is not playing, NOR or VAR flag will flash on the LCD, indicating the intro section is ready to play. Length of the intro varies in different styles.

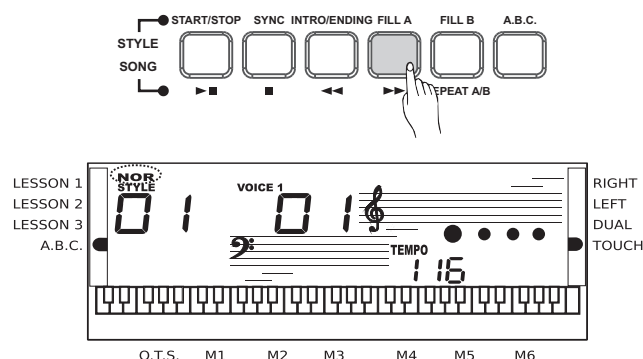


Press [START/STOP] button, then the style starts with an intro section, followed by the main section.

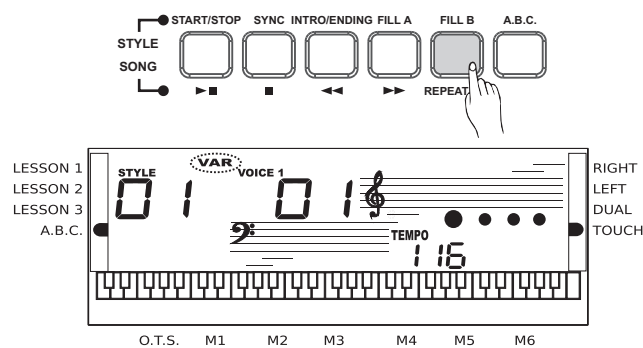


Fill A/ Fill B

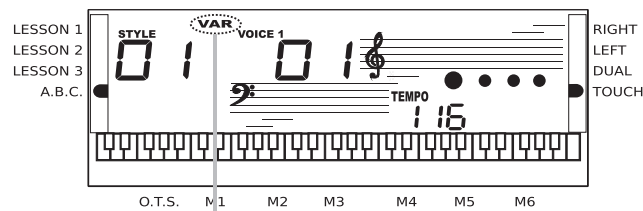
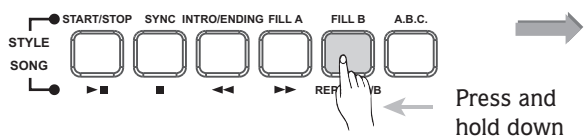
1. Press [FILL A] button to insert 1 or 2 measure fill and LCD flashes 'NOR'. After one measure is over, NORMAL style will be returned.



2. Press [FILL B] button to insert 1 or 2 measure fill and LCD flashes 'VAR'. After one measure is over, VARIATION style will be returned.



3. Press and hold down the [FILL A] or [FILL B] button, when the style is playing, the fill section will be played repeatedly.

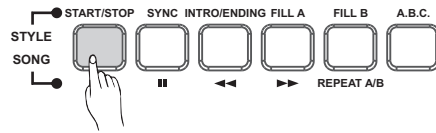


Flashing until button is released

Stop a Style

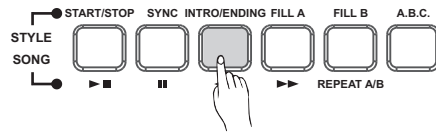
1. Stop immediately

The accompaniment can be stopped at any time by pressing the [START/STOP] button.



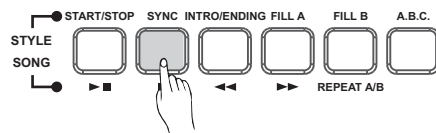
2. Ending stop

Press the [INTRO/ENDING] button to complete the style with an ending section. The ending section will begin from the start of the next measure.



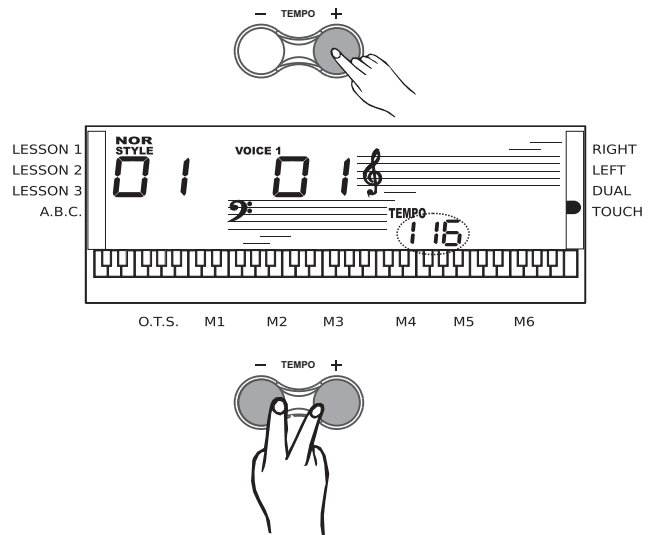
3. Sync stop

Press the [SYNC] button to stop playing the style; the synchronized start mode will be activated.



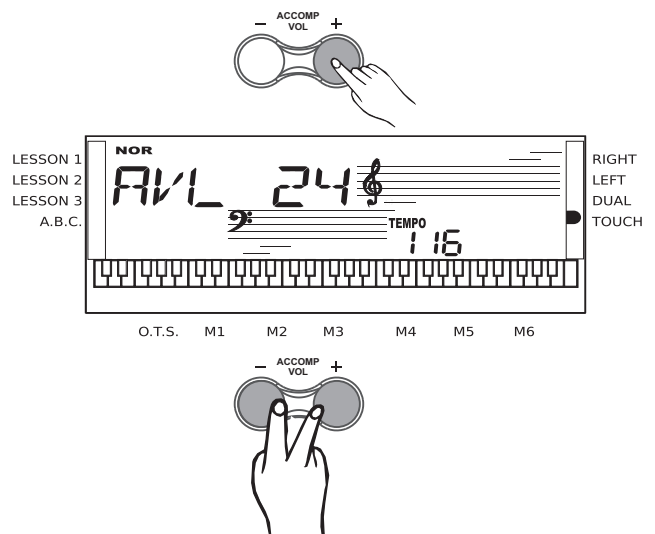
Tempo

1. Press the [TEMPO +] or [TEMPO -] button to change the tempo.
2. Press the [TEMPO +] and [TEMPO -] button simultaneously to set the tempo value back to its default.
3. The keyboard will not change the default tempo of the style even if you change the style when it is playing.



Accomp Volume

1. Press [ACCOMP VOLUME+] / [ACCOMP VOLUME-] button to enter ACCOMP VOLUME menu, the LCD displays the ACCOMP volume value which ranges between 0 and 31. (Default Accomp Value is 24.)
2. Use [ACCOMP VOLUME+] / [ACCOMP VOLUME-] to adjust the ACCOMP volume value.
3. Press [ACCOMP VOLUME+] and [ACCOMP VOLUME-] together will set the ACCOMP volume value to off.

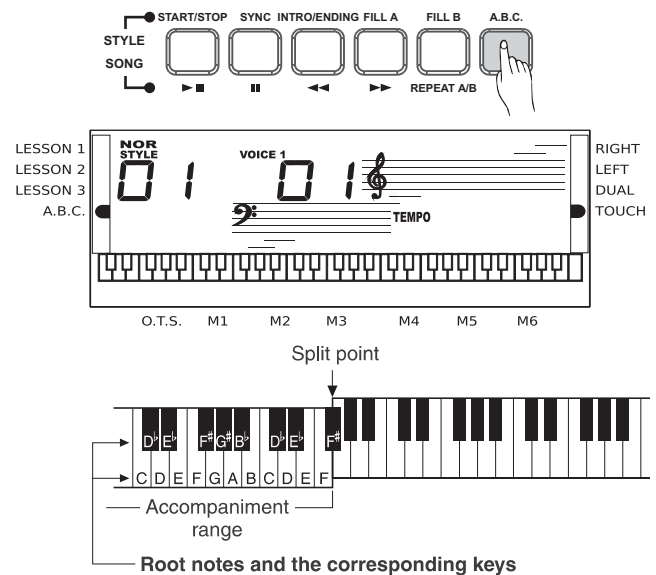


Chord Recognize

"A.B.C." is disabled during the default setting. Press [A.B.C.] button to turn on this "auto bass chord" function; the A.B.C. flag on the LCD is lightened. The left section of the keyboard is known as the "chord area", while playing the chord, both the bass and the chord voices phonate.

NOTE:

Since the chord detection of A.B.C. is based on the Chord Root priority, some chords that could be played under the Chord Dictionary may not be recognised by A.B.C. though, eg. B6、bB6、Baug、bBm6、Bm6、bBdim7、Bdim7.



There are 2 ways to detect a chord: "single finger detect" and "multi fingers detect".

If the chord played is based on "multi fingers detect", it is recognized as the "multi fingers chord". If not, "single finger chord" will be recognized.

• Single Finger Chords

This method allows you to play chords easily within the accompaniment range of the keyboard using only one, two, or three fingers. Examples of Single Finger Chord are "C, Cm, C7 and Cm7", shown as below:

	<p>C</p> <p>• To play a major chord Press the root note of the chord</p>
	<p>Cm</p> <p>• To play a minor chord Press the root note together with the nearest black key to the left of it .</p>
	<p>C7</p> <p>• To play a seventh chord Press the root note together with the nearest white key to the left of it .</p>
	<p>Cm7</p> <p>• To play a minor seventh chord Press the root notes together with the nearest white and black keys to the left of it (three keys altogether) .</p>

NOTE:

When A.B.C. is on, press the keys on the left of the split point. The chord will be recognized as single finger chords.

• Multi Finger Chords

This method allows you to produce an accompaniment by playing chords with normal fingerings within the accompaniment range of the keyboard. To play Multi Chords (Example for C chords) A total of 16 chords are provided as below:

0 C	1 C ₆	2 C _{M7}	3 Caug	4 C _{M(9)}	5 C _m
6 C _{m6}	7 C _{m7}	8 C _{m7(b5)}	9 C _{mM7}	10 C _{dim}	11 C _{dim7}
12 C ₇	13 C _{7sus4}	14 C ₇₍₁₃₎	15 C _{7sus4}		

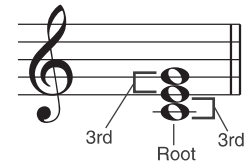
Notes enclosed in parentheses ● are optional; the chords could be recognized without them.

• Chord Basics

Three or more notes played together constitute a "chord".

The most basic chord type is the "triad" consisting three notes: the root, third, and fifth degrees of the corresponding scale.

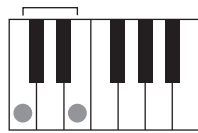
A "C major triad", for example, is made up of the notes C (the root), E (the third note of the C major scale), and G (the fifth note of the C major scale).



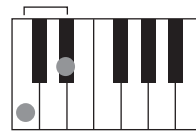
In the C major triad shown as above, the lowest note is the "root" of the chord (this is the chord's "root position"...using other chord notes for the lowest note results in "inversion"). The root is the central sound of the chord, which supports and anchors other chord notes.

The distance (interval) between adjacent notes of triad in root position is either a major or minor third.

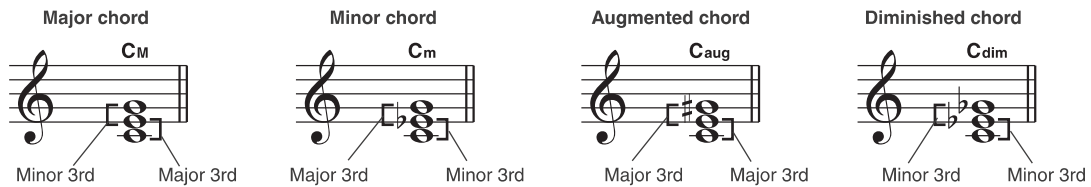
Major third – four half steps (semitones)



Minor third – three half steps (semitones)



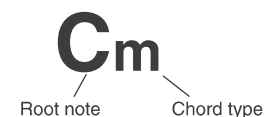
The lowest interval in our root-position triad (between the root and the third) determines whether the triad is a major or minor chord, and we can shift the highest note up or down by a semitone to produce two additional chords, as shown below.



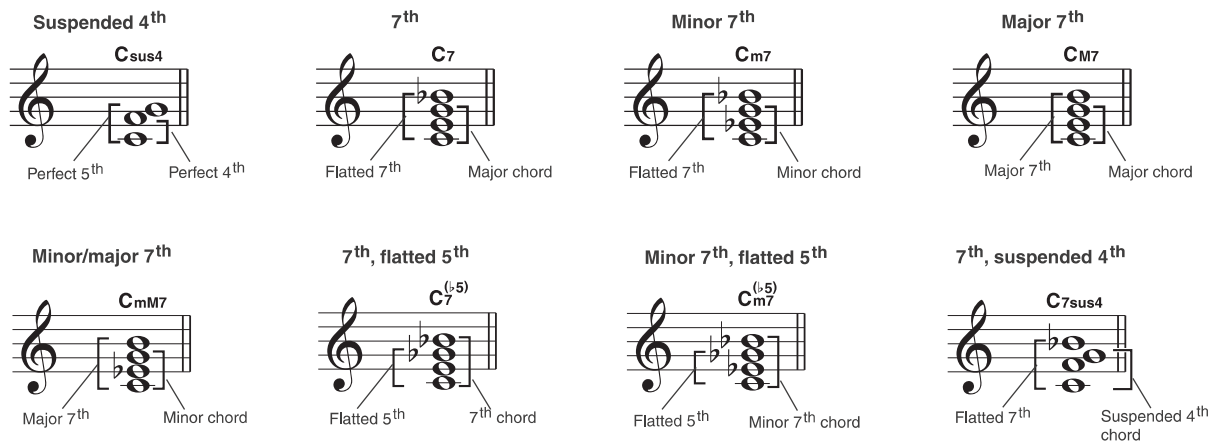
The basic characteristics of the chord sound remain intact even if we change the order of the notes to create different inversions. Successive chords in a chord progression can be smoothly connected, for example, by choosing the appropriate inversions (or chord "voicings").

• Reading Chord Names

Chord names tell you just about everything you need to know about a chord (other than the inversion/voicing). The chord name tells you what the root of a chord is, whether it is a major, minor, or diminished, whether it requires a major or flatted seventh and what alterations or tension does it use...all at a glance.



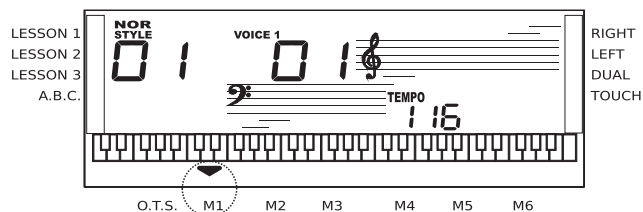
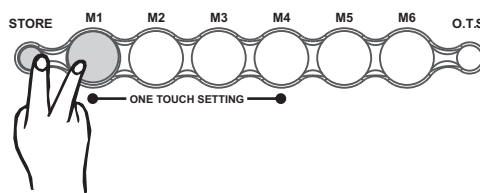
• Some Chord Types



Memory

There are 6 memories (M1-M6) for storage.

1. Press and hold [STORE], press [M1](or [M2]-[M6]) meanwhile. The data will be stored into M1 (M2-M6).



2. The data which can be stored into the memory are as follows:
Voice, Sustain, Style, Tempo, ACCOMP volume, Octave, Transpose, ABC, SPLIT POINT, VAR/NOR and TOUCH etc.

NOTE:

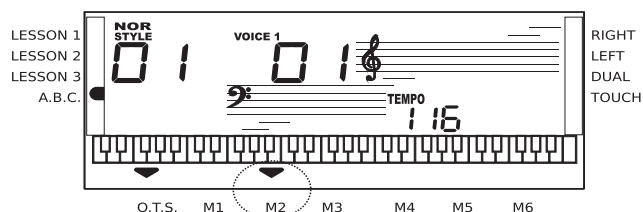
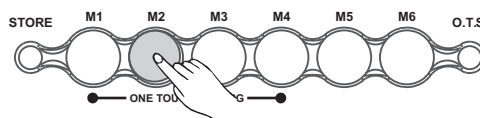
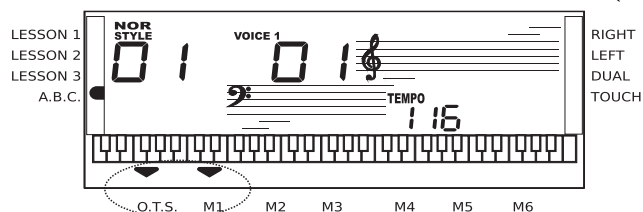
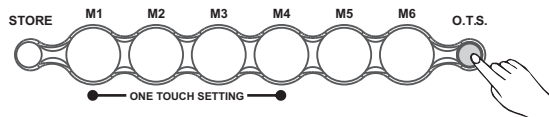
If the current data is different from the current memory data, the corresponding memory flag on the LCD will flash.

The memory data will change to its default after power off.

One Touch Setting

One Touch Setting is a powerful and convenient function that allows you to reconfigure all settings instantly with the touch of a single button. In this function, 4 types of parameters (M1~M4) will be loaded for operating the current style.

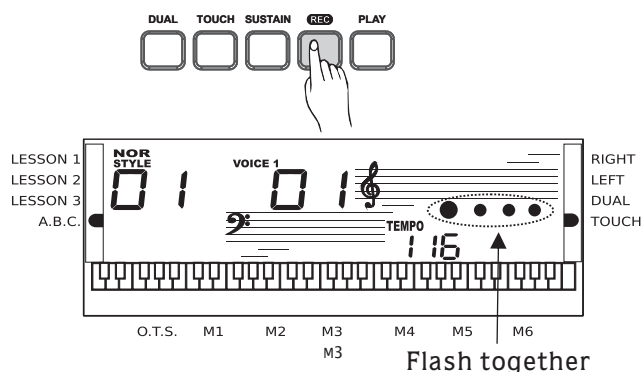
1. Press [O.T.S.] button to turn this mode on and the O.T.S. flag on the LCD will be lightened. Press any of the [M1] ~ [M4] buttons, the relative type of the parameter will be loaded according to the current style. The keyboard will turn the A.B.C. mode on automatically while the O.T.S. is on.
2. Press any of the M1-M4 buttons, which is corresponded to your desired setting.
3. Press [O.T.S.] button again to turn off the O.T.S. Mode.
4. Press [O.T.S] to turn on the O.T.S mode, it will insert a "Fill in" section automatically.
5. While you are recording or playbacking a recorded song, press [M1~M4] button, no "FILL IN" be inserted.



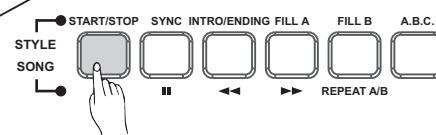
Record

Start Recording

1. Press the [RECORD] button, the four-beat on the LCD will flash simultaneously, indicating the "record waiting status".
A voice, style and memory can be selected in this status. The ACCOMP track and MELODY track can be recorded together.



2. After all the settings in the "record waiting status" have been selected, play the keyboard (the chord area when recording ACCOMP) or press the [START/STOP] button; it will start recording and the beat will be displayed according to the current tempo.

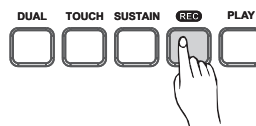
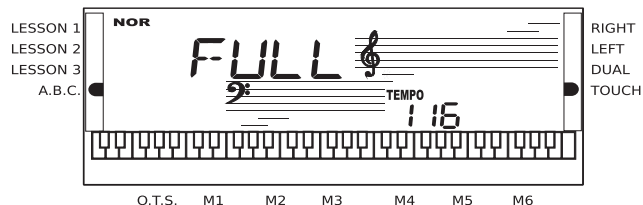


NOTE:

Once the recording of one track is started, the original data in the track will be overwritten.

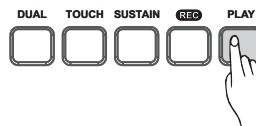
Stop Recording

1. STOP AUTOMATICALLY
While recording, once the capability is full, the recording will be stopped automatically. "FULL" will be displayed on the LCD.
2. STOP MANUALLY
Press [RECORD] button again to stop the recording immediately.
When a style is playing, press the [INTRO/END] button, it will stop recording automatically after "ending".



Playback the Recording

Press [PLAY] button, the recorded data will be played.



NOTE:

The record data can be saved when the keyboard turn off power.

Function Menu

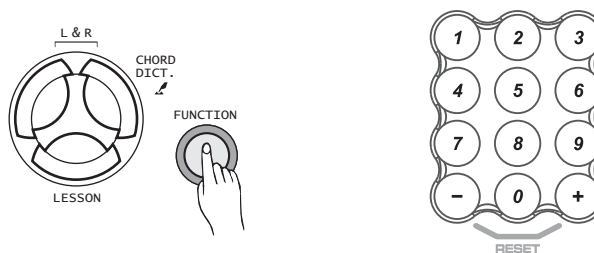
Press [FUNCTION] key to enter the menu of function.
The default option of the menu is "BEAT".

Everytime when you enter the menu, it will return to the option that you selected last time.

Press [FUNCTION] key to select the option you would like to set.

Use the [+] / [-] button to set the parameter.

The option and the parameters are indicated on the right:



NOTE:

If there is no action 5 seconds after pressing the [FUNCTION] key, it will quit the function menu automatically.

Option	LCD Display	Range	Default
BEAT	BET 04	0, 2...9	4
SPLIT POINT	SPT 19	1...61	19(*F3)
MIDI IN	CHI ALL	01...16, ALL	ALL
MIDI OUT	CHO 01	01...16	01
BANK SELECT	BAK 01	01...128	01

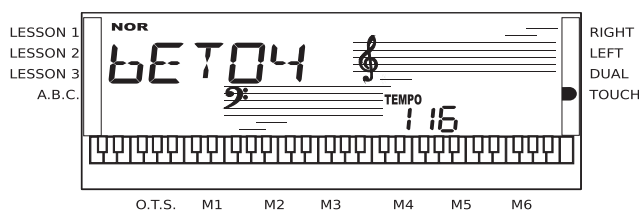
Beat

Press the [FUNCTION] button to enter the BEAT sub-menu.

The LCD displays the current beat value.

Use [+] / [-] to select the beat value.

The beat value includes: 0, 2-9, 9 types of value.

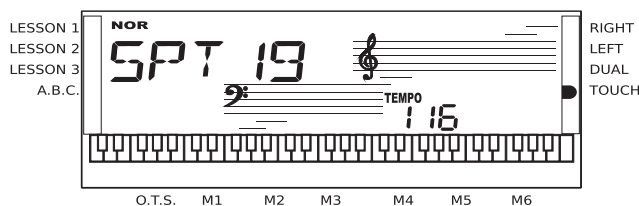


Split Point

Press the [FUNCTION] button to enter SPLIT POINT sub-menu. The LCD displays the current split point value.

Use [+] / [-] to select the beat value. The keyboard can be also used to change the split point.

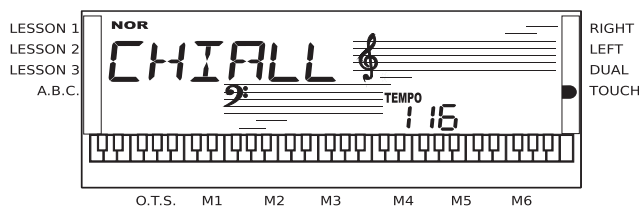
The key of the split point is the part of the left area.



MIDI IN

RECEIVE can be used to set the channel of MIDI IN. Channel 1-16 can be selected by pressing [+] / [-] button.

The default setting is ALL.

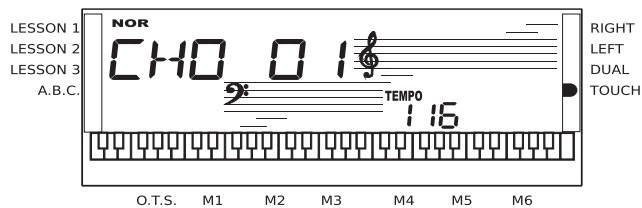


MIDI OUT

TRANSMIT can be used to set the channel of MIDI OUT.

Channel 1-16 can be selected by pressing [+] / [-] button.

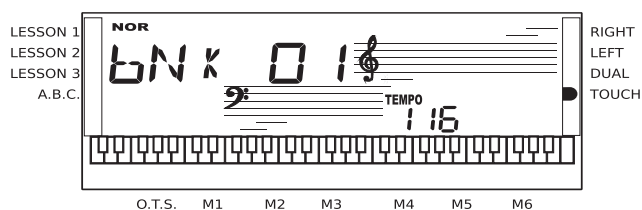
The default setting is 001.



Bank Select

Press [FUNCTION] button to enter BANK SELECT sub-menu, the LCD display BNK 01.

The bank of the MIDI output sound could be adjusted from 1-128.



Song

There are total 100 songs in this keyboard (see Appendix). Each song can be practised in the **MELODY OFF** mode.

1. START/STOP the song

Press [SONG] button to enter the "song mode", the song flag on the LCD will show up. All songs will be played in a loop.

Press [START/STOP] button to stop playing the song, but it will not quit the song mode.

2. LOOP:

The second time you start playing the song by pressing [START/STOP] button, it will play the current song repeatedly.

3. SELECT the song:

Use [+] / [-] button or numeric keypad to select your desired song.

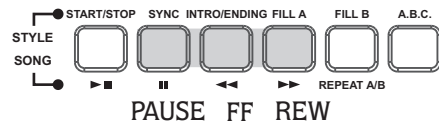
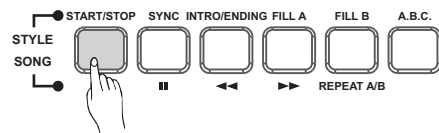
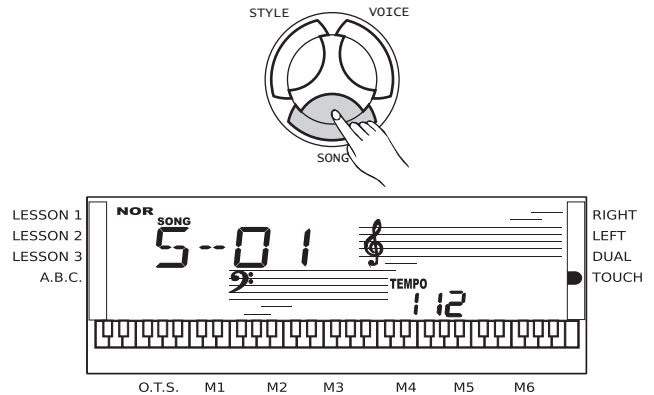
4. REW, FF and PAUSE

When a song is playing, press [FF] button to fast forward the song;

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

Press [PAUSE] to pause the song.

When the song is stopped, press [STYLE], [VOICE], [DUAL] to exit the song mode.

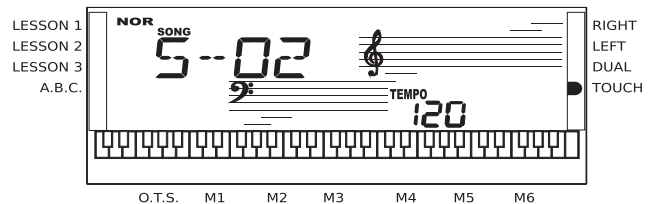
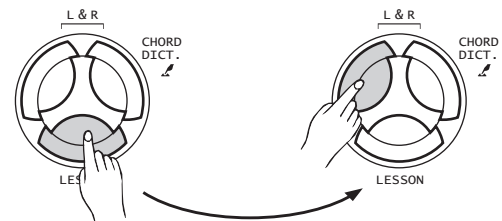


Lesson Mode

Learning a new song primarily involves with the timing of the piece and the accuracy of a note. Thus the song learning function focuses on these two elements to help you better play a song.

1. In song mode (when a song is not playing), press [LESSON] button to enter the Lesson mode.

2. There are 3 levels to score the performance of your playing. You can use [R] or [L] button to select which hand to practice. If neither hand is selected, the keyboard will choose the right hand automatically. If [L] and [R] are both selected, you can use two hands to do the lesson together.

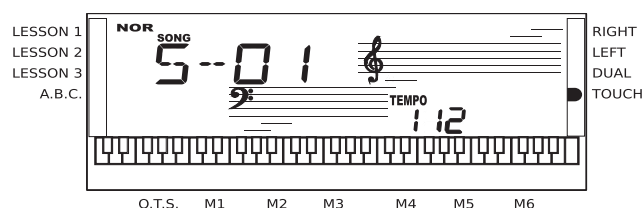
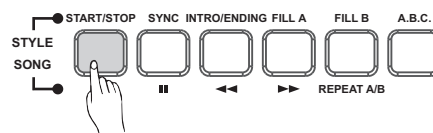
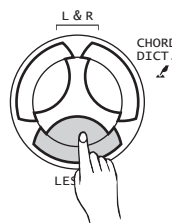


NOTE:

The contents for practising with left hand varied according to different types of songs. If you choose a chord song, the left hand practices the chord, otherwise, the left hand will be used to practise the melody. When a song is playing, the notes and keyboard displayed on the LCD indicate the melody and chord position, the numbered musical notation displayed on the LCD shows the last note played by the RIGHT track, and it will be convenient for you to practice .

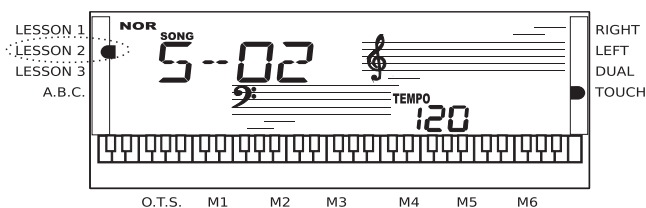
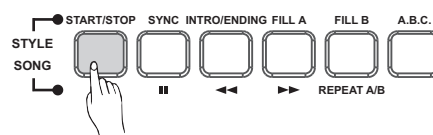
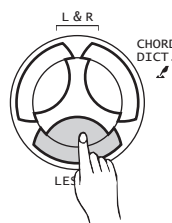
Lesson 1-Practice an timing

1. Press [LESSON] button to enter the LESSON 1 mode, the lesson 1 flag is lightened on the LCD.
Evaluation is based on the accuracy of the time value, and the accuracy of note playing will not be graded.
2. Press [START/STOP] to begin.
3. If [R] is selected; it will mute the melody of the right hand position and you will have to follow the timing of the right hand. As long as the timing is correct, the melody will be sounded.
4. If [L] is selected ; it will mute the changing chord and melody by the left hand. You will have to follow the timing of the left hand. As long as the timing is correct, the chord / melody will be sounded.
5. If [L] and [R] are both selected, the melody on both hands will be muted. You will have to follow the timing of both the left and right hands, and the song will then play accordingly.
6. Once the lesson is completed, the result of evaluation will be announced.



Lesson 2-Practice a note accuracy

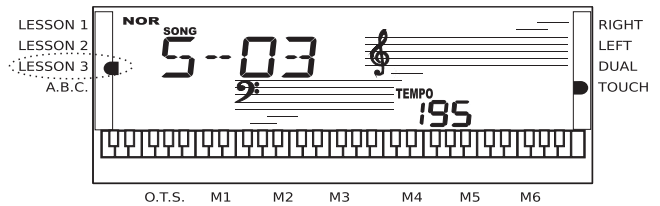
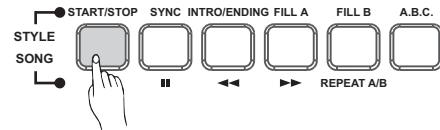
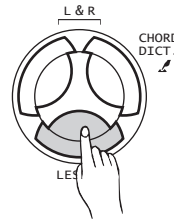
1. Press [LESSON] button again to enter the LESSON 2 mode. Evaluation is based on the accuracy of notes playing. Accuracy of time value will not be considered as the song could keep going only if the correct note is played.
2. Press [START/STOP] button to begin.
3. If [R] is selected, only the left hand will be played automatically until the first note on the right hand is played. The song will not proceed until the correct note is played.
4. If [L] is selected, only the right hand will be played. The song will not proceed until the notes of the left hand are played correctly.
5. If [L] and [R] are both selected, the song will proceed only when the notes of both hands are played correctly.
6. Once the lesson is completed, the result of evaluation will be announced.



Song

Lesson 3-Melody off

1. Press [LESSON] button in LESSON 2 to enter the LESSON 3 mode.
In this mode, evaluation is based on the correctness of both the time value and notes.
2. Press [START/STOP] button to begin.
3. If [R] is selected, the melody in the right hand will be muted. Unlike LESSON 1, the correct notes must be played to produce correct the melody.
4. If [L] is selected, the chord / melody in the left hand will be muted. Unlike LESSON 1, the correct chord or melody must be played to produce a correct chord or melodic line.
5. If [L] and [R] are both selected, both the left and right hands will be muted, only the accompaniment will be sounded. Both hands must be played correctly to produce the accurate song.
6. Once the lesson is completed, the result of evaluation will be announced.



Grade Function

Lesson 1 / Lesson 2 / Lesson 3 all have the grading function. There are four levels, including: OK , GOOD, VERY GOOD, EXCELLENT.

After a grade is given, the song will be played again and retain the lesson mode.

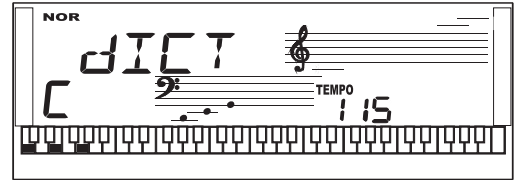
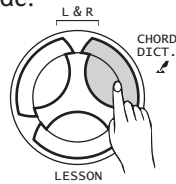
Chord Dictionary

Chord Dictionary is essentially a built-in "chord book" showing you the individual notes of the chords.

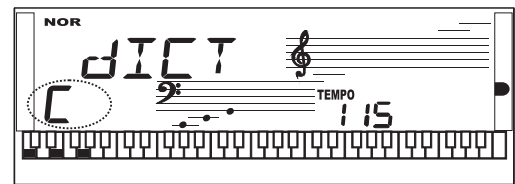
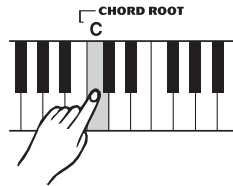
It is ideal for you to learn the name of certain chords and to learn how to play them instantly.

1. Press [CHORD DICT./R] button to enter the DICT mode.

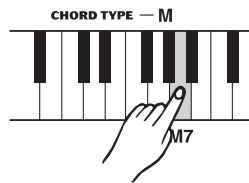
The LCD shows "dict". In this mode, the keyboard notes in the right area can be played to assign the Chord Type and the Chord Root.



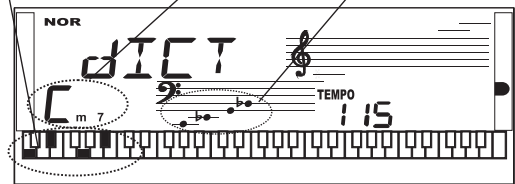
2. For example, if we want to play a Cm7 Chord. Press the C key in the section of the keyboard labeled Chord Root. (The note does not sound) the root note you set will be shown on the display.



Press the m7 key in the section of the keyboard which has labeled Chord Type (The note does not sound). The notes you should play for the specified chord (root note and chord type) are shown on the display as the notation and also in the keyboard diagram.



Individual notes of chord (keyboard) Chord name (root and type) Notation of chord



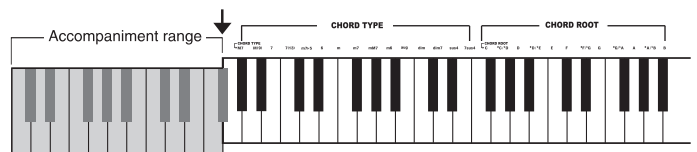
3. When the Chord Type and Chord Root are confirmed, the LCD will display the Chord and its keyboard position. A bell sound will be heard if you play it correctly.

4. Press [CHORD DICT./R] button again to exit the Chord Dictionary mode.

Specify and play the Chord Type and the Chord Root that you would like to play on the keyboard as shown below:

5. Some fingerings may be recognised as different chords by A.B.C. , eg. B6、bB6、Baug、bBm6、Bm6、bBdim7、Bdim7.

Split point



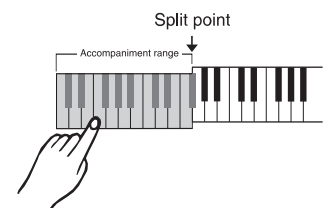
NOTE:

The notes you played in order to assign as the Chord Type / Chord Root could not be heard.

If you play the chord correctly, you could hear the applause sound.

If the chords are not be played correctly, a bass sound would be heard.

The chord should be played below the split point(chord area).



MIDI Function

What is MIDI

1. MIDI stands for "Musical Instrument Digital Interface", that is the standard interface between a PC and other electronic instrument(s).
2. USB connection can be used for midi data transference with a computer or other USB host devices that support USB audio devices.
3. The keyboard can only be connected to the PC.
4. Use the keyboard as a tone generator, the data (MIDI) recorded on the PC can be played on the keyboard.

NOTE:

While a recorded data and a style are being played, you can not use the MIDI IN function, or the song you are playing will have an error occurs for the same channel.

USB Connection

1. System Requirements

- CPU: 300 MHz or higher, Pentium 2
- Memory: 64MB or more
- Driver: CDROM 24X
- OS: WINDOWS 2000/XP

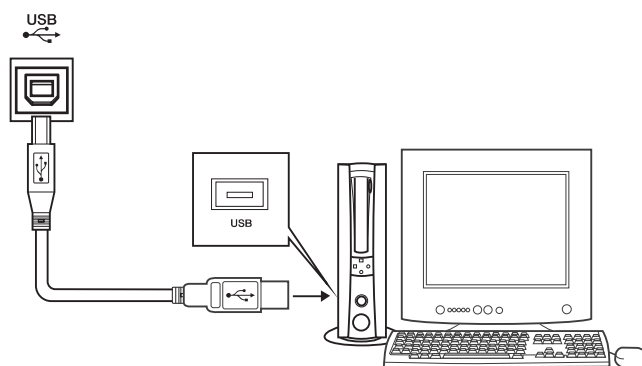
2. The Method of Connection

Connect a standard USB cable between the rear-panel of the USB jack of this instrument and the USB jack of your computer (USB cable will be sold separately).

3. USB Precautions

Please observe the following precautions while connecting the instrument with the a computer via a USB cable. Failure to do, so can cause the instrument and/or the computer to hang up(freeze), possibly causing corruption or losing the data.

If the instrument or computer hangs up, turn the power of both devices off and then turn it on again after a few seconds.



CAUTIONS!

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.

MIDI Application

1. PC recorded data (MIDI) can be played on the keyboard.
2. In order to transfer songs between your computer and the keyboard, you will need to install other applications.
3. You need not to install the USB Driver for WINDOWS 2000/XP.

Specifications

LCD display	Multi-functional LCD
Keys	61 keys with Touch Response
Polyphony	32-note polyphony(max)
Voice	395 Voices
Style	150 Styles
Demo Song	100 Songs; 2 Demos
Control button	Power ON/OFF, Master Volume, Tempo +/-, R / Chord Dictionary, L , Lesson, Voice, Style, Song, O.T.S. , M1-M6, Store, Start/Stop, Sync, Intro/Ending, Fill A, Fill B A.B.C. , Record, Play, Dual, Touch, Sustain, Metromonme, Demo, +, -, Piano, Transpose +/-, Octave +/-, Pitch Bend
Accompaniment Control	Start/Stop, Sync, Intro/Ending, Fill A, Fill B
Song Control	Start/Stop ▶■ , Pause ■ , Rew◀◀ , FF ▶▶
Record Function	Record, Play
Panel Memory	6 Memory Storage
Power Supply	≡ 12V
Connectors	AC Power, Headphones, Sustain, USB
Speaker	4 Ω 5w x 2
Dimension	986(L)x348(W)x142(H)mm
Weight	6kg(without batteries)
Attachment	Adaptor, Music stand, Manual

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

Trouble Shooting

Problem	Possible Cause and Solution
No matter the instrument is turned on or off, a popping sound has temporarily produced.	This is normal and indicates that the instrument is receiving electrical power.
There is no sound even when the keyboard is played or when a song or style is being played.	Check if any cable or headphone is connected to the PHONES jack on the rear panel. When a set of headphones is plugged into this jack, no sound will be produced.
The volume is too soft. The sound quality is poor. The rhythm stops unexpectedly or not responding. The recorded data of the song is not playing correctly. The LCD display suddenly goes dark, and all panel settings are reset.	The batteries are low or dead. Replace all six batteries with completely new ones, or use the optional AC adaptor.

Appendix 1 - Voice List

PIANO		Mallet		PIANO	
01	Stereo Grand Piano	56	Clavichord 1	108	Mellow Drawbar Organ
02	Stereo Piano Dark	57	Clavichord 2	109	1960 Drawbar Organ
03	Acoustic Grand Piano	58	Stereo Clavichord	110	Percussive Organ
04	Grand Piano / W	59	Clavichord 1 / W	111	Percussive Organ Detuned
05	Octave Piano 1	60	Clavichord 2 / W	112	1970 Percussive Organ
06	Octave Piano 2	61	Punchy Clavichord	113	Light Click Organ
07	Piano & Strings	62	Clavichord Wah	114	Percussive Organ
08	Piano & Stereo Strings	63	Celesta 1	115	Rock Organ
09	Dreamscape	64	Celesta 2	116	Rotary Organ
10	Piano & Choir	65	Bright Celesta	117	Stereo Rotary Organ
11	Synth Piano	66	Gamelan	118	Slow Rotary Organ
12	Bright Piano 1	67	Reecho Bell	119	Church Organ 1
13	Bright Piano?2	68	Celesta & Music Box	120	Church Organ 2
14	Bright Piano / W	69	Celesta & Sine	121	Detuned Church Organ
15	Stereo Bright Piano	70	Glockenspiel 1	122	Pureness
16	Detuned Piano	71	Glockenspiel?2	123	Octave Church Organ
17	Chorus Piano	72	Glockenspiel? & Sine	124	Reed Organ
18	Velocity Crossfade Piano	73	Glockenspiel? & Celesta	125	Accordion
19	Piano Pad	74	Music Box 1	126	Accord It Solo
20	Piano & Vibraphone	75	Music Box 2	127	Harmonica
21	Electric Grand Piano 1	76	Music Box 3	128	Detuned Harmonica
22	Electric Grand Piano 2	77	Music Box & Harp	129	Tango Accordion
23	Electric Grand Piano / W	78	Toy Box		Guitar
24	Honky-Tonk	79	Vibraphone 1	130	Nylon G.T. 1
25	Honky-Tonk / W	80	Vibraphone 2	131	Nylon G.T. 2
26	Stereo Honk-Tonk	81	Vibraphone 3	132	Bright Nylon G.T.
27	Honky-Tonk Dark	82	Vibraphone 1 / W	133	Nylon G.T. / R
28	E Piano 1	83	Vibraphone 2 / W	134	Detuned Nylon G.T.
29	E Piano 2	84	Stereo Vibraphone	135	Chorus Nylon G.T.
30	E Piano 3	85	Rigid Vibraphone	136	Steel G.T.
31	Soft E.P.	86	Vibraphone & Bell	137	Nylon & Steel G.T.
32	Hard E.P.	87	Vibraphone & Harpsichord	138	Jazz G.T.
33	E.Piano 1 / W	88	Marimba 1	139	Mellow G.T.
34	E.Piano 2 / W	89	Marimba 2	140	Clean G.T.
35	Detuned E.P. 1	90	Marimba? / W	141	Chorus Clean G.T.
36	Detuned E.P. 2	91	Sine Marimba	142	Muted G.T.
37	Stereo Hard E.P.	92	Marimba & Vibraphone	143	Muted Steel Guitar
38	Velocity Crossfade E.P. 1	93	Wood Drum	144	Overdriven G.T.
39	Velocity Crossfade E.P. 2	94	Xylophone	145	Distortion G.T. 1
40	Warm E.P.	95	Xylophone / W	146	Distortion G.T. 2
41	Cloudy E.P.	96	Dark Xylophone	147	Feedback G.T. 1
42	Deep E.P.	97	Tubular Bells 1	148	Feedback G.T. 2
43	Nylon E.P.	98	Tubular Bells 2	149	Stereo Distorted G.T.
44	Layered E.P. 1	99	Tubular Bells 3	150	Distortion G.T. Octave
45	Layered E.P. 2	100	Dulcimer 1	151	Distorted Rhythm G.T.
46	Harpsichord 1	101	Dulcimer 2	152	5th Distortion
47	Harpsichord 2			153	G.T. Harmonics
48	Grand Harpsichord		Organ		Bass
49	Harpsichord 1 / W				
50	Harpsichord 2 / W				
51	Harpsichord / R	103	Drawbar Organ	154	Acoustic Bass
52	Harpsichord / O	104	Drawbar Organ Detuned	155	Jazz Style
53	Harpsichord Octave 1	105	Drawbar Organ Stereo	156	Wah Bass
54	Harpsichord Octave 2	106	Soft Stereo Drawbar Organ	157	Finger Bass 1
55	Piano & Harpsichord	107	Bright Drawbar Organ	158	Finger Bass 2

Appendix 1 - Voice List

- 159 Finger Bass Dark
- 160 Finger Slap Bass
- 161 Bass & Distorted Elec Guitar
- 162 Pick Bass
- 163 Muted Pick Bass
- 164 Fretless Bass
- 165 Fretless Bass Detuned 1
- 166 Fretless Bass Detuned 2
- 167 Fretless Bass Detuned 3
- 168 Fretless Bass & Sine
- 169 Slap Bass 1
- 170 Slap Bass 2
- 171 Resonant Slap Bass
- 172 Synth Bass 1
- 173 Synth Bass 2
- 174 Synth Bass 3
- 175 Synth Bass 4
- 176 Super Synth Bass
- 177 Tech Synth Bass
- 178 Dark Synth Bass

Strings

- 179 Violin
- 180 Viola 1
- 181 Viola 2
- 182 Viola 3
- 183 Viola 4
- 184 Dark Viola
- 185 Cello 1
- 186 Cello 2
- 187 Cello 3
- 188 Cello 16'
- 189 Contrabass
- 190 Tremolo Strings 1
- 191 Tremolo Strings 2
- 192 Slow Tremolo Strings
- 193 Pizzicato Strings
- 194 Orchestral Harp
- 195 Africa
- 196 Timpani

Bass

- 197 Strings Ensemble 1
- 198 Strings Ensemble 2
- 199 Slow Strings
- 200 Legato Strings
- 201 Arco Strings
- 202 Stereo Slow Strings
- 203 Sforzato Strings
- 204 Orchestra
- 205 The Strings
- 206 Strings Solo
- 207 Resonant Strings
- 208 1960 Strings
- 209 1970 Strings
- 210 Synth Strings 1

PIANO

- 211 Synth Strings 2
- 212 Synth Strings 3
- 213 Synth Strings 4
- 214 Synth Strings 5
- 215 Choir Aahs 1
- 216 Choir Aahs 2
- 217 Choir Aahs 3
- 218 Stereo Choir Aahs
- 219 Mellow Choir
- 220 Strings Choir
- 221 Voice Oohs
- 222 Oohs & Strings
- 223 Synth Voice
- 224 Orchestra Hit

Brass

- 225 Trumpet 1
- 226 Trumpet 2
- 227 Trumpet 3
- 228 Dark Trumpet
- 229 Sweet Trumpet
- 230 Trumpet & Strings
- 231 Trombone 1
- 232 Trombone 2
- 233 Dark Trombone
- 234 Strings & Trombone
- 235 Tuba 1
- 236 Tuba 2
- 237 Muted Trumpet
- 238 French Horn
- 239 5th Horn Orchestr
- 240 Brass Section 1
- 241 Brass Section 2
- 242 Brass Swell
- 243 Bright Brass Section
- 244 Dark Brass
- 245 Brass Section Octave
- 246 Brassband
- 247 Sforzato Brass
- 248 Stereo Brass & Strings
- 249 Synth Brass 1
- 250 Synth Brass 2
- 251 Synth Brass 3
- 252 Synth Brass 4
- 253 Synth Brass 5
- 254 Leap Brass
- 255 Octave Synth Brass
- 256 Synth Brass & Strings 1
- 257 Synth Brass & Strings 2
- 258 Sooth Brass

Reed

- 259 Soprano Sax 1
- 260 Soprano Sax 2
- 261 Sweet Soprano Sax

- 262 Slow Soprano Sax
- 263 Soprano Sax Soft
- 264 Alto Sax
- 265 Super Alto Sax
- 266 Alto Sax & Breath
- 267 Sax Band
- 268 Tenor Sax 1
- 269 Tenor Sax 2
- 270 Baritone Sax
- 271 Baritone Sax & Breath
- 272 Oboe 1
- 273 Oboe 2
- 274 Oboe 3
- 275 Sweet Oboe
- 276 English Horn 1
- 277 English Horn 2
- 278 Analog Horns
- 279 Woodwinds
- 280 Bassoon 1
- 281 Bassoon 2
- 282 Clarinet 1
- 283 Clarinet 2
- 284 Clarinet 3

Pipe

- 285 Piccolo
- 286 Flute 1
- 287 Flute 2
- 288 Recorder 1
- 289 Recorder 2
- 290 Pan Flute
- 291 Sweet Pan Flute
- 292 Blown Bottle
- 293 Shakuhachi
- 294 Whistle 1
- 295 Whistle 2
- 296 Ocarina

Lead

- 297 Lead 1 (square)
- 298 Lead Sine
- 299 Square Lead 1
- 300 Square Lead 2
- 301 Slow Square Lead
- 302 Square
- 303 Corrie
- 304 Thick Square
- 305 2 Oscillators Lead
- 306 Quint
- 307 Sine Solo
- 308 Lead 2 (sawtooth) 1
- 309 Lead 2 (sawtooth) 2
- 310 Slow Saw
- 311 Heavy Sawtooth
- 312 Wavy Sawtooth

Appendix 1 - Voice List

- 313 Ead
- 314 Bauble Lead
- 315 Synther
- 316 Super Analog
- 317 Lead 3 (calliope)
- 318 PWM 4th
- 319 Lead 4 (chiff)
- 320 Lead 5 (charang)
- 321 Lead 6 (voice)
- 322 Lead 7 (fifths)
- 323 Fifth Lead
- 324 Fifths Lead Soft
- 325 Lead 8 (Bass & Lead)
- 326 Bass Lead
- 327 Massiness

Pad

- 328 Pad 1 (newage)
- 329 Slow Square
- 330 Pad2 (warm)
- 331 Warmly Pad
- 332 PWM Pad
- 333 Horn Pad
- 334 Sine Pad
- 335 Pad 3 (Polysynth)
- 336 Poly Synth Pad
- 337 Poly Pad
- 338 Click Pad
- 339 Analog Pad
- 340 Pad 4 (choir) 1
- 341 Pad 4 (choir) 2
- 342 Pad 5 (bowed)
- 343 Pad 6 (metallic)
- 344 Pan Pad
- 345 Pad 7 (halo)
- 346 Pad 8 (sweep)
- 347 Rising
- 348 Congregate
- 349 Dipolar Pad

Effects

- 350 FX1 (rain)
- 351 FX2 (soundtrack)
- 352 Prelude
- 353 Progenitor
- 354 FX3 (crystal)
- 355 FX4 (atmsphere)
- 356 Warm Air
- 357 FX5 (brightness)
- 358 Smog
- 359 FX6 (goblins)
- 360 FX7 (echoes)
- 361 Reecho Pan
- 362 Large Pan
- 363 Fantasyland
- 364 FX8 (sci-fi)

Ethnic

- 365 Sitar
- 366 Banjo
- 367 Shamisen
- 368 Koto
- 369 Kalimba
- 370 Bagpipe
- 371 Fiddle
- 372 Shanai

Percussive

- 373 Tinkle Bell
- 374 Agogo
- 375 Detune Agogo
- 376 Steel Drums
- 377 Wood Block
- 378 Taiko Drum
- 379 Melodic Tom
- 380 Synth Drum
- 381 Reverse Cymba

Sound Effects

- 382 Guitar Fret Noise
- 383 Breath Noise
- 384 Seashore
- 385 Bird Tweet
- 386 Telephone Ring
- 387 Helicopter
- 388 Applause
- 389 Gunshot

Drum Kit

- 390 tandard Kit
- 391 Power Kit
- 392 Dance
- 393 Analog Kit
- 394 Brush Kit
- 395 Jazz Kit

Appendix 2 - Demo List

- 01 Little Brown Jug
- 02 Cha Cha

Appendix 3- Style List

BEAT & POP

01	8 Beat 1
20	8 Beat 2
03	8 Beat 3
04	8 Beat 4
05	8 Beat 5
06	8 Beat 6
07	8 Beat 7
08	60's 8 Beat
09	8 Beat Pop
10	8 Beat Ballad
11	8 Beat Rock
12	Pop Funk
13	16 Beat 1
14	16 Beat 2
15	16 Beat 3
16	16 Beat 4
17	16 Beat Pop
18	Pop 16 Beat 1
19	16 Beat Shuffle
20	Ballad
21	Ballad 1
22	Slow Ballad
23	Slow Ballad 1
24	16 Beat Ballad
25	16 Beat Ballad 1
26	Pop Ballad
27	Funk Ballad
28	Fusion
29	Shuffle
30	Fusion Shuffle
31	Unplugged

ROCK

32	Rock
33	Pop Rock
34	Flok Rock
35	Soft Rock
36	Easy Rock
37	Jazz Rock
38	Fast Rock
39	Slow Rock 1
40	Slow Rock 2
41	Slow Rock 3
42	Rock & Roll
43	Rock 'N' Roll 1
44	Rock 'N' Roll 2
45	Rock Shuffle
46	Heavy Metal
47	Blues Boogie
48	Blues
49	4/4 Blues
50	Shuffle
51	Blues Shuffle
52	Rock Shuffle
53	Charlston

DANCE

54	Disco 1
55	Disco 2
56	Disco 3
57	Disco Funk
58	Dance
59	House 1
60	House 2
61	Rap
62	Euro Beat
63	Hip Hop
64	Hip Hop 1
65	Down Beat
66	Techno
67	Techno 1

SOUL & FUNK

68	Jay R&B
69	Funky Pop
70	Funk
71	Jazz Funk
72	Cool Funky
73	Soul 1
74	Soul 2
75	Soul 3
76	Soul Shuffle
77	Soul Blues
78	R & B
79	6/8 Gospel
80	Pop Groove

JAZZ

81	Swing
82	Swing 1
83	Cool Jazz
84	Cool Jazz Ballad
85	Pop Swing
86	Swing Fox
87	Big Band
88	Big Band Meduim
89	Jazz Waltz
90	Ragtime
91	Dixeland
92	Dixeland 1
93	Quick Step

COUNTRY

94	Country 1
95	Country 2
96	Country 3
97	Pop Country
98	Country Pop 1
99	Country Rock
100	Country Rock 1
101	Country Folk
102	3/4 Country

103	Country Waltz
104	Country Shuffle
105	Country Boogie
106	Country Blues
107	Country Quick Step
108	Bluegrass
109	Bluegrass 1

LATIN

110	Bossa Nova 1
111	Bossa Nova 2
112	Bossa Nova 3
113	Rhumba
114	Pop Rhumba
115	Cha Cha
116	Cha Cha 1
117	Pop Cha Cha
118	Pop Cha Cha 1
119	Tango
120	Tango 1
121	Beguine
122	Samba
123	Jazz Samba
124	Disco Samba
125	Reggae
126	Reggae 1
127	Pop Reggae
128	Pop Reggae 1

TRADITIONAL

129	1-Mar
130	2-Mar
131	German March
132	6/8 March
133	Polka
134	Pop Polka
135	Waltz
136	Slow Waltz
137	Vienna Waltz
138	Orchestra Waltz
139	Musette

PIANO

140	8 Beat
141	Ballad
142	Boogie
143	Jazz
144	Swing
145	Jazz Waltz
146	Twist
147	March
148	6/8 March
149	Waltz
150	Slow Rock

Appendix 4- Song List

CLASSIC

- 01 Cannon
- 02 Thais Meditation
- 03 Old France
- 04 Minuet
- 05 Ode To Joy
- 06 Wiegenlied
- 07 "he Surprise" Symphony
- 08 Swan Lake
- 09 Spring From "The Four Seasons"
- 10 Habanera From "Carmen"
- 11 Joy To The World
- 12 Toy Symphony
- 13 Humoreske
- 14 Kuckuckswalzer

FAVORITE

- 15 Long, Long Ago
- 16 Old Folks At Home
- 17 Oh! Susanna
- 18 Jeannie With The Light Brown Hair
- 19 Bill Bailey Won't You Come Home
- 20 Annie Laurie
- 21 From The New World
- 22 The Yellow Rose Of Texas
- 23 Ave Maria
- 24 My Old Kentucky Home
- 25 Turkey In The Straw
- 26 Deck The Halls
- 27 Grandfather's Clock
- 28 America The Beautiful
- 29 The Sideway
- 30 The Entertainer
- 31 The Old Gray Mare
- 32 Aloha Oe
- 33 Solveig's Song
- 34 Camptown Races
- 35 Carry Me Back To Old Viginia
- 36 The Blue-Bells Of Scotland
- 37 O'Solo Mio
- 38 Jingle Bells
- 39 Battle Hymne Of The Republic
- 40 Silent Night

FOLK

- 41 Orohek
- 42 Aula Lee
- 43 House Of The Rising Son
- 44 Danny Boy
- 45 I've Been Working On The Railroad
- 46 In The Rain
- 47 She Wore A Yellow Ribbon
- 48 My Bonnie
- 49 Yankee Doodle
- 50 Red River Valley

- 51 Auld Lang Syne
- 52 When The Saints Go Marching In
- 53 Twinkle Twinkle Little Star
- 54 Happy Birthday To You
- 55 Little Brown Jug
- 56 Michael Row The Boat Ashore
- 57 Old King Cole
- 58 Jamaica Farewell
- 59 Т р о й к а
- 60 Cielito Lindo
- 61 If You're Happy And You Know It,
Clap Your Hands
- 62 American Patrol
- 63 When Johnny Comes Marching Home
- 64 Green Sleeves
- 65 Santa Lucia
- 66 Szla Dzieweczka

KID'S SONG

- 67 Angels We Have Heard On High
- 68 Skip To My Lou
- 69 London Bridge Is Falling Down
- 70 Humpty Dumpty
- 71 Home On The Range
- 72 This Old Man
- 73 Butterfly
- 74 Ten Little Indians
- 75 Polly-Wolly-Doodle
- 76 Santa Claus Is Coming To Town
- 77 Sippin Cider Through A Straw
- 78 La Cucaracha
- 79 Home Sweet Home
- 80 Up On The House Top

BALLROOM

- 81 ExamineOneGramOFDance
MusicsInTheStorehouse
- 82 Samba
- 83 Tango Of Cuba
- 84 Russian
- 85 Polka

PIANO & KEYBOARD

- 86 Four Little Swans
- 87 Did You Ever See a Lassie
- 88 Spring
- 89 Impromptu
- 90 Gavotte
- 91 Nocturne
- 92 Pizzicato Polka
- 93 Musical Moments
- 94 Reggae
- 95 All Kind Of My Everything
- 96 Valse No.6 "etit Chien"
- 97 Rondeau
- 98 Chrysanf
- 99 Invention a 2 Voix
- 100 Jesus, Saviour Pilot me

Appendix 5- Chord List

	Chord Name[Abbreviation]	Normal Voicing	Chord	Display
0	Major[M]	1-3-5	C	C
1	Major sixth[6]	1-(3)-5-6	C6	C6
2	Major seventh[M7]	1-3-(5)-7	CM7	CM7
3	Major seventh sharp Eleventh[M7#11]	1-(2)-3-#4-(5)-7	CM7#11	CM7(#11)
4	Major add ninth[Madd9]	1-2-3-5	CMadd9	CM(9)
5	Major ninth[M9]	1-2-3-(5)-7	CM9	CM7(9)
6	Major sixth add ninth[6 9]	1-2-3-(5)-6	C6 9	C6(9)
7	augmented[aug]	1-3-#5	Caug	Caug
8	Minor[m]	1-b3-5	Cm	Cm
9	Minor sixth[m6]	1-b3-5-6	Cm6	Cm6
10	Minor Seventh[m7]	1-b3-(5)-b7	Cm7	Cm7
11	Minor seventh flatted fifth[m7b5]	1-b3-b5-b7	Cm7b5	Cm7(b5)
12	Minor add ninth[madd9]	1-2-b3-5	Cmadd9	Cm(9)
13	Minor ninth[m9]	1-2-b3-(5)-b7	Cm9	Cm7(9)
14	Minor eleventh[m11]	1-(2)-b3-4-5-(b7)	Cm11	Cm7(11)
15	Minor major ninth[mM7]	1-b3-(5)-7	CmM7	CmM7
16	Minor major ninth[mM9]	1-2-b3-(5)-7	CmM9	CmM7(9)
17	Diminished[dim]	1-b3-b5	Cdim	Cdim
18	Diminished seventh[dim7]	1-b3-b5-6	Cdim7	Cdim7
19	Seventh[7]	1-3-(5)-b7	C7	C7
20	Seventh suspended Fourth[7sus4]	1-4-5-b7	C7sus4	C7sus4
21	Seventh flatted Fifth[7b5]	1-3-b5-b7	C7b5	C7(b5)
22	Seventh Ninth[7 9]	1-2-3-(5)-b7	C7 9	C7(9)
23	Seventh sharp eleventh[7#11]	1-2-3-#4-(5)-b7or 1-(2)-3-#4-5-b7	C7#11	C7(#11)
24	Seventh thirteenth[7 13]	1-3-(5)-6-b7or 2-3-5-6-b7	C7 13	C7(13)
25	Seventh flatted Ninth[7b9]	1-b2-3-(5)-b7	C7b9	C7(b9)
26	Seventh flatted Thirteenth[7b13]	1-3-5-b6-b7	C7b13	C7(b13)
27	Seventh Sharp ninth[7#9]	(1)-#2-3-(5)-b7	C7#9	C7(#9)
28	Major Seventh augmented[M7aug]	1-3-#5-7	CM7aug	CM7aug
29	Seventh augmented[7aug]	(1)-3-#5-b7	C7aug	C7aug
30	Suspended Fourth[sus4]	1-4-5	Csus4	Csus4
31	One plus two plus five[1+2+5]	1-2-5	C1+2+5	C

Appendix 6- MIDI List

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1ch X	1-16ch X	
Mode	Default Messages Altered	X X *****	3 X X	
Note Number		12-120 *****	0...127 0...127	
Velocity :	Note on Noteoff	0 NH,V=1-127 X (9nH,V=0)	0 9nH,V=1-127 X (9nH,V=0; 8nH,V=0-127)	
After Touch	Keys Chs	X X	X X	
Pitch Bend		0	0	
Control Change	0 1 5 6 7 10 11 64 65 66 67 80 81 91 93 120 121 123	0 0 X X X X X 0 X X X X X X X X X X	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	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 #	0 *****	0 0...127	
System Exclusive		X	0	
System Common	” Song Position ” Song Select : Tune	X X X	X X X	
System Real Time	:Clock :Commands	X X	X X	
Aux Messages	:LOCAL ON/OFF :All Notes Off :Active sense :Reset	X X X X	X 0 0 0	
Note:	*1 When the accompaniment is started, an FAH message is transmitted. When accompaniment is stopped, an FCH message is transmitted. When an FAH message is received, accompaniment is started. When an FCH message is received, accompaniment is stopped.			

Mode 1: OMNI ON , POLY Mode 2 : OMNI ON , MONO 0 : YES
 Mode 3: OMNI OFF , POLY Mode 4 : OMNI OFF , MONO X : NO