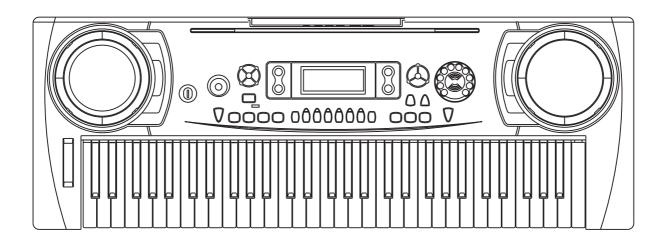
# **Electronic Keyboard**

# **Instruction** Manual



### SUMMARY

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.

### **Main Features**

• KEYBOARD

61-key touch keyboard

• DISPLAY

Multi\_function LCD display.

• OPERATION

Use numeric keypad and [+/YES] [-/NO] to select voice, style and song, Including Transpose, Octave, Beat, Split point, MIDI out,Bank。

• VOICE

Domestic market: 162 voices at all, including 5 Chinese Voices.

Oversea market: 157 voices at all.

• STYLE

Domestic market: 1.7 Chinese styles , PIANO styles 1. including , styles at all; Oversea market: 1... styles at all, PIANO styles 1. including .

• DEMO

#### • SONG

100 songs at all, from 001 to100.Each song has its learning mode.

• CHORD MODE

Single finger detect and fingers detect.

• CHORD DICTIONARY

It can help you to learn chord more conveniently.

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.

• RECORD FEATURE

one recorded song as 101st song in song list.

TEMPO

It can be adjusted to 40~280.

• STYLE CONTROL

Sync, Start/Stop, Intro/Ending, Main/Fill

• OTHER FEATURES

Piano, Dual, Touch, Metronome, Demo, Sustain, Pitch wheel and etc.

# 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 multiplug 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.

• 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.

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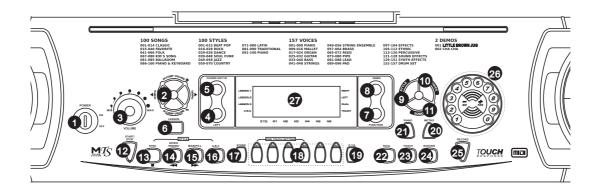
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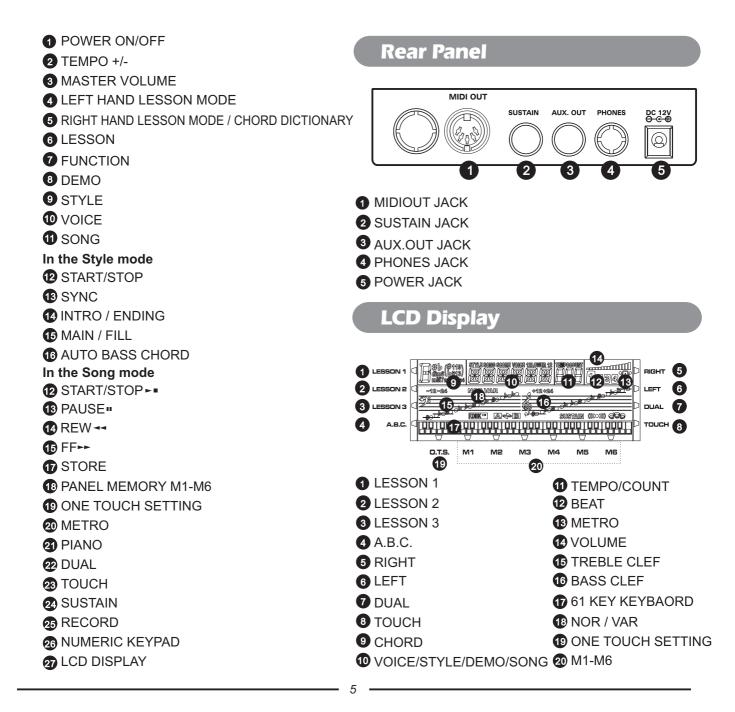
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### **Front Panel**



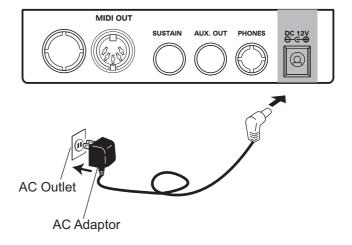


### Preparation

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, 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.



#### 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 8 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 if any of the following occurs.

A dim and difficult-to-read LCD display. Abnormally low speaker/headphone volume.

Distortion of the sound output.

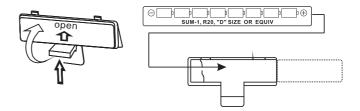
Sudden power failure when playing at high volume.

Abnormal rhythms or demo songs are played.

Dimming of the display when playing at high volume.

#### - CAUTIONS! -

- 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.

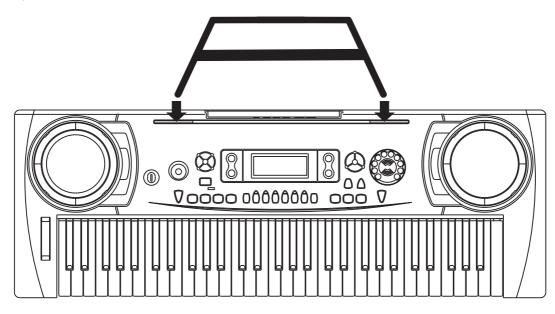


#### CAUTIONS!

- 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.

### Setting Music Stand

Please set up the music stand as the instruction below:



### Connections

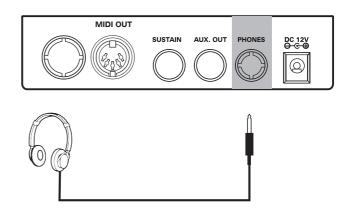
### **Headphones Jack**

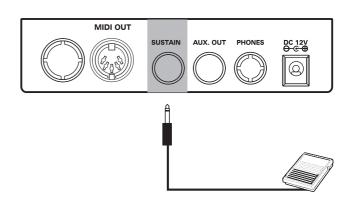
- 1. If you prefer to play with headphones for high quality personal monitoring, plug a set of stereo headphones into the rear panel PHONES jack.
- **2.** Plug a set of headphones into the PHONES jack and the speakers will be disabled automatically.

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

### **Sustain Jack**

- 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.



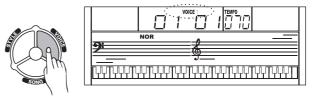


### **Voices and Effects**

There are 157 voices in total (See appendix), including 128 GM voices, 6 percussion voices, and synth voices.

#### 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 [+/YES] and [-/NO] buttons: Press [+/YES] or [-/NO] 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.

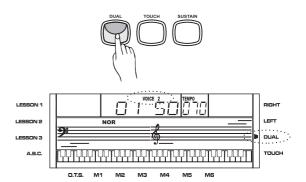
#### **Dual Voice**

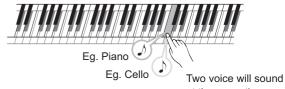
This keyboard has the "dual voice" function. This function is capable to enhance the delicacy of your music by playing two voices of musical instruments simultaneously; new combinations of voices and music could be created then. When the dual function is off, the voice indicated is VOICE 1, when the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









at the same time.

### Voices and Effects

- Press [+/YES] / [-/NO] 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.

#### Sustain

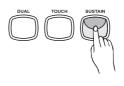
This function helps you to get a voice with a sustained effect, while playing the keyboard.

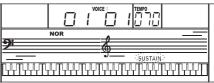
- **1.** Press **[SUSTAIN]** button to activate the sustain effect. LCD lights the SUSTAIN flag. The keyboard will be played with a sustain effect.
- 2. Press [SUSTAIN] button again to eliminate the sustain effect. The SUSTAIN flag will disappear.
- 3. Default sustain is disabled accordingly.



#### NOTE:

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





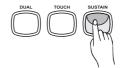
#### NOTE:

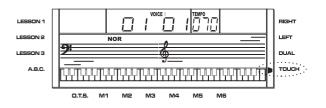
When you step on the sustain pedal, the sustain effect will be stronger than the effect produced by the **[SUSTAIN]** button.

#### Touch

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

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





### Metronome

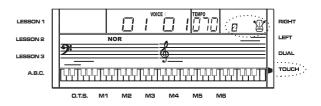
- 1. Press [METRO] button to enable to the metronome.
- 2. Press [METRO] button again to disable it.
- **3.** Metronome could not be played in SONG / CHORD DICT mode.

#### 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.





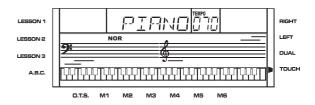
#### Piano

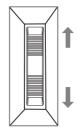
- Press [PIANO] button to enter to the piano mode. The LCD displays PIANO, and the voice changes to piano immediately. In this mode, A.B.C. will be disabled.
- 2. Press [PIANO] button again to exit the PIANO mode.
- If any of the [FUNCTION] / [DEMO] / [VOICE] / [SONG] / [STYLE] buttons has been pressed 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, it ranges between +/-2 semitone. When release the wheel, the note will be back to the normal.







### **Style Control**

#### Domestic market: 106 Chinese styles6 ,PIANO styles10 including ,styles at all. Oversea market: 100 styles at all PIANO styles10 including

#### Select a Style

 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. [+/YES] and [-/NO] buttons:

Press [+/YES] or [-/NO] 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.

#### **The Accompaniment Section**

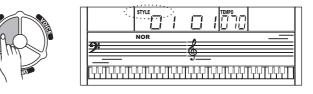
Accompaniment consists of Intro, Main, Variation, Fill and Ending. Using different sections based on the different structures of styles enable you to enhance the overall musical performance.

#### INTRO

Press the **[INTRO/END]** button to insert an intro section before you start to play. The rhythm will begin with a 2-4 measure introduction which will be followed by a menu section.

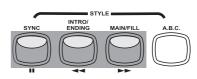
#### **MAIN and VARIATION**

There are two sections: main and variation. Each section consists of 2 to 4 measures.









#### FILL

While the accompaniment is playing, you can fill in the rhythm/accompaniment by pressing the **[MAIN/FILL A]** button. This will automatically insert a fill section.

#### ENDING

When you press the **[INTRO/ENDING]** button, it brings rhythm accompaniment and your performance to end with a 2-4 measure conclusion.

### 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.

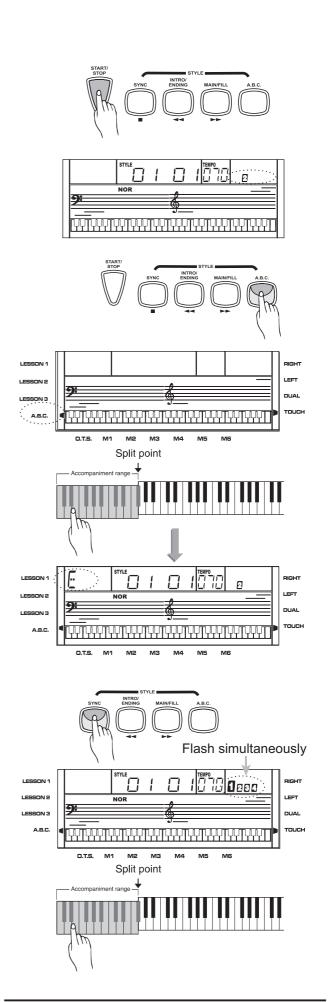
The left side of the split point is known as the chord area. When playing the chord, both the bass and the chord voices will be performed.

#### **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.

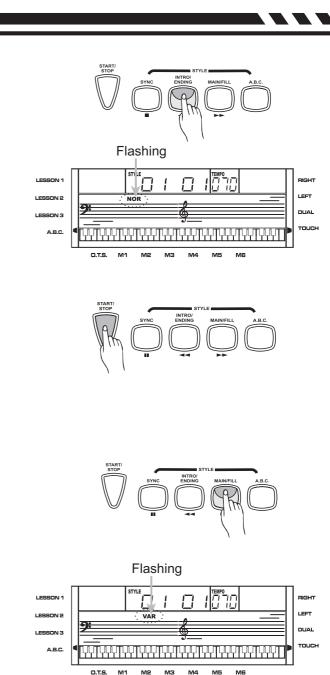
If the A.B.C. mode is off, play any key on the keyboard, and the style plays only the drum voice.



#### 4. INTRO/ENDING:

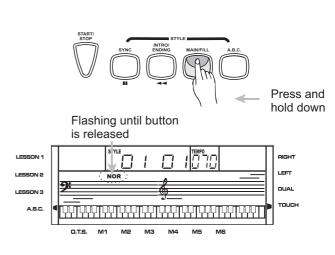
Press **[INTRO/ENDING]** key when the style is not playing, NOR or VAR flag will flash on LCD to indicate the intro is ready. Press **[START/STOP]** key, then the normal style will play after the intro style.

Press **[INTRO/ENDING]** key when the style is playing, style will be stopped after the ending.



### Main/Fill

- 1. In NORMAL mode, press [MAIN/FILL] button to insert 1 measure fill and LCD flashes 'VAR'. After one measure is over, NORMAL style will be returned.
- In VARIATION mode, press [MAIN/FILL] button to insert 1 measure fill and LCD flashes 'NOR'. After one measure is over, VIRIATION style will be returned.
- **3.** Press and hold down the **[MAIN/FILL]** button, when the style is playing, the fill section will be played repeatedly.



#### NOTE:

Press **[MAIN/FILL]** when the style stops, it will be changed to the VAR or NOR; the VAR or NOR flag on the LCD will be lightened.

### Stop a Style

#### 1. Stop immediately

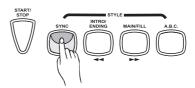
The accompaniment can be stopped at any time by pressing the **[START/STOP]** button.

#### 2. Ending stop

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

Press the [SYNC] button to stop playing the style; the

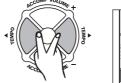
synchronized start mode will be activated.

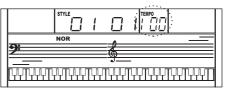


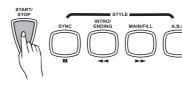
#### Tempo

3. Sync stop

- 1. Press the [TEMPO +] or [TEMPO -] button to change the tempo.
- 2. Press the [TEMPO +] and [TEMPO ] button together to set the default one.
- **3.** The keyboard does not take out the default tempo of the style if you change the style when it is playing.







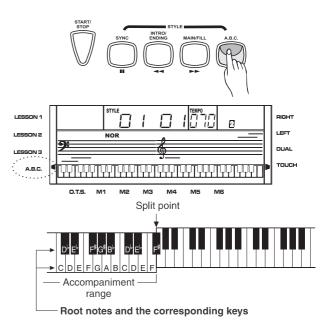


### Chord Recognize

The default mode after power on is A.B.C off. Press **[A.B.C]** key to turn on the auto bass chord, the A.B.C flag on LCD is lightened. The left area of keyboard is known as the chord area. When playing the chord, both the bass and the chord voice 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、B6(9)、bB6 (9)、Baug、bBaug、bBm6、Bm6、Adim7、 bBdim7、Bdim.

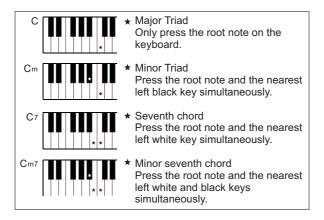


# There are 2 ways to detect a chord: "single finger detect" and "multi fingers detect".

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

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

0	1	2	3	4	5
	C <sub>6</sub>	CM <sub>7</sub>	CM <sub>7</sub> (#11)	CM(9)	CM <sub>7</sub> <sup>(9)</sup>
6 C <sub>6</sub> <sup>(9)</sup>	7 Caug	8 Cm * *	9 Cm <sub>6</sub>	10 Cm <sub>7</sub>	11 Cm <sub>7</sub> <sup>(b5)</sup>
12 Cm(9)	13 Cm <sub>7</sub> <sup>(9)</sup>	14 Cm <sub>7</sub> <sup>(11)</sup>	15 CmM <sub>7</sub> * 8 *	16 CmM <sub>7</sub> <sup>(9)</sup>	17 Cdim
18 Cdim <sub>7</sub> * *	19 C <sub>7</sub> * * ®	20 C <sub>7sus4</sub>	21 C7 <sup>(b5)</sup>	22 C7 <sup>(9)</sup>	23 C7 <sup>(#11)</sup>
24 C7 <sup>(13)</sup>	25 C7 <sup>(b9)</sup>	26 C7 <sup>(b13)</sup>	27 C <sub>7</sub> (#9)	28 CM <sub>7aug</sub>	29 C <sub>7aug</sub>
30 Csus <sub>4</sub>	31 C1+2+5				⊛are optional without them

#### 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.

#### 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:

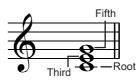
Major Triad	A root with a major third added above and a perfect fifth will consist as a Major Triad.
Minor Triad	A root with a minor third added above and a perfect fifth will consist as a Minor Triad.
Augmented Triad	A root with a major third added above and an augmented fifth will consist as an Augmented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

#### 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.

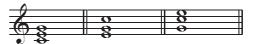




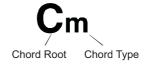
Major Triad Minor Triad



Augmented Triad Diminished Triad



Root Position First Inversion Second Inversion



### Memory

#### There are 6 memories(M1~M6) at all.

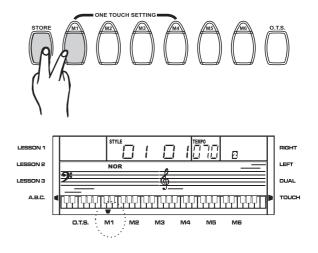
- 1. Press and hold [STORE], press [M1] ( or [M2] [M6] ) meanwhile. The data will be stored into M1 (M2-M6).
- **2.** The data which can be stored into the memory are as follows:

VOICE DATA

VOICE: VOICE 1, VOICE 2;

VOICE EFFECT: TOUCH ON/OFF, SUSTAIN ON/OFF, TRANSPOSE, OCTAVE, SPLIT POINT;

ACCOMP DATA STYLE NUMBER, TEMPO, A.B.C ON/OFF, NORMAL/ VARIATION STATUS.



#### 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**

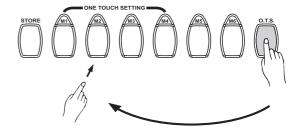
When One Touch Setting is switched on, you can instantly recall all auto accompaniment related settings including voices selection and digital effects simply with a single touch of a button. In this function, 4 types of parameters (M1~M4) will be loaded for operating the current style.

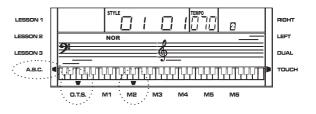
 Press [O.T.S.] button to turn this mode on and the O.T.S. flag on the LCD will be lightened. Press any of the [M1] ~ [M4] buttons, the relative type

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.



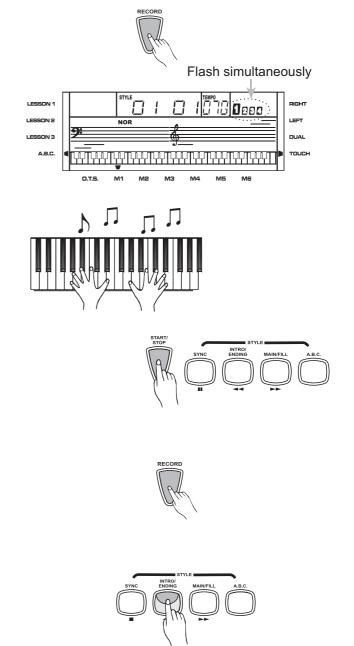


### **Start Recording**

1. Press the [RECORD] button, the four-beat on the LCD will flash simultaneity, 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 [SONG] button, use numeric keypads or the [+/YES] / [-/NO] button to select the 101songs. The recorded data will be played.

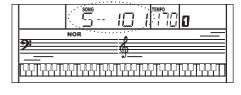
#### NOTE:

If you power off the keyboard, the recorded data would be erased.

If you would like to quit the recorded song play mode, you could use numeric keypads or the [+/YES] / [-/NO] button to choose other songs.

Then it will enter to song mode automatically.





### **Function Menu**

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

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 **[+/YES]** / **[-/NO]** 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
TRANSPOSE	XPS 00	-66	0
OCTAVEOCT	OCT 00	-11	0
BEATBET	BET 04	0, 29	4
SPLIT PTSPT	SPT 19	161	19( <sup>#</sup> F3)
MIDI OUT	CHO 01	0116	01
BANK SELECT	BNK 01	01128	01

#### Transpose

Press **[FUNCTION]** button to enter the TRANSPOSE sub-menu. The LCD displays the current transpose value.

Use [+/YES] / [-/NO] to adjust the transpose value from -6 to 6 semitones, only for the right area of the keyboard.

Press the **[+/YES]** and **[-/NO]** button together to set the transpose value back to its default.

#### Octave

Press the **[FUNCTION]** button to enter the OCTAVE sub-menu. The LCD displays the current octave value.

Use **[+/YES]** / **[-/NO]** to adjust the octave value from -1 to 1 octaves, only for the right area of the keyboard.

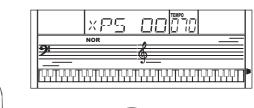
Press [+/YES] and [-/NO] keys together to set the octave value back to its default.

#### Beat

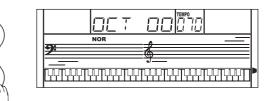
Press the **[FUNCTION]** button to enter the BEAT sub-menu.

The LCD displays the current beat value.

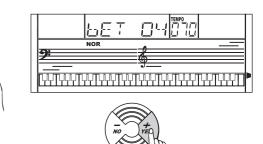
Use **[+/YES]** / **[-/NO]** to select the beat value. The beat value includes: 0, 2-9, 9 types of value.









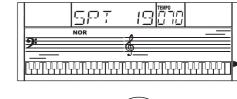


#### Split Point

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

Use **[+/YES]** / **[-/NO]** 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.

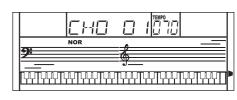




#### MIDI OUT

TRANSMIT can be used to set the channel of MIDI OUT. Channel 1-16 can be selected by pressing **[+/YES]** / **[-/NO]** button.

The default setting is 001.

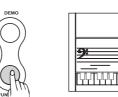


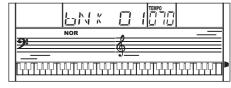


#### **Bank Select**

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.





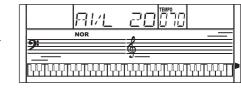


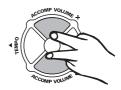
#### Accomp Volume

Press **[ACCOMP VOLUME+]** / **[ACCOMP VOLUM-]** button to enter ACCOM VOLUME menu. The LCD displays the accomp volume value which ranges between 0 and 31.(Default accomp volume value is 20) Use **[ACCOMP VOLUME+]** to adjush the accomp volume value.

Press [ACCOMP VOLUME+] and [ACCOMP VOLUM-] together will set the accomp volume value to off.







### 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 **[+/YES]** / **[-/NO]** button or numeric keypad to select your desired song.

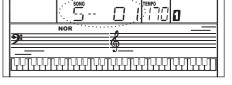
#### 4. REW, FF and PAUSE

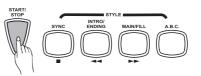
When a song is playing, press **[FF]** button to fast forward the song;

Press **[REW]** to rewind the song (base on the measure); Press **[PAUSE]** to pause the song.

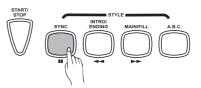
When the song is stopped, press **[STYLE]**, **[VOICE]**, **[DUAL]** to exit the song mode.









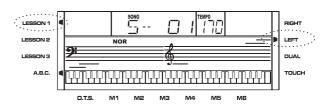


#### **Lesson Mode**

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.

- 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 togther.





#### NOTE:

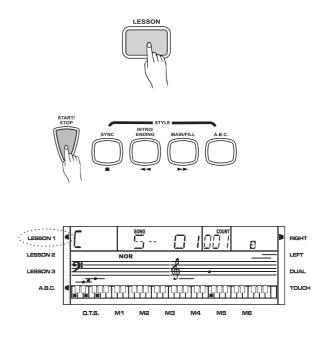
The contents for practising with left hand varied according to different types of songs. If you choose a chord song, the left hand practices the chord, otherwise, the left hand will be used to practise the melody. When a song is playing, the notes and keyboard displayed on the LCD indicate the melody 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.

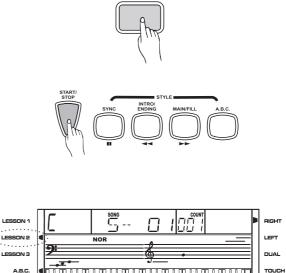
### Lesson 1-Practice an timing

- 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/CHORD]** 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

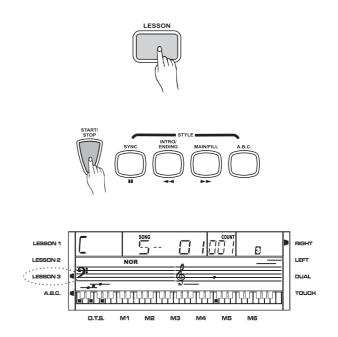
- Press [LESSON] button again to enter the LESSON 2 mode. Evaluation is based on the accuracy of notes playing. Accuracy of time value will not be considered as the song could keep going only if the correct note is played.
- 2. Press [START/STOP] button to begin.
- 3. If [R] is selected, only the left 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.





### Lesson 3-Melody off

- Press [LESSON] button in LESSON 2 to enter the LESSON 3 mode.
  In this mode, evaluation is based on the correctiveness 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.

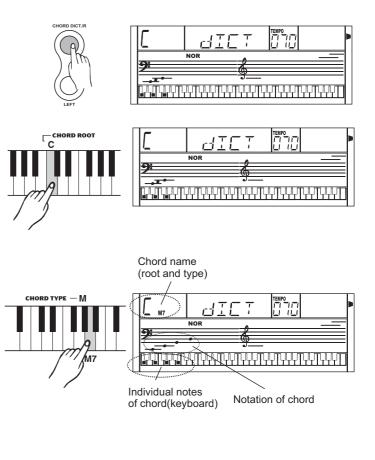
### Chord Dictionary

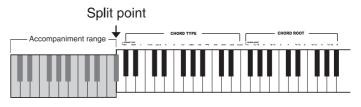
If you know the name of a chord but don't know how to play it, you can use the Chord Dictionary function.

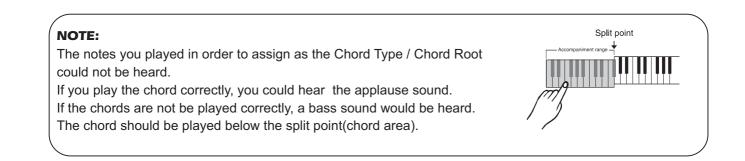
- Press [CHORD DICT./R] button to enter the DICT mode. The LCD shows " dict ". In this mode, the keyboard notes in the right area can be played to assign the Chord Type and the Chord Root.
- 2. For example, if we want to play a Cm7 Chord. Press the C key in the section of the keyboard labeled Chord Root. (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.

- 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.
- 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 on the right:
- Some fingerings may be recognised as different chords by A.B.C., eg. B6、 bB6、 B6(9)、 bB6 (9)、 Baug、 bBaug、 bBm6、 Bm6、 Adim7、 bBdim7、 Bdim.







### **MIDI Function**

#### 1. WHAT'S MIDI

#### MIDI

Musical Instrument Digital Interface. The standard interface between PC and Electronic instrument.

This keyboard is equipped with standard MIDI interface, including 1 MIDI IN and 1 MIDI OUT.

CONNECTION

This keyboard can be connected with PC or other MIDI equipment.

#### 2. MIDI CONNECTION CONNECTION RULE

a. In midi connection, the equipment which control another equipment is called Host equipment, while another is called affiliated equipment.

b. The host equipment's MIDI OUT connects with affiliated equipment's MIDI IN

c. Note that MIDI OUT cannot connect with MIDI IN on the same equipment.

THE METHOD OF CONNECTION Connect the MIDI interface with PC.

#### 3. MAJOR APPLICATION

This keyboard can control other equipment or electronic instrument

Other equipment can also control the keyboard. (The valid MIDI information see MIDI IMPLEMENTATION CHART)

 $\ensuremath{\mathsf{PC}}$  recorded data (MIDI) can be played on the keyboard.

### **Specifications**

LCD display	Multi-functional LCD
Keys	61 keys with Touch Response
Polyphony	32-note polyphony(max)
Voice	157 Voices
Style	100 Styles
Demo Song	100 Songs; 2 Demos
Control button	Volume Knob, Accomp volume +/-, Tempo +/-, Chord DICTR, LEFT, Lesson, Voice, Style, Song, O.T.S., M1-M6, Store, Start/Stop, Sync, Intro/Ending, Main/Fill, A.B.C., Record, Dual, Touch, Sustain, Metro, Demo, +/YES, -/NO, Piano
Accompaniment Control	Start/Stop, Sync, Intro/Ending, Main/Fill
Song Control	Start/Stop ►■ , Pause ■ , Rew ◄◄ , FF ►►
Record Function	Record
Panel Memory	6 Memory Storage
Power Supply	<del></del> 12V
Connectors	AC Power, Headphones, Sustain, AUX OUT, MIDI OUT
Speaker	4Ω 5w x 2
Dimension	990(L)x350(W)x150(H)mm
Weight	5.3kg(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

NO	Name
	PIANO
01	Grand Piano
02	Bright Piano
03	El Grd Piano
04	Honky-Tonk Piano
05	Elec Piano 1
06	Elec Piano 2
07	Harpsichord
08	Clavi
	MALLET
09	Celesta
10	Glockenspiel
10	Music Box
12	Vibraphone
13	Marimba
13	1
14	Xylophone Tubular Bell
	4
16	Santur
17	ORGAN
17	Drawbar Organ
18	Jazz Organ
19	Rock Organ
20	Church Organ
21	Reed Organ
22	Accordion
23	Harmonica
23 24	Tango Accordion
24	Tango Accordion GUITAR
24 25	Tango Accordion <b>GUITAR</b> Classic Guitar
24 25 26	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar
24 25 26 27	Tango Accordion GUITAR Classic Guitar Steel Guitar Jazz Guitar
24 25 26 27 28	Tango Accordion GUITAR Classic Guitar Steel Guitar Jazz Guitar Clean Guitar
24 25 26 27 28 29	Tango Accordion GUITAR Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar
24 25 26 27 28 29 30	Tango Accordion GUITAR Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar
24 25 26 27 28 29 30 31	Tango Accordion GUITAR Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar
24 25 26 27 28 29 30	Tango Accordion GUITAR Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar Guitar Harmonics
24 25 26 27 28 29 30 31 32	Tango Accordion GUITAR Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar Guitar Harmonics BASS
24 25 26 27 28 29 30 31 32 33	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass
24 25 26 27 28 29 30 31 32 33 33 34	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass
24 25 26 27 28 29 30 31 32 33 33 34 35	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass
24 25 26 27 28 29 30 31 32 33 33 34 35 36	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass Fretless Bass
24 25 26 27 28 29 30 31 32 33 33 34 35 36 37	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Overdriven Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Finger Bass Firetless Bass Slap Bass 1
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass Fretless Bass Slap Bass 1 Slap Bass 2
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass Fretless Bass Slap Bass 1 Slap Bass 1 Synth Bass 1
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Overdriven Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass Fretless Bass Slap Bass 1 Slap Bass 2 Synth Bass 2
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass Fretless Bass Slap Bass 1 Slap Bass 2 Synth Bass 2 Synth Bass 2 <b>STRINGS</b>
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Distortion Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass Fretless Bass Slap Bass 1 Slap Bass 2 Synth Bass 2 Strings
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Overdriven Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass Fretless Bass Slap Bass 1 Slap Bass 2 Synth Bass 3 Synth Bass 2 Synth Bass 3 Synth Bass 2 Synth Bass 3 Synth Bass
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Overdriven Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass Fretless Bass Slap Bass 1 Slap Bass 2 Synth Bass 1 Synth Bass 2 STRINGS Violin Viola Cello
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Overdriven Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass Fretless Bass Slap Bass 1 Slap Bass 2 Synth Bass 2 South Bass 2 South Bass 3 Guitar Harmonics Cello Contrabass
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Overdriven Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass Firetless Bass Slap Bass 1 Slap Bass 2 Synth Bass 3 Sign Bass 1 Some and a some an
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Overdriven Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass Fretless Bass Slap Bass 1 Slap Bass 2 Synth Bass 3 Siap Bass 1 Slap Bass 1 Slap Bass 1 Slap Bass 2 Synth Bass 2 Synth Bass 2 Synth Bass 2 Synth Bass 3 Tremolo Strings Pizzcato Strings
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45	Tango Accordion <b>GUITAR</b> Classic Guitar Steel Guitar Jazz Guitar Clean Guitar Muted Guitar Overdriven Guitar Overdriven Guitar Guitar Harmonics <b>BASS</b> Acoustic Bass Finger Bass Picked Bass Firetless Bass Slap Bass 1 Slap Bass 2 Synth Bass 3 Sign Bass 1 Some and a some an

STRING ENSEMBLE		
49	Strings 1	
50	Strings 2	
51	Synth Strings 1	
52	Synth Strings 2	
53	Choir Aahs	
54	Voice Ooh	
55	Synth Voice	
56	Orchestra Hit	
	BRASS	
57	Trumpet	
58	Trombone	
59	Tuba	
60	Muted Trumpet	
61	Horn	
62	Brass Ensemble	
63	Synth Brass 1	
64	Synth Brass 2	
	REED	
65	Soprano Sax	
66	Alto Sax	
67	Tenor Sax	
68	Baritone Sax	
69	Oboe	
70	English Horn	
71	Bassoon	
72	Clarinet	
	PIPE	
73	Piccolo	
74	Flute	
75	Recorder	
76	Pan Flute	
77	Blown Bottle	
78	Shakuhachi	
78 79	Shakuhachi Whistle	
78	Shakuhachi Whistle Ocarina	
78 79 80	Shakuhachi Whistle Ocarina LEAD	
78 79 80 81	Shakuhachi Whistle Ocarina <b>LEAD</b> Square	
78 79 80 81 82	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth	
78 79 80 81 82 83	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth Calliope	
78 79 80 81 82 83 84	Shakuhachi Whistle Ocarina LEAD Square Sawtooth Calliope Chiff	
78 79 80 81 82 83 83 84 85	Shakuhachi Whistle Ocarina LEAD Square Sawtooth Calliope Chiff Charang	
78 79 80 81 82 83 83 84 85 86	Shakuhachi Whistle Ocarina LEAD Square Sawtooth Calliope Chiff Charang Voice	
78 79 80 81 82 83 84 85 86 87	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth Calliope Chiff Charang Voice Fifths	
78 79 80 81 82 83 83 84 85 86	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth Calliope Chiff Charang Voice Fifths Bass Lead	
78 79 80 81 82 83 84 85 86 86 87 88	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth Calliope Chiff Charang Voice Fifths Bass Lead <b>PAD</b>	
78 79 80 81 82 83 84 85 86 87 88 88 89	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth Calliope Chiff Charang Voice Fifths Bass Lead <b>PAD</b> Fantasia	
78 79 80 81 82 83 84 85 86 87 88 88 90	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth Calliope Chiff Charang Voice Fifths Bass Lead <b>PAD</b> Fantasia Warm	
78 79 80 81 82 83 84 85 86 87 88 87 88 89 90 91	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth Calliope Chiff Charang Voice Fifths Bass Lead <b>PAD</b> Fantasia Warm Poly Synth	
78 79 80 81 82 83 84 85 86 87 88 88 90	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth Calliope Chiff Charang Voice Fifths Bass Lead <b>PAD</b> Fantasia Warm	
78 79 80 81 82 83 84 85 86 87 88 87 88 89 90 91	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth Calliope Chiff Charang Voice Fifths Bass Lead <b>PAD</b> Fantasia Warm Poly Synth	
78 79 80 81 82 83 84 85 86 87 88 88 89 90 91 92	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth Calliope Chiff Charang Voice Fifths Bass Lead <b>PAD</b> Fantasia Warm Poly Synth Choir	
78     79     80     81     82     83     84     85     86     87     88     90     91     92     93     94	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth Calliope Chiff Charang Voice Fifths Bass Lead <b>PAD</b> Fantasia Warm Poly Synth Choir Bowed Metallic	
78     79     80     81     82     83     84     85     86     87     88     90     91     92     93	Shakuhachi Whistle Ocarina <b>LEAD</b> Square Sawtooth Calliope Chiff Charang Voice Fifths Bass Lead <b>PAD</b> Fantasia Warm Poly Synth Choir Bowed	

	EFFECTS
97	Rain
98	SoundTrk
99	Crystal
100	Atmosphr
101	Bright
102	Goblins
103	Echoes
104	Sci-Fi
	ETHNIC
105	Sitar
106	Banjo
107	Shamisen
108	Koto
109	Kalimba
110	Bag Pipe
111	Fiddle
112	Shanai
	PERCUSSIVE
113	Tinkle Bell
113 114	
	Tinkle Bell
114	Tinkle Bell Agogo
114 115	Tinkle Bell Agogo Steel Drums
114 115 116	Tinkle Bell Agogo Steel Drums Woodblock
114 115 116 117	Tinkle Bell Agogo Steel Drums Woodblock Taiko Drum
114 115 116 117 118	Tinkle Bell Agogo Steel Drums Woodblock Taiko Drum Melodic Tom
114   115   116   117   118   119   120	Tinkle Bell Agogo Steel Drums Woodblock Taiko Drum Melodic Tom Synth Drum Reverse Cymbal UND EFFECTS
114   115   116   117   118   119   120	Tinkle Bell Agogo Steel Drums Woodblock Taiko Drum Melodic Tom Synth Drum Reverse Cymbal
114 115 116 117 118 119 120 <b>SO</b>	Tinkle Bell Agogo Steel Drums Woodblock Taiko Drum Melodic Tom Synth Drum Reverse Cymbal UND EFFECTS
114   115   116   117   118   119   120   SO   121	Tinkle Bell Agogo Steel Drums Woodblock Taiko Drum Melodic Tom Synth Drum Reverse Cymbal <b>UND EFFECTS</b> Gt Fret Noise
114 115 116 117 118 119 120 <b>SO</b> 121 122	Tinkle Bell Agogo Steel Drums Woodblock Taiko Drum Melodic Tom Synth Drum Reverse Cymbal UND EFFECTS Gt Fret Noise Breath Noise
114 115 116 117 118 119 120 <b>SO</b> 121 122 123	Tinkle Bell Agogo Steel Drums Woodblock Taiko Drum Melodic Tom Synth Drum Reverse Cymbal <b>UND EFFECTS</b> Gt Fret Noise Breath Noise Seashore
114 115 116 117 118 119 120 <b>SO</b> 121 122 123 124	Tinkle Bell Agogo Steel Drums Woodblock Taiko Drum Melodic Tom Synth Drum Reverse Cymbal <b>UND EFFECTS</b> Gt Fret Noise Breath Noise Seashore Bird Tweet
114     115     116     117     118     119     120     SO     121     122     123     124     125	Tinkle Bell Agogo Steel Drums Woodblock Taiko Drum Melodic Tom Synth Drum Reverse Cymbal <b>UND EFFECTS</b> Gt Fret Noise Breath Noise Breath Noise Seashore Bird Tweet Telephone Ring

S	
129	70elep
130	Fzpiano
131	Ep3
132	Ep4
133	Ep5
134	Harppian
135	Clavr2
136	Clavr3
137	Organbox
138	Elorgan
139	Churc2
140	Synorgan
141	Altoel
142	Fzguitar
143	Synelgt
144	Picelbas
145	Elviolin
146	Brassfm
147	Fmlead
148	Fantalfo
149	Polyaa2
150	Bowedg2
151	70elpad
	DRUM SET
152	StdKit
153	PowerKit
154	DanceKit
155	808Kit
156	BrushKit
157	OrchKit

# Appendix 2- Style List

	8/16BEAT	
01	8 Beat 1	
02	8 Beat 2	
03	8 Beat 3	
04	8 Beat 4	
05	60's 8 Beat	
06	8 Beat Ballad	
07	8 Beat Rock	
08	16 Beat 1	
09	16 Beat 2	
10	16 Beat Pop	
11	16 Beat Shuffle	
12	Ballad	
13	Slow Ballad	
14	16 Beat Ballad	
15	Unplugged	
	ROCK	
16	Rock	
17	Pop Rock	
18	Fast Rock	
19	Slow Rock 1	
20	Slow Rock 2	
21	Rock & Roll	
22	Heavy Metal	
23	Blues Boogie	
24	Blues	
25	Shuffle	
26	Blues Shuffle	
27	Rock Shuffle	
28	Charlston	
DANCE		
29	Disco 1	
30	Disco 2	
31	Disco Funk	
32	Dance	
33	House 1	
34	House 2	
35	Rap	
36	Euro Beat	
37	Нір Нор	
38	Techno	

	SOUL & FUNK
39	Funky Pop
40	Jazz Funk
40	Cool Funky
41	,
	Soul 1
43	Soul 2
44	Soul Shuffle
45	Soul Blues
46	R & B
47	6/8 Gospel
48	Pop Groove
	JAZZ
49	Swing
50	Cool Jazz
51	Pop Swing
52	Swing Fox
53	Big Band
54	Big Band Meduim
55	Jazz Waltz
56	Ragtime
57	Dixeland
58	Quick Step
	COUNTRY
59	Country 1
60	Country 2
61	Pop Country
62	Country Rock
63	Country Folk
64	3/4 Country
65	Country Waltz
66	Country Shuffle
67	Country Boogie
	Country Blues
68	Country Quick Step
69	
70	Bluegrass
	LATIN
71	Bossa Nova 1
72	Bossa Nova 2
73	Rhumba
74	Pop Rhumba
75	Cha Cha
76	Pop Cha Cha
77	Tango
78	Jazz Samba
79	Reggae
80	Pop Reggae

	TRADITIONAL
81	March 1
82	March 2
83	German March
84	6/8 March
85	Polka
86	Pop Polka
87	Waltz
88	Slow Waltz
89	Vienna Waltz
90	Musette
	PIANO
91	8 Beat
92	Ballad
93	Boogie
94	Jazz
95	Swing
96	Jazz Waltz
97	Twist
98	March
99	6/8 March
100	Waltz

## Appendix 3- Song List

	01~14 CLASSICAL
01	Cannon
02	Thais Meditation
03	Old France
04	Minuet
05	Ode To Joy
06	Wiegenlied
07	"The 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
	15~40 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 37	The Blue-Bells Of Scotland O'Solo Mio
	Jingle Bells
38	Battle Hymne Of The Republic
39	Silent Night
40	-
41	41~66 FOLK
41	Oronek Aula Lee
42	House Of The Rising Son
43	Danny Boy
44	I've Been Working On The Railroad
46	In The Rain
40	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			
	Michael Row The Boat Ashore			
56 57				
	Old King Cole			
58 59	Jamaica Farewell Тройка			
-	Тройка Cielito Lindo			
60				
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			
	67~80 KID			
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			
	81~85 BALLROOM			
81	Examine one Gram of Dance Musical in The storehouse			
82 83	Samba Tango Of Cuba			
84	Russian			
85	Polka			
	86~100 PIANO & KEYBOARD			
86	Four Little Swans			
87	Did You Ever See a Lassie			
88	Spring			
89 90	Impromptu Covetto			
90 91	Gavotte Nocturne			
92	Pizzicato Polka			
93	Musical Moments			
94	Reggae			
95	All Kind Of My Everything			
96	Valse No.6 "Petit Chien"			
97 98	Rondeau Chrysanf			
90 99	Chrysanf Invention a 2 Voix			
100	Jesus, Saviour Pilot me			

### Appendix 4- Demo List

Number	Name
01	Little Brown Jug
02	Cha Cha

### Appendix 5- Chord List

Chord Name/[Abbreviation]	Normal Voicing	Chord(C)	DISPLAY
Major [M]	1-3-5	С	С
Sixth [6]	1-(3)-5-6	C6	C6
Major seventh[M7]	1-3-(5)-7	CM7	CM7
Major add ninth [M(9)]	1-2-3-5	CM(9)	CM (9)
Augmented [aug]	1-3-#5	Caug	Caug
Minor [m]	1-b3-5	Cm	Cm
Minor sixth [m6]	1-b3-5-6	Cm6	Cm6
Minor seventh [m7]	1-b3-(5)-b7	Cm7	Cm7
Minor seventh flatted fifth [m7b5]	1-b3-b5-b7	Cm7b5	Cm7b5
Minor major seventh [mM7]	1-b3-(5)-7	CmM7	CmM7
Diminished [dim]	1-b3-b5	Cdim	Cdim
Diminished seventh [dim7]	1-b3-b5-6	Cdim7	Cdim7
Seventh [7]	1-3-(5)-b7	C7	C7
Seventh suspended fourth [7sus4]	1-4-5-b7	C7sus4	C7sus4
Seventh add thirteenth [7 (13)]	1-3-(5)-6-b7	C7(13)	C7 (13)
Suspended Fourth [sus4]	1-4-5	Csus4	Csus4

**Appendix 6- MIDI List** 

Function		Transmitted	Recognized	Remarks
Basic	Default	1ch	ALL	
Channel	Changed	1-16ch	1-16ch	
	Default	Х	3	
Mode	Messages	Х	3	
	Altered	*****	Х	
Note		18-114	0127	
Number	True voice	******	0127	
Velocity :	Note on	O 9nH,V=1-127		
voloony.	Noteoff	X (9nH,V=0)	X (9nH,V=0; 8nH,V=0-127	
After	Keys	X	Χ	
Touch	Chs	X	X	
Pitch Bend		0	0	
Control	0	0	0	Bank Select
Change	1	x	0	Modulation
onange	5	X	0	Portamento Time
	6	0	0	Data Entry
	7	0	0	Volume
	10	X	0	Pan
	10	X	0	Expression
	64	0	0	Sustain Pedal
	65	x	0	Portamento ON/OFF
	66	X	0	Sostenuto Pedal
	67	×	0	Soft Pedal
			-	
	80 81	X X	0	Reverb Program
			0	Chorus Program
	91	X	0	Reverb Level
	93	X	0	Chorus Level
	120	X	0	All Sound Off
	121	X	0	ResetAll Controllers
	123	X	0	All Notes Off
Program		O *******	0	
Change :	true #		0127	
System Ex		X	0	
System	: Song Position	Х	Х	
Common	: Song Select	Х	Х	
	: Tune	Х	Х	
System	:Clock	Х	Х	
Real Time	:Commands	X *1	X *1	
	:LOCAL ON/OFF	Х	Х	
	:All Notes Off	Х	0	
-	:Active sense	Х	0	
:Reset		Х	0	
Note:		When accompanim When an FAH mess	niment is started, an FAH mess ent is stoped, an FCH message age is received, accompanimer sage is received, accompanimer	is transmitted. ht is started.

Mode 1: OMNI ON , POLYMode 2 : OMNI ON , MONO O: YESMode 3: OMNI OFF , POLYMode 4 : OMNI OFF , MONOX: NO