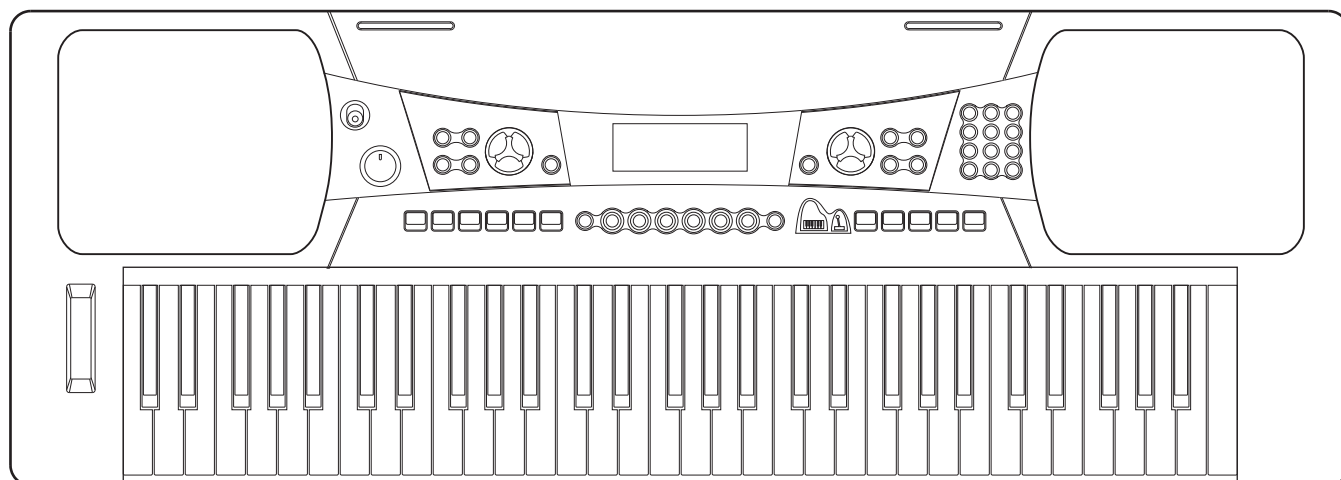# Electronic Keyboard

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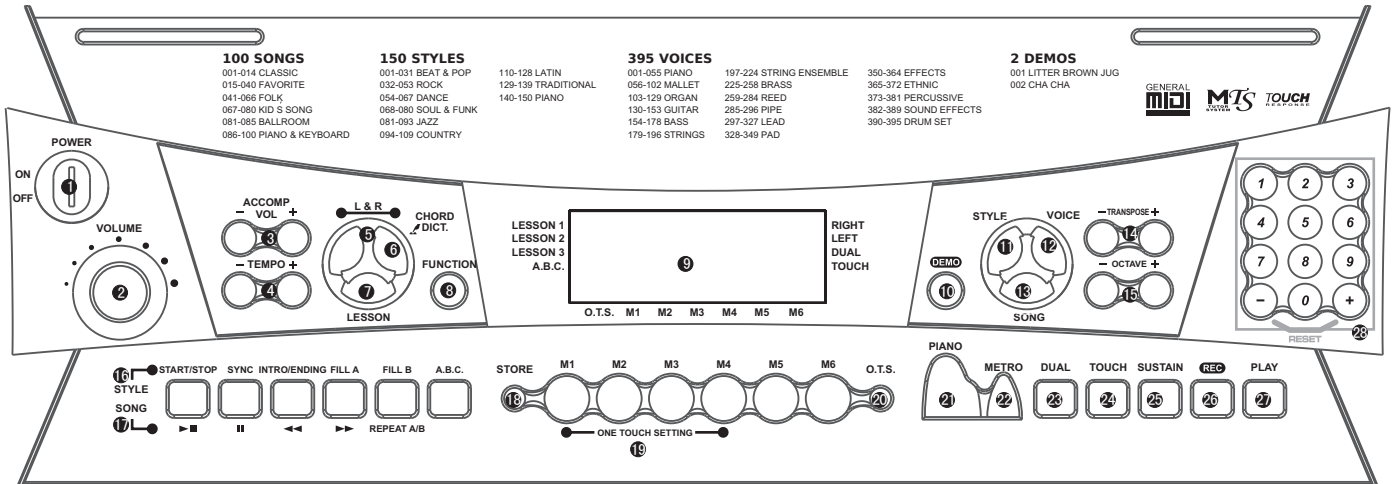 Sync，Start/Stop，Fill/A，Fill/B，Intro/Ending

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

Contents

General Guide

Front Panel

100 SONGS
001-014 CLASSIC
015-040 FAVORITE
041-066 FOLK
067-080 KID S SONG
081-085 BALLROOM
086-100 PIANO & KEYBOARD

150 STYLES
001-031 BEAT & POP
032-053 ROCK
054-067 DANCE
068-080 SOUL & FUNK
081-093 JAZZ
094-109 COUNTRY
110-128 LATIN
129-139 TRADITIONAL
140-150 PIANO

395 VOICES
001-055 PIANO
056-102 MALLET
103-129 ORGAN
130-153 GUITAR
154-178 BASS
179-196 STRINGS
197-224 STRING ENSEMBLE
225-258 BRASS
259-284 REED
285-296 PIPE
297-327 LEAD
328-349 PAD
350-364 EFFECTS
365-372 ETHNIC
373-381 PERCUSSIVE
382-389 SOUND EFFECTS
390-395 DRUM SET

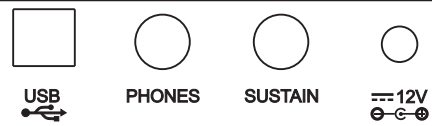**2 DEMOS**
001 LITTER BROWN JUG
002 CHA CHA

GENERAL MIDI   MTS   TOUCH

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 ►■
  -PAUSE ❚❚
  -REW ◄◄
  -FF ►►
  -REPEAT A/B

18. STORE
19. PANEL MEMORY
  -M1-M6
20. ONE TOUCH SETTING
21. PIANO
22. METRONOME
23. DUAL
24. TOUCH
25. SUSTAIN
26. RECORD
27. PLAY
28. NUMERIC KEYS
29. PITCH BEND

29 PITCH BEND

LCD Display

1. LESSON 1
2. LESSON 2
3. LESSON 3
4. A.B.C.
5. BEAT
6. VOLUEM
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.

USB   PHONES   SUSTAIN   ⎓12V
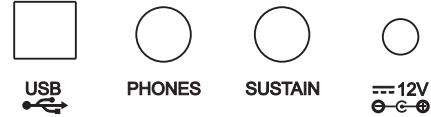
CAUTIONS!

- 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.
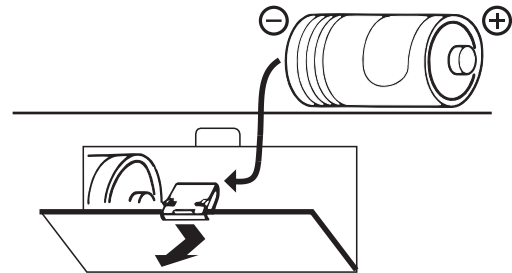
CAUTIONS!

- 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:
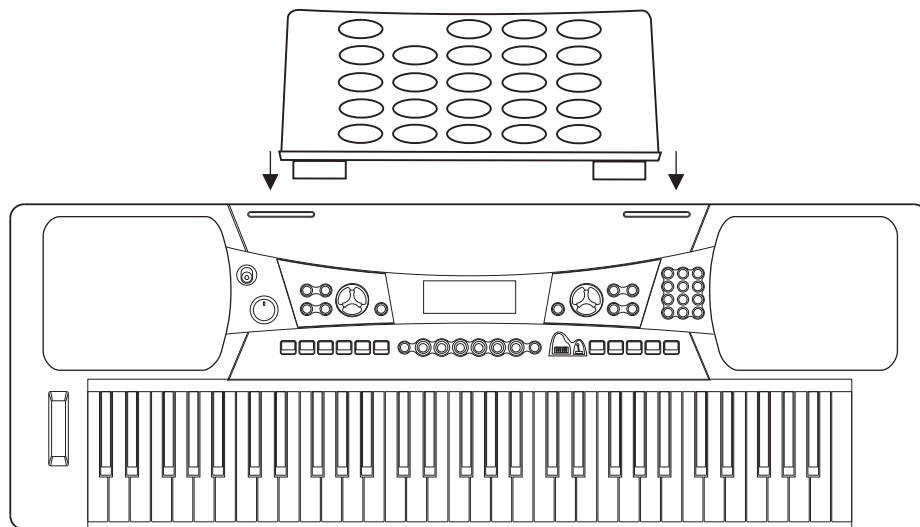
Connections

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.

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.

USB   PHONES   SUSTAIN   12V

Sustain Jack

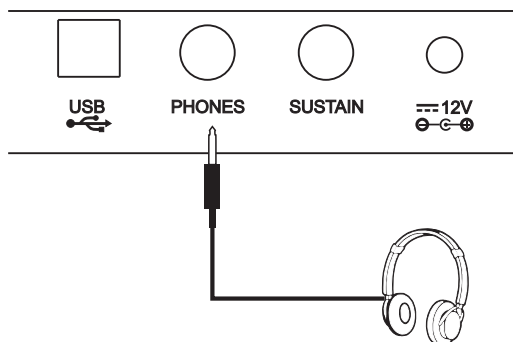1. An optional footswitch can be plugged into the SUSTAIN jack for sustain control.

2. The footswitch functions like the damper pedal of a piano. Press for sustain, release for normal sound.

USB PHONES SUSTAIN ===12V
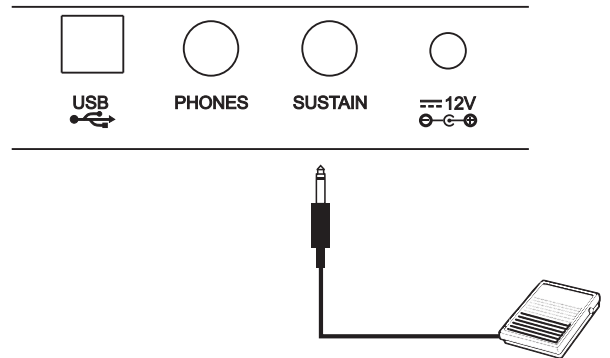
USB Jack

1. Connect PC or other USB host devices that support USB Audio.

USB

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.
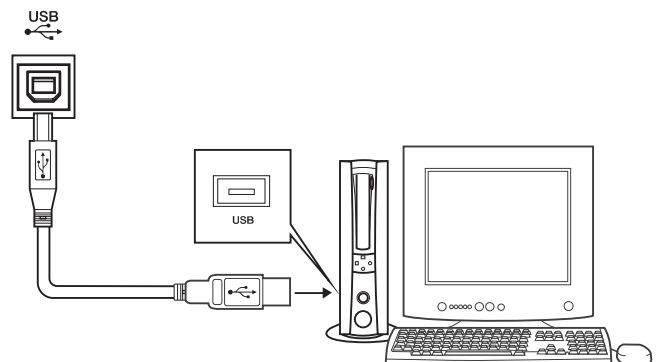
⚠ **WARNING**

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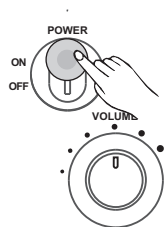
2. Turn the [POWER] switch on. The LCD display lights up.

> **NOTE:**
> - If the LCD display does not light up after you turned on the keyboard, please check the power supply.
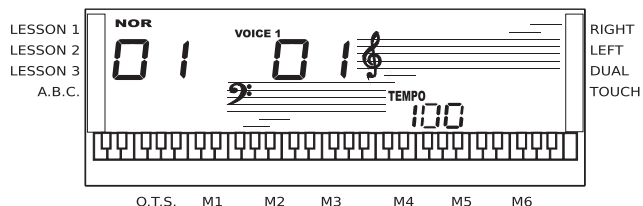
3. Rotate [VOLUME] button to adjust the volume.

> **NOTE:**
> - If the keyboard is silent, that means the volume has adjusted to its minimum level.
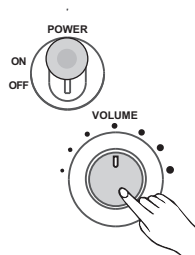
Demo

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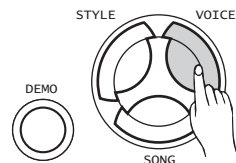
2. The [+] and [-] buttons:
Press [+] or [- button to choose your desired voice.
The selected voice number will be shown on the display.
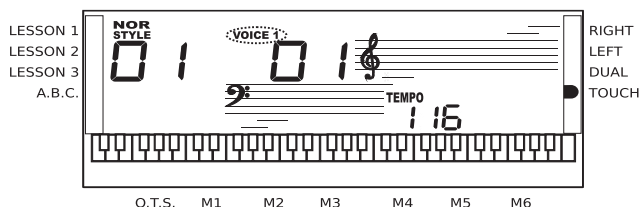
The number buttons:
The number buttons can be pressed directly to select
your desired voice.

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

Dual Voice

This keyboard has the "dual voice" function. This func-
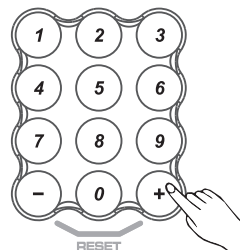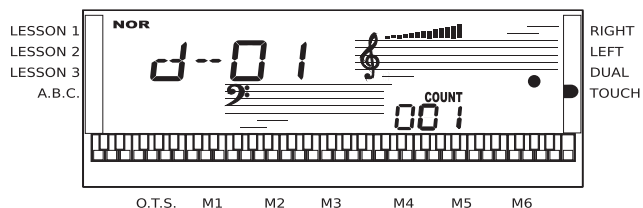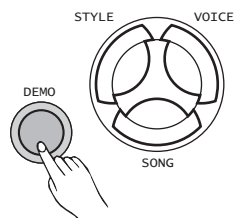tion is capable to enhance the delicacy of your music by
playing two voices of musical instruments simultaneously;
new combinations of voices and music could be created
then. When the dual function is off, the voice indicated
is VOICE 1, when the dual function is on, the voice indi-
cated would be VOICE 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
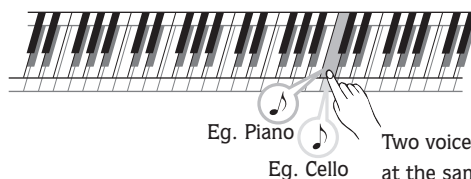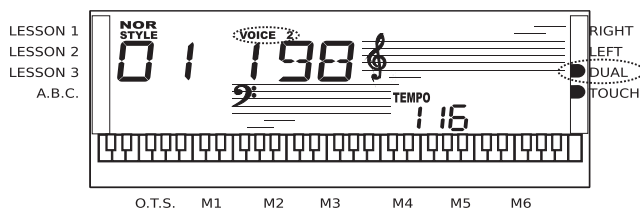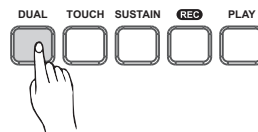
Two voice will sound
at the same time.

Voices and Effects

2. Press [+] / [-] button or numeric keypad to select your desired voice. The default DUAL VOICE number is NO.50 Strings2.

3. 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.
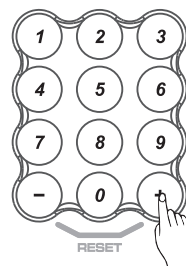
NOTE:
In DUAL VOICE status, only section above split point on keyboard has dual voice.

Sustain

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

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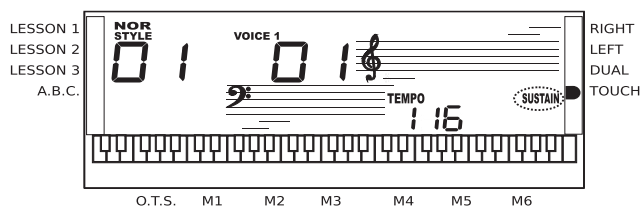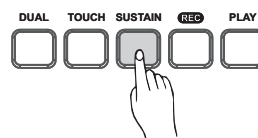
NOTE:
When you step on the sustain pedal, the sustain effect will be stronger than the effect produced by the [SUSTAIN] button.

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.
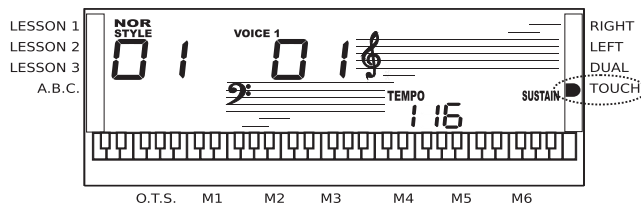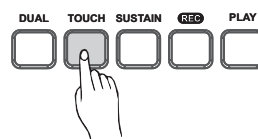
Metronome

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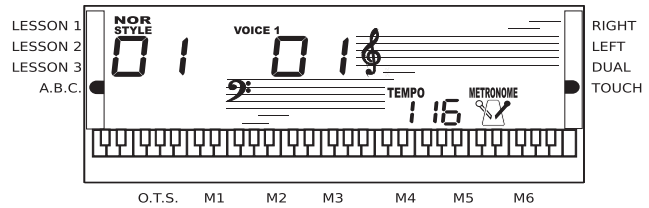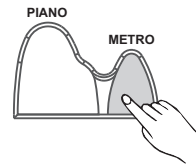
> **NOTE:**
> ● Metronome can be played along with the tempo as accompaniment whenever you turn on a style.
> Metronome could be played in the recording mode, but it would not be recorded.

Piano

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.
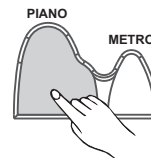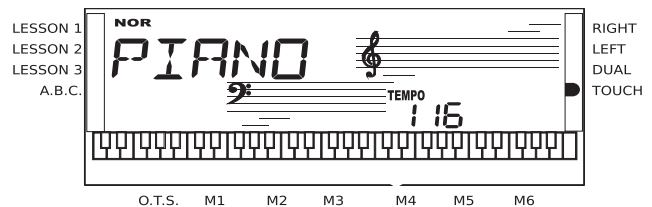
Pitch Bend Wheel

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.
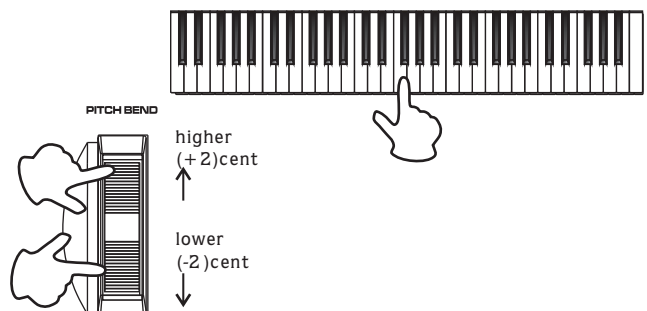
Transpose

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

1. Press [TRANSPOSE+] / [TRANSPOSE-]button to enter TRANSPOSE sub-menu.The LCD displays the current transpose value.

2. Use [TRANSPOSE+] / [TRANSPOSE-] to adjust the transpose value from +6 to -6 semitones only for the right area of the keyboard.

3. Press [TRANSPOSE+] and [TRANSPOSE-] together to set the default value:00.
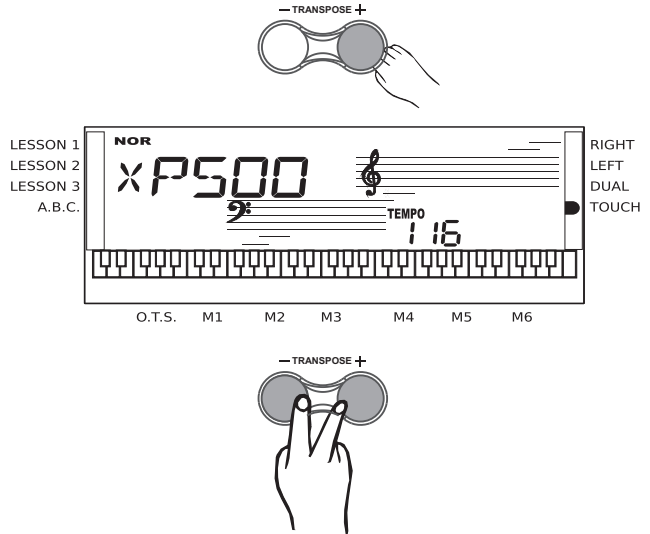
Octave

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 key-board.

3. Press [OCTAVE+] and [OCTAVE-] together to set the default value:00.
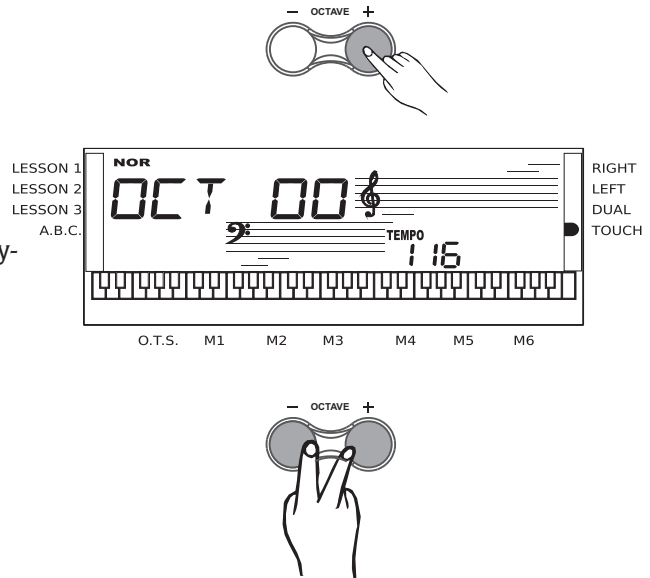
Style Control

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 [-O] 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.
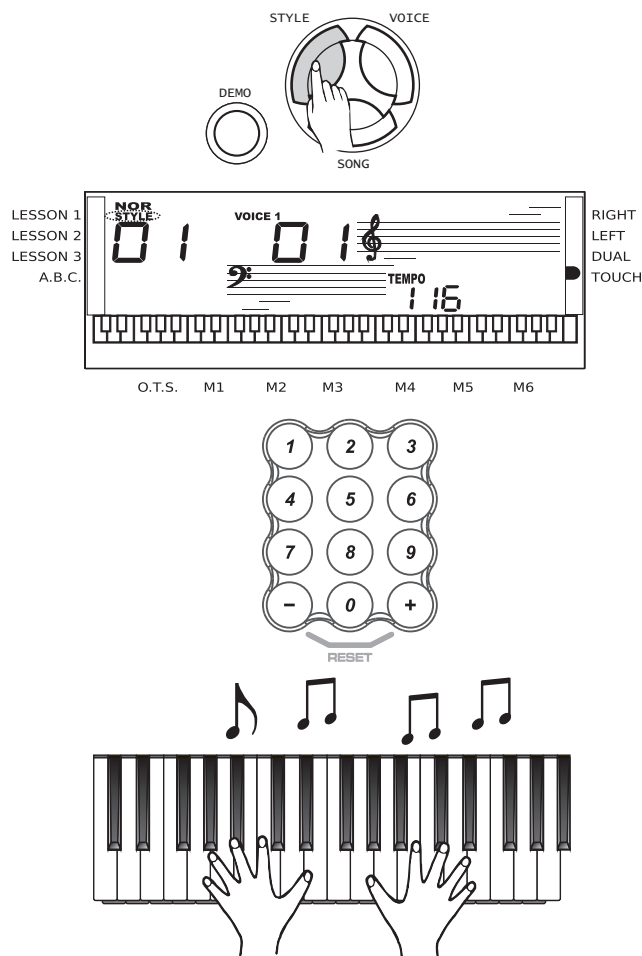
Start a Style

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.
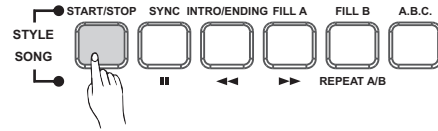
2. A.B.C. mode

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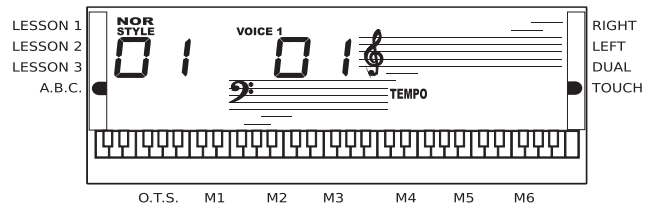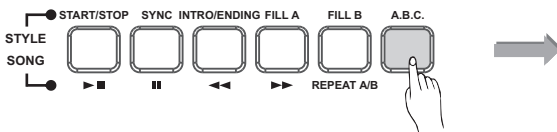
The left side of the split point is known as the chord area. When playing the chord, both the bass and the chord voices will be performed.
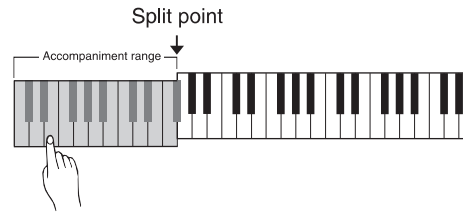
3. Sync Start

Press [SYNC] button to enter the sync start waiting mode. The beats on the LCD flash together.
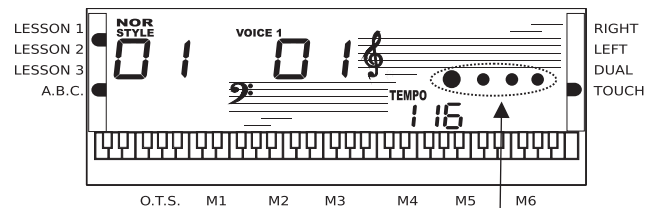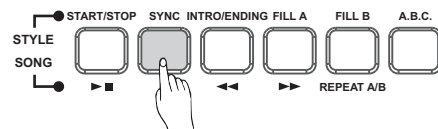
If the A.B.C. mode is on, play any key on the left section of the keyboard and the style starts playing with the bass and chord.
If the A.B.C. mode is off, play any key on the keyboard, and the style plays only the drum voice.
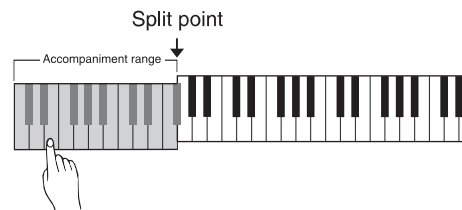
4. Intro Start:

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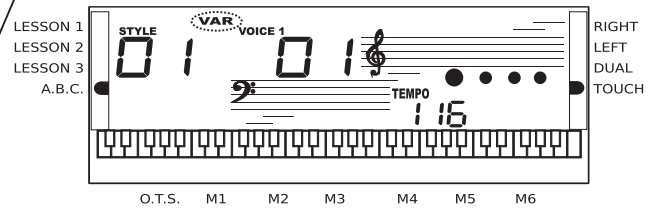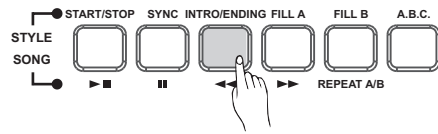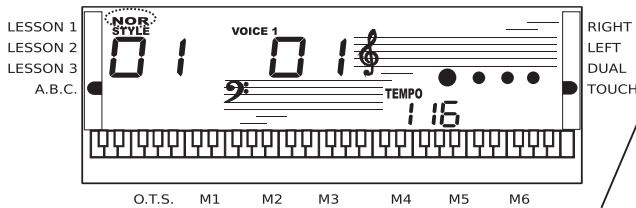
Press [START/STOP] button, then the style starts with an intro section, followed by the main section.
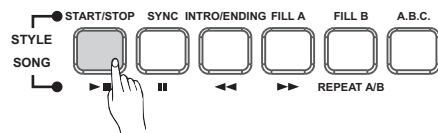
Fill A/ Fill B

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.
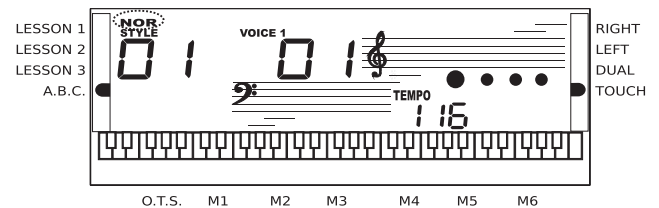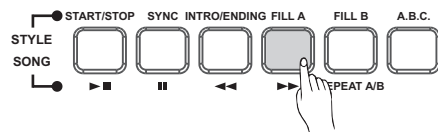
2. Press [FILL B] button to insert 1 ot 2 measure fill and LCD flashes 'VAR', After one measure is over, VIRIATION style will be returned.
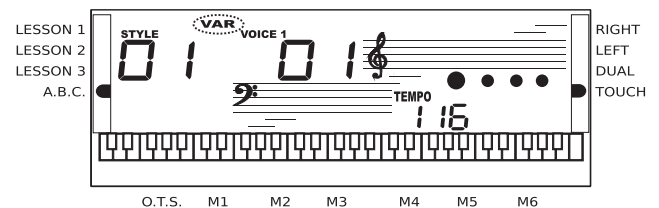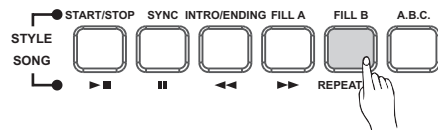
3. Press and hold down the [FILL A] or [FILL B] button, when the style is playing, the fill section will be played repeatedly.

Press and hold down
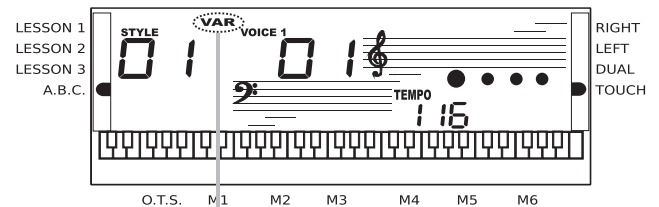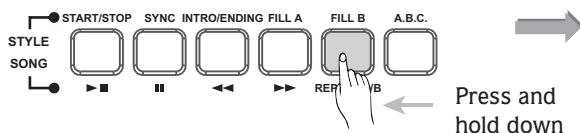
Flashing until button is released

Stop a Style

1. Stop immediately

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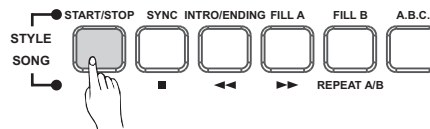
2. Ending stop

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.
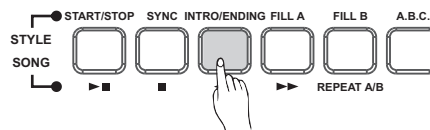
3. Sync stop

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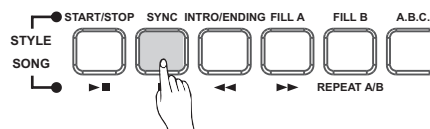
Tempo

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.
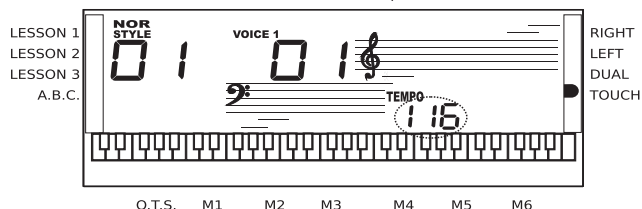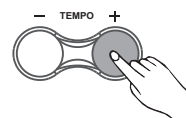
Accomp Volume

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.
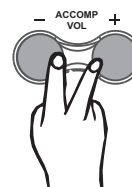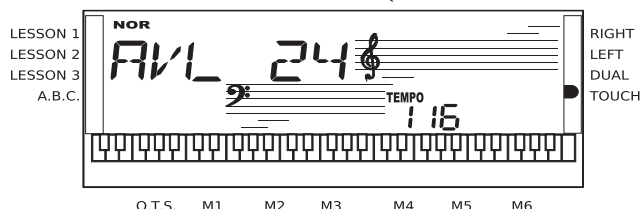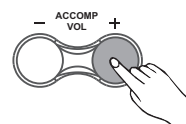
Chord Recognize

"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.

Root notes and the corresponding keys
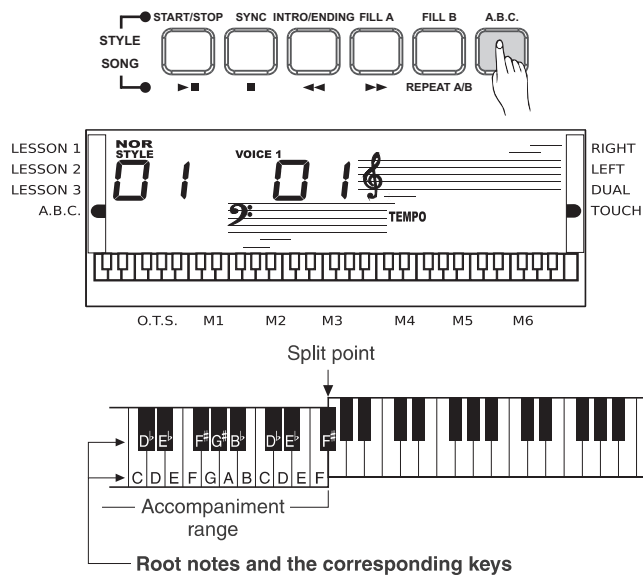
There are 2 ways to detect a chord: "single finger detect" and "multi fingers detect".

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.

C
★ Major Triad
Only press the root note on the keyboard.

Cm
★ Minor Triad
Press the root note and the nearest left black key simultaneously.

C7
★ Seventh chord
Press the root note and the nearest left white key simultaneously.

Cm7
★ Minor seventh chord
Press the root note and the nearest left white and black keys simultaneously.

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

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

0 C	1 C_6	2 CM_7	3 $CM_7(\#11)$	4 $CM(9)$	5 $CM_7^{(9)}$
6 $C_6^{(9)}$	7 Caug	8 Cm	9 Cm_6	10 Cm_7	11 $Cm_7^{(b5)}$
12 Cm(9)	13 $Cm_7^{(9)}$	14 $Cm_7^{(11)}$	15 CmM_7	16 $CmM_7^{(9)}$	17 Cdim
18 $Cdim_7$	19 C_7	20 C_{7sus4}	21 $C_7^{(b5)}$	22 $C_7^{(9)}$	23 $C_7^{(\#11)}$
24 $C_7^{(13)}$	25 $C_7^{(b9)}$	26 $C_7^{(b13)}$	27 $C_7^{(\#9)}$	28 CM_{7aug}	29 C_{7aug}
30 $Csus_4$	31 C_{1+2+5}				

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

● Chord Basics

A chord, in music, is any harmonic set of three or more notes that is heard as if sounding simultaneously. The most frequently encountered chords are triads. A triad is a set of three notes that can be stacked in thirds. When stacked in thirds, the triad's members, from lowest pitched tone to highest, are called: the Root, the Third, and the Fifth.
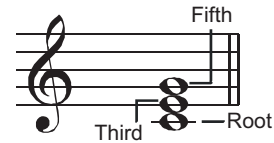
● Triad Type

There are following basic triad types:

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

Major Triad   Minor Triad

Augmented Triad   Diminished Triad

● 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.

Root Position   First Inversion   Second Inversion

● Chord Name

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

Cm

Chord Root   Chord Type
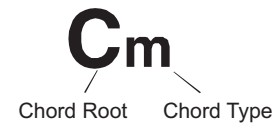
Memory

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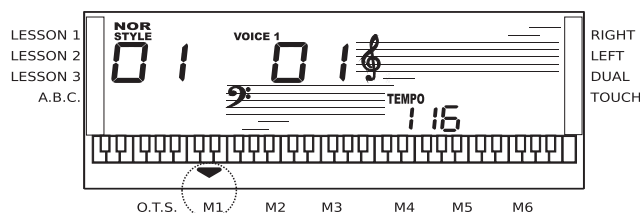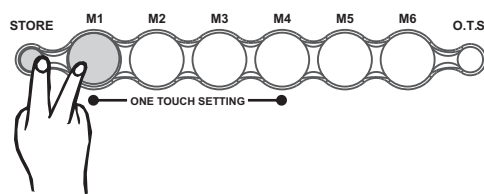
2. The data which can be stored into the memory are as
follows:
Voice , Sustain, Style, Tempo, ACCOMP volume ,Octave,
Transpose ,ABC,SPLIT POINT、VAR/NOR and TOUCH etc.

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

**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.**

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.
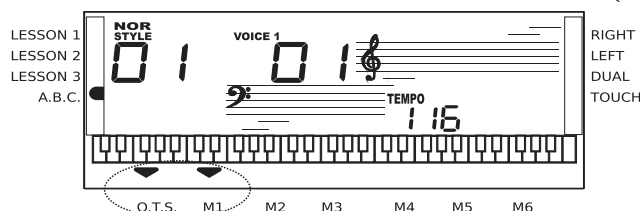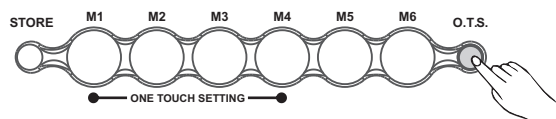
2. Press any of the M1-M4 buttons, which is corresponded
to your desired setting.
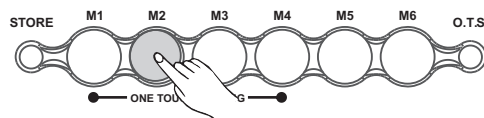
3. Press [O.T.S.] button again to turn off the O.T.S. Mode.
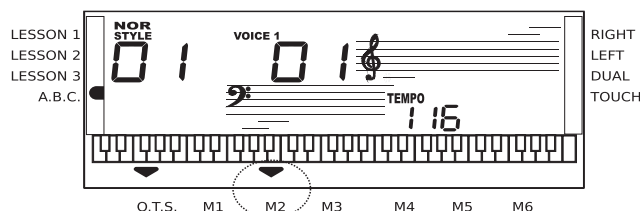
4. Press [O.T.S] to turn on the O.T.S mode, it will insert
a "Fill in" section automatically.

5. While you are recording or playbacking a recorded song,
press [M1~M4]button, no " FILL IN " be inserted .

21

Record

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.

LESSON 1   LESSON 2   LESSON 3   A.B.C.   NOR   STYLE   VOICE 1   RIGHT   LEFT   DUAL   TOUCH

TEMPO

O.T.S.   M1   M2   M3   M4   M5   M6

M3

Flash together
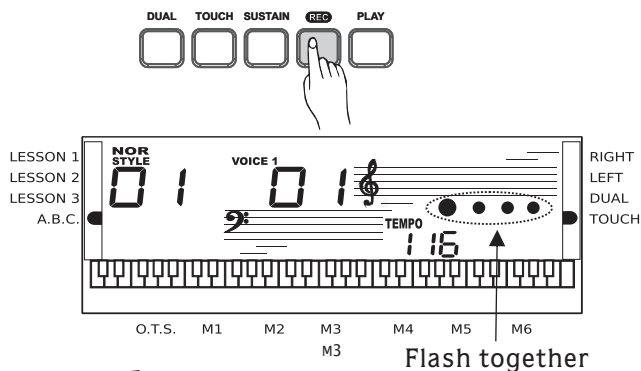
2. After all the settings in the "record waiting status" have been selected, play the keyboard (the chord area when recording ACCOMP) or press the [START/STOP] button; it will start recording and the beat will be displayed according to the current tempo.
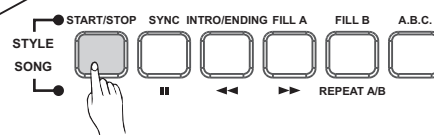
> **NOTE:**
> Once the recording of one track is started, the original data in the track will be overwritten.

START/STOP   SYNC   INTRO/ENDING   FILL A   FILL B   A.B.C.
STYLE
SONG

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".

LESSON 1   LESSON 2   LESSON 3   A.B.C.   NOR   FULL   RIGHT   LEFT   DUAL   TOUCH

TEMPO

O.T.S.   M1   M2   M3   M4   M5   M6

DUAL   TOUCH   SUSTAIN   REC   PLAY
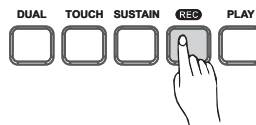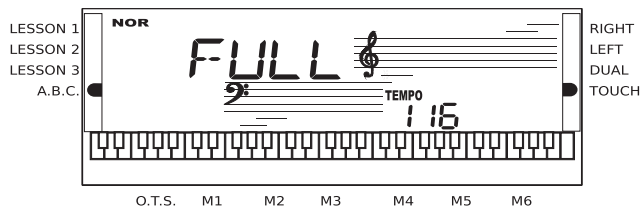
Playback the Recording

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

DUAL   TOUCH   SUSTAIN   REC   PLAY
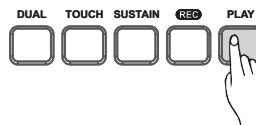
> **NOTE:**
> The record data can be saved when the keyboard turn off power.

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:
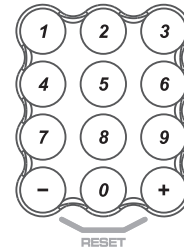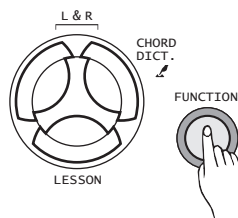
NOTE:

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.
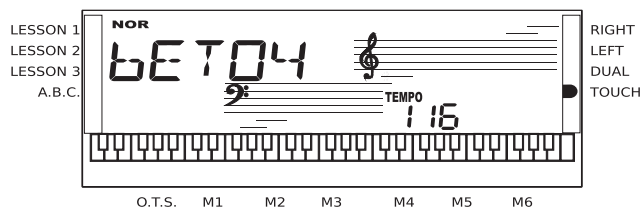
Split Point

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.
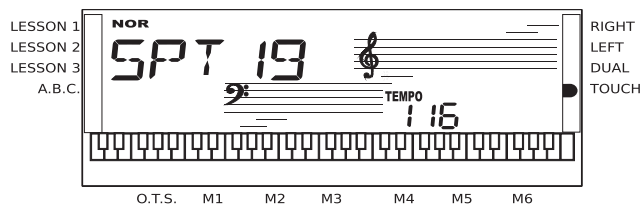
MIDI IN

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.
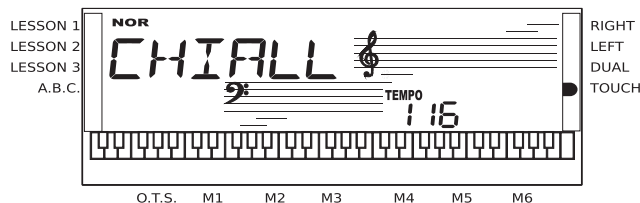
MIDI OUT

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.
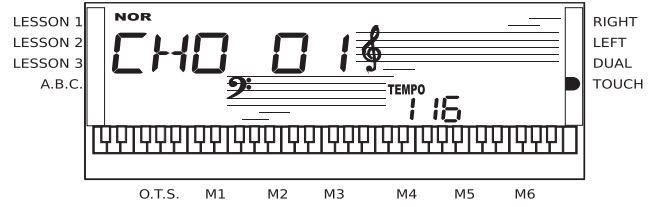
Bank Select

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.
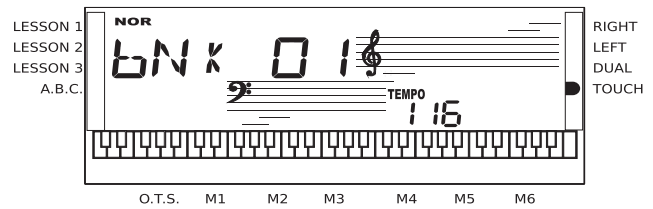
Song

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.
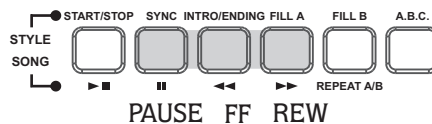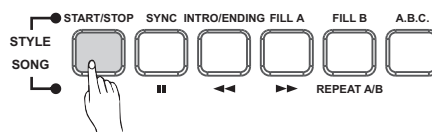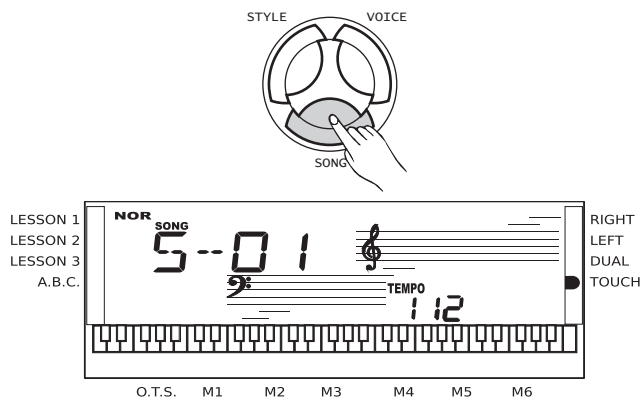
Lesson Mode

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 togther.
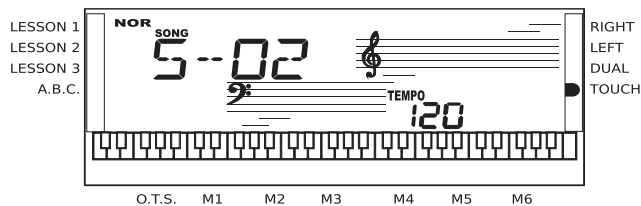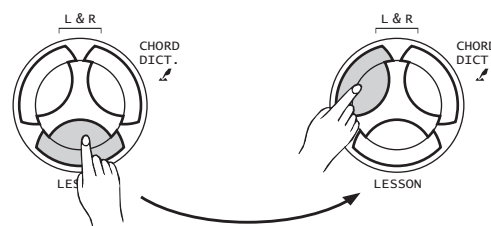
NOTE:

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

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.
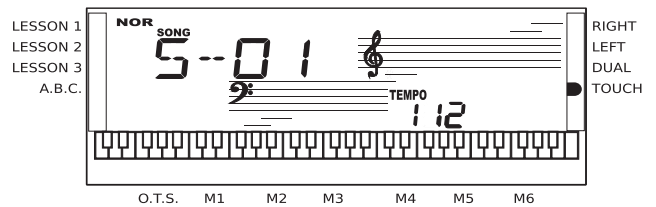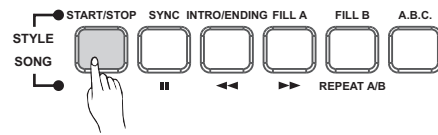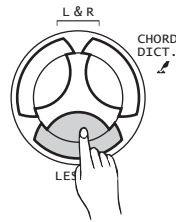
Lesson 2-Practice a note accuracy

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.
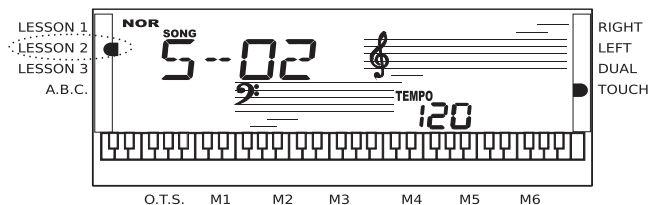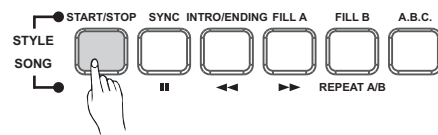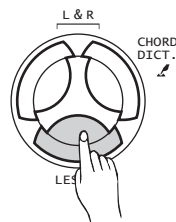
Lesson 3-Melody off

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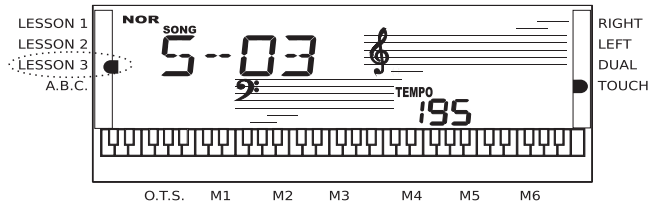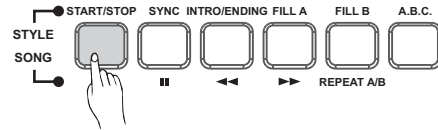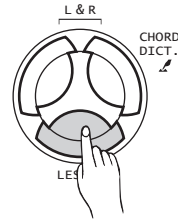
Grade Function

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.

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.
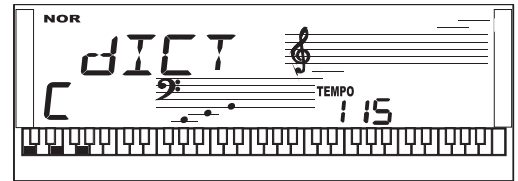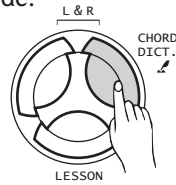
2. For example, if we want to play a Cm7 Chord. Press the C key in the section of the keyboard labeled Chord Root. (The note does not sound) the root note you set will be shown on the display.
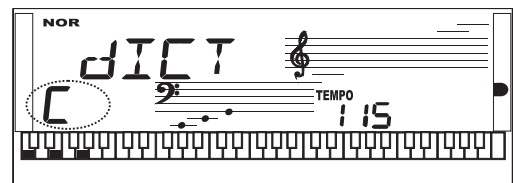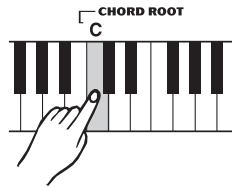
Press the m7 key in the section of the keyboard which has labeled Chord Type (The note does not sound).The notes you should play for the specified chord (root note and chord type) are shown on the display as the notation and also in the keyboard diagram.
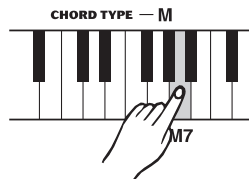
Individual notes of chord(keyboard)　　Chord name (root and type)　　Notation of chord
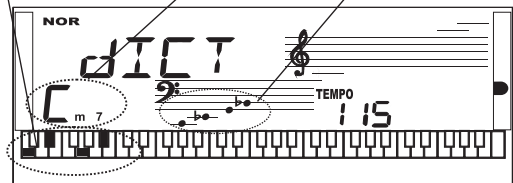
3. When the Chord Type and Chord Root are confirmed, the LCD will display the Chord and its keyboard position. A bell sound will be heard if you play it correctly.

4. Press [CHORD DICT./R] button again to exit the Chord Dictionary mode.
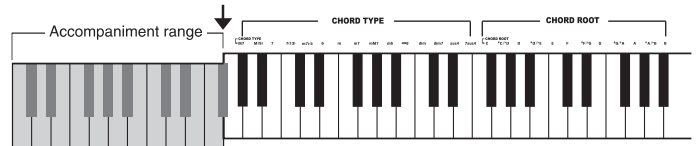
5. Some fingerings may be recognised as different chords by A.B.C. , eg. B6、bB6、Baug、bBm6、Bm6、bBdim7、Bdim7.

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

Split point

Accompaniment range　CHORD TYPE　CHORD ROOT

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).

Split point

Accompaniment range
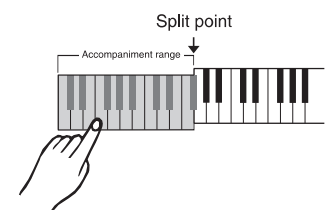
MIDI Function

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.
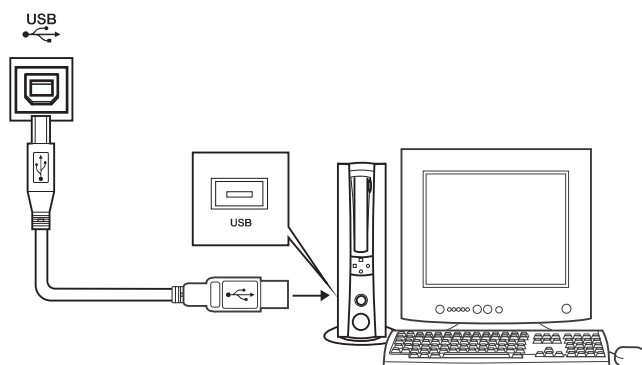
CAUTIONS!

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	4Ω 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

01	Stereo Grand Piano
02	Stereo Piano Dark
03	Acoustic Grand Piano
04	Grand Piano / W
05	Octave Piano 1
06	Octave Piano 2
07	Piano & Strings
08	Piano & Stereo Strings
09	Dreamscape
10	Piano & Choir
11	Synth Piano
12	Bright Piano 1
13	Bright Piano?2
14	Bright Piano / W
15	Stereo Bright Piano
16	Detuned Piano
17	Chorus Piano
18	Velocity Crossfade Piano
19	Piano Pad
20	Piano & Vibraphone
21	Electric Grand Piano 1
22	Electric Grand Piano 2
23	Electric Grand Piano / W
24	Honky-Tonk
25	Honky-Tonk / W
26	Stereo Honk-Tonk
27	Honky-Tonk Dark
28	E Piano 1
29	E Piano 2
30	E Piano 3
31	Soft E.P.
32	Hard E.P.
33	E.Piano 1 / W
34	E.Piano 2 / W
35	Detuned E.P. 1
36	Detuned E.P. 2
37	Stereo Hard E.P.
38	Velocity Crossfade E.P. 1
39	Velocity Crossfade E.P. 2
40	Warm E.P.
41	Cloudy E.P.
42	Deep E.P.
43	Nylon E.P.
44	Layered E.P. 1
45	Layered E.P. 2
46	Harpsichord 1
47	Harpsichord 2
48	Grand Harpsichord
49	Harpsichord 1 / W
50	Harpsichord 2 / W
51	Harpsichord / R
52	Harpsichord / O
53	Harpsichord Octave 1
54	Harpsichord Octave 2
55	Piano & Harpsichord

Mallet

56	Clavichord 1
57	Clavichord 2
58	Stereo Clavichord
59	Clavichord 1 / W
60	Clavichord 2 / W
61	Punchy Clavichord
62	Clavichord Wah
63	Celesta 1
64	Celesta 2
65	Bright Celesta
66	Gamelan
67	Reecho Bell
68	Celesta & Music Box
69	Celesta & Sine
70	Glockenspiel 1
71	Glockenspiel?2
72	Glockenspiel? & Sine
73	Glockenspiel? & Celesta
74	Music Box 1
75	Music Box 2
76	Music Box 3
77	Music Box & Harp
78	Toy Box
79	Vibraphone 1
80	Vibraphone 2
81	Vibraphone 3
82	Vibraphone 1 / W
83	Vibraphone 2 / W
84	Stereo Vibraphone
85	Rigid Vibraphone
86	Vibraphone & Bell
87	Vibraphone & Harpsichord
88	Marimba 1
89	Marimba 2
90	Marimba? / W
91	Stereo Marimba
92	Sine Marimba
93	Marimba & Vibraphone
94	Wood Drum
95	Xylophone
96	Xylophone / W
97	Dark Xylophone
98	Tubular Bells 1
99	Tubular Bells 2
100	Tubular Bells 3
101	Dulcimer 1
102	Dulcimer 2

Organ

103	Drawbar Organ
104	Drawbar Organ Detuned
105	Drawbar Organ Stereo
106	Soft Stereo Drawbar Organ
107	Bright Drawbar Organ

PIANO

108	Mellow Drawbar Organ
109	1960 Drawbar Organ
110	Percussive Organ
111	Percussive Organ Detuned
112	1970 Percussive Organ
113	Light Click Organ
114	Percussive Organ
115	Rock Organ
116	Rotary Organ
117	Stereo Rotary Organ
118	Slow Rotary Organ
119	Church Organ 1
120	Church Organ 2
121	Detuned Church Organ
122	Pureness
123	Octave Church Organ
124	Reed Organ
125	Accordion
126	Accord It Solo
127	Harmonica
128	Detuned Harmonica
129	Tango Accordion

Guitar

130	Nylon G.T. 1
131	Nylon G.T. 2
132	Bright Nylon G.T.
133	Nylon G.T. / R
134	Detuned Nylon G.T.
135	Chorus Nylon G.T.
136	Steel G.T.
137	Nylon & Steel G.T.
138	Jazz G.T.
139	Mellow G.T.
140	Clean G.T.
141	Chorus Clean G.T.
142	Muted G.T.
143	Muted Steel Guitar
144	Overdriven G.T.
145	Distortion G.T. 1
146	Distortion G.T. 2
147	Feedback G.T. 1
148	Feedback G.T. 2
149	Stereo Distorted G.T.
150	Distortion G.T. Octave
151	Distorted Rhythm G.T.
152	5th Distortion
153	G.T. Harmonics

Bass

154	Acoustic Bass
155	Jazz Style
156	Wah Bass
157	Finger Bass 1
158	Finger Bass 2

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 **Celloen 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 ройкаТ
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	CM⁹add	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[79]	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 Default		1ch	1-16ch	
Channel Changed		X	X	
Mode	Default	X	3	
	Messages	X	X	
	Altered	**********	X	
Note		12-120	0...127	
Number	True voice	**********	0...127	
Velocity :	Note on	O NH,V=1-127	O 9nH,V=1-127	
	Noteoff	X (9nH,V=0)	X (9nH,V=0; 8nH,V=0-127	
After	Keys	X	X	
Touch	Chs	X	X	
Pitch Bend		O	O	
Control	0	O	O	Bank Select
Change	1	O	O	Modulation
	5	X	O	Portamento Time
	6	X	O	Data Entry
	7	X	O	Volume
	10	X	O	Pan
	11	X	O	Expression
	64	O	O	Sustain Pedal
	65	X	O	Portamento ON/OFF
	66	X	O	Sostenuto Pedal
	67	X	O	Soft Pedal
	80	X	O	Reverb Program
	81	X	O	Chorus Program
	91	X	O	Reverb Level
	93	X	O	Chorus Level
	120	X	O	All Sound Off
	121	X	O	Reset All Controllers
	123	X	O	All Notes Off
Program		O	O	
Change : true #		**********	0...127	
System Exclusive		X	O	
System	¨ Song Position	X	X	
Common	¨ Song Select	X	X	
	: Tune	X	X	
System	:Clock	X	X	
Real Time	:Commands	X	X	
Aux	:LOCAL ON/OFF	X	X	
	:All Notes Off	X	O	
Messages	:Active sense	X	O	
	:Reset	X	O	

Note: *1
When the accompaniment is started, an FAH message is transmitted.
When accompaniment is stoped, an FCH message is transmitted.
When an FAH message is received, accompaniment is started.
When an FCH message is received, accompaniment is stoped.

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