TB688

## User's Manual

Precaution

Thank you for purchasing this digital TB688. For perfect operation and security, please read the manual carefully and keep it for future reference.

Safety Precautions
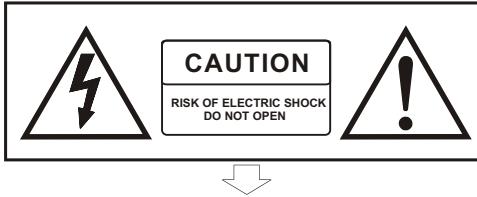
The lightning icon inside a triangle is intended to alert the user to the presence of exposed dangerous voltages within the product s enclosure, that could cause electric shock.

The lightning icon inside a triangle is intended to alert the user to read important operating and maintenance(servicing) instructions within the literature accompanying this product.

Important Safety Instructions

(Figure 1)

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings, install in accordance with the manufacturer's instructions.
8) Do not place near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not bypass the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety, if the provided plug does not fit into your outlet. consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the trolley, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tipping over (Figure 1).
13) Unplug this equipment during lightning storms or when unused for a long periods fo time.
14) Refer all servicing to qualified service personnel. Servicing is required when the equipment has been damaged in any way, such as power-supply cord, or plug is damaged, liquid has been spilled or objects have fallen into the equipment, the equipment has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING: To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.
CAUTION: Equipment must not be exposed to liquid dripping or splashing and also no objects filled with liquids, such as vases, or beverages may be placed.
Always make sure all batteries are inserted the correct way around to match the +/- polarity markings.
Always replace all of the batteries at the same time. Do not combine old and new batteries, also do not mix battery types, as this can cause overheating, or fire, or battery fluid leakage.
Remove the batteries from the instrument if it is not to be used for a long time.

Thanks For Using Our Electronic Keyboard

Your instrument is a high-quality electronic keyboard with 61 standard touch sensitive keys, and which employs the most advanced PCM tone generation technology, as well as a high quality DSP (Digital Signal Processor). It has 203 accompaniment styles which can be used to provide fully-orchestrated auto accompaniment. The multi-functional LCD (Multi Display) provides easy to understand information regarding your keyboard's various settings.

We recommend that you read through the manual carefully, so you can get the best performance and maximum enjoyment from your new electronic keyboard.

Contents

Top Panel Controls

1.POWER[POWER ON/OFF]

2.MASTER VOLUME

3.[REVERB] Button

4.[CHORUS] Button

5.[APREG.] Button

6.[TRANS./TUNE] Button

7.[TEMPO/TAP] Button

8.[MIXER] Button

9.ACCOMPANMENT CONTROL

  [SYNCHRO] Button

  [START/STOP] Button

  [INTRO/ENDING] Button

  [FILL IN] Button

10. [KBD.MODE] Button

11. [PEDAL] Button

12. [TOUCH] Button

13. [O.T.S] Button

14. [GRAND PIANO] Button

15.REGESTRATION MEMORY

  [STORE/BANK] Button

  [M1]-[M4]Button

16.[METRONOME] Button

17.MULTI LCD DISPLAY

18. 【+ 】【- 】Buttons

  【0 】-【9 】Number Buttons

19.[VOICE/STYLE]Button

20.[DUAL] Button

21.[DEMO/LEARN] Button

22.[RECORD] Button

23.[PLAY] Button

Rear Panel Controls

24.Pitch Bend

25.DC 12V In Jack

26.Phones/Line Out Jack

27.Line In Jack

28.Pedal Jack

29.Mic Jack

30.USB To Host
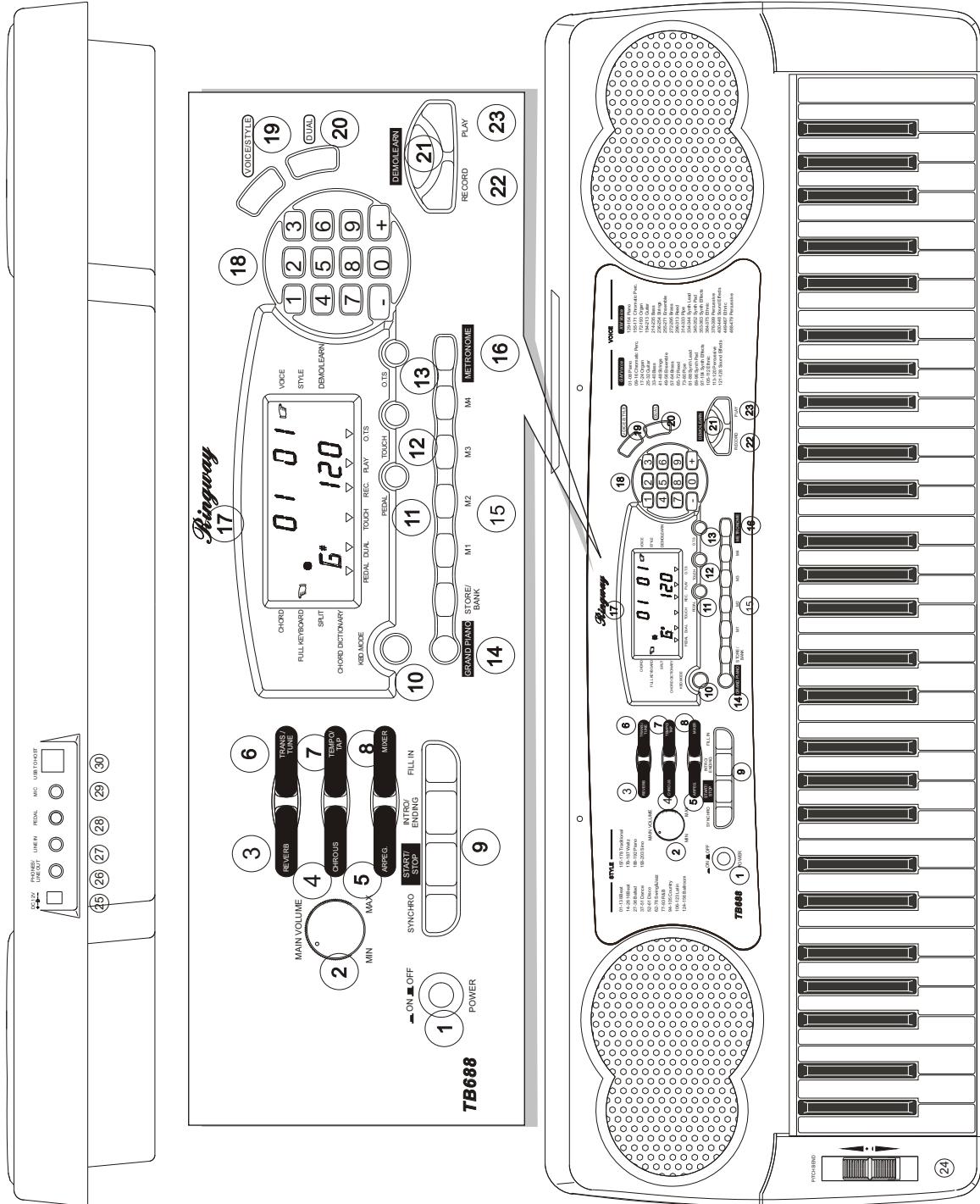
Turn On the Power

1. Ensure the keyboard is turned off when connecting and disconnecting the power, and turn the volume switch to reach the minimum level.
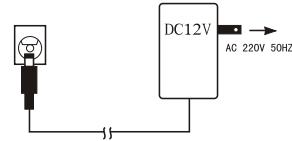
2. Connect the adaptor into the AC wall outlet and the cord into the unit, then turn the power on.

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

Phones/Line Out jack

Plug a set of stereo headphone into the [PHONES/LINE OUT] jack, and the internal speaker system is automatically shut off when the headphone is plugged.

The [PHONES/LINE OUT] jack can be used to deliver the output of the piano to a keyboard amplifier, stereo sound system, mixing console or tape recorder.

PHONES/LINE OUT

Line In jack

The audio output from other sound system connected to the LINE IN jack on the rear panel can be mixed with the sound of the unit. This function is convenient when you want to play along with a favourite song.

Basic Operation
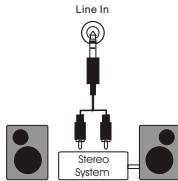
Pedal Jack

A foot switch can be plugged into the rear-panel [PEDAL] jack. The Pedal is a damper pedal controlling sustain function. Press the pedal you can sustain the notes after the keys are released.
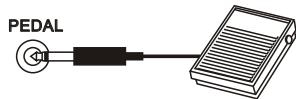
Mic Jack

A Micphone can be plugged into the rear-pannel [MIC] jack .
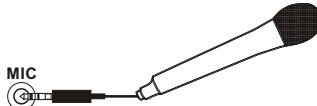
USB To Host Jack

Connect PC or other USB to host devices that support USB audio with a standard USB cable. 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.

Adjust the Main Volume

Use [MAIN VOLUME] control to adjust the volume to your desired level.

MAIN VOLUME

MIN   MAX
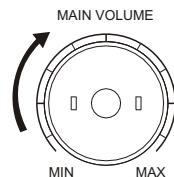
Demo Songs

There are 5 preset demo songs and 100 learning songs that you can play individually. Here's how you can select and play the demo songs .

1. Press [DEMO/LEARN] button and the LCD display : "d0" .Then your instrument will play the demo songs in sequence.

CHORD

FULL KEYBOARD

SPLIT

CHORD DICTIONARY

01 d0

200

VOICE

STYLE

DEMO/LEARN

PEDAL DUAL   TOUCH   REC. PLAY   O.T.S

KBD.MODE

DEMO/LEARN

RECORD   PLAY
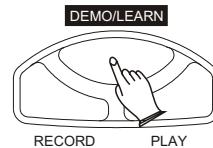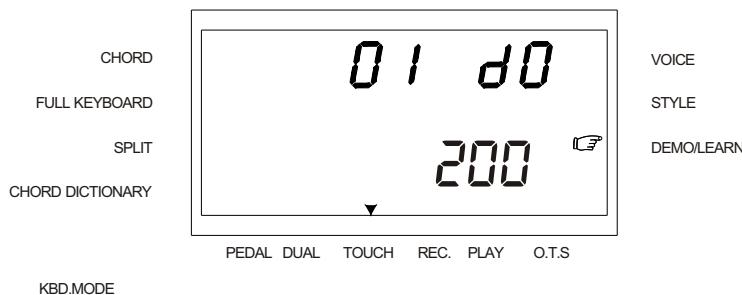
2. Use the [+] [-] button or number button to select a demo song. Press the [TEMPO/TAP] button and then press [+] [-] button to change the tempo.

3.Press [DEMO/LEARN] button again to stop playing.

Play the Electronic Keyboard

Your instrument has 479 voices that you can select and play.

Select a Voice

.   Press the [VOICE/STYLE] button to let the cursor point to "VOICE". The voice number will appear on the LCD display.

.Select a Main Voice Number
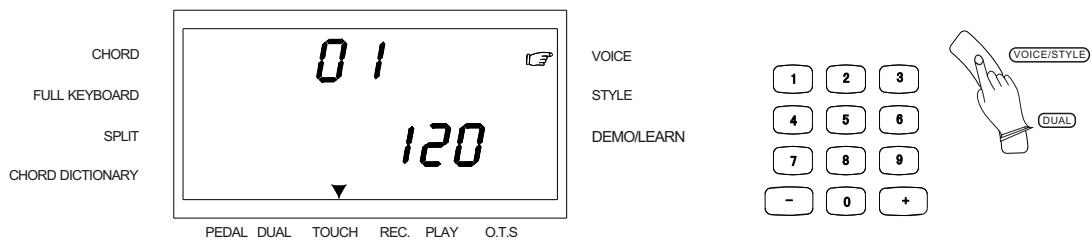
Use the [+] / [-] buttons or the number buttons to select the required voice number (01-479). Press the [+] button briefly to increment the value, or the [-] button to decrement. If you hold the [+] or [-] button down , the value will increment or decrement continuously - simply release the button when the desired value has been reached.

1~9 voice: press 01~09.

10~99 voice: press 10~99.

100~479 voice: hold the [1] button till the LCD displays: 1_ _ , then enter the tens digit and single digits.

In Voice Mode， the main voice number will appear on the LCD.

.Select a Split Voice Number

Your keyboard can be split into two sections which means different voices can be played with the left and right hands at the same time.

Press [KBD.MODE] button so that the cursor points to "SPLIT" to turn Split mode ON. The split voice number will appear on the MULTI DISPLAY. Use the [+] and [-] buttons or the number buttons to select the desired split voice number (01 through 479). There is a horizontal line behind the "33" when the LCD display the voice of left hand area.

If you want to change the voice of right hand area, press the [VOICE/STYLE] button, then the horizontal line will disappear, you can use the [+] and [-] buttons or the number buttons to select desired voice and the LCD will display the number of the right hand area.
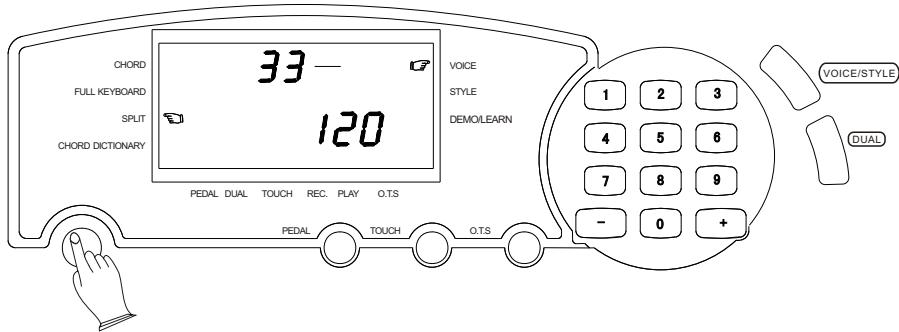
Overall Control

Pedal

Press [PEDAL] button to turn on/off the function. Press the [PEDAL] button and then press the pedal ,the cursor will point to [PEDAL].
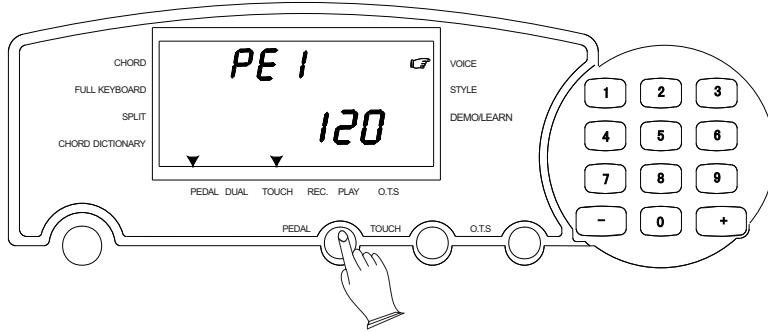
1.Multi-function pedal

This function allows you to set the function of the pedal plugged into the pedal jack on the back board.

Your instrument has 7 different pedal functions. Press the [PEDAL] button. Then use [+] and [-] buttons to select your desired pedal function among "PE1-PE7" .
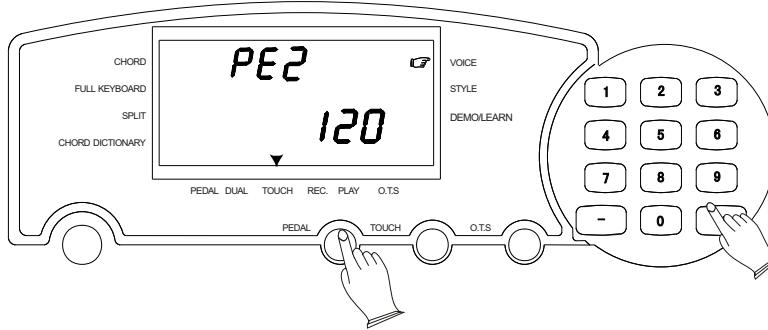
Play the Electronic Keyboard

.
     PE1------ It performs the same function as the damper pedal on an actual acoustic piano, letting you sustain the sound of the voices even after releasing your fingers from the keys.

     PE2------It performs the same function as the soft pedal on an actual acoustic piano, the volume of the whole keyboard will decrease when you play the TB688 keys and depress the soft pedal.

     PE3------If you play a note or chord on the keyboard and press the sostenuto pedal whilst the notes are held, those notes will be sustained as long as the pedal is held, but all subsequently played notes will not be sustained.

     PE4------You can change the volume of the keyboard by the pedal.

     PE5------This function is the same as the [START/STOP] button on the front panel. Switches the rhythm on/off whenever you press the Left Foot-switch.

     PE6------This function is the same as the [FILL 1] button on the front panel. Let you add dynamic variations and breaks in the rhythm of the accompaniment.

     PE7------Anytime you store to a REGISTRATION MEMORY button, all settings previously stored in that button will be erased and replaced by the new settings.

   2.Detail Instructions

   Sustain Pedal (Switch-type Pedal)

   If your pedal is a switch-type pedal, connect the pedal to your piano, then the pedal is ready to use. The default pedal function is "PE1", sustainer pedal function.
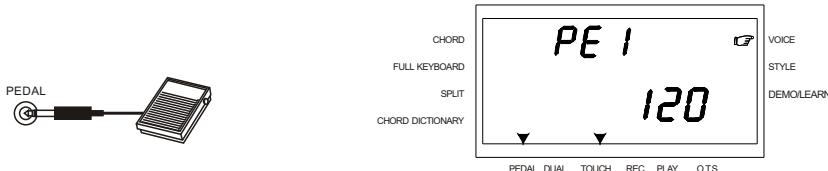
Note: If "PE4" is selected while you are using the sustain pedal, the pedal can only be used to turn on or off the keyboard volume.

   Volume Pedal(AD-type Pedal)

   If your pedal is a volume pedal, you have to preset it.

   Press the [REVERB], [TRANSPOSE] and [POWER] button at the same time to enter the Pedal Setting Mode. Press the [+] (or [-]) button before stepping the pedal. Then step the pedal and press the [-] (or [+]) button.

   Then the LCD will show two values between 0 and 255. Press the [STORE/BANK] button to save your redefined parameters.

   Note: If your instrument is restored, it will restore the current setting.
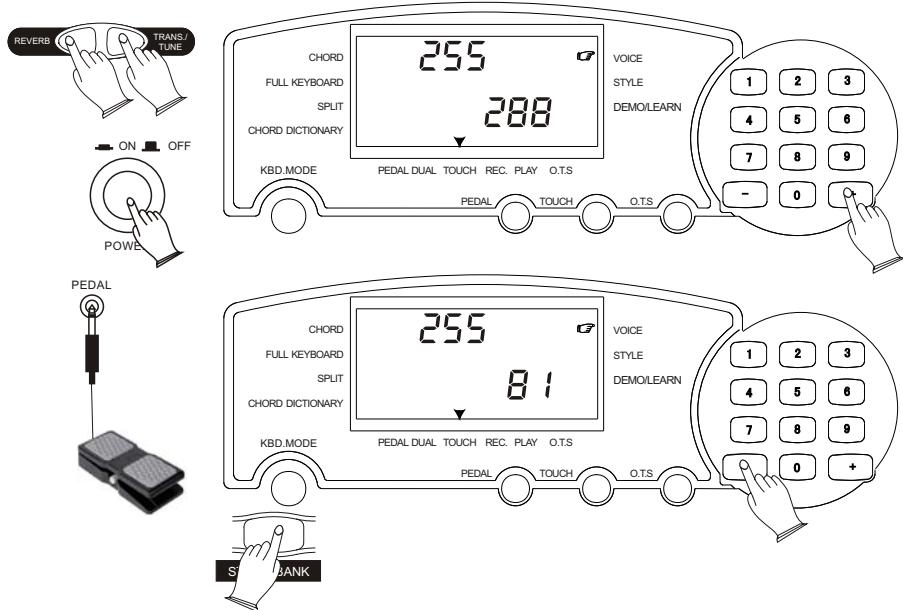
PITCH BEND

The PITCH BEND wheel is located on the left side of your keyboard that can be used to tune the pitch of the keyboard. Push the wheel upward, the keyboard pitch will be increased and pull wheel downward will decreased the keyboard pitch.

Push the wheel to the top position for about 2 seconds, LCD will display the pitch range (pitch sensitivity). You can use the [+] and [-] or the number [0]-[9] buttons or the digital dial to set the pitch sensitivity: 1~ 12 semitones. When the power is turned ON, the preset sensitivity is +/- 2 semitones.
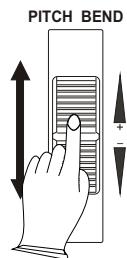
Touch

Press [TOUCH] button, you can turn ON/OFF the touch function. When the Touch function is ON, the volume will be varied according to how hard you play on the keyboard.
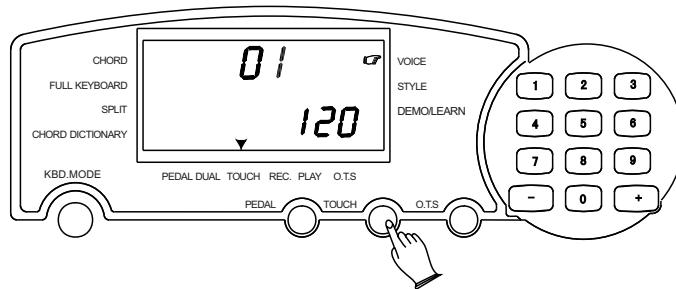
Play the Electronic Keyboard

Reverb

    Press the [REVERB] button and then use the [+][-]buttons to select the Reverb types (10).

    Hold down the [REVERB] button，LCD will display the value of Reverb depth，then you can use [+]/[-] buttons or number button to set the value:00-63(default:18).
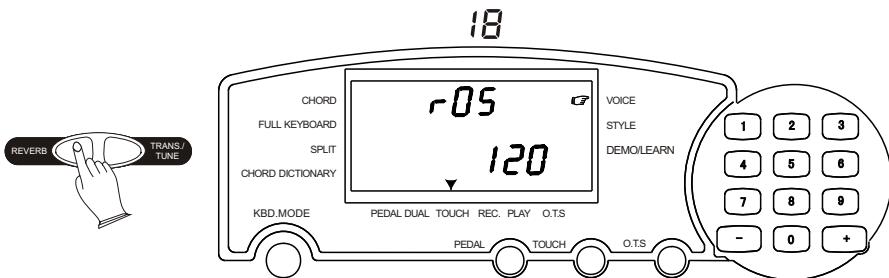
Trans/Tune

    Press the [**Trans/Tune**] button until the LCD display "7ᵣ"，it possible to shift the pitch of this instrument up or down in semitone intervals up to a maximum of 12 semitones (total one octave).

    Press the [**Trans/Tune**] button until the LCD display "7u"，this function makes it possible to tune the pitch of your instrument to match other instruments. Tune can be accomplished over ± 50 cents range (that's 100 cents total, or one semitone) in 128 (-64~63) steps (approximately 0.8 cents per step).
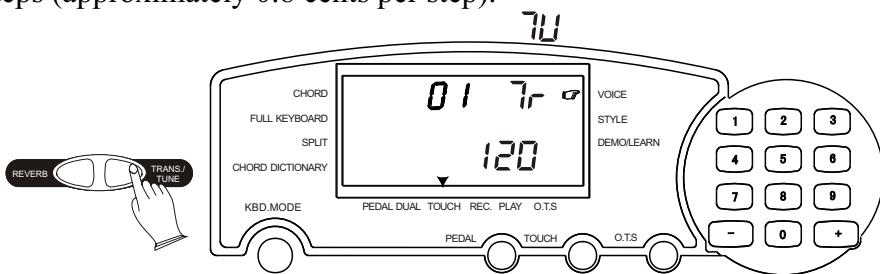
Chorus

    Press the [CHORUS] button and then use the [+]/[-]buttons to select the Chorus types (8).

    Hold down the [CHORUS] button，LCD will display the value of Chorus depth, then you can use [+]/[-] buttons or number button to set the value:00-63(default:18).
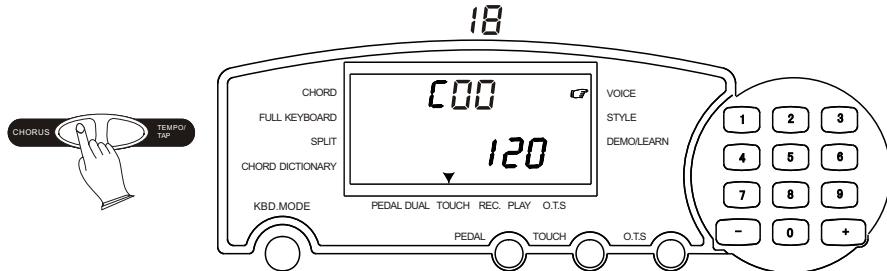
Arpeggio

An Arpeggio, also called "broken chord", is a group of notes played in sequence from the lowest to the highest note or from the highest to the lowest note. It is a musical technique usually used in practicing songs. An arpeggio may be a melody part of songs and may be written with a squiggly vertical line in front of the chord. Arpeggio is divided into the Tonic Triad, Diminished Seventh Chords and Dominant Seventh Chord.

Press the [ARPEGGIO] button and the LCD will show "P1", indicating the Arpeggio function is enabled. When "P1" is selected, hold one key or several keys and you will hear the note played from the lowest to the highest. When "P2" is selected, hold one key or several keys and you will hear the note played from the highest to the lowest.

Repeatedly press the [ARPEGGIO] button to turn off the Arpeggio function.
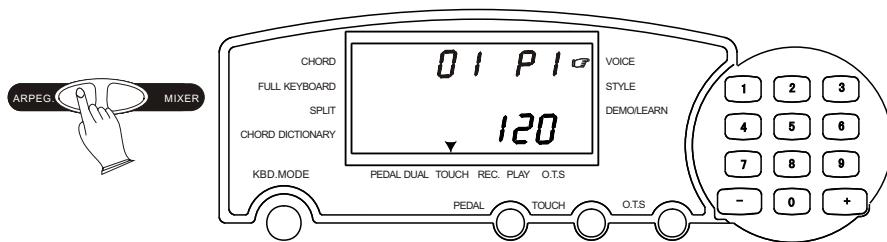
Mixer

This function can set Accompaniment Volume, Main Volume, Split Volume, Dual Volume and Metronome Volume.

Accompaniment Volume

Press the [MIXER] button repeatedly to select " AC ", then use [+]/[-] buttons or number buttons to set the Accompaniment Volume. Range: 00~15. Default: 12

Play the Electronic Keyboard
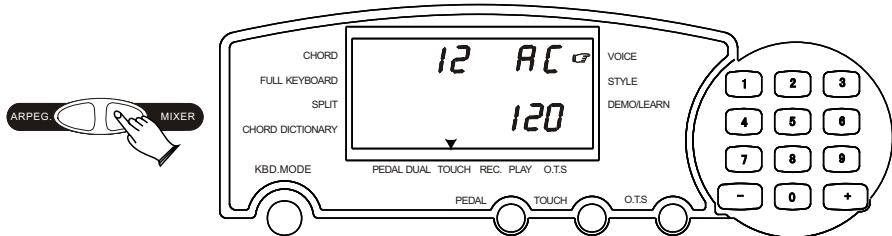
M. Volume

Press the [MIXER] button repeatedly to select " r G " , then use [+]/[-] buttons or number buttons to set the Main Volume. Range: 00~127. Default: 127.
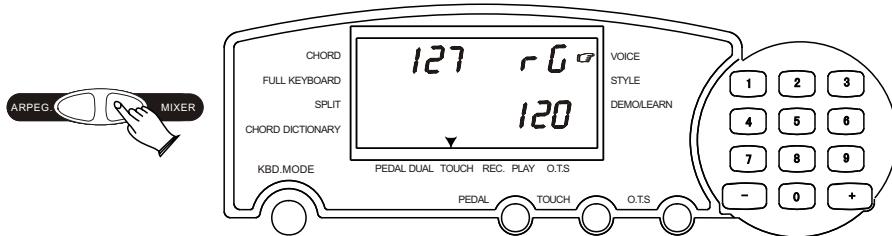
S. Volume

Press the [MIXER] button repeatedly to select " L F " , then use [+]/[-] buttons or number buttons to set the Split Volume. Range: 00~127. Default: 127.
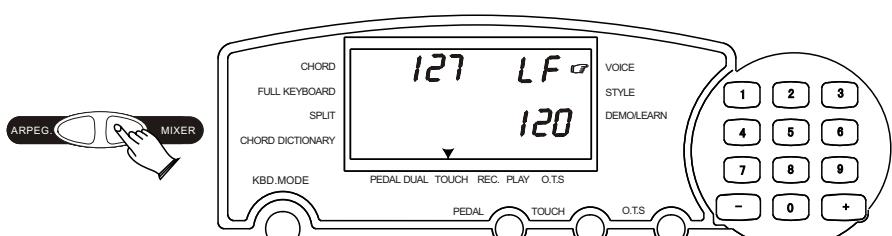
Dual Volume

Press the [MIXER] button repeatedly to select " dU " , then use [+]/[-] buttons or number buttons to set the Dual Volume. Range: 00~127. Default: 75.
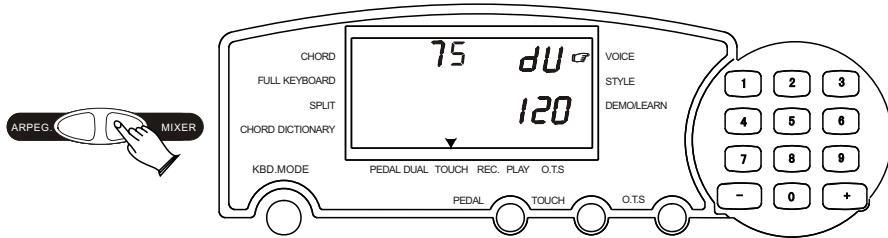
Metronome Volume

Press the [MIXER] button repeatedly to select " 7ᴦ " , then use [+]/[-] buttons or number buttons to set the Metronome Volume. Range: 00~127. Default: 127.
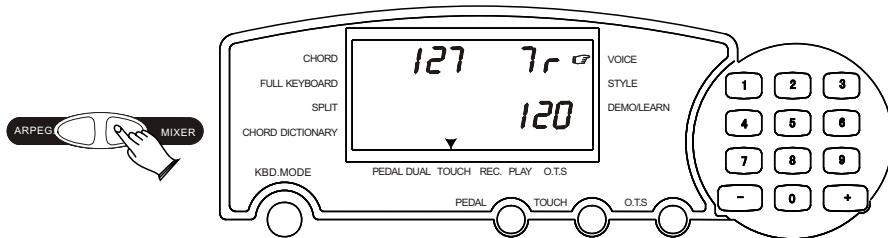
Grand Piano

Press the [GRAND PIANO] button. This convenient function allows you to instantly call up the Grand Piano voice.

Dual

This function is capable of enhancing the delicacy of your music by playing two voices of musical instruments simultaneously; new combinations of voices and music could be created then.

Press [+]/[-] buttons or number button to select your desired voice.

Press [DUAL] button again to turn off the dual voice

When the cursor is stop flashing, you can select the main voices. .
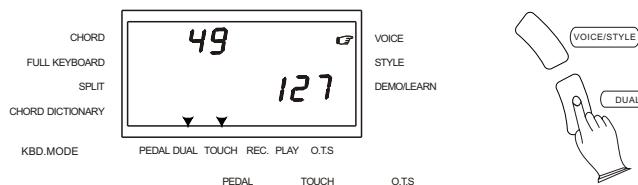
Auto Accompaniment

The keyboard has a total of 203 accompaniment styles which can be used to provide Fully-orchestrated Auto Accompaniment. When the Auto Accompaniment function is turned on, this instrument creates fully-orchestrated rhythm, bass and chord accompaniment based on chord s that you play with the left hand, in the Auto Accompaniment section of the keyboard (i.e. all keys to the left of the Auto Accompaniment split point). The right-hand section of the keyboard is available for normal playing.

The default Auto Accompaniment split point is the F 2 key. The Auto Accompaniment section of the keyboard consists of all keys to its left.

Selecting a Style

Press the [VOICE/STYLE] button to let the Active Input Arrow point to string "STYLE". The style number will appear on the MULTI DISPLAY. You can use the [+] and [-] buttons or the number buttons to select the required style number(00 through 203).
You can use [+]/[-] buttons or number buttons to select the desired style.
1~9 style: press 01~09.
10~99 style: press 10~99.
100~203 style: hold the [1] button till the LCD displays: 1_ , then enter the tens digit and single digits.
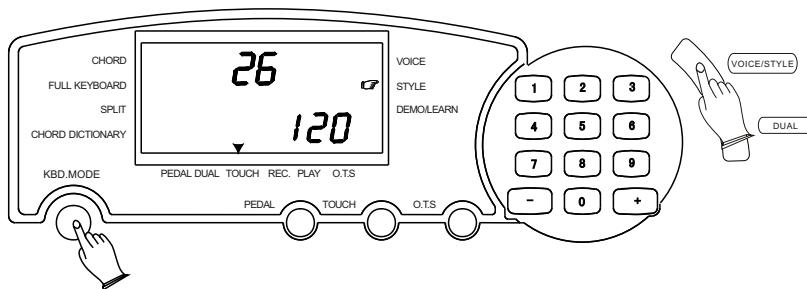
Turn Chord On/Off

Press the [KBD.MODE] button repeatedly to select "CHORD" and its Active Input Arrow lights. The specified left-hand section of the keyboard becomes the "Auto Accompaniment" section,and chords played in this section are automatically detected and used as a basis for fully automatic accompaniment with the selected style.

Auto Accompaniment
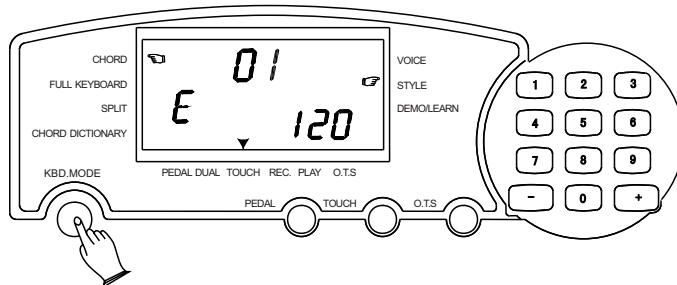
Full Keyboard

This function detects chord in entire key range. Chords are detected in a way similar to fingered, even if you split the notes between your left and right hands.

For example: playing a bass note with your left hand and a chord with you right, or by playing a chord with your left hand and a melody note with your right.

Press [FULL KEYBOARD] button to enter the Full Keyboard mode. "FULL KEYBOARD" signal appears in the display.
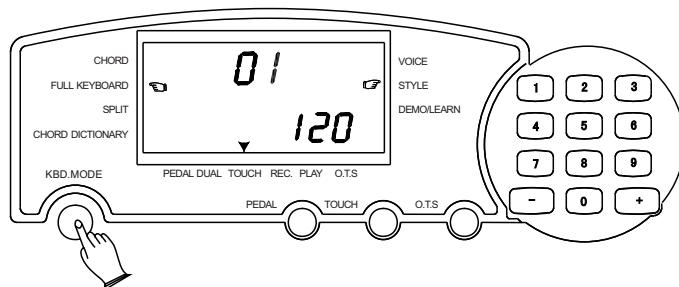
Press [SYNCHRO] button to enter the sync start waiting mode, play the keyboard to start the accompaniment.

Press [KBD.MODE] repeatedly to turn off the full keyboard function and the cusior will disappear.

Auto Accompaniment

Accompaniment Control

The [START/STOP] button starts the selected accompaniment style immediately.

Selecting the Chord mode(Reference:Turn chord on/off P.14) . The left hand section of the keyboard becomes the Auto Accompaniment section, and chords played in this section are automatically detected and used as a basis for fully automatic accompaniment with the selected style.

Any of your instrument accompaniment patterns can be started with an appropriate introduction by pressing the [INTRO/ENDING] button directly.

If you press the [SYNCHRO] button and then the [INTRO/ENDING] button, the accompaniment will start from the introduction as soon as a chord is detected in the AUTO ACCOMPANIMENT section of the keyboard.
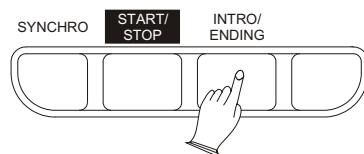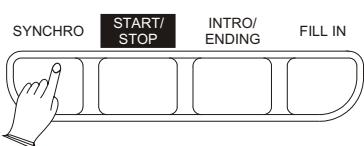
Press the [FILL IN] button at any time while the accompaniment is playing to add a one-measure fill-in.

If you hold the [FILL IN] button , the fill-in pattern will repeat until the button is released , then the MAIN section will play from the beginning of the next measure.

Press the [SYNCHRO] button, then the accompaniment will start when you play the first chord on the AUTO ACCOMPANIMENT section of the keyboard.
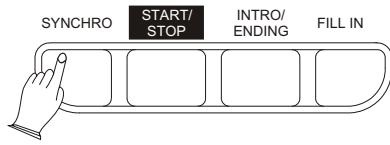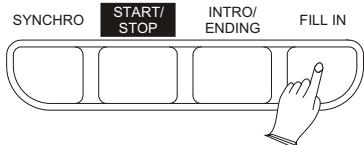
Metronome

The metronome sound may be alternately turned on and turned off by pressing the [METRONOME] button.

Hold the [METRONOME] button to enter the page for selecting the time signature. Then use the [+]/[-] buttons to select your desired time signature.

Time signature: 2/2,1/4, 2/4, 3/4, 4/4, 5/4,6/4, 3/8, 6/8, 7/8,9/8,12/8.(Default: 4/4)
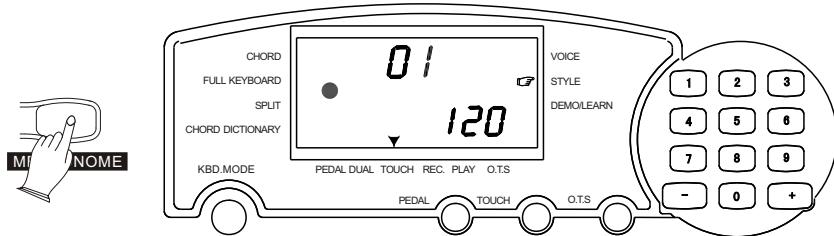
Overall Control

Tempo

This function allows you to set the rhythm tempo by tapping in tempo on [TEMPO/TAP] button. Tap on the button 2 times while rhythm is playing, The rhythm tempo are set as your desired speed.
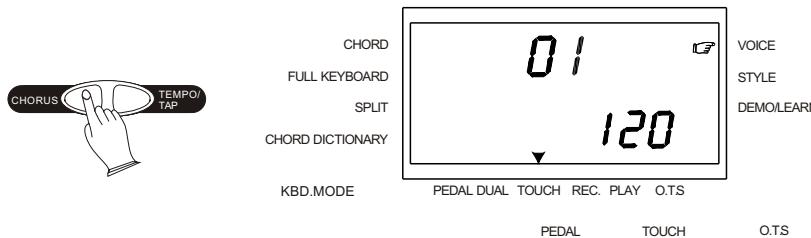
If you want to set the tempo before starting rhythm, you have to tap the button 4 times.

O.T.S

This function is actually a convenient feature to automatically select a suitable voice to match your selected style. In addition, various panel settings (such as voice, effect, Tempo, etc.) that match the selected style can be recalled with just a single button [O.T.S].

Press the [O.T.S] button to enter this mode and the arrow point strings to O.T.S. Press the [O.T.S] button repeatedly to turn on or turn off One Touch Setting function.
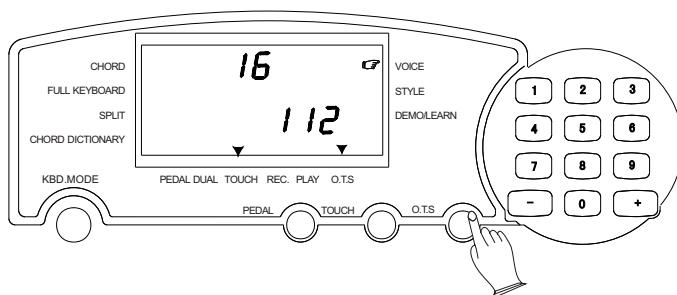
Registration Memory

Your instrument REGISTRATION MEMORY can be used to store 4 sets of VOICE and AUTO ACCOMPANIMENT settings that can be recalled during you playing at the touch of one single button. The main voice number (right hand), split voice number (left hand), sustain and touch status, tempo value, transpose value, Auto Accompaniment volume (ACC VOL) , Chord and split status can be restored to REGISTRATION MEMORY.

Memorizing the settings

The panel settings listed above can be stored to any one of the 4 registration memory buttons by pressing the button [M1] ,[M2] , [M3] or [M4] while holding the [STORE/BANK] button . The [S-1]-[S-4] will appear on the LCD display.

Press the [STORE/BANK] button repeatedly to change the banks:1-8. The defalut bank is :1.
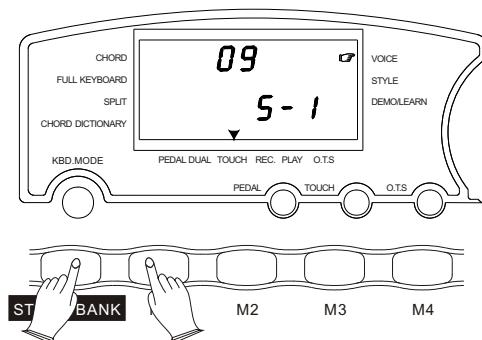
Recalling the settings

The settings stored to a REGISTRATION MEMORY button can be recalled simply by pressing the [M1]-[M4] button. The [E-1]-[E-4] will appear on the LCD display.
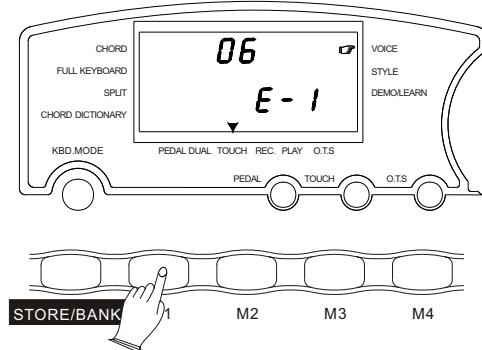
Your instrument allows you to record and playback what you have played on the keyboard include part panel operation.

Record

Press the [RECORD] button to start recording and the arrow point to RECORD.
Press this [RECORD] button again to stop recording.
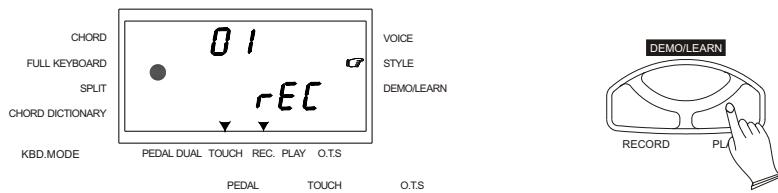
Play

Press [PLAY] button, you can enjoy the song you have recorded. Now you can follow the song by playing the keyboard and change the tempo of the song by press [TEMPO/TAP] button.

Press [PLAY] button again, the playing will be ended.
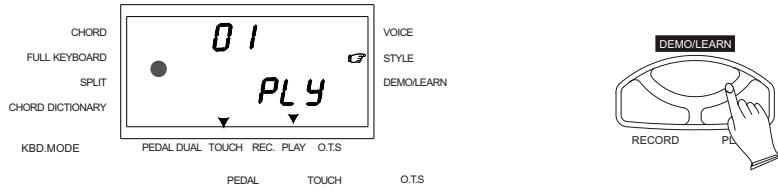
Chord Dictionary

The Chord Dictionary function allows you to look up chords. When you want to quickly learn how to play a certain chord, the Dictionary function will help you to look up the individual notes of the chord.

Chord Dictionary

Press the [KBD.MODE] Button repeatedly to select Chord Dictionary, the arrow point to Chord Dictionary.
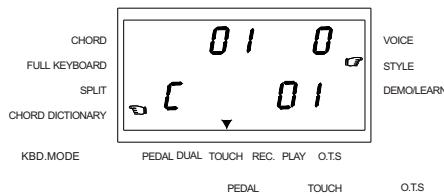
Select the Chord Root

Press the root note of the Chord you want to look up. This needs to be in the Chord Root section of the keyboard. For example:
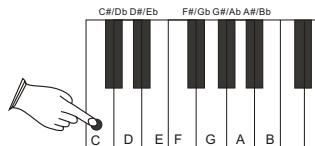
Select the Chord Type

After pressing the Chord Root, select the Chord Type you want to look up in the Chord Type section of the keyboard. The Chord Type includes Major Triad, Minor Triad and Seventh Chord. Then the LCD will display the Chord Type and key position you currently want to look up. If you press the correct key as the notes shown on the LCD, the beep will sound.
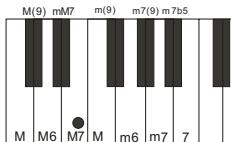
Exit the Chord Dictionary

Press the [KBD.MODE] button again to exit the function.

Your instrument has a teaching function which can teach a beginner how to play a song. There are three teaching steps for you to learn by playing the songs step by step.

Learn 1

Hold down the [DEMO/LEARN] button to enter the Learn mode and the LCD will display "L1". You can use[+] [-] button or number button to select lean songs and then press [PLAY] button to start learning function. When you play a key on the keyboard, the teaching song will be layed note by note. Making it easy and fun for you to learn.

After playing the learning song two seconds ,it will stop learning state, you can press [DEMO/LEARN] button repeatedly until the screen does not display the "L" to exit this function.

```
CHORD                                    VOICE
FULL KEYBOARD          01  L1            STYLE
SPLIT                                    DEMO/LEARN
CHORD DICTIONARY          120      ☞
                            ▼
KBD.MODE      PEDAL DUAL TOUCH REC. PLAY O.T.S
                  PEDAL        TOUCH       O.T.S
```

```
                                    DEMO/LEARN

                                    RECORD      AY
```
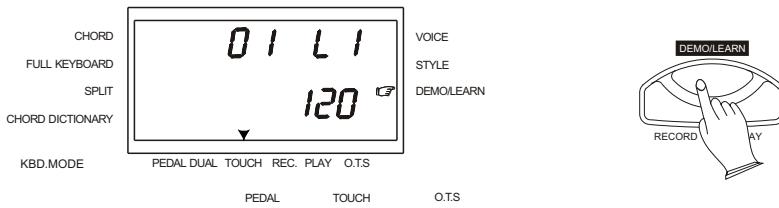
Learn 2

Hold down the [DEMO/LEARN] button to enter the Learn mode and press [DEMO/LEARN] button repeat to select "L2". You can use[+] [-] button or number button to select lean songs and then press [PLAY] button to start learning function. The learning song will continue until you play the correct key on the keyboard. You can quickly master these songs in a very short time.

After playing the learning song two seconds ,it will stop learning state, you can press [DEMO/LEARN] button repeatedly until the screen does not display the "L" to exit this function.

```
CHORD                                    VOICE
FULL KEYBOARD          01  L2            STYLE
SPLIT                     120      ☞     DEMO/LEARN
CHORD DICTIONARY
                            ▼
KBD.MODE      PEDAL DUAL TOUCH REC. PLAY O.T.S
                  PEDAL        TOUCH       O.T.S
```

```
                                    DEMO/LEARN

                                    RECORD
```
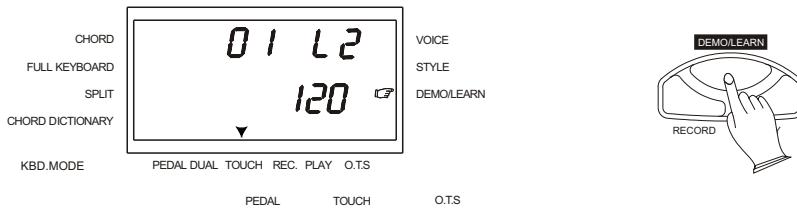
Teaching Function

Learn 3

Hold down the [DEMO/LEARN] button to enter the Learn mode and press [DEMO/LEARN] button repeat to select "L3". You can use[+] [-] button or number button to select lean songs and then press [PLAY] button to start learning function. You can play the song with the instrumentation playing. Now you can play this song by yourself.

After playing the learning song two seconds ,it will stop learning state, you can press [DEMO/LEARN] button repeatedly until the screen does not display the "L" to exit this function.

CHORD   VOICE

FULL KEYBOARD   STYLE

SPLIT   DEMO/LEARN

CHORD DICTIONARY

KBD.MODE   PEDAL DUAL TOUCH REC. PLAY O.T.S

PEDAL   TOUCH   O.T.S

DEMO/LEARN

RECORD

Percussion Voice List

Note#	Note	Standard(0)	Room(8)	Power(16)	Electronic(24)	Synth(25)	Jazz(32)	Brush(40)	Classic(48)	Effects(56)
24	C	Seq Click H	←	←	←	←	←	←	←	
25	#C	Brush Tap	←	←	←	←	←	←	←	
26	D	Brush Swirl L	←	←	←	←	←	←	←	
27	#D	Brush Slap	←	←	←	←	←	←	←	
28	E	Brush Swirl H	←	←	Rever se Cymbal	Rever se Cymbal	←	←	←	
29	F	Snare Roll	←	←	←	←	←	←	←	
30	#F	Castanet	←	←	Hi-Q	Hi-Q	←	←	←	
31	G	Snare L	←	SD Elec M	Snare L	SD Elec H2	Snare Jazz	Brush Slap L	←	
32	#G	Sticks	←	←	←	←	←	←	←	
33	A	Bass Drum L	←	←	←	←	←	←	Bass Drun L3	
34	#A	Open Rim Shot	←	←	←	←	←	←	←	
35	B	Bass Drum M	←	←	BD Rock	BD Analog 1L	←	←	Gran Casa	
36	C	Bass Drum H	←	BD Rock	BD Rock 2	BD Analog 1H	BD Jazz	BD Jazz	Gran Casa Mute	
37	#C	Side Stick	←	←	←	Analog Side Stick	←	←	←	
38	D	Snare M	SD Room L	SD Rock	SD Elec M	SD Analog 1H	SD Jazz L	Brush Slap H	Marching SD M	
39	#D	Hand Clap	←	←	←	←	←	←	←	High-Q
40	E	Snare H	SD Room H	SD Rock Rim	SD Elec H	SD Analog 1L	SD Jazz H	Brush Tap	Marching SD H	Slap
41	F	Floor Tom L	Room Tom 1	Rock Tom 1	E Tom 1	Analog Tom 1	←	Brush Tom 1	←	Scratch Push
42	#F	Hi-Hat Closed	←	←	←	Analog HH Closed1	←	←	←	Scratch Pull
43	G	Floor Tom H	Room Tom 2	Rock Tom 2	E Tom 2	Analog Tom 2	←	Brush Tom 2	←	Sticks
44	#G	Hi-Hat Pedal	←	←	←	Analog HH Closed2	←	←	←	Square Click
45	A	Low Tom	Room Tom 3	Rock Tom 3	E Tom 3	Analog Tom 3	←	Brush Tom 3	←	Mtrnm .Click
46	#A	Hi-Hat Open	←	←	←	Analog HH 1Open	←	←	←	Mtrnm. Bell
47	B	Mid Tom L	Room Tom 4	Rock Tom 4	E Tom 4	Analog Tom 4	←	Brush Tom 4	←	Gt.FretNoiz
48	C	Mid Tom H	Room Tom 5	Rock Tom 5	E Tom 5	Analog Tom 5	←	Brush Tom 5	←	Gt.CutNoise
49	#C	Crash Cymbal 1	←	←	←	Analog Cymbal	←	←	Hand Cym.L Open	Gt.CutNoise
50	D	High Tom	Room Tom 6	Rock Tom 6	E Tom 6	Analog Tom 6	←	Brush Tom 6	←	String Slap
51	#D	Ride Cymbal 1	←	←	←	←	←	←	Hand Cym.L Closed	Fl.KeyClick
52	E	Chinese Cymbal	←	←	←	←	←	←	←	Laughing
53	F	Ride Cymbal Cup	←	←	←	←	←	←	←	Screaming
54	#F	Tambourine	←	←	←	←	←	←	←	Punch
55	G	Splash Cymbal	←	←	←	←	←	←	←	Heart Beat
56	#G	CowBell	←	←	←	Analog Cowbell	←	←	←	Footsteps 1
57	A	Crash Cymbal 2	←	←	←	←	←	←	Hand Cym.H Open	Footsteps 2
58	#A	Vibraslap	←	←	←	←	←	←	←	Applause
59	B	Ride Cymbal 2	←	←	←	←	←	←	Hand Cym.H Closed	Door Creaking
60	C	Bongo H	←	←	←	←	←	←	←	Door
61	#C	Bongo L	←	←	←	←	←	←	←	Scratch
62	D	Conga H Mute	←	←	←	Analog Conga H	←	←	←	Wind Chimes
63	#D	Conga H Open	←	←	←	Analog Conga M	←	←	←	Car-Engine
64	E	Conga L	←	←	←	Analog Conga L	←	←	←	Car-Stop
65	F	Timbale H	←	←	←	←	←	←	←	Car-Pass
66	#F	Timbale L	←	←	←	←	←	←	←	Car-Crash
67	G	Agogo H	←	←	←	←	←	←	←	Siren
68	#G	Agogo L	←	←	←	←	←	←	←	Train
69	A	Cabasa	←	←	←	←	←	←	←	Jetplane
70	#A	Maracas	←	←	←	Analog Maracas	←	←	←	Helicopter
71	B	Samba Whistle H	←	←	←	←	←	←	←	Starship
72	C	Samba Whistle L	←	←	←	←	←	←	←	Gun Shot
73	#C	Cuiro Short	←	←	←	←	←	←	←	Machine Gun
74	D	Cuiro Long	←	←	←	←	←	←	←	Lasergun
75	#D	Claves	←	←	←	Analog Claves	←	←	←	Explosion
76	E	Wood Block H	←	←	←	←	←	←	←	Dog
77	F	Wood Block L	←	←	←	←	←	←	←	HorseGallop
78	#F	Guica Mute	←	←	Scratch Push	Scratch Push	←	←	←	Bird
79	G	Guica Open	←	←	Scratch Pull	Scratch Pull	←	←	←	Rain
80	#G	Triangle Mute	←	←	←	←	←	←	←	Thunder
81	A	Triangle Open	←	←	←	←	←	←	←	Wind
82	#A	Shaker	←	←	←	←	←	←	←	Seashore
83	B	Jingle Bell	←	←	←	←	←	←	←	Stream
84	C	Bell Tree	←	←	←	←	←	←	←	BuBBle

Voice List

NO.	PROGRAM CHANGE	BANK	VOICE NAME
Piano			
01	0	0	AcousticGrandPiano
02	1	0	BrighAcoustictPiano
03	2	0	ElectricGrandPiano
04	3	0	Honky-TonkPiano
05	4	0	Electricpiano1
06	5	0	ElectricPiano2
07	6	0	Harpsichord
08	7	0	Clavi
Chromatic Percussion			
09	8	0	Celesta
10	9	0	Glockenspiel
11	10	0	MusicBox
12	11	0	Vibraphone
13	12	0	Marimba
14	13	0	Xylophone
15	14	0	TubularBells
16	15	0	Dulcimer
Organ 风琴			
17	16	0	DrawbarOrgan
18	17	0	PercussiveOrgan
19	18	0	RockOrgan
20	19	0	ChurchOrgan
21	20	0	ReedOrgan
22	21	0	Accordion
23	22	0	Harmonica
24	23	0	TangoAccordion
Guitar			
25	24	0	AcousticGuitar(Nylon)
26	25	0	AcousticGuitar(Steel)
27	26	0	ElectricGuitar(Jazz)
28	27	0	ElectricGuitar(Clean)
29	28	0	ElectricGuitar(Muted)
30	29	0	OverdrivenGuitar
31	30	0	DistortionGuitar
32	31	0	GuitarHarmonics
Bass			
33	32	0	AcousticBass
34	33	0	FingerBass
35	34	0	PickBass
36	35	0	FretlessBass
37	36	0	SlapBass1
38	37	0	SlapBass2
39	38	0	SynthBass1
40	39	0	SynthBass2
Strings			
41	40	0	Violin
42	41	0	Viola
43	42	0	Cello
44	43	0	Contrabass
45	44	0	TremoloStrings
46	45	0	PizzicatoStrings
47	46	0	OrchestralHarp
48	47	0	Timpani
Ensemble			
49	48	0	StringsEnsemble1
50	49	0	StringsEnsemble2

NO.	PROGRAM CHANGE	BANK	VOICE NAME
51	50	0	Synth Strings 1
52	51	0	Synth Strings 2
53	52	0	Choir Aahs
54	53	0	Voice Oohs
55	54	0	Synth Voice
56	55	0	Orchestra Hit
Brass			
57	56	0	Trumpet
58	57	0	Trombone
59	58	0	Tuba 长号
60	59	0	Muted Trumpet
61	60	0	French Horn
62	61	0	Brass Section
63	62	0	Synth Brass 1
64	63	0	Synth Brass 2
Reed			
65	64	0	Soprano Sax
66	65	0	Alto Sax
67	66	0	Tenor Sax
68	67	0	Baritone Sax
69	68	0	Oboe
70	69	0	English Horn
71	70	0	Bassoon
72	71	0	Clarinet
Pipe			
73	72	0	Piccolo
74	73	0	Flute
75	74	0	Recorder
76	75	0	Pan Flute
77	76	0	Blown Bottle
78	77	0	Shakuhachi
79	78	0	Whistle
80	79	0	Ocarina
Synth Lead			
81	80	0	Lead 1 (Square)
82	81	0	Lead 2 (Sawtooth)
83	82	0	Lead 3 (Calliope)
84	83	0	Lead 4 (Chiff)
85	84	0	Lead 5 (Charang)
86	85	0	Lead 6 (Voice)
87	86	0	Lead 7 (Fifth)
88	87	0	Lead 8 (Bass+Lead)
Systh Pad			
89	88	0	Pad 1 (New Age)
90	89	0	Pad 2 (Warm)
91	90	0	Pad 3 (Polysynth)
92	91	0	Pad 4 (Choir)
93	92	0	Pad 5 (Bowed)
94	93	0	Pad 6 (Metallic)
95	94	0	Pad 7 (Halo)
96	95	0	Pad 8 (Sweep)
Synth Effects			
97	96	0	Fx 1 (Rain)
98	97	0	Fx 2 (Soundrack)
99	98	0	Fx 3 (Crystal)
100	99	0	Fx 4 (Atmosphere)
101	100	0	Fx 5 (Brightness)

NO.	PROGRAM CHANGE	BANK	VOICE NAME
102	101	0	Fx 6 (Goblins)
103	102	0	Fx 7 (Echoes)
104	103	0	Fx 8 (Sci-Fi)
Ethnic			
105	104	0	Sitar
106	105	0	Banjo
107	106	0	Shamisen
108	107	0	Koto
109	108	0	Kalimba
110	109	0	Bagpipe
111	110	0	Fiddle
112	111	0	Shanai
Percussive			
113	112	0	Tinkle Bell
114	113	0	Agogo
115	114	0	Steel Drums
116	115	0	Woodblock
117	116	0	Taiko Drum
118	117	0	Melodic Tom
119	118	0	Synth Drum
120	119	0	Reverse Cymbal
Sound Effects			
121	120	0	Guitar Fret Noise
122	121	0	Breath Noise
123	122	0	Seashore
124	123	0	Bird Tweet
125	124	0	Telephone Ring
126	125	0	Helicopter
127	126	0	Applause
128	127	0	Gunshot
Piano			
129	0	0	Grand Pno
130	0	90	AcPiano1
131	0	99	AcPiano2
132	0	91	AcPiano3
133	0	92	AcPiano4
134	1	0	BritePno
135	2	0	El Grand Piano 1
136	3	0	HonkyTonk Piano 1
137	3	99	HonkyTonk 2
138	4	0	Electric piano 1
139	5	0	Electric piano 2
140	4	99	ElecPiano3
141	5	99	ElecPiano4
142	4	91	ElecPiano5
143	5	91	ElecPiano6
144	4	98	DetunedEP1
145	5	98	DetunedEP2
146	6	0	Harpsichord
147	6	91	Harpsichord2
148	6	92	Harpsichord3
149	6	99	Harpsichord4
150	6	98	CoupledHarpsichord
151	7	0	Clavi1
152	7	91	Clavinet2
153	7	92	Clavinet3
154	7	99	Clavinet4

NO.	PROGRAM CHANGE	BANK	VOICE NAME
Chromatic Percussion			
155	8	0	Celesta
156	8	92	Celesta 2
157	8	99	Celesta 3
158	9	0	Glocken1
159	9	99	Glocken2
160	10	0	Music Box
161	11	0	Vibraphone
162	11	92	Vibes 1
163	11	99	Vibes 2
164	12	0	Marimba 1
165	12	99	Marimba 2
166	13	0	Xylophone 1
167	13	99	Xylophone 2
168	14	0	Tubular Bells
169	14	98	ChurchBell
170	14	99	TubeBell
171	15	0	Dulcimer
Organ			
172	16	0	Drawbar Organ
173	16	98	DetunedOrgan 1
174	17	98	DetunedOrgan 2
175	17	0	Percussive Organ
176	18	0	Rock Organ
177	18	91	ElecOrgan1
178	18	92	ElecOrgan2
179	18	93	ElecOrgan3
180	18	99	ElecOrgan4
181	19	0	Church Organ 1
182	19	98	ChurchOrgan 2
183	19	91	PipeOrgan1
184	19	92	PipeOrgan2
185	19	99	PipeOrgan3
186	20	0	Reed Organ
187	21	0	Accordion
188	21	98	ItalianAccordion
189	21	99	Accordion_MT
190	22	0	Harmonica1
191	22	91	Harmonica2
192	22	99	HarmoPan
193	23	0	Tango Accordion
Guitar			
194	24	0	Nylon Guitar
195	24	98	Ukulele
196	24	99	Guitar1
197	25	0	Steel Guitar 1
198	25	90	Mandolin
199	25	98	StringGuitar
200	25	99	Guitar2
201	26	0	Jazz Guitar
202	26	98	HawaiianGuitar
203	26	99	ElecGuitar1
204	27	99	ElecGuitar2
205	27	0	Clean Guitar
206	27	98	ChorusedGuitar
207	28	0	Muted Guitar
208	28	98	FunkGuitar

NO.	PROGRAM CHANGE	BANK	VOICE NAME
209	29	0	Overdriven Guitar
210	30	0	Distortion Guitar
211	30	98	FeedbackGuitar1
212	31	0	Guitar Harmonics
213	31	98	GuitarFeedback2
Bass			
214	32	0	Acoustic Bass 1
215	32	91	Acou Bass 2
216	32	99	Acou Bass 3
217	33	0	Finger Bass
218	33	99	ElecBass 1
219	34	99	ElecBass 2
220	34	0	Pick Bass
221	35	0	Fretless Bass 1
222	35	91	Fretless 2
223	35	99	Fretless 3
224	36	0	Slap Bass 1
225	37	0	Slap Bass 2
226	36	99	Slap Bass 3
227	37	99	Slap Bass 4
228	38	0	Synth Bass 1
229	39	0	Synth Bass 2
230	38	91	SynthBass 3
231	38	92	SynthBass 4
232	38	98	SynthBass 5
233	39	91	SynthBass 6
234	39	92	SynthBass 7
235	39	98	SynthBass 8
Strings			
236	40	0	Violin1
237	40	91	Violin2
238	40	99	Violin3
239	40	98	SlowViolin
240	41	0	Viola
241	42	0	Cello 1
242	42	91	Cello 2
243	42	99	Cello 3
244	43	0	Contrabass 1
245	43	99	ContraBass_MT
246	44	0	Tremolo Strings
247	44	99	DoctorSolo
248	45	0	Pizzicato Strings1
249	45	99	Pizzicato 2
250	46	0	Orchestral Harp 1
251	46	91	Harp 1
252	46	99	Harp 2
253	47	0	Timpani 1
254	47	93	Timpani 2
Ensemble			
255	48	0	Strings Ensemble 1
256	49	0	Strings Ensemble 2
257	48	98	OrchestralPad
258	48	99	StringSection1
259	49	99	StringSection2
260	50	99	StringSection3
261	50	0	Synth Strings 1
262	51	0	Synth Strings 2

NO.	PROGRAM CHANGE	BANK	VOICE NAME
263	50	98	SynthStrings3
264	52	0	Choir Aahs
265	52	99	Chorale
266	53	0	Voice Oohs
267	53	99	SoundTrack
268	54	0	Synth Voice
269	54	99	FunnyVox
270	55	0	Orchestra Hit1
271	55	99	OrchestraHit 2
Brass			
272	56	0	Trumpet 1
273	56	91	Trumpet 2
274	56	99	Trumpet 3
275	57	0	Trombone 1
276	57	91	Trombone 2
277	57	99	Trombone 3
278	58	0	Tuba
279	58	90	Tuba 2
280	58	91	BrassSection1
281	58	99	BrassSection2
282	59	0	Muted Trumpet
283	60	0	French Horn 1
284	60	91	FrenchHorns 2
285	60	99	FrenchHorns 3
286	61	0	Brass Section
287	61	98	Brass2
288	62	0	Synth Brass 1
289	63	0	Synth Brass 2
290	62	91	SynthBrass 3
291	62	98	SynthBrass 4
292	62	99	SynthBrass 5
293	63	91	SynthBrass 6
294	63	98	SynthBrass 7
295	63	99	SynthBrass 8
Reed			
296	64	0	Soprano Sax
297	65	0	Alto Sax
298	66	0	Tenor Sax
299	67	0	Baritone Sax
300	64	99	Sax1
301	65	99	Sax2
302	66	99	Sax3
303	67	99	Sax4
304	68	0	Oboe1
305	68	91	Oboe2
306	68	99	Oboe2001
307	69	0	English Horn 1
308	69	99	English Horn 2
309	70	0	Bassoon 1
310	70	99	Bassoon 2
311	71	0	Clarinet 1
312	71	91	Clarinet 2
313	71	99	Clarinet 3
Pipe			
314	72	0	Piccolo 1
315	72	91	Piccolo 2
316	72	99	Piccolo 3

NO.	PROGRAM CHANGE	BANK	VOICE NAME
317	73	0	Flute 2
318	73	91	Flute 3
319	73	99	BreathPipe
320	73	92	Recorder1
321	74	0	Recorder 2
322	74	99	Pan Flute
323	75	0	Sho
324	75	97	PanPipes
325	75	99	Blown Bottle1
326	76	0	Bottle Bottle2
327	76	99	Shakuhachi
328	77	0	Shakuhachi 2
329	77	99	Whistle 1
330	78	0	Whistle 2
331	78	91	Whistle 3
332	78	99	Ocarina
333	79	0	
Synth Lead			Lead 1 (Square)
334	80	0	Sine Wave
335	80	98	Square Wave
336	80	99	Lead 3 (Sawtooth)
337	81	0	DeepSnare
338	81	99	Lead 5 (Calliope)
339	82	0	Lead 7 (Chiff)
340	83	0	Lead 8 (Charang)
341	84	0	Lead 10(Voice)
342	85	0	Lead 12 (Fifth)
343	86	0	Lead 13 (Bass+Lead)
344	87	0	
Synth Pad			Pad 1 (New Age)
345	88	0	Pad 3 (Warm)
346	89	0	Pad 4 (Polysynth)
347	90	0	Pad 5 (Choir)
348	91	0	Pad 6 (Bowed)
349	92	0	Pad7(Metallic)
350	93	0	Pad 9 (Halo)
351	94	0	Pad 10 (Sweep)
352	95	0	
Synth Effects			Fx 1 (Rain)
353	96	0	IceRain_MT
354	96	99	Fx 2 (Soundrack)
355	97	0	Fx 3 (Crystal)
356	98	0	Fx 4 (Atmosphere)
357	99	0	Fx6(Brightness)
358	100	0	Fx 7 (Goblins)
359	101	0	Fx 8 (Echoes)
360	102	0	EchoPan
361	102	99	Fantasy1
362	103	0	Fantasy2
363	103	99	
Ethnic			Sitar
364	104	0	Sitar_MT
365	104	99	Banjo
366	105	0	Shamisen
367	106	0	Koto1
368	107	0	Koto2
369	107	98	

NO.	PROGRAM CHANGE	BANK	VOICE NAME
370	107	99	Koto_MT
371	108	0	Kalimba
372	109	0	Bagpipe
373	110	0	Fiddle
374	111	0	Shanai
375	111	97	BreathPipe
Percussive			
376	112	0	Tinkle Bell
377	112	91	EchoBell
378	112	92	WindBell
379	112	93	WaterBell
380	112	94	JungleTune
381	112	97	BellSinger
382	112	99	WarmBell
383	113	0	Agogo
384	113	93	SynMallet
385	113	99	MelodicTom
386	114	0	Steel Drums
387	115	0	Woodblock
388	115	97	ElecPerc 1
389	115	99	ElecPerc 2
390	116	0	Taiko Drum
391	116	91	TaikoRim
392	116	98	ConcertBassDrum
393	116	99	Taiko_MT
394	117	0	Melodic Tom1
395	117	98	MeloTom2
396	118	0	Synth Drum
397	118	98	808Tom 808
398	119	0	Reverse Cymbal
399	119	99	Cymbal
Sound Effects			
400	120	0	GuitarNoise
401	120	92	StringSlap
402	120	99	GtrCutNoise
403	121	0	Breath Noise
404	121	91	FluteKeyClick
405	121	93	Glasses
406	121	99	Triangle
407	122	0	Seashore
408	122	91	Rain
409	122	92	Thunder
410	122	93	Wind
411	122	94	Stream
412	122	95	Bubble
413	122	96	Atmosphere
414	123	0	Bird Tweet
415	123	91	Dog
416	123	92	HorseGallop
417	123	93	Bird 2
418	123	99	BirdTweet
419	124	0	Telephone 1
420	124	91	Telephone 2
421	124	99	Telephone 3
422	124	92	DoorCreaking
423	124	93	DoorSlam
424	124	94	Scratch

NO.	PROGRAM CHANGE	BANK	VOICE NAME
425	124	95	WindChimes
426	125	0	Helicopter
427	125	90	BurstNoise
428	125	91	CarEngine
429	125	92	CarStop
430	125	93	CarPass
431	125	94	CarCrash
432	125	95	Siren
433	125	96	Train
434	125	97	JetPlane
435	125	98	Starship
436	125	99	OneNoteJam
437	126	0	Applause
438	126	91	Laughing
439	126	92	Screaming
440	126	93	Punch
441	126	94	HeartBeat
442	126	95	FootSteps
443	126	99	SchoolDaze
444	127	0	Gunshot1
445	127	91	MachineGun
446	127	92	LazerGun
447	127	93	Explosion
448	127	97	JungleTune
Ethnic			
449	73	81	Bangdi
450	40	81	Erhu 1
451	40	82	Erhu 2
452	24	81	Pipa 1
453	24	82	Pipa 2
454	25	81	Liuqin
455	27	81	Zhongruan
456	33	81	Guzheng 1
457	33	82	Guzheng 2
458	34	81	Yangqin
459	41	81	Banhu
460	56	82	Suona
461	56	81	SuonaHigh
462	58	81	LuShen
463	72	81	Hulusi
464	76	81	Xiao
465	32	82	Guqin
466	43	82	Matouqin
467	58	82	Reed
Percussive			
468	0	127	Standard
469	1	127	Standrd2
470	8	127	Room
471	16	127	Power
472	24	127	Eletroni
473	25	127	Synth
474	26	127	Dance
475	32	127	Jazz
476	40	127	Brush
477	48	127	Classic
478	127	127	Sino
479	56	127	Effect

Appendix

Style List

NO.	Style Name
8 Beat	
1	8Bt_Mdrn
2	MrsyBeat
3	SurfPop
4	8Beat1
5	8Beat2
6	8Beat3
7	Ballrock
8	60sRock
9	HardRock
10	ShufRock
11	80sRock
12	Slrock1
13	Slrock2
16 Beat	
14	16Beat1
15	16Beat2
16	16Beat3
17	16Beat4
18	16Beat5
19	PopShuf
20	GuitrPop
21	JazzRock
22	SwngFunk
23	PopRock
24	60Rock2
25	70Ties
26	Surfrock
Ballad	
27	PnoBalad
28	LoveSong
29	68Modern
30	68SlowRk
31	ShowBld
32	PopBalad
33	16BtBld
34	Ballad1
35	Ballad2
36	Ballad3
Dance	
37	Rap
38	DancePop
39	House
40	SwingHse
41	ClubDnce
42	ClubLatn
43	Garage
44	TechnoPop
45	Dance8Bt
46	HipHop
47	ChillOut
48	Cumbia
49	Dance
50	Techno1
51	Techno2
Disco	
52	70sDisco

NO.	Style Name
53	LatnDsco
54	DiscoPop
55	DscParty
56	DscFever
57	NYDisco
58	Disco1
59	Disco2
60	Disco3
61	Disco4
Swing&Jazz	
62	BBFast
63	BBMid
64	BBBallad
65	JazzClub
66	Swing
67	JzBallad
68	Dixie
69	Ratime
70	Stride
71	MdrnJazz
72	DixiePop
73	Jazzwals
74	RagtimeP
75	Swing
76	Ulligull
R&B	
77	Soul
78	DtrtPop
79	Rhtmblus
80	68soul
81	Twist
82	RockRollP
83	BgieWgie
84	68Blues
85	34Gospel
86	GsplShuf
87	Germwalz
88	Gospel
89	Gypsi
90	Rocknrol
91	Rockrol2
92	R&B
93	TwistPop
Country	
94	Ctry8Bt
95	CtryPop
96	CtrySwng
97	Ctry2Bt2
98	CtryBld
99	Bluegras
100	CtryWlzP
101	Cntryrok
102	Cntrywlz
103	Country1
104	Country2
105	Country3
Latin	

NO.	Style Name
106	Merengue
107	Bosanova
108	PopBossa
109	MamboPop
110	SalsaPop
111	Beguine1
112	Beguine2
113	Reggae
114	SwngRega
115	Baroque
116	Bigband
117	Boogie1
118	Boogie2
119	Latin
120	Macarena
121	Mambo
122	Sacrific
123	Salsa
Ballroom	
124	DancBand
125	EglshWlz
126	Foxtrot1
127	Foxtrot2
128	Slowfox
129	QvkFxtrt
130	QvkStep
131	Tango1
132	Tango2
133	Tango3
134	Tango4
135	TangoHb
136	Pasodobl
137	Samba1
138	Samba2
139	Samba3
140	Sambarok
141	Dscsamba
142	ChaCha1
143	Chacha2
144	Chacha3
145	Chacha4
146	Jive
147	Rhumba1
148	Rhumba2
149	VnsWaltz
150	Carib1
151	Charlstn
152	Cingen98
153	Fastbos
154	Rave1
155	Rave2
156	Reggea
Traditional 传统音乐	
157	24March
158	March
159	68March1
160	68March2

NO.	Style Name	NO.	Style Name	NO.	Style Name
161	24Polka				
162	68Polka				
163	Polka1				
164	Polka2				
165	Tarntela				
166	SirtakiP				
167	SctsReel				
168	Hawai1				
169	Hawai2				
170	Mariachi				
171	Hollywd				
172	Merenque				
173	Motown1				
174	Mus58				
175	Oriental				
176	Pasodobl				
177	Schlager				
178	Sirtaki1				
Waltz					
179	SwngWltz				
180	JazzWltz				
181	Waltz				
182	FrnchWlz 兹				
183	MordnWlz				
184	Slwaltz				
185	Trawltz1				
186	Trawltz2				
187	Vienwltz				
Piano					
188	Pno8bt1				
189	Pno8bt2				
190	Pnobald				
191	Pnowalz1				
192	Pnowalz2				
Sino					
193	Yaozu				
194	Zangzu				
195	Xiaoqu				
196	Xinjiang				
197	Errenzan				
198	Jiangsu1				
199	Jiangsu2				
200	Minzu				
201	Shanbei				
202	JingJu1				
203	JingJu2				

Troubleshooting Hints

•When the instrument is turned on or off, a Popping sound is temporarily produced.	This is normal and indicates that the instrument is receiving electrical power.
•When using a mobile phone, noise is produced. Using a mobile phone in close proximity to the instrument may produce interference.	To prevent this, turn off the mobile phone or use it further away from the instrument.
•Not all of the voices seem to sound, or the sound seems to cut off.	The instrument is polyphonic up to a maximum of 32 notes — including Dual voice, Split Voice, auto accompaniment, song, and Metronome. Notes exceeding this limit will not sound.
•The Auto Accompaniment does not sound properly.	Make sure that the Auto Accomp Volume Function is set to an appropriate level. Is the Split Point set to an appropriate key for the chords you are playing? Set the Split Point to an appropriate position on the keyboard. Is the chord indicator showing in the LCD display? If it is not showing, press the CHORD button so that it does show.
•No sound produced by the keyboard, but the lights and screen work.	Check that the master volume control is not set to minimum. Check that nothing is plugged into the headphone socket.
•The sound of the voice changes from note to note.	This is normal. The digital tone generation uses multiple recordings (samples) of an instrument across the range of the keyboard; The actual sound of the voice may be slightly different from note to note.
•The volume is too soft. •The sound quality is poor. •The rhythm stops unexpectedly or will not play. •The recorded data of the song, etc. does not play 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 supplied AC adaptor. If you have lost or damaged your AC adaptor, please contact your nearest store for a correct replacement adaptor. An incorrect AC mains adaptor which is not rated sufficiently can cause malfunction or damage.
•To completely restore all settings as per factory settings	Perform a factory reset, Please refer to content in this owner's manual. All of the user setting will be erased and the default factory settings will be applied to the instrument.
•Power suddenly and unexpectedly turns off, after a period of not touching the keys.	This is normal and the Auto Power Off function may have been activated. If you need to disable the Auto Power Off function, please see how to do this in the owner's manual.
•The sustain pedal or footswitch seems to produce the opposite effect. Example pressing the footswitch deactivates the sustain, and releasing the footswitch triggers the sustain.	The polarity of the footswitch needs to be correctly detected.Make sure the jack plug for the footswitch is connected. Switch the instrument on whilst not touching the pedal.

Appendix

Specifications

Keyboard:	61 standard-size touch sensitivity keys(C1 through C6)
Display:	Multi-Function LCD
Number Buttons:	[0]-[9],[+],[-]
Voices:	479
Polyphony:	32
Voice Control:	Sustain, Transpose, Pitch Bend, Touch, Mixer
Auto accompaniment:	203 Styles
Accompaniment Control:	Synchro, Start/Stop, Intro/Ending, Fill In, Tempo/Tap, Accompaniment Volume, Metronome
Keyboard Modes:	Fullkeyboard, Split, Chord
Setup:	Power(ON/OFF), Master Volume(MIN-MAX)
Registration Memory:	Store, M1-M4
DEMO:	Demo Songs: 5,Learning Songs:100
Recording:	Record, Play
Interface:	DC12V, Phones/Line Out, Line In, Pedal, Mic, USB To Host
Dimensions(W x D x H):	950mm x 350mm x 130mm
Weight:	6kgs

FCC STATEMENT

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

    Reorient or relocate the receiving antenna.

    Increase the separation between the equipment and receiver.

    Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

    Consult the dealer or an experienced radio/TV technician for help.

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