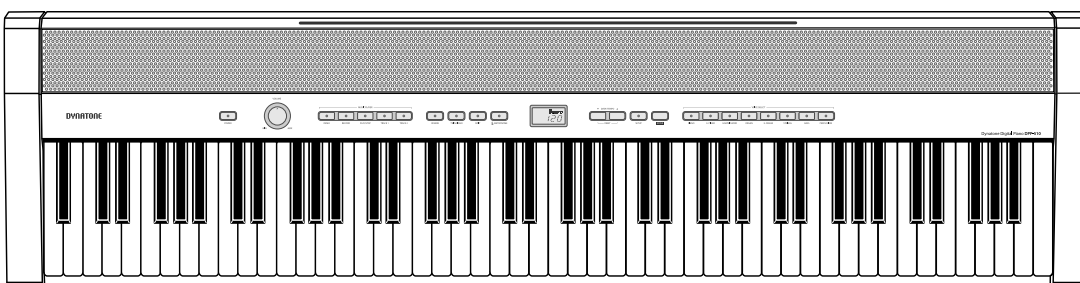




# OWNER'S MANUAL



***Dynatone Portable Piano DPP-510***  
*New feel, new look and new sound*

# PRECAUTIONS

## PLEASE READ CAREFULLY BEFORE PROCEEDING.

Please keep this manual in a safe and handy place for future reference.

### For AC adaptor



#### WARNING

- This AC adaptor is designed for use with only the digital piano. Do not use for any other purpose.
- Indoor use only. Do not use in any wet environments.



#### CAUTION

- When setting up, make sure that the AC outlet is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch of the instrument and disconnect the AC adaptor from the outlet. When the AC adaptor is connected to the AC outlet, keep in mind that electricity is flowing at the minimum level, even if the power switch is turned off. When you are not using the instrument for a long time, make sure to unplug the power cord from the wall AC outlet.

### For Piano



#### WARNING

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

- Do not place the power cord near heat sources such as heaters or radiators. Also, do not excessively bend or otherwise damage the cord, or place heavy objects on it.
- Only use the voltage specified as correct for the instrument. The required voltage is printed on the name plate of the instrument.
- Use the specified adaptor (page 5) only. Using the wrong adaptor can result in damage to the instrument or overheating.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.
- This instrument contains no user-serviceable parts. Do not open the instrument or attempt to disassemble or modify the internal components in any way. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified service personnel.
- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place on it any containers (such as vases, bottles or glasses) containing liquids which might spill into any openings. If any liquid such as water seeps into the instrument, turn off the power immediately and unplug the power cord from the AC outlet. Then have the instrument inspected by qualified service personnel.
- Never insert or remove an electric plug with wet hands.
- Do not put burning items, such as candles, on the unit. A burning item may fall over and cause a fire.
- When one of the following problems occur, immediately turn off the power switch and disconnect the electric plug from the outlet. Then have the device inspected by service personnel.
  - The power cord or plug becomes frayed or damaged.
  - It emits unusual smells or smoke.
  - Some object has been dropped into the instrument.
  - There is a sudden loss of sound during use of the instrument.



## CAUTION

Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the instrument or other property. These precautions include, but are not limited to, the following:

- Do not connect the instrument to an electrical outlet using a multiple-connector. Doing so can result in lower sound quality, or possibly cause overheating in the outlet.
- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.
- Remove the electric plug from the outlet when the instrument is not to be used for extended periods of time, or during electrical storms.
- Do not place the instrument in an unstable position where it might accidentally fall over.
- Before moving the instrument, remove all connected cables, to prevent damage to the cables or injury to anyone who might trip over them.
- When setting up the product, make sure that the AC outlet you are using is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch and disconnect the plug from the outlet. Even when the power switch is turned off, electricity is still flowing to the product at the minimum level. When you are not using the product for a long time, make sure to unplug the power cord from the wall AC outlet.
- Use only the stand specified for the instrument. When attaching it, use the provided screws only. Failure to do so could cause damage to the internal components or result in the instrument falling over.
- Before connecting the instrument to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all volume levels to minimum.
- Be sure to set the volumes of all components at their minimum levels and gradually raise the volume controls while playing the instrument to set the desired listening level.
- Do not insert a finger or hand in any gaps on the instrument.
- Never insert or drop paper, metallic, or other objects into the gaps on the panel or keyboard. This could cause physical injury to you or others, damage to the instrument or other property, or operational failure.
- Do not rest your weight on, or place heavy objects on the instrument, and do not use excessive force on the buttons, switches or connectors.
- Do not use the instrument/device or headphones for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

- ☞ Always turn the power off when the instrument is not in use.
- ☞ Even when the [POWER] switch is in standby status (power lamp is off), electricity is still flowing to the instrument at the minimum level. When you are not using the instrument for a long time, make sure you unplug the power cord from the wall AC outlet.

## NOTICE

To avoid the possibility of malfunction/ damage to the product, damage to data, or damage to other property, follow the notices below.

- Do not use the instrument in the vicinity of a TV, radio, stereo equipment, mobile phone, or other electric devices. Otherwise, the instrument, TV, or radio may generate noise. When you use the instrument along with an application on your iPad, iPhone or iPod touch, we recommend that you set " Airplane Mode" to " ON" on that device in order to avoid noise caused by communication.
- Do not expose the instrument to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration, damage to the internal components or unstable operation. (Verified operating temperature range: 5° - 40° C, or 41° - 104° F.)
- Do not place vinyl, plastic or rubber objects on the instrument, since this might discolor the panel or keyboard.
- When cleaning the instrument, use a soft cloth. Do not use paint thinners, alcohol, solvents, cleaning fluids, or chemical-impregnated wiping cloths.
- Some types of data will be stored in internal memory, and maintained even if the power is turned off. However, the data could be lost due to malfunction or incorrect operation. Save important data to a computer.

## Welcome

Thank you and congratulations on your purchase of the digital piano.

Your new digital piano is a state-of-the-art musical instrument which incorporates the latest electronics technology to make its operation as easy as possible.

In addition to the many features usually found on digital pianos, this contains a variety of educational resources that can be used for the learning of musical concepts and piano skills.

Your versatile digital piano is ideal for both beginners and experienced musicians alike.

The piano's compact size will allow it to fit into many places where a traditional or large-sized digital piano can't.

Its slim stylish design will match most home interiors.

In order to enjoy and utilize the features and functions of this unit to their fullest, be sure to carefully read this manual and follow the instructions contained herein.

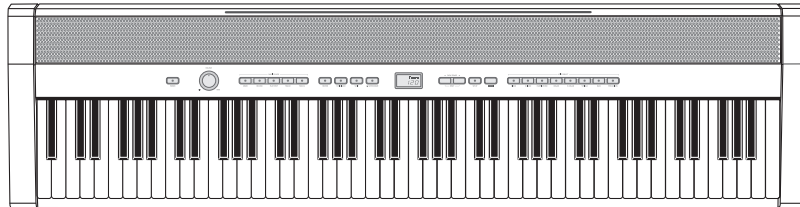
## Table of Contents

<b>PRECAUTIONS</b>	<b>1</b>	Main/Split/Layer/Music Volume	<b>16</b>
For AC adaptor	1	Touch	16
For Piano	1	Main/Split/Layer Octave	16
Welcome	3	Tune	16
Table of Contents	3	Transpose	16
		Reverb Volume	17
<b>Unpacking</b>	<b>4</b>	Reverb Type	17
<b>Setting Up Your Piano</b>	<b>5</b>	Effect Volume	17
		Effect Type	17
<b>Controls and Terminals</b>	<b>7</b>	EQ	17
Turning ON the Power	7	Auto Power Off	17
Headphone	7	MIDI Local Control	17
Connecting to the External Device	8	Reset	17
Control Panel	9		
<b>Basic Operation</b>	<b>11</b>	<b>Recording</b>	<b>18</b>
Adjusting the Volume	11	Recording and Playback	18
Selecting Voices	11	<b>Demo Music</b>	<b>19</b>
Layer	12	Classic Demo Music	19
Split	12	Classic Demo Music List	20
Changing the Split Point	13	Educational Demo Music	21
Reverb	13	Sonatine Demo Music List	22
Using the Metronome	14	<b>Drum and SFX Table</b>	<b>23</b>
Twin Piano	14	<b>MIDI Implementation Chart</b>	<b>24</b>
<b>Function</b>	<b>15</b>	<b>Troubleshooting</b>	<b>25</b>
Setup mode	15	<b>Specifications</b>	<b>26</b>

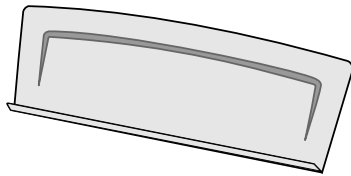
# Unpacking

Carefully take out the digital piano and its accessories from the packing box.  
The digital piano set consists of the following items.

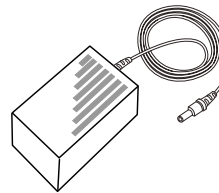
Unpacking



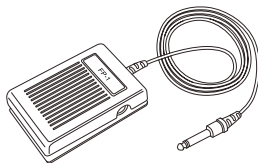
Digital Piano



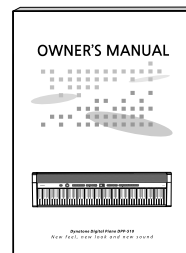
Music Rest



AC Adaptor



Pedal FP-1

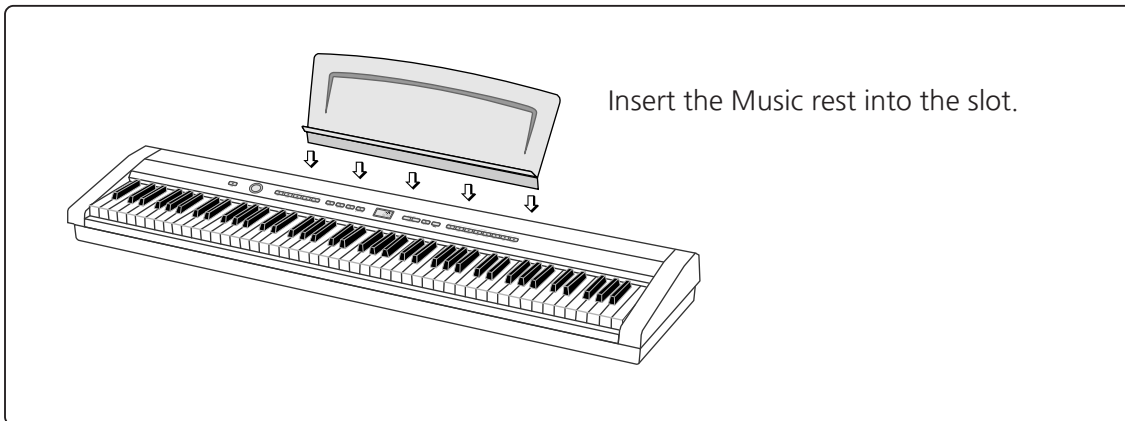


Owner's Manual

☛ Inspect each item carefully to make sure that it is in a good condition. If you find any item missing or damaged, immediately contact the place of purchase for replacement

# Setting Up Your Piano

## Music Rest



## Power Requirements

- 1 Connect the **AC POWER ADAPTOR**. Insert the DC plug of the AC adaptor into the piano and the AC plug into a household AC power outlet.
- 2 Turn on **POWER** by pressing the **POWER** button.
  - ☞ Use the specified adaptor only. Using the wrong adaptor can result in damage to the instrument or overheating.
  - ☞ When setting up the product, make sure that the AC outlet you are using is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch and disconnect the plug from the outlet.

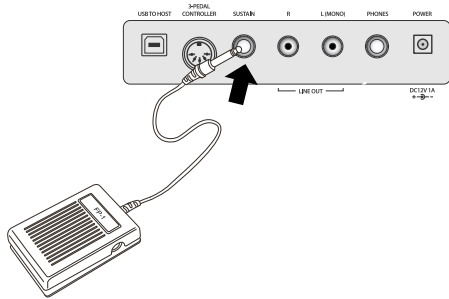
Household AC power outlet

### USING BATTERY

This Piano can be powered by batteries instead of the AC power adaptor.

- ☞ D size 6 batteries required. The battery life is approximate 4 hours.
- ☞ Always make sure you turn the piano off whenever your not using.

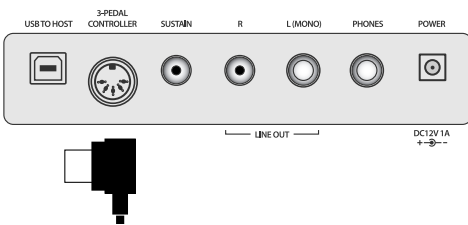
## Using the Foot Pedal(FP-1)



The **SUSTAIN** jack is for connecting the included foot pedal FP-1, which works in the same way as a damper pedal on an acoustic piano.

- Do not press the footswitch when turning the power on. Doing this changes the recognized polarity of the footswitch, resulting in reversed footswitch operation.
- Make sure that power is OFF when connecting or disconnecting the footswitch or pedal.

## Using the Optional 3-Pedal Controller



The **3-PEDAL CONTROLLER** jack is for connecting an optional 3-pedal controller. When connecting the pedal unit, make sure to also assemble the unit on an optional keyboard stand.

### RIGHT PEDAL(Damper Pedal )

When the voice is set to any of the piano variants, the right pedal performs the same role as the damper pedal of acoustic pianos. With organ voices, the pedal causes notes to be sustained indefinitely until its release.

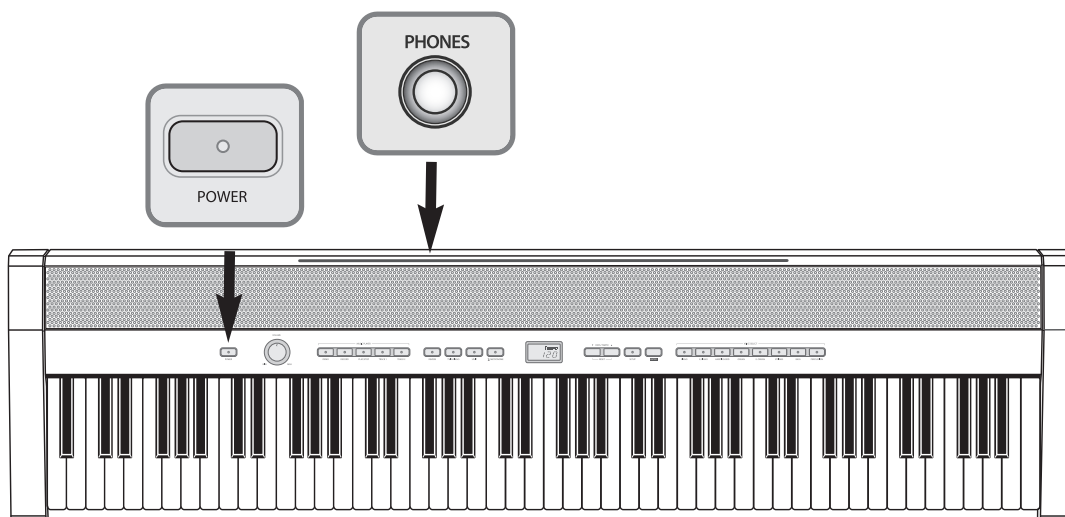
### CENTER PEDAL(Sostenuto Pedal)

The sostenuto pedal, like the damper pedal, causes the affected notes to be sustained until the release of the pedal, but only the notes that are being played at the moment the pedal is depressed are affected. All subsequent notes played while the pedal is being held down are not affected.

### LEFT PEDAL(Soft Pedal)

Depressing the pedal softens the sound of the notes being played.

## Controls and Terminals



### Turning ON the Power

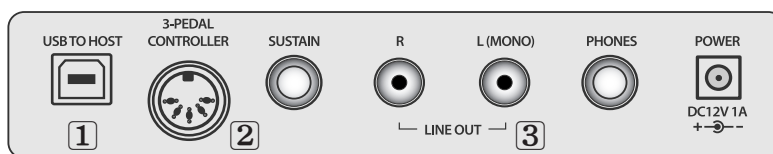
- 1 Connect the **AC POWER ADAPTER**.  
Insert the DC plug of the AC adapter into the piano and the AC plug into a household AC power outlet.  
☞ See 'Power requirements' on page 5.
- 2 Turn on **POWER**  
Press the **POWER** button to turn on the piano. The LCD screen will show the initial screen.  
☞ The voice is initially set to Grand Piano.  
☞ Adjust the volume by using **MASTER VOLUME**.  
☞ **Auto Power Off**  
Following 30 minutes of inactivity, the piano will be turned off automatically to preserve energy.  
To disable the auto power-off system, turn off the APO option on the setup menu, see **Setup mode** on page 15.
- 3 Turn off **POWER**  
Press the **POWER** button. All lights and the LCD screen will be turned off.  
☞ **Backing Up the recorded song**  
The recorded music will be preserved even if the power is turned off and then on again.

### Headphone

Connect a set of stereo headphones(optional) to the **PHONES jack**(standard 1/4"). Insert the headphone plug into the **PHONES jack** on the back of the main unit. When headphones are connected, the internal speaker system is automatically shut off.



## Connecting to the External Devices



Terminals

### 1 USB to HOST(Connecting to a Computer)

By connecting a computer to the USB, you can transfer MIDI and audio data between the instrument and the computer and take advantage of sophisticated computer music programs.

When connecting to a computer, the digital piano can be used as an audio device of your computer.

When you connect the digital piano to a computer, the device driver required to send and receive data will be installed on the computer.

The below instructions explain how to connect and use the terminals.

#### ⚠ CAUTION - Precautions when using the USB terminal.

When connecting the computer to the USB terminal, make sure to observe the following points. Failing to do so risks freezing the computer and corrupting or losing data. If the computer or the instrument freezes, turn the power of the instrument off and restart the computer.

### 2 3-Pedal controller(Connecting to the optional 3-Pedal)

The **3-PEDAL CONTROLLER** jack is for connecting an optional 3-pedal controller. When connecting the pedal unit, make sure to also assemble the unit on an optional keyboard stand.

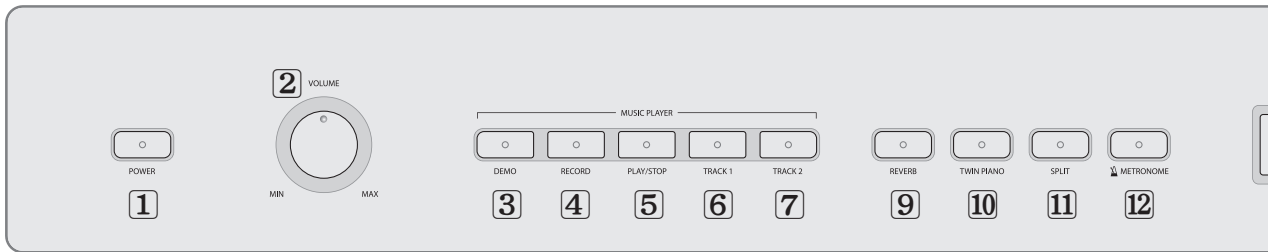
### 3 Line Out(Connecting to an External AMP)

Connect the instrument's **LINE OUT** jack and the input jacks of a pair of powered speakers using appropriate stereo audio cable.

# Control Panel

Controls and Terminals

Control Panel



## POWER

1 POWER Switch ..... Page 7

## VOLUME

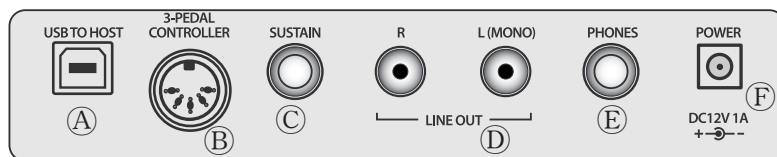
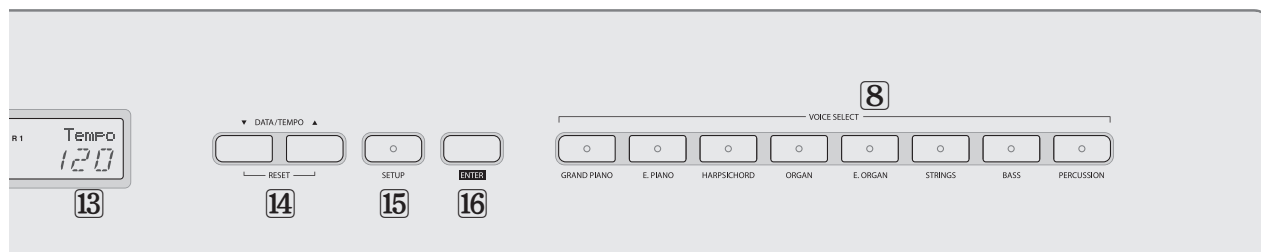
2 MASTER VOLUME ..... Page 11

## RECORD & DEMO

- 3 DEMO ..... Page 19,21
- 4 RECORD ..... Page 19
- 5 PLAY/STOP ..... Page 18,19,21
- 6 TRACK1 ..... Page 18,21
- 7 TRACK2 ..... Page 18,21

## PERFORMANCE

- 8 VOICE Buttons ..... Page 11
- 9 REVERB ..... Page 13
- 10 TWIN PIANO ..... Page 14
- 11 SPLIT ..... Page 12
- 12 METRONOME ..... Page 14



**SETUP**

- 13 LCD screen
- 14 DATA/TEMPO
- 15 SETUP ..... Page 15
- 16 ENTER ..... Page 15

**TERMINALS**

- A USB TO HOST ..... Page 8
- B 3-PEDAL CONTROLLER ..... Page 6,8
- C SUSTAIN ..... Page 6
- D LINE OUT R,L/MONO ..... Page 8
- E PHONES ..... Page 7
- F DC IN ..... Page 5

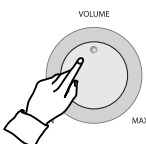
# Basic Operation

## Adjusting the Volume

The piano has one volume knob on the panel for adjusting the volume.

### MASTER VOLUME

This determines the entire volume of the piano.



This also determines the volume level of the **HEADPHONE(s)**.

## Selecting Voices

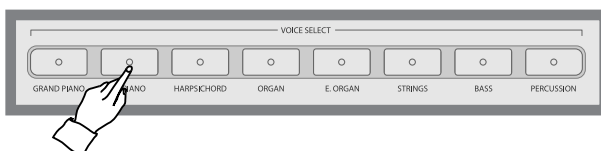
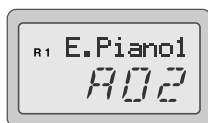
The piano features a wealth of rich, authentic voices, including piano, organ, elec. piano, strings and other instruments. It also features a keyboard percussion function that lets you play realistic drum, percussion sounds, and various effect sounds directly from the keyboard.

### Voice Types

- ☞ 14 Sounds
- ☞ 1 Drum kit
- ☞ 1 Sound Effect set

### 1 Select a Voice.

Select the desired voice by pressing the appropriate **VOICE** button.



- ☞ The digital piano has 8 voice buttons and each voice button has two assigned voices.
- ☞ When a voice button is pressed, the assigned voice will be shown on the display.
- ☞ To select the other voice assigned to the current button, press the button again.

### ☞ Backing Up the Selected Voice

The lastly selected voice on each button will be retained in memory.

### Voice List

Grand Piano	E.Piano	Harpichord	Organ	E.Organ	Strings	Bass	Percussion
Button 1	Button 2	Button 3	Button 4	Button 5	Button 6	Button 7	Button 8
G. Piano 1 G. Piano 2	E.Piano 1 E.Piano 2	Harpichord Vibraphone	Organ 1 Organ 2	E. Organ 1 E. Organ 2	Strings 1 Strings 2	Acoust Bass Elec. Bass	Drum Set Sound FX

### 2 Play the selected voice.

Adjust the volume by using **MASTER VOLUME** and play the piano with the selected voice.

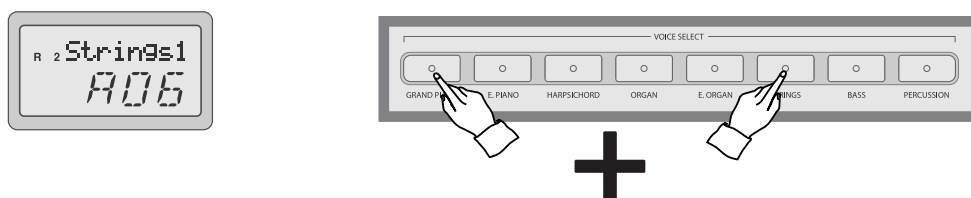
## Layer

The Layer mode of the piano allows you to select and play two different voices simultaneously in a layer. This makes it easy to create exceptionally rich and thick tonal textures. The volume balance can be set individually for each of the two voices.

### 1 Press and hold down the button corresponding to your desired main voice, then press the button of your desired layer voice.

Select a voice in the normal way. (See the **SELECTING VOICE** section on page 11.)

- ☞ With the Layer mode active, playing keys will result in both main and layered voice sounding.
- ☞ Volume of the layered voice can be adjusted independently in the setup mode. (See the **SETUP** section on page 15,16.)



### 2 Press a voice button to deactivate the layer.

## Split

The split mode allows you to assign different voices of each of the left and right parts of the keyboard. For example, you may play the bass on the left while still playing in piano voice on the right.

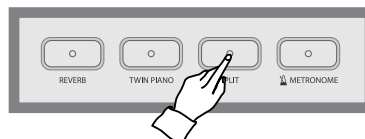
### PLAYING WITH SPLIT VOICE

#### 1 Select a main voice.

Select a voice in the normal way. (See the **SELECTING VOICE** section on page 11.)

## 2 Call up the Split mode.

To call up the split mode, press the **SPLIT** button. The lamp will begin flashing; the LCD screen will display the number of current split voice.



The default voice is 'A07' **ACOUSTIC BASS** in the split mode.

## 3 Select the split voice.

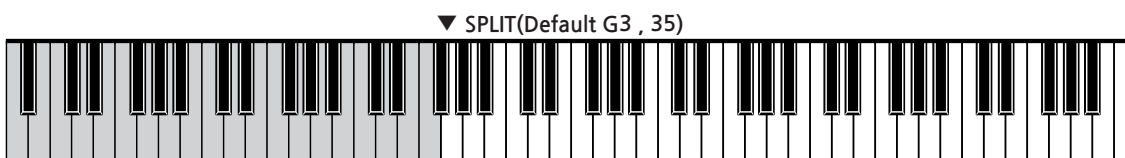
Select the voice while the split button is flashing.

- Volume of the split voice can be adjusted independently in the setup mode. (See the **SETUP** section on page 16.)

## Changing the Split Point

You can set the point dividing the right and left parts of the keyboard at any desired key position.

Hold down the **SPLIT** button and press the desired key to assign it as the new split point. The LCD screen will display the corresponding number of the chosen key.



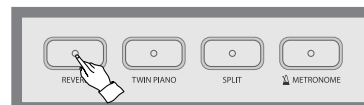
Key number of the lowest note is '01'.

## Reverb

Reverb is an effect that recreates the decaying reflections of a sound in a performance space, and reproduces the special ambience of a concert hall.

### REVERB ON/OFF

To turn on the reverb, press the **REVERB** button. The lamp will be lighted to indicate that the reverb is now active.



To turn off the reverb, press the **REVERB** button again. The lamp will be off, indicating that the reverb is no more active.

- Reverb is set ON by default.
- The type and volume of reverb may be adjusted in the setup mode. (See the **SETUP** section on page 15,17.)

## Using the Metronome

The piano features a convenient metronome that is ideal for practice.

### START/STOP THE METRONOME

To start the metronome, simply press the **METRONOME** button. Press the **METRONOME** button again to stop the metronome sound.

### ADJUSTING THE TEMPO OF THE METRONOME

You can set the tempo to a range of 20 ~ 280 beats per minute by using the **DATA/TEMPO** buttons.

- ☞ Hold the button for continuous decrementing or incrementing.
- ☞ Pressing the **UP** and **DOWN** buttons simultaneously will instantly restore the default tempo(120).
- ☞ Metronome volume can be adjusted in the setup mode.(See the **SETUP** section on page 19.)

### SELECTING THE BEAT

The metronome may be set for a specific meter, causing it to make a distinguished beep sound to indicate every first beat of each measure.

Press and hold the **METRONOME** button for 2 seconds while the metronome is active. The LCD screen will display the current meter of the metronome. Use **DATA UP** or **DOWN** button to set the metronome to your desired meter.



- ☞ Pressing both **DATA UP** and **DOWN** buttons simultaneously will instantly restore the default metronome meter(1/4).
- ☞ **METRONOME BEAT** : 1/4, 2/4, 3/4, 4/4, 5/4, 6/8, 9/8, C/8(12/8)

## Twin Piano

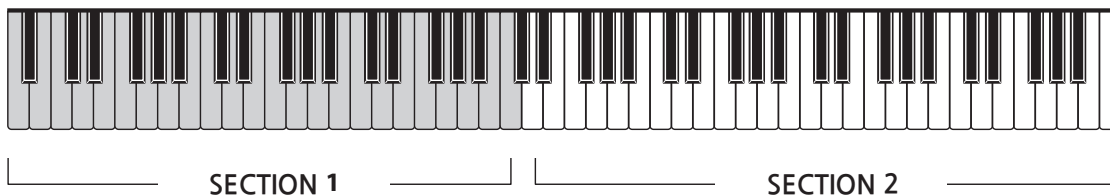
The twin piano is a tool that divides the piano into two smaller pianos with identical octave range. This feature allows two people to play the piano in the same octave range simultaneously.

### 1 Select a Voice.

Select a voice in the normal way.(See the **SELECTING VOICE** section on page 13.)

### 2 Press the TWIN PIANO button.

The keyboard is split into two sections with identical octave range.



### 3 Press the TWIN PIANO button again to deactivate the twin piano.

The lamp will be off, indicating that the twin piano is no more active.

# Function

The set values for each of the 19 functions can be adjusted in the setup menu. The setup menu also gives you the option of re-initializing the piano, restoring the values of all functions to their default and bringing the piano to its initial status.

## Setup mode

### 1 Call up the setup mode.

Press **SETUP** button to call up setup mode . The LCD screen will show the first setup menu 'Main Volume or the latest operated setup menu.

### 2 Select a desired function.

Select a desired function by using the **DATA UP** or **DOWN** button .

☞ The LCD screen will display the current value of the selected function.

### 3 Adjust the value of the selected function.

Press the **ENTER** button and adjust the value by using the **DATA UP** or **DOWN** button. Refer to the below function list.

☞ The value can be adjusted during flashing the value display.

☞ To exit setup mode, press the **SETUP** button.

☞ To go to the function selection menu, press the **ENTER** button on the adjustment value menu.

☞ Pressing both **DATA UP** and **DOWN** buttons simultaneously will instantly restore the default value of the selected function.

☞ If the **ENTER** button on the **RESET** menu is pressed, all memories and functions of the piano will be initialized.

☞ **Backing Up adjusted value** The lasted values of the functions will be retained in memory until turns off the power.

#### FUNCTION LIST

DISPLAY	FUNCTION	DESCRIPTION	RANGE(DEFAULT)
Main Vol	Main Volume	Adjust the main voice volume	00 ~ 127(127)
SplitVol	Split Volume	Adjust the split voice volume	00 ~ 127(127)
LayerVol	Layer Volume	Adjust the layered voice volume	00 ~ 127(85)
MusicVol	Demo/Metronome Vol.	Adjust the music and the metronome volume	00 ~ 127(75)
Touch	Touch	Type of the Touch : OFF,SOFT,NORMAL,HARD	Off/SFT/NOR/HRD(NOR)
Main Oct	Main Octave	Set the main voice octave	-02 ~ 00 ~ +02(00)
SplitOct	Split Octave	Set the split voice octave	-02 ~ 00 ~ +02(00)
LayerOct	Layer Octave	Set the layered voice octave	-02 ~ 00 ~ +02(00)
Transpos	Key Transpose	Adjust the key transpose	-12 ~ 00 ~ +12(00)
Tune	Master Tune	Adjust the master tune	-64 ~ 00 ~ +63(00)
Rev. Vol	Reverb Volume	Adjust the reverb volume	00 ~ 127(45)
Rev. Type	Reverb Type	Set the reverb type 00(Off), 01(Room 1), 02(Room 2), 03(Room 3), 04(Hall 1), 05(Hall 2), 06(Plate), 07(Short Delay), 08(Long Delay)	00 ~ 08(03)
Eft. Vol	Effect Volume	Adjust the effect volume	00 ~ 127(80)
Eft. Type	Effect Type	Set the effect type 00(Off), 01(Chorus 1), 02(Chorus 2), 03(Chorus 3), 04(Chorus 4), 05(Chorus 5), 06(Delay 1), 07(Delay 2), 08(Delay 3)	00 ~ 08(00)
EQ. Bass	Bass EQ	Adjust Bass EQ	-12 ~ 00 ~ +12(06)
EQ. High	High EQ	Adjust High EQ	-12 ~ 00 ~ +12(01)
AutoPowr	Auto Power Off	Auto Power Off : ON/OFF	ON/OFF(ON)
L.Contrl	MIDI Local Control	MIDI Local control : ON/OFF	ON/OFF(ON)
Reset	Reset	Reset Piano	Enter to reset



## Main/Split/Layer/Music Volume

All voice parts can be independently adjusted by using this function.

- ☞ When the music volume is adjusted, both the metronome and the music volume are adjusted.

## Touch

The touch option determines the extent to which the volume of the piano responds to your playing strength(velocity). 4 different types are available for tailoring the keyboard response to the selected voice, type of song, or your own playing preference.

DISPLAY	TOUCH	DESCRIPTION
SOF	Soft	This setting lets you produce a relatively loud sound even when the keys are played softly.
NOR	Normal	This setting represents the standard degree of response of an ordinary keyboard, and is used as default.
HRd	Hard	This setting requires you to play the keys quite strongly to produce maximum loudness.
OFF	Off	These settings produce the same degree of loudness, no matter how strongly or softly you play the keys.

## Main/Split/Layer Octave

In this function you can set the main voice octave, the layered voice octave and the split voice octave

## Tune

The Tune function lets you make fine adjustments to the pitch, allowing you to accurately match the tuning with that of other instruments.

- ☞ The available range of tuning is from **-64 Hz to +64 Hz.(Default 0)**
- ☞ **Hz(Hertz)**  
The pitch is measured in units of Hertz(abbreviated Hz), which represents the number of times the sound wave vibrates in a second.
- ☞ The cent is a unit of pitch, equal to 1/100 of a semitone.

## Transpose

The TRANSPOSE function makes it possible to shift the pitch of the keyboard in semitone units, allowing you to match the pitch of the keyboard to the range of other instruments or singers, or letting you easily play in a different key without having to change your fingering. For example, if the TRANSPOSE is set F key, playing C results in a pitch of F, or in other words, you can play in the key of C major on the keyboard and automatically have the pitch transposed to F major.

- ☞ Pressing both **UP** and **DOWN** buttons simultaneously will instantly restore the default value(0).
- ☞ **Range:** -12 semitone ~ 0 ~ 12 semitone(default 00)

## Reverb Volume

The reverb volume can be adjusted.

## Reverb Type

There are 8 reverb types in the piano.

- ☞ 00(Off), 01(Room 1), 02(Room 2), 03(Room 3), 04(Hall 1), 05(Hall 2), 06(Plate), 07(Short Delay), 08(Long Delay)

## Effect Volume

Effect volume can be adjusted.

## Effect Type

There are 8 effect types in the piano.

- ☞ 00(Off), 01(Chorus 1), 02(Chorus 2), 03(Chorus 3), 04(Chorus 4), 05(Chorus 5), 06(Delay 1), 07(Delay 2), 08(Delay 3)

## EQ

The piano has the 2 band equalizer.

- ☞ High and Bass sound can be adjusted by using the EQ.

## Auto Power Off

The piano has the APO(Auto Power Off) function and you can turn off this function.

- ☞ Following 30 minutes of inactivity, the piano will be turned off automatically to preserve energy.
- ☞ Even after turning off the APO function, the piano will not be turned off automatically.

## MIDI Local Control

Local Control refers to the control that the piano keyboard has on its internal sound system. When Local Control is set ON, the sound system belongs to the piano keyboard and what is played on the keyboard is reproduced via the piano speakers.

By turning this OFF, you can separate the connection between the keyboard and the sound system. When it is turned off, playing the keyboard does not trigger the speakers of the piano to make sound. The playing data is still transmitted to any external MIDI device connected to the piano, allowing you to control the external MIDI device with the piano keyboard without sounding the internal speakers of the piano.

## RESET

Including recored song, all functions and memories in the piano are set to default.

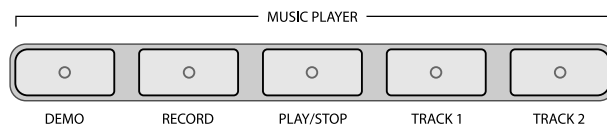
- ☞ If pressing the enter button in the reset menu, the piano starts resetting.
- ☞ It takes around 5 seconds to finish all resetting.
- ☞ Never disconnect the power during resetting.
- ☞ After resetting the LCD screen shows the initial display 'TEMPO'.

# Recording

The piano features comprehensive song recording functions that allow you to record your own performance.

A song records 2 tracks and approx. 9,000 notes can be recorded into one track.

## Recording and Playback



### 1 Prepare recording to the track1

Select the desired voice and press both the **RECORD** and the **TRACK1** buttons. The record button will be lighted, and the track1 button will begin flashing.

### 2 Start recording to the track1.

Play the keyboard or press the **RECORD** button to begin the recording. Both buttons will be flashing.

☞ Any previously recorded music in the track will be deleted.

### 3 Stop recording to the track1.

Press the **TRACK1** button or the **RECORD** button to stop the recording. The record button will be turned off, and the track1 button will be lighted.

If you want to hear what is recorded in the track1, press the **PLAY/STOP** button. The play button will be flashing throughout the playback.

### 4 Start recording to the track2.

Press both the **RECORD** and the **TRACK2** button. The record button will be lighted, and the track2 button will begin flashing.

Play the keyboard or press the **RECORD** button to begin the recording.

☞ If you wish not to hear what is recorded in the track1 while recording to the track2, press the track1 button to turn it off. Otherwise, leave it turned on(lighted).

☞ Each track can be played individually.

### 5 Stop recording to the track2.

Press either the **TRACK2** button or the **RECORD** button to stop the recording. The record button will be turned off, and the track2 button will be lighted.

If you want to hear what is recorded in the track2, press the **PLAY/STOP** button. The play button will be flashing throughout the playback.

### 6 Playback the recorded song.

Press the **PLAY/STOP** button.

☞ A lighted track button means that there is previously recorded material saved in that track.

☞ If you wish not to hear a track, turn off the button corresponding to that track.

### 7 Stop playback of the recorded song.

Press the **PLAY** button again.

#### CLEARING RECORDED MEMORY

To clear the recorded memory, Press both the **RECORD** and the **PLAY/STOP** buttons simultaneously.

☞ Recording new material will remove the pre-existing material in the track.

☞ **Backing Up the recorded song**

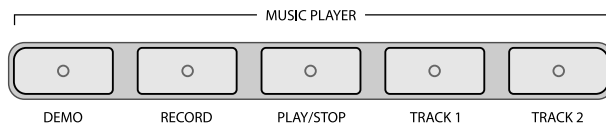
The recorded material will be preserved even after the power is turned off and then on again.

# Demo Music

There are 50 classical tunes and 321 educational tunes in the demo music of this piano.

## Classic Demo Music

There are 50 demo tunes in the piano.



### 1 Enter the demo music mode.

Press the **DEMO** button. The LCD screen shows 'Classic'.

### 2 Go to the Classic Demo Music mode.

Press the **ENTER** button to go to the music select mode. The LCD screen shows the first number '01' of the classic demo music.

☞ The music selection mode can be automatically selected after 4 seconds without pressing the enter button.

### 3 Select a desired demo tune.

Select the demo tune by using the **DATA UP** or **DOWN** button.

### 4 Playback of the selected demo tune.

Press the **PLAY** button. Playback of the selected demo tune starts.

- ☞ Automatically start the next tune after finishing the playback.
- ☞ The music volume can be adjusted (See the setup mode on page 15, 16.)
- ☞ Whenever pressing the demo button, the piano goes to performance mode.
- ☞ If pressing the data up (or down) button, the music stops and the next (or before) tune is selected.

### 5 Stop music.

Press the **PLAY** button to stop the playback.

### 6 Exit the demo mode.

Press the **DEMO** button to exit the demo mode. The piano goes to the performance mode.

☞ To go to the music selection mode, press the **ENTER** button on the demo tune section mode.

## Classic Demo Music List

DISPLAY	TITLE	COMPOSER
01	Etude op.10 no.1	Chopin, Fryderyk Franciszek
02	Etude op.10 no.4	
03	Etude op.10 no.5	
04	Etude op.25 no.9	
05	Nocturne op.9 no.1	
06	Nocturne op.9 no.2	
07	Nocturne op.27 no.2	
08	Nocturne op.32 no.1	
09	Nocturne op.72 no.1	
10	Sonata op.3 no.4	
11	Mazurka op.7 no.1	
12	Mazurka op.30 no.2	
13	Mazurka op.67 no.3	
14	Polonaise op.40 no.1	
15	Waltz op.34 no.1	
16	Waltz op.64 no.1	
17	Waltz op.64 no.2	
18	Waltz op.69 no.2	
19	Impromptu No. 4 c sharp minor(Fantasie-Impromptu) Op.66	
20	Ballade op.23 no.1 in g minor	Mozart, Wolfgang Amadeus
21	Ballade op.47 no.3 in A flat Major	
22	Prelude op.28 no.1 in C Major- Agitato	
23	Prelude op.28 no.16 in b-flat minor- Presto con fuoco	
24	Piano Sonata no.10 in C major, KV330 I. Allegro moderato	
25	Piano Sonata no.11 in A major, KV331 I. Alla turca : Allegretto	Beethoven, Ludwig van
26	Piano Sonata no.14 in c minor, KV457 I. Adagio	
27	Piano Sonata no.14 in c minor, KV457 III. Assai allegro	
28	Variations "Ah! Vous dirai-je, Maman"	
29	Rondo in D major, KV485	Debussy, Claude Achille
30	Sonate no.8 in c minor, op.13 'Pathetique' Grave - Allegro molto e con brio	
31	Sonate no.8 in c minor, op.13 'Pathetique' II. Adagio cantabile	
32	Sonate no.8 in c minor, op.13 'Pathetique' III. Allegro	Schumann, Robert Alexander
33	Arabesque No.1 in E major	
34	Suite bergamesque 1. Prelude	
35	Suite bergamesque 3. Clair de lune	
36	Petite Suite, for piano 4-hands 2. Cortege	Liszt, Franz
37	Scenes from Childhood op.15 From foreign lands and peoples in G major	
38	"12 Etudes d'execution transcendante(Transcendental Etudes), S 139 Etude Transcendante in d minor, Mazzeppa	Rimsky, Korsakov
39	The flight of the bumble bee(by S. Rachmaninov)	
40	Trois Gymnopedies 1. Lent et douloureux	Telemann, Georg Philipp
41	12 Fantasie per clavicembalo(TWV 33) - Harpsichord music - 1. Fantasia	
42	12 Fantasie per clavicembalo(TWV 33) - Harpsichord music - 3. Fantasia	
43	12 Fantasie per clavicembalo(TWV 33) - Harpsichord music - 5. Fantasia	
44	12 Fantasie per clavicembalo(TWV 33) - Harpsichord music - 6. Fantasia	
45	12 Fantasie per clavicembalo(TWV 33) - Harpsichord music - 12. Fantasia	Tchaikovsky, Pyotr Ilyich
46	Children's Album, Op.39 No.4 Mama	
47	Prelude in C major, BWV933	
48	Praludium und Fuge in B BWV560 -Pipe Organ music -	Bach, Johann Sebastian
49	Wohltemperriertes Klavier-Pledudio 1	
50	Wohltemperriertes Klavier-Fuga 1	

## Educational Demo Music

The Educational Music allows the user to practice the piano using a selection of built-in piano lesson music. The left and right hand parts for each piece can be practiced separately, while adjusting the tempo allows difficult passages to be mastered.

### 1 Enter the demo music mode.

The LCD screen shows 'Classic' that is the first demo music group and the piano goes into the demo music mode. You can select a demo music group in this mode. There are 5 educational music groups and 1 classic music group in this mode and each educational music group has same tunes as the listed piano lesson book.

Display	Buyer	Czerny 100	Czerny 30	Czerny 40	Sonatine
Tune	106	100	30	40	45

### 2 Select a desired tune.

Select a desired tune number in the selected music group by the **DATA UP** or **DOWN** button.

- ☞ If you don't select any music for 4 seconds, the first tune will be automatically set.
- ☞ When a tune is selected, the left and right hand buttons light and you can mute the right or left hand parts by pressing the track1 or 2 button.

### 3 Playback of the selected music.

Press the **PLAY** button. The selected music starts.

- ☞ This function can activate or deactivate the left and right-hand parts of selected lesson tune and enables the user to practice each part by pressing the left and right hand buttons.
- ☞ Automatically start the next tune after finishing the playback.
- ☞ The music volume can be adjusted(See the setup mode on page 15,16.)
- ☞ Whenever pressing the demo button, the piano goes to performance mode.
- ☞ If pressing the data up(or down) button, the music stops and the next(or before) tune is selected.

### 4 Stop music.

Press the **PLAY** button to stop the playback.

### 5 Exit the demo mode.

Press the **DEMO** button to exit the demo mode. The piano goes to the performance mode.

- ☞ To go to the music selection mode, press the **ENTER** button on the demo tune section mode.

## Sonatine Demo Music List

DISPLAY	TITLE	COMPOSER
011	Sonatine op.20 no.1 1movement	F. Kuhlau
012	Sonatine op.20 no.1 2movement	
013	Sonatine op.20 no.1 3movement	
021	Sonatine op.20 no.2 1movement	
022	Sonatine op.20 no.2 2movement	
023	Sonatine op.20 no.2 3movement	
031	Sonatine op.20 no.3 1movement	
032	Sonatine op.20 no.3 2movement	
033	Sonatine op.20 no.3 3movement	
041	Sonatine op.55 no.1 1movement	
042	Sonatine op.55 no.1 2movement	
051	Sonatine op.55 no.2 1movement	
052	Sonatine op.55 no.2 2movement	
053	Sonatine op.55 no.2 3movement	
061	Sonatine op.55 no.3 1movement	
062	Sonatine op.55 no.3 2movement	
.....		
071	Sonatine op.36 no.1 1movement	M. Clementi
072	Sonatine op.36 no.1 2movement	
073	Sonatine op.36 no.1 3movement	
081	Sonatine op.36 no.2 1movement	
082	Sonatine op.36 no.2 2movement	
083	Sonatine op.36 no.2 3movement	
091	Sonatine op.36 no.3 1movement	
092	Sonatine op.36 no.3 2movement	
093	Sonatine op.36 no.3 3movement	
101	Sonatine op.36 no.4 1movement	
102	Sonatine op.36 no.4 2movement	
103	Sonatine op.36 no.4 3movement	
111	Sonatine op.36 no.5 1movement	
112	Sonatine op.36 no.5 2movement	
113	Sonatine op.36 no.5 3movement	
121	Sonatine op.36 no.5 1movement	
122	Sonatine op.36 no.5 2movement	
.....		
131	Sonatine Hob.16-35 1movement	J. Haydn
132	Sonatine Hob.16-35 2movement	
133	Sonatine Hob.16-35 3movement	
.....		
141	Sonatine K. 545 1movement	W.A. Mozart
142	Sonatine K. 545 2movement	
143	Sonatine K. 545 3movement	
.....		
151	Sonatine op.49 no.2 1movement	L.V. Beethoven
152	Sonatine op.49 no.2 2movement	
161	Sonatine op.49 no.1 1movement	
162	Sonatine op.49 no.1 2movement	
.....		
171	Sonatine op.20 no.1 1movement	J.L. Dussek
172	Sonatine op.20 no.1 2movement	

# Drum and Sound FX Table

## Drum and SFX Table

	Prog 1 Standard Drum	Prog 57 Sound FX
39 - D#2	High Q	Jing
40 - E2	Slap	Samul Drum 1
41 - F2	Scratch Push	Samul Drum 2
42 - F#2	Scratch Pull	Samul Cymbal 1
43 - G2	Sticks	Soft/Loud
44 - G#2	Square Click	Samul Cymbal 2
45 - A2	Metronome Click	Long/Short
46 - A#2	Metronome Bell	Samul Tong
47 - B2	Kick drum2/Jazz BD2	Low
48 - C2	Kick drum1/Jazz BD1	High
49 - C#3	Side Stick	Sogo
50 - D3	Snare Drum1	Good/Very Good
51 - D#3	Hand Clap	High Q
52 - E3	Snare Drum 2	Slap
53 - F3	Low Floor Tom	Scratch Push
54 - F#3	Closed Hi Hat [EXC1]	Scratch Pull
55 - G3	High Floor Tom	Sticks
56 - G#3	Pedal Hi-Hat [EXC1]	Square Click
57 - A3	Low Tom	Metronome Click
58 - A#3	Open Hi-Hat [EXC1]	Metronome Bell
59 - B3	Low-Mid Tom	Guitar Slide
60 - C4	Hi Mid Tom	Gt Cut Noise 1
61 - C#4	Crash Cymbal 1	Gt Cut Noise 2
62 - D4	High Tom	Double Bass Slap
63 - D#4	Ride Cymbal 1	Key Click
64 - E4	Chinese Cymbal	Laughing
65 - F4	Ride Bell	Screaming
66 - F#4	Tambourine	Punch
67 - G4	Splash Cymbal	Heart Beat
68 - G#4	Cowbell	Footsteps 1
69 - A4	Crash Cymbal2	Footsteps 2
70 - A#4	Vibraslap	Applause
71 - B4	Ride Cymbal2	Door Creaking
72 - C5	Hi Bongo	Door Closing
73 - C#5	Low Bongo	Scratch
74 - D5	Mute Hi Conga	Wind Chime
75 - D#5	Open Hi Conga	Car Engine Start
76 - E5	Low Conga	Car Breaking
77 - F5	High Timbale	Car Pass
78 - F#5	Low Timbale	Car Crash
79 - G5	High Timbale	Police Siren
80 - G#5	Low Agogo	Train
81 - A5	Cabasa	Jet Take-off
82 - A#5	Maracas	Helicopter
83 - B5	Short Whistle[EXC2]	Starship
84 - C6	Long Whistle[EXC2]	Gun Shot
85 - C#6	Short Guiro[EXC3]	Machinegun
86 - D6	Long Guiro[EXC3]	Lasergun
87 - D#6	Claves	Explosion
88 - E6	Hi Wood Block	Dog
89 - F6	Low Wood Block	Horse Gallop
90 - F#6	Mute Cuica[EXC4]	Birds
91 - G6	Open Cuica[EXC4]	Rain
92 - G#6	Mute Triangle[EXC5]	Thunder
93 - A6	Open Triangle[EXC5]	Wind
94 - A#6	Shaker	Sea Shore
95 - B6	Jingle Bell	Stream
96 - C7	Belltree	Bubble
97 - C#7	Castanets	Birds in Forest
98 - D7	Mute Surdo[EXC6]	Cricket
99 - D#7	Open Surdo[EXC6]	Bush Warbler
100 - E7		



# MIDI Implementation Chart

Function		Recognized	Transmitted	Remark
Basic Channel	Default	ALL	1 -3	
Mode	Default	OMNI OFF, POLY	OMNI OFF, POLY	
Note ON/OFF	9nH kk w	O	O	#kk:note ON (0-127) #w:velocity (1-127)
Pitch Bender	EnH bi bh	O	O	Maximum swing +/- 1 tone
Control Change	00 BnH 00H cc	O	X	Bank Select
	01 BnH 01H cc	O	X	Modulation Wheel
	05 BnH 05H cc	O	X	Portamento Time
	06 BnH 06H cc	O	X	Data Entry
	07 BnH 07H cc	O	X	Volume
	10 BnH 0AH cc	O	X	Pan Out
	11 BnH 0BH cc	O	X	Expression
	64 BnH 40H cc	O	O	Sustain (Damper) Pedal
	65 BnH 41H cc	O	X	Portamento ON/OFF
	66 BnH 42H cc	O	O	Sostenuto Pedal
	67 BnH 43H cc	O	O	Soft Pedal
	80 BnH 80H w	O	X	Reverb Prog.(w=00H-70H)
	81 BnH 51H w	O	X	Chorus Prog.
	91 BnH 5BH w	O	O	Reverb Send Level
	93 BnH 5DH w	O	O	Chorus Send Level
	120 BnH 78H 00H	O	X	All Sound Off
	121 BnH 79H 00H	O	X	Reset All Controller
123 BnH 7BH 00H	O	X	All Notes Off	
126 BnH 7EH 00H	O	X	Mono On	
127 BnH 7FH 00H	O	X	Poly On	
Program Change	CnH PP	O	O	Sounds/Drum Set List
System Exclusive	General MIDI Reset	X	X	

O : Yes, X : No

# Troubleshooting

If a problem occurs while using this product, check the points listed below first prior to contacting customer service.

Problem	Cause	Solution
The piano does not turn on.	<ol style="list-style-type: none"> <li>1) The power cord is not properly plugged.</li> <li>2) The power switch is not pressed. (The button is lighted when it is pressed.)</li> <li>3) Outlet is out of order.</li> </ol>	<ol style="list-style-type: none"> <li>1) Properly plug the power cord.</li> <li>2) Press the power switch.</li> <li>3) Try to plug the power cord of another home appliance into same electric outlet.</li> </ol>
The speakers produce no sound when a key is played.	<ol style="list-style-type: none"> <li>1) The master volume is set to minimum.</li> <li>2) A headphone is connected.</li> <li>3) The power connection jack of the power cord is not properly connected to the product.</li> </ol>	<ol style="list-style-type: none"> <li>1) Increase the master volume.</li> <li>2) Disconnect the headphone.</li> <li>3) Properly connect the power connection jack to the product.</li> </ol>
There are notable difference between the volumes of the main voice and the secondary voice.	<ol style="list-style-type: none"> <li>1) The secondary voice volume is set to a wrong value.</li> </ol>	<ol style="list-style-type: none"> <li>1) Set the secondary voice volume properly.</li> </ol>
Random noise is heard when using the product.	<ol style="list-style-type: none"> <li>1) Other electric products such as a refrigerator or an electric washer are operating nearby.</li> <li>2) The vibration comes from some objects on the piano when playing the piano.</li> <li>3) Noise is heard when using the headphone.</li> </ol>	<ol style="list-style-type: none"> <li>1) Move the product faraway from other electric products, particularly those that use motors.</li> <li>2) Firmly secure items causing the vibration or move them to another place.</li> <li>3) Make the headphone plug clean or replace the headphone.</li> </ol>
No sound is heard when using the product connected to an external sound device.	<ol style="list-style-type: none"> <li>1) The master volume is set to minimum.</li> <li>2) The connecting cord is either cut or damaged.</li> <li>3) Not connected in the right port.</li> </ol>	<ol style="list-style-type: none"> <li>1) Increase the master volume.</li> <li>2) Replace the cord.</li> <li>3) Make sure to properly connect into the right port.</li> </ol>

# Specifications

<b>Section</b>	<b>Contents</b>
<b>PRODUCT</b>	PORTABLE DIGITAL PIANO
<b>KEYBOARD</b>	88 KEYS(STANDARD) - 7 1/4 OCTAVES
<b>TOUCH RESPONSE</b>	OFF, SOFT, NORMAL, HARD
<b>MAX. POLYPHONY</b>	128 NOTES
<b>SOUND</b>	14 VOICES
	1 DRUM KIT
	1 SOUND EFFECT SET
<b>FUNCTIONS</b>	LAYER, SPLIT, TWIN PIANO, TUNE, TRANSPOSE, MIDI LOCAL CONTROL, PEDAL
<b>DIGITAL SIGNAL PROCESSING</b>	EFFECT(8), REVERB(8)
<b>METRONOME</b>	YES
<b>DISPLAY</b>	LCD Screen
<b>DEMO MUSIC</b>	CLASSIC 50 TUNES, EDUCATIONAL 321 TUNES - BUYER, CZERNY100, 30, 40, SONATINE
<b>RECORD</b>	REAL-TIME-RECORDING 2 TRACKS APPROX. 18,000 NOTES(9,000 NOTES/TR)
<b>VOLUME CONTROLS</b>	MAIN, LAYER, SPLIT, DEMO, METRONOME LOW EQ GAIN, HIGH EQ GAIN, REVERB, EFFECT
<b>I/O TERMINALS</b>	USB IN, PEDAL IN, 3-PEDAL CONTROLLER, STEREO LINE OUT, PHONES
<b>SPEAKER</b>	3:6 INCHES × 2(STEREO 15W + 15W)
<b>POWER</b>	DC IN(12V)

