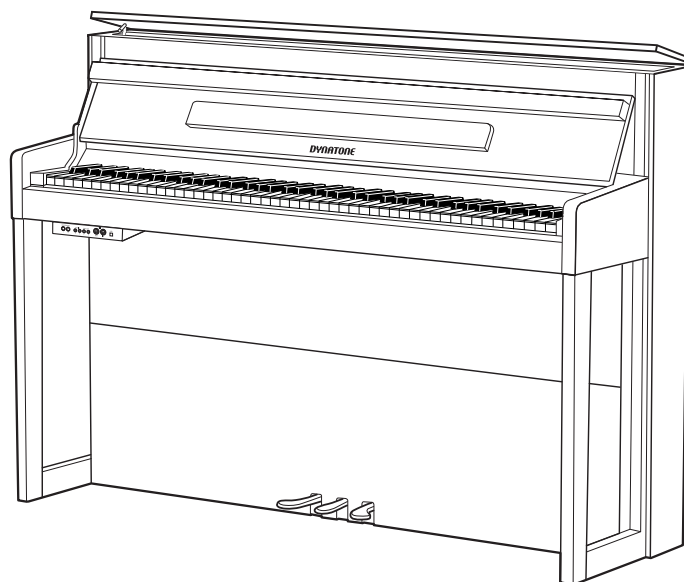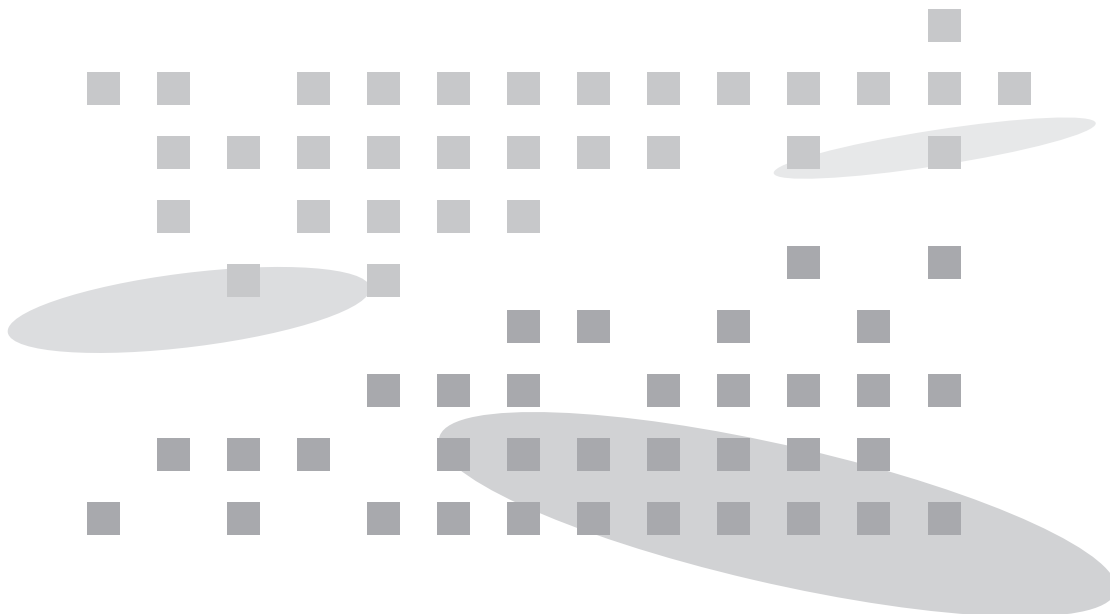# DYNATONE

# OWNER'S MANUAL

*High Performance USB Digital Piano*

*New feel, new look and new sound*

# IMPORTANT SAFETY INSTRUCTIONS

**WARNING**: When using electric products, basic precautions should always be followed, including the following:

1. Read all the instructions before using the product.
2. To reduce the risk of injury, close supervision in necessary when a product is used near children.
3. Do not use this product near water -for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool.
4. This product should be used only with a cart or stand that is recommended by the manufacturer.
5. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
6. The product should be positioned so that its location does not interfere with its proper ventilation.
7. The product should be positioned away from heat sources such as radiators, heat registers, or other products that produce heat.
8. The product should only be connected to the type of power supply described in the operating instructions or as marked on the product.
9. This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.
10. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
11. Care should be taken so that objects do not fall and liquids are not spilled into the openings of the enclosure.
12. The product should be serviced by qualified service personnel when:
    A. The power-supply cord or the plug has been damaged;
    B. Objects have fallen, or liquid has been spilled into the product;
    C. The product has been exposed to rain;
    D. The product does not appear to operate normally or exhibits a marked change in performance;
    E. The product has been dropped, or the enclosure damaged.
13. Do not attempt to service the product beyond what is described in the user maintenance instruction. All other servicing should be done by qualified service personnel.
14. To clean the exterior surfaces, wipe lightly with a clean, dry cloth. Never use solvents such as benzine or paint thinners.
15. The product should be positioned away from a television, radio, or any heavy equipment that can generate electromagnetic fields.
16. The product should be located on a flat, stable surface that is free of vibration.
17. Be careful to protect the product from knocks, particularly when carrying it.
18. During thunderstorms, turn the product off and disconnect the plug from the power outlet.

## INFORMATION TO THE USER

This equipment has been tested and is 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. 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 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.

## WARNING

 Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

## GROUNDING INSTRUCTIONS

This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a power supply cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet which is properly installed and grounded in accordance with all local codes and ordinances.
**DANGER** - Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Do not modify the plug provided with the the product - if it will not fit the outlet, have a proper outlet installed by a qualified electrician. Do not use an adapter which defeats the function of the equipment-grounding conductor. If you are in doubt as to whether the product is properly grounded, check with a qualified serviceman or electrician.

**Before Reading:**

# Safety Instructions

This section is intended to ensure the user's safety and prevent financial damage.
Please read this section carefully and use the product properly according to it.

| ⚠ | WARNING: | Not following this warning may result in death or serious injury |
|---|---|---|

| ⚠ | CAUTION: | Not following this caution may result in injury and/or financial loss. |
|---|---|---|

## ⚠ WARNING:

**To avoid the risk of death or physical injury due to electric shock, short circuit, damage or fire, please follow the fundamental safety instructions listed below. This warning includes the following:**

· Never open up this product or attempt to break down or modify its inner parts. This product contains no user-serviceable components. If it seems to be malfunctioning, please immediately cease use of the product and contact customer service for repair.

· Do not expose the product to rain. Do not use this product under watery or wet environment, and do not leave any liquid container on its top as it may spill into the product. If any liquid is spilled into the product, immediately turn off the product, take the plug off the AC outlet and contact a designated service center for inspection.

· If the power cable or plug is either wore off or damaged, or the product suddenly stops sounding, or any unknown smell or smoke seem to emerge from the product, immediately turn off the product, take the adapter plug off the AC outlet and contact a designated service center for inspection.

· Always use the correct voltage for this product. The voltage specification can be found on the name label located behind this product.

· Always take the plug off the outlet prior to cleaning the product. Never insert or take off the plug with wet hands.

· Regularly check the condition of the power plug, and remove any substances or dusts that may have accumulated on it.

# ⚠ CAUTION

**To avoid the risk of physical injury, damage of this product or other financial loss, please follow the fundamental safety instructions listed below. This caution includes the following:**

· Do not place the power cable nearby heat generators like heaters or radiators. Bending the cable too much could damage the cable. Do not put heavy objects on the cable, or leave the cable on a location where others may step on or trip over it.

· When removing the plug from either the product or the outlet, always seize the neck of the plug. Seizing and pulling from the cable could damage it.

· Do not use multi-connectors to power the product. Doing so may result in lowered sound quality and/or overheat the outlet.

· When not using the product for an extended period of time, or during an electric storm, take the plug off the outlet.

· When connecting this product to another electronic product, turn off the powers of both products before connecting. Set the volumes of all products to minimum before turning on the products. After making sure that all volumes are set to minimum, begin using this product and gradually increase the volume until the desired level is reached.

· Do not expose this product to excessive dust, vibration, or locations/sources of extreme heat (under direct sunlight, nearby heaters, inside cars during daytime). Exposure to such environments may result in external and/or internal damage.

· Do not use this product nearby devices like TVs, radios, stereo sound devices, mobile phones or other electronic devices. Doing so could result in excessive noise from either this product or the TV/radio.

· Do not place the product on unstable locations where it may fall off.

· Always remove all cables from the product before moving it.

· When cleaning the instrument, always use soft and dry or lightly wet cloth. Do not use cloth imbued with paint diluent, solvent, cleansing agent or chemical substances. Do not place any objects made of vinyl, plastic or rubber on the product. Doing so may alter the color of the keys or the panel.

· Do not place your weight or heavy objects on the product.

· Do not use excessive force while manipulating the buttons, switches or connectors.

· Be careful not to leave fingers below the key cover when closing it. Do not insert fingers below the key cover or into any other gap between the parts of this product.

· Do not insert or drop objects like paper or metal substances on the key cover, panel, or in the gap between keys. When done so accidentally, immediately turn off the power of the product, take the plug off the outlet, and contact a designated service center.

· Maintain 3 inches of space between the piano and the wall or other nearby objects. Insufficient space may interfere with air circulation and result in overheat.

· Carefully read the guide on assembling procedure and follow the instructions. Not doing so could result in damage of the instrument and/or injury of the user.

· Avoid using the product on volume high enough to be disturbing to ears for extended period of time, as doing so could affect one's hearing permanently. If you experience hearing difficulty, or excessive ringing on the ears, contact a physician.

· During thunderstorms, take the plug off the outlet.

# Preface

Thank you for your purchase.

This product mixes up a maximum polyphony of 256 notes and a massive sound data weighing as much as 8Gbit to offer its 5 distinguished concert grand piano sounds and other high quality voices that recreate the authentic sound of 128 different instruments. Its RHA-3W (Tri-sensor) wooden keyboard, a vast improvement over its two-sensored predecessor, and half-pedal feature that detects the precise movement of its keys add on its respectable quality.

The VP player of the piano features an extensive bank of demonstrational pieces including the pedagogical etude series of Beyer, Czerny, Burgmüller and selected sonatines by many composers, as well as 1,005 pieces in different genres for either entertainment or playing reference. The piano's music player allows to play MP3 and MIDI files saved in USB flash drives.

Also there are the two-track recording system designed to aid the learning process, a USB 2.0 terminal for connections with devices like computers or smartphones/tablets, and other versatile utilities such as the auto-accompaniment system.

To take full advantage of the wide range of features and utilities offered by this instrument, please read and examine this user's manual carefully.
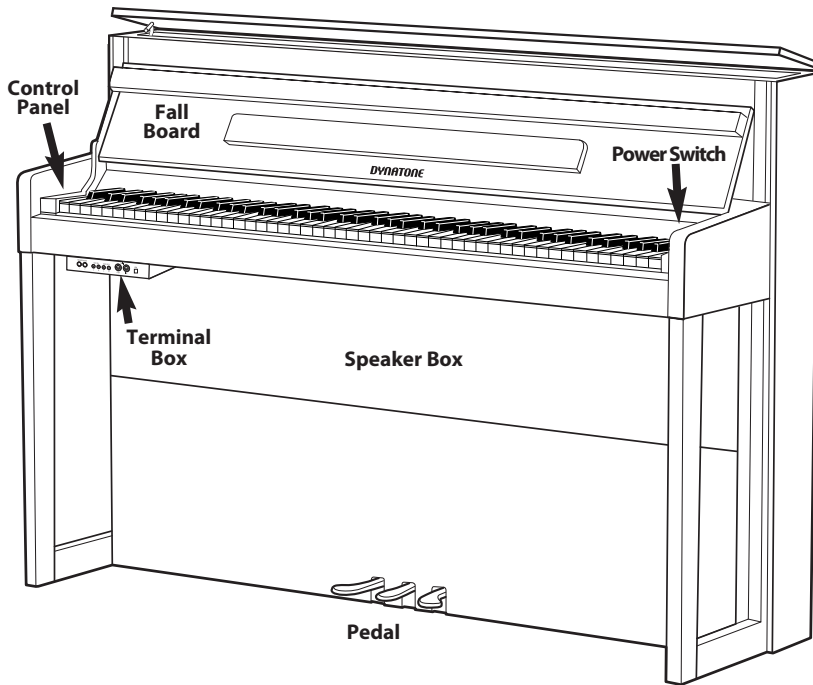
Please keep this user's manual for future reference.

Thank you.

# Table of Contents

# External Appearance

Control
Panel

Fall
Board

Power Switch

DYNATONE

Terminal
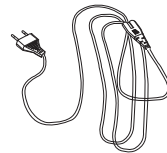Box

Speaker Box

Pedal

# Accessory

**Owner's Manual**
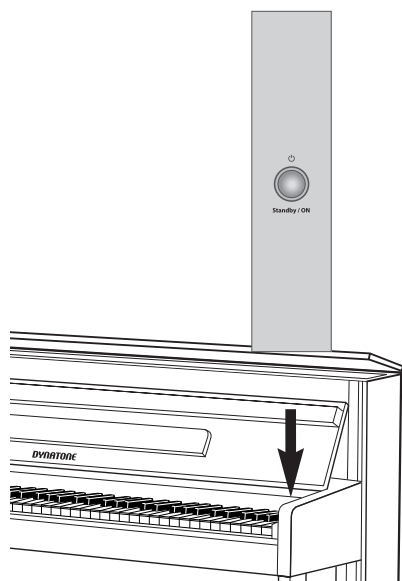
OWNER'S MANUAL

**AC Power Cable**

Plug the AC Power Cable into the corresponding socket on the back of the main unit.

## Turning on the Power

① Connect the **AC POWER CABLE.** Insert AC plug at the end of AC cord into the piano and AC plug at the other end of AC cord into a standard AC outlet.

② Press **POWER** switch. The power is turned on.
The voice of Grand Piano is selected automatically as the default value.

☞ Adjust the volume by using **MASTER VOLUME**.

To turn off the power, press **POWER** switch again All lamps will be turned off.

**Auto Power Off (APO)**
This product is designed to turn itself off automatically when left unused for more than 30 minutes, in order to conserve energy.

**Deactivating Auto Power Off(APO)**
While holding down the first white key and first black key from the left, press the power switch to deactivate APO.

## Using the Headphone
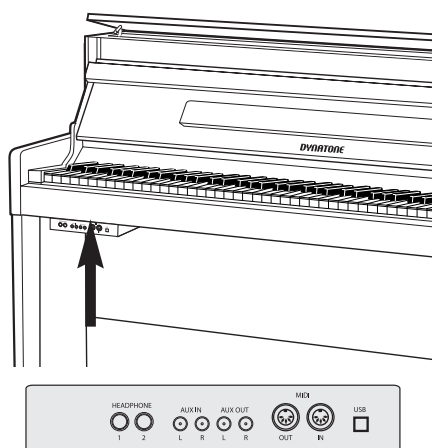
Connect a set of stereo headphones(optional) to **HEADPHONE** jack.
Insert plug of the headphone into the **HEADPHONE** jack on the bottom panel of the piano.

When headphone is connected, the internal speaker system is automatically shut off.

Since the piano has two **HEADPHONE** jacks, two sets of headphones can be used simultaneously, allowing two people to enjoy listening to the performance.

# Controls
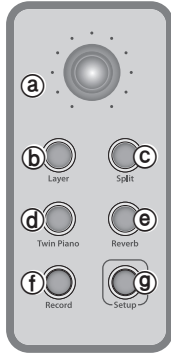
ⓐ MASTER VOLUME ················· Page 13
ⓑ LAYER button ················· Page 14
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ⓕ RECORD button ················· Page 21
ⓖ SETUP button ················· Page 18,19,20

# Voice Key Map

# Function Key Map

SECONDARY VOICE VOLUME — Down, Up

REVERB LEVEL — Down, Up

C4

C5

KEY TRANSPOSE — C, C#, D, D#, E, F, F#, G, G#, A, A#, B

C6

TUNE — Down, Up

TOUCH — Off, Hard, Normal, Soft

C7

# Terminals

## CONNECTING AUDIO DEVICES

ⓐ **AUX in jacks**(RCA jacks of **L** and **R**)
The stereo outputs from another instrument can be connected to these jacks, allowing the sound of an external instrument to be reproduced via the instrument's speakers.
Connect the output jacks (LINE OUT etc.) of an external synthesizer or the tone generator module and the instrument's **AUX In 'L'** and **'R'** jacks using appropriate audio cables.

☞ **CAUTION**
When the sound of an external device is output to the instrument, first turn on the power to the external device, then to the instrument. Reverse this order when you turn the power off.

ⓑ **AUX out jacks** (RCA jacks of **L** and **R**)
When these are connected, you can use the instrument's **MASTER VOLUME** control to adjust the volume of the sound output to the external device.
Connect the instrument's **AUX Out 'L'** and **'R'** jacks and the input jacks of a pair of powered speakers using appropriate audio cables.

# CONNECTING OTHER DEVICES

## ⓒ **Connecting the external MIDI devices** (MIDI Terminals)

Use the built-in **MIDI** terminals and standard MIDI cables to connect external MIDI devices.

**MIDI IN**      Receives MIDI messages from an external MIDI device.

**MIDI OUT**    Transmits MIDI messages generated by the instrument.

☞ **What's MIDI?**

MIDI(Musical Instrument Digital Interface) is the international standard for digital communication of electronic musical instrument data.

This means that any equipment that has a MIDI terminal (such as electronic musical instruments or personal computers ) can easily exchange digital data with other MIDI equipment without complicated conversions or connections.

## ⓓ **Connecting a computer** (USB Terminal)

By connecting a computer to the USB, you can transfer data between the instrument and the computer via MIDI, and take advantage of sophisticated computer music programs. Keep in mind that you also need to install an appropriate USB MIDI driver.

The instructions below 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 to the instrument off and restart the computer.

Before connecting the computer to the USB terminal, exit from any power-saving mode of the computer (such as suspended, sleep, standby), quit any open application software, and turns off the power to the instrument.

Execute the following before turning the power to the instrument off or unplugging the USB cable to/from the instrument/computer.

- Quit any open application software on the computer.
- Make sure that data is not being transmitted from the instrument. (Data is transmitted only by playing notes on the keyboard or playing back a song.)
- While a USB device is connected to the instrument, you should wait for six seconds or more between these operations: When turning the power of the instrument off then on again, or when alternately connecting/disconnecting the USB cable.

# THE LOCAL CONTROL ON/OFF

Local control refers to the fact that, normally, the piano keyboard controls its internal tone generator, allowing the internal voices to be played directly from the keyboard.

This situation is called **Local Control ON**. When the local control is set to off, the keyboard and sound source are separated and no sound is heard through the piano when playing the keyboard.

However, the data of the keyboard performance is output through MIDI. By setting local control to off, you can play an external MIDI tone generator from the keyboard of the piano without sounding the internal voices.

To enter the MIDI local control off mode, hold down the **SETUP** button and press **C8 right end key** of the keyboard.

To release it, press again **C8 key** with the **SETUP** button.

# Using the Pedals

The piano has three pedals.
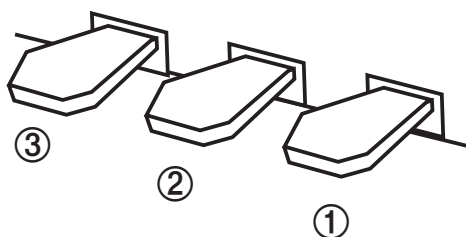
① **Damper Pedal (Right)**
This pedal performs the same function as the damper pedal of an acoustic piano; playing notes while keeping this pedal pressed will sustain the notes even if the keys have been released. It also provides the Half Pedal feature, which detects and responds to the delicate control that pianists exercise on acoustic pianos by pressing the pedal only halfway.

☞ The duration of the sustained notes differs depending on the chosen voice.
☞ The Half Pedal feature controls the sustain duration depending on how deep the pedal is pressed.
☞ Do not press the damper pedal when turning on the piano. If the pedal had been pressed when the piano was switched on, it may not function properly.

② **Sostenuto Pedal (Center)**
If you play a note or chord on the keyboard and press the sostenuto pedal while the note(s) are held, those notes will be sustained as long as the pedal is held, but all subsequently played notes will not be sustained. This makes it possible to sustain a chord, for example, while other notes are played staccato.

☞ Certain voices in the PERCUSSION group may not be affected by use of the sostenuto pedal.
☞ Certain voices such as STRINGS or BRASS sustain continuously when the sostenuto pedal is pressed.

③ **Soft Pedal (Left)**
Pressing this pedal reduces the volume and slightly changes the timbre of the notes you play.

# Adjusting the Volume

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

## MASTER VOLUME

This determines the entire volume of the piano.
- ☞ This also determines the output level of the signal at the **HEADPHONES**.
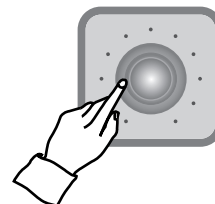
# Selecting Voice

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

There are 10 main voices, 2 split voices, 3 layered voices and 14 extra voices in this piano.

- ☞ **Main Voice**
  Grand Piano 1, 2, Pipe Organ, Elec. Organ 1, 2, Elec. Piano 1, 2, Strings, Slow Strings, Choir
- ☞ **Split Voice**
  Acoustic Bass, Elec. Bass
- ☞ **Layered Voice**
  Acoustic Bass, Fingered Bass, Elec. Bass
- ☞ **Extra Voice**
  Grand Piano 3, Detuned Piano, Harpsichord, Vibraphone, Accordion, Elec. Organ 3,
  Square Wave, Sawtooth Wave, Synth Piano, Flute, Saxophone, Guitar, Synth brass, Drum set
- ☞ **128 General MIDI Voice**
  When connecting with PC, it's available to use 128 GM voices.
  (See the **GM VOICE CHART/DRUM TABLE** section on page 23~25.)

① **Press and hold the SETUP button.**
  - ☞ The lamp is on.

② **Select a desired voice.**
  - ☞ Both the **SETUP** button and a **voice key** should be pressed.
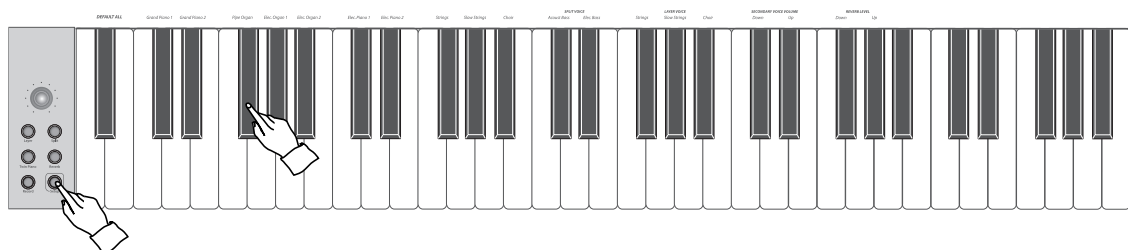
- ☞ Default voice is Grand piano 1.
- ☞ Refer to the **VOICE key map** on page 8.
- ☞ When a split voice or a layer voice is selected, layer or split function automatically will be on.
  See the **LAYER/SPLIT** section on page 14~15.

# 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 for the two voices.

## PLAYING WITH THE LAYER VOICE

### ① **Select a main voice.**
Select a voice in the normal way. (See the **SELECTING VOICE** section on page 13.)

### ② **Call up the layer mode.**
To call up the layer mode, press the **LAYER** button. Lamp lights and the layer is set on.

☞ If you select a layer voice, layer function automatically can be on without pressing the **LAYER** button.
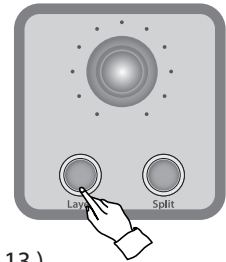
### ③ **Select the layered voice.**
Select a voice in the normal way. (See the **SELECTING VOICES** section on page 13.)

## ADJUSTING THE LAYER VOLUME
This determines the volume of the layered voice.

### ① **Press and hold the SETUP button.**
☞ The lamp is on.

### ② **Adjust the layer volume by pressing secondary voice volume up(D#4) and down(C#4) keys.**
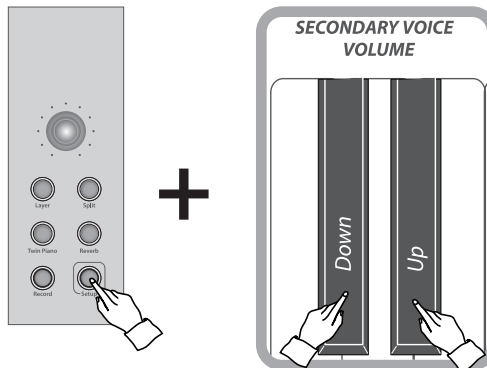
☞ Refer to the **FUNCTION KEY MAP** on page 9.
☞ If you press both **UP** and **DOWN** keys at the same time, it automatically returns to the default secondary voice volume (11). The range of volume is  0 ~ 16.
☞ Hold the key for continuous decrementing or incrementing.
☞ Both split and layer volumes can be adjusted by using secondary volume keys.

# Split

The split mode of the piano allows you to select and play two different voices with your left and right hands. For example, play bass with the left and piano with the right.

## PLAYING WITH THE SPLIT VOICE

① **Select a main voice.**
Select a voice in the normal way. (See the **SELECTING VOICE** section on page 13.)

② **Call up the split mode.**
To call up the split mode, press the **SPLIT** button. Lamp lights and the split is set on.

☞ If you select a split voice, layer function automatically can be on without pressing the **SPLIT** button.
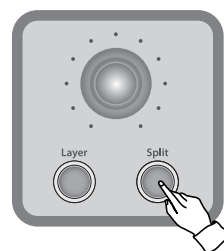
③ **Select the split voice.**
Select a voice in the normal way. (See the **SELECTING VOICE** section on page 13.)

## ADJUSTING THE SPLIT VOLUME
This determines the volume of the split voice.

① **Press and hold the SETUP button.**
☞ The lamp is on.

② **Adjust the split volume by pressing secondary volume up(D#4) and down(C#4) keys.**
☞ Refer to the **FUNCTION KEY MAP** on page 9.
☞ If you press both **UP** and **DOWN** keys at the same time, it automatically returns to the default secondary voice Volume (11). The range of volume is 0 ~ 16.
☞ Hold the key for continuous decrementing or incrementing.
☞ Both split and layer volumes can be adjusted by using secondary volume keys.

## CHANGING THE SPLIT POINT
You can set the point dividing the split voice and main voice ranges at any desired key position·

① **Press and hold the SPLIT button.**

② **Press a desired key.** The pressed key is assigned to new split point.

☞ Default value is F#3.

▼ **Split point (F#3)**
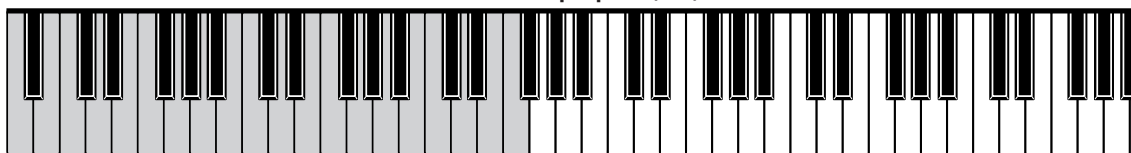
# Twin Piano

Splitting the piano Keyboard into two sections for twin piano performance.
The keyboard can be divided into two separate sections, allowing two people to perform in the same octave.

## PLAYING WITH THE TWIN PIANO

① **Press the TWIN PIANO button.**
The keyboard splits two sections, which have same octave.



C3                C4                C5                C6                C3                C4                C5                C6

**SETCION 1**                    **SETCION 2**
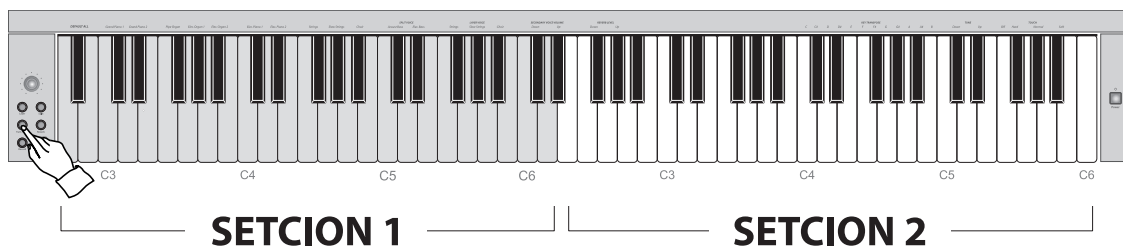
② **To turn off the twin piano performance, press the TWIN PIANO button again.**
The twin piano performance turns off and the lamp goes out.

☞ This function can not be used with the layer and split functions.

# Defaul ALL

**Press ad hold the SETUP button and press left-end key (A#0).**
Following settings go to default values.

1) Secondary Voice volume (Default, 11 Range 0 ~ 16)
2) Reverb level  (Default 11, Range 0 ~ 16)
3) Transpose (Default C, Range G~C~F#)
4) Tune  (Default A3 440Hz, Range -50 ~ 0 ~ 50 cents)
5) Touch (Default Normal, Range Off, Hard, Normal, Soft)



DEFAULT ALL

Layer    Split

Twin Piano    Reverb

Record    Setup
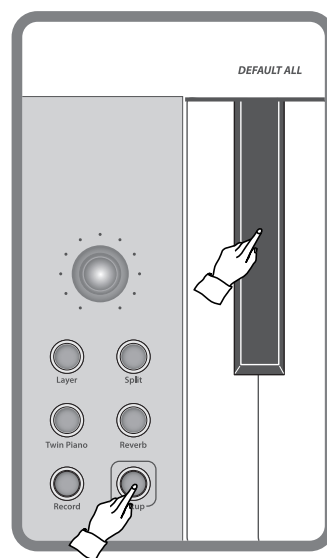
# Reverb

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.

**① Press the REVERB button.**

☞ The reverb turns on and lamp lights.
☞ The reverb is engaged automatically when the power is turned on with the lamp lighting.
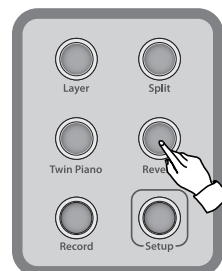
**② To turn off the reverb, press the REVERB button again.**
The reverb turns off and the lamp goes out.

## ADJUSTING THE REVERB LEVEL

**① Press and hold the SETUP button.**
☞ The lamp is on.

**② Adjust the reverb level by pressing reverb level up(G#4) and down(F#4) keys.**

*REVERB LEVEL*

*Down*   *Up*
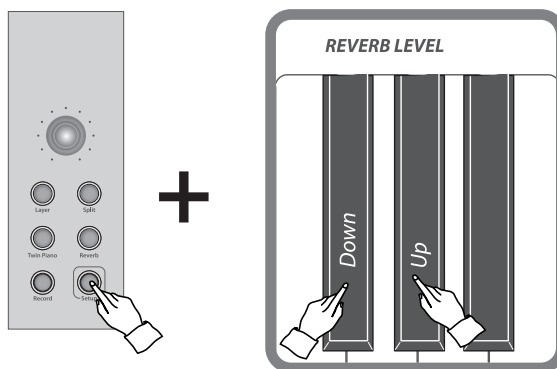
☞ Refer to the **FUNCTION KEY MAP** on page 9.
☞ The reverb level can be adjusted, when reverb is on.
☞ If you press both **UP** and **DOWN** keys at the same time, it automatically returns to the default reverb level (11).
☞ The range is  0 ~ 16.
☞ Hold the key for continuous decrementing or incrementing.

# Tune

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

① **Press and hold the SETUP button.**

☞ The lamp is on.

② **Adjust the pitch by pressing tune up(D#7) and down(C#7) keys.**
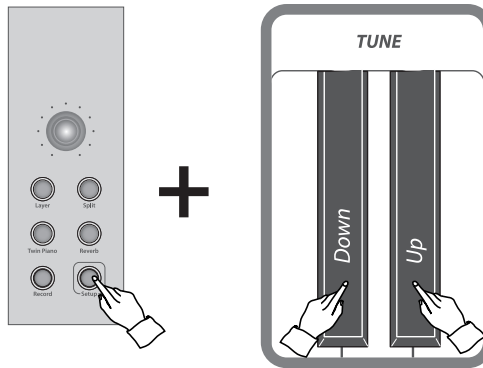
☞ Refer to the **FUNCTION KEY MAP** on page 9.

☞ When pressing up or down key, piano makes 'C' sound and you can hear the adjusted pitch.

☞ If you press both **UP** and **DOWN** keys at the same time, it automatically returns to the default value.

☞ **Range** A3 440Hz ± 50cents (1 step is 1 cent.)

☞ **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 unit of pitch, equal to 1/100 of a semitone.

☞ Hold the key for continuous decrementing or incrementing.

# 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, 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.

① **Press and hold the SETUP button.**

☞ The lamp is on.

② **Set new key of transpose section.**
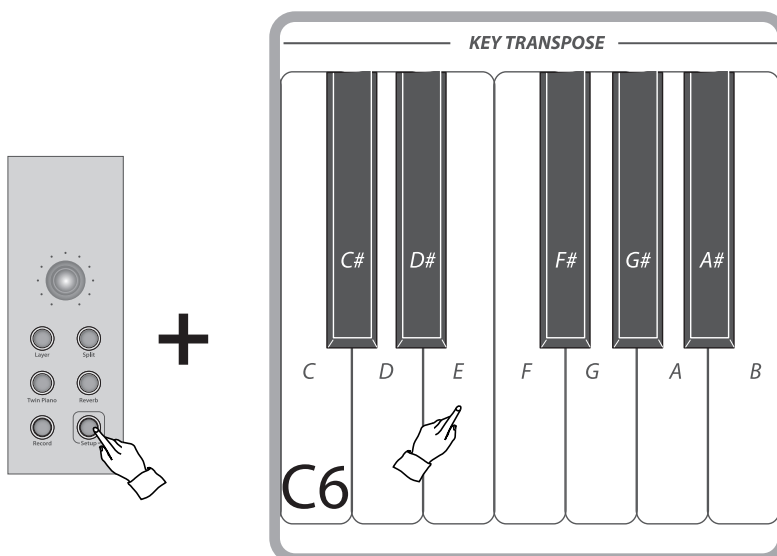


☞ Refer to the **FUNCTION KEY MAP** on page 9.

☞ **Default value:** C key

☞ **Range:** 12 semitones (G ~ C ~ F#)

# Touch

Touch determines how your playing strength (velocity) affects the volume of the voices.
Four types are available for tailoring the keyboard response to the selected voice, type of song, or your own playing preference.

① **Press and hold the SETUP button.**

☞ The lamp is on.

② **Set a desired touch by pressing one of touch keys.**
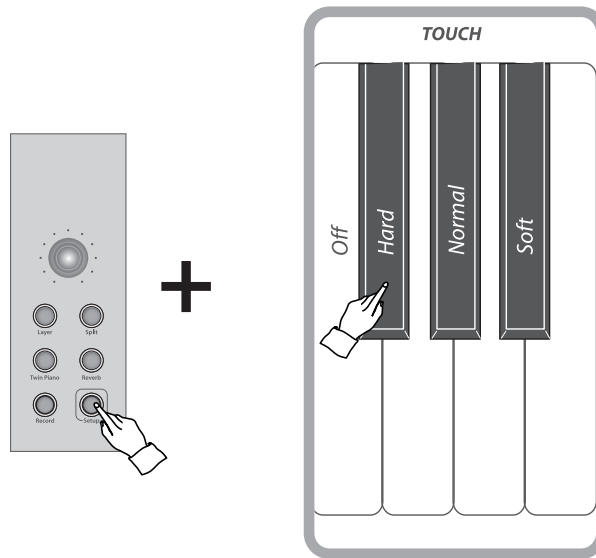


☞ Refer to the **FUNCTION KEY MAP** on page 9.

☞ Default touch is **Normal**.

☞ There are 4 touch types in this piano - Off, Hard, Normal, Soft

**Off (F7)**
This setting produces the same degree of loudness, no matter how strongly or softly you play the keys.

**Hard (F#7)**
This setting requires you to play the keys quit strongly to produce maximum loudness.

**Normal (G#7)**
This setting is standard keyboard response. - Default setting

**Soft (A#7)**
This setting lets you produce a relatively loud sound even when playing the key softly.

# Recording

This piano is equipped with a real time recorder, able to store a song or performance. It will record all notes as they are played.

① **Select Record mode.**
Press the **RECORD** button. The button lights.

② **Start recording**
Start playing the keyboard or press the **SETUP** button.
The record button flashes and the setup button lights.

③ **Stop recording**
Stop playing the keyboard and press the **SETUP** button.
Both record and setup buttons light.

④ **Playback the recorded song**
Press the **SETUP** button again in the record mode. The recorded song is played.
The setup button flashes and the record button lights.

☞ To delete the recorded song, press and hold the **RECORD** button for 2~3 seconds.
☞ If there is no recorded song in the memory, the record button lights and the setup button is off.
☞ If there is a recorded song in the memory, both the record and the setup buttons light.
☞ When the power is turned off, the recorded song memory will be reserved.

⑤ **Return to the normal mode**
Press the **RECORD** button. The record button light is turned off.

# MIDI CHART

## 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 vv | | O | O | #kk:note ON (0-127) |
| | | | | | #vv:velocity (1-127) |
| Pitch Bender | EnH bi bh | | O | O | Maximum swing +/- 1 tone |
| | 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 | Damper Pedal |
| | 65 | BnH 41H cc | O | X | Portamento ON/OFF |
| | 66 | BnH 42H cc | O | O | Sostenuto Pedal |
| Control | 67 | BnH 43H cc | O | O | Soft Pedal |
| Change | 80 | BnH 80H vv | O | X | Reverb Prog.(vv=00H-70H) |
| | 81 | BnH 51H vv | O | X | Chorus Prog. |
| | 91 | BnH 5BH vv | O | O | Reverb Send Level |
| | 93 | BnH 5DH vv | 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 : Move/enter,   X : No

# GM Voice & Percussions List

## GM Voice

| GM # | VOICE | GM # | VOICE |
|---|---|---|---|
| 0 0 1 | Piano1 | 0 6 5 | Soprano Saxophone |
| 0 0 2 | Piano2 | 0 6 6 | Alto Saxophone |
| 0 0 3 | Piano3 | 0 6 7 | Tenor Saxophone |
| 0 0 4 | Honky Tonk | 0 6 8 | Baritone Saxophone |
| 0 0 5 | Electric Piano 1 | 0 6 9 | Oboe |
| 0 0 6 | Electric Piano 2 | 0 7 0 | English Horn |
| 0 0 7 | Harpsichord | 0 7 1 | Basson |
| 0 0 8 | Clavinet | 0 7 2 | Clarinet |
| 0 0 9 | Celesta | 0 7 3 | Piccolo |
| 0 1 0 | Glockenspiel | 0 7 4 | Flute |
| 0 1 1 | Music Box | 0 7 5 | Recorder |
| 0 1 2 | Vibraphone | 0 7 6 | Pan Flute |
| 0 1 3 | Marimba | 0 7 7 | Bottle Blow |
| 0 1 4 | Xylophone | 0 7 8 | Shakuhachi |
| 0 1 5 | Tubular Bell | 0 7 9 | Whistle |
| 0 1 6 | Dulcimer | 0 8 0 | Ocarina |
| 0 1 7 | Electric Organ | 0 8 1 | Square |
| 0 1 8 | Jazz Organ | 0 8 2 | Sawtooth |
| 0 1 9 | Rock Organ | 0 8 3 | Calliope |
| 0 2 0 | Pipe Organ | 0 8 4 | Chiffer |
| 0 2 1 | Reed Organ | 0 8 5 | Charang |
| 0 2 2 | Accordion | 0 8 6 | Solo Vox |
| 0 2 3 | Harmonica | 0 8 7 | Fifths |
| 0 2 4 | Bandonion | 0 8 8 | Bass Lead |
| 0 2 5 | Nylon Guitar | 0 8 9 | Fantasia |
| 0 2 6 | Steel Guitar | 0 9 0 | Warm Pad |
| 0 2 7 | Jazz Guitar | 0 9 1 | Poly Synth |
| 0 2 8 | Clean Guitar | 0 9 2 | Space Vox |
| 0 2 9 | Muted Guitar | 0 9 3 | Bow Glass |
| 0 3 0 | Drive Guitar | 0 9 4 | Metal Pad |
| 0 3 1 | Lead Guitar | 0 9 5 | Halo Pad |
| 0 3 2 | Harmonic Guitar | 0 9 6 | Sweep Pad |
| 0 3 3 | Acoustic Bass | 0 9 7 | Ice Rain |
| 0 3 4 | Finger Bass | 0 9 8 | Sound Track |
| 0 3 5 | Pick Bass | 0 9 9 | Crystal |
| 0 3 6 | Fretless Bass | 1 0 0 | Atmosphere |
| 0 3 7 | Slap Bass1 | 1 0 1 | Brightness |
| 0 3 8 | Slap Bass2 | 1 0 2 | Goblin |
| 0 3 9 | Synth Bass1 | 1 0 3 | Echo Drop |
| 0 4 0 | Synth Bass2 | 1 0 4 | Star Theme |
| 0 4 1 | Violin | 1 0 5 | Sitar |
| 0 4 2 | Viola | 1 0 6 | Banjo |
| 0 4 3 | Cello | 1 0 7 | Shamishen |
| 0 4 4 | Contra Bass | 1 0 8 | Koto |
| 0 4 5 | Tremolo Strings | 1 0 9 | Kalimba |
| 0 4 6 | Pizzicato Strings | 1 1 0 | Bagpipe |
| 0 4 7 | Harp | 1 1 1 | Fiddle |
| 0 4 8 | Timpani | 1 1 2 | Shanai |
| 0 4 9 | Strings | 1 1 3 | Tinkle Bell |
| 0 5 0 | Slow Strings | 1 1 4 | Agogo |
| 0 5 1 | Synth Strings1 | 1 1 5 | Steel Drum |
| 0 5 2 | Synth Strings 2 | 1 1 6 | Wood Block |
| 0 5 3 | Choir Aahs | 1 1 7 | Taiko |
| 0 5 4 | Voice Oohs | 1 1 8 | Melody Tom |
| 0 5 5 | Synth Voice | 1 1 9 | Synth Drum |
| 0 5 6 | Orchestra Hit | 1 2 0 | Reversed Cymbal |
| 0 5 7 | Trumpet | 1 2 1 | Guitar Noise |
| 0 5 8 | Trombone | 1 2 2 | Breath Noise |
| 0 5 9 | Tuba | 1 2 3 | Sea Shore |
| 0 6 0 | Muted Trumpet | 1 4 4 | Birds |
| 0 6 1 | French Horn | 1 2 5 | Telephone |
| 0 6 2 | Brass Section | 1 2 6 | Helicopter |
| 0 6 3 | Synth Brass1 | 1 2 7 | Applause |
| 0 6 4 | Synth Brass2 | 1 2 8 | Gunshot |

☞ When connecting with PC or other MIDI device via MIDI or USB port, 128 GM voices and all drum sets on the table can be used.

# Percussions

| | Prog 1<br>Standard Drum | Prog 9<br>Room Drum | Prog 17<br>Rock Drum | Prog 25<br>Elec. Drum | Prog 26<br>Analog Drum |
|---|---|---|---|---|---|
| 27 - D#1 | High Q | | | | |
| 28 - E1 | Slap | | | | |
| 29 - F1 | Scratch Push | | | | |
| 30 - F#1 | Scratch Pull | | | | |
| 31 - G1 | Sticks | | | | |
| 32 - G#1 | Square Click | | | | |
| 33 - A1 | Metronome Click | | | | |
| 34 - A#1 | Metronome Bell | | | | |
| 35 - B1 | Kick drum2/Jazz BD2 | | | | |
| 36 - C1 | Kick drum1/Jazz BD1 | | Power Kick | Elec BD | 808 Bass Drum |
| 37 - C#2 | Side Stick | | | | 808 Rim shot |
| 38 - D2 | Snare Drum1 | | Gated Snare | Elec SD | 808 Snare Drum |
| 39 - D#2 | Hand Clap | | | | |
| 40 - E2 | Snare Drum 2 | | | | |
| 41 - F2 | Low Floor Tom | Room Low Tom2 | Room Low Tom2 | Elec Low Tom2 | 808 Low Tom2 |
| 42 - F#2 | Closed Hi Hat [EXC1] | | | | 808 CHH[EXC1] |
| 43 - G2 | High Floor Tom | Room Low Tom1 | Room Low Tom1 | Elec Low Tom1 | 808 Low Tom2 |
| 44 - G#2 | Pedal Hi-Hat [EXC1] | | | | 808 CHH[EXC1] |
| 45 - A2 | Low Tom | Room Mid Tom2 | Room Mid Tom2 | Elec Mid Tom2 | 808 Mid Tom2 |
| 46 - A#2 | Open Hi-Hat [EXC1] | | | | 808 OHH[EXC1] |
| 47 - B2 | Low-Mid Tom | Room Mid Tom1 | Room Mid Tom1 | Elec Mid Tom1 | 808 Mid Tom1 |
| 48 - C2 | Hi Mid Tom | Room Hi Tom2 | Room Hi Tom2 | Elec Hi Tom2 | 808 Hi Tom2 |
| 49 - C#3 | Crash Cymbal 1 | | | | 808 Cymbal |
| 50 - D3 | High Tom | Room Hi Tom1 | Room Hi Tom1 | Elec Hi Tom1 | 808 Hi Tom1 |
| 51 - D#3 | Ride Cymbal 1 | | | | |
| 52 - E3 | Chinese Cymbal | | | Reverse Cymbal | |
| 53 - F3 | Ride Bell | | | | |
| 54 - F#3 | Tambourine | | | | |
| 55 - G3 | Splash Cymbal | | | | |
| 56 - G#3 | Cowbell | | | | 808 Cowbell |
| 57 - A3 | Crash Cymbal2 | | | | |
| 58 - A#3 | Vibraslap | | | | |
| 59 - B3 | Ride Cymbal2 | | | | |
| 60 - C4 | Hi Bongo | | | | |
| 61 - C#4 | Low Bongo | | | | |
| 62 - D4 | Mute Hi Conga | | | | 808 High Conga |
| 63 - D#4 | Open Hi Conga | | | | 808 Mid Conga |
| 64 - E4 | Low Conga | | | | 808 Low Conga |
| 65 - F4 | High Timbale | | | | |
| 66 - F#4 | Low Timbale | | | | |
| 67 - G4 | High Timbale | | | | |
| 68 - G#4 | Low Agogo | | | | |
| 69 - A4 | Cabasa | | | | |
| 70 - A#4 | Maracas | | | | |
| 71 - B4 | Short Whistle[EXC2] | | | | 808 Maracas |
| 72 - C5 | Long Whistle[EXC2] | | | | |
| 73 - C#5 | Short Guiro[EXC3] | | | | |
| 74 - D5 | Long Guiro[EXC3] | | | | |
| 75 - D#5 | Claves | | | | 808 Claves |
| 76 - E5 | Hi Wood Block | | | | |
| 77 - F5 | Low Wood Block | | | | |
| 78 - F#5 | Mute Cuica[EXC4] | | | | |
| 79 - G5 | Open Cuica[EXC4] | | | | |
| 80 - G#5 | Mute Triangle[EXC5] | | | | |
| 81 - A5 | Open Triangle[EXC5] | | | | |
| 82 - A#5 | Shaker | | | | |
| 83 - B5 | Jingle Bell | | | | |
| 84 - C6 | Belltree | | | | |
| 85 - C#6 | Castanets | | | | |
| 86 - D6 | Mute Surdo[EXC6] | | | | |
| 87 - D#6 | Open Surdo[EXC6] | | | | |
| 88 - E6 | | | | | |

※ Prog. 33(Jazz Drum) is available only through MIDI connections. The internal percussion kits of the piano does not include it.

| | Prog 33<br>Jazz Drum | Prog 41<br>Brush Drum | Prog 49<br>Classic | Prog 57<br>SFX 1 | Prog 59<br>SFX 2 | REMARKS |
|---|---|---|---|---|---|---|
| 27 - D#1 | | | Closed Hi Hat | | Conga | |
| 28 - E1 | | | Pedal Hi-Hat | | Whistle | |
| 29 - F1 | | | Open Hi Hat | | Small Drum | |
| 30 - F#1 | | | Ride Cymbal | | Cymbal | |
| 31 - G1 | | | | | Castanets | |
| 32 - G#1 | | | | | Triangle | |
| 33 - A1 | | | | | Maracas | |
| 34 - A#1 | | | | | Timbale | |
| 35 - B1 | Jazz BD2 | Jazz BD2 | Concert BD 2 | | Belltree | |
| 36 - C2 | Jazz BD1 | Jazz BD1 | Concert BD1 | | Wood Block | |
| 37 - C#2 | | | | | Jingle Bell | |
| 38 - D2 | | Brush Tap | Concert SD | | Hand Clap | |
| 39 - D#2 | | Brush Slap | Castanets | High Q | Jing | |
| 40 - E2 | | Brush Swirl | Concert SD | Slap | One | |
| 41 - F2 | | | Timpani F | Scratch Push | Two | |
| 42 - F#2 | | | Timpani F# | Scratch Pull | Laughing | |
| 43 - G2 | | | Timpani G | Sticks | Three | |
| 44 - G#2 | | | Timpani G# | Square Click | Bugs | |
| 45 - A2 | | | Timpani A | Metronome Click | Four | |
| 46 - A#2 | | | Timpani A# | Metronome Bell | Elf | |
| 47 - B2 | | | Timpani B | Guitar Slide | Five | |
| 48 - C3 | | | Timpani c | Gt Cut Noise(dw) | Six | |
| 49 - C#3 | | | Timpani c# | Gt Cut Noise (up) | Korean Drum 1 | |
| 50 - D3 | | | Timpani d | Double Bass Slap | Seven | |
| 51 - D#3 | | | Timpani d# | Key Click | Korean Drum 2 | |
| 52 - E3 | | | Timpani e | Laughing | Eight | |
| 53 - F3 | | | Timpani f | Screaming | Nine | |
| 54 - F#3 | | | | Punch | Korean Drum 3 | |
| 55 - G3 | | | | Heart Beat | Ten | |
| 56 - G#3 | | | | Footsteps1 | Korean Drum 4 | |
| 57 - A3 | | | Concert Cymbal2 | Footsteps2 | Rocket | |
| 58 - A#3 | | | | Applause | Korean Drum 5 | |
| 59 - B3 | | | Concert Cymbal1 | Door Creaking | Short/Long | |
| 60 - C4 | | | | Door Closing | Soft/loud | |
| 61 - C#4 | | | | Scratch | Cuckoo | |
| 62 - D4 | | | | Wind Chime | Good/Very Good | |
| 63 - D#4 | | | | Car Engine Start | Bush Warbler | |
| 64 - E4 | | | | Car Breaking | Birds | |
| 65 - F4 | | | | Car Pass | Hen | |
| 66 - F#4 | | | | Car Crash | Duck | |
| 67 - G4 | | | | Police Siren | Chick/Chicken | |
| 68 - G#4 | | | | Train | Dog | |
| 69 - A4 | | | | Jet Take-off | Cat | |
| 70 - A#4 | | | | Helicopter | Pig | |
| 71 - B4 | | | | Starship | Goat | |
| 72 - C5 | | | | Gun Shot | Cow | |
| 73 - C#5 | | | | Machine gun | Korean Cymbal 1 | |
| 74 - D5 | | | | Laser gun | Horse | |
| 75 - D#5 | | | | Explosion | Korean Cymbal 2 | |
| 76 - E5 | | | | Dog | Flog/Flogs | |
| 77 - F5 | | | | Horse Gallop | Swan + Bubble | |
| 78 - F#5 | | | | Birds | Splash | |
| 79 - G5 | | | | Rain | Wolf | |
| 80 - G#5 | | | | Thunder | Comic Sound | |
| 81 - A5 | | | | Wind | Tiger | |
| 82 - A#5 | | | | Sea Shore | Children's Laughing | |
| 83 - B5 | | | | Stream | Elephant | |
| 84 - C6 | | | | Bubble | Bear | |
| 85 - C#6 | | | | | Korean Drum 7 | |
| 86 - D6 | | | | | Telephone Bell | |
| 87 - D#6 | | | | | Korean Drum 8 | |
| 88 - E6 | | | | | Bicycle Bell | |

# Trouble shooting

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. | 1) The power cord is not properly plugged.<br>2) The power switch is not pressed.<br>(The button is lighted when it is pressed.) | 1) Properly plug the power cord.<br>2) Press the power switch.<br>3) Contact customer service. |
| The speakers produce no sound when a key is played. | 1) The master volume is set to minimum.<br>2) A headphone is connected.<br>3) The power connection jack of the power cord is not properly connected to the product.<br>4) The treble/bass volume is set to minimum. | 1) Increase the master volume.<br>2) Disconnect the headphone.<br>3) Properly connect the power connection jack to the product.<br>4) Increase the part volumes. |
| There are notable difference between the volumes of the main voice and the secondary voice. | 1) The secondary voice volume is set to a wrong value. | 1) Set the secondary voice volume properly. |
| Random noise is heard when using the product. | 1) Other electric products such as a refrigerator or an electric washer are operating nearby. | 1) Move the product faraway from other electric products, particularly those that use motors. |
| No sound is heard when using the product connected to an external sound device. | 1) The master volume is set to minimum.<br>2) The connecting cord is either cut or damaged. | 1) Increase the master volume.<br>2) Replace the cord. |

# Product Specifications

| | |
|---|---|
| **Product Name** | High Performance USB Digital Piano |
| **Keyboard** | Real Hammer Action-3W (Wooden Key,Triple-Sensor) |
| **Maximum Polyphony** | 256 |
| **Voices** | 152 Voices (include 128 GM voice) |
| **Functions** | LAYER |
| | SPLIT |
| | TWIN PIANO |
| | TUNE |
| | TRANSPOSE |
| | TOUCH (Off, Hard, Normal, Soft) |
| **DSP** | REVERB with Adjustable Level Control |
| | EFFECT with Adjustable Level Control |
| **Recording** | Real-time recording |
| | 1 Tracks |
| | About 9,000 notes per track |
| **Volume Control** | MAIN VOLUME |
| **Terminals** | MIDI IN/OUT |
| | Audio IN/OUT |
| | USB |
| | 2 headphones |
| **Speakers** | 2 INCH x 4, 6.9 INCH x 2 |
| | STEREO 50W + 50W |
| **Power** | AC IN |
| **Accessories** | Manual, USB MEMORY |

**DYNATONE**