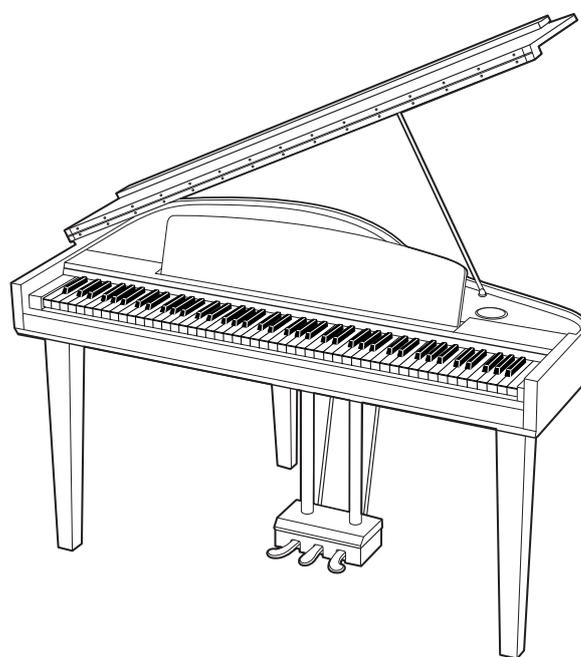
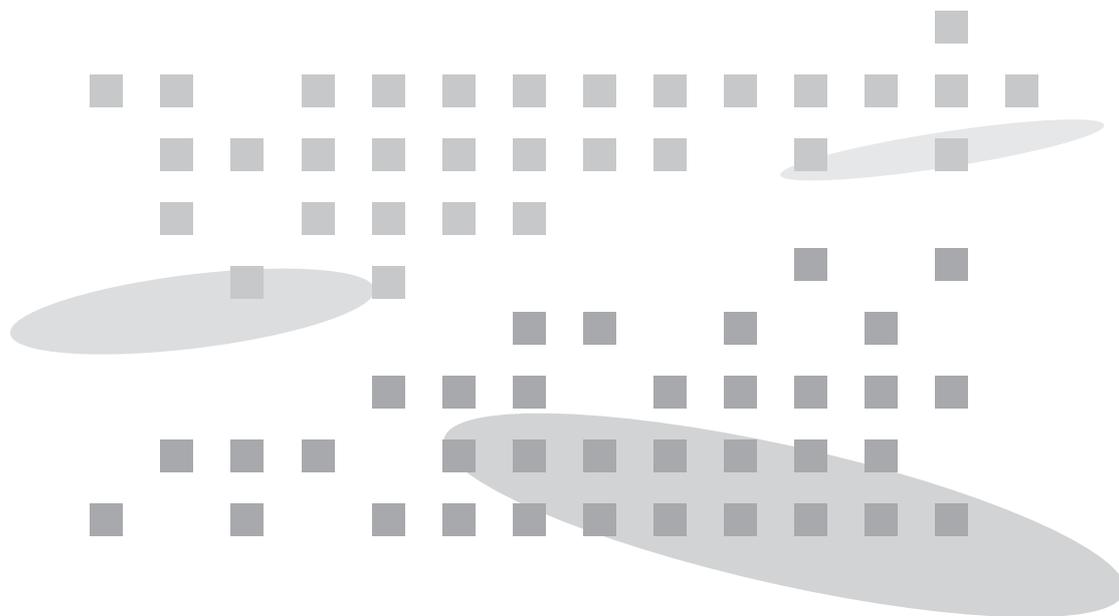


# OWNER'S MANUAL



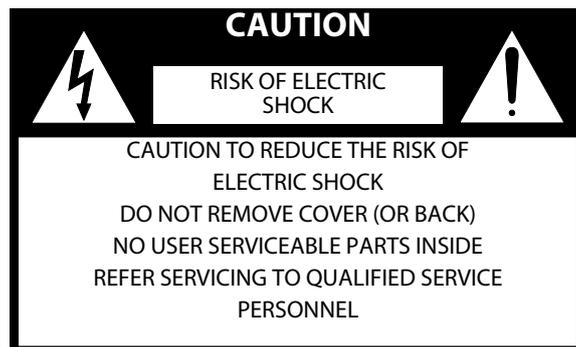
**High Performance Slim Digital Grand Piano**  
*New feel, new look and new sound*

---

---

## INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

**WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT  
EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**



This Symbol is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of fire or electric shock.



This Symbol is intended to alert the user to the presence of important information in the literature accompanying this appliance.  
All information should be read carefully to avoid misuse of product.

### ***INFORMATION TO THE USER***

---

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference.

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.

### **FCC WARNING**

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

## Precaution

---

### **PLEASE READ CAREFULLY BEFORE PROCEEDING**

Please keep these precautions in a safe place for future reference.



#### **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 open the piano or attempt to disassemble the internal parts or modify in anyway. The piano contains no user-serviceable parts. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified service personnel.
- Do not expose the piano to rain, use it near water or damp or wet conditions, or place containers on it containing liquids which might spill into any openings.
- If the power cord or plug becomes frayed or damaged, or if there is a sudden loss of sound during use of the piano, or if any unusual smells or smoke should appear to be caused by it, immediately turn off power switch, disconnect the electric plug from outlet, and have the instrument inspected by qualified service personnel.
- Only use the voltage specified as correct for the piano. The required voltage is printed on the name label of the piano.
- Before cleaning the piano, always remove the electric plug from the outlet. Never insert or remove an electric plug with wet hand.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.



#### **CAUTION**

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

- Do not place the power cord near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy object on it, or place it in a position where anyone could walk on, trip over or roll anything over it.
- When removing the electric plug from the piano or an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.
- Do not connect the piano to an electrical outlet using a multiple-connector. Doing so can result in lower sound quality, or possibly cause over-heating in the outlet.
- Remove the electric plug from the outlet when the piano is not to be used for extended periods of time, or during electrical storms.
- Before connecting the piano to other electronic components, turn off power for all components. Before turning the power on or off for all components, set all volume levels to minimum.
- Do not expose the piano to excessive dust or vibrations, or extreme cold or heat such as in direct sunlight, near heater, or in the car during the day to prevent the possibility of panel disfiguration or damage to the internal components.
- Do not use the piano near other electrical products such as televisions, radios, or speakers, since this might cause interference which can affect proper operation of other products.
- Do not place the piano in an unstable position where it might accidentally fall over.

## *Precaution*

---

- Before moving the piano, remove all connected cables.
- When cleaning the piano, use a soft, dry cloth. Do not use paint thinners, solvent, cleaning fluids or chemical-impregnated wiping cloths. Also, do not place vinyl, plastic or rubber object on the piano, since might discover the panel or keyboard.
- Do not rest your weight or place heavy objects on the piano.
- Do not use excessive force on the buttons, switches and connectors.
- Take care that the key cover does not pinch your fingers, and do not insert a finger or hand in the key cover gap.
- Never insert or drop paper or metallic or liquids or other objects between the slits of the key cover and keyboard. If this happens, immediately turn off the power and remove electric plug from outlet. Then have the instrument inspected by qualified service personnel.
- Do not place the piano against a wall (allow at least 3 cm/one inch from the wall), since this can cause inadequate air circulation, and possibly result in the piano overheating.
- Read carefully the 'SETTING UP YOUR PIANO' section in this manual. Failure to assemble the piano in the proper sequence might result in damage to the piano or even injury.
- Do not operate the piano 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 the ears, consult a physician.
- During thunderstorms, turn the product off and disconnect the plug from the power.

*Welcome*

---

---

## Welcome

Thank you and congratulations on your purchase of the SLIM DIGITAL GRAND PIANO.

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

Your versatile DIGITAL PIANO is ideal for beginners or experienced musicians.

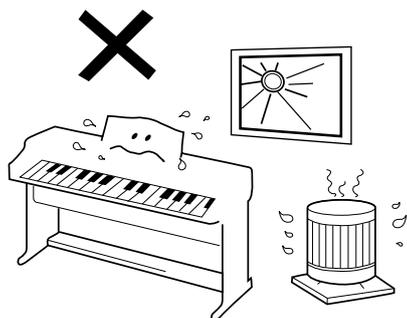
In order to enjoy the features and functions of this unit to their fullest, be sure to carefully read this manual and follow the instructions contained herein.

# Contents

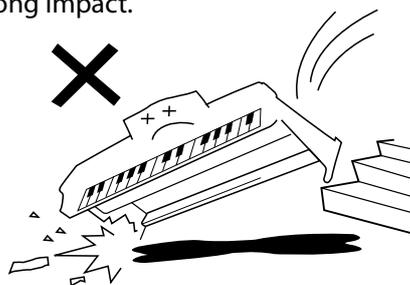
Precaution .....	1
Welcome .....	4
Contents .....	5
Care of Your Digital Piano .....	6
Unpacking .....	7
Setting Up Your Piano .....	8
External Appearance .....	11
Controls .....	12
Voice Key Map .....	12
Function Key Map .....	13
Terminals .....	14
Using the Pedals .....	16
Adjusting the Volume .....	17
Selecting Voice .....	17
Layer .....	18
Split .....	19
3D (Spatial Effect) .....	20
Twin Piano .....	21
Default All .....	21
Reverb .....	22
Effect .....	23
Tune .....	24
Transpose .....	25
Touch .....	26
Using Metronome .....	27
Recording .....	28
GM Voice & Drum Table .....	29
MIDI Implementation Chart .....	32
Troubleshooting .....	33
Specifications .....	34

## Care of your Digital Piano

- Avoid heat, humidity or direct sunlight.



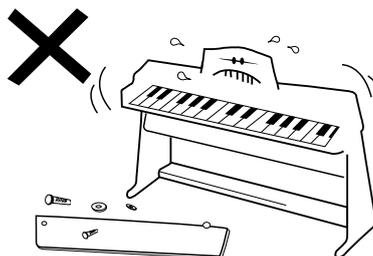
- Take care not to drop the unit and avoid strong impact.



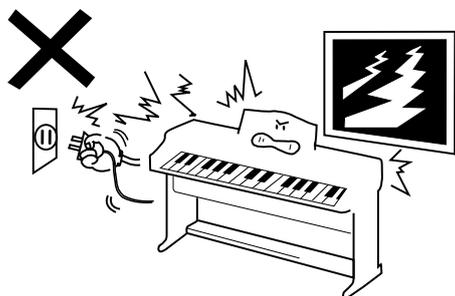
- Keep the unit free from liquids, dust, etc...



- Never attempt to modify any parts of the unit.



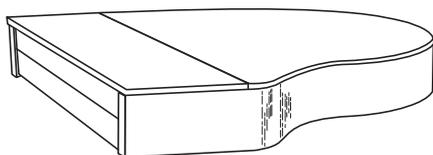
- During thunderstorms, turn the product off and disconnect the plug from the power.



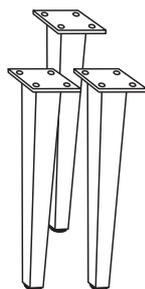
# Unpacking

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

Main Unit (a)

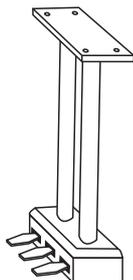


Owner's Manual

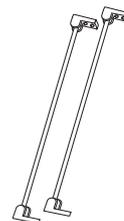


Left Leg (b)  
Right Leg (c)  
Rear Leg (d)

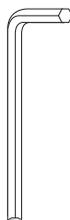
Pedal (e)



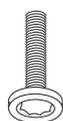
2 Lyres (f)



Wrench for bolt  
(leg and pedal)



16 Bolts  
for leg and pedal (g) PS  
ø10x30mm



8 Screws  
for lyre (h)  
ø3.5x25mm

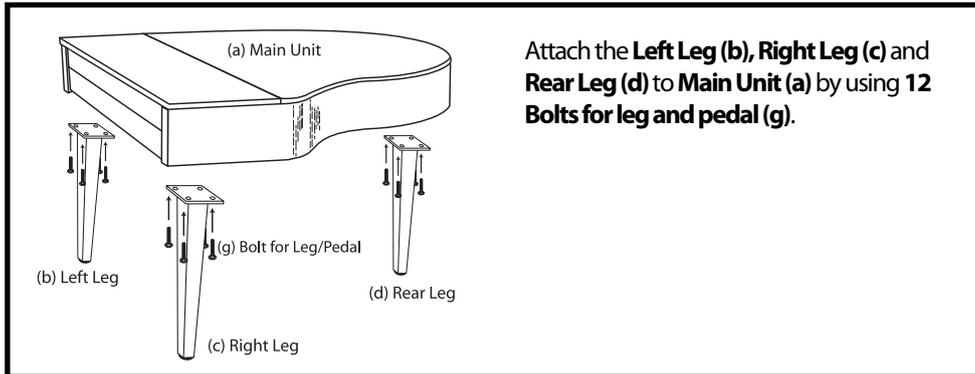


AC Power Cable

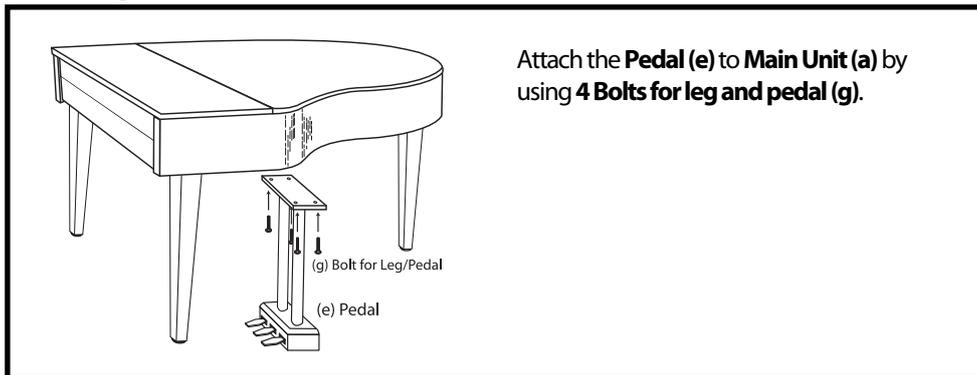


# Setting Up Your Piano

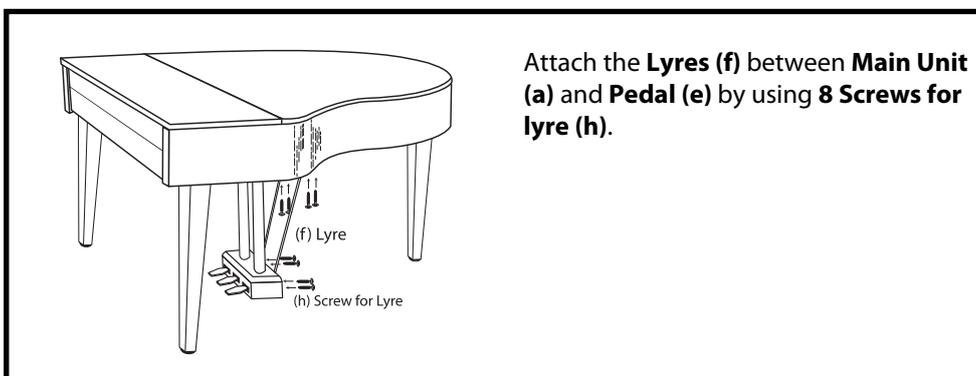
## 1. Attaching the Legs



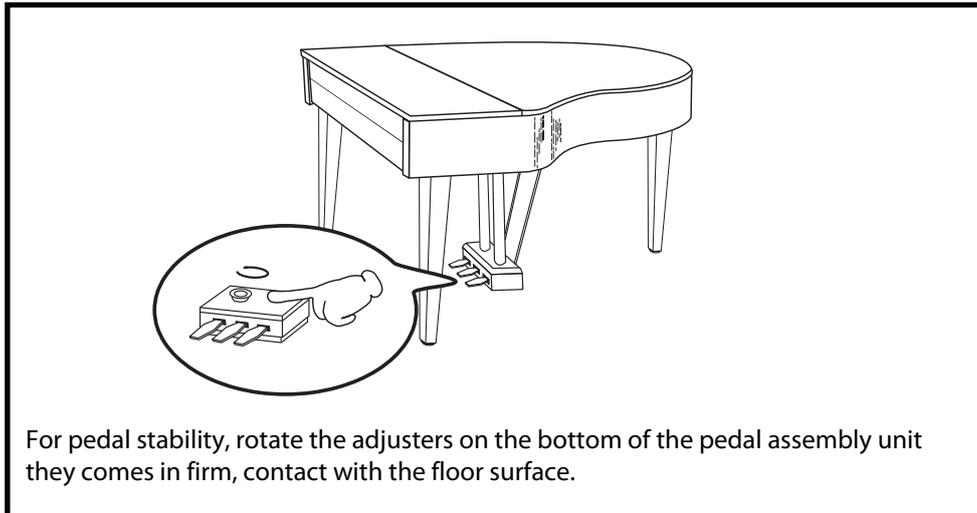
## 2. Attaching the Pedal



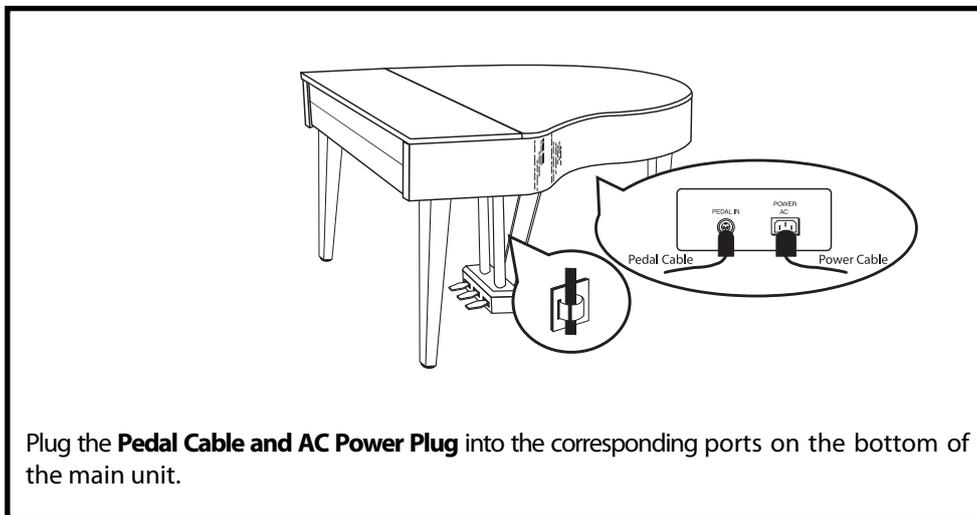
## 3. Attaching the Lyres



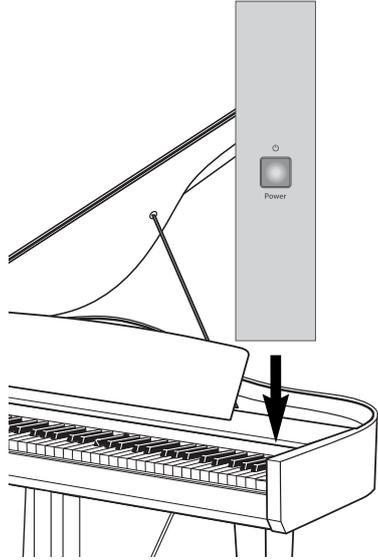
#### 4. Pedal Stability



#### 5. Connecting the Pedal Cable and AC Power Cable



## 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.

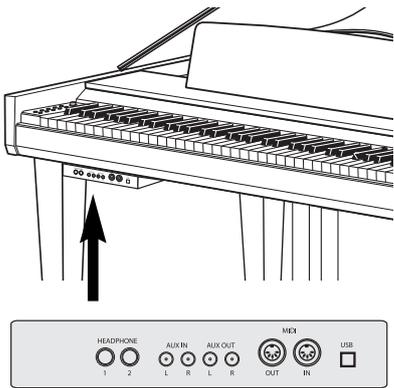
☞ See **CONNECTING THE PEDAL CABLE AND AC POWER CABLE** section on page 9.

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

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

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

## Headphones

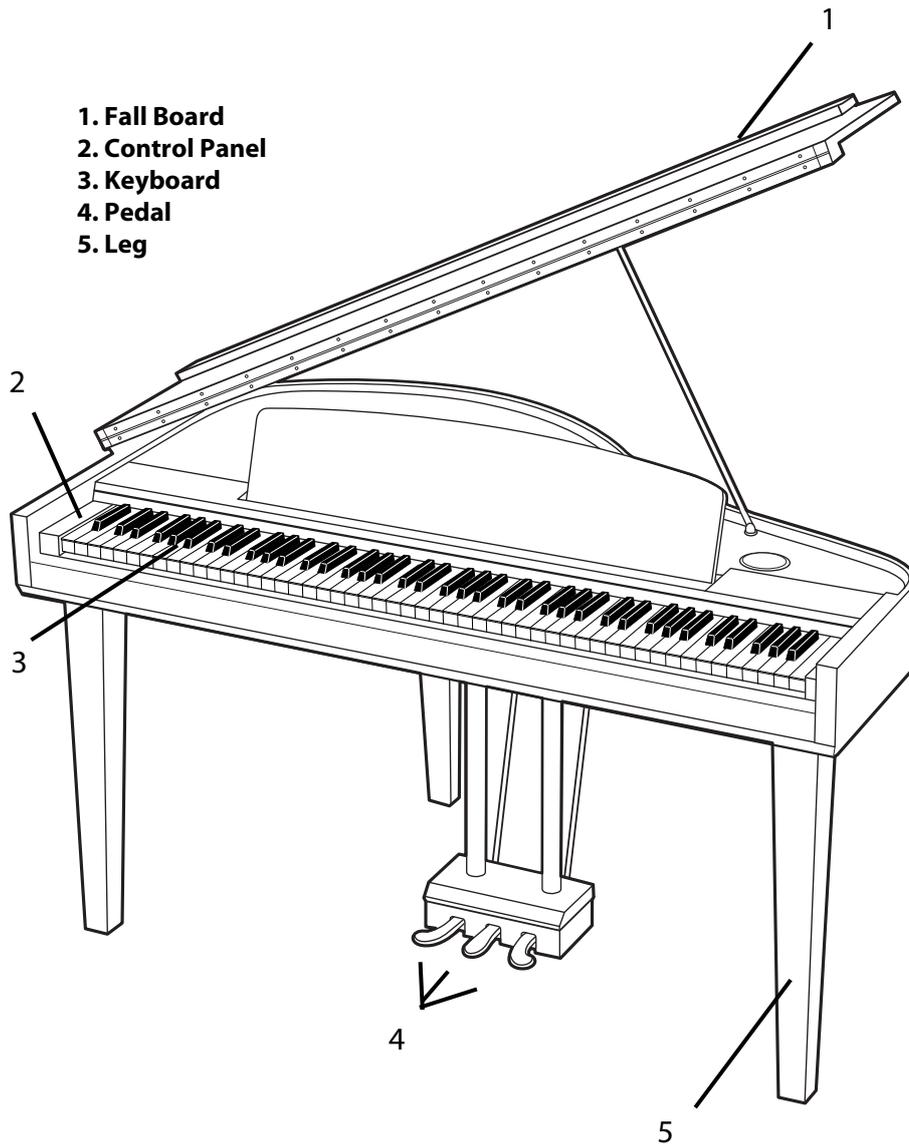


Connect a set of stereo headphones(optional) to **HEADPHONE** jack. Insert plug of the headphone into the **HEADPHONE** jack on the bottom panel of the piano.

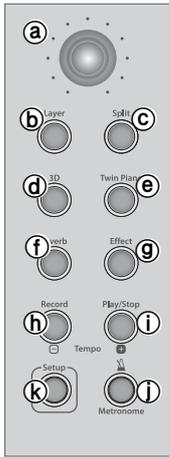
When headphone is connected, the internal speaker system is automatically shut off.

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

# External Appearance

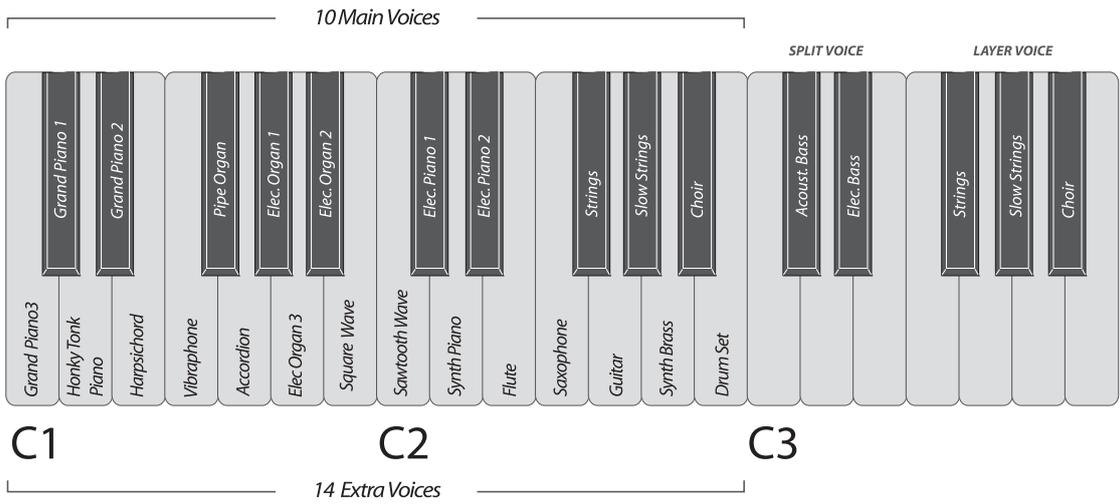
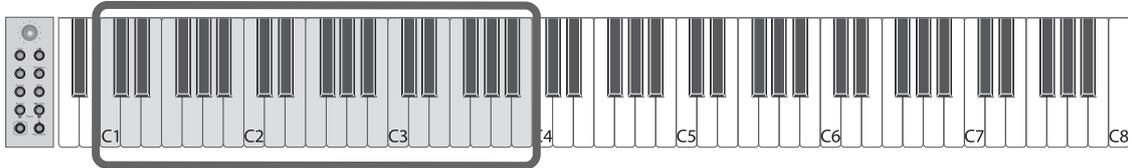


# Controls

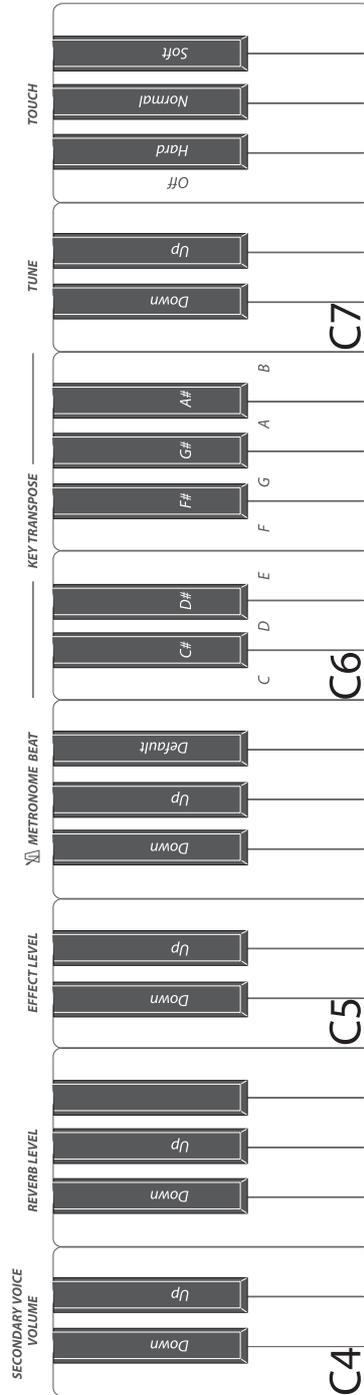
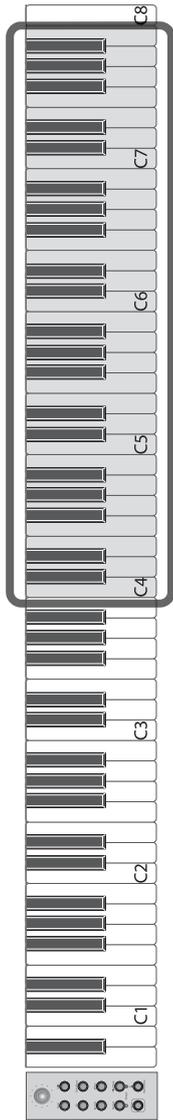


- Ⓐ MASTER VOLUME ..... Page 17
- Ⓑ LAYER Button ..... Page 18
- Ⓒ SPLIT Button ..... Page 19
- Ⓓ 3D Button ..... Page 20
- Ⓔ TWIN PIANO Button ..... Page 21
- Ⓕ REVERB Button ..... Page 22
- Ⓖ EFFECT Button ..... Page 23
- Ⓗ RECORD Button ..... Page 28
- Ⓘ PLAY/STOP Button ..... Page 28
- Ⓙ METRONOME Button ..... Page 27
- Ⓚ SETUP Button

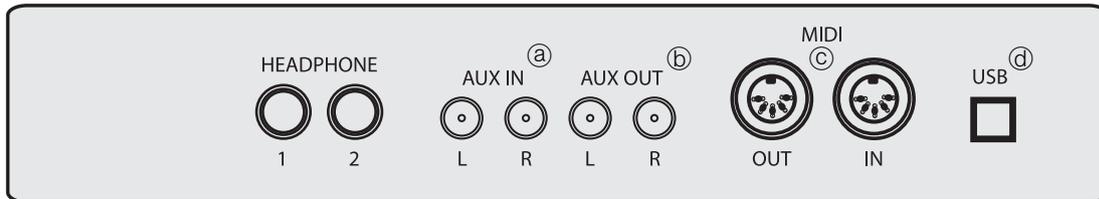
# Voice Key Map



# Function Key Map



## 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 turn 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.

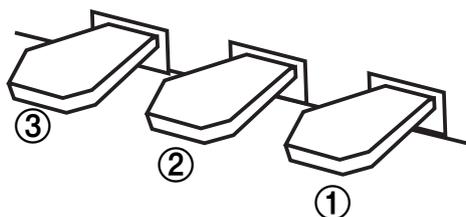
---

---

---

## Using the Pedals

The piano has three pedals.



### ① Damper Pedal (Right)

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

- ☞ Certain voices in the PERCUSSION sounds may not be affected by use of the damper pedal.
- ☞ Some voices may sound continuously or have a long decay after the notes have been released while the damper pedal is held.

### 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.

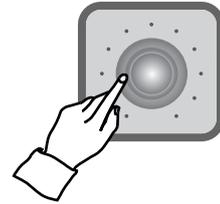
## Adjusting the Volume

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.

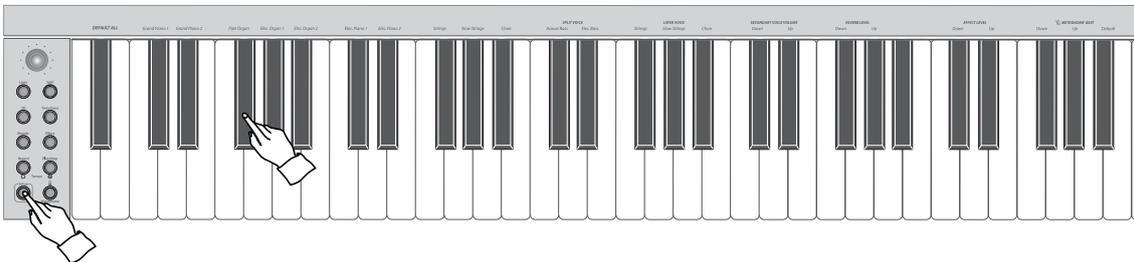
- ☞ **Main Voice**  
Grand Piano 1, 2, Pipe Organ, Elec. Organ 1, 2, Elec. Piano 1, 2, Strings, Slow Strings, Choir
- ☞ **Split Voice**  
Acoustic Bass, Elec. Bass
- ☞ **Layered Voice**  
Acoustic Bass, Fingered Bass, Elec. Bass
- ☞ **Extra Voice**  
Grand Piano 3, Detuned Piano, Harpsichord, Vibraphone, 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 29~31.)

### 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 12.
- ☞ 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 18~19.

# 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

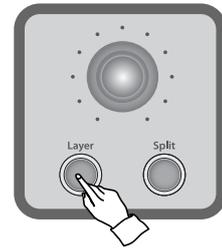
### ① Select a main voice.

Select a voice in the normal way. (See the **SELECTING VOICE** section on page 17.)

### 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 17.)

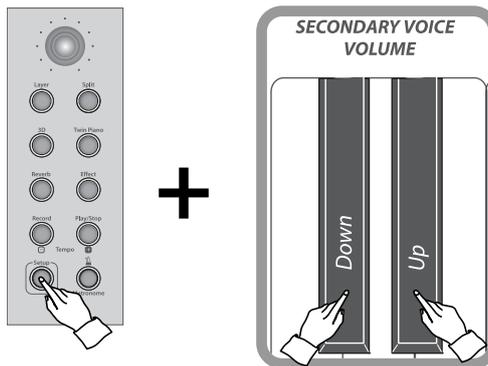
## ADJUSTING THE LAYER VOLUME

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 13.

☞ 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

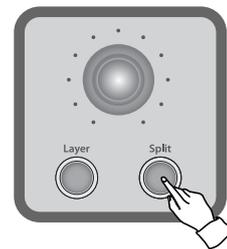
### ① Select a main voice.

Select a voice in the normal way. (See the **SELECTING VOICE** section on page 17.)

### 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 17.)

## 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 13.
- ⇒ 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)



---

---

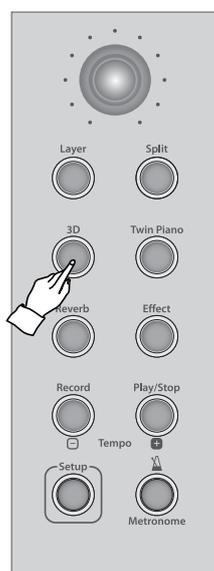
## 3D (Spatial Effect)

The 3D effects widen the stereo image and the listener through two speakers or stereo headphones feels like placed in 3 dimensional spaces.

### PLAYING WITH THE 3D EFFECT

① **Press the 3D button.**

The 3D effect turns on and the lamp lights.



② **To turn off the 3D effect, press the 3D button again.**

The 3D effect turns off and the lamp goes out.

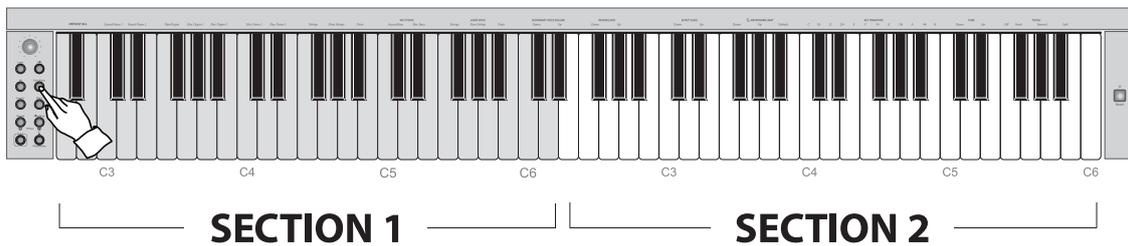
## Twin Piano

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.



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.

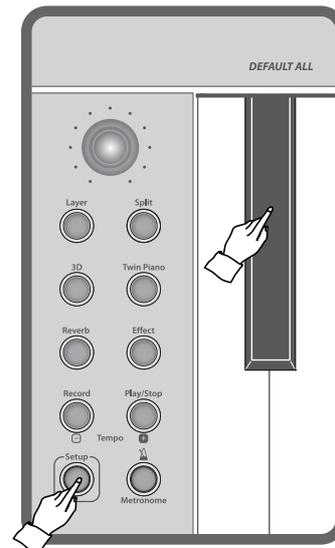
☞ This function can not be used with the layer and split functions.

## Default All

**Press and 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) Effect level (Default 11, Range 0 ~ 16)
- 4) Metronome beat (Default 4, Range 2 ~ 13)
- 5) Metronome tempo (Default 128, 40~250)
- 6) Transpose (Default C, Range G~C~F#)
- 7) Tune (Default A3 440Hz, Range -50 ~ 0 ~ 50 cents)
- 8) Touch (Default Normal, Range Off, Hard, Normal, Soft)

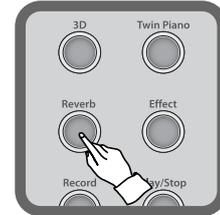


# Reverb

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.**

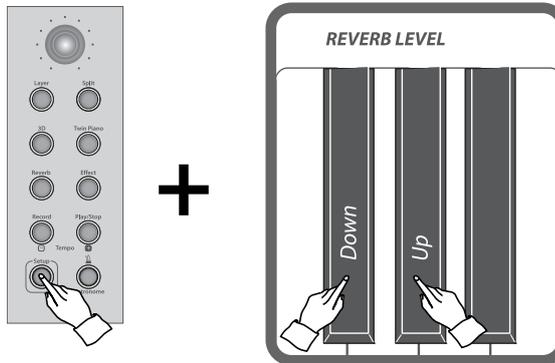
The reverb turns off and the lamp goes out.

## 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.**



- ☞ Refer to the **FUNCTION KEY MAP** on page 13.
- ☞ 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.

# Effect

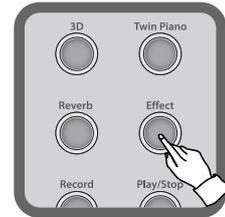
The effect adds more breadth to the selected keyboard voice.

① **Press the EFFECT button.**

- ☞ The effect turns on and lamp lights.
- ☞ When turning on power, the effect is off. (Default is off.)

② **To turn off the effect, press the EFFECT button again.**

The effect turns off and the lamp goes out.

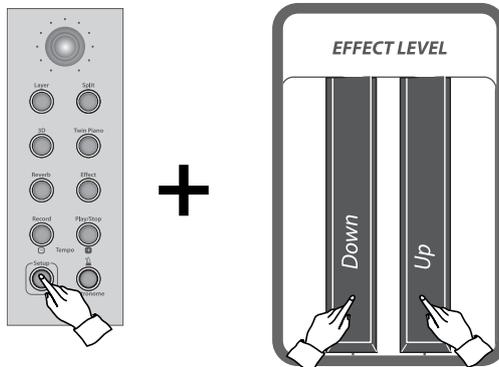


## ADJUSTING THE EFFECT LEVEL

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

- ☞ The lamp is on.

② **Adjust the effect level by pressing effect level up(D#5) and down(C#5) keys.**



- ☞ Refer to the **FUNCTION KEY MAP** on page 13.
- ☞ The effect level can be adjusted, when effect is on.
- ☞ If you press both **UP** and **DOWN** keys at the same time, it automatically returns to the default effect level (11).
- ☞ The range is 0 ~ 16.
- ☞ Hold the key for continuous decrementing or incrementing.

---

---

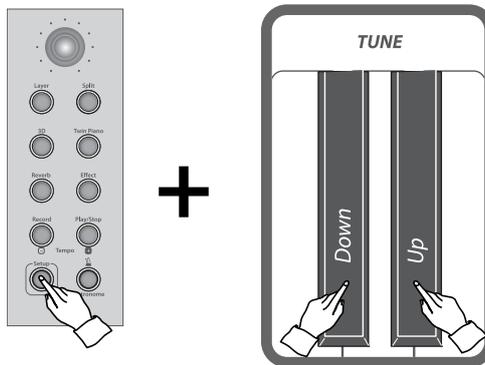
# Tune

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 13.
- ☞ 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  $\pm$  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

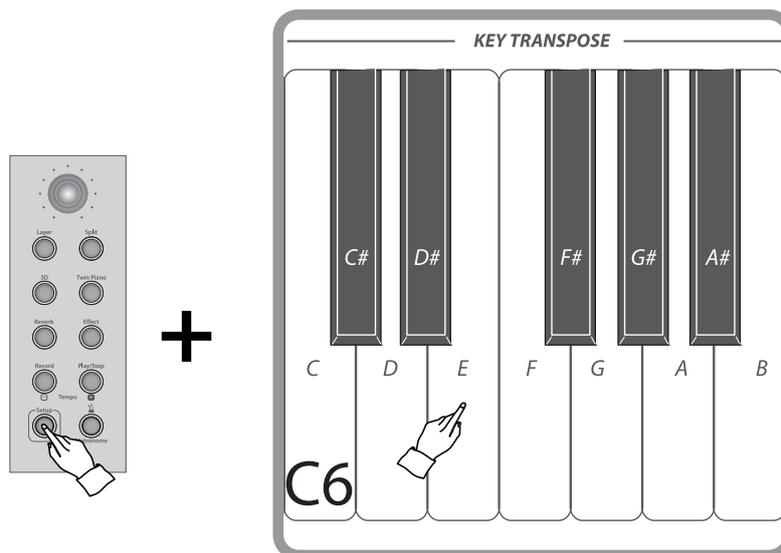
The Transpose function makes it possible to shift the pitch of the keyboard in semitone units, allowing you to match the pitch of the keyboard to the range of other instruments or singers, or letting you easily play in a different key without having to change your fingering.

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 13.

☞ **Default value:** C key

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

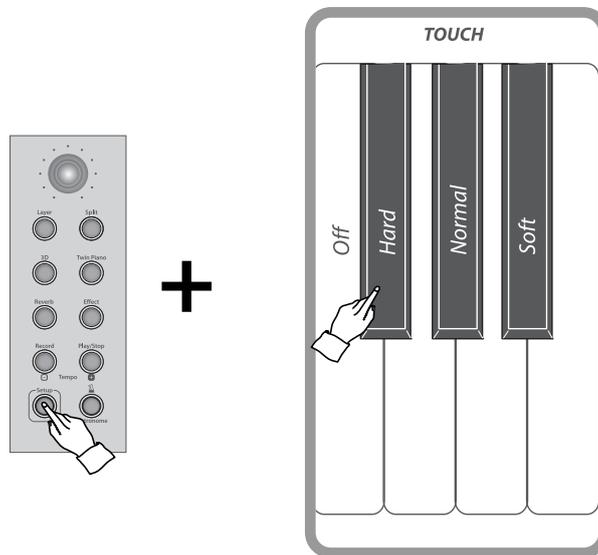
## Touch

# 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.



☞ Refer to the **FUNCTION KEY MAP** on page 13.

☞ 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 quite 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.

# Using Metronome

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

## ① START/STOP of Metronome

To start the metronome, simply press the **METRONOME** button. The lamp lights.

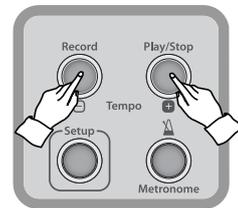
Press the **METRONOME** button again to stop the metronome sound. The lamp goes off.



## ② Adjusting Tempo of Metronome

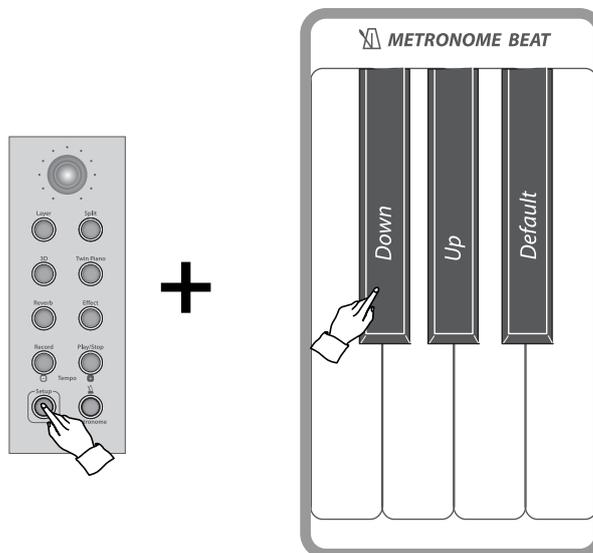
You can set the tempo over range 40 ~ 250 by using the **TEMPO** buttons.

- ☞ Hold the button for continuous decrementing or incrementing.
- ☞ If pressing both **TEMPO UP** and **DOWN** buttons, tempo goes to default.
- ☞ **Default tempo** ♩ = 128.



## ③ Changing the metronome Beat

Press and hold the **SETUP** button and press the **METRONOME BEAT UP(G#5)** or **DOWN(F#5)** key.



- ☞ Refer to the **FUNCTION KEY MAP** on page 13.
- ☞ **Metronome beat range** 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
- ☞ **Default beat** 4
- ☞ If you want to set default beat, press and hold the **SETUP** button and press **DEFAULT** key in the metronome beat section.

## 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 **PLAY/STOP** button.  
The record button flashes and the play/stop button lights.

③ **Stop recording**

Stop playing the keyboard and press the **PLAY/STOP** button.  
Both record and play/stop buttons light.

④ **Playback the recorded song**

Press the **PLAY/STOP** button again in the record mode.

The recorded song is played.

The play/stop 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 lamp lights and the play/stop lamp is off.
- ☞ If there is a recorded song in the memory, both the record lamp and the play/stop lamps light.
- ☞ Even if the power is turned off, the song memory remains.

⑤ **Return to the normal mode**

Press the **RECORD** button. The record button light is turned off.



# GM Voice & Drum Table

GM #	Voice	GM #	Voice
001	Piano1	065	Soprano Saxophone
002	Piano2	066	Alto Saxophone
003	Piano3	067	Tenor Saxophone
004	Honky Tonk	068	Baritone Saxophone
005	Electric Piano 1	069	Oboe
006	Electric Piano 2	070	English Horn
007	Harpichord	071	Bassoon
008	Clavinet	072	Clarinet
009	Celesta	073	Piccolo
010	Glockenspiel	074	Flute
011	Music Box	075	Recorder
012	Vibraphone	076	Pan Flute
013	Marimba	077	Bottle Blow
014	Xylophone	078	Shakuhachi
015	Tubular Bell	079	Whistle
016	Dulcimer	080	Ocarina
017	Electric Organ	081	Square
018	Jazz Organ	082	Sawtooth
019	Rock Organ	083	Calliope
020	Pipe Organ	084	Chiffer
021	Reed Organ	085	Charang
022	Accordion	086	Solo Vox
023	Harmonica	087	Fifths
024	Bandonion	088	Bass Lead
025	Nylon Guitar	089	Fantasia
026	Steel Guitar	090	Warm Pad
027	Jazz Guitar	091	Poly Synth
028	Clean Guitar	092	Space Vox
029	Muted Guitar	093	Bow Glass
030	Drive Guitar	094	Metal Pad
031	Lead Guitar	095	Halo Pad
032	Harmonic Guitar	096	Sweep Pad
033	Acoustic Bass	097	Ice Rain
034	Finger Bass	098	Sound Track
035	Pick Bass	099	Crystal
036	Fretless Bass	100	Atmosphere
037	Slap Bass1	101	Brightness
038	Slap Bass2	102	Goblin
039	Synth Bass1	103	Echo Drop
040	Synth Bass2	104	Star Theme
041	Violin	105	Sitar
042	Viola	106	Banjo
043	Cello	107	Shamishen
044	Contra Bass	108	Koto
045	Tremolo Strings	109	Kalimba
046	Pizzicato Strings	110	Bagpipe
047	Harp	111	Fiddle
048	Timpani	112	Shanai
049	Strings	113	Tinkle Bell
050	Slow Strings	114	Agogo
051	Synth Strings1	115	Steel Drum
052	Synth Strings 2	116	Wood Block
053	Choir Aahs	117	Taiko
054	Voice Oohs	118	Melody Tom
055	Synth Voice	119	Synth Drum
056	Orchestra Hit	120	Reversed Cymbal
057	Trumpet	121	Guitar Noise
058	Trombone	122	Breath Noise
059	Tuba	123	Sea Shore
060	Muted Trumpet	124	Birds
061	French Horn	125	Telephone
062	Brass Section	126	Helicopter
063	Synth Brass1	127	Applause
064	Synth Brass2	128	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.

## GM Voice & Drum Table

	Prog 1 Standard Drum	Prog 9 Room Drum	Prog 17 Rock Drum	Prog 25 Elec. Drum	Prog 26 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 - C2	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 - C3	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	Belltrees				
85 - C#6	Castanets				
86 - D6	Mute Surdo[EXC6]				
87 - D#6	Open Surdo[EXC6]				
88 - E6					

GM Voice & Drum Table

	Prog 33 Jazz Drum	Prog 41 Brush Drum	Prog 49 Orchestra	Remark
27 - D#1			Closed Hi Hat	
28 - E1			Pedal Hi-Hat	
29 - F1			Open Hi Hat	
30 - F#1			Ride Cymbal	
31 - G1				
32 - G#1				
33 - A1				
34 - A#1				
35 - B1	Jazz BD2	Jazz BD2	Concert BD 2	
36 - C2	Jazz BD1	Jazz BD1	Concert BD1	
37 - C#2				
38 - D2		Brush Tap	Concert SD	
39 - D#2		Brush Slap	Castanets	
40 - E2		Brush Swirl	Concert SD	
41 - F2			Timpani F	
42 - F#2			Timpani F#	
43 - G2			Timpani G	
44 - G#2			Timpani G#	
45 - A2			Timpani A	
46 - A#2			Timpani A#	
47 - B2			Timpani B	
48 - C3			Timpani c	
49 - C#3			Timpani c#	
50 - D3			Timpani d	
51 - D#3			Timpani d#	
52 - E3			Timpani e	
53 - F3			Timpani f	
54 - F#3				
55 - G3				
56 - G#3				
57 - A3			Concert Cymbal2	
58 - A#3				
59 - B3			Concert Cymbal1	
60 - C4				
61 - C#4				
62 - D4				
63 - D#4				
64 - E4				
65 - F4				
66 - F#4				
67 - G4				
68 - G#4				
69 - A4				
70 - A#4				
71 - B4				
72 - C5				
73 - C#5				
74 - D5				
75 - D#5				
76 - E5				
77 - F5				
78 - F#5				
79 - G5				
80 - G#5				
81 - A5				
82 - A#5				
83 - B5				
84 - C6				
85 - C#6				
86 - D6				
87 - D#6				
88 - E6				

# 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	X	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 vv	O	X	Reverb Prog.(vv=00H-70H)
	81 BnH 51H vv	O	X	Chorus Prog.
	91 BnH 5BH vv	O	X	Reverb Send Level
	93 BnH 5DH vv	O	X	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	O	X	

O:Yes, X:No

## Troubleshooting

※ Be sure to check the following table whenever you encounter problems with the **DIGITAL PIANO** operation.

<b>PROBLEM</b>	<b>CAUSE</b>	<b>SOLUTION</b>
<b>No sound</b>	<ol style="list-style-type: none"> <li>1. Power supply problem.</li> <li>2. Volume setting is too low.</li> <li>3. Headphone is plugged in.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check whether the power cord is properly in AC outlet.</li> <li>2. Adjust the volume.</li> <li>3. Unplug the headphone.</li> </ol>
<b>Occasional interference</b>	<ol style="list-style-type: none"> <li>1. Refrigerators, washing machines and similar electric appliances are interfering.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use outlet as far away as possible from appliances thought to be the cause.</li> </ol>
<b>No sound when connected to external amplifier.</b>	<ol style="list-style-type: none"> <li>1. Volume setting is too low.</li> <li>2. Defective connection cord.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the volume.</li> <li>2. Replace connection cord.</li> </ol>

---

---

## Specifications

<b>PRODUCT</b>	SLIM DIGITAL GRAND PIANO
<b>KEYBOARD</b>	88 HAMMER ACTION KEYBOARD - 7 1/4 OCTAVES
<b>MAX. POLYPHONY</b>	128 NOTES
<b>SOUND</b>	25 Voices and 1 DRUM KIT
<b>FUNCTIONS</b>	LAYER SPLIT TWIN PIANO TUNE TRANSPOSE TOUCH (Off, Hard, Normal, Soft)
<b>DSP</b>	3D EFFECT REVERB with Adjustable Level Control EFFECT with Adjustable Level Control
<b>METRONOME</b>	YES (Available to adjust Tempo & Beat)
<b>RECORD</b>	REAL-TIME-RECORDING 1 TRACK APPROX. 4,500 NOTES
<b>PEDAL</b>	3PEDALS (DAMPER, SOSTENUTO, SOFT)
<b>VOLUME CONTROLS</b>	MAIN VOLUME
<b>I/O TERMINALS</b>	MIDI IN/OUT AUX L/R IN AUX L/R OUT USB IN 2 HEADPHONE JACKS
<b>SPEAKER</b>	6:9 INCHES× 2, 2INCH x 2
<b>POWER</b>	AC IN
<b>POWER CONSUMPTION</b>	90W
<b>DIMENSIONS (W x D X H)</b>	1400 x 860 x 795 mm
<b>WEIGHT</b>	82KGS
<b>ACCESSORY</b>	OWNER S MANUAL, AC POWER CABLE

*High Performance Slim Digital Grand Piano*

Part No. 11958295 MF