KAWAI

DIGITAL PIANO

EP3

Owner's Manual

Thank you for purchasing a KAWAI EP3 digital piano!

The EP3 digital piano is a revolutionary new instrument that combines the latest digital technology with traditional piano craftsmanship inherited from KAWAI's many years of experience in building fine acoustic pianos. The authentic tone has been created through the stereo sampling of concert grand pianos, and is reproduced using KAWAI's unique Harmonic Imaging™ sound technology, while the Advanced Hammer Action IV-F keyboard action provides the touch response and full dynamic range required for a superb performance of piano, harpsichord, organ, and other instruments.

The EP3 digital piano is also equipped with additional reverb and digital effects processors, delivering a deeper, richer sound, while industry standard MIDI (Musical Instrument Digital Interface) jacks and a USB interface are also provided, allowing the playback of other electronic instruments and connection with personal computers.

This owner's manual contains useful information regarding the varied capabilities of the EP3 digital piano. Please read all sections carefully and keep this manual handy for future reference.

Table of Contents

Important Safety Instructions

SAVE THESE INSTRUCTIONS

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

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

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

AVIS : RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR.

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lighting flash with arrowhead symbol, within an equilateral triangle, 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 electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the leterature accompanying the product.

Examples of Picture Symbols

	denotes that care should be taken. The example instructs the user to take care not to allow fingers to be trapped.
	denotes a prohibited operation. The example instructs that disassembly of the product is prohibited.
	denotes an operation that should be carried out. The example instructs the user to remove the power cord plug from the AC outlet.

Read all the instructions before using the product.

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this apparatus near water.

6) Clean only with dry cloth.

7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prongs are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/accessories specified by the manufacturer.

12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or object have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING - When using electric products, basic precautions should always be followed, including the following.

⚠ **WARNING** Indicates a potential hazard that could result in death or serious injury if the product is handled incorrectly.

The product should be connected to an AC outlet of the specified voltage.

120V 230V 240V

● If you are going to use an AC power cord, make sure that its has the correct plug shape and conforms to the specified power voltage.
● Failure to do so may result in fire.

**Do not insert or disconnect the power cord plug with wet hands.**

Doing so may cause electric shock.

The chair must be used properly (it must be used only when playing the product).

● Do not play with it or stand on it.
● Only one person is allowed to sit on it.
● Do not sit on it when opening the lid.
● Re-tighten the bolts occasionally.

Doing so may cause the chair to fall over or your fingers to be trapped, resulting in injury.

When using the headphones, do not listen for long periods of time at high volume levels.
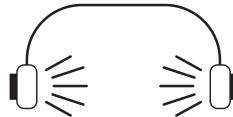
Doing so may result in hearing problems.

Do not lean against the keyboard.

Doing so may cause the product to fall over, resulting in injury.

Do not disassemble, repair or modify the product.

Doing so may result in product breakdown, electric shock or short-circuit.

When disconnecting the AC power cord's plug, always hold the plug and pull it to remove it.

● Pulling the AC power cord itself may damage the cord, causing a fire, electric shock or short-circuit.

The product is not completely disconnected from the power supply even when the power switch is turned off. If the product will not be used for a long time, unplug the AC power cord from the AC outlet.

● Failure to do so may cause fire in case of lightning.
● Failure to do so may over-heat the product, resulting in fire.

**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.**
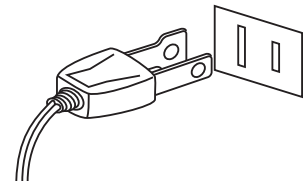
It is a good practice to have the instrument near the AC outlet and the power cord plug in a position so that it can readily be disconnected in an emergency, because electricity is always charging while the plug is in the AC outlet even in a power switch off condition.

⚠ CAUTION

Indicates a potential hazard that could result in injury or damage to the product or other property if the product is handled incorrectly.

Do not use the product in the following areas.

- **Areas, such as those near windows, where the product is exposed to direct sunlight**
- **Extremely hot areas, such as near a heater**
- **Extremely cold areas, such as outside**
- **Extremely humid areas**
- **Areas where a large amount of sand or dust is present**
- **Areas where the product is exposed to excessive vibrations**

Using the product in such areas may result in product breakdown.
Use the product only in moderate climates (not in tropical climates).

- **Do not stand the main unit on its side for extended periods of time.**
- **Do not attempt to play the main unit at unusual angles.**

Doing so may place stress on the keyboard action, resulting in breakdown of the product.

Use only the AC adaptor included with this instrument to power the instrument.

- **Do not use other AC adaptors to power this instrument.**
- **Do not use the included AC adaptor or AC power cord to power other equipment.**

When using headphones or playing with a low volume setting, it may be possible to hear the mechanical movements of the keyboard action. This is to be expected, and should not be considered a fault.

Before connecting cords, make sure that the power to this product and other devices is turned OFF.
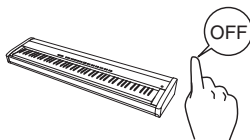
Failure to do so may cause breakdown of this product and other devices.

Take care not to allow any foreign matter to enter the product.

Entry of water, needles or hair pins may result in breakdown or short-circuit.
The product shall not be exposed to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the product.

Do not drag the product on the floor. Take care not to drop the product.

Please lift up the product when moving it.
Please note that the product is heavy and must be carried by more than two persons.
Dropping the product may result in breakdown.

Do not place the product near electrical appliances such as TVs and radios.
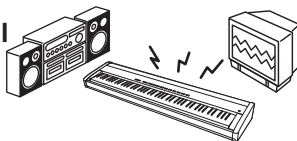
- Doing so may cause the product to generate noise.
- If the product generates noise, move the product sufficiently away from the electrical appliance or connect it to another AC outlet.

When connecting the AC power cord and other cords, take care not to get them tangled.

Failure to do so may damage them, resulting in fire, electric shock or short-circuit.

Do not wipe the product with benzene or thinner.

- Doing so may result in discoloration or deformation of the product.
- When cleaning the product, put a soft cloth in lukewarm water, squeeze it well, then wipe the product.

Do not stand on the product or exert excessive force.

● Doing so may cause the product to become deformed or fall over, resulting in breakdown or injury.

Do not place naked flame, such as lighted candles on the product.

Doing so may cause the illumination to fall over, resulting in fire.

Ensure that the ventilation is not impeded by covering the ventilation openings with items, such as newspaper, table-cloths, curtains, etc.

Failure to do so may over-heat the product, resulting in fire.

The product should be located so that its location or position does not interfere with its proper ventilation. Ensure a minimum distance of 5cm around the product for sufficient ventilation.

The product should be serviced by qualified service personnel when:

● **The power supply cord or the plug has been damaged.**
● **Objects have fallen, or liquid has been spilled into the product.**
● **The product has been exposed to rain.**
● **The product does not appear to operate normally or exhibits a marked change in performance.**
● **The product has been dropped, or the enclosure damaged.**

Notes on Repair
Should an abnormality occur in the product, immediately turn the power OFF, disconnect the power cord plug, and then contact the shop from which the product was purchased.

CAUTION:
To prevent electric shock, match wide blade of plug to wide slot, fully insert.

ATTENTION:
Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

Instruction for AC power cord (U.K.)
Do not plug either terminal of the power cord to the ground of the AC outlet on the wall.

FCC Information
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a different electrical circuit from the receiver.
• Consult the dealer or an experienced radio/TV technician for help.

Canadian Radio Interference Regulations
This instrument complies with the limits for a class B digital apparatus, pursuant to the Radio Interference Regulations, C.R.C., c. 1374.

An information on Disposal for users
If your product is marked with this recycling symbol it means that, at the end of its life, you must dispose of it separately by taking it to an appropriate collection point.
You should not mix it with general household waste. Disposing of this product correctly will prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.
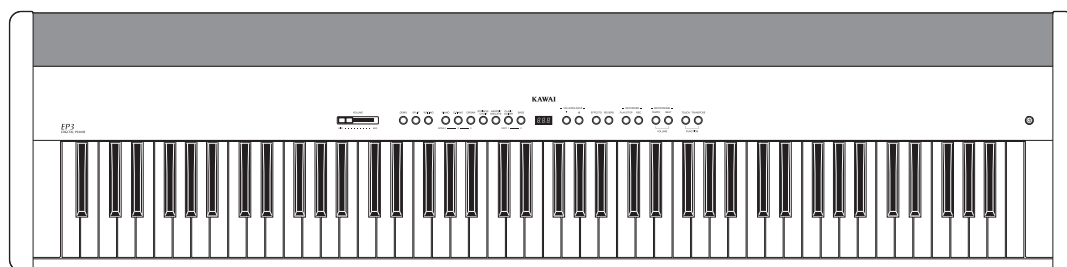For further details, please contact your local authority.
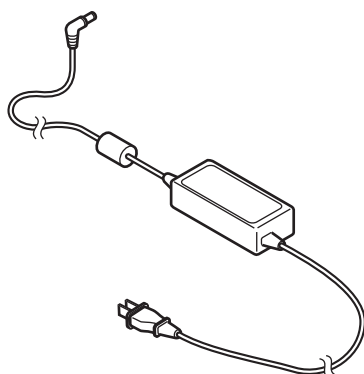(European Union only)

1. INTRODUCTION

1) PACKAGE CONTENTS

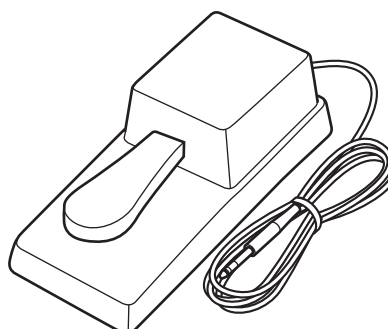The EP3 digital piano package contains the following items:
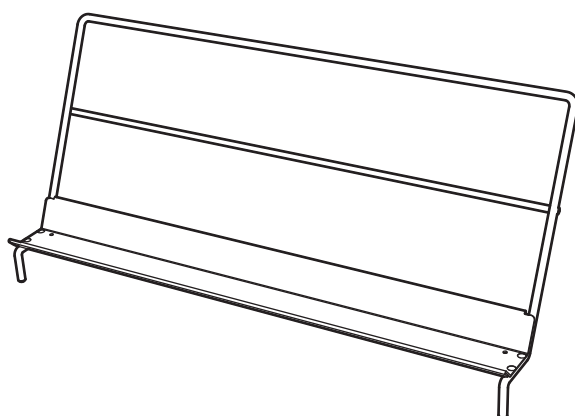
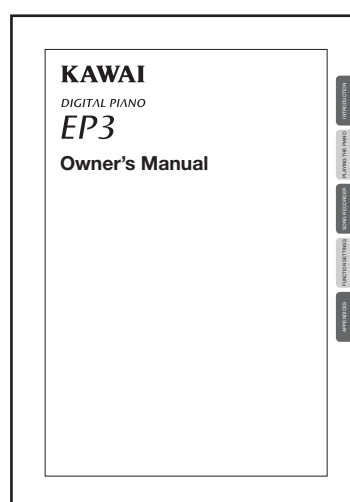● EP3 digital piano

● AC power adaptor (PS-154)

● Foot pedal (F-10H)

● Music rest

● Owner's manual

2) FEATURE HIGHLIGHTS

◇ Advanced Hammer Action IV-F

Developed to accurately represent the touch of a traditional grand piano, the redesigned Advanced Hammer Action IV-F keyboard adopts KAWAI's remarkable springless construction, for a smoother, more natural, piano feeling. Just as acoustic pianos utilise heavier bass hammers and lighter treble hammers, the EP3 digital piano keyboard also employs different hammer weights, appropriately graded for each playing range. This innovative Acoustic Reaction™ technology provides greater stability during fortissimo passages, while preserving delicate pianissimo control, to satisfy the demands of even the most discerning pianist.

◇ Harmonic Imaging™ Technology

The authentic sound of the EP3 digital piano begins with the world renowned KAWAI EX Concert grand piano. Placed inside an anechoic chamber, free of audio reflections, the rich sound of this world class instrument is meticulously analysed and recorded by our Master Piano Artisans. The acoustic portrait of each note is later transformed into a precise three dimensional digital representation, employing KAWAI's proprietary Harmonic Imaging™ technology. This unique process allows the EP3 digital piano to faithfully reproduces the broad dynamic range of the original grand piano, from subtle pianissimos to thunderous fortissimos.

◇ Additional Sound Selection

With a total of 21 realistic internal sounds, the EP3 digital piano is suitably equipped for playing various musical styles. In addition to the rich piano sounds, the EP3 digital piano also features a broad selection of other instrumental sounds, ranging from electric pianos and organs, to harpsichord, strings, and percussion instruments.

◇ Powerful Speaker System

The EP3 digital piano features an innovative 6-speaker sound system, utilising speaker box enclosures to provide deep bass and crisp treble frequencies. This unique design allows for a compact, portable instrument that is powerful enough to deliver strong live performances without the need for additional amplification equipment. And with a selection of adjustable reverb, effects, and EQ settings, the EP3 digital piano is guaranteed to sound absolutely terrific - regardless of the playing situation.

3) PART NAMES AND FUNCTIONS

●VOLUME
The VOLUME slider controls the master volume level of the EP3 digital piano. Move the slider to the right to increase the volume, and to the left to decrease the volume. This slider also controls the headphone volume and LINE OUT output level. (page 13)

●SPLIT
The SPLIT function divides the keyboard into two sections - Upper and Lower - allowing each section to be played with a different sound. (page 19)

●SOUND SELECTION BUTTONS
The SOUND SELECTION buttons are used to select the sound(s) that will be heard when pressing the keys. (page 14)
These buttons can also be used to select RECORDER songs and parts. (page 30)

●DEMO
The DEMO function introduces a selection of demonstration songs, highlighting the various capabilities of the EP3 digital piano. (page 15)

●VOICING
The VOICING function allows the tonal quality of the EP3 digital piano to be adjusted. (page 27)
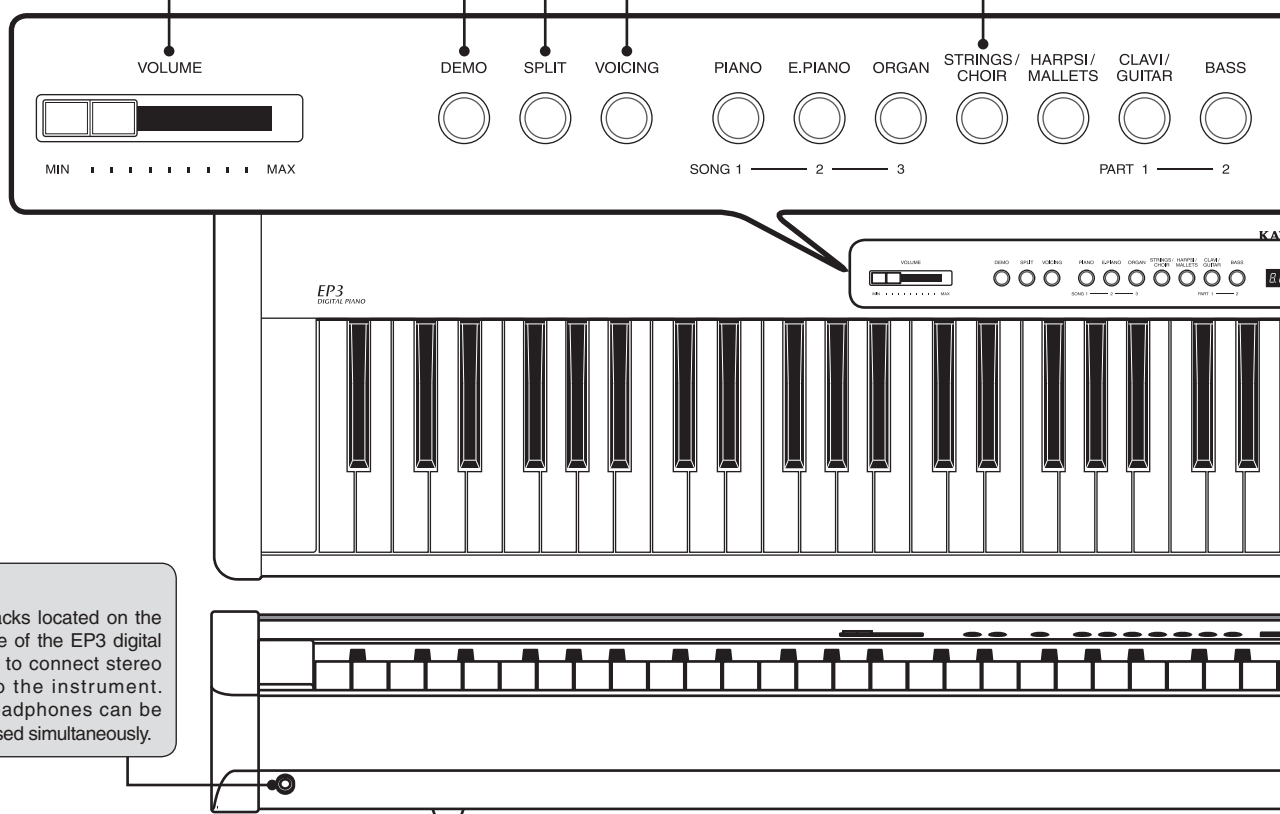
●PHONES
The PHONES jacks located on the left and right side of the EP3 digital piano, are used to connect stereo headphones to the instrument. Two pairs of headphones can be connected and used simultaneously.
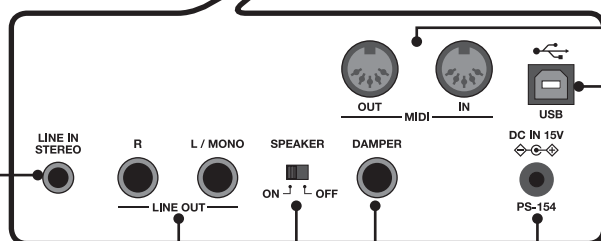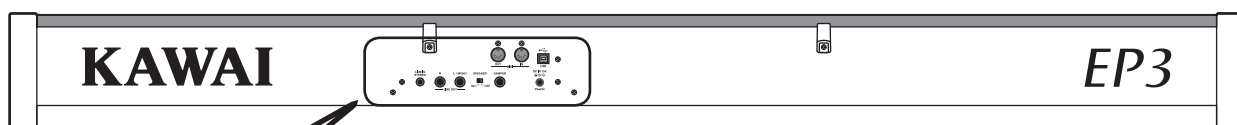
●MIDI IN/OUT Connectors
Used to connect the EP3 digital piano to external MIDI devices such as other electronic instruments or computers. (page 57)

●USB Connector
Used to connect the EP3 digital piano with a personal computer to exchange MIDI data. (page 57)

●DC IN Jack
Used to connect the included PS-154 AC power adaptor. (page 13)

●SPEAKER ON/OFF Switch
Used to turn the internal speakers on or off. (page 12)

●LINE IN STEREO Jack
Used to connect the stereo output from other electronic instruments or audio equipment such as a CD player. (page 57)

●LINE OUT Jacks
Used to connect the audio signal to an external amplifier, speakers, or recording devices such as a computer. (page 57)

●DAMPER PEDAL Jack
Used to connect the included F-10H single pedal to the EP3 digital piano. (page 12)

●LED DISPLAY
The LED display shows information about selected sounds, functions, and other important settings.

●VALUE/BALANCE
The ▼ and ▲ VALUE/ BALANCE buttons are used to adjust various settings and functions.

●EFFECTS
The EFFECTS function adds chorus, delay, tremolo, and rotary speaker simulation effects to the sound. (page 23)

●REVERB
The REVERB function adds reverberation to the sound, simulating the acoustic environment of a recital room, stage, or concert hall. (page 22)

●RECORDER
The RECORDER function allows two track songs to be recorded and stored to one of the 4 different song memories, and later played back or altered. (page 30)

●METRONOME
The METRONOME function provides a steady rhythm with which to aid piano practice. The tempo, time signature, and volume of the metronome can be freely adjusted. (page 28)
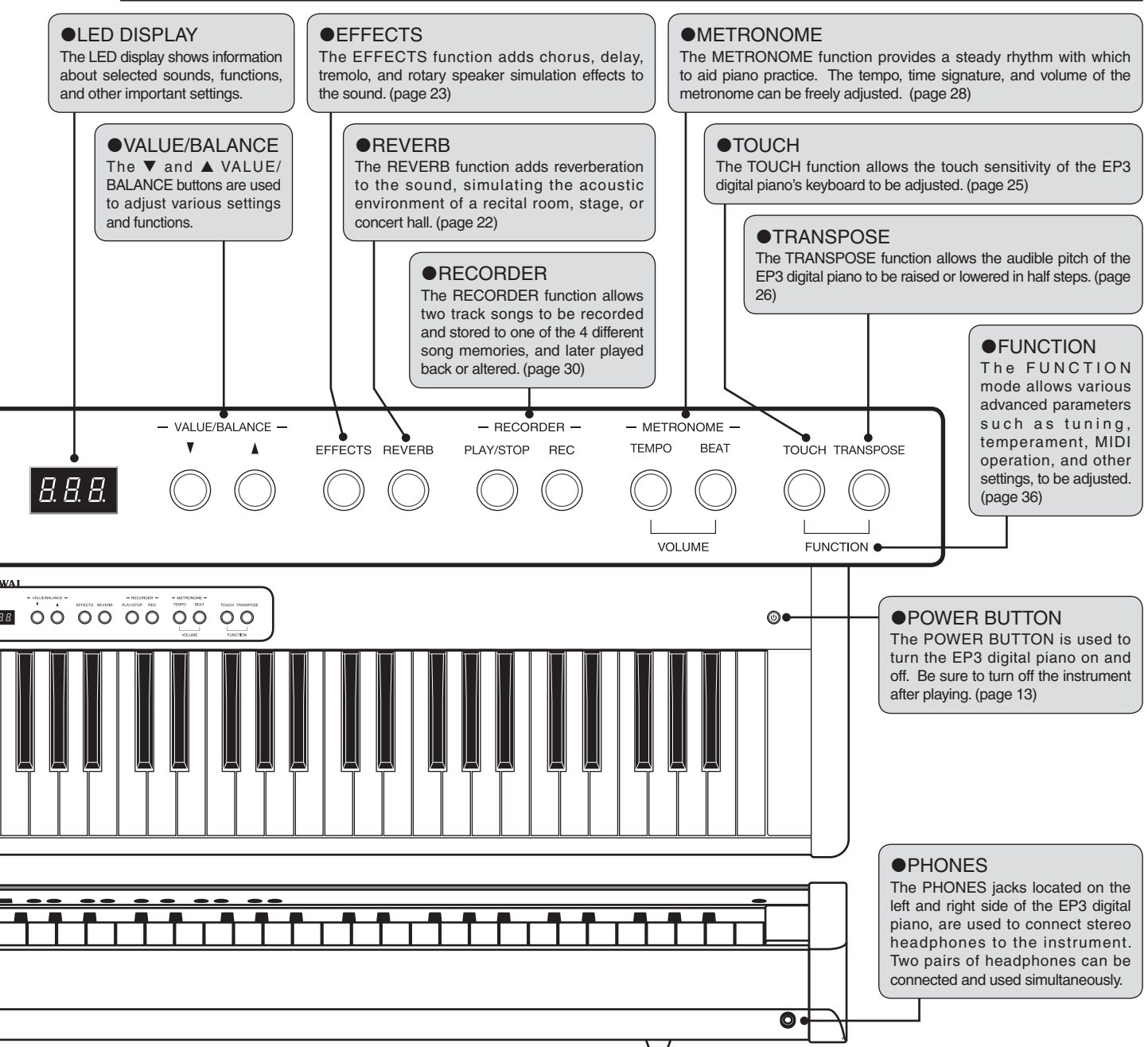
●TOUCH
The TOUCH function allows the touch sensitivity of the EP3 digital piano's keyboard to be adjusted. (page 25)

●TRANSPOSE
The TRANSPOSE function allows the audible pitch of the EP3 digital piano to be raised or lowered in half steps. (page 26)

●FUNCTION
The FUNCTION mode allows various advanced parameters such as tuning, temperament, MIDI operation, and other settings, to be adjusted. (page 36)

— VALUE/BALANCE —
▼   ▲   EFFECTS REVERB

— RECORDER —
PLAY/STOP REC

— METRONOME —
TEMPO BEAT

TOUCH TRANSPOSE

VOLUME   FUNCTION

●POWER BUTTON
The POWER BUTTON is used to turn the EP3 digital piano on and off. Be sure to turn off the instrument after playing. (page 13)

●PHONES
The PHONES jacks located on the left and right side of the EP3 digital piano, are used to connect stereo headphones to the instrument. Two pairs of headphones can be connected and used simultaneously.
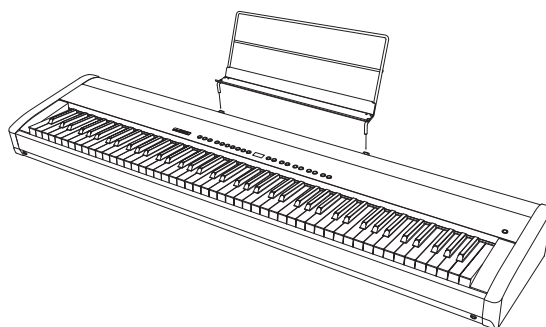
4) GETTING STARTED

◇ ATTACHING THE MUSIC REST

Insert the legs of the music rest into the holes located at the rear of the main unit.

■ When attaching the music rest, be careful not to scratch the rear of the main unit.
■ Avoid applying excessive force when attaching/ detaching the music rest from the main unit.

◇ CONNECTING THE F-10H FOOT PEDAL

Connect the included F-10H foot pedal unit to the DAMPER pedal jack.

The foot pedal will behave as a damper pedal, sustaining the sound after hands are lifted from the keyboard, while also responding to half pedaling.
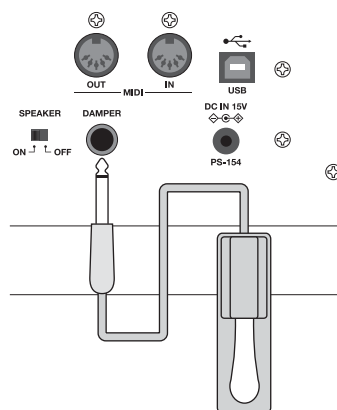
◇ TURNING THE SPEAKER OUTPUT ON/OFF

The SPEAKER switch located at the rear of the main unit, can be used to turn the built-in speaker output on or off. When set to the ON position, sound will be output through the built-in speakers, and when set to the OFF position, no sound will be output through the built-in speakers. This is useful when wishing to use external speakers or an amplification system using the LINE OUT jacks. Please note that when headphones are connected, no sound will be output through the built-in speakers, regardless of the position of the SPEAKER switch.
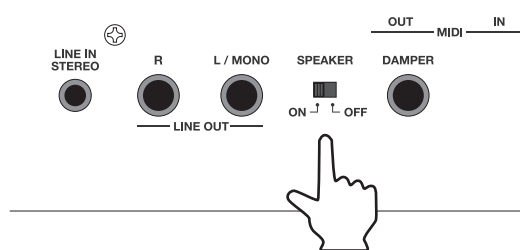
◇ BASIC OPERATION

☐ Step 1

Connect one end of the AC power cable to the DC IN jack of the EP3 digital piano, and the other end of the cable to a wall AC outlet.
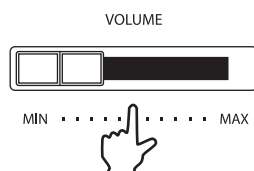
DAMPER   DC IN 15V
PS-154
①
②
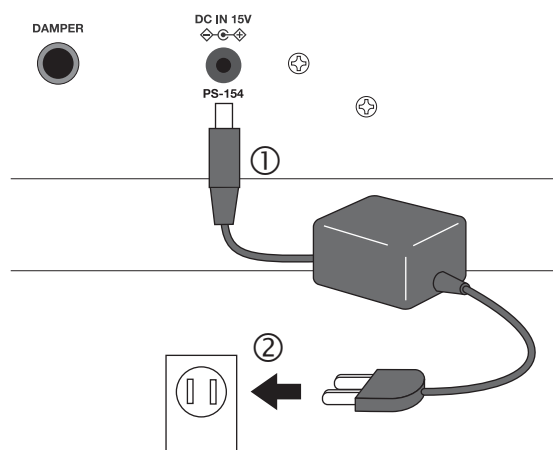
☐ Step 2

Press the POWER button to turn on the power.

PIANO E.PIANO ORGAN STRINGS/CHOIR HARPSI/MALLETS CLAVI/GUITAR BASS

The LED indicator for the PIANO button will turn on, and the Concert Grand sound will be selected automatically.

☐ Step 3

Adjust the volume level using the VOLUME slider.

VOLUME
MIN · · · · · · · · · · MAX
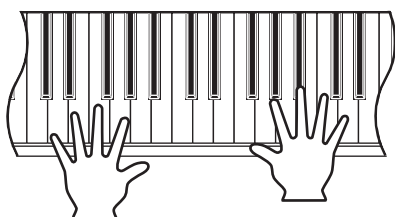
The VOLUME slider controls the volume level of the built-in speakers and connected headphones.
Move the slider to the right to increase the volume, and to the left to decrease the volume.
Set the volume to a comfortable listening level - the middle is often a good starting point.

☐ Step 4

Play the piano.

The sound of a Concert Grand piano will be heard as the keys are pressed.
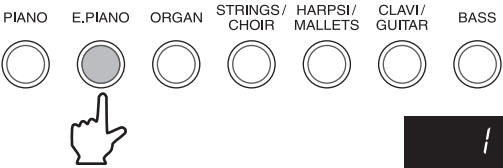
2. PLAYING THE PIANO

1) SELECTING A SOUND

The EP3 digital piano features 21 realistic sounds suitable for various musical styles, with multiple sounds assigned to each of the 7 category buttons listed below.

Button	Variation	Instrument name
PIANO	1	Concert Grand
	2	Studio Grand
	3	Mellow Grand
E.PIANO	1	Classic E.Piano
	2	Modern E.P.
	3	60's E. P.
ORGAN	1	Jazz Organ
	2	Drawbar Organ
	3	Church Organ
STRIGNS/ CHOIR	1	Slow Strings
	2	String Ensemble
	3	Choir

| Button	Variation	Instrument name
HARPSI/ MALLETS	1	Harpsichord
	2	Vibraphone
	3	Marimba
CLAVI/ GUITAR	1	Clavi
	2	Steel Guitar
	3	Nylon Acoustic
BASS	1	Wood Bass
	2	Electric Bass
	3	W. Bass & Ride

☐ Step 1

Press the E.PIANO button.

The LED indicator for the E.PIANO button will turn on.

The variation number '1' will be shown in the LED display, indicating that the Classic E.Piano sound has been selected.

Several sounds are assigned to each SOUND SELECTION button. Press the same SOUND SELECTION button multiple times to cycle through each sound variation.

☐ Step 2

Play the piano.
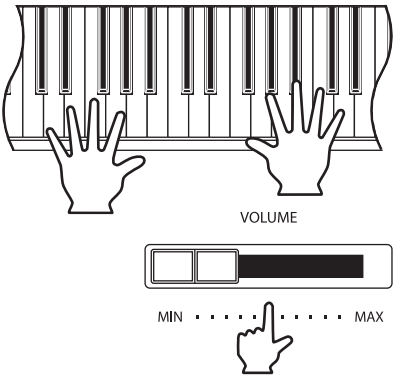
The sound of Classic E.Piano will be heard as the keys are pressed.
Use the VOLUME slider to adjust the volume, if necessary.

■ The EP3 digital piano is capable of playing up to 96 notes simultaneously (96 note polyphony). However, when playing in DUAL mode, or when playing a stereo piano sound, the polyphony will be reduced by half due to the number of sounds being produced for each note.

2) DEMO SONGS

The internal demonstration songs provide an excellent introduction to the varied capabilities of the EP3 digital piano, presenting the instrument's rich selection of voices and powerful speaker system. There are two different types of demonstration available: the Main Demo song and an additional 19 separate Internal Sound demo songs.

Demo Song List

■ Main Demo		■ STRINGS/CHOIR	
Main Demo	: KAWAI	Slow Strings	: KAWAI
■ PIANO		String Ensemble	: Le quattro stagioni - La primavera / Vivaldi
Concert Grand	: Valse Romantique / Debussy	Choir	: KAWAI
Studio Grand	: KAWAI	■ HARPSI/MALLETS	
Mellow Grand	: La Fille aux Cheveux de lin / Debussy	Harpsichord	: French Suite No.6 / Bach
■ E.PIANO		Vibraphone	: KAWAI
Classic E.Piano	: KAWAI	■ CLAVI/GUITAR	
Modern E.P.	: KAWAI	Clavi	: KAWAI
■ ORGAN		Steel Guitar	: KAWAI
Jazz Organ	: KAWAI	Nylon Acoustic	: KAWAI
Drawbar Organ	: KAWAI	■ BASS	
Church Organ	: Toccata / Eugene Gigout	Wood Bass	: KAWAI
		Fretless Bass	: KAWAI
		W. Bass & Ride	: KAWAI

KAWAI regret that sheet music for KAWAI original demo songs is not available.

☐ Step 1

Press the DEMO button to activate demo mode.
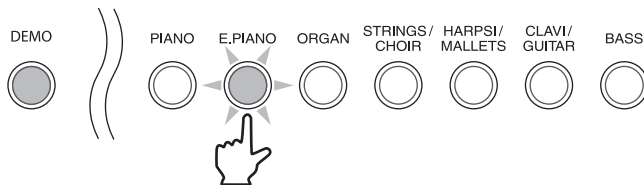

DEMO

The LED indicator for the DEMO button will turn on, indicating that demo mode has been activated.
The Main Demo song will start to play.

When the Main Demo song has finished, the Internal Sound demo songs will begin to play automatically.

☐ Step 2

While the Main Demo song is playing, press the E.PIANO button to select the Classic E.Piano sound demo.

The LED indicator for the E.PIANO button will start to flash, and the Classic E.Piano sound demo will start to play.

When the E.PIANO sound demos have finished, a song demo from a different sound category will be selected at random, and will begin to play automatically.

When all of the Internal Sound demo songs have been played, the EP3 digital piano will return to playing the Main Demo songs automatically.

PLAYING THE PIANO

2

□ Step 3

Press the DEMO button to deactivate demo mode.

DEMO

The LED indicator for the DEMO button will turn off, indicating that demo mode has been deactivated.
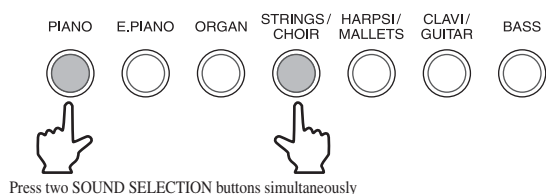
The demo songs will stop playing.

3) DUAL MODE

The DUAL function allows two internal sounds to be layered together, creating a more complex sound. For example, a piano can be layered with strings, or a church organ with a choir sound.

☐ Step 1

Press and hold the PIANO button, then press the STRINGS/CHOIR button.

PIANO   E.PIANO   ORGAN   STRINGS/   HARPSI/   CLAVI/   BASS
                          CHOIR   MALLETS   GUITAR

Press two SOUND SELECTION buttons simultaneously

The LED indicators for the PIANO and STRINGS/CHOIR buttons will turn on, indicating that both sounds have been selected simultaneously, and DUAL mode has been activated.
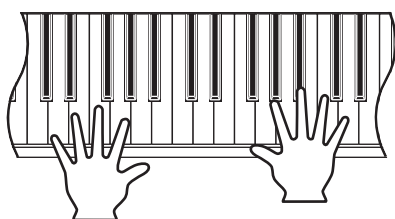
1 - 1

The selected sound variation numbers will be shown in the LED display.
The left number represents the primary sound, while the right number represents the secondary sound.
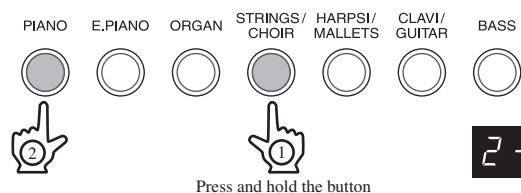
☐ Step 2

Play the piano.

The Concert Grand and Slow Strings sounds will be heard simultaneously.

☐ Step 3

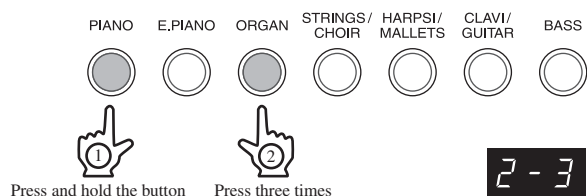Press and hold the STRINGS/CHOIR button, then press the PIANO button.

PIANO   E.PIANO   ORGAN   STRINGS/   HARPSI/   CLAVI/   BASS
                          CHOIR   MALLETS   GUITAR

Press and hold the button

2 - 1

'2-1' will be shown in the LED display, indicating that the primary sound has changed to Studio Grand.

☐ Step 4

Press and hold the PIANO button, then press the ORGAN button three times.

PIANO   E.PIANO   ORGAN   STRINGS/   HARPSI/   CLAVI/   BASS
                          CHOIR   MALLETS   GUITAR

Press and hold the button   Press three times

The LED indicators for the PIANO and ORGAN buttons will turn on.

2 - 3

'2-3' will be shown in the LED display, indicating that the secondary sound has been changed to Church Organ.

To combine two sounds assigned to the same SOUND SELECTION button, first select the primary sound, next press and hold the SOUND SELECTION button, then press the ▼ or ▲ VALUE/BALANCE buttons to select the desired secondary sound.

PLAYING THE PIANO

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□ **Step 5**

Press the ▼ or ▲ VALUE/BALANCE buttons to adjust the volume balance between the two sounds.
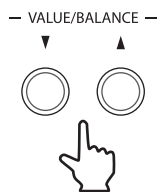
— VALUE/BALANCE —
▼   ▲

`5 - 5` The current volume balance between the primary and secondary sounds will be shown in the LED display.

■ The sum of the primary and secondary sound volume balances will always total 10 (e.g. '1-9', '5-5', '9-1', etc.), with larger values producing greater volume.
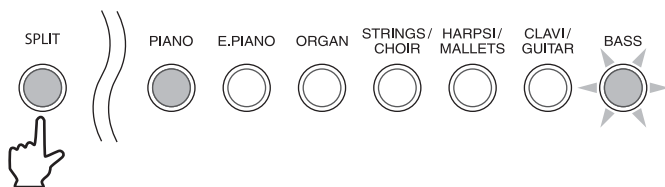
□ **Step 6**

Press any individual SOUND SELECTION button to deactivate DUAL mode.

4) SPLIT MODE

The SPLIT function divides the keyboard of the EP3 digital piano into Upper and Lower sections, allowing each section to be played with a different sound.

☐ Step 1

Press the SPLIT button.

The LED indicator for the SPLIT button will turn on, indicating that SPLIT mode has been activated.

In addition, the LED indicator for the PIANO button will also turn on, indicating the Upper section sound, while the BASS button will start to flash, indicating the Lower section.

The selected sound variation numbers will be shown in the LED display.

The left number represents the Lower section, while the right number represents the Upper section.
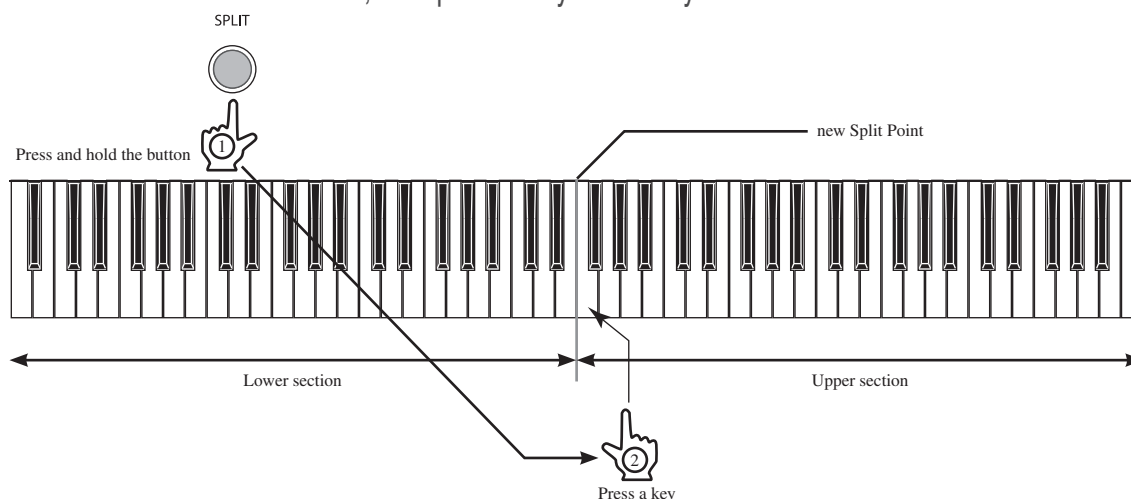
☐ Step 2

Play the piano.

The Concert Grand sound will be heard in the Upper section, while the Wood Bass sound will be heard in the Lower section.

The number of keys used for the Upper and Lower sections can be freely adjusted by changing the Split Point.

■ The default Split Point setting is C3.

☐ Step 3

Press and hold the SPLIT button, then press a key on the keyboard.

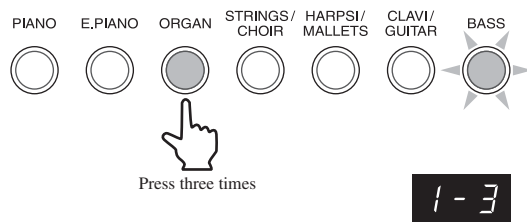The name of the pressed key will be shown in the LED display, and will become the new Split Point.

■ Any changes made to the Split Point will remain until the power is turned off.
■ When the power is turned off, the Split Point will return to the default setting of 'C3', however it is possible to use the Memory Backup function to store the preferred Split Point. Please refer to the instructions on page 56 for more information.

□ **Step 4**

Press the ORGAN button three times.

PIANO   E.PIANO   ORGAN   STRINGS/   HARPSI/   CLAVI/   BASS
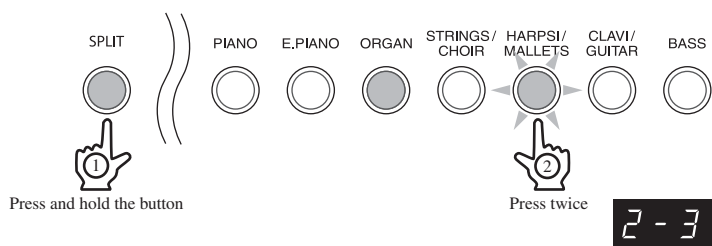   CHOIR   MALLETS   GUITAR

Press three times

The LED indicator for the ORGAN button will turn on.

'1-3' will be shown in the LED display, indicating that the Upper section sound has been changed to Church Organ.

□ **Step 5**

Press and hold the SPLIT button, then press the HARPSI/MALLETS button twice.

SPLIT   PIANO   E.PIANO   ORGAN   STRINGS/   HARPSI/   CLAVI/   BASS
                                      CHOIR   MALLETS   GUITAR
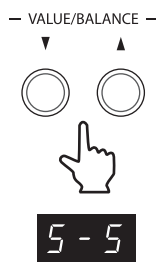
Press and hold the button

Press twice

The LED indicator for the HARPSI/MALLETS button will start to flash.

'2-3' will be shown in the LED display, indicating that the Lower section sound has been changed to Vibraphone.

□ **Step 6**

Press the ▼ or ▲ VALUE/BALANCE buttons to adjust the volume balance between the Upper and Lower sections.

— VALUE/BALANCE —
▼   ▲

The current volume balance between the Upper and Lower sections will be shown in the LED display.

■ The sum of the Upper and Lower sections volume balances will always total 10 (e.g. '1-9', '5-5', '9-1', etc.), with larger values producing greater volume.

□ **Step 7**

Press the SPLIT button to deactivate split mode.

SPLIT

The LED indicator for the SPLIT button will turn off.

■ When SPLIT mode is activated, the Lower Octave Shift function can be used to adjust the octave range for the Lower section. Please refer to the instructions on page 43 for more information.
■ The influence of the damper pedal over the Lower section can also be turned on and off. Please refer to the instructions on page 44 for more information.

5) FOUR HANDS MODE

The FOUR HANDS function divides the keyboard of the EP3 digital piano into separate Upper and Lower sections in a similar way to that of the SPLIT function. In addition, the the octave/pitch of each section is also adjusted, allowing two people to play the piano together.

☐ Step 1

Press and hold the SPLIT button, then press the damper pedal.

SPLIT

Damper pedal

Press and hold the button

Depress the pedal
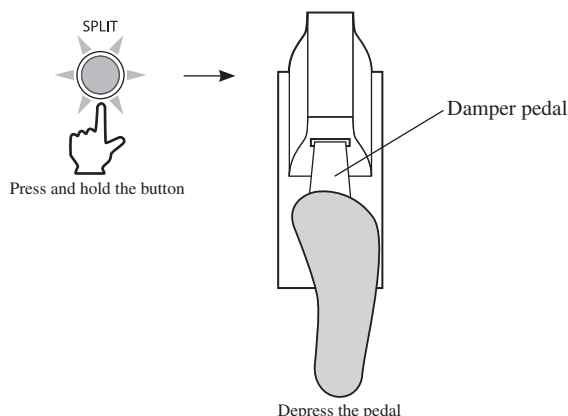
The LED indicator for the SPLIT button will start to flash, indicating that FOUR HANDS mode has been activated.

In addition, the LED indicator for the Upper section sound button will also turn on, while the Lower section sound button will start to flash.

The selected sound variation numbers will be shown in the LED display.

The left number represents the Lower section, while the right number represents the Upper section.

☐ Step 2

Play the piano.

With FOUR HANDS mode activated, the sounds in the Upper section are transposed two octaves down from the original pitch, while sounds from the Lower section are transposed two octaves up from the original pitch, allowing two people to play within the same key range.

The number of keys used for the Upper and Lower sections can be freely adjusted by changing the Split Point.

■ The default Split Point setting is F3.
■ When FOUR HANDS mode is activated, the Lower Octave Shift function can be used to adjust the octave range for the Lower section. Please refer to the instructions on page 43 for more information.
■ If the included F-10H foot pedal unit is connected to the EP3 digital piano, the pedal will be used as a damper pedal for the Upper section only.

☐ Step 3

Press the SOUND SELECTION buttons to adjust the Upper and Lower section sounds.

☐ Step 4

Press and hold the SPLIT button, then press a key on the keyboard to adjust the Split Point.

■ The FOUR HANDS mode Split Point will not affect the SPLIT mode Split Point.

☐ Step 5

Press the SPLIT button again to deactivate FOUR HANDS mode.

The LED indicator for the SPLIT button will turn off.

PLAYING THE PIANO

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6) REVERB, EFFECTS, AND EQ

The EP3 digital piano allows performers to alter sounds by adding reverb, applying effects, and adjusting equalisation (EQ).

When selecting some internal sounds, the LED indicator for the EFFECTS or REVERB buttons may turn on automatically. This is because certain internal sounds are prepared with an effect enabled as the default setting, enhancing tonal quality and improving acoustic realism.
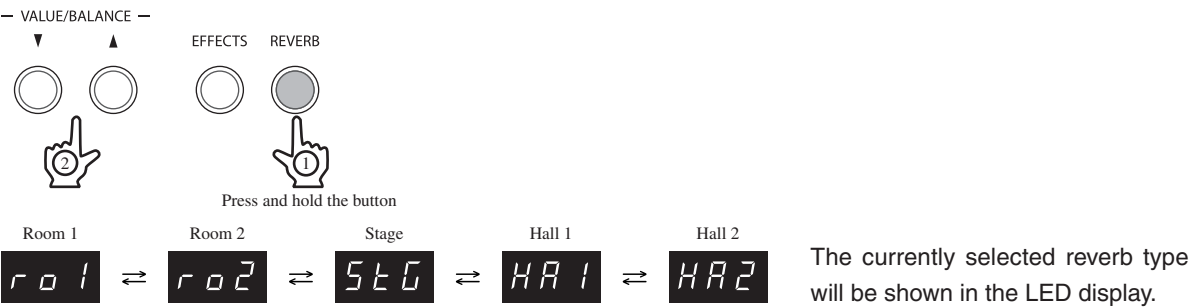
◇ REVERB

Reverb adds reverberation to the sound, simulating the acoustic environment of a recital room, stage, or concert hall. There are five types of reverb available:

Reverb type	Description
Room 1	Simulates the ambiance of a living room or small rehearsal room.
Room 2	Simulates a larger room than Room 1.
Stage	Simulates the ambiance of a small hall or live stage.
Hall 1	Simulates the ambiance of a concert hall or theatre.
Hall 2	Simulates a larger hall or theatre than Hall 1.

□ Step 1

Press and hold the REVERB button, then press the ▼ or ▲ VALUE/BALANCE buttons to select the desired reverb type.

The currently selected reverb type will be shown in the LED display.

□ Step 2

Press the REVERB button again to deactivate the reverb simulation.

The LED indicator for the REVERB button will turn off, indicating that the reverb simulation has been deactivated.

Pressing the REVERB button once again will reactivate the reverb simulation, recalling the previously selected reverb type.

■ Reverb settings are specific to each individual sound.
■ Any changes made to the reverb type or on/off status will remain until the power is turned off.
■ When the power is turned off, the reverb settings will return to the default settings, however it is possible to use the Memory Backup function to store the preferred reverb on/off setting. Please refer to the instructions on page 56 for more information.

◇ EFFECTS

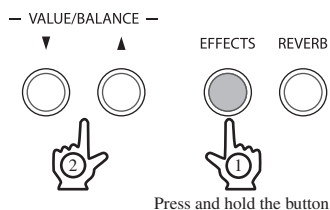Effects alter the impression and feeling of the sounds.

There are five types of effect available:

Effect type	Description
Chorus	Simulates the rich character of a vocal choir or string ensemble, by layering a slightly detuned version of the sound over the original to enrich it.
Delay	Adds an echo to the sound.
Tremolo	Adds vibrato to the sound.
Rotary 1	Simulates the sound of a rotary speaker cabinet commonly used with electronic organs. Rotary 1 is a
Rotary 2	normal rotary effect while and Rotary 2 adds distortion.

■ When either the Rotary 1 or Rotary 2 effect is selected, pressing the ▼ and ▲ VALUE/BALANCE buttons simultaneously will alternate the speed of the rotary speaker simulation between 'Slow' and 'Fast' effect modes.

□ Step 1

Press and hold the EFFECTS button, then press the ▼ or ▲ VALUE/BALANCE buttons to select the desired effect type.

| Chorus | Delay | Tremolo | Rotary 1 | Rotary 2 |

$$[hr \rightleftarrows dLY \rightleftarrows trE \rightleftarrows rt1 \rightleftarrows rt2$$

The currently selected effect type will be shown in the LED display.

□ Step 2

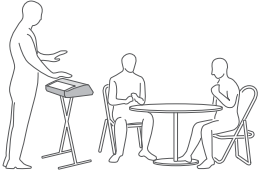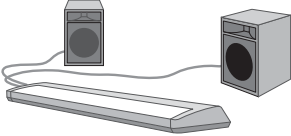Press the EFFECTS button again to deactivate the effects.

The LED indicator for the EFFECTS button will turn off, indicating that the effects have been deactivated.

Pressing the EFFECTS button once again will reactivate the effects, recalling the previously selected effect type.

■ Effects settings are specific to each individual sound.
■ Any changes made to the effect type or on/off status will remain until the power is turned off.
■ When the power is turned off the effects settings will return to the default settings, however it is possible to use the Memory Backup function to store the preferred effects on/off setting. Please refer to the instructions on page 56 for more information.
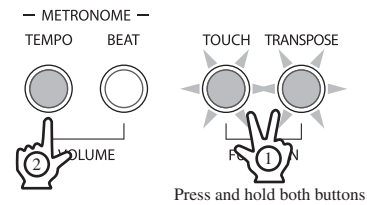
◇ LINE OUT EQ

Equaliser adjusts the tonal character of the sound.
The equaliser can be turned On or Off.

Equaliser type	Description	
Off	Recommended for normal playing circumstances, such as in a living room or classroom. With headphones connected, the normal sound of the EP3 digital piano is reproduced.	
On	Recommended when the EP3 digital piano is connected to external speakers, or when recording. With headphones connected, the normal sound of the EP3 digital piano is reproduced (same as Off).	

□ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the TEMPO button.

The LED indicators for the TOUCH, TRANSPOSE, and TEMPO buttons will start to flash, indicating that the EQ function has been selected.

The name of the function 'LEQ' (Line out EQ) and the current settings will be shown in the LED display.

□ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to select the desired EQ mode.
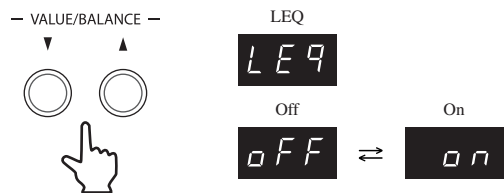
□ Step 3

Press the TEMPO button to exit EQ setting mode.

The LED indicators for the TOUCH, TRANSPOSE, and TEMPO buttons will stop flashing.

■ EQ settings are global for all the internal sounds. It is not possible to have individual settings for each internal sound.
■ Any changes made to the EQ mode will remain until the power is turned off.
■ When the power is turned off, the EQ settings will return to the default setting of 'Off', however it is possible to use the Memory Backup function to store the preferred EQ mode. Please refer to the instructions on page 56 for more information.

7) TOUCH CURVE

The TOUCH function allows different touch sensitivities for the keyboard to be selected, other than the standard touch of an acoustic piano. The sensitivity can be changed to one of five different types: Light 2, Light 1, Heavy 1, Heavy 2 or Off.

①Light 2 : For players with a delicate touch. Requires less striking force to achieve a forte note.
②Light 1 : For those still developing finger strength. A louder volume is produced even when playing with a soft touch.
③Normal : Reproduces the standard touch sensitivity of an acoustic piano. This touch setting is selected when the LED indicator for the TOUCH button is off.
④Heavy 1 : Perfect for those with strong fingers. Requires a heavier touch to produce a loud volume.
⑤Heavy 2 : Requires more striking force to achieve a loud volume.
⑥Off : A constant volume is produced regardless of how hard the keys are struck. This setting is suitable for sounds that have a fixed dynamic range such as Organ and Harpsichord.
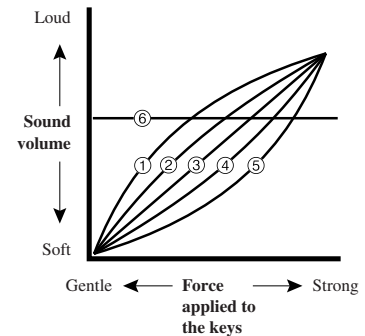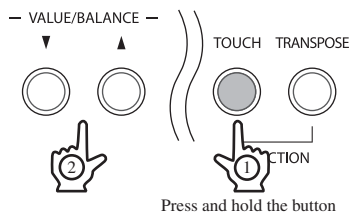
☐ Step 1

Press the TOUCH button.
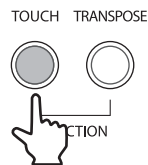
The LED indicator for the TOUCH button will turn on, indicating that a different touch type is being used.

☐ Step 2

Press and hold the TOUCH button, then press the ▼ or ▲ VALUE/BALANCE buttons to select the desired TOUCH type.

Heavy 2		Heavy 1		Light 1		Light 2		Off
HE2	⇄	HE1	⇄	Lt1	⇄	Lt2	⇄	oFF

The currently selected touch type will be shown in the LED display.

☐ Step 3

Press the TOUCH button again to return to the standard (Normal) touch setting.

The LED indicator for the TOUCH button will turn off, indicating that the Normal touch type is being used.

■ The touch setting is global for all of the internal sounds. It is not possible to have individual touch settings for each internal sound.
■ Any changes made to the touch mode will remain until the power is turned off.
■ When the power is turned off, the touch settings will return to the default setting of 'Normal', however it is possible to use the Memory Backup function to store the preferred TOUCH mode. Please refer to the instructions on page 56 for more information.

■ Note: LIGHT and HEAVY do not represent the physical weight of the keys. The touch type affects the sensitivity of the keys, determining the volume level in response to the key movement.

8) TRANSPOSE

The TRANSPOSE function allows the audible pitch of the EP3 digital piano to be raised or lowered in half steps. This is particularly useful when accompanying instruments with different tones, or when a song learned in one key must be played in another key. The transpose feature allows the song to be played in the original key, but heard in another key.

□ Step 1

Press and hold the TRANSPOSE button, then press the ▼ or ▲ VALUE/BALANCE buttons to specify the desired transposition value.
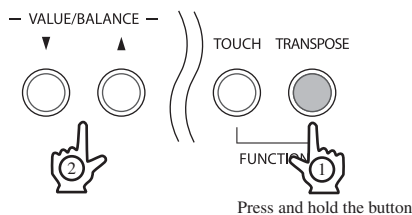
Press and hold the button

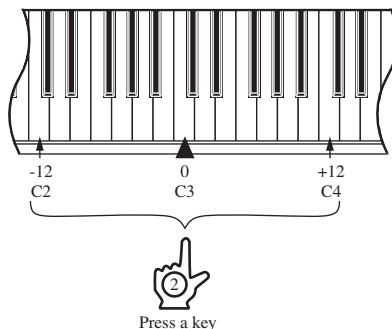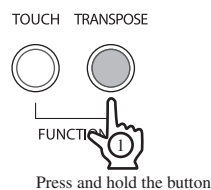The LED indicator for the TRANSPOSE button will turn on, indicating that the transpose function has been activated.

The currently selected transpose setting will be shown in the LED display.

The pitch can be transposed by up to 12 halftones higher or 12 halftones lower.

Alternatively, while holding the TRANSPOSE button, press the keys from C2 to C4, to set the desired transpose value.

Press and hold the button

-12   0   +12
C2   C3   C4

Press a key

The 'C' key in the centre of the piano keyboard corresponds to the value '0'.

□ Step 2

Press the TRANSPOSE button again to deactivate the transpose function.

The LED indicator for the TRANSPOSE button will turn off, indicating that the transpose function has been deactivated.

Pressing the TRANSPOSE button once again will reactivate the transpose function, recalling the previously selected transpose value type.

■ Transpose is active when the LED indicator for the TRANSPOSE button is turned on, and the notes are transposed according to the specified transpose value. For example, if the transpose setting is '-3' and the LED indicator for the TRANSPOSE button is turned on, and the notes will be transposed 3 half steps lower. When the LED indicator for the TRANSPOSE button is turned off, the transpose setting will automatically return to '0' (no transposition) with one touch.
■ When the transpose value is set to '0', the LED indicator for the TRANSPOSE button will not turn on.
■ Any changes made to the transpose value will remain until the power is turned off.
■ When the power is turned off, the transpose value will return to the default setting of '0', however it is possible to use the Memory Backup function to store the preferred transpose value. Please refer to the instructions on page 56 for more information.

9) VOICING

Voicing is a technique used by piano technicians to mould the character of a piano's sound.

This function allows the tonal quality of the EP3 digital piano to be set to one of four voicing types:

Voicing type	Description
Normal	The normal tone character of an acoustic piano throughout the entire dynamic range. This is the default voicing setting.
Mellow	A softer (mellow) tone character throughout the entire dynamic range.
Dynamic	The tone character will change dramatically from mellow to bright, depending on how soft or hard the piano is played.
Bright	A brighter tone character throughout the entire dynamic range.

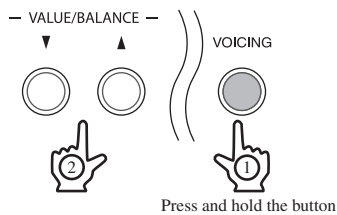☐ Step 1

Press the VOICING button.

VOICING

The LED indicator for the VOICING button will turn on, indicating that a different voicing type is being used.

☐ Step 2

Press and hold the VOICING button, then press the ▼ or ▲ VALUE/BALANCE buttons to select the desired voicing type.

— VALUE/BALANCE —
▼   ▲   VOICING

②   ①
Press and hold the button

Mellow   Dynamic   Bright

ΠEL ⇄ dYn ⇄ brt   The currently selected voicing type will be shown in the LED display.

☐ Step 3

Press the VOICING button again to return to the standard (Normal) voicing setting.

The LED indicator for the VOICING button will turn off, indicating that the Normal voicing type is being used.

■ The voicing setting is global for all of the internal sounds. It is not possible to have individual voicing settings for each internal sound.

■ Any changes made to the voicing setting will remain until the power is turned off.

■ When the power is turned off, the voicing setting will return to the default type of 'Normal', however it is possible to use the Memory Backup function to store the preferred voicing type. Please refer to the instructions on page 56 for more information.

■ NOTE : While voicing is a technique used for optimizing the tone of an acoustic piano, this function can be used on all the sounds on the EP3 piano.
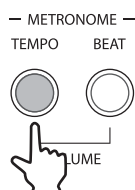
10) METRONOME

Rhythm is one of the most important elements when learning music. It is important to practise playing the piano at the correct tempo and with a steady rhythm. The EP3 digital piano's metronome function helps learners to achieve this by providing a steady beat to play along with.

◇ STARTING THE METRONOME

☐ Step 1
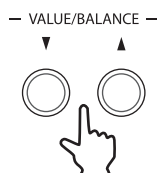Press the TEMPO button.

— METRONOME —
TEMPO   BEAT

`100`

The LED indicator for the TEMPO button will turn on, and the metronome will begin counting with a 4/4 beat.

The metronome tempo in beats per minute (BPM) will be shown in the LED display.

☐ Step 2
Press the ▼ or ▲ VALUE/BALANCE buttons to adjust the metronome tempo to the desired value.

— VALUE/BALANCE —
▼   ▲

`30` ~ `300`

The metronome tempo can be adjusted within the range of 30-300 beats per minute.

☐ Step 3
Press the TEMPO button again to deactivate the metronome.

The LED indicator for the TEMPO button will turn off, indicating that the metronome has been deactivated.

■ Any changes made to the metronome tempo will remain until the power is turned off.
■ When the power is turned off, the metronome tempo will return to the default setting of '100' (100 BPM), however it is possible to use the Memory Backup function to store the preferred metronome tempo. Please refer to the instructions on page 56 for more information.

◇ CHANGING THE METRONOME TIME SIGNATURE

The metronome produces two types of click, with a bell sound indicating the first beat of a bar - this is a 4-beat or 4/4 time signature. It is possible to select a different signature where appropriate. There are seven different types of time signature available: 1/4, 2/4, 3/4, 4/4, 5/4, 3/8, and 6/8. The EP3 also features an additional 30 drum rhythms. Please refer to page 60 for a complete listing of available rhythm styles.

☐ Step 1
Press the BEAT button.
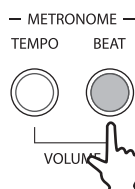
— METRONOME —
TEMPO   BEAT

VOLUM

`4-4`

The LED indicator for the BEAT button will turn on and the metronome will begin counting with a 4/4 beat.
The metronome time signature will be shown in the LED display.
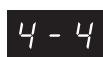
□ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to select the desired time signature.

— VALUE/BALANCE —

▼   ▲
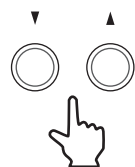
The currently selected time signature will be shown in the LED display.

| 1/4 | 2/4 | 3/4 | 4/4 | 5/4 | 3/8 | 6/8 | Rhythm 1 | Rhythm 30 |

$1-4 \rightleftarrows 2-4 \rightleftarrows 3-4 \rightleftarrows 4-4 \rightleftarrows 5-4 \rightleftarrows 3-8 \rightleftarrows 6-8 \rightleftarrows r-1 \sim r30$

□ Step 3

Press the BEAT button again to deactivate the metronome.

The LED indicator for the BEAT button will turn off, indicating that the metronome has been deactivated.

Both the TEMPO button and the BEAT button can be used to activate and deactivate the metronome, depending on whether the tempo or time signature is being adjusted.

■ Any changes made to the metronome time signature setting will remain until the power is turned off.
■ When the power is turned off, the metronome time signature will return to the default setting of '4/4', however it is possible to use the Memory Backup function to store the preferred metronome time signature. Please refer to the instructions on page 56 for more information.
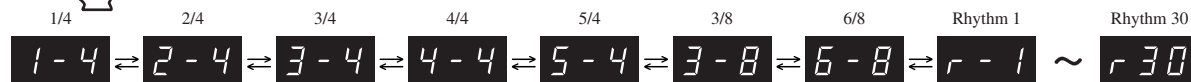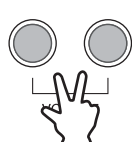
◇ ADJUSTING THE METRONOME VOLUME

The volume level of the metronome can also be adjusted.

□ Step 1

Press the TEMPO and BEAT buttons simultaneously.

— METRONOME —

TEMPO   BEAT

The LED indicators for both the TEMPO and BEAT buttons will turn on, and the metronome will begin counting with the previously selected time signature.

5

The metronome volume will be shown in the display.

□ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to adjust the metronome volume to the desired level.

— VALUE/BALANCE —

▼   ▲
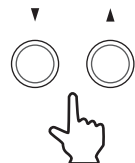
The metronome volume can be adjusted within the range of 1 (soft) to 10 (loud).

$1 \sim 10$

□ Step 3

Press the TEMPO and BEAT buttons simultaneously again to deactivate the metronome.

The LED indicators for the TEMPO and BEAT buttons will turn off, indicating that the metronome has been deactivated.

■ Any changes made to the metronome volume will remain until the power is turned off.
■ When the power is turned off, the metronome volume will return to the default setting of '5', however it is possible to use the Memory Backup function to store the preferred metronome volume. Please refer to the instructions on page 56 for more information.

PLAYING THE PIANO

2

3. SONG RECORDER

The EP3 digital piano allows up to three different songs to be recorded, stored in memory, and played back at the touch of a button. Each song has two separate tracks called 'parts' that can be recorded independently. For example, this allows the left-hand part to be recorded first on one track, then the right-hand part to be recorded later on the other track, while listening to the first part.

When recording or playing back a song, each part can be re-recorded or played back freely. Attempting to re-record a part will automatically erase all previously recorded performance information for that part, therefore when recording parts separately, it is important to select the correct part carefully, in order to prevent accidentally overwriting a previously recorded part.

1) RECORDING A SONG

In the following example, the SONG1 memory will be used for recording.

☐ Step 1

Press and hold the REC button, then press the PIANO button to select SONG1, and the CLAVI/GUITAR button to select PART1.
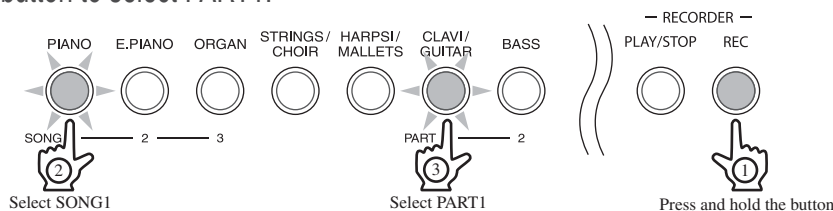
While holding the REC button, the LED indicators for the PIANO and CLAVI/GUITAR buttons will start to flash, indicating that SONG1 and PART1 are selected for recording.

If no PART is selected PART1 will be selected automatically.

☐ Step 2

Release the REC button.

The LED indicators for the selected PIANO and CLAVI/GUITAR buttons will stop flashing, and the LED indicator for the REC button will start to flash. This is the standby state for recording.

The LED indicator for the SOUND SELECTION button will also turn on, indicating that the sound to be used for recording can be changed.

□ Step 3

Play the piano.

The recorder will automatically start recording with the first note played. The LED indicators for the PLAY/STOP and REC buttons will turn on.

Any changes made to the sound while recording will also be recorded.

— RECORDER —
PLAY/STOP   REC
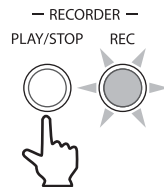
The recording can also be started by pressing the PLAY/STOP button instead of pressing a key, allowing a blank bar or 'up beat' to be inserted at the beginning of a song.

□ Step 4

Press the PLAY/STOP button to stop recording.

— RECORDER —
PLAY/STOP   REC
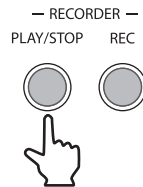
The LED indicators for the PLAY/STOP and REC buttons will flash briefly as the newly recorded part is saved to memory.

■ Saving may take a few moments. During this time, the EP3 digital piano will not respond to any other operations.
■ To record the part again, simply repeat the above procedure. The new recording will completely erase the previous recording.

◇ RECORDING A SECOND PART

A second part can be recorded in PART2 of the same song.

□ Step 1

Press and hold the REC button, then press the BASS button to select PART2 for recording.

PIANO E.PIANO ORGAN STRINGS/CHOIR HARPSI/MALLETS CLAVI/GUITAR BASS   — RECORDER —
PLAY/STOP   REC

SONG 1 —— 2 —— 3   PART 1

② Select PART2   ① Press and hold the button
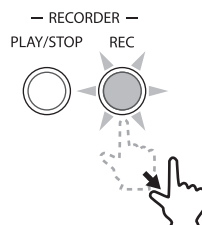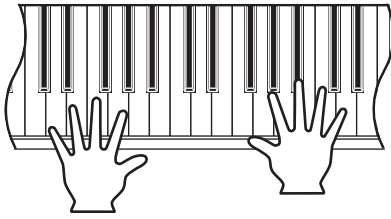
The LED indicators for the PIANO and BASS buttons will start to flash, indicating that SONG1 and PART2 are selected for recording. The LED indicator for the CLAVI/GUITAR button will now be turned on, indicating that PART1 has already been recorded.

☐ Step 2

Release the REC button.

— RECORDER —
PLAY/STOP   REC
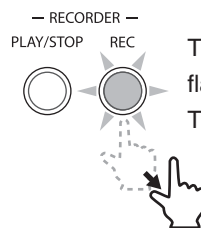
The LED indicators for the selected PIANO and BASS buttons will stop flashing, and the LED indicator for the REC button will start to flash. This is the standby state for recording.

The LED indicator for the SOUND SELECTION button will also turn on, indicating that the sound to be used for recording can be changed.

☐ Step 3

Play the piano.
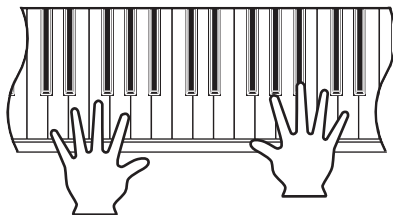
The recorder will automatically start recording with the first key played. The LED indicators for the PLAY/STOP and REC buttons will turn on.

Any changes made to the sound while recording will also be recorded.
While recording PART2, the previously recorded PART1 will also be played.
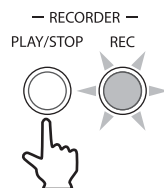
— RECORDER —
PLAY/STOP   REC

The recording can also be started by pressing the PLAY/STOP button instead of pressing a key, allowing PART2 to be recorded later in the song.

☐ Step 4

Press the PLAY/STOP button to finish recording.

— RECORDER —
PLAY/STOP   REC
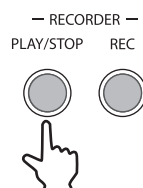
The LED indicators for the REC and PLAY/STOP buttons will turn off.
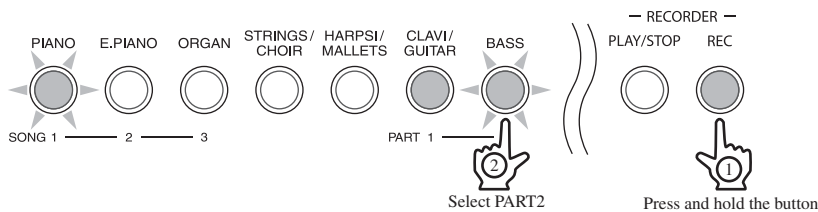
■ Saving may take a few moments. During this time, the EP3 digital piano will not respond to any other operations.
■ The total recording capacity of the EP3 piano's memory is approximately 15,000 notes, with button and pedal presses also counted as one note. When the maximum capacity is reached, recording will stop and all music recorded up until that point will be saved to memory automatically.

2) PLAYING BACK A SONG

The PLAY/STOP button is used to start and stop playback of the recorded song, and to also select which song and part is played.

In the following example, the song recorded to the SONG1 memory will be played back.

□ Step 1

Press and hold the PLAY/STOP button, then press the PIANO button to select the SONG1 memory.
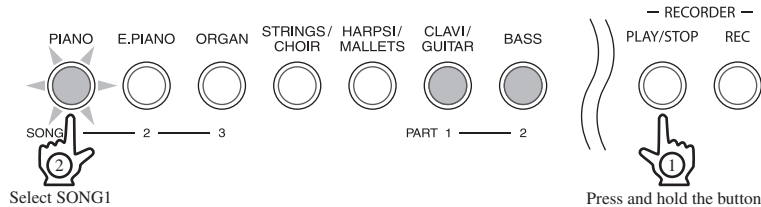
The LED indicator for the PIANO button will start to flash, and the LED indicators for the CLAVI/GUITAR, and BASS buttons will turn on, indicating that PART1 and PART2 of SONG1 have been recorded.

□ Step 2

Release the PLAY/STOP button.

The selected song will start to play.

□ Step 3

Press the PLAY/STOP button to stop song playback.
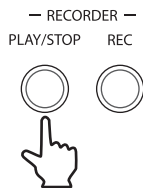
The LED indicator for the PLAY/STOP button will turn off, and the song will stop playing.

◇ PLAYING BACK PARTS SEPARATELY

When selecting a song recorded with two parts, it is possible to playback PART1 and PART2 separately.
In the following example, only PART1 of the song recorded to the SONG1 memory will be played back.

☐ Step 1

Press and hold the PLAY/STOP button, then press the PIANO button to select SONG1.
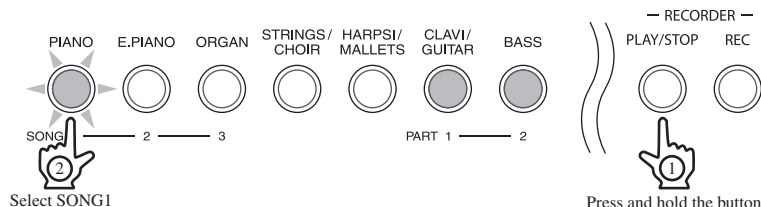
The LED indicator for the PIANO button will start to flash, and the LED indicators for the CLAVI/GUITAR, and BASS buttons will turn on, indicating that PART1 and PART2 of SONG1 have been recorded.

☐ Step 2

While holding the PLAY/STOP button, press the BASS button to deselect PART2.
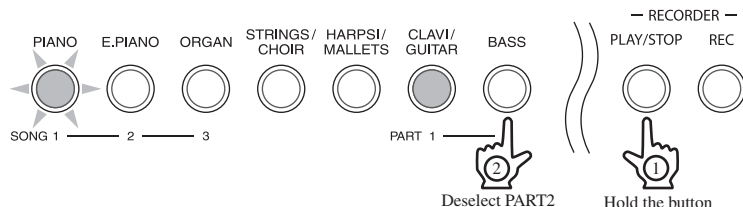
The LED indicator for the BASS button will turn off, indicating that PART2 will not be played back.

☐ Step 3

Release the PLAY/STOP button.
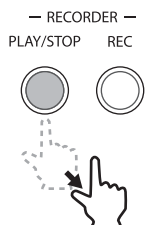
Only PART1 of the selected song will start to play.

☐ Step 4

Press the PLAY/STOP button to stop song playback.
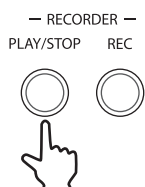
The LED indicator for the PLAY/STOP button will turn off, and the song will stop playing.

3) ERASING A SONG/PART

This function allows any songs that are no longer listened to, to be cleared.
In the following example, PART1 of the song recorded to the SONG1 memory will be erased.

☐ Step 1

Press and hold the PLAY/STOP and REC buttons.
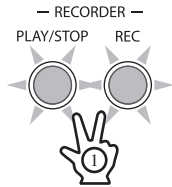
The LED indicators for the SOUND SELECTION buttons will turn on to indicate which song memories (SONG1-SONG3) have been recorded to.

☐ Step 2

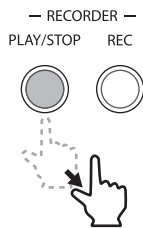While holding the PLAY/STOP and REC buttons, press the PIANO button to select SONG1.
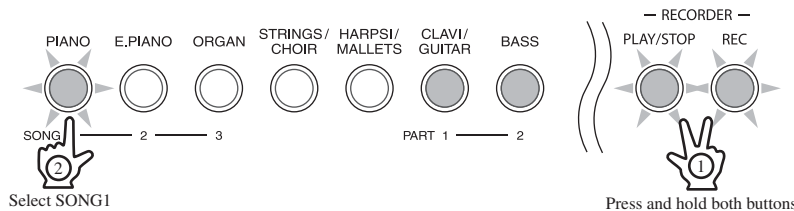
The LED indicator for the PIANO button will start to flash, indicating that SONG1 has been selected for erasure.

☐ Step 3

While still holding the PLAY/STOP and REC buttons, press the CLAVI/GUITAR button to select PART1.
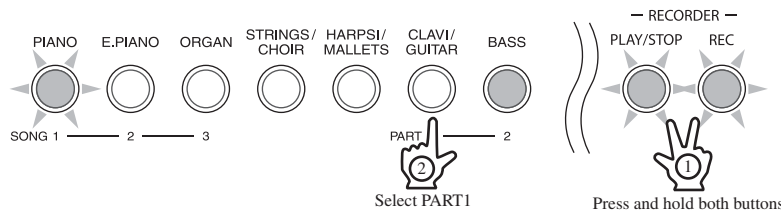
The LED indicator for the CLAVI/GUITAR button will turn off, indicating that PART1 has been erased.
When both PART1 and PART2 of a song are erased, the song becomes empty. Selecting the song only, without selecting PART1 and/or PART2, will not erase it.

■ Repeat the steps above in order to erase a number of songs and parts.

◇ ERASING ALL SONGS

To erase all songs from memory at once, press and hold the PLAY/STOP and REC buttons while turning on the power.

SONG RECORDER

3
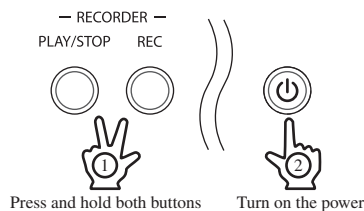
4. FUNCTION SETTINGS

The function settings are responsible for controlling various advanced parameters within the EP3 digital piano, and can be selected by pressing a combination of buttons.

The functions are assigned as follows:

Menu Button	Function
DEMO	Brilliance *
SPLIT	Tuning *
VOICING	Damper Effect *
PIANO	String Resonance *
E. PIANO	Temperament *
ORGAN	Lower Octave Shift *
STRINGS/CHOIR	Damper Hold On/Off *
HARPSI/MALLETS	MIDI Channel *

Menu Button	Function
CLAVI/GUITAR	Sending Program Change Numbers
BASS	Local Control On/Off *
EFFECTS	Transmit Prgram Change On/Off *
REVERB	Multi-Timbral Mode *
PLAY/STOP	Channel Mute *
REC	Lower Pedal On/Off *
TEMPO	Line Out EQ * (page 24)
BEAT	Memory Backup

* Function settings can be stored using the Memory Backup function. Please refer to page 56 for more information.

◇ SELECTING & ADJUSTING A FUNCTION

□ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press one of the Menu buttons listed above.
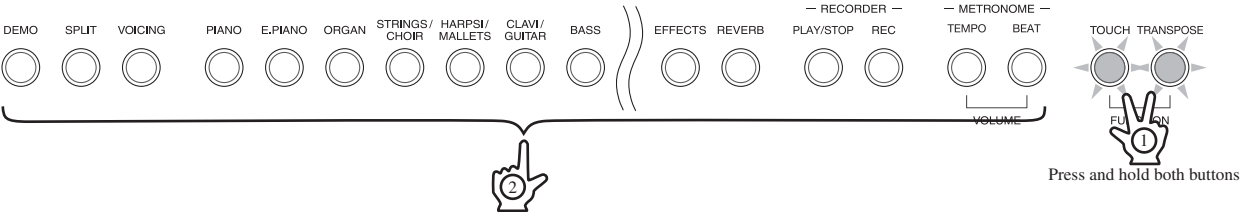
The LED indicators for the above buttons will start to flash, indicating that the function has been selected.
An abbreviation of the function name and the current settings will be shown in the LED display.

□ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to adjust the function's settings.

□ Step 3

Press the TOUCH or TRANSPOSE button to exit function setting mode.

The LED indicators for the buttons will stop flashing.

■ Any changes made to the function's settings will remain until the power is turned off.
■ When the power is turned off, the function's setting will return to the default setting, however it is possible to use the Memory Backup function to store the preferred settings for many functions.

1) BRILLIANCE

This function allows the brightness of the EP3 digital piano sound to be adjusted.

☐ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the DEMO button.

DEMO   TOUCH   TRANSPOSE

②   ①

Press the DEMO button   Press and hold both buttons
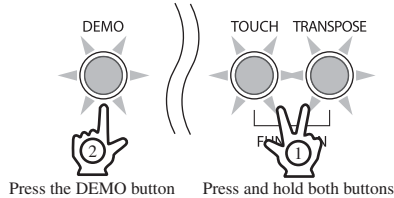
The LED indicators for the TOUCH, TRANSPOSE, and DEMO buttons will start to flash, indicating that the Brilliance function has been selected.

The name of the function 'bri' (Brilliance) and the current settings will be shown in the LED display.

☐ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to increase or decrease the Brilliance level to the desired value.

— VALUE/BALANCE —
▼   ▲

BRILLIANCE

b r i

- 1 0   ~   1 0
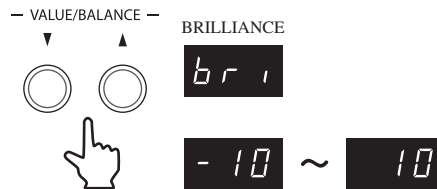
The Brilliance value can be set within the range of -10 to +10.
Positive values produce a brighter tone, while negative values produce a more mellowed tone.

☐ Step 3

Press the TOUCH or TRANSPOSE button to exit Brilliance setting mode.

The LED indicators for the TOUCH, TRANSPOSE, and DEMO buttons will stop flashing.

■ Any changes made to the Brilliance setting will remain until the power is turned off.
■ When the power is turned off, the Brilliance setting will return to the default value of '0', however it is possible to use the Memory Backup function to store the preferred Brilliance value. Please refer to the instructions on page 56 for more information.

FUNCTION SETTINGS

4

2) TUNING

The TUNING function allows the pitch of the EP3 digital piano to be finely adjusted, and may prove useful when playing with other instruments.

☐ **Step 1**

Press and hold the TOUCH and TRANSPOSE buttons, then press the SPLIT button.

SPLIT   TOUCH   TRANSPOSE

Press the SPLIT button   Press and hold both buttons

The LED indicators for the TOUCH, TRANSPOSE, and SPLIT buttons will start to flash, indicating that the Tuning function has been selected.

The name of the function 'tun' (Tuning) and a number representing the pitch for 'A3' in Hz (Hertz) will be shown in the LED display.
A test tuning tone will also be played.

☐ **Step 2**

Press the ▼ or ▲ VALUE/BALANCE buttons to increase or decrease Tuning to the desired pitch.

— VALUE/BALANCE —
▼   ▲

TUNING

tun

27.0 ~ 53.0   =   427.0 ~ 453.0

The tuning pitch can be set within the range from 427.0 to 453.0 Hz (displayed as '27.0' and '53.0').
The tuning pitch will increase or decrease in 0.5 Hz increments each time one of the VALUE/BALANCE buttons is pressed.

☐ **Step 3**

Press the TOUCH or TRANSPOSE button to exit Tuning setting mode.

The LED indicators for the TOUCH, TRANSPOSE, and SPLIT buttons will stop flashing.

While adjusting the tuning settings, the currently select sound will be heard when pressing a key on the keyboard.
To use a different sound while adjusting the tuning settings, first exit the tuning mode, select the desired sound, then repeat Step 1 and Step 2.

■ Any changes made to the Tuning setting will remain until the power is turned off.
■ When the power is turned off, the Tuning setting will return to the default value of '44.0', however it is possible to use the Memory Backup function to store the preferred Tuning value. Please refer to the instructions on page 56 for more information.

4

FUNCTION SETTINGS

3) DAMPER EFFECT

When the damper pedal is depressed on an acoustic piano, all dampers are lifted up, allowing the strings to vibrate freely. When a note or chord is played on the piano with the damper pedal depressed, not only will the strings of the notes played vibrate, but also the strings of other notes, vibrating in sympathetic resonance. The Damper Effect function of the EP3 digital piano attempts to simulate this phenomenon.

☐ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the VOICING button.

VOICING   TOUCH   TRANSPOSE

Press the VOICING button   Press and hold both buttons

The LED indicators for the TOUCH, TRANSPOSE, and VOICING buttons will start to flash, indicating that the Damper Effect function has been selected.

The name of the function 'dEF' (Damper Effect) and the current settings will be shown in the LED display.

☐ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to increase or decrease the Damper Effect level to the desired value.
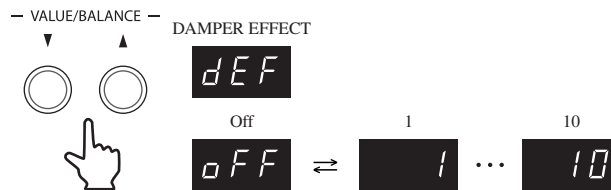
The Damper Effect value can be set within the range of 1 to 10. Setting the Damper Effect to 'Off' will disable the function entirely.
A Damper Effect value of '1' produces a very subtle effect, while the maximum level of '10' creates a stronger, more pronounced resonance.

☐ Step 3

Press the TOUCH or TRANSPOSE button to exit Damper Effect setting mode.

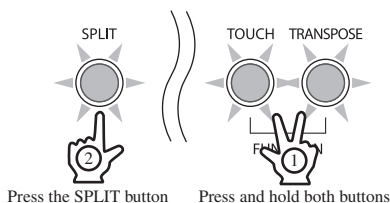The LED indicators for the TOUCH, TRANSPOSE, and VOICING buttons will stop flashing.

■ Any changes made to the Damper Effect setting will remain until the power is turned off.
■ When the power is turned off, the Damper Effect setting will return to the default value of '5', however it is possible to use the Memory Backup function to store the preferred Damper Effect value. Please refer to the instructions on page 56 for more information.

FUNCTION SETTINGS

4

4) STRING RESONANCE

String Resonance refers to a phenomenon present among acoustic pianos, whereby the strings of held notes resonate 'sympathetically' with other notes of the same harmonic series. The String Resonance function of the EP3 digital piano attempts to simulate this phenomenon.

□ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the PIANO button.

The LED indicators for the TOUCH, TRANSPOSE, and PIANO buttons will start to flash, indicating that the String Resonance function has been selected.

The name of the function 'Str' (String Resonance) and the current settings will be shown in the LED display.

□ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to increase or decrease the String Resonance level to the desired value.
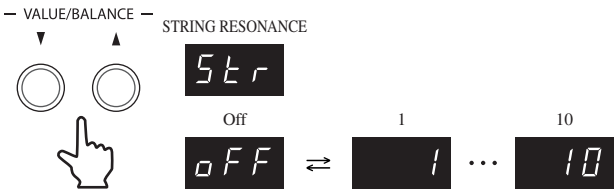
The String Resonance value can be set within the range of 1 to 10. Setting the String Resonance to 'Off' will disable the function entirely.

A String Resonance value of '1' produces a very subtle effect, while the maximum level of '10' creates a stronger, more pronounced resonance.

□ Step 3

Press the TOUCH or TRANSPOSE button to exit String Resonance setting mode.

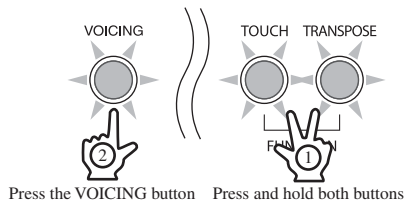The LED indicators for the TOUCH, TRANSPOSE, and PIANO buttons will stop flashing.

■ Any changes made to the String Resonance setting will remain until the power is turned off.
■ When the power is turned off, the String Resonance setting will return to the default value of '5', however it is possible to use the Memory Backup function to store the preferred String Resonance value. Please refer to the instructions on page 56 for more information.

4

FUNCTION SETTINGS

5) TEMPERAMENT

The EP3 digital piano offers immediate access to a variety of musical temperaments popular during the Renaissance and Baroque periods. It may prove interesting and educational to experiment with different temperaments, other than the modern 'equal temperament' standard this is dominant in music today.

BRIEF EXPLANATION OF TEMPERAMENTS

EQUAL TEMPERAMENT (PIANO ONLY)	This is the default temperament. If a piano sound is selected the tuning is stretched like an acoustic piano (EQUAL TEMPERAMENT). If any other type of sound is selected the tuning will be EQUAL (FLAT). An explanation of EQUAL TEMPERAMENT and EQUAL TEMPERAMENT (FLAT) is provided later in this section. If a piano sound is used in a layer with any other sound, then both sounds will use the EQUAL TEMPERAMENT (stretched) tuning.
MERSENNE PURE TEMPERAMENT (MAJOR) MERSENNE PURE TEMPERAMENT (MINOR)	This temperament, which eliminates dissonances for thirds and fifths, is still popular for choral music because of its perfect harmony. Performers must be aware which key they are playing in when using this temperament. Any key modulation will result in dissonances. When playing music in a particular key, the key of the temperament must also be correctly matched. When playing in a major key select Pure (Major) and when playing in a minor key select Pure (Minor).
PYTHAGOREAN TEMPERAMENT	This temperament, which uses mathematical ratios to eliminate dissonance for fifths, is very limited for use with chords, but it produces very characteristic melodic lines.
MEANTONE TEMPERAMENT	This temperament, which uses a mean between a major and minor whole tone to eliminate dissonance for thirds, was devised to eliminate the lack of consonances experienced with certain fifths for the Mersenne pure temperament. It produces chords that are more beautiful than those with the equal temperament.
WERCKMEISTER III TEMPERAMENT KIRNBERGER III TEMPERAMENT	These two temperaments are placed in between Meantone and Pythagorean. For music with few accidentals, this temperament produces the beautiful chords of the mean tone, but as accidentals increase, the temperament produces the characteristic melodies of the Pythagorean temperament. It is used primarily for classical music written in the Baroque era to revive the original characteristics.
EQUAL TEMPERAMENT (FLAT)	This is an 'unstretched' equal temperament that divides the scale into twelve equal semitones. This produces the same chordal intervals in all twelve keys, and has the advantage of limitless modulation of the key. However the tonality of each key becomes less characteristic and no chord is in pure consonance.
EQUAL TEMPERAMENT	This is the most popular piano temperament. The hearing ability of a human is uneven and is not as accurate with high frequency and low frequency as it is with the middle range. This temperament's tuning is stretched to compensate for this so the sound will be heard naturally to the ears. This 'stretched' equal temperament is a practical variation of the 'unstretched' equal temperament which was invented on a mathematical basis.

□ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the E.PIANO button.
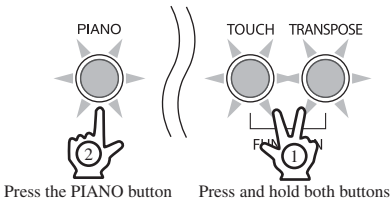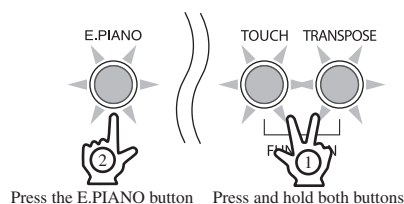

Press the E.PIANO button   Press and hold both buttons

The LED indicators for the TOUCH, TRANSPOSE, and E.PIANO buttons will start to flash, indicating that the Temperament function has been selected.

The name of the function 'tMP' (Temperament) and the current settings will be shown in the LED display.

□ **Step 2**

Press the ▼ or ▲ VALUE/BALANCE buttons to select the desired temperament type.

— VALUE/BALANCE —   TEMPERAMENT

ヒ几P

Equal (Piano)		Pure (Major)		Pure (Minor)		Pythagorean		Meantone		Werckmeister III
E9P	⇄	*Pr1*	⇄	*Pr2*	⇄	*PYE*	⇄	*几nと*	⇄	* Urと*

Equal		Equal (Flat)		Kirnberger III
E9L	⇄	*E9F*	⇄	*Urn*

■ Any changes made to the Temperament setting will remain until the power is turned off.

■ When the power is turned off, the Temperament setting will return to the default type of 'Equal Temperament (piano)', however it is possible to use the Memory Backup function to store the preferred Temperament type. Please refer to the instructions on page 56 for more information.

◇ KEY SIGNATURE OF TEMPERAMENT

Limitless modulation of the key became available only after the invention of equal temperament. When using a temperament other than equal temperament, care must be taken to choose the key signature to play in. For example, if the song to be played is written in D major, 'D' would be chosen as the temperament key.

□ **Step 1**

While the Temperament function is selected, press one of the 88 piano keys to select the desired key signature of the temperament.

Cº
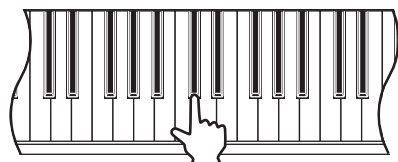
The note name of the key pressed will be shown in the display and chosen as the key signature of the temperament.

C	➜ *C*	D#	➜ *dº*	F#	➜ *Fº*	A	➜ *A*
C#	➜ *Cº*	E	➜ *E*	G	➜ *G*	A#	➜ *Aº*
D	➜ *d*	F	➜ *F*	G#	➜ *Gº*	B	➜ *b*

The key signature of temperament function will have no effect when equal temperament has been selected.

□ **Step 2**

Press the TOUCH or TRANSPOSE button to exit Temperament setting mode.

The LED indicators for the TOUCH, TRANSPOSE, and E.PIANO buttons will stop flashing.

■ Any changes made to the Temperament key setting will remain until the power is turned off.

■ When the power is turned off, the Temperament key setting will return to the default value of 'C', however it is possible to use the Memory Backup function to store the preferred Temperament key. Please refer to the instructions on page 56 for more information.

4

FUNCTION SETTINGS

6) LOWER OCTAVE SHIFT

When using SPLIT mode, this function allows the Lower section to be raised by one, two, or three octaves.

☐ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the ORGAN button.

ORGAN   TOUCH   TRANSPOSE

②
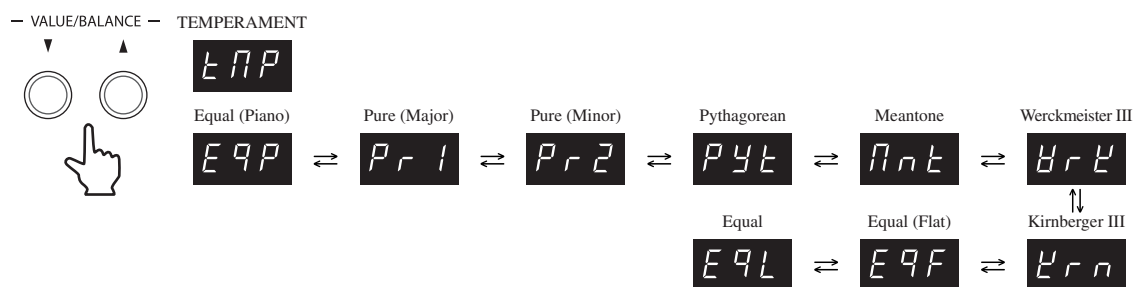Press the ORGAN button

①
Press and hold both buttons
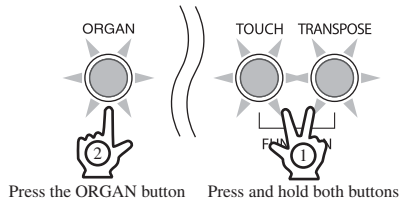
The LED indicators for the TOUCH, TRANSPOSE, and ORGAN buttons will start to flash, indicating that the Lower Octave Shift function has been selected.

The name of the function 'Lot' (Lower Octave) and the current settings will be shown in the LED display.

☐ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to increase or decrease the Lower Octave Shift to the desired value.

— VALUE/BALANCE —   LOWER OCTAVE SHIFT
▼   ▲

Lot

0 ~ 3
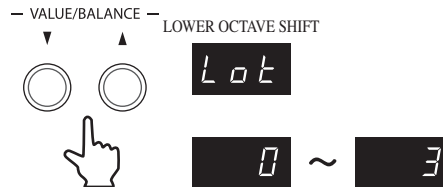
The Lower Octave Shift value can be set within the range of 0 to 3.

☐ Step 3

Press the TOUCH or TRANSPOSE button to exit Lower Octave Shift setting mode.

The LED indicators for the TOUCH, TRANSPOSE, and ORGAN buttons will stop flashing.

■ Any changes made to the Lower Octave Shift setting will remain until the power is turned off.
■ When the power is turned off, the Lower Octave Shift setting will return to the default value of '0', however it is possible to use the Memory Backup function to store the preferred Lower Octave Shift value. Please refer to the instructions on page 56 for more information.

FUNCTION SETTINGS

4

7) DAMPER HOLD ON/OFF

This function determines whether or not pressing the damper pedal will sustain continuous sounds such as organ or strings after the keys are released.

☐ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the STRINGS/CHOIR button.

STRINGS/
CHOIR   TOUCH   TRANSPOSE
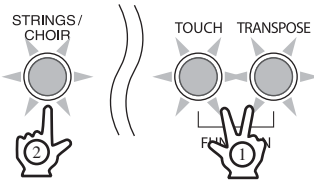
Press the STRINGS/CHOIR button   Press and hold both buttons

The LED indicators for the TOUCH, TRANSPOSE, and STRINGS/CHOIR buttons will start to flash, indicating that the Damper Hold On/Off function has been selected.

The name of the function 'dMP' (Damper Hold) and the current settings will be shown in the LED display.

☐ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to select the desired Damper Hold setting.

VALUE/BALANCE   DAMPER HOLD

dMP

Off   On

oFF ⇄ on
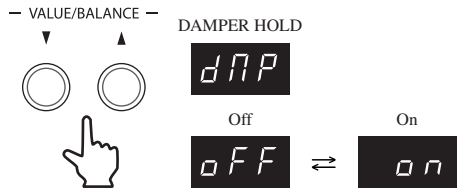
When set to 'On', pressing the damper pedal will sustain sounds after the keys are released.
When set to 'Off', pressing the damper pedal will not sustain sounds after the keys are released.

☐ Step 3

Press the TOUCH or TRANSPOSE button to exit Damper Hold On/Off setting mode.

The LED indicators for the TOUCH, TRANSPOSE, and STRINGS/CHOIR buttons will stop flashing.

■ Any changes made to the Damper Hold On/Off setting will remain until the power is turned off.
■ When the power is turned off, the Damper Hold On/Off setting will return to the default value of 'Off', however it is possible to use the Memory Backup function to store the preferred Damper Hold On/Off setting. Please refer to the instructions on page 56 for more information.

4

FUNCTION SETTINGS

8) MIDI FUNCTIONS

◇ MIDI OVERVIEW

The term MIDI is an acronym for Musical Instrument Digital Interface, an international standard for connecting synthesizers, sequencers (MIDI recorders) and other electronic instruments so that they can exchange performance data.

The EP3 is equipped with two MIDI jacks for exchanging data: MIDI IN and MIDI OUT. Each uses a special cable with a DIN connector.

MIDI IN   : For receiving note, program change and other data.
MIDI OUT : For sending note, program change and other data.

MIDI uses channels to exchange data back and forth between MIDI devices. There are receive (MIDI IN) and transmit (MIDI OUT) channels. Most musical instruments or devices with MIDI functions are equipped with both MIDI IN and MIDI OUT jacks, and are capable of transmitting and receiving data via MIDI. The receive channels are used to receive data from another MIDI device and the transmit channels are used to transmit data to another MIDI device.

■ Connection to an external sequencer

When connected as shown in the illustration below, songs played on the EP3 digital piano can be recorded using a MIDI recorder, with internal sounds (such as piano, harpsichord, strings, etc.) controlled by the MULTI-TIMBRAL MODE function to create a multi-layer MIDI recording.

MIDI IN   MIDI OUT   MIDI IN

FUNCTION SETTINGS

4
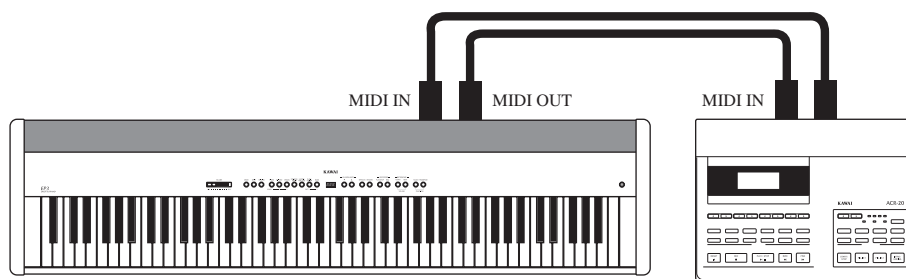
◇ EP3 MIDI functions

The EP3 piano is capable of the following MIDI functions:

Transmit / receive keyboard note information	By transmitting MIDI data (MIDI out), a MIDI-connected keyboard can be played from the EP3 digital piano. Or alternatively, by receiving data (MIDI IN), the EP3 digital piano can be played from another MIDI-connected keyboard or device.
Transmit / receive channel setting	Specify transmit/receive channels within the range of 1 to 16.
Transmit / receive Program change (sound type) number	Transmit/receive program change data to/from a MIDI-connected musical instrument or device.
Transmit / receive pedal data	Transmit/receive sustain pedal data from a MIDI-connected musical instrument or device.
Receive volume data	The EP3 digital piano will respond to MIDI volume data sent from a MIDI-connected musical instrument or device.
Multi-timbral setting	The EP3 digital piano is able to receive multiple channel MIDI data from a MIDI-connected musical instrument or device, when multi-timbral mode is turned on.
Transmit / receive exclusive data	Transmit/receive front panel or menu function settings as exclusive data.
Transmit recorder playback data	Songs recorded using the recorder can be played back from a MIDI-connected musical instrument or recorded by an external sequencer via the MIDI OUT jack. Note that Metronome and Demo song data will not be transmitted.

Please refer to the MIDI Implementation Chart on page 63 for further information regarding MIDI functionality.

9) MIDI CHANNEL

This function is used to determine on which MIDI channel the EP3 digital piano will exchange MIDI information with external MIDI devices and instruments.

☐ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the HARPSI/MALLETS button.

HARPSI/
MALLETS   TOUCH   TRANSPOSE

The LED indicators for the TOUCH, TRANSPOSE, and HARPSI/MALLETS buttons will start to flash, indicating that the MIDI Channel function has been selected.
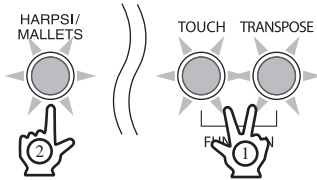
Press the HARPSI/MALLETS button   Press and hold both buttons

The name of the function 'Chn' (Channel) and the current settings will be shown in the LED display.

☐ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to select the desired MIDI channel.

VALUE/BALANCE   MIDI CHANNEL
▼   ▲

Chn

$1 \sim 16$
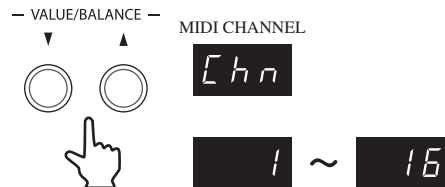
The MIDI Channel can be set within the range of 1 to 16.

☐ Step 3

Press the TOUCH or TRANSPOSE button to exit MIDI Channel mode.

The LED indicators for the TOUCH, TRANSPOSE, and HARPSI/MALLETS buttons will stop flashing.

■ By default, the EP3 digital piano will receive MIDI information from all channels, 1 to 16. This state is called 'omni mode on'. The EP3 digital piano will switch to 'omni mode off' when a specific channel is selected using the above MIDI Channel function, and data will only be received on that specified channel. In order to specify channel 1 in the 'omni mode off' state, first select channel 2, then select channel 1.

■ It is possible to use the Memory Backup function to store the preferred MIDI Channel setting. Please refer to the instructions on page 56 for more information.

FUNCTION SETTINGS

4

10) SEND PROGRAM CHANGE NUMBER

This function allows the EP3 digital piano to send program change numbers. Using this function, any program change number from 1 to 128 can be sent to external MIDI devices and instruments.

☐ **Step 1**

Press and hold the TOUCH and TRANSPOSE buttons, then press the CLAVI/GUITAR button.

CLAVI/GUITAR   TOUCH   TRANSPOSE
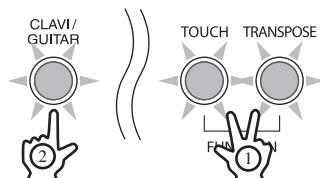
Press the CLAVI/GUITAR button   Press and hold both buttons

The LED indicators for the TOUCH, TRANSPOSE, and CLAVI/GUITAR buttons will start to flash, indicating that the Send Program Change Number function has been selected.

The name of the function 'PG#' (Program #) and a program change number will be shown in the LED display.

☐ **Step 2**

Press the ▼ or ▲ VALUE/BALANCE buttons to select the desired program change number.

VALUE/BALANCE
▼   ▲

PROGRAM CHANGE NUMBER

PG°

1 ~ 128
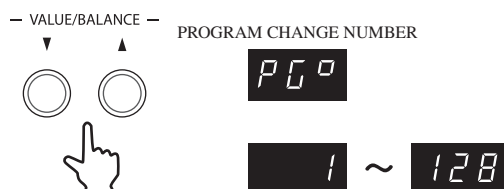
The program change number can be set within the range of 1 to 128.

☐ **Step 3**

Press both ▼ and ▲ VALUE/BALANCE buttons simultaneously to send the program change number.

VALUE/BALANCE
▼   ▲
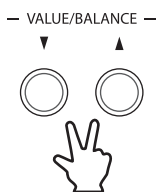
☐ **Step 4**

Press the TOUCH or TRANSPOSE button to exit Send Program Change Number mode.

The LED indicators for the TOUCH, TRANSPOSE, and CLAVI/GUITAR buttons will stop flashing.

4

FUNCTION SETTINGS

11) LOCAL CONTROL ON/OFF

This function determines whether the EP3 digital piano will play a sound when the keyboard is played, or only when a message is received from an external MIDI instrument.

☐ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the BASS button.
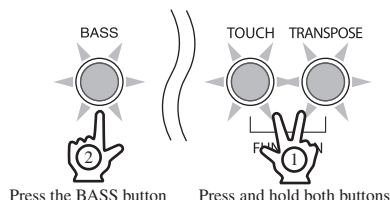
The LED indicators for the TOUCH, TRANSPOSE, and BASS buttons will start to flash, indicating that the Local Control On/Off function has been selected.

The name of the function 'LcL' (Local) and the current settings will be shown in the LED display.

☐ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to select the desired Local Control setting.
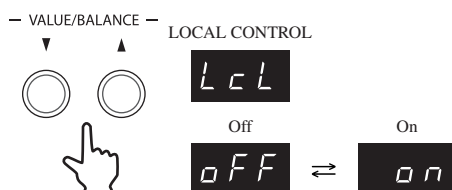
When set to 'On', the EP3 digital piano will play a sound when the keyboard is played.
With set to 'Off', the EP3 digital piano will not play a sound when the keyboard is played, yet will continue to transmit data on the selected MIDI channel to an external MIDI device.

☐ Step 3

Press the TOUCH or TRANSPOSE button to exit Local Control On/Off setting mode.

The LED indicators for the TOUCH, TRANSPOSE, and BASS buttons will stop flashing.

■ Any changes made to the Local Control On/Off setting will remain until the power is turned off.
■ When the power is turned off, the Local Control On/Off setting will return to the default value of 'On', however it is possible to use the Memory Backup function to store the preferred Local Control On/Off setting. Please refer to the instructions on page 56 for more information.

FUNCTION SETTINGS

4

12) TRANSMIT PROGRAM CHANGE ON/OFF

This function determines whether or not the EP3 digital piano will transmit program change information when pressing the control buttons.

Program Change Number Mapping

Sound Button		No.	Sound Name	Multi-Timbral mode			
				Off, On 1	On 2		
				Prog No.	MSB	LSB	Prog No.
PIANO		1	Concert Grand	1	121	0	1
		2	Studio Grand	2	121	1	1
		3	Mellow Grand	3	121	2	1
E. PIANO		1	Classic E.Piano	4	121	0	5
		2	Modern E.P.	5	121	0	6
		3	60's E. P.	6	121	3	5
ORGAN		1	Jazz Organ	7	121	0	18
		2	Drawbar Organ	8	121	0	17
		3	Church Organ	9	121	0	20
STRINGS/CHOIR		1	Slow Strings	10	95	1	45
		2	String Ensemble	11	121	0	49
		3	Choir	12	121	0	53
HARPSI/MALLETS		1	Harpsichord	13	121	0	7
		2	Vibraphone	14	121	0	12
		3	Marimba	15	121	0	13
CLAVI/GUITAR		1	Clavi	16	121	0	8
		2	Steel Guitar	17	95	20	26
		3	Nylon Acoustic	18	121	0	25
BASS		1	Wood Bass	19	121	0	33
		2	Electric Bass	20	121	0	34
		3	W. Bass & Ride	21	95	1	33

MIDI reception only

Sound category		No.	Sound Name	Multi-Timbral mode			
				Off, On 1	On 2		
				Prog No.	MSB	LSB	Prog No.
Drum			Standard Kit 1	22	120	0	1
			Standard Kit 2	23	120	0	33
			Room Kit	24	120	0	9
			Analog Kit	25	120	0	26

* Active only in On1 mode.

Please refer to page 61 for a full listing of available drum kits sounds.

When transmit program change is set to 'Off', program change and other panel information will NOT be transmitted via MIDI.

When transmit program change is set to 'On', the following MIDI exclusive data will be transmitted:

• Reverb settings (On/Off, type)	• Dual mode settings
• Tuning setting	• Multi-timbral mode On/Off
• Transmit program change number On/Off	• Multi-timbral mode Channel mute
• Touch curve setting	• Key of Temperament setting

□ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the EFFECTS button.
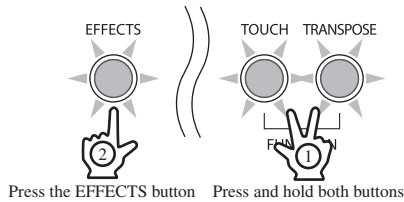
EFFECTS   TOUCH   TRANSPOSE

②   ①

Press the EFFECTS button   Press and hold both buttons

The LED indicators for the TOUCH, TRANSPOSE, and EFFECTS buttons will start to flash, indicating that the Transmit Program Change On/Off function has been selected.

The name of the function 'PGM' (Program) and the current settings will be shown in the LED display.

□ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to select the desired Transmit Program Change setting.
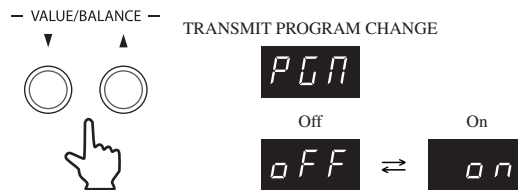
— VALUE/BALANCE —   TRANSMIT PROGRAM CHANGE

▼   ▲

PGM

Off   On

oFF ⇄ on

When transmit program change is set to 'Off', program change and other panel information will not be transmitted via MIDI.

When transmit program change is set to 'On', program change and other panel information will be transmitted via MIDI.

□ Step 3

Press the TOUCH or TRANSPOSE button to exit Transmit Program Change On/Off setting mode.

The LED indicators for the TOUCH, TRANSPOSE, and EFFECTS buttons will stop flashing.

■ When using DUAL or SPLIT mode, On/Off information and sound type settings for each mode are transmitted as exclusive data, however program numbers will not be transmitted. Program numbers will also be transmitted when multi-timbral mode is on.

■ Any changes made to the Transmit Program Change On/Off setting will remain until the power is turned off.

■ When the power is turned off, the Transmit Program Change On/Off setting will return to the default value of 'On', however it is possible to use the Memory Backup function to store the preferred Transmit Program Change On/Off setting. Please refer to the instructions on page 56 for more information.

FUNCTION SETTINGS

4

13) MULTI-TIMBRAL MODE ON/OFF

This function allows the EP3 digital piano to receive data on more than one MIDI channel simultaneously. In this mode, the EP3 digital piano can play several musical parts, with different sounds for each part.

With multi-timbral mode enabled, an external sequencer can be used to enjoy an ensemble performance, playing multiple sound types (multi-timbral) on a single EP3 digital piano.

◆ Multi-timbral On (On1 and On2)

This activates the flexible 16 part multi-timbral capability. Individual MIDI channels can be turned on and off, and assigned any internal sound. The internal sound for each MIDI channel can be changed when the program change number for the desired sound is received from an external MIDI device or instrument. The specific EP3 digital piano program change numbers are assigned in On1, and General MIDI program change numbers are assigned in On2. Please refer to page 50 for a list of program change numbers.

◆ Multi-Timbral Off

This deactivates the multi-timbral capability. Only one MIDI channel will be active and only the sound currently selected will be heard when a MIDI signal is received.

☐ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the REVERB button.

REVERB   TOUCH   TRANSPOSE

② Press the REVERB button   ① Press and hold both buttons
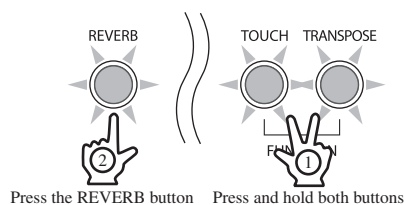
The LED indicators for the TOUCH, TRANSPOSE, and REVERB buttons will start to flash, indicating that the Multi-timbral mode On/Off function has been selected.

The name of the function 'MLt' (Multi) and the current settings will be shown in the LED display.

☐ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to select the desired Multi-timbral mode setting.

— VALUE/BALANCE —
▼   ▲

MULTI-TIMBRAL MODE

$\Pi L \, t$

Off   On1   On2

$o F F$ ⇌ $o n \, 1$ ⇌ $o n 2$
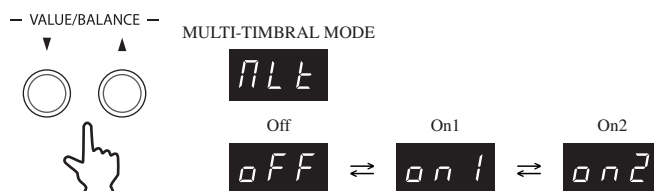
When Multi-timbral mode is set to 'Off' and MIDI information is received, only the currently selected internal sound will be heard.

When Multi-timbral mode is set to 'On1' and MIDI information is received, the internal sound that is heard corresponds to the specific EP3 digital piano program change numbers received from an external MIDI device or instrument. This sound may be different from the internal sound that is currently selected using the SOUND SELECTION buttons on the panel.

When Multi-timbral mode is set to 'On2' and MIDI information is received, the internal sound that is heard corresponds to General MIDI program change numbers received from an external MIDI device or instrument. This sound may be different from the internal sound that is currently selected using the SOUND SELECTION buttons on the panel.

☐ Step 3

Press the TOUCH or TRANSPOSE button to exit Multi-timbral setting mode.

The LED indicators for the TOUCH, TRANSPOSE, and REVERB buttons will stop flashing.

■ Any changes made to the Multi-timbral mode On/Off setting will remain until the power is turned off.
■ When the power is turned off, the Multi-timbral mode On/Off setting will return to the default value of 'Off', however it is possible to use the Memory Backup function to store the preferred Multi-timbral mode On/Off setting. Please refer to the instructions on page 56 for more information.

FUNCTION SETTINGS

4

14) CHANNEL MUTE

This function determines which MIDI channels are activated to receive MIDI information when Multi-timbral mode is set to 'On'. Each of the 16 channels can be individually activated or deactivated.

When Multi-timbral mode is set to 'Off', the Channel Mute function cannot be selected.

☐ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the PLAY/STOP button.
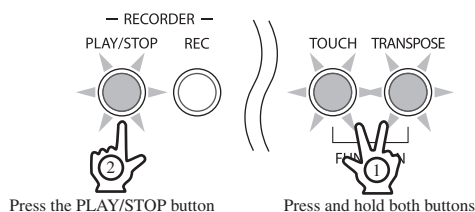
The LED indicators for the TOUCH, TRANSPOSE, and PLAY/STOP buttons will start to flash, indicating that the Channel Mute function has been selected.

The channel number (e.g '1') and the current settings will be shown in the LED display.

☐ Step 2

Press one of the 16 lowest white keys to select the desired MIDI channel.
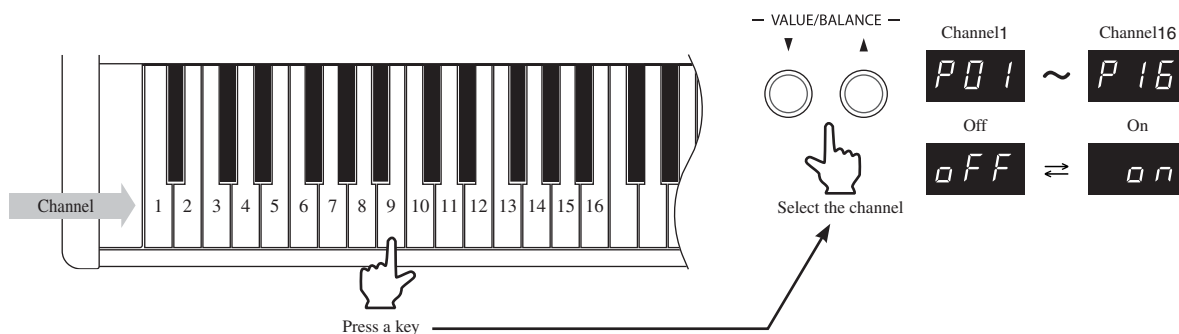
☐ Step 3

Press the ▼ or ▲ VALUE/BALANCE buttons to select the desired Channel Mute setting.

When set to 'Off', the selected channel will not receive MIDI information when Multi-timbral mode is activated. When set to 'On', the selected channel will receive MIDI information when Multi-timbral mode is activated.

When changing the Channel Mute settings, no sound will be heard when the keys are pressed to select the individual channels.

☐ Step 4

Press the TOUCH or TRANSPOSE button to exit Channel Mute setting mode.

The LED indicators for the TOUCH, TRANSPOSE, and PLAY/STOP buttons will stop flashing.

■ Any changes made to the Channel Mute settings will remain until the power is turned off.
■ When the power is turned off, and Multi-timbral mode is activated the Channel Mute settings for all channels will return to the default value of 'On', however it is possible to use the Memory Backup function to store the preferred Channel Mute settings. Please refer to the instructions on page 56 for more information.

4 FUNCTION SETTINGS

15) LOWER PEDAL ON/OFF

When using SPLIT mode, this function determines whether or not pressing the damper pedal will also sustain the Lower section sounds.

☐ Step 1

Press and hold the TOUCH and TRANSPOSE buttons, then press the REC button.
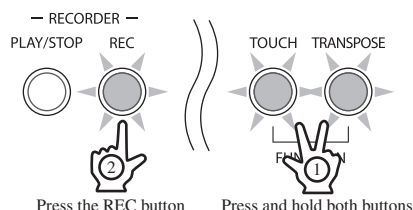
The LED indicators for the TOUCH, TRANSPOSE, and REC buttons will start to flash, indicating that the Lower Pedal On/Off function has been selected.

The name of the function 'LPd' (Lower Pedal) and the current settings will be shown in the LED display.

☐ Step 2

Press the ▼ or ▲ VALUE/BALANCE buttons to select the desired Lower Pedal setting.
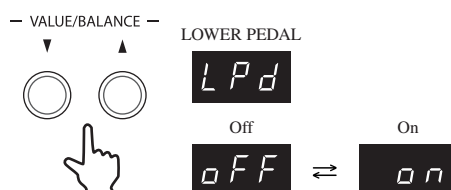
When set to 'On', pressing the damper pedal will sustain the Lower section sounds.
When set to 'Off', pressing the damper pedal will not sustain the Lower section sounds.

Note that regardless of the 'On' or 'Off' setting, pressing the damper pedal will always sustain the Upper section sounds.

☐ Step 3

Press the TOUCH or TRANSPOSE button to exit Lower Pedal On/Off setting mode.

The LED indicators for the TOUCH, TRANSPOSE, and REC buttons will stop flashing.

■ The Damper Effect (page 39) will be used regardless of the Lower Pedal On/Off setting.
■ Any changes made to the Lower Pedal On/Off setting will remain until the power is turned off.
■ When the power is turned off, the Lower Pedal On/Off setting will return to the default value of 'Off', however it is possible to use the Memory Backup function to store the preferred Lower Pedal On/Off setting. Please refer to the instructions on page 56 for more information.

FUNCTION SETTINGS

4

16) MEMORY BACKUP

This function allows the EP3 digital piano to store certain user-definable settings which will be recalled every time the power is turned on.

The following settings will be stored:

- Selected sound
- Individual sound settings (reverb, effects)
- Equaliser setting
- Function settings

- Transpose setting
- Metronome time signature, tempo, and volume
- Touch curve

☐ **Step 1**

Press and hold the TOUCH and TRANSPOSE buttons, then press the BEAT button.

— METRONOME —
TEMPO   BEAT   TOUCH   TRANSPOSE

VOLU②   FUNCTION①

Press the BEAT button   Press and hold both buttons
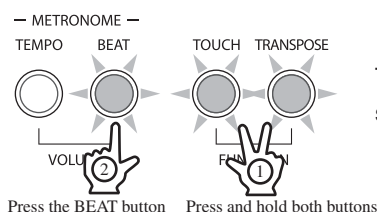
The LED indicators for the TOUCH, TRANSPOSE, and BEAT buttons will start to flash, indicating that the Memory Backup function has been selected.

The name of the function 'MEM' (Memory Backup) and the current settings will be shown in the LED display.

☐ **Step 2**

Press the ▼ or ▲ VALUE/BALANCE buttons to select the desired Memory Backup function.

— VALUE/BALANCE —   MEMORY BACKUP
▼   ▲

MEM

Reset   User

rES ⇄ *uSr*
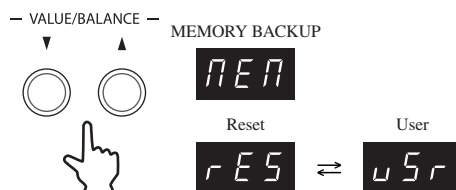
When set to 'rES' (Reset), the EP3 digital piano will reset all settings to the default value, however the song and registrations memories will not be reset.
When set to 'uSr' (User), the EP3 digital piano will store the current user-definable settings, recalling them every time the power is turned on.

☐ **Step 3**

Press the REC button to complete the desired Memory Backup operation.

— RECORDER —
PLAY/STOP   REC

Wrt
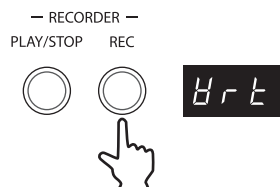
'Wrt' (Write) will be shown in the LED display, indicating that the current user-definable settings are being stored.

☐ **Step 4**

Press the TOUCH or TRANSPOSE button to exit Memory Backup mode.

The LED indicators for the TOUCH, TRANSPOSE, and BEAT buttons will stop flashing.

5. APPENDICES

1) CONNECTING TO OTHER DEVICES

> ⚠ Caution Do not directly connect the LINE IN and LINE OUT jacks of the EP3 digital piano together with a cable. An audio loop (oscillation sound) will occur, resulting in damage to the unit.
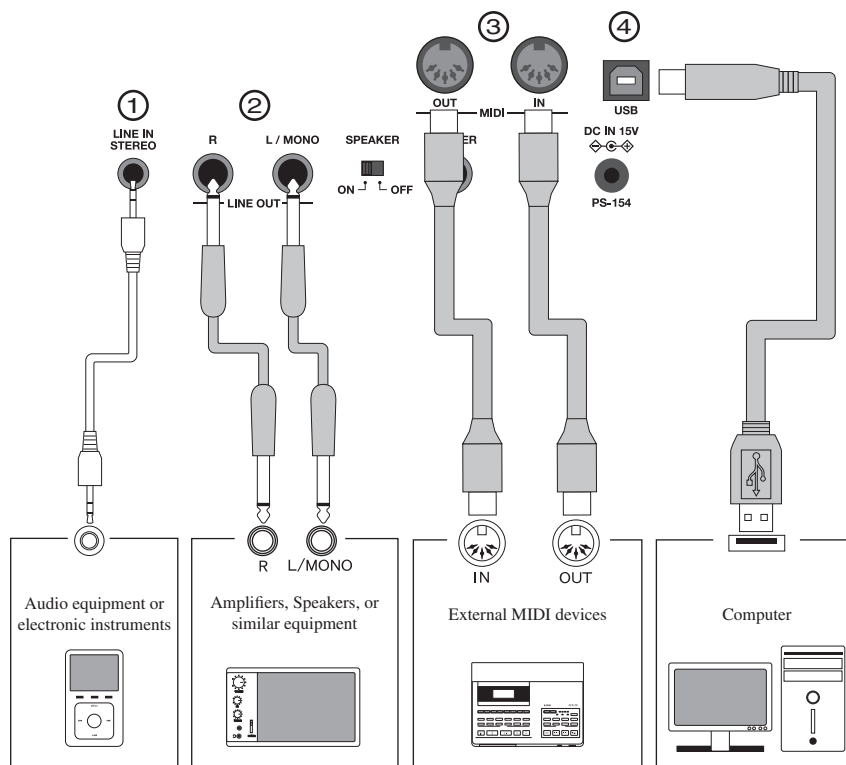
① LINE IN STEREO JACK

This jack allows the output from an external audio device, such as a CD or MP3 player, to be mixed with the sound produced by the EP3 digital piano.

Please use the controls on the external device in order to adjust the volume level of the mixed audio.

② LINE OUT JACKS

These jacks provide stereo or mono output of the sound produced by the EP3 digital piano to amplifiers, mixers, recorders, and similar equipment.

When connecting to a stereo device, use both the L/MONO and R connectors. When connecting to a monaural device, use only the L/MONO connector. The audio signal from the LINE IN STEREO jack is also routed to these jacks. In addition, the panel VOLUME slider can be used to control the output level from the LINE OUT jacks without affecting the level of the LINE IN STEREO audio signal.

③ MIDI JACKS

These jacks are used to connect external MIDI devices with the EP3 digital piano. There are two terminals: MIDI IN and MIDI OUT.

④ USB PORT

When the EP3 digital piano is connected to a computer via a commercially available USB cable, the EP3 digital piano will be recognised as a standard MIDI device, allowing the instrument to send and receive MIDI messages just as with a regular MIDI interface.

Connect a 'B' type USB connector to the EP3 digital piano and an 'A' type USB connector to the computer.

APPENDICES

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2) USB USAGE

◇ ABOUT THE USB DRIVER

Additional driver software may be required in order to send and receive data between a computer and the EP3 digital piano using a USB connection.

Please read the following instructions carefully for each computer/operating system type.

◇ Windows XP/Me users:

The standard USB-MIDI driver installed by Windows XP/Me will be used automatically - additional driver software should not be required.

To establish MIDI communications with the EP3 digital piano, ensure that the MIDI device is defined as 'USB audio device' within the MIDI application.

◇ Windows Vista/2000/98SE users:

Additional USB-MIDI driver software will be required. Please download the special USB driver software from the KAWAI website at the following URL:

http://www.kawai.de/downloads_en.htm

To establish MIDI communications with the EP3 digital piano, ensure that the MIDI IN device is defined as 'KAWAI USB MIDI IN' and that the MIDI OUT device is defined as 'KAWAI USB MIDI OUT' within the MIDI application.

◇ Macintosh OS X users:

The standard USB-MIDI driver will be installed automatically by Macintosh OS X - additional driver software should not be required.

To establish MIDI communications with the EP3 digital piano, ensure that the MIDI device is defined as 'USB MIDI' within the MIDI application.

◇ Macintosh OS9 (or earlier) users:

The EP3 digital piano does not support USB MIDI under Macintosh OS9 (or earlier) systems.

Please utilise a standard, commercially available MIDI interface in order to establish a MIDI connection with the EP3 digital piano.

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APPENDICES

◇ NOTES ON USB USAGE

- When both MIDI jacks and the USB port are connected simultaneously, the USB port has priority.
- When connecting a USB cable to the EP3 digital piano, first connect the USB cable and then turn the EP3 digital piano power on.
- When connected the EP3 digital piano to a computer via the USB port, there may be a short delay before MIDI communications begin.
- If the EP3 digital piano is connected to the computer via a USB hub and the USB communication becomes unreliable/unstable, please connect the USB cable directly to the USB port of the computer.
- Turning on/off the power of the EP3 digital piano while connected via USB, or disconnecting the USB cable suddenly, may cause computer instability in the following situations:
  - ∗ while installing the USB driver
  - ∗ while starting up the computer
  - ∗ while MIDI applications are performing tasks
  - ∗ while the EP3 digital piano is communicating with the computer
  - ∗ while the computer is in energy saver mode
- If there are any further problems experienced with USB communication while the EP3 digital piano is connected, please consult the instruction manual of your computer and double-check all connections and relevant settings.

CERTIFIED **USB**

The USB-MIDI conversion board TID10000934 utilised in the EP3 digital piano is approved to show the USB logo.
The USB logo can be used only for products approved by the USB-IF (USB Implements Forum Inc.) test.

※ "MIDI" is a registered trademark of the Association of Manufacturers of Electronic Instruments (AMEI).
※ "Windows" is registered trademark of Microsoft Corporation.
※ "Macintosh" is registered trademark of Apple Computer, Inc.
※ Other company names and product names mentioned referenced herein may be registered trademarks or trademarks of respective owners.

APPENDICES

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3) RHYTHM STYLE LIST

Display	Rhythm Name
r-1	8 Beat 1
r-2	8 Beat 2
r-3	16 Beat 1
r-4	16 Beat 2
r-5	16 Beat 3
r-6	Ride Beat 1
r-7	Ride Beat 2
r-8	Rock Beat
r-9	Surf Rock
r10	Ballad 1
r11	Ballad 2
r12	Light Ride 1
r13	Light Ride 2
r14	Smooth Beat
r15	Slow Jam
r16	Funky Beat
r17	Disco
r18	8 Shuffle
r19	Triplet
r20	Triplet Ballad
r21	Waltz
r22	Motown 1
r23	Motown 2
r24	Ride Swing
r25	H.H. Swing
r26	Jazz Waltz
r27	H.H. Bossa Nova
r28	Mambo
r29	Light Samba
r30	Surdo Samba

4) DRUM KIT SOUNDS

Key	No.	Standard Kit 1	Standard Kit 2	Room Kit	Analog Kit
C 0	24				
C# 0	25	Snare Roll	←	←	←
D 0	26	Finger Snap	←	←	←
D# 0	27	High Q	←	←	←
E 0	28	Slap	←	←	←
F 0	29	Scratch Push	←	←	Scratch Push2
F# 0	30	Scratch Pull	←	←	Scratch Pull2
G 0	31	Sticks	←	←	←
G# 0	32	Square Click	←	←	←
A 0	33	Metronome Click	←	←	←
A# 0	34	Metronome Bell	←	←	←
B 0	35	Std1 BD2	Std2 BD2	Room BD2	Analog BD2
C 1	36	Std1 BD1	Std2 BD1	Room BD1	Analog BD1
C# 1	37	Rim	←	←	Analog Rim
D 1	38	Std1 SD1	Std2 SD1	Room SD1	Analog SD1
D# 1	39	Hand Clap	←	←	←
E 1	40	Std1 SD2	Std2 SD2	Room SD2	Analog SD2
F 1	41	Std1 LowTom2	←	RoomLowTom2	Analog LowTom2
F# 1	42	Std1 HHC	←	Room HHC	Analog HHC
G 1	43	Std1 Low Tom1	←	RoomLowTom1	Analog Low Tom1
G# 1	44	Std1 HHP	←	←	Analog HHP
A 1	45	Std1 Mid Tom2	←	RoomMidTom2	Analog Mid Tom2
A# 1	46	Std1 HHO	←	Room HHO	Analog HHO
B 1	47	Std1 Mid Tom1	←	RoomMidTom1	Analog Mid Tom1
C 2	48	Std1 Hi Tom2	←	RoomHiTom2	Analog Hi Tom2
C# 2	49	Std1 Crash1	←	←	Analog Crash1
D 2	50	Std1 Hi Tom1	←	RoomHiTom1	Analog Hi Tom1
D# 2	51	Std1 Ride1	←	←	←
E 2	52	Chaina	←	←	←
F 2	53	Cup	←	←	←
F# 2	54	Tambourine	←	←	←
G 2	55	Splash	←	←	←
G# 2	56	Cowbell	←	←	Analog Cowbell
A 2	57	Crash2	←	←	←
A# 2	58	Vibra Slap	←	←	←
B 2	59	Ride2	←	←	←
C 3	60	Hi Bongo	←	←	←
C# 3	61	Low Bongo	←	←	←
D 3	62	Mute Hi Conga	←	←	Analog Hi Conga
D# 3	63	Hi Conga	←	←	Analog Mid Conga
E 3	64	Low Conga	←	←	Analog Low Conga
F 3	65	Hi Timbale	←	←	←
F# 3	66	Low Timbale	←	←	←
G 3	67	Hi Agogo	←	←	←
G# 3	68	Low Agogo	←	←	←
A 3	69	Cabasa	←	←	←
A# 3	70	Maracas	←	←	Analog Maracas
B 3	71	Short Whistle	←	←	←
C 4	72	Long Whistle	←	←	←
C# 4	73	Short Guiro	←	←	←
D 4	74	Long Guiro	←	←	←
D# 4	75	Claves	←	←	Analog Claves
E 4	76	Hi Wood Blk	←	←	←
F 4	77	Low Wood Blk	←	←	←
F# 4	78	Mute Cuica	←	←	←
G 4	79	Open Cuica	←	←	←
G# 4	80	Mute Triangle	←	←	←
A 4	81	Open Triangle	←	←	←
A# 4	82	Shaker	←	←	←
B 4	83	Jingle Bell	←	←	←
C 5	84	Bell Tree	Bar Chimes	←	←
C# 5	85	Castanets	←	←	←
D 5	86	Mute Surdo	←	←	←
D# 5	87	Open Surdo	←	←	←

5) SPECIFICATIONS

■ Keyboard	88 Keys with Advanced Hammer Action IV-F
■ Internal Sounds	21 voices
■ Polyphony	Max. 96 notes
■ Display	3 digit LED
■ Effects	Reverb (Room 1, Room 2, Stage, Hall 1, Hall 2), Chorus, Delay, Tremolo, Rotary 1, Rotary 2
■ Metronome	Time signatures: 1/4, 2/4, 3/4, 4/4, 5/4, 3/8, 6/8, 30 drum rhythms Tempo: 30-300 BPM
■ Recorder	3 song, 2 track recorder - total memory capacity approximately 15,000 notes.
■ Demo Songs	Main demo, Internal Sound demo (19 songs)
■ Other Functions	Dual, Split, Dual/Split balance adjust, Four Hands, EQ (2 types), Touch curve (6 types), Transpose, Brilliance, Tuning, Voicing, Damper effect, String resonance, Temperament, Lower octave shift, Lower pedal, Damper hold, Memory backup, MIDI function settings
■ Pedal	Damper
■ External Jacks	Headphones x 2, LINE IN (Stereo), LINE OUT (L/MONO, R), Pedal, MIDI (IN, OUT), USB (to Host)
■ Output Power	13W x 2
■ Speaker	5 cm x 4, (8 x 12 cm) x 2 (Bass-reflex speaker enclosure)
■ Power Consumption	35W
■ Dimensions (W x D x H)	136.2 x 34.5 x 13.9 cm
■ Weight	21.5 kg

KAWAI   Model EP3 MIDI Implementation Chart

Date : APRIL 2008
Version : 1.0

Function...		Transmitted	Recognised	Remarks
Basic Channel	Default Changed	1 1 - 16	1 1 - 16	
Mode	Default Messages Altered	Mode 3 × ✱✱✱✱✱✱✱✱	Mode 1 Mode 1, 3* ×	* Omni On, Channel 1 * Omni Off, Channel 1-16 configurable
Note Number	 : True voice	9 - 120** ✱✱✱✱✱✱✱✱	0 - 127 0 - 127	* 9 - 120 including transpose
Velocity	Note ON Note OFF	○ 9nH v=1-127 × 8nH v=0	○ ×	
After Touch	Key's Ch's	× ×	× ×	
Pitch Bend		×	×	
Control Change	0, 32 7 10 11 64	○ × × × ○	○ ○ ○ ○ ○	Bank Select *1 Volume Panpot Expression Damper Pedal
Prog Change		○	○	*1
System Exclusive		○	○	
Common	: Song Pos. : Song Sel. : Tune	× × ×	× × ×	
System Real time	: Clock : Commands	× ×	× ×	
Aux	: Local ON/OFF : All Notes OFF : Active Sense : Reset	× × ○ ×	○ ○ ○ ×	

*1 Please refer to the Program Change Number Mapping list on page 50.

Mode 1: OMNI ON, POLY   Mode 2: OMNI ON, MONO

Mode 3: OMNI OFF, POLY   Mode 4: OMNI OFF, MONO

○: Yes
×: No

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The Future of the Piano