KAWAI

KCP90
Owner's Manual

Thank you for purchasing this Kawai KCP90 digital piano.

This owner's manual contains important information regarding the usage and

operation of the KCP90 digital piano.

Please read all sections carefully, keeping this manual handy for future reference.

Preface

■ About this Owner's Manual

Before attempting to play this instrument, please read the **Preparation Before Use** section from page 10 of this owner's manual. This section explains the name and function of each part, how to connect the power cable, and how to turn on the power.

The **Basic Operations** section (page 14) provides an overview of the instrument's most commonly used functions, allowing the KCP90 digital piano to be enjoyed almost immediately after being connected, while the **Accompaniment Styles** section (page 24) explains how the instrument's Styles feature can be used to enhance performances with backing accompaniments.

The **Recorder** section (page 31) provides instructions on how to record and play back pieces stored in the instrument's internal memory, while the **Settings** section (page 35) details the various options and settings that be used to adjust the sound and operation of the instrument.

Finally, the **Appendix** section (page 48) includes assembly instructions, troubleshooting recommendations, lists for all internal sounds and styles, as well as chord charts, MIDI reference information, and full specification details.

■ KCP90 Feature Highlights

Advanced Hammer Action IV-F weighted-key keyboard action

The *Advanced Hammer Action IV-F* (AHA IV-F) keyboard action has been developed to represent the distinctive touch of an acoustic grand piano, with its remarkable springless design providing consistent upward and downward motion for a smooth, natural, piano playing experience.

Moreover, just as acoustic pianos utilise heavier bass hammers and lighter treble hammers, the AHA IV-F keyboard action also employs different hammer weights, appropriately graded for each playing range. Such attention to detail allows greater stability during fortissimo passages, while preserving delicate pianissimo control, to satisfy the demands of even the most discerning pianist.

Harmonic Imaging™ (HI) sound technology, 88-key piano sampling

The KCP90 digital piano captures the beautiful sound of Kawai's highly acclaimed hand-built concert grand piano, with all 88 keys of this exceptional instrument meticulously recorded, analysed and faithfully reproduced using proprietary *Harmonic Imaging™* technology. This unique process accurately recreates the broad dynamic range of the original grand piano, affording pianists an extraordinary level of expressiveness ranging from the softest pianissimo to the strongest, boldest fortissimo.

Additional reverberation effects that simulate the acoustic environment of a recital room, stage, or concert hall are also applied, resulting in a rich, vibrant piano tone that delivers breathtaking realism and authenticity.

Excellent selection of additional instrument sounds

Supplementing the realistic acoustic piano voices, the KCP90 also features an excellent selection of additional instrument sounds, ranging from electric pianos and drawbar and church organs, to strings, brass, and woodwind instruments, inviting musicians to add greater variety to their performances.

Furthermore, the *Dual* playing mode also allows two different sounds, such as grand piano and strings, to be layered together. This combined sound can then be adjusted quickly and easily using the real-time balance slider.

Professional accompaniment styles

The KCP90's *Styles* feature provides 100 professionally arranged backing accompaniments to support a range of musical genres. Complete with intro, fill-in, and ending phrases and a selection of rock, jazz, funk, and Latin styles, creative players can enjoy breathing new life into their existing repertoire at the touch of a button.

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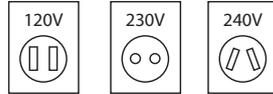
WARNING - When using electric products, basic precautions should always be followed, including the following.

⚠️ **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.
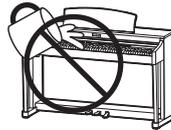
120V	230V	240V

● 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.

**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.

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.

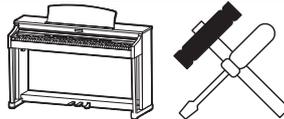**When using the headphones, do not listen for long periods of time at high volume levels.**
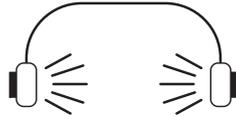
Doing so may result in hearing problems.

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.
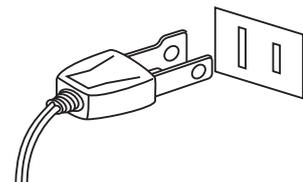
This product shall be near the AC outlet and the power cord plug in a position so that it can readily be disconnected in an emergency because electricity is always charging while the plug is in the AC outlet even in a power switch off condition.

⚠ 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).

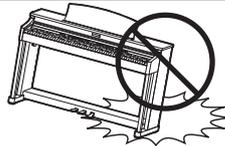**When you close the keyboard cover, close it gently.**

Closing it roughly may trap your fingers, resulting in injury.

Before connecting cords, make sure that the power to this product and other devices is turned OFF.

OFF

Failure to do so may cause breakdown of this product and other devices.

**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.
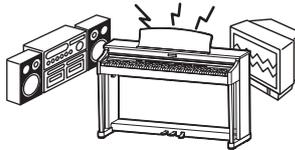
- Doing so may cause the product to generate noise.
- If the product generates noise, move the product sufficiently away from the electrical appliance or connect it to another AC outlet.

When connecting the AC power cord and other cords, take care not to get them tangled.
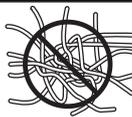
Failure to do so may damage them, resulting in fire, electric shock or short-circuit.

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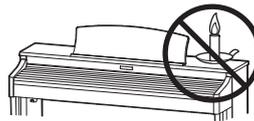
Doing so may cause the illumination to fall over, resulting in fire.

Ensure that the ventilation is not impeded by covering the ventilation openings with items, such as newspaper, table-cloths, curtains, etc.
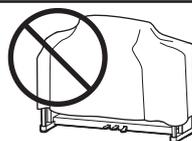
Failure to do so may over-heat the product, resulting in fire.

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.

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.

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)

Instruction for AC power cord (U.K.)

IMPORTANT
THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE : NEUTRAL
BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.
Do not plug either terminal of the power cord to the the ground od AC outlet on the wall.

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.
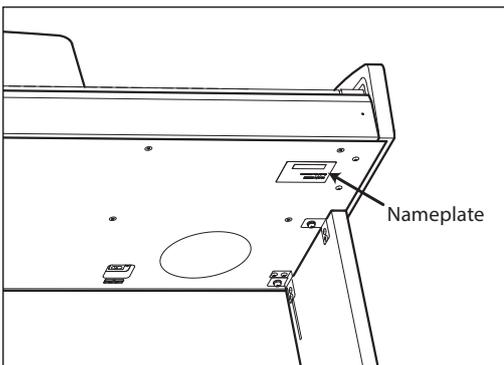
FCC Information (U.S.A)

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

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The nameplate label is located on the underside of the instrument, as indicated below.

Nameplate

Table of Contents

Part Names and Functions

① MASTER VOLUME
MIN · · · · · · · MAX
DIGITAL PIANO KCP90

② DEMO

③ REGIST-RATION

④ STYLE
A-POP DANCE BALLAD POP/ROCK JAZZ EASY BAND WORLD USER
1 — 2 — 3 — 4 — 5 — 6 — 7 — 8

⑤ 1-2 PLAY

⑥ METRONOME
TEMPO BEAT
└ VOLUME ┘

⑦ ACC

⑧ SYNC/FADE OUT

⑨ INTRO/ENDING

⑩ START/STOP

⑪ FILL IN

⑫ MENU ▲ ▼

⑬ KAWAI KCP90
DIGITAL PIANO

⑭ VALUE ▲ ▼

⑮ EFFECTS

⑯ REVERB

⑰ BALANCE
LEFT · · · · · · · RIGHT

⑱ SOUND
PIANO E.PIANO STRINGS ORGAN WOOD WIND BRASS GUITAR BASS OTHERS PIANO ONLY

⑲ RECORDER
REC PLAY/STOP

⑳ TOUCH

㉑ TRANSPOSE

㉒ POWER

㉓ PHONES

㉔ USB to HOST

㉕ R L/MONO
LINE OUT

10

① **MASTER VOLUME slider**

This slider controls the master volume level of the instrument's built-in speakers or headphones, if connected.

② **DEMO button**

This button is used to start/stop playback of the instrument's built-in Demonstration songs.

③ **REGISTRATION button**

This button is used to store and recall one of the eight different Registration memories. Each Registration can store sound, style, reverb, and effects settings, as well as various other panel options.

④ **STYLE SELECTION buttons**

These buttons are used to select drum rhythms and accompaniment styles. Multiple styles are assigned to each category button, and can be selected by pressing the same button repeatedly. In addition, these buttons are also used to select Registration memories.

⑤ **1-2 PLAY button**

This button is used to automatically choose an appropriate sound and setup for the selected style.

⑥ **METRONOME buttons**

These buttons are used to turn the metronome function on/off, and also to adjust the metronome's tempo, time signature (or beat), and volume settings.

⑦ **ACC button**

This button is used to turn the auto accompaniment style function on/off.

⑧ **SYNC/FADE OUT button**

This button is used to activate the SYNC function, which starts the drum rhythm/accompaniment style as soon as a note or chord is played on the keyboard. If this button is pressed while the style is playing, the accompaniment will gradually fade-out and stop.

⑨ **INTRO/ENDING button**

This button is used to play an intro section that leads into the style. If this button is press while the style is playing, an ending section will be played and the accompaniment will stop.

⑩ **START/STOP button**

This button is used to start and stop the selected drum rhythm/accompaniment style.

⑪ **FILL IN button**

This button is used to play a short 'fill-in' section that embellishes the style and leads to the next section.

⑫ **MENU buttons**

These buttons are used to access menu functions that control the instrument's keyboard, sound, and MIDI settings.

⑬ **LCD display**

The LCD display provides information such as the currently selected sound/style name, and various other function values.

* A protective plastic film is attached to the display during production. Please remove this film before attempting to play the instrument.

⑭ **VALUE buttons**

These buttons are used to adjust the metronome/style tempo, and other values shown in the LCD display.

⑮ **EFFECTS button**

This button is used to turn effects for the selected sound on/off, and to select the different effect types.

⑯ **REVERB button**

This button is used to turn reverb for the selected sound on/off, and to select the different reverb types.

⑰ **BALANCE slider**

This slider adjusts the volume balance of the two sounds used in Dual mode, or the Lower Section ACC volume when active.

⑱ **SOUND SELECTION buttons**

These buttons are used to select the sound(s) that will be heard when playing the keyboard of the KCP90 digital piano. Multiple sounds are assigned to each category button, and can be selected by pressing the same button repeatedly.

⑲ **RECORDER buttons**

These buttons are used to record and playback performances stored in the instrument's internal memory.

⑳ **TOUCH button**

This button is used to adjust the sensitivity of the keyboard.

㉑ **TRANSPOSE button**

This button is used to adjust the pitch of the keyboard in semi-tone steps.

㉒ **POWER switch**

This switch is used to turn the KCP90 digital piano on/off.

㉓ **PHONES jacks**

These jacks are used to connect stereo headphones to the KCP90 digital piano. Two pairs of headphones can be connected and used simultaneously.

㉔ **USB to Host port**

This port is use to connect the instrument to a computer using a USB 'B to A' type cable in order to send and receive MIDI data.

㉕ **LINE OUT jacks**

These jacks are used to connect the stereo output (Left/Right 1/4" phone plug) of the KCP90 digital piano to external amplifiers, mixers, recording devices, and similar equipment.

Setting Up the Piano

1. Connecting AC adapter to the instrument

Connect AC adapter (PS-154) to "DC IN 15V" jack located on the underside of instrument.

Binder
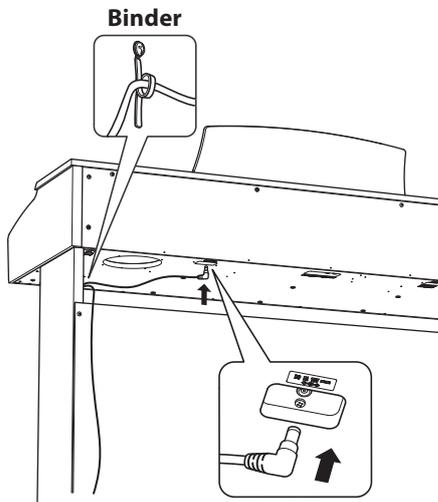
2. Connecting the power cable to an outlet

Connect the instrument's power cable to an AC outlet.
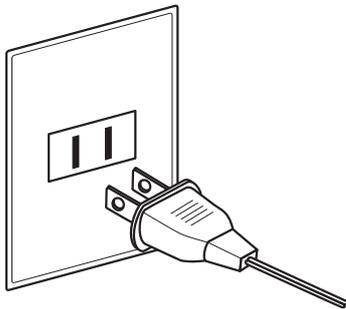
3. Turning on the power

Press the POWER SWITCH located on the right hand side of the front panel.
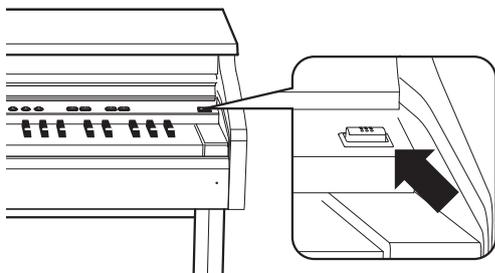
The instrument will turn on, and the words 'Concert Grand' will be shown in the LCD display, indicating that the Concert Grand sound is selected, and the KCP90 digital piano is ready to be played.

```
Concert Grand
```

4. Adjusting the volume

The MASTER VOLUME slider controls the volume level of the instrument's speakers, or headphones if connected.

Move the slider to the right to increase the volume, and to the left to decrease the volume.

MASTER VOLUME

Decrease volume   **Increase volume**

MIN · · · · · | · · · · MAX
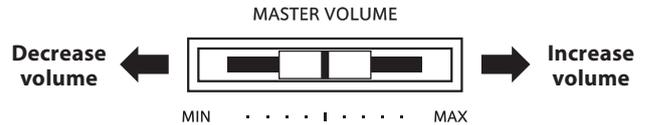
Use this slider to set the volume to a comfortable listening level - the middle is often a good starting point.

* The KCP90 digital piano features a power saving function that can automatically turn off the instrument after a specified period of inactivity. For more information, please refer to the Auto Power Off setting on page 46.

▌ Using headphones

Use the jacks located beneath the keyboard on the left hand side, to connect stereo headphones to the KCP90 digital piano.

Two pairs of headphones can be connected and used simultaneously. When a pair of headphones is connected, sound will not be produced by the speakers.

PHONES
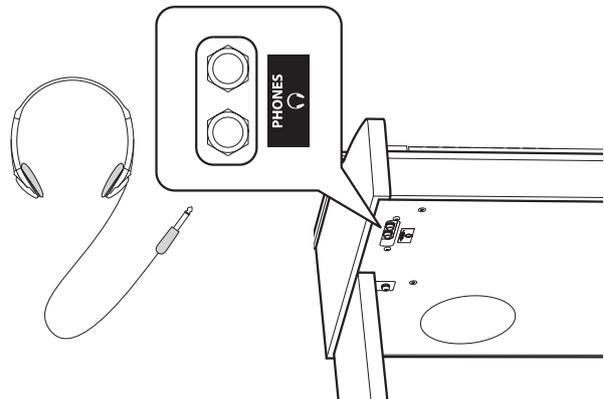
Using the Pedals

As with a grand piano, the KCP90 digital piano features three pedals: sustain, sostenuto, and soft.

◼ Sustain pedal (right pedal)

Depressing this pedal sustains the sound after one's hands have been lifted from the keyboard - greatly enriching the piano sound, while also assisting smooth 'legato' passages.

The sustain pedal is capable of responding to half pedaling.

Soft pedal

Sostenuto pedal

Sustain pedal
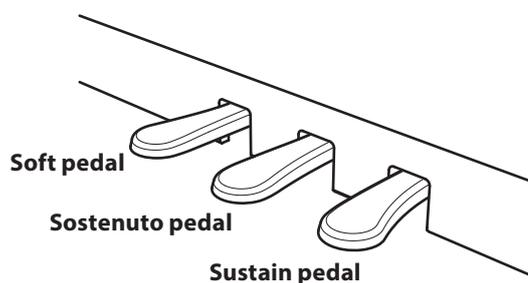
◼ Soft pedal (left pedal)

Depressing this pedal softens the sound, reducing its volume.

When the rotary speaker effect is selected, the soft pedal is also used to alternate the speed of the rotary simulation between 'Slow' and 'Fast' effect modes.

◼ Sostenuto pedal (centre pedal)

Depressing this pedal after playing the keyboard and before releasing the keys, sustains the sound of only those notes that have been played. Any keys that are subsequently played after the sostenuto pedal is depressed will not be sustained.

◼ Pedal support bolt

A pedal support bolt is attached at the base of the pedal board to aid stability when the pedals are pushed.

Turn the bolt anti-clockwise until it makes contact with the floor and supports the pedals firmly. If the pedal support bolt does not make contact with the floor, the pedal board may become damaged.
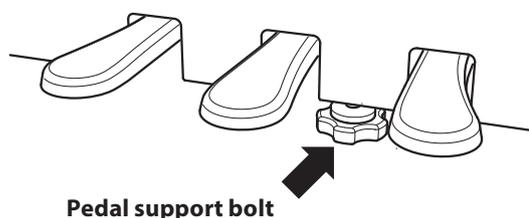
Pedal support bolt

⚠ **When moving the instrument, always adjust or remove the pedal support bolt, then readjust when the instrument is in its new position.**

◼ Caring for the pedals

If the surface of the pedals becomes dirty, clean the pedals using a dry dish-washing sponge.
Do not attempt to clean the pedals using rust-removing solvents, abrasives or files.

◼ Grand Feel pedal system

The KCP90 digital piano features the Grand Feel pedal system, which replicates the sustain, soft, and sostenuto pedal weighting of Kawai's EX Concert Grand piano.

Selecting Sounds

The KCP90 digital piano features a wide selection of realistic instrument sounds suitable for various musical styles. Sounds are arranged into seven categories, with several sounds assigned to each category button. For a complete listing of sounds available on the KCP90 instrument, please refer to page 54 of this owner's manual.

By default, the 'Concert Grand' sound will be selected automatically when the instrument is turned on.

■ Selecting a sound category

Press the desired SOUND button.

The LED indicator for the button will turn on to indicate that this category has been selected, and the name of the sound will be shown in the LCD display.

```
Classic E.Piano
```


SOUND
PIANO   E.PIANO   STRINGS   ORGAN   WOODWIND/   GUITAR/   OTHERS   PIANO
                                     BRASS   BASS   ONLY

E.PIANO
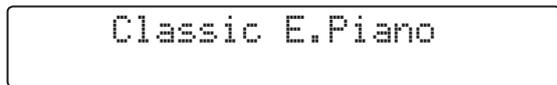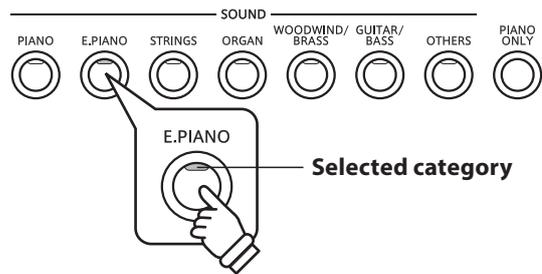
Selected category

■ Changing the sound

Several sounds are assigned to each category button.

Press the selected category button repeatedly to cycle through the different sound variations.

The ▲ and ▼ VALUE buttons can also be used to select sounds.

```
Classic E.Piano
```
⬍
```
60's E.Piano
```
⬍
```
Modern E.Piano.
```
⋮
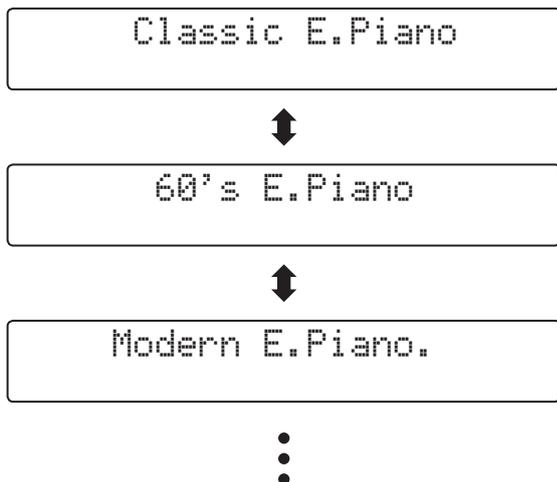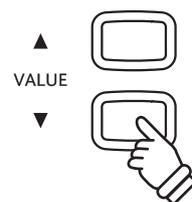
The OTHERS category contains 333 sounds, divided into 22 subcategories. Press the OTHERS button repeatedly to cycle through the different sound variations. Press the ▲ and ▼ VALUE buttons to jump to the next/previous sub-category.

Method 1:

E.PIANO   **Press repeatedly**   E.PIANO

● ● ●

Method 2:

▲
VALUE
▼

■ PIANO ONLY button

The PIANO ONLY button provides a convenient way to immediately restore the keyboard to the Concert Grand sound, and stop any playing Style accompaniments.

PIANO
ONLY

Basic Operations

Dual Mode

The Dual Mode function allows two sounds to be layered together, creating a more complex sound.
For example, a piano sound layered with strings, or a church organ combined with a choir, etc.

■Entering Dual mode

Press and hold a SOUND button to select the first sound, then press another SOUND button to select the second (layered) sound.

The LED indicators for both buttons will turn on to indicate that the two sounds have been selected, and their names will be shown in the LCD display.

The sound assigned to the button that is pressed first will be shown on the top line.

First sound

```
Concert Grand
Beautiful Strings
```

Second (layered) sound
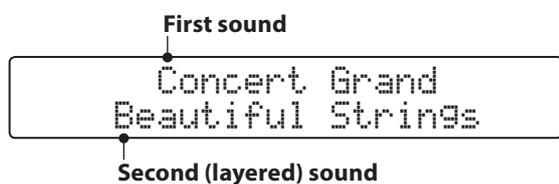
For example, to layer a piano sound with strings, first press and hold the PIANO button, then press the STRINGS button.
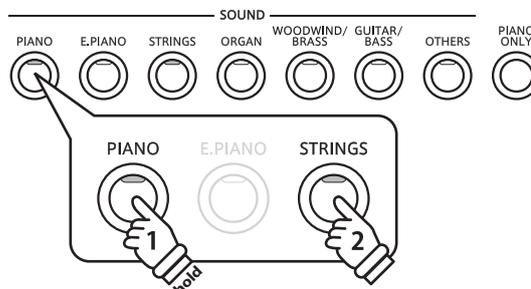
* The KCP90 digital piano is capable of playing up to 192 notes simultaneously (192-note polyphony). However, when Dual mode is active the maximum polyphony will be halved, as two sounds are produced for each note.

* If ACC is turned on and the Lower Section Mode setting is set to 'Play', Dual mode will automatically revert to the first selected sound. Please refer to page 28 for more information.

■Changing layered sounds

Press and hold the first SOUND button, then press the second SOUND button repeatedly to select the other sounds assigned to that button.

For example, to change the layered 'Beautiful Strings' sound to 'Warm Strings 2', first press and hold the PIANO button, then press the STRINGS button repeatedly until 'Warm Strings 2' is shown on the bottom line of the LCD display.

```
Concert Grand
Warm Strings 2
```
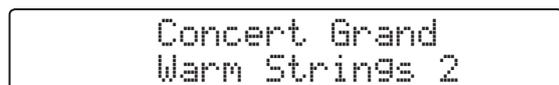
To layer two sounds assigned to the same SOUND button, press the first SOUND button, then press the ▲ or ▼ VALUE buttons to select the desired layered sound.

```
Concert Grand
Modern Piano
```
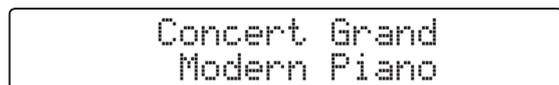
* Press and hold the OTHERS button, then press the ▲ or ▼ VALUE buttons to jump to the next/previous sub-category.
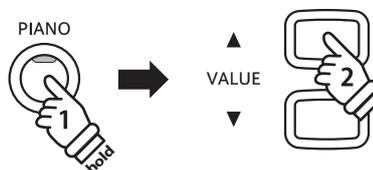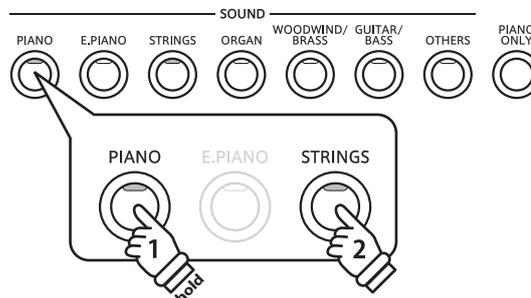
■Adjusting the volume balance

Move the BALANCE slider left and right to adjust the volume balance between the two layered sounds.

Increase second sound volume ← BALANCE → **Increase first sound volume**

LEFT · · · · · RIGHT
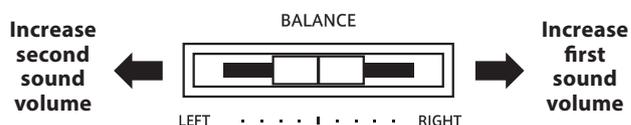
■Exiting Dual mode

Press a single SOUND button to exit dual mode.

Basic Operations

15

Reverb

Reverb adds reverberation to the sound, simulating the acoustic environment of a recital room, stage, or concert hall. The KCP90 digital piano features six different reverb types.

■ Reverb types

Reverb type	Description
Room	Simulates the ambiance of a small rehearsa room.
Lounge	Simulates the ambience of piano lounge.
Small Hall	Simulates the ambiance of a small hall.
Concert Hall	Simulates the ambiance of a concert hall or theater.
Live Hall	Simulates the ambiance of a live hall or stage.
Cathedral	Simulates the ambiance of a large cathedral.

■ Turning Reverb on/off

Press the REVERB button to turn reverb on/off.

The LED indicator for the REVERB button will turn on to indicate that reverb is in use.

The currently selected reverb type and status will be shown in the LCD display.
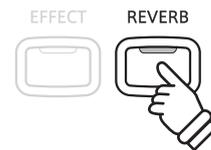
```
        Reverb ON
    Type = Small Hall
```

■ Changing the Reverb type

Press and hold the REVERB button, then press the ▲ or ▼ VALUE buttons to cycle through the different reverb types.

```
        Reverb ON
    Type = Small Hall
```

•
•
•

```
        Reverb ON
    Type = Cathedral
```
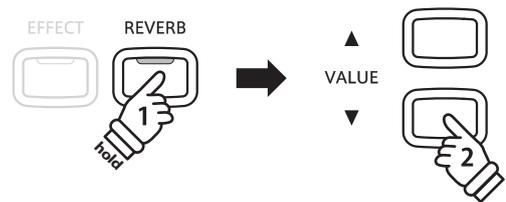
Release the REVERB button to select the desired reverb type.

After a few seconds, the LCD display will return to showing the name of the selected sound.

* The selected reverb type and on/off status can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

Effects

In addition to reverb, various other effects can be applied to the selected sound, altering the tonal character and feeling of the instrument. The KCP90 digital piano features thirteen effect types.

* In order to enhance tonal quality and acoustic realism, certain types of effect may be applied to certain sounds automatically.

■ Effect types

Effect type	Description
Chorus	Layers a slightly detuned version of sound over the original, thus enriching its tonal character.
Classic Chorus	Similar in principle to Chorus, but intended for vintage electric piano sounds.
Stereo Delay	Add an echo effect to the sound, playing through both speakers (stereo) simultaneously.
Ping Delay	Adds a 'ping pong' echo effect to the sound, giving the impression that is 'bouncing' from left to right.
Triple Delay	Similar in principle to Ping Delay, but with an additional centre echo.
Tremolo	Continuously varies the volume at a constant speed, adding a vibrato type effect to the sound.
Classic Tremolo	Similar in principle to Tremolo, but intended for vintage electric piano sounds.
Phaser	Applies a cyclic phase change to the sound, giving the impression that the sound is moving.
Rotary 1/2/3	Simulates the sound of a rotary speaker commonly used with vintage electronic organs. * The soft pedal can be used to alternate the speed of the rotary simulation between 'Slow' and 'Fast' effect modes.
Phaser + Amp	Phaser with a vintage electric piano speaker effect applied.
Auto Pan + Amp	Alternates the sound output from left to right across the stereo field using a sine wave with vintage electric piano speaker effect applied.

■ Turning Effects on/off

Press the EFFECT button to turn the effects on/off.

The LED indicator for the EFFECT button will turn on to indicate that the effects are in use.

The currently selected effect type and status will be shown in the LCD display.

EFFECT   REVERB

```
      Effect ON
  Type = Stereo Delay
```

■ Changing the Effect type

Press and hold the EFFECT button, then press the ▲ or ▼ VALUE button to cycle through the different effect types.

```
      Effect ON
  Type = Stereo Delay
```

```
      Effect ON
   Type = Tremolo
```

EFFECT   REVERB   →   VALUE ▲ ▼
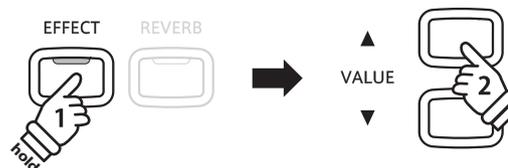
Release the EFFECT button to select the desired effect type.

After a few seconds, the LCD display will return to showing the name of the selected sound.

Basic Operations

Transpose

The Transpose function allows the pitch of the KCP90 digital piano keyboard to be raised or lowered in semi-tone intervals. This is particularly useful when accompanying instruments tuned for different keys, or when a song learned in one key must be played in another key. When transposed, the song can be played in the original key, yet heard in a different key.

■ Adjusting the Transpose value

Press and hold the TRANSPOSE button, then press the ▲ or ▼ VALUE buttons to increase or decrease the transpose value.

* The keyboard pitch can be raised or lowered by up to 12 semi-tones.

Alternatively, press and hold the TRANSPOSE button, then press a key within the range of C2 to C4.

The Transpose value will be shown in the LCD display, and the LED indicator for the TRANSPOSE button will turn on to indicate that the transpose function is active.

```
Transpose ON
   +3 (D#)
```
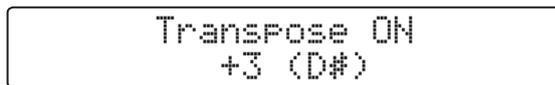
* To reset the Transpose value to 0, press and hold the TRANPOSE button, then press the ▲ and ▼ VALUE buttons simultaneously.

* When the Transpose value is set to 0, the LED indicator for the TRANSPOSE button will turn off.

Method 1:
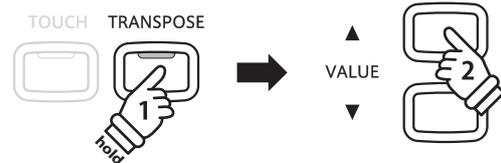
Method 2:
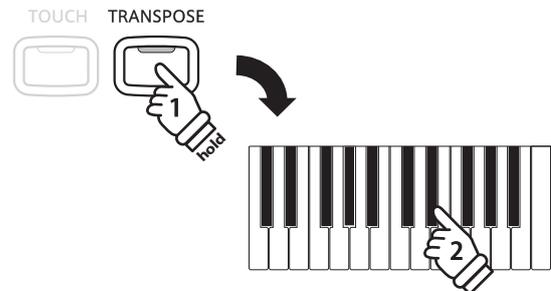
■ Turning Transpose on/off

Press the TRANSPOSE button to turn the transpose function on/off.

* The specified transpose value will be retained even after the transpose function is turned off.

* The specified transpose value can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

Basic Operations
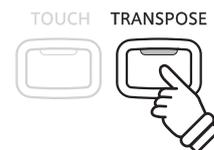
Touch

As with an acoustic piano, the KCP90 digital piano produces a louder sound when the keys are struck with force, and a softer sound when the keys are played gently. The volume and tonal character change in relation to the strength and speed of playing - on a digital piano this system is referred to as 'touch sensitivity'.

The Touch function allows the touch sensitivity of the keyboard to be conveniently adjusted. There are five different preset touch curve settings available.

■ Touch type

Touch type	Description
Light +	Requires less striking force to achieve a forte note. For players with a very delicate touch.
Light	A louder volume is produced even when playing with a soft touch. For those still developing finger strength. This curve is recommended for children and organ players.
Heavy	Requires a heavier touch to produce a loud volume. Ideally suited to those with stronger fingers.
Heavy +	Requires considerably more striking force to achieve a loud volume.
Off	A constant volume is produced regardless of how hard the keys are struck. Ideally suited for sounds that have a fixed dynamic range such as organ and harpsichord.

■ Changing the Touch type

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

The touch type will be shown in the LCD display, and the LED indicator for the TOUCH button will turn on to indicate that the Touch function is active.

```
Touch ON
Type = Light
```
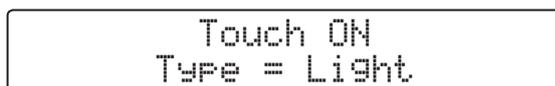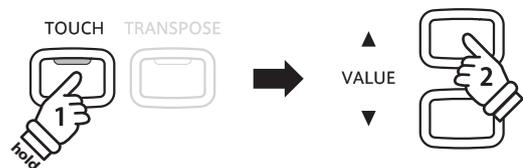
* The Touch function does not alter the physical weight of the keys.

■ Turning Touch off (returning to 'Normal' touch)

Press the TOUCH button to turn the touch function off.

The LED for the TOUCH button will turn off to indicate that the touch function is no longer active, and the keyboard will return to the 'Normal' (default) touch type.
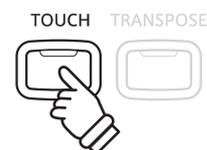
* The selected touch type will be retained even after the touch function is turned off.

Metronome

The Metronome function provides a steady beat to aid practicing the piano at a consistent tempo. The time signature, volume, and tempo of the metronome can be freely adjusted.

■ Turning the metronome on/off

Press the TEMPO button.

The LED indicator for the TEMPO button will turn on to indicate that the metronome is in use, and a 4/4 beat will start to count. The current metronome time signature and tempo in beats per minute (bpm) will also be shown in the LCD display.

```
Metronome
TEMPO ♩ = 120
```
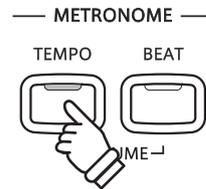
Press the TEMPO button again to stop the metronome. The LED indicator for the TEMPO button will turn off.

* The metronome can also be started by pressing the BEAT button.

■ Adjusting the metronome tempo

Press the TEMPO button, then press the ▲ or ▼ VALUE buttons to increase or decrease the metronome tempo.

* The metronome tempo can be adjusted within the range of 10-300 bpm (20-600 bpm for eighth note rhythms).

* Adjusting the metronome tempo will also change the style tempo.
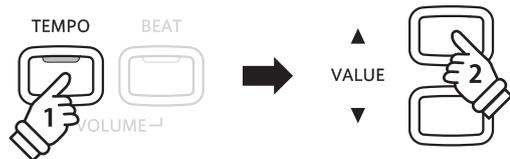
■ Changing the metronome time signature

Press the BEAT button, then press the ▲ or ▼ VALUE buttons to select the desired metronome time signature.

* There are ten different types of time signature available:
1/4, 2/4, 3/4, 4/4, 5/4, 3/8, 6/8, 7/8, 9/8, and 12/8.
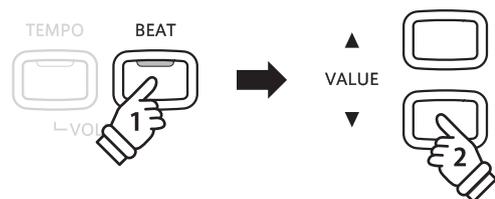
■ Adjusting the metronome volume

Press the TEMPO and BEAT buttons simultaneously, then press the ▲ or ▼ VALUE buttons to increase or decrease the metronome volume.

The metronome volume will be shown in the LCD display.
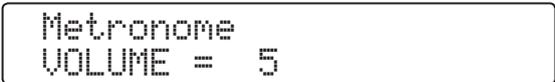
```
Metronome
VOLUME =  5
```
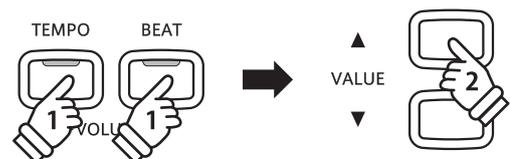
* The metronome volume can be adjusted within the range of 1-10.

Demo Songs

The Demo function provides an excellent introduction to the varied capabilities of KCP90 digital piano. There are 3 different demonstration songs available, highlighting the instruments' rich selection of high quality sounds and its power speaker system.

■ Demo songs

Demo no.	Song name	Composer
1	Ethnic Beat	Kawai Original
2	Sunday Morning	Kawai Original
3	Nature	Kawai Original

* Kawai regrets that sheet music for Kawai original demo songs is not available.

■ Entering demo mode

Press the DEMO button.

The LED indicator for the DEMO button will turn on, and the first demo song will start to play. The name of the demo song will also be shown in the LCD display.

DEMO

```
    KCP90 Demo
 1. Ethnic Beat
```

When the first demo song has finished, the second, and then third demo songs will start to play automatically.

■ Selecting a demo song

While Demo mode is selected and the demo songs are playing:

Press the ▲ or ▼ VALUE buttons to select the desired demo song.

The selected demo song will start to play, and the name of the song will also be shown in the LCD display.

▲
VALUE
▼
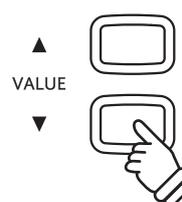
```
    KCP90 Demo
 2. Sunday Morning
```

■ Stopping the demo song and exiting demo mode

Press the DEMO button while the demo song is playing.

The LED indicator for the DEMO button will turn off, the demo song will stop, and the instrument will return to normal operation.

DEMO

Registration Memories

The Registration function allows the current instrument setup (sound/style selection, reverb and effect settings, etc.) to be stored in one of eight registration memories, and conveniently recalled at the touch of a button. Each registration memory is assigned to one of the STYLE buttons.

∎ Settings stored in registration memories

Sound settings
Selected sound (including dual mode)
Dual Balance
Effect and Reverb
Transpose

Function settings
Tuning
Damper Resonance
Temperament
Key of Temperament

Accompaniment settings
Selected style
ACC On/Off
Style Tempo
Style Volume
Upper/Lower Balance
Lower Section Sound
Lower Section Mode
Lower Octave Shift
Lower Split Point

∎ Turning the registration function on, selecting a registration memory

Press the REGISTRATION button.

The LED indicator for the REGISTRATION button will turn on to indicate that the registration function is in use.

* When the registration function is in use, the STYLE buttons cannot be used to select the style.

Press one of the the STYLE buttons to select the desired registration memory.

The LED indicator for the STYLE button (corresponding to the selected registration memory) will turn on, and the instrument setup stored in the selected registration memory will be recalled.

```
Fancy Disco
              ♩ = 145
```
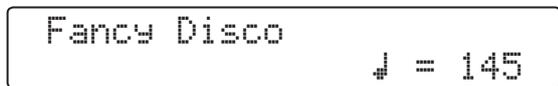
∎ Turning the registration function off

Press the REGISTRATION button.

The LED indicator for the REGISTRATION button will turn off, and the instrument will return to normal operation.

* If the REGISTRATION function is turned on once again, the previously selected registration memory will be recalled automatically.

■ Storing a registration memory

Press and hold the REGISTRATION button for two seconds.

The LED indicators for the STYLE buttons will start to flash, and a prompt message will be shown in the LCD display.

```
Registration
     Select memory no.
```

Press one of the STYLE buttons to select the memory in which to store the new registration.

A confirmation message will be shown in the LCD display to indicate that the current panel setup has been stored.

```
Registration
     Memory 2: Stored.
```

■ Resetting all registration memories

Press and hold the REGISTRATION then turn the instrument's power off/on.

All registration memories will be reset to the factory default settings.
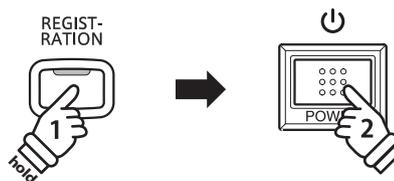
Styles

1 Style basics

The KCP90 contains 100 built-in accompaniment styles, covering a wide range of musical genres. Each style can be used simply as a drum or percussion track, or as a full musical accompaniment with bass, guitar, organ, brass, etc. parts. In addition, each style includes separate introduction, fill-in, and ending passages, allowing musicians to enliven their performances at the touch of a button.

For a complete listing of available styles, please refer to page 67 of this owner's manual.

■ Selecting a style category

Press the desired STYLE button.

The LED indicator for the button will turn on to indicate that this category has been selected, and the name of the style and tempo in BPM will be shown in the LCD display.

```
Medium Swing
              ♩ = 135
```
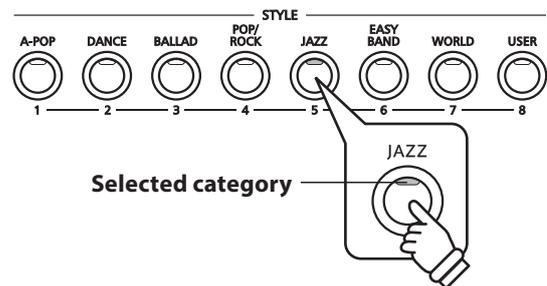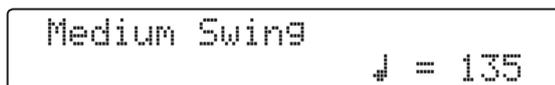
Selected category

■ Changing the style

Several styles are assigned to each category button.

Press the selected category button repeatedly to cycle through the different styles.

The ▲ and ▼ MENU buttons can also be used to select styles.

```
Medium Swing
              ♩ = 135
```

```
Slow Swing
              ♩ =  70
```

Method 1:

Press repeatedly

Method 2:

▲
MENU
▼
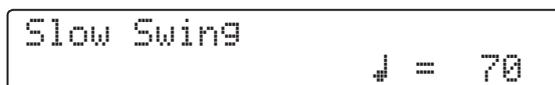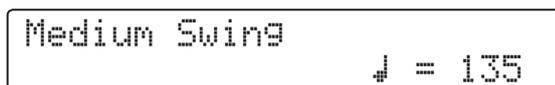
■ Starting/stopping the style

Press the START/STOP button.

The LED indicator for the START/STOP button will turn on and the drum rhythm of the selected style will start to play.

The four counting LEDs will also flash in time with the rhythm.

Press the START/STOP button again.

The LED indicator for the START/STOP button and counters will turn off and the drum rhythm will stop playing.

Accompaniment Styles
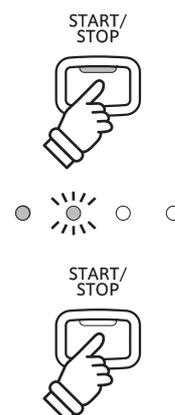
2 Adjusting/enhancing the style

▌ Adjusting the style tempo

While the style name is shown in the LCD display:

Press the ▲ or ▼ VALUE buttons to increase or decrease the tempo of the selected style.

▲
VALUE
▼

* The style tempo can be adjusted within the range of 10-300 bpm (20-600 bpm for eighth note rhythms).

* Adjusting the style tempo will also change the metronome tempo.

* The selected style tempo can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.
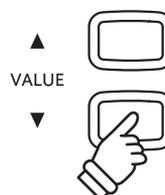
▌ Adding an introduction passage

Before starting the style:

INTRO/
ENDING

Press the INTRO/ENDING button.

The LED indicator for the INTRO/ENDING button will turn on to indicate that an introduction passage will be played when the style starts.

▌ Adding a fill-in passage

While the style is playing, during a performance:

FILL IN

Press the FILL IN button.

The LED indicator for the FILL IN button will turn on briefly, and a fill-in passage will be played that temporarily embellishes the style, before returning to the normal style.

▌ Adding an ending passage

While the style is playing, towards the end of the performance:

INTRO/
ENDING

Press the INTRO/ENDING button.

The LED indicator for the INTRO/ENDING button will turn on and an ending passage will be played that brings the style to a stop.

▌ Using the SYNC/FADE OUT button

Before starting the style:

SYNC/FADE OUT

Press the SYNC/FADE OUT button to start the style playing automatically with the next key press.

While the style is playing, towards the end of the performance:

Press the SYNC/FADE OUT button to reduce the volume of the style gradually, and eventually bring the style to a stop.

Accompaniment Styles

3 Adding accompaniment

The ACC feature adds an automatic bass, guitar, organ, etc. accompaniment to the selected style, which is controlled by playing single or full-fingered chords in the lower section of the keyboard. The KCP90 is capable of recognising 15 different chords types, including most inversions.

For a complete listing of recognised chords, please refer to page 63 of this owner's manual.

■ Turning the accompaniment on/off

Press the ACC button.

The LED indicator for the ACC button will turn on to indicate the accompaniment playback is enabled for the selected style.

When ACC is turned on, the keyboard will be split into lower and upper sections, with the lower section used to control the key of the playing accompaniment.

Play single or full-fingered chords in the lower section of the keyboard. A chord will be played and the name of the chord shown in the LCD display.

ACC

Lower section


```
Smooth Jazz
Gm            ♩ =  93
```
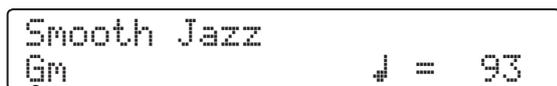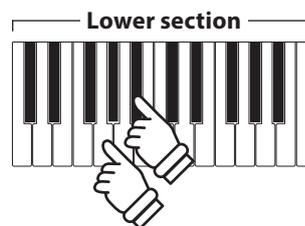
Chord name

* The selected ACC on/off state can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

■ Combining style functions

Before starting the style:

Press the ACC button, then press the SYNC/FADE OUT button.

The LED indicators for the ACC and SYNC/FADE OUT buttons will turn on to indicate that accompaniment playback is enabled, and will start automatically with the next key press.

Next press the INTRO/ENDING button.

The LED indicator for the INTRO/ENDING button will turn on to indicate than an introduction passage will be played when the style starts.

Finally, play a chord (or press a key) in the lower section.

The style will start to play automatically, with a full accompaniment backing in the specified chord.

ACC   SYNC/FADE OUT

INTRO/
ENDING

Lower section


```
Smooth Jazz
G7            ♩ =  93
```
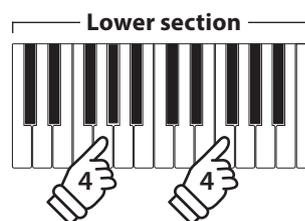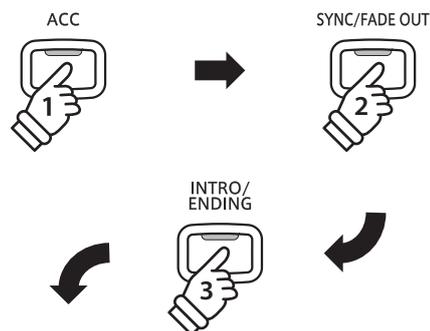
Continue to play chords in the lower section, while playing a melody in the upper section and experimenting with various features of the style function.

Accompaniment Styles

4 Changing accompaniment settings

■ Adjusting the style volume

When ACC is enabled:

Press the TEMPO and BEAT buttons simultaneously.

The Style Volume screen will be shown in the LCD display.

```
Style Volume =  7
```
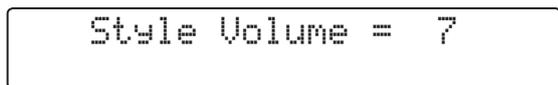
Press the ▲ or ▼ VALUE buttons to increase or decrease the volume of the selected style.

* The style volume can be adjusted within the range of 1-10.

Press the TEMPO and BEAT buttons simultaneously once again to return to the Style screen.

* The adjusted Style Volume setting can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

TEMPO   BEAT
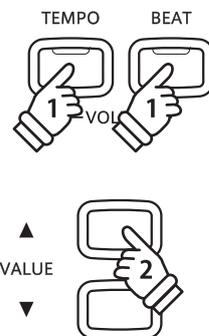
■ Adjusting the lower/upper section volume balance

When ACC is enabled and Lower Section Mode is set to 'Play':

Move the BALANCE slider left and right to adjust the volume balance between the lower and upper sections.

* The lower/upper section volume balance can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

BALANCE

Increase lower section volume ← | | → **Increase upper section volume**

LEFT · · · · | · · · · RIGHT
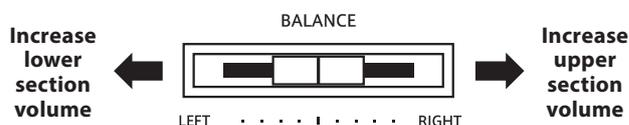
■ Lower Section Mode setting

This setting is used to determine whether notes in the lower section produce a sound when played.

When ACC is enabled:

Press and hold the ACC button for two seconds.

The LED indicator for the ACC button will start to flash.

Press the ▲ or ▼ MENU buttons until the Lower Section Mode setting screen is shown in the LCD display.

```
1. Lower Section Mode
   = Mute
```
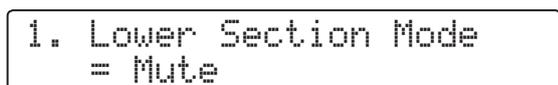
Press the ▲ or ▼ VALUE buttons to change the Lower Section Mode setting to Mute/Play.

Press the ACC button again to return to the Style screen.

* If ACC is turned on and the Lower Section Mode setting is set to 'Play', Dual mode will automatically revert to the first selected sound.

* The selected Lower Section Mode setting can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

ACC

MENU

VALUE

Accompaniment Styles

27

4 Changing accompaniment settings (cont.)

■ Lower Section Sound setting

This setting is used to change the sound that is heard in the lower section.

When ACC is enabled:

Press and hold the ACC button for two seconds.

The LED indicator for the ACC button will start to flash and the Lower Section Sound setting screen will be shown in the LCD display.

```
2. Lower Section Sound
   = 15   Choir Ooh/Aah
```

Press a SOUND SELECTION button or the ▲ or ▼ VALUE buttons to select the desired lower section sound.

Press the ACC button again to return to the Style screen.

* The Lower Section Mode setting must be set to 'Play' for notes in the lower section to produce a sound when played.

* The selected Lower Section Sound setting can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

ACC

Method 1:
GUITAR
BASS

Method 2:
▲
VALUE
▼

■ Lower Octave Shift setting

This setting is used to raise the pitch of the lower section in octave intervals.

When ACC is enabled:

Press and hold the ACC button for two seconds.

The LED indicator for the ACC button will start to flash.

Press the ▲ or ▼ MENU buttons until the Lower Octave Shift setting screen is shown in the LCD display.

```
3. Lower Octave Shift
   = 0
```

Press the ▲ or ▼ VALUE buttons to change the Lower Octave Shift setting.

* The Lower Octave Shift setting can be adjusted within the range of 0-3.

Press the ACC button again to return to the Style screen.

* The selected Lower Octave Shift setting can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

ACC

▲
MENU
▼

▲
VALUE
▼

Accompaniment Styles

■ Lower Split Point setting

This setting is used to change the point at which the lower and upper sections are divided, allowing the size of each section to be increased or decreased freely.

* The default split point is set to G2.
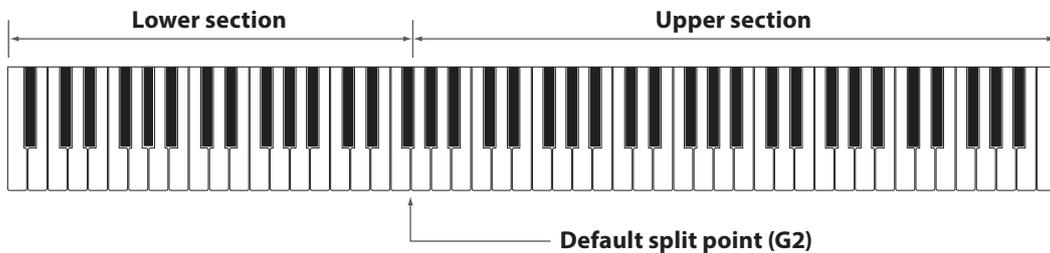
Lower section　　　　　　　　　　　**Upper section**

Default split point (G2)

When ACC is enabled:

Press and hold the ACC button for two seconds.

The LED indicator for the ACC button will start to flash.

Press the ▲ or ▼ MENU buttons until the Lower Split Point setting screen is shown in the LCD display.

```
4. Lower Split Point
   = G2
```

Press the ▲ or ▼ VALUE buttons or press a key on the keyboard to change the Lower Split Point setting.

Press the ACC button again to return to the Style screen.

* The adjusted Lower Split Point setting can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

ACC

MENU

Method 1:　　　　　　　　　　**Method 2:**

VALUE
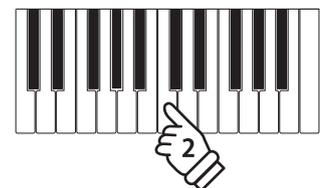
Favourite Styles

The favourite category allows you to store up to 5 your favourite styles on the USER button for easy selection.

■ Selecting the favourite style

Press the USER button repeatedly to cycle through the different favourite styles.

The ▲ and ▼ MENU buttons can also be used to select favourite styles.

Method 1:

USER   **Press repeatedly**   USER
● ● ●

Method 2:

▲
MENU
▼

■ Storing the favourite style

Select the style, then press and hold the USER button for two seconds.

The LED indicators for the USER button will start to flash, and a prompt message will be shown in the LCD display.

```
Favorite
    Select memory no.
```

Press the ▲ or ▼ MENU buttons to select the memory in which to store the new favourite style.

Press the ▲ or ▼ VALUE buttons to confirm that the current style has been stored.

```
Favorite
    Memory 2: Stored.
```

Press the USER button to cancel the store operation.

USER
hold

1   ▲   ▲
MENU   VALUE
▼   ▼
2

Cancel:

USER
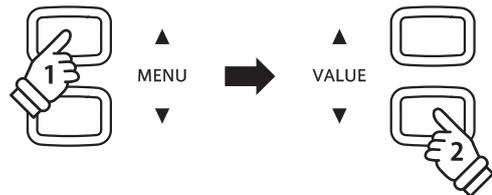
Song Recorder

The KCP90 digital piano allows up to 3 different songs to be recorded, stored in internal memory, and played back at the touch of a button. Each song consists of two separate tracks - referred to as 'parts' - that can be recorded and played back independently. This allows the left-hand part of a song to be recorded first on one track, and the right-hand part to be recorded later on the other track.

1 Recording a song

1. Entering song recorder mode

Press the REC button.

The LED indicator for the REC button will start to flash, and the Recorder screen will appear with the currently selected song and part number shown in the LCD display.

RECORDER
REC   PLAY/STOP

```
Song1        Part = 1
Record        ♩ = 120
```
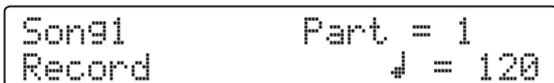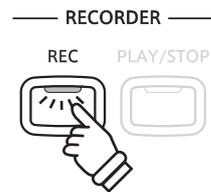
2. Selecting the song/part to be recorded

Press the ▲ or ▼ MENU buttons to select the song memory to record to, then press the ▲ or ▼ VALUE buttons to select the part to be recorded.

If a part has been recorded, a ✳ symbol will be shown.

MENU ➡ VALUE

Part has been recorded ⌐
```
Song1        Part = 1✳
Bar =    1- 1    ♩ = 120
```
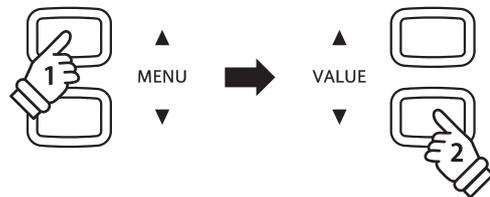
* Re-recording a part will automatically erase all previously recorded performance information for that part.

⚠️ **When recording part 1 and part 2 separately, select the song and part number carefully in order to prevent accidentally overwriting a previously recorded part.**

3. Starting the song recorder

Press a key on the keyboard.

RECORDER
REC   PLAY/STOP

The LED indicators for the REC and PLAY/STOP buttons will turn on, and recording will start.
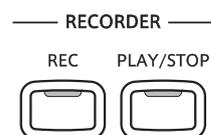
* Recording can also be started by pressing the PLAY/STOP button, allowing a rest period or empty bar to be inserted at the beginning of the song.

Recorder

31

1 Recording a song (cont.)

4. Stopping the song recorder

Press the PLAY/STOP button.

The LED indicators for the PLAY/STOP and REC buttons will turn off, the recorder will stop, and the part/song will be stored in internal memory.

After a few seconds, the Song Play screen will be shown in the LCD display, indicating that the song is ready for playback.

```
Song1        Part = 1*
Bar =    1- 1      ♩ = 120
```
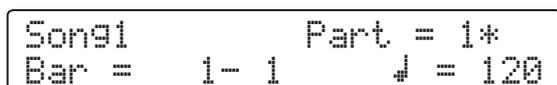
To play back the recorded song, please refer to the 'Playing back a song' instructions on page 33.

—— RECORDER ——

REC   PLAY/STOP
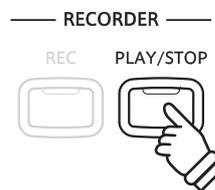
* The maximum recording capacity is approximately 7,000 notes, with button and pedal presses also counted as one note.

* If the maximum recording capacity is reached during recording, the recorder will stop automatically.

* Recorder songs will remain in memory after the power is turned off.

■ Recording with accompaniment styles

It is also possible to record songs while using accompaniment styles. This useful feature allows accompaniment chord sequences, and fill-in patterns etc. to be recorded and played back.

* Recording with accompaniment styles is only possible for Part 1 of the recorder song.

■ Changing panel settings while recording

It may be desirable to make changes to the selected sound or style while recording a song. The tables below list the various functions which will and will not be remembered during recording.

Panel operations remembered during recording
Changes made to the sound type (SOUND SELECTION buttons)
Switching between normal/dual playing modes
Changes made to the style type (STYLE SELECTION buttons)
ACC chord progression
ACC intro, fill-in, ending patterns

Panel operations NOT remembered during recording*
Changes made to the reverb settings
Changes made to the effects settings
Changes made to the tempo
Changes made to transpose, tuning, touch, etc

* Prepare the desired effect, reverb, tempo settings etc. before recording a new performance.

5. Exiting song recorder mode

Press the REC button at any time to exit the song recorder.

The LED indicator for the REC button will stop flashing and the instrument will return to normal operation.

—— RECORDER ——

REC   PLAY/STOP
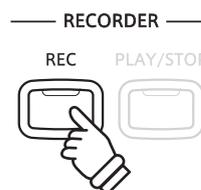
Recorder

2 Playing back a song

This function is used to playback recorder songs stored in internal memory. To playback a song/part immediately after recording, start this process from step 2.

1. Entering song play mode

Press the PLAY/STOP button.

The Song Play screen will appear with the currently selected song and part number shown in the LCD display.

```
Song1        Part = 1*
Bar =    1- 1      ♩ = 120
```
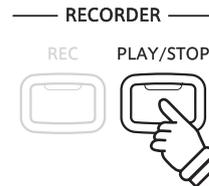
2. Selecting a song/part(s) to be played back

Press the ▲ or ▼ MENU buttons to select the song memory to playback, then press the ▲ or ▼ VALUE buttons to select the part(s) to be played.

If a part has been recorded, a ✳ symbol will be shown.

Part has been recorded ─────┐

```
Song1        Part = 1*
Bar =    1- 1      ♩ = 120
```
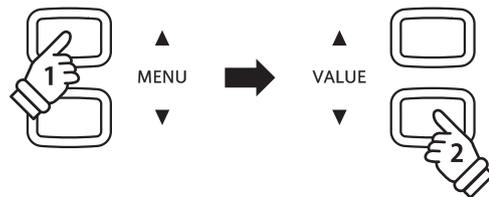
3. Starting song playback

Press the PLAY/STOP button.

The selected song/part(s) will start to play, and playback information will be shown in the LCD display.
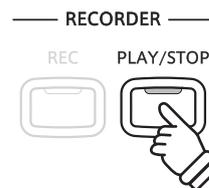
4. Stopping song playback

Press the PLAY/STOP button again.

The song will stop playing.
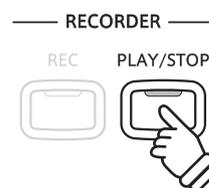
5. Exiting song play mode

Press a SOUND SELECTION button to exit the song player.

The instrument will return to normal operation, and the name of the selected sound will be shown in the LCD display.
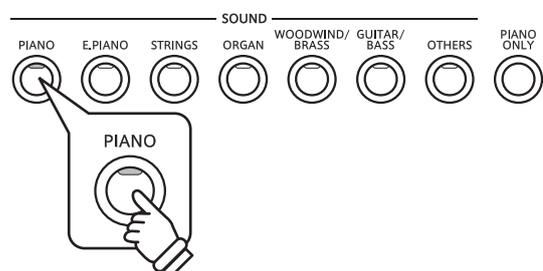
Recorder

3 Erasing a part/song

This function is used to erase recorder parts/songs that have been recorded incorrectly, or are simply no longer required.

1. Entering erase mode

Press the REC and PLAY/STOP buttons simultaneously.

The LED indicators for the REC and PLAY/STOP buttons will start to flash, and the Erase screen will appear with the currently selected song and part number shown in the LCD display.

```
To Del Press REC
Song1  Part = 1&2*
```

—— RECORDER ——

REC   PLAY/STOP
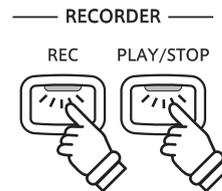
2. Selecting a song and part to be erased

Press the ▲ or ▼ MENU buttons to select the song memory, then press the ▲ or ▼ VALUE buttons to select the part(s) to be erased.

If a part has been recorded, a ✱ symbol will be shown.

```
To Del Press REC
Song1  Part = 1&2*
```

▲
MENU
▼

▲
VALUE
▼
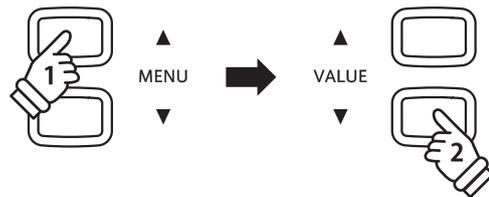
3. Erasing a song

Press the REC button.

A confirmation message will be shown in the LCD display, prompting to confirm or cancel the erase operation.
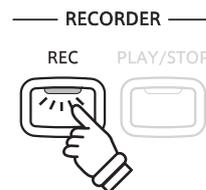
```
Sure? Press REC
Song1  Part = 1&2*
```

—— RECORDER ——

REC   PLAY/STOP

Press the REC button again to confirm the erase operation and return to the Song Play screen.

Press the PLAY/STOP button to cancel the erase operation and return to the Erase screen.
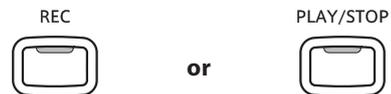
REC   **or**   PLAY/STOP

■ Erasing all recorder songs from memory

Press and hold the PLAY/STOP and REC buttons, then turn the instrument's power off/on.

All recorder songs stored in memory will be erased.

—— RECORDER ——

REC   PLAY/STOP

POWER

Recorder
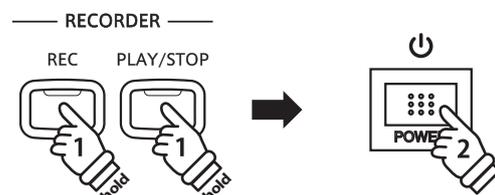
Menu Settings

The KCP90's keyboard, sound, and MIDI settings allow various aspects of the instrument to be adjusted. When the instrument is turned on, these settings will return to the default values indicated below.

■ Menu settings

No.	Setting name	Explanation	Default setting
1	Tuning	Adjust the pitch of the instrument in 0.5 Hz steps.	440.0
2	Damper Resonance	Adjust the resonance that is heard when pressing the damper pedal.	5
3	Temperament	Adjust the tuning system to suit Renaissance and Baroque periods etc.	Equal P.only
4	Key of Temperament	Adjust the key of the selected tuning system.	C
5	MIDI Channel	Specify the channel that is used to transmit MIDI information.	1ch
6	Trans. PGM Change	Specify whether program change information is sent when sounds are changed.	On
7	Local Control	Specify whether internal sounds will be heard when the keyboard is pressed.	On
8	Channel Mute	Specify which channels (1-16) are activated to receive MIDI information.	Play
9	Send PGM Change #	Send a MIDI program change number from 1 to 128.	–
10	Auto Power Off	Specify the period of inactivity required before the instrument turns off	–

■ Selecting Menu settings

While normal playing mode is selected:

Press the ▲ or ▼ MENU buttons to select the desired setting.

The setting name and value will be shown in the LCD display.

```
5. MIDI Channel
  =  1ch (Transmit)
```

▲
MENU
▼

■ Changing the setting's value

Press the ▲ or ▼ VALUE buttons to change the selected setting's value.
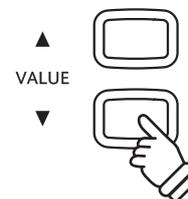
```
5. MIDI Channel
  =  4ch (Transmit)
```

▲
VALUE
▼

1 Tuning

The Tuning setting allows the overall pitch of the KCP90 digital piano to be raised and lowered in 0.5 Hz steps, and may therefore prove useful when playing with other instruments.

1. Selecting the Tuning setting

Press the ▲ or ▼ MENU buttons to select the Tuning setting.

The current Tuning setting value will be shown in the LCD display.

```
1. Tuning
   = 440.0
```

▲

MENU

▼

2. Adjusting the Tuning value

Press the ▲ or ▼ VALUE buttons to increase or decrease the value of the Tuning setting in 0.5 Hz steps.

* The Tuning value can be adjusted within the range of 427.0 - 453.0 Hz.

```
1. Tuning
   = 442.5
```

▲

VALUE

▼
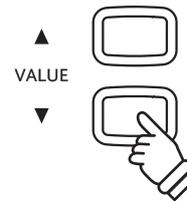
Press a SOUND SELECTION button to exit the Tuning setting and return to normal operation.

* The adjusted Tuning value can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

Settings

2 Damper Resonance

Depressing the sustain pedal of an acoustic piano raises all dampers, allowing the strings to vibrate freely. When a note or chord is played on the piano with the sustain pedal depressed, not only will the strings of the notes played vibrate, but also the strings of other notes, vibrating in sympathetic resonance.

The KCP90 digital piano recreates this phenomenon, with the Damper Resonance setting allowing the volume of this resonance to be adjusted.

1. Selecting the Damper Resonance setting

Press the ▲ or ▼ MENU buttons to select the Damper Resonance setting.

The current Damper Resonance setting value will be shown in the LCD display.

```
2. Damper Resonance
   = 5
```

2. Adjusting the Damper Resonance value

Press the ▲ or ▼ VALUE buttons to increase or decrease the value of the Damper Resonance setting.

* The Damper Resonance value can be adjusted within the range of 1-10.
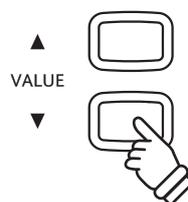
```
2. Damper Resonance
   = 8
```

Press a SOUND SELECTION button to exit the Damper Resonance setting and return to normal operation.

* The adjusted Damper Resonance value can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

Settings

3 Temperament

The Temperament setting allows the tuning system used by the KCP90 digital piano to be changed from the modern 'Equal Temperament' standard to one of the various musical temperaments popularised during the Renaissance and Baroque periods.

■ Available Temperament types

Temperament type	Description
Equal Temperament (piano) (Equal P.only)	This is the default temperament. When a piano sound is selected, the tuning will be stretched like an acoustic piano (equal temperament). * If any other type of sound is selected, the tuning will be set to equal temperament (flat).
Pure Temperament (major) (Pure Major) Pure Temperament (minor) (Pure Minor)	This temperament, which eliminates dissonances for thirds and fifths, is still popular in choral music because of its perfect harmony. Any key modulation will result in dissonances. * The key of the temperament, and major/minor setting must be correctly matched.
Pythagorean Temperament (Pythagorean)	This temperament, which uses mathematical ratios to eliminate dissonance for fifths, is very limited for use with chords, but produces very characteristic melodic lines.
Meantone Temperament (Meantone)	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 played with equal temperament.
Werckmeister III Temperament (Werkmeister) Kirnberger III Temperament (Kirnberger)	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) (Equal Flat)	This is an 'unstretched' equal temperament that divides the scale into twelve equal semi-tones. It 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 (Equal Stretch)	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.
Arabic Temperaments (Rast, Nairuz, Bayati/Saba, Hijaz, Sikah)	Some oriental scales, including the Arabic, are characterised for "quarter-tone" which is half of a half-tone (50 cents). This makes the music sound very different from traditional western music. The KCP90 digital piano provides a selection of popular Arabic scales: Rast, Nairuz, Bayati/Saba, Hijaz, and Sikah. **Rast:** Notes B and E are a quartertone lower than the Occidental Scale. **Nairuz:** Notes A and E are a quartertone lower than the Occidental Scale. **Bayati/Saba:** Note D is a quartertone lower than the Occidental Scale. **Hijaz:** Note A is a quartertone lower than the Occidental Scale. **Sikah:** Notes C and G are a quartertone lower than the Occidental Scale.

Settings

1. Selecting the Temperament setting

Press the ▲ or ▼ MENU buttons to select the Temperament setting.

The current Temperament setting type will be shown in the LCD display.

```
3. Temperament
   = Equal(P.only)
```

2. Changing the Temperament type

Press the ▲ or ▼ VALUE buttons to cycle through the different temperament types.

```
3. Temperament
   = Meantone
```
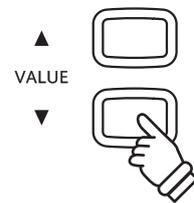
Press a SOUND SELECTION button to exit the Temperament setting and return to normal operation.

* The selected Temperament type can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

4 Key of Temperament

The Key of Temperament setting allows the key of the selected temperament to be specified. When using a temperament other than equal temperament, use this setting to specify the key signature of the piece.

* This setting will only affect the 'balance' of the tuning system, the pitch of the keyboard will remain unchanged.

1. Selecting the Key of Temperament setting

Press the ▲ or ▼ MENU buttons to select the Key of Temperament setting.

The current Key of Temperament setting type will be shown in the LCD display.

```
4. Key of Temperament
   = C
```

2. Changing the Key of Temperament

Press the ▲ or ▼ VALUE buttons to select the desired Key of Temperament.

* The Key of Temperament key can be set within the range of C-B
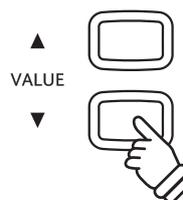
```
4. Key of Temperament
   = F
```

Press a SOUND SELECTION button to exit the Key of Temperament setting and return to normal operation.

* The selected Key of Temperament can be stored to the KCP90's Registration memories. Please refer to page 22 for more information.

5 MIDI Channel (transmit)

The MIDI Channel setting allows the transmit channel to be specified.

1. Selecting the MIDI Channel setting

Press the ▲ or ▼ MENU buttons to select the MIDI Channel setting.

The current MIDI Channel setting will be shown in the LCD display.

```
5. MIDI Channel
   =  1ch (Transmit)
```

2. Changing the MIDI Channel

Press the ▲ or ▼ VALUE buttons to change the MIDI Channel setting.

* The MIDI Channel can be set within the range of 1-16.
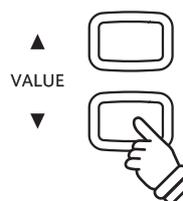
```
5. MIDI Channel
   =  5ch (Transmit)
```

Press a SOUND SELECTION button to exit the MIDI Channel setting and return to normal operation.

Settings

41

6 Transmit MIDI Program Change

The Send Program Change Number setting determines whether the KCP90 digital piano will transmit program change information when sounds are changed.

■Transmit MIDI Program Change settings

Transmit PGM#	Explanation
On (default)	The instrument will transmit program change numbers when changing sounds.
Off	The instrument will NOT transmit program change numbers when changing sounds.

1. Selecting the Transmit MIDI Program Change setting

Press the ▲ or ▼ MENU buttons to select the Transmit MIDI Program Change setting.

The current Transmit MIDI Program Change setting will be shown in the LCD display.

```
6. Transmit PGM
   = On
```

▲
MENU
▼
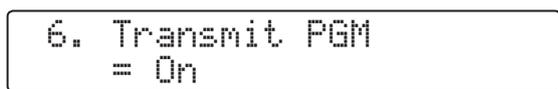
2. Changing the Transmit MIDI Program Change setting

Press the ▲ or ▼ VALUE buttons to turn the Transmit MIDI Program Change setting On/Off.

```
6. Transmit PGM
   = Off
```

▲
VALUE
▼
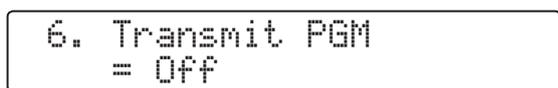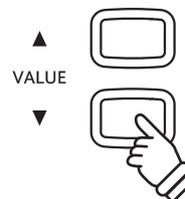
Press a SOUND SELECTION button to exit the Transmit MIDI Program Change setting and return to normal operation.

Settings

7 Local Control

The Local Control setting determines whether the instrument will play an internal sound when the keys are pressed. This setting is useful when using the KCP90 digital piano to control an external MIDI device.

■ Local Control settings

Local Control	Explanation
On (default)	The instrument will play an internal sound and transmit information to an external MIDI device.
Off	The instrument will transmit information to an external MIDI device only.

1. Selecting the Local Control setting

Press the ▲ or ▼ MENU buttons to select the Local Control setting.

The current Local Control setting will be shown in the LCD display.

```
7. Local Control
   = On
```

▲
MENU
▼

2. Changing the Local Control setting

Press the ▲ or ▼ VALUE buttons to turn the Local Control setting On/Off.

```
7. Local Control
   = Off
```

▲
VALUE
▼
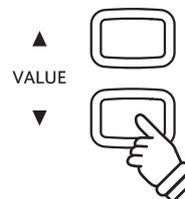
Press a SOUND SELECTION button to exit the Local Control setting and return to normal operation.

Settings

8 Channel Mute

The Channel Mute setting determines which MIDI channels (1-16) are activated to receive MIDI information. Each MIDI channel can be activated or deactivated individually.

■ Channel Mute settings

Channel Mute	Explanation
Play (default)	The instrument will receive MIDI information on the specified MIDI channel.
Mute	The instrument will not receive MIDI information on the specified MIDI channel.

1. Selecting the Channel Mute setting

Press the ▲ or ▼ MENU buttons to select the Channel Mute setting.

The current Channel Mute setting will be shown in the LCD display.

```
8. Channel Mute
   Channel 1 = Play
```

2. Changing the Channel Mute setting

Press the ▲ or ▼ VALUE buttons to change the Channel Mute setting to Mute/Play.
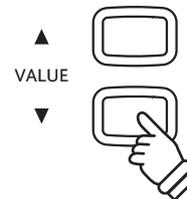
```
8. Channel Mute
   Channel 1 = Mute
```

Press a SOUND SELECTION button to exit the Channel Mute setting and return to normal operation.

Settings

44

9 Send Program Change Number

The Send Program Change Number function is used to send a Program Change Number (1-128) to the connected MIDI device.

* Please refer to the Program Change Number List on page 54.

1. Selecting the Send Program Change Number function

Press the ▲ or ▼ MENU buttons to select the Send Program Change Number function.

The Send Program Change Number function will be shown in the LCD display.

```
9. Send PGM#
   =   1 (UP+DOWN)
```

2. Selecting the Program Change Number to send

Press the ▲ or ▼ VALUE buttons to select the Program Change Number to be sent.

* The Program Change Number can be set within the range of 1-128.
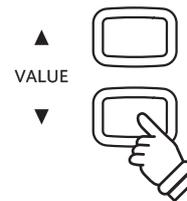
```
9. Send PGM#
   =  52 (UP+DOWN)
```

3. Sending the Program Change Number

Press the ▲ and ▼ VALUE simultaneously to send the selected Program Change Number.

A confirmation message will be shown in the LCD display to indicate that the Program Change Number has been sent.
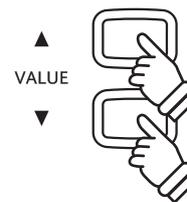
```
9. Send PGM#
   = PGM# Sent!
```

Press a SOUND SELECTION button to exit the Send Program Change Number function and return to normal operation.

Settings

10 Auto Power Off

The KCP90 digital piano features a power saving function that can be used to automatically turn off the instrument after a specified period of inactivity.

* This setting will be stored automatically, and recalled every time the instrument is turned on.

∎ Auto Power Off settings

Auto Power Off setting	Explanation
Disabled	The Auto Power Off function is disabled.
30 min.	The instrument will turn off automatically after 30 minutes of inactivity.
60 min.	The instrument will turn off automatically after 60 minutes of inactivity.
120 min.	The instrument will turn off automatically after 120 minutes of inactivity.

1. Selecting the Auto Power Off setting

Press the ▲ or ▼ MENU buttons to select the Auto Power Off setting.

The current Auto Power Off setting will be shown in the LCD display.

```
10. Auto Power Off
    = Disabled
```

2. Changing the Auto Power Off setting

Press the ▲ or ▼ VALUE buttons to change the Auto Power Off setting.

* The Auto Power Off setting will be stored automatically, and recalled every time the instrument is turned on.
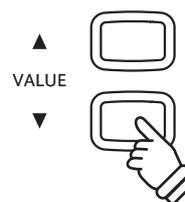
```
10. Auto Power Off
    = 30 min.
```

Press a SOUND SELECTION button to exit the Auto Power Off setting and return to normal operation.

Settings

USB MIDI (USB to Host connector)

The KCP90 digital piano features a 'USB to Host' type connector, allowing the instrument to be connected to a computer using an inexpensive USB cable and utilised as a MIDI device. Depending on the type of computer and operating system installed, additional driver software may be required for USB MIDI communication to function correctly.

■ USB MIDI driver

Operating System	USB MIDI Driver Support
Windows ME Windows XP (no SP, SP1, SP2, SP3) Windows XP 64-bit Windows Vista (SP1, SP2) Windows Vista 64-bit (SP1, SP2) Windows 7 (no SP, SP1) Windows 7 64-bit	**Additional USB MIDI driver software NOT required.** The standard (built-in) Windows USB MIDI driver will be installed automatically when the instrument is connected to the computer. * After driver installation, ensure that the 'USB Audio Device' (Windows ME/Windows XP) or 'USB-MIDI' (Windows Vista/Windows 7) device is correctly selected in the application software.
Windows 98 se Windows 2000 Windows Vista (no SP)	**Additional USB MIDI driver software required.** Please download the USB MIDI driver from the Kawai Japan website: ➡ http://www.kawai.co.jp/english * After driver installation, ensure that the 'KAWAI USB MIDI' device is correctly selected in the application software.
Windows Vista 64-bit (no SP)	**USB MIDI is not supported.** Please upgrade to service pack 1 or service pack 2.
Mac OS X	**Additional USB MIDI driver software NOT required.** The standard (built-in) Mac OS X USB MIDI driver will be installed automatically when the instrument is connected to the computer.
Mac OS 9	**USB MIDI is not supported.**

■ USB MIDI information

■ Ensure that the instrument is turned OFF before attempting to connect the USB MIDI cable.

■ When connecting the instrument to a computer using the USB MIDI port, there may be a short delay before communications begin.

■ If the instrument is connected to a computer via a USB hub and USB MIDI communication becomes unreliable/unstable, please connect the USB MIDI cable directly to the one of the computer's USB ports.

■ Disconnecting the USB MIDI cable suddenly, or turning the instrument on/off while using USB MIDI may cause computer instability in the following situations:

  – while installing the USB MIDI driver
  – while starting up the computer
  – while MIDI applications are performing tasks
  – while the computer is in energy saver mode

■ If there are any further problems experienced with USB MIDI communication while the instrument is connected, please double-check all connections and relevant MIDI settings in the computer's operating system.

* '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.

Settings

Assembly Instructions

Please read these assembly instructions thoroughly before attempting to assemble the KCP90 digital piano.

Please ensure that two or more people work on assembling the KCP90 digital piano, especially when lifting the main body of the instrument onto the stand in step 3.

■Included parts

Before attempting to assemble the KCP90 digital piano, ensure that all parts below are included.
A Phillips-head screwdriver (not included) will also be required in order to assemble the instrument.
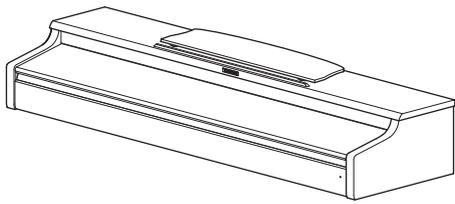
① Main body
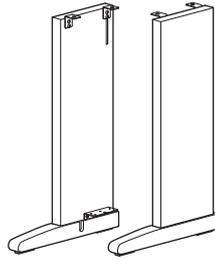
② Side panel
(left, right)
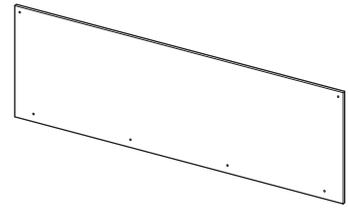
③ Back board
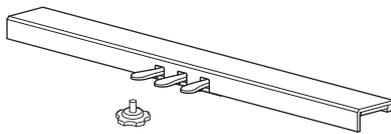
④ Pedal board
Pedal support bolt
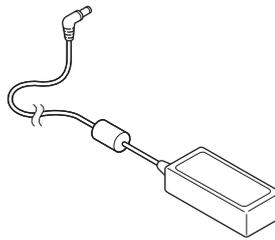
⑤ AC/DC Adaptor
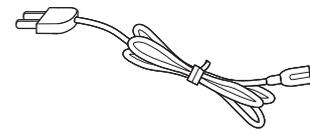
⑥ Power cable

Screw set

⑦ Screw (with flat washer and spring washer)
x 4

⑧ Tapping screw (long, black) x 2

⑨ Tapping screw (mid, black) x 4

⑩ Tapping screw (short, silver) x 4
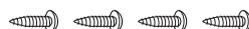
1. Assembling the side panels ②, and pedal board ④

Unfasten and extend the pedal connection cable attached to the bottom of the pedal board ④.

Attach the pedal board ④ to the left and right side panels ② using the alignment screws located on either end of the pedal board. Ensure that the correct side panel is used for the left and right side.

Ensure that the pedal board and side panels make close contact, and that there are no large gaps between the assembled parts.

Insert the four short black tapping screws ⑩ into the holes as shown, and securely fasten the pedal board to the and left and right side panels.
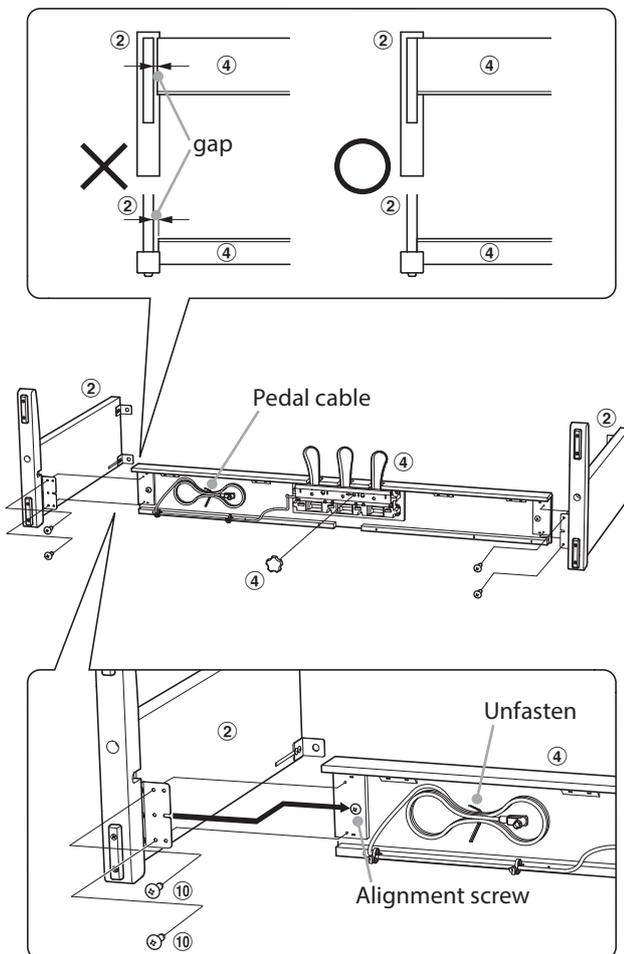
2. Attaching the back board ③

Allow the assembled pedal board and side panels to stand upright (vertically) on the floor.

* Ensure that the adjustor bolt is attached to the pedal board.

Temporarily fix the back board ③ to the left and right side panels using the two long black tapping screws ⑧, leaving a tightening allowance of approximately 1-2 mm.

Then attach the bottom of the back board to the pedal board using the four short black tapping screws ⑨.
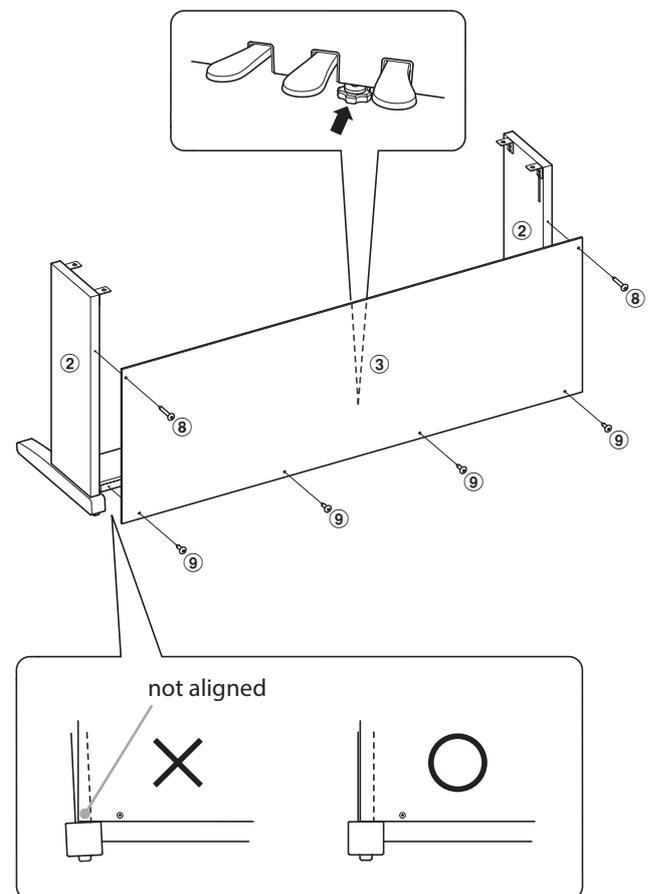
3. Mounting the main body ①

> ⚠ **Ensure that two or more people undertake the following step of the assembly process.**

Lift the main body ① and carefully place it onto the stand.

Position the main body towards the front of the stand, so that the metal fitting holes are visible when viewed from above.

Gently slide the main body backwards until the base engages with the fixings inside the side panels and locks into place.

> ⚠ **When lifting the main body onto the stand, be careful not to catch/trap hands and fingers.**

Secure the main body to the stand from below, using the four screws (with the flat washer and spring washer) ⑦.

> ⚠ **Tighten all screws securely to ensure that the main body is firmly attached to the stand. Failing to do so may result in serious injury.**
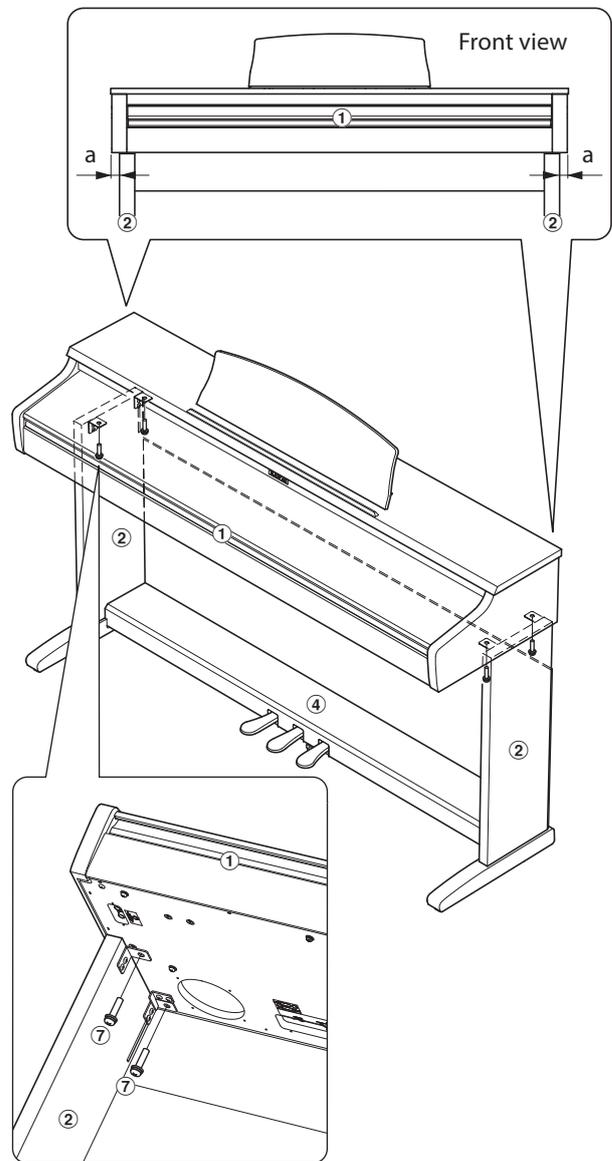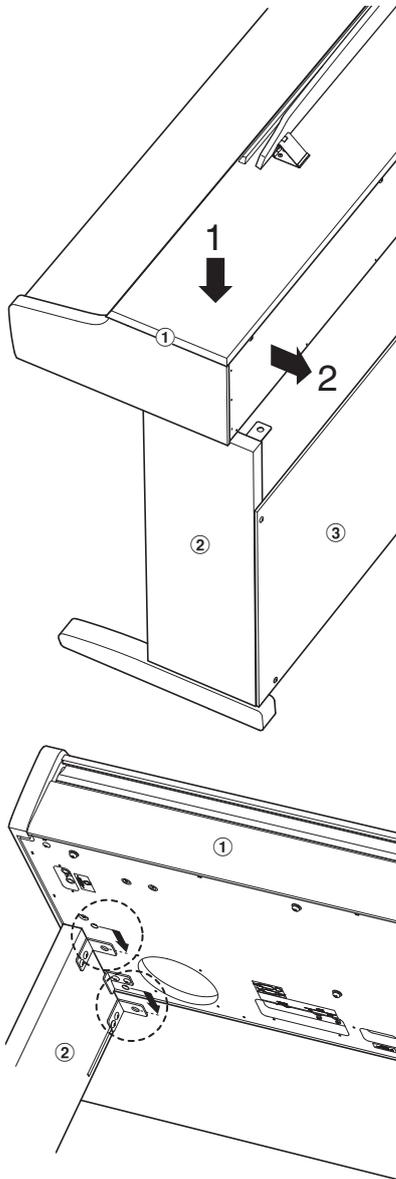
4. Connecting the pedal cable and AC/DC adaptor

Connect the pedal cable to the PEDAL terminal located on the underside of the main body.

Connect the AC/DC adaptor ⑤ to the DC IN terminal.

Use the binders to fix the cables in place.

Binder

* Note the direction

Binder
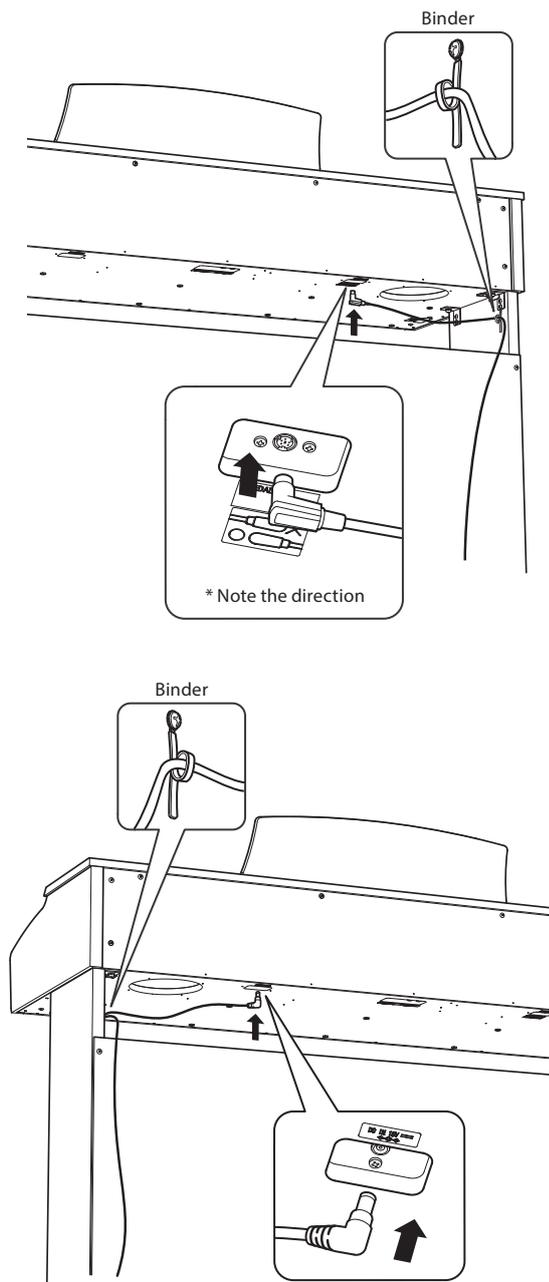
5. Adjusting the pedal support bolt

Turn the pedal support bolt anti-clockwise until it makes contact with the floor and supports the pedals firmly.
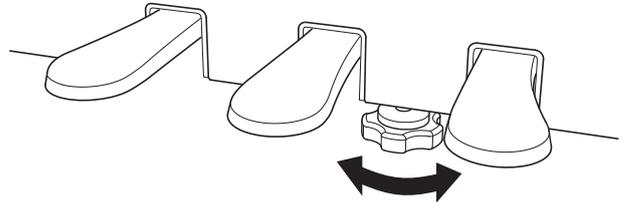
⚠ **When moving the instrument, always adjust or remove the pedal support bolt, then readjust when the instrument is in its new position.**

Connecting to Other Devices

⚠️ **Before connecting the KCP90 digital piano to other devices, ensure that the power to both the instrument and the other device is turned off. If connections are established while the power is turned on, extraneous noise that can damage the KCP90 digital piano may activate the instrument's amplifier protection circuit, preventing any sound from being produced. If this occurs, turn the power off and then on again to reset the amplifier protection circuit.**

USB type 'A'

Connect the instrument to a computer to send or receive MIDI data.

USB type 'B'

R

L / MONO

Connect the instrument to external speakers, amplifiers, mixers, etc.

USB to HOST　　　**R　L/MONO**
LINE OUT
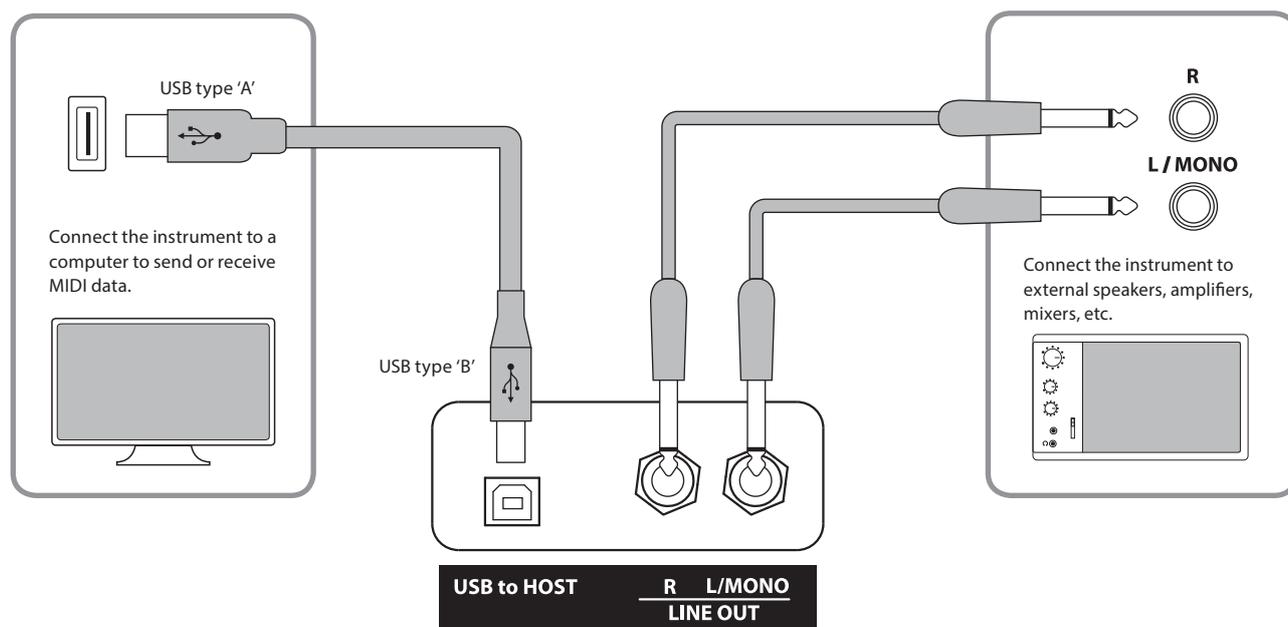
▉ LINE OUT jacks (1/4" phone jack)

These jacks provide stereo output of the instrument's sound to external speakers, amplifiers, mixers, recording devices, and similar equipment. Mono signals will be output only if a cable is connected to the L/MONO jack.

▉ USB to Host port ('B' type)

This USB port is used to connect the KCP90 digital piano to a computer using an inexpensive USB cable. When connected, the instrument can be used as a standard MIDI device, allowing it to send a receive MIDI data. Connect a 'B' type USB connector to the instrument, and an 'A' type USB connector to the computer.

■ Troubleshooting

	Problem	Possible Cause and Solution	Page no.
Power	The instrument does not turn on.	Check that the AC power cable is firmly attached to the instrument, and connected to an AC outlet.	p. 12
Sound	The instrument is turned on, however no sound is produced when the keys are played.	Check that the VOLUME slider is not set to the lowest position.	p. 12
		Check that a pair of headphones (or headphone adaptor plug) are not connected to the PHONES jacks.	p. 12
		Check that the 'Local Control' MIDI setting is set to 'On'.	p. 43
	The sound distorts when playing at very loud volume levels.	Check that the VOLUME slider is set to an appropriate level, reducing the volume if excessive distortion is heard.	p. 12
Pedals	The pedals are unreliable or do not function at all.	Check that the pedal cable is firmly connected to the instrument.	p. 51
	When depressing a pedal, the pedal board flexes and is not firm.	Check that the pedal support bolt is fully extended.	p. 13
USB (MIDI)	The instrument is connected to the computer using a USB cable, however the software does not respond to key presses.	Check that a USB MIDI driver is installed on the computer.	p. 47
		Check that 'USB Audio Device' or 'KAWAI USB MIDI' is selected in the software's input/output device settings.	p. 47

Appendix

Program Change Number List

Sound type	Prg	Bank MSB	LSB
PIANO			
Concert Grand	1	121	0
Concert Grand 2	1	95	16
Studio Grand	1	121	1
Studio Grand 2	1	95	17
Mellow Grand	1	121	2
Jazz Grand	1	95	8
Modern Piano	2	121	0
Honky Tonk	4	121	0
E. PIANO			
Classic E.Piano	5	95	3
60's E.Piano	5	121	3
Modern E.Piano	6	121	0
Modern E.Piano 2	6	121	1
E.Piano Dolce	5	95	2
Crystal E.Piano	6	95	1
E.Piano Legend	6	121	3
Classic E.Piano 2	5	121	0
STRINGS			
Beautiful Strings	45	95	1
Warm Strings	49	95	1
Warm Strings 2	49	95	8
String Ensemble	49	121	0
Passionate Violin	41	95	2
Cello	43	121	0
Pizzicato	46	121	0
Harp	47	121	0
ORGAN			
Ballad Organ	17	95	5
Drawbar Organ	17	121	0
Jazz Organ	18	121	0
Drawbar Organ 2	17	121	3
8' & 4' Principle	20	95	24
Church Organ	20	121	0
Small Ensemble	20	95	8
Church Organ 2	20	121	1
WOODWIND & BRASS			
Jazz Clarinet	72	95	9
Flute	74	95	12
Jazz Alto	66	95	12
Ballad Tenor	67	95	6
Trumpet	57	95	12
Lead Flugel Horn	57	95	14
Ballad Trombone	58	95	3
Brass	62	95	8

Sound type	Prg	Bank MSB	LSB
GUITAR & BASS			
Jazz Guitar	27	95	6
Ballad Guitar	26	95	6
Nylon Guitar	25	95	2
Blues Lick	31	95	1
Acoustic Bass	33	121	0
Finger Bass	34	121	0
Fretless Bass	36	121	0
Ac Bass & Ride	33	95	1
OTHERS 1: FEATURE			
Yangqin	16	95	2
Guzheng	108	95	1
Erhu	111	95	8
Erhu(Solo)	111	95	9
Dizi	78	95	3
OTHERS 2: HARPSICHORD			
Harpsichord	7	121	0
Harpsichord 2	7	121	3
Harpsichord Octave	7	121	1
Wide Harpsichord	7	121	2
Clavi	8	121	0
Synth Clavi	8	121	1
OTHERS 3: MALLET			
Vibraphone	12	121	0
Celesta	9	121	0
Music Box	11	121	0
Marimba	13	121	0
Barafon	13	95	4
Slit Drum	13	95	3
Xylophone	14	121	0
Glockenspiel	10	121	0
Tubular Bells	15	121	0
Church Bells	15	121	1
Carillon	15	121	2
Dulcimer	16	121	0
Wide Vibraphone	12	121	1
Wide Marimba	13	121	1
OTHERS 4: PIANO			
Rock Grand	2	121	1
Wide Honky Tonk	4	121	1
Electric Grand	3	121	0
Electric Grand 2	3	121	1

Appendix

Sound type	Prg	Bank MSB	Bank LSB
OTHERS 5: E.PIANO			
Classic E.Piano 3	5	121	1
Classic E.Piano 4	5	121	2
Tremolo E.Piano	5	95	1
Modern E.Piano 3	6	121	2
E.Piano Phase	6	121	4
New Age E.Piano	6	95	3
OTHERS 6: DRAWBAR			
Hi-Lo	17	95	3
Jazzer	18	95	1
Be 3	17	95	1
Soft Solo	17	95	8
Drawbar Organ 3	17	95	2
Drawbar Organ 4	17	121	1
60's Organ	17	121	2
Electronic Organ	17	95	9
Be Nice	17	95	7
Percussive Organ	18	121	1
Percussive Organ 2	18	121	2
Rock Organ	19	121	0
OTHERS 7: CHURCH ORGAN			
Principle Pipe	20	95	22
Church Organ 3	20	121	2
Full Pipes	20	95	9
Theater Organ	20	95	1
Harmonium	21	95	11
Reed Organ	21	121	0
Puff Organ	21	121	1
OTHERS 8: ACCORDIAN			
Accordion	22	121	1
French Accordion	22	121	0
French Accordion 2	22	95	1
Accordion 2	22	95	2
Tango Accordion	24	121	0
Jazzy Harmonica	23	95	6
Harmonica	23	121	0
OTHERS 9: GUITAR			
Acoustic Guitar	26	95	5
Modern Jazz Gtr	27	95	10
Mandolin	26	95	18
Finger Nylon Gtr	25	95	4
Nylon Acoustic	25	121	0
Nylon Acoustic 2	25	121	2
Nylon Acoustic 3	25	121	3
Ukulele	25	121	1

Sound type	Prg	Bank MSB	Bank LSB
OTHERS 9: GUITAR (cont.)			
Acoustic Guitar 2	26	95	11
12 String	26	121	1
Folk Guitar	26	95	8
Steel Guitar	26	121	0
Steel String	26	121	3
Standard Mandolin	26	121	2
Balalaika	26	95	7
Hawaiian Guitar	27	95	1
Pedal Steel	27	121	1
Std. Jazz Guitar	27	121	0
British	28	95	7
College	28	95	6
Cutting Guitar	28	95	3
Cutting Guitar ES	28	95	5
Electric Guitar	28	121	0
Electric Guitar 2	28	121	1
Electric Guitar 3	29	121	2
Electric Guitar 4	28	95	2
Rhythm Guitar	28	121	2
Country Lead	29	121	3
Cutting Guitar 2	29	121	1
Muted Electric	29	121	0
Dynamic Overdrive	30	121	1
Overdrive	30	121	0
Dist Feedback	31	121	1
Dist Rhythm	31	121	2
Distortion	31	121	0
Elec Gtr Harmonics	32	121	0
Guitar Feedback	32	121	1
OTHERS 10: BASS			
Acoustic Bass 2	33	95	2
Acoustic Bass 3	33	95	4
Acoustic Bass 4	33	95	5
Electric Bass	34	95	1
Finger Bass 2	34	95	5
Finger Slap Bass	34	121	1
Finger Bass 3	34	95	6
Pick Bass	35	121	0
Octave Fretless	36	95	1
Slap Bass	37	121	0
Slap Bass 2	38	121	0
Clavi Bass	39	121	3
Hammer Bass	39	121	4
Synth Bass	39	121	0

Program Change Number List

Sound type	Prg	Bank MSB	Bank LSB
OTHERS 10: BASS (cont.)			
Synth Bass 3	39	121	2
Warm Synth Bass	39	121	1
Attack Bass	40	121	3
Rubber Bass	40	121	2
Synth Bass 2	40	121	0
Synth Bass 4	40	121	1
OTHERS 11: STRINGS & ORCHESTRA INSTRUMENT			
String Ensemble 2	50	121	0
Warm Strings 3	51	95	2
Synth Strings	51	121	0
Synth Strings 3	51	121	1
Synth Strings 2	52	121	0
Slow Violin	41	121	1
Violin	41	121	0
Viola	42	121	0
Slow Cello	43	95	1
Contrabass	44	121	0
Tremolo Strings	45	121	0
Octave Strings	49	95	4
60's Strings	49	121	2
Mono Strings	49	95	3
Strings & Brass	49	121	1
Celtic Harp	47	121	1
Timpani	48	121	0
OTHERS 12: REED			
Soprano Sax	65	121	0
Soft Alto	66	95	7
Alto Sax	66	121	0
Alto Sax 2	66	95	4
Tenor Sax	67	121	0
Breathy Tenor Sax	67	95	1
Baritone Sax	68	121	0
Saxes	66	95	11
Oboe	69	121	0
English Horn	70	121	0
Bassoon	71	121	0
Clarinet	72	121	0
OTHERS 13: FLUTE & PIPE			
Piccolo	73	121	0
Ballad Flute	74	95	13
Standard Flute	74	121	0
Recorder	75	121	0
Recorder 2	75	95	1
Smooth Pan Flute	76	95	4
Pan Flute	76	121	0
Blown Bottle	77	121	0

Sound type	Prg	Bank MSB	Bank LSB
OTHERS 13: FLUTE & PIPE (cont.)			
Shakuhachi	78	121	0
Hulusi	78	95	4
Hulusi (Solo)	78	95	5
Whistle	79	121	0
Ocarina	80	121	0
OTHERS 14: BRASS			
Ballad Trumpet	57	95	13
Trombone	58	95	8
Lead Trombone	58	95	2
Solo Trumpet	57	121	1
Standard Trumpet	57	121	0
Flugel Horn	57	95	1
Flugel & Tenor	57	95	18
Standard Trombone	58	121	0
Sentimental Bone	58	95	7
Bright Trombone	58	121	2
Trombone 2	58	121	1
Tuba	59	121	0
Muted Trumpet	60	121	0
Muted Trumpet 2	60	121	1
Warm French Horn	61	121	1
French Horns	61	121	0
Brass Section	62	121	0
Brass Section 2	62	121	1
Synth Brass	63	121	0
Synth Brass 2	64	121	0
Synth Brass 3	63	121	1
Synth Brass 4	64	121	1
Jump Brass	63	121	3
Analog Brass	63	121	2
Analog Brass 2	64	121	2
OTHERS 15: CHOIR & HIT			
Choir Ooh/Aah	54	95	53
Choir Aahs	53	121	0
Choir Aahs 2	53	121	1
Voice Oohs	54	121	0
Humming	54	121	1
Voice	86	121	0
Choir	92	121	0
Synth Vocal	55	121	0
Analog Voice	55	121	1
Orchestra Hit	56	121	0
Euro Hit	56	121	3
Bass Hit Plus	56	121	1
6th Hit	56	121	2

Sound type	Prg	Bank MSB	Bank LSB
OTHERS 16: SYNTH LEAD			
Square Lead	81	95	3
Square	81	121	0
Sine	81	121	2
Square 2	81	121	1
Classic Synth	82	121	0
Classic Synth 2	82	121	1
Lead	82	121	2
Classic Synth 3	82	121	3
Sequenced Analog	82	121	4
Saw Pad	82	95	3
Caliope	83	121	0
Chiff	84	121	0
Charang	85	121	0
Wire Lead	85	121	1
Fifth	87	121	0
Bass & Lead	88	121	0
Soft Wire Lead	88	121	1
Polysynth	91	121	0
Polysynth 2	91	95	1
OTHERS 17: SYNTH PAD			
New Age	89	121	0
New Age 2	89	95	1
Warm Pad	90	121	0
Sine Pad	90	121	1
Itopia	92	121	1
Bowed	93	121	0
Metallic	94	121	0
Metallic 2	94	95	1
Halo	95	121	0
Halo 2	95	95	1
Sweep	96	121	0
Multi Sweep	96	95	1
Warm Sweep	96	95	2
OTHERS 18: SYNTH SFX			
Rain Pad	97	121	0
Soundtrack	98	121	0
Crystal	99	121	0
Synth Mallet	99	121	1
Atmosphere	100	121	0
Brightness	101	121	0
Brightness 2	101	95	1
Goblin	102	121	0
Echo Bell	103	121	1
Echoes	103	121	0
Echo Pan	103	121	2
Sci-Fi	104	121	0

Sound type	Prg	Bank MSB	Bank LSB	
OTHERS 19: ETHNIC				
Sitar	105	121	0	
Sitar 2	105	121	1	
Tanpura	105	95	1	
Banjo	106	121	0	
Shamisen	107	121	0	
Koto	108	121	0	
Taisho Koto	108	121	1	
Pipa	107	95	2	
Guqin	108	95	2	
Kalimba	109	121	0	
Bag Pipe	110	121	0	
Jinghu	111	95	10	
Jinghu (Solo)	111	95	11	
Suona	112	95	3	
Suona (Solo)	112	95	4	
Fiddle	111	121	0	
Shanai	112	121	0	
OTHERS 20: PERCUSSION				
Ethnic Set	1	120	0	*1
Gamelan	113	95	3	
Steel Drums	115	121	0	
Tinkle Bell	113	121	0	
Sleigh Bells	113	95	1	
Agogo	114	121	0	
Woodblock	116	121	0	
Castanet	116	121	1	
Concert Bass Drum	117	121	1	
Taiko Drums	117	121	0	
Melodic Toms	118	121	0	
Melodic Toms 2	118	121	1	
Synth Drum	119	121	0	
Rhythm Box Tom	119	121	1	
Electric Drum	119	121	2	
Cymbal Roll	120	95	3	
Gong	120	95	5	
Reverse Cymbal	120	121	0	
Cutting Noise ES	121	95	1	
Gtr Cutting Noise	121	121	1	
Ac Bass Slap	121	121	2	
Gtr Fret Noise	121	121	0	
Breath Noise	122	121	0	
Flute Key Click	122	121	1	

Program Change Number List

Sound type	Prg	Bank MSB	Bank LSB
OTHERS 21: SFX			
SFX Set	57	120	0
Nature	123	95	2
Seashore	123	121	0
Stream	123	121	4
Rain	123	121	1
Thunder	123	121	2
Wind	123	121	3
Bubble	123	121	5
Dog Barking	124	121	1
Horse Gallop	124	121	2
Bird Tweet	124	121	0
Bird Tweet 2	124	121	3
Wind Chime	125	121	5
Telephone	125	121	0
Telephone 2	125	121	1
Door Creak	125	121	2
Door Slam	125	121	3
Scratch	125	121	4
Helicopter	126	121	0
Siren	126	121	5
Car Passing	126	121	3
Car Stopping	126	121	2
Car Engine	126	121	1
Car Crash	126	121	4
Train	126	121	6
Jet Plane	126	121	7
Starship	126	121	8
Burst Noise	126	121	9
Heartbeat	127	121	4
Applause	127	121	0
Laughing	127	121	1
Screaming	127	121	2
Foot Step	127	121	5
Punch	127	121	3
Gunshot	128	121	0
Explosion	128	121	3
Machine Gun	128	121	1
Laser Gun	128	121	2

Sound type	Prg	Bank MSB	Bank LSB	
OTHERS 22: DRUM KITS				
Stereo Ambience Set	1	120	0	*2
Stereo Pop Set	1	120	0	*3
Stereo Ballad Set	1	120	0	*4
Dance Set	1	120	0	*5
Standard Set	1	120	0	
Room Set	9	120	0	
Power Set	17	120	0	
Electronic Set	25	120	0	
Analog Set	26	120	0	
Jazz Set	33	120	0	
Brush Set	41	120	0	
Orchestra Set	49	120	0	

*1 Exclusive message (F0, 40, 7F, 33, 04, 07, 10, ch, 7F, 7A, F7) is required after the Program Change message.

*2 Exclusive message (F0, 40, 7F, 33, 04, 07, 10, ch, 7F, 02, F7) is required after the Program Change message.

*3 Exclusive message (F0, 40, 7F, 33, 04, 07, 10, ch, 7F, 04, F7) is required after the Program Change message.

*4 Exclusive message (F0, 40, 7F, 33, 04, 07, 10, ch, 7F, 05, F7) is required after the Program Change message.

*5 Exclusive message (F0, 40, 7F, 33, 04, 07, 10, ch, 7F, 1A, F7) is required after the Program Change message.

'ch' is the MIDI channel number (00~0F)

Drum Sound Mapping List

		STANDARD SET	ROOM SET	POWER SET	ELECTRONIC SET
	C#				
	D				
	D#	High Q	High Q	High Q	High Q
	E	Slap	Slap	Slap	Slap
	F	Scratch Push	Scratch Push	Scratch Push	Scratch Push
	F#	Scratch Pull	Scratch Pull	Scratch Pull	Scratch Pull
	G	Sticks	Sticks	Sticks	Sticks
	G#	Square Click	Square Click	Square Click	Square Click
	A	Metronome Click	Metronome Click	Metronome Click	Metronome Click
	A#	Metronome Bell	Metronome Bell	Metronome Bell	Metronome Bell
	B	Acoustic Bass Drum	Acoustic Bass Drum	Acoustic Bass Drum	Acoustic Bass Drum
C1	C	Bass Drum 1	Bass Drum 1	Power Kick Drum	Electric Bass Drum
	C#	Side Stick	Side Stick	Side Stick	Side Stick
	D	Acoustic Snare	Acoustic Snare	Power Snare Drum	Electric Snare 1
	D#	Hand Clap	Hand Clap	Hand Clap	Hand Clap
	E	Electric Snare	Electric Snare	Electric Snare	Electric Snare 2
	F	Low Floor Tom	Room Low Tom 2	Power Low Tom 2	Electric Low Tom 2
	F#	Closed Hi-hat	Closed Hi-hat	Closed Hi-hat	Closed Hi-hat
	G	High Floor Tom	Room Low Tom 1	Power Low Tom 1	Electric Low Tom 1
	G#	Pedal Hi-hat	Pedal Hi-hat	Pedal Hi-hat	Pedal Hi-hat
	A	Low Tom	Room Mid Tom 2	Power Mid Tom 2	Electric Mid Tom 2
	A#	Open Hi-hat	Open Hi-hat	Open Hi-hat	Open Hi-hat
	B	Low-Mid Tom	Room Mid Tom 1	Power Mid Tom 1	Electric Mid Tom 1
C2	C	High-Mid Tom	Room Hi Tom 2	Power Hi Tom 2	Electric Hi Tom 2
	C#	Crash Cymbal 1	Crash Cymbal 1	Crash Cymbal 1	Crash Cymbal 1
	D	Hi Tom	Room Hi Tom 1	Power Hi Tom 1	Electric Hi Tom 1
	D#	Ride Cymbal 1	Ride Cymbal 1	Ride Cymbal 1	Ride Cymbal 1
	E	Chinese Cymbal	Chinese Cymbal	Chinese Cymbal	Reverse Cymbal
	F	Ride Bell	Ride Bell	Ride Bell	Ride Bell
	F#	Tambourine	Tambourine	Tambourine	Tambourine
	G	Splash Cymbal	Splash Cymbal	Splash Cymbal	Splash Cymbal
	G#	Cowbell	Cowbell	Cowbell	Cowbell
	A	Crash Cymbal 2	Crash Cymbal 2	Crash Cymbal 2	Crash Cymbal 2
	A#	Vibra-slap	Vibra-slap	Vibra-slap	Vibra-slap
	B	Ride Cymbal 2	Ride Cymbal 2	Ride Cymbal 2	Ride Cymbal 2
C3	C	High Bongo	High Bongo	High Bongo	High Bongo
	C#	Low Bongo	Low Bongo	Low Bongo	Low Bongo
	D	Mute Hi Conga	Mute Hi Conga	Mute Hi Conga	Mute Hi Conga
	D#	Open Hi Conga	Open Hi Conga	Open Hi Conga	Analog Mid Conga
	E	Low Conga	Low Conga	Low Conga	Analog Low Conga
	F	High Timbale	High Timbale	High Timbale	High Timbale
	F#	Low Timbale	Low Timbale	Low Timbale	Low Timbale
	G	High Agogo	High Agogo	High Agogo	High Agogo
	G#	Low Agogo	Low Agogo	Low Agogo	Low Agogo
	A	Cabasa	Cabasa	Cabasa	Cabasa
	A#	Maracas	Maracas	Maracas	Maracas
	B	Short Whistle	Short Whistle	Short Whistle	Short Whistle
C4	C	Long Whistle	Long Whistle	Long Whistle	Long Whistle
	C#	Short Guiro	Short Guiro	Short Guiro	Short Guiro
	D	Long Guiro	Long Guiro	Long Guiro	Long Guiro
	D#	Claves	Claves	Claves	Claves
	E	Hi Wood Block	Hi Wood Block	Hi Wood Block	Hi Wood Block
	F	Low Wood Block	Low Wood Block	Low Wood Block	Low Wood Block
	F#	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica
	G	Open Cuica	Open Cuica	Open Cuica	Open Cuica
	G#	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle
	A	Open Triangle	Open Triangle	Open Triangle	Open Triangle
	A#	Shaker	Shaker	Shaker	Shaker
	B	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
C5	C	Bell Tree	Bell Tree	Bell Tree	Bell Tree
	C#	Castanets	Castanets	Castanets	Castanets
	D	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
	D#	Open Surdo	Open Surdo	Open Surdo	Open Surdo
	E				

Drum Sound Mapping List

		ANALOG SET	JAZZ SET	BRUSH SET	ORCHESTRA SET
	C#				
	D				
	D#	High Q	High Q	High Q	Closed Hi-hat 2
	E	Slap	Slap	Slap	Pedal Hi-hat
	F	Scratch Push 2	Scratch Push	Scratch Push	Open Hi-hat 2
	F#	Scratch Pull 2	Scratch Pull	Scratch Pull	Ride Cymbal 1
	G	Sticks	Sticks	Sticks	Sticks
	G#	Square Click	Square Click	Square Click	Square Click
	A	Metronome Click	Metronome Click	Metronome Click	Metronome Click
	A#	Metronome Bell	Metronome Bell	Metronome Bell	Metronome Bell
	B	Analog Bass Drum 2	Jazz Kick 2	Jazz Kick 2	Concert BD 2
C1	C	Analog Bass Drum	Jazz Kick 1	Jazz Kick 1	Concert BD 1
	C#	Analog Rim Shot	Side Stick	Side Stick	Side Stick
	D	Analog Snare 1	Acoustic Snare	Brush Tap	Concert SD
	D#	Hand Clap	Hand Clap	Brush Slap	Castanets
	E	Analog SD2	Electric Snare	Brush Swirl	Concert SD
	F	Analog Low Tom 2	Low Floor Tom	Low Floor Tom	Timpani F
	F#	Analog CHH 1	Closed Hi-hat	Closed Hi-hat	Timpani F#
	G	Analog Low Tom 1	High Floor Tom	High Floor Tom	Timpani G
	G#	Analog CHH 2	Pedal Hi-hat	Pedal Hi-hat	Timpani G#
	A	Analog Mid Tom 2	Low Tom	Low Tom	Timpani A
	A#	Analog OHH	Open Hi-hat	Open Hi-hat	Timpani A#
	B	Analog Mid Tom 1	Low-Mid Tom	Low-Mid Tom	Timpani B
C2	C	Analog Hi Tom 2	High-Mid Tom	High-Mid Tom	Timani c
	C#	Analog Cymbal	Crash Cymbal 1	Crash Cymbal 1	Timpani c#
	D	Analog Hi Tom 1	Hi Tom	Hi Tom	Timpani d
	D#	Ride Cymbal 1	Ride Cymbal 1	Ride Cymbal 1	Timpani d#
	E	Chinese Cymbal	Chinese Cymbal	Chinese Cymbal	Timpani e
	F	Ride Bell	Ride Bell	Ride Bell	Timpani f
	F#	Tambourine	Tambourine	Tambourine	Tambourine
	G	Splash Cymbal	Splash Cymbal	Splash Cymbal	Splash Cymbal
	G#	Analog Cowbell	Cowbell	Cowbell	Cowbell
	A	Crash Cymbal 2	Crash Cymbal 2	Crash Cymbal 2	Concert Cymbal 2
	A#	Vibra-slap	Vibra-slap	Vibra-slap	Vibra-slap
	B	Ride Cymbal 2	Ride Cymbal 2	Ride Cymbal 2	Concert Cymbal 1
C3	C	High Bongo	High Bongo	High Bongo	High Bongo
	C#	Low Bongo	Low Bongo	Low Bongo	Low Bongo
	D	Analog Hi Conga	Mute Hi Conga	Mute Hi Conga	Mute Hi Conga
	D#	Analog Mid Conga	Open Hi Conga	Open Hi Conga	Open Hi Conga
	E	Analog Low Conga	Low Conga	Low Conga	Low Conga
	F	High Timbale	High Timbale	High Timbale	High Timbale
	F#	Low Timbale	Low Timbale	Low Timbale	Low Timbale
	G	High Agogo	High Agogo	High Agogo	High Agogo
	G#	Low Agogo	Low Agogo	Low Agogo	Low Agogo
	A	Cabasa	Cabasa	Cabasa	Cabasa
	A#	Analog Maracas	Maracas	Maracas	Maracas
	B	Short Whistle	Short Whistle	Short Whistle	Short Whistle
C4	C	Long Whistle	Long Whistle	Long Whistle	Long Whistle
	C#	Short Guiro	Short Guiro	Short Guiro	Short Guiro
	D	Long Guiro	Long Guiro	Long Guiro	Long Guiro
	D#	Analog Claves	Claves	Claves	Claves
	E	Hi Wood Block	Hi Wood Block	Hi Wood Block	Hi Wood Block
	F	Low Wood Block	Low Wood Block	Low Wood Block	Low Wood Block
	F#	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica
	G	Open Cuica	Open Cuica	Open Cuica	Open Cuica
	G#	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle
	A	Open Triangle	Open Triangle	Open Triangle	Open Triangle
	A#	Shaker	Shaker	Shaker	Shaker
	B	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
C5	C	Bell Tree	Bell Tree	Bell Tree	Bell Tree
	C#	Castanets	Castanets	Castanets	Castanets
	D	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
	D#	Open Surdo	Open Surdo	Open Surdo	Open Surdo
	E				Applause

		SFX SET	STEREO AMBIENCE SET	STEREO POP SET	STEREO BALLAD SET
	C#		Snare Roll	Snare Roll	Snare Roll
	D		Finger Snap	Finger Snap	Finger Snap
	D#		High Q	High Q	High Q
	E		Slap	Slap	Slap
	F		Scratch Push	Scratch Push	Scratch Push
	F#		Scratch Pull	Scratch Pull	Scratch Pull
	G		Sticks	Sticks	Sticks
	G#		Square Click	Square Click	Square Click
	A		Metronome Click	Metronome Click	Metronome Click
	A#		Metronome Bell	Metronome Bell	Metronome Bell
	B		Ambi BD2	Pop BD2	Bala BD2
C1	C		Ambi BD1	Pop BD1	Bala BD1
	C#		Ambi Rim	Pop Rim	Ambi Rim
	D		Ambi SD1	Pop SD1	Bala SD1
	D#	High Q	Hand Clap	Hand Clap	Hand Clap
	E	Slap	Ambi SD2	Pop SD2	Bala SD2
	F	Scratch Push	AmbiLowTom2	PopLowTom2	PopLowTom2
	F#	Scratch Pull	Ambi HHC	Pop HHC	Funk HHC
	G	Sticks	AmbiLowTom1	PopLowTom1	PopLowTom1
	G#	Square Click	Ambi HHP	Pop HHP	Funk HHP
	A	Metronome Click	AmbiMidTom2	PopMidTom2	PopMidTom2
	A#	Metronome Bell	Ambi HHO	Pop HHO	Pop HHO
	B	Guitar Fret Noise	AmbiMidTom1	PopMidTom1	PopMidTom1
C2	C	Guitar Cutting Noise Up	AmbiHiTom2	PopHiTom2	PopHiTom2
	C#	Guitar Cutting Noise Down	Ambi Crash1	Funk Crash1	Ambi Crash1
	D	String Slap of Double Bass	AmbiHiTom1	PopHiTom1	PopHiTom1
	D#	Fl. Key Click	Pop Ride1	Pop Ride1	Pop Ride1
	E	Laughing	Chinese Cymbal	Chinese Cymbal	Chinese Cymbal
	F	Scream	Pop Cup	Pop Cup	Pop Cup
	F#	Punch	TambourIne	TambourIne	TambourIne
	G	Heart Beat	Funk Splash	Funk Splash	Funk Splash
	G#	Footsteps 1	Cowbell	Cowbell	Cowbell
	A	Footsteps 2	Funk Crash2	Funk Crash2	Funk Crash2
	A#	Applause	Vibra slap	Vibra slap	Vibra slap
	B	Door Creaking	Pop Ride2	Pop Ride2	Pop Ride2
C3	C	Door	Hi Bongo	Hi Bongo	Hi Bongo
	C#	Scratch	Low Bongo	Low Bongo	Low Bongo
	D	Wind Chimes	Mute Hi Conga	Mute Hi Conga	Mute Hi Conga
	D#	Car-Engine	Hi Conga	Hi Conga	Hi Conga
	E	Car-Stop	Low Conga	Low Conga	Low Conga
	F	Car-Pass	Hi Timbale	Hi Timbale	Hi Timbale
	F#	Car-Crash	Low Timbale	Low Timbale	Low Timbale
	G	Siren	Hi Agogo	Hi Agogo	Hi Agogo
	G#	Train	Low Agogo	Low Agogo	Low Agogo
	A	Jetplane	Cabasa	Cabasa	Cabasa
	A#	Helicoopter	Maracas	Maracas	Maracas
	B	Startship	Short Whistle	Short Whistle	Short Whistle
C4	C	Gun Shot	Long Whistle	Long Whistle	Long Whistle
	C#	Machine Gun	Short Guiro	Short Guiro	Short Guiro
	D	Lasergun	Long Guiro	Long Guiro	Long Guiro
	D#	Explosion	Claves	Claves	Claves
	E	Dog	Hi Wood Blk	Hi Wood Blk	Hi Wood Blk
	F	Horse-Gallop	Low Wood Blk	Low Wood Blk	Low Wood Blk
	F#	Birds	Mute Cuica	Mute Cuica	Mute Cuica
	G	Rain	Open Cuica	Open Cuica	Open Cuica
	G#	Thunder	Mute Triangle	Mute Triangle	Mute Triangle
	A	Wind	Open Triangle	Open Triangle	Open Triangle
	A#	Seashore	Shaker	Shaker	Shaker
	B	Stream	Jingle Bell	Jingle Bell	Jingle Bell
C5	C	Bubble	Bar Chimes	Bar Chimes	Bar Chimes
	C#		Castanets	Castanets	Castanets
	D		Mute Surdo	Mute Surdo	Mute Surdo
	D#		Open Surdo	Open Surdo	Open Surdo
	E				

Drum Sound Mapping List

		DANCE SET	ETHNIC SET
	C#	Snare Roll	
	D	Finger Snap	
	D#	High Q	
	E	Slap	
	F	Scratch Push 2	Shime Taiko
	F#	Dance SD6	Atarigane
	G	Dance SD5	Tsuzumi Lo
	G#	Dance SD4	Chappa
	A	Dance BD3	Tsuzumi Hi
	A#	Dance SD3	Mokugyo
	B	Dance BD 2	Da Gu2
C1	C	Dance BD 1	Da Gu1
	C#	Dance Rim	Da Gu Edge
	D	Dance SD 1	Ban Gu
	D#	Dance Clap	Chinese Gong
	E	Dance SD 2	Xiao Bo
	F	Dance Low Tom 2	Da Luo
	F#	Dance HHC	Xiao Luo
	G	Dance Low Tom 1	KendhangOpen 2
	G#	Dance HHP	KendhangMute 2
	A	Dance Mid Tom 2	KendhangOpen 1
	A#	Dance HHO	KendhangMute 1
	B	Dance Mid Tom 1	Manjira Open
C2	C	Dance Hi Tom 2	Manjira Attack
	C#	Dance Crash1	Manjira Close
	D	Dance Hi Tom 1	Baya Low
	D#	Dance Ride1	Baya Mute
	E	Reverse Cymbal	Baya Bend
	F	Ride Bell	Tabla Open 2
	F#	Tambourine	Tabla Mute 2
	G	Splash Cymbal	Tbala Open 1
	G#	Cowbell	Tabla Mute 1
	A	Crash Cymbal 2	Darabuka 4
	A#	Vibra-slap	Darabuka Mute 2
	B	Ride Cymbal 2	Darabuka 3
C3	C	High Bongo	Darabuka 2
	C#	Low Bongo	Darabuka Mute 1
	D	Mute Hi Conga	Darabuka 1
	D#	Open Hi Conga	Doira Mute
	E	Low Conga	Doira Open 3
	F	High Timbale	Doira Open 2
	F#	Low Timbale	Doira Open 1
	G	High Agogo	Doira Ring
	G#	Low Agogo	Chimpta 2
	A	Cabasa	Chimpta 1
	A#	Maracas	
	B	Short Whistle	
C4	C	Long Whistle	
	C#	Short Guiro	
	D	Long Guiro	
	D#	Claves	
	E	Hi Wood Block	
	F	Low Wood Block	
	F#	Hi Hoo	
	G	Low Hoo	
	G#	Ele Mute Triangle	
	A	Ele Open Triangle	
	A#	Shaker	
	B	Jingle Bell	
C5	C	Bell Tree	
	C#	Castanets	
	D	Mute Surdo	
	D#	Open Surdo	
	E		

Accompaniment Chord Types

The following is a list of chord types recognised by the KCP90 digital piano Style Accompaniment. Each chord can be played by pressing the notes marked with a ● symbol in the diagrams below. In addition, the common Major, Minor, M7, and 7, chord types can also be played by pressing just the notes marked with a ★ symbol.

* When an unrecognised chord is played, an asterisk symbol (∗) will be shown in the LCD display.

Chord Name	Notes	Chord Name	Notes	Chord Name	Notes
C Maj		D♭ Maj (C♯)		D Maj	
C sus4		D♭ sus4 (C♯)		D sus4	
C aug		D♭ aug (C♯)		D aug	
C min		D♭ min (C♯)		D min	
C M7		D♭ M7 (C♯)		D M7	
C 6		D♭ 6 (C♯)		D 6	
C m7		D♭ m7 (C♯)		D m7	
C mM7		D♭ mM7 (C♯)		D mM7	
C m6		D♭ m6 (C♯)		D m6	
C 7		D♭ 7 (C♯)		D 7	
C 7$^{(♭5)}$		D♭ 7$^{(♭5)}$ (C♯)		D 7$^{(♭5)}$	
C 7$^{(♯5)}$		D♭ 7$^{(♯5)}$ (C♯)		D 7$^{(♯5)}$	
C 7sus4		D♭ 7sus4 (C♯)		D 7sus4	
C m7$^{(♭5)}$		D♭ m7$^{(♭5)}$ (C♯)		D m7$^{(♭5)}$	
C dim		D♭ dim (C♯)		D dim	

Accompaniment Chord Types

Chord Name	Notes	Chord Name	Notes	Chord Name	Notes
E♭ Maj (D♯)		E Maj		F Maj	
E♭ sus4 (D♯)		E sus4		F sus4	
E♭ aug (D♯)		E aug		F aug	
E♭ min (D♯)		E min		F min	
E♭ M7 (D♯)		E M7		F M7	
E♭ 6 (D♯)		E 6		F 6	
E♭ m7 (D♯)		E m7		F m7	
E♭ mM7 (D♯)		E mM7		F mM7	
E♭ m6 (D♯)		E m6		F m6	
E♭ 7 (D♯)		E 7		F 7	
E♭ 7⁽♭5⁾ (D♯)		E 7⁽♭5⁾		F 7⁽♭5⁾	
E♭ 7⁽♯5⁾ (D♯)		E 7⁽♯5⁾		F 7⁽♯5⁾	
E♭ 7sus4 (D♯)		E 7sus4		F 7sus4	
E♭ m7⁽♭5⁾ (D♯)		E m7⁽♭5⁾		F m7⁽♭5⁾	
E♭ dim (D♯)		E dim		F dim	

Chord Name	Notes	Chord Name	Notes	Chord Name	Notes
G♭ Maj (F♯)		G Maj		A♭ Maj (G♯)	
G♭ sus4 (F♯)		G sus4		A♭ sus4 (G♯)	
G♭ aug (F♯)		G aug		A♭ aug (G♯)	
G♭ min (F♯)		G min		A♭ min (G♯)	
G♭ M7 (F♯)		G M7		A♭ M7 (G♯)	
G♭ 6 (F♯)		G 6		A♭ 6 (G♯)	
G♭ m7 (F♯)		G m7		A♭ m7 (G♯)	
G♭ mM7 (F♯)		G mM7		A♭ mM7 (G♯)	
G♭ m6 (F♯)		G m6		A♭ m6 (G♯)	
G♭ 7 (F♯)		G 7		A♭ 7 (G♯)	
G♭ 7(♭5) (F♯)		G 7(♭5)		A♭ 7(♭5) (G♯)	
G♭ 7(♯5) (F♯)		G 7(♯5)		A♭ 7(♯5) (G♯)	
G♭ 7sus4 (F♯)		G 7sus4		A♭ 7sus4 (G♯)	
G♭ m7(♭5) (F♯)		G m7(♭5)		A♭ m7(♭5) (G♯)	
G♭ dim (F♯)		G dim		A♭ dim (G♯)	

Accompaniment Chord Types

Chord Name	Notes	Chord Name	Notes	Chord Name	Notes
A Maj		B♭ Maj (A♯)		B Maj	
A sus4		B♭ sus4 (A♯)		B sus4	
A aug		B♭ aug (A♯)		B aug	
A min		B♭ min (A♯)		B min	
A M7		B♭ M7 (A♯)		B M7	
A 6		B♭ 6 (A♯)		B 6	
A m7		B♭ m7 (A♯)		B m7	
A mM7		B♭ mM7 (A♯)		B mM7	
A m6		B♭ m6 (A♯)		B m6	
A 7		B♭ 7 (A♯)		B 7	
A 7(♭5)		B♭ 7(♭5) (A♯)		B 7(♭5)	
A 7(♯5)		B♭ 7(♯5) (A♯)		B 7(♯5)	
A 7sus4		B♭ 7sus4 (A♯)		B 7sus4	
A m7(♭5)		B♭ m7(♭5) (A♯)		B m7(♭5)	
A dim		B♭ dim (A♯)		B dim	

Style List

A-POP

Thai Pop 1

Thai Pop 2

Thai Pop 3

Thai R&B Pop

Indonesian Pop 1

Indonesian Pop 2

Indonesian Idol Pop

Malaysian Pop 1

Malaysian Pop 2

Pop Sumazau

Vietnamese Pop 1

Vietnamese Pop 2

Philippine Pop

Singaporean Pop

Korean Pop

Taiwanese Pop

Chinese Pop 1

Chinese Pop 2

Chinese Pop 3

Chinese Pop 4

DANCE

Thai Dance

Indonesian Dance

Malaysian Dance

Vietnamese Dance

K-POP Dance 1

K-POP Dance 2

Taiwanese Dance

Chinese Dance

Fancy Dance

Euro Dance

BALLAD

Dance Ballad

Soft Ballad

Slow Ballad

Modern Ballad

Piano Ballad 1

Piano Ballad 2

Guitar Ballad

Oldies 6/8 Ballad

6/8 R&B Ballad

Rock Ballad

POP/ROCK

Pop 1

Pop 2

8 Beat

90's Pop

Piano Pop

6/8 Piano Pop

Classic Rock

Latin Rock

Rock

Rock Shuffle

JAZZ

Medium Swing

Slow Swing

Jammin Organ

Jazz Swing

Jazz Waltz

5/4 Jazz

Jazz Bossa

Fast Big Band

Medium Big Band

Smooth Jazz

EASY BAND

Ride Beat

Slow 16 Beat

Electro Pop

Techno

Jazz Funk

16 Shuffle

Pop Shuffle

Rock Beat 1

Rock Beat 2

Triplet Rock

WORLD

Luktung

Pop Luktung

Mor Lam

Dangdut

Pop Keroncong

Pop Jawa

Pop Sunda

Neo Kulintang

Sumazau

Ghazal

Que Huong

Guangdong

Beijing

Daizu

Dadra

Kaherava

Bhangra

Greek Folk

Aranjman

Flamenco Pop

Cha Cha

Salsa

Reggae

Tango

Bossa Nova

Samba

Polka

Schlager

Waltz

Musette Waltz

Specifications

■ Kawai KCP90 digital piano

Keyboard	88 weighted keys Advanced Hammer Action IV-F (AHA IV-F)
Sound Source	Harmonic Imaging™ (HI), 88-key piano sampling
Internal Sounds	381 voices PIANO x 8, E.PIANO x 8, STRINGS x 8, ORGAN x 8 12 drum kits WOODWIND & BRASS x 8, GUITAR & BASS x 8, OTHERS x 333
Polyphony	max. 192 notes
Display	LCD 24 Characters × 2 Lines
Reverb	Room, Lounge, Small Hall, Concert Hall, Live Hall, Cathedral
Effects	Chorus, Classic Chorus, Stereo Delay, Ping Delay, Triple Delay, Tremolo, Classic Tremolo, Phaser, Rotary1, Rotary2, Rotary3, Phaser+Amp, Auto Pan + Amp
Touch	Light+, Light, Normal, Heavy, Heavy+, Off
Recorder	3 song, 2 track recorder – approximately 7,000 note memory capacity
Metronome	1/4, 2/4, 3/4, 4/4, 5/4, 3/8, 6/8, 7/8, 9/8, 12/8 Tempo: 10-300 bpm
Accompaniment	100 styles Start/Stop, Intro/Ending, Sync/Fade Out, Fill In, ACC, 1-2 Play
Demo Songs	3 songs
Registrations	8 memories
Other Functions	Dual Mode, Balance slider, Transpose, Tuning, Damper Resonance, Temperament, Key of Temperament, Auto Power Off
MIDI Functions	MIDI Channel, Transmit MIDI Program Change, Local Control, Channel Mute, Send MIDI Program Change Number
Pedals	Sustain (with half-pedal support), Soft, Sostenuto
Jacks	LINE OUT (L/MONO, R), Headphones x 2, USB to Host
Speakers	16 cm x 2
Output Power	20 W x 2
Power Consumption	35 W
AC Adapter	PS-154 (DC 15V/4A / center plus)
Key Cover	Sliding type
Finish	Premium Rosewood
Dimensions (with music rack flattened)	1358 (W) x 476 (D) x 864 (H) mm
Weight	47.5 kg / 105 lbs.

Specifications are subject to change without notice.

MIDI Implementation Chart

■ Kawai KCP90 digital piano

Function		Transmit	Receive	Remarks
Basic channel	At power-up	1	1	
	Settable	1 - 16	1 - 16	
Mode	At power-up	Mode 3	Mode 1	
	Message	×	Mode 1, 2	
	Alternative	********	×	
Note number		21 - 108*	0 - 127	* 9-120, including transpose
	Range	********	0 - 127	
Velocity	Note on	○ 9nH v=1-127	○	
	Note off	× 9nH v=0	×	
After touch	Key specific	×	×	
	Channel specific	×	○	
Pitch bend		×	○	
Control change	0, 32	○	○	Bank Select
	1	×	○	Modulation
	5	×	○	Portament Time
	6, 38	×	○	Data Entry
	7	○	○	Volume
	10	○	○	Panpot
	11	×	○	Expression Pedal
	64	○ (Right pedal)	○	Sustain Pedal
	65	×	○	Portament
	66	○ (Middle pedal)	○	Sostenuto Pedal
	67	○ (Left pedal)	○	Soft Pedal
	69	×	○	Hold 2
	71	×	○	Resonance
	72	×	○	Release Time
	73	×	○	Attack Time
	74	×	○	Cuttoff
	75	×	○	Decay Time
	76	×	○	Vibrato Speed
	77	×	○	Vibrato Depth
	78	×	○	Vibrato Delay
	84	×	○	Portament Control
	91	○	○	Reverb Send Level
	93	○	○	Chorus Send Level
	98, 99	×	○	NRPN LSB, MSB
	100, 101	×	○	RPN LSB, MSB
Program change		○	○	
	True	********	0 - 127	Program No. 1 - 128
Exclusive		○	○	Transmission can be selected
Common	Song position	×	×	
	Song selection	×	×	
	Tune	×	×	
Real time	Clock	○	×	
	Commands	○ FA, FC	○ FA, FB, FC	
Other functions	Local On / Off	×	×	
	All notes Off	○	○ (123 - 127)	
	Active sensing	○	○	
	Reset	×	×	
Remarks				

Mode 1: omni mode On, Poly   Mode 2: omni mode On, Mono   ○ : Yes
Mode 3: omni mode Off, Poly   Mode 4: omni mode Off, Mono   × : No

Appendix

Notes

KAWAI

The Future of the Piano

817985-R100