

KAWAI

CN34 Owner's Manual

Introduction

Playing the Piano

Internal Songs

Recorder

USB Functions

Settings

Appendix

Thank you for purchasing this Kawai CN34 digital piano.

This owner's manual contains important information regarding the usage and operation of the CN34 digital piano. Please read all sections carefully, keeping this manual handy for future reference.

■ About this Owner's Manual

Before attempting to play this instrument, please read the **Introduction** 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 **Playing the Piano** section (page 16) provides an overview of the instrument's commonly used functions, allowing the CN34 digital piano to be enjoyed almost immediately after being connected, while the **Internal Songs** section (page 34) includes information regarding the instrument's built-in lesson songs and Concert Magic function.

The **Recorder** section (page 44) provides instructions on how to record and play back pieces stored both in the instrument's internal memory, and also MP3/WAV audio files saved to a USB memory device. Additional functions to load and save songs and registration memories from/to USB devices are further explained in the **USB Functions** chapter (page 59). The **Settings** section (page 68) details the various options and settings that can be used to adjust the sound and operation of the instrument.

Finally, the **Appendix** section (page 103) includes stand assembly instructions and device connection information. This section also lists the instrument's internal sounds, demonstration songs, drum rhythms and drum sound maps, in addition to MIDI reference tables, and full technical specification details.

Important Safety Instructions

SAVE THESE INSTRUCTIONS

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



WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS 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 lightning 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 literature 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.



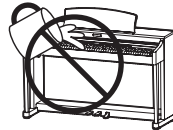
- If you are going to use an AC power cord, make sure that its has the correct plug shape and conforms to the specified power voltage.
- Failure to do so may result in fire.

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



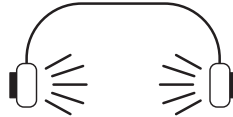
Doing so may cause electric shock.

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



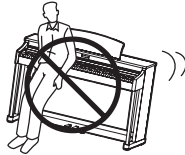
Entry of water, needles or hair pins may result in breakdown or short-circuit. The product shall not be exposed to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the product.

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 use the product in wet areas, or areas close to water.



Doing so may cause a short circuit, leading to an electric shock, or a fire.

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.



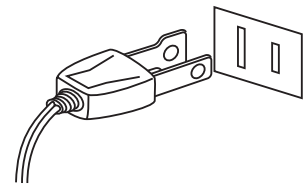
- Pulling the AC power cord itself may damage the cord, causing a fire, electric shock or short-circuit.

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

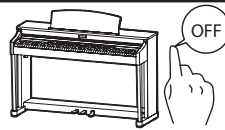
Using the product in such areas may result in product breakdown. Use the product only in moderate climates (not in tropical climates).

When you close the keyboard cover, close it gently.



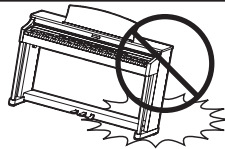
Closing it roughly may trap your fingers, resulting in injury.

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



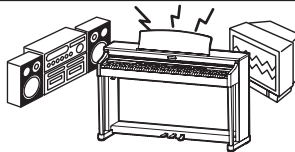
Failure to do so may cause breakdown of this product and other devices.

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.



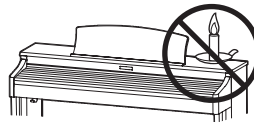
- Doing so may result in discoloration or deformation of the product.
- When cleaning the product, put a soft cloth in lukewarm water, squeeze it well, then wipe the product.

Do not stand on the product or exert excessive force.



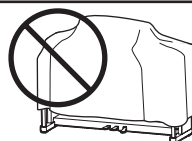
- Doing so may cause the product to become deformed or fall over, resulting in breakdown or injury.

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.

The product should be serviced by qualified service personnel when:

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

Notes on Repair

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

CAUTION:

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

ATTENTION:

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



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.

Declaration of Conformity

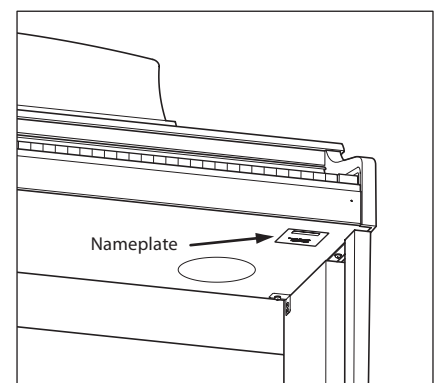
Products :	Electronic Piano
Model Number :	CN34
Responsible Party Name :	Kawai America Corporation
Address :	2055 East University Drive Rancho Dominguez, CA 90220
Telephone :	310-631-1771

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

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



This applies only to products distributed by Kawai America Corporation.

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Welcome to the Kawai CN34

1 Feature Highlights

'Responsive Hammer II' weighted-key action, with Ivory Touch key surfaces and Let-off simulation

The new *Responsive Hammer II* (RHII) action recreates the distinctive touch of an acoustic grand piano, with its realistic movement and accurate 3-sensor technology providing a smooth, natural, and highly responsive piano playing experience. The weight of the keyboard is appropriately graded to mirror the heavier bass hammers and lighter treble hammers of an acoustic piano, while structural reinforcements within the action assembly ensure greater stability during fortissimo and staccato passages.

The CN34 digital piano also features Kawai's *Ivory Touch* key surfaces that gently absorb finger moisture to assist the player's performance, while, let-off simulation recreates the subtle 'notch' sensation felt when softly playing the keys of a grand piano, satisfying the expectations of the most discerning pianists.

Progressive Harmonic Imaging (PHI) with 88-key piano sampling

The CN34 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 *Progressive 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.

The instrument's built-in *Virtual Technician* feature allows various characteristics of the acoustic piano sound to be shaped at the touch of a button, with settings to adjust string and damper resonance. This personalised piano sound is further enhanced with atmospheric reverberation effects, delivering a rich, vibrant piano tone with breathtaking realism and authenticity.

USB to Device functionality, with MP3/WAV file recording and playback

The CN34 digital piano is equipped with USB connectors that not only allow the instrument to be connected to a computer for MIDI use, but also to load and save data to USB memory devices directly. This *USB to Device* feature allows registration memories and songs recorded and stored in internal memory to be saved to USB for posterity, or standard MIDI files (SMF) downloaded from the internet to be conveniently played back without additional hardware.

USB memory devices can also be used to play back MP3 or WAV audio files, allowing musicians to learn the chords or melody for a new piece, or to simply play along with their favourite songs. It is even possible to save performances as MP3 or WAV files for emailing to friends and family, listening to on a smartphone, or for further editing using an audio workstation.

Wide range of connectivity options

The CN34 digital piano features a variety of standard connectivity options, with Line-level output jacks that allow the instrument to be enjoyed in larger settings such as churches and schools. Standard MIDI and *USB to Host* connectors ensure flexibility when using computers and other electronic instruments.

2 Owner's Manual Conventions

This owner's manual utilises a number of illustrative conventions in order to explain the CN34's various functions. The examples below provide an overview of the button LED indicator states and press types, and the appearance of difference kinds of text.

■ Button LED indicator states



LED indicator off:
Sound/Function is not selected.



LED indicator on:
Sound/Function is selected.



LED indicator flashing:
Sound/Function is selected in a temporary state.

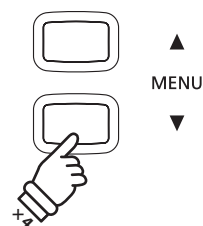
■ Button press types



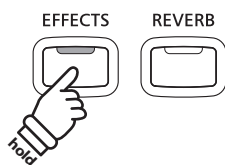
Normal press:
Select a sound or function.



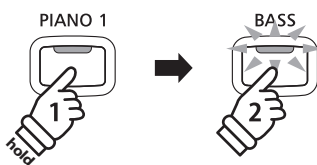
Press twice:
Select a sound or function.



Press multiple times:
Cycle through sounds or settings.



Press and hold:
Select a function's settings.



Press and hold, then press X:
Combine two sounds, or store registration memories etc.

■ Text appearance

Normal instruction and explanation text is written in regular type at 9 pt. size.

* Notes about functions are marked with an asterisk and written in 8 pt. size.

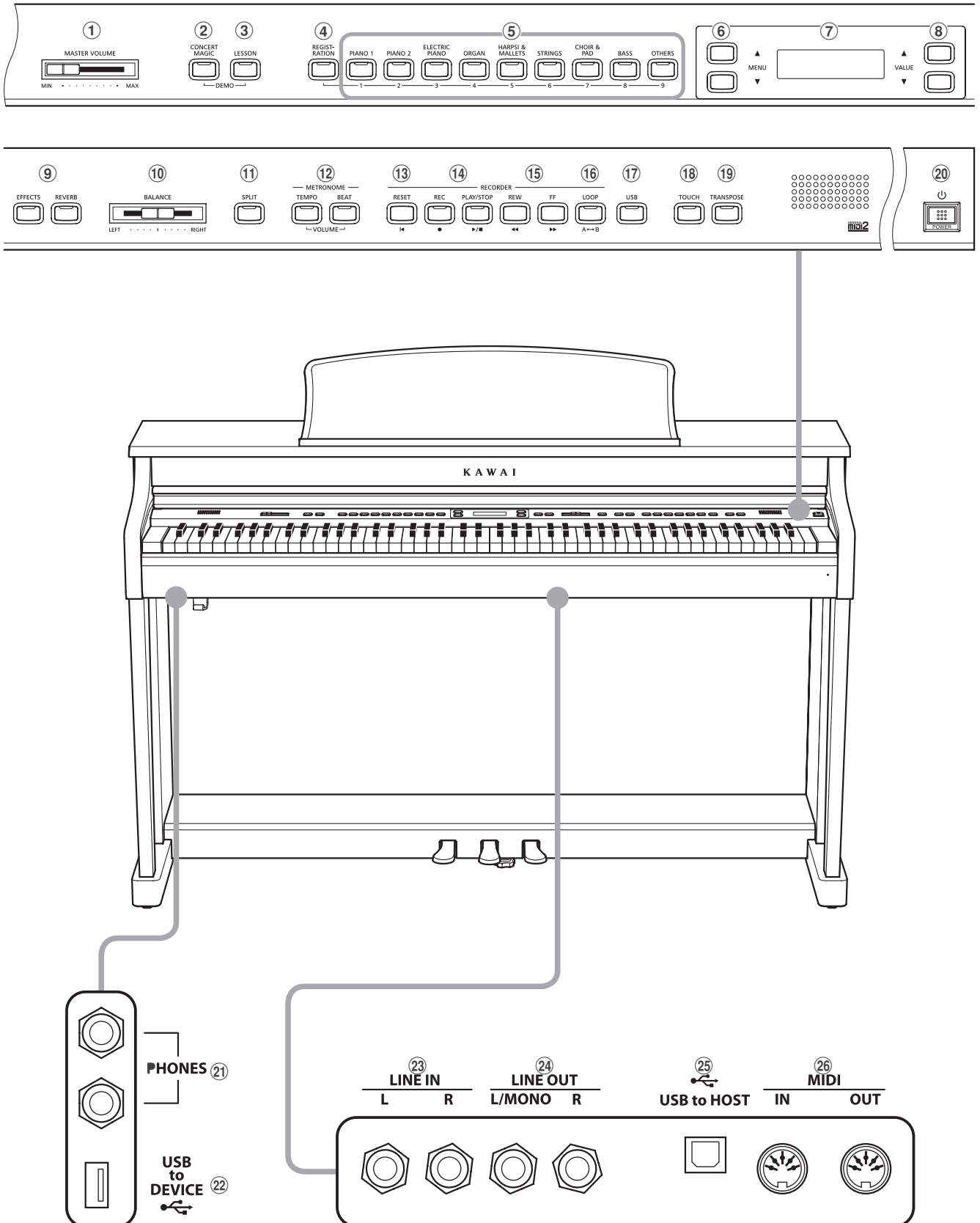
Reminders about previous operations are written in italic type at 9 pt. size.

LCD display text looks like this.

— Captions explaining the LCD display or button functions, are written in bold type at 8.5 pt. size.

Example operations are written in italic type at 8 pt. size, and enclosed within a grey box.

Part Names and Functions



① MASTER VOLUME slider

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

* This slider does not affect the LINE OUT level. For information about adjusting the LINE OUT level, please refer to page 74.

② CONCERT MAGIC button

This button is used to select the instrument's Concert Magic function.

③ LESSON button

This button is used to select the instrument's built-in Lesson songs.

* When pressed simultaneously, the CONCERT MAGIC and LESSON buttons are also used to select the instrument's Demo mode.

④ REGISTRATION button

This button is used to store and recall one of the 9 different Registration memories. Each Registration can store sound, reverb/effects settings, and various other panel and menu options.

⑤ SOUND buttons

These buttons are used to select the sound(s) that will be heard when playing the instrument's keyboard. These buttons are also used to select Registration memories

⑥ MENU buttons

These buttons are used to navigate through the instrument's various function and settings menus.

⑦ LCD display

The LCD display provides important information relating to the currently selected sound, function, and setting.

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

⑧ VALUE buttons

These buttons are used to adjust values, change settings, and answer on-screen prompts.

⑨ EFFECTS and REVERB buttons

These buttons are used to turn the instrument's reverb and effects functions on/off, and to adjust effect/reverb settings.

⑩ BALANCE slider

This slider adjusts the volume balance of the two layered sounds when Dual mode is selected, or the the upper and lower sections when Split/Four Hands mode is selected.

⑪ SPLIT button

This button is used to enable the Split/Four Hands mode functions, allowing the keyboard to be divided into upper and lower sections.

⑫ METRONOME buttons

These buttons are used to turn the instrument's metronome function on/off, and to adjust metronome settings.

⑬ RESET button

This button is used to reset the instrument's song recorder, and to rewind songs and MP3/WAV/SMF files to the beginning.

⑭ REC and PLAY/STOP buttons

These buttons are used to record and playback songs stored in the instrument's internal memory, or MP3/WAV/SMF files saved to a USB memory device.

⑮ REW and FF buttons

These buttons are used to move the playing position of the current recorder song or MP3/WAV/SMF backward or forward. These buttons are also used to select the recorder song.

⑯ LOOP button

This button is used to enable the instrument's A-B Loop function, allowing passages of a recorder song or MP3/WAV/SMF file to be played back repeatedly.

⑰ USB button

This button is used to access the instrument's USB functions.

⑱ TOUCH button

This button is used to access the instrument's Touch settings to adjust the touch sensitivity of the keyboard.

⑲ TRANSPOSE button

This button is used to adjust the pitch of the keyboard in semitone steps.

⑳ POWER switch

This switch is used to turn the instrument on/off.

* The CN34 digital piano features a power saving mode that can turn off the instrument automatically after a specified period of inactivity. For more information, please refer to the Auto Power Off setting on page 102.

㉑ PHONES jacks

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

㉒ USB to Device port

This port is used to connect a FAT or FAT32 formatted USB memory device to the instrument in order to load/save recorded song data, registration memories, and MP3/WAV/SMF files etc.

㉓ LINE IN jacks

These jacks are used to connect the stereo output from audio equipment, computers, or other electronic instruments to the instrument's amplifier and speakers.

㉔ LINE OUT jacks

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

㉕ 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.

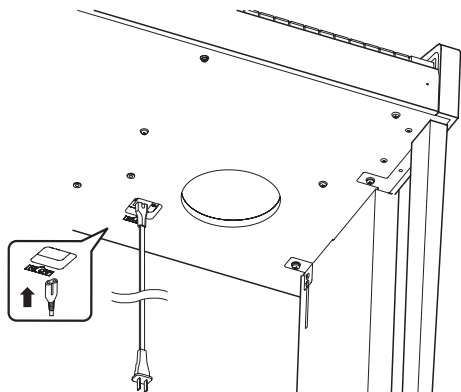
㉖ MIDI jacks

The jacks are used to connect the instrument to external MIDI devices (such as other musical instruments or a computer) in order to send and receive MIDI data.

Setting Up the Piano

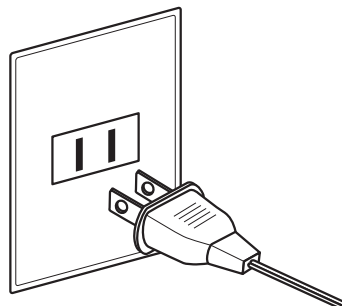
1. Connecting the power cable to the instrument

Connect the included power cable to the 'AC IN' inlet located on the underside of instrument.



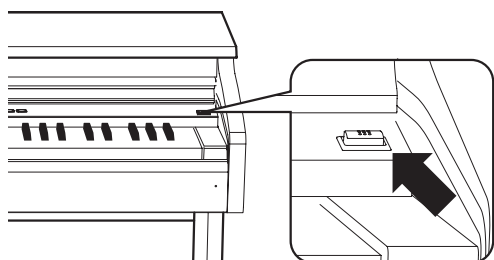
2. Connecting the power cable to an outlet

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.



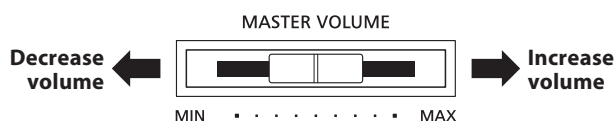
The instrument will turn on, and the words 'Concert Grand' will be shown in the LCD display, indicating that the Concert Grand sound is selected, and the instrument is ready to be played.

* The CN34 digital piano features a power saving mode that can turn off the instrument automatically after a specified period of inactivity. For more information, please refer to the 'Auto Power Off' setting on page 102.

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.

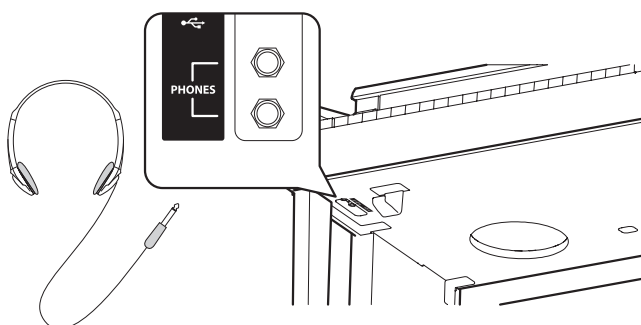


Use this slider to set the volume to a comfortable listening level - the middle is often a good starting point.

* This slider does not affect the LINE OUT level. For information about adjusting the LINE OUT level, please refer to page 74.

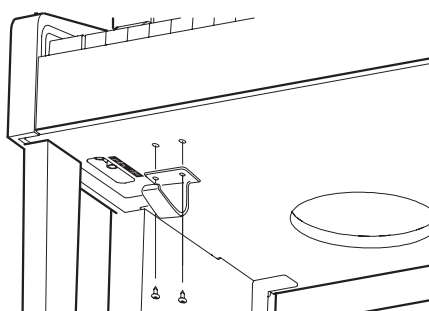
■ Using headphones

Use the jacks located beneath the keyboard on the left hand side, to connect stereo headphones to the CN34 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.



■ Attaching the headphone hook (optional)

A headphone hook is included with the CN34 digital piano and can be used to hang headphones when not in use. If desired, attach the headphone hook to the underside of the keyboard as shown in the illustration below.



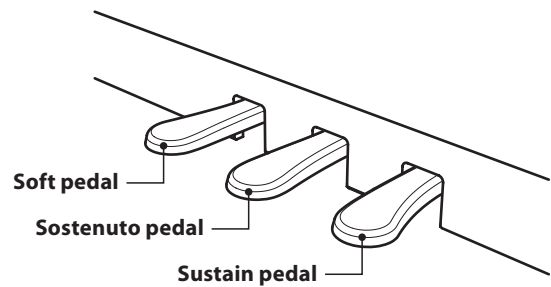
Using the Pedals

As with a grand piano, the CN34 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 (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.

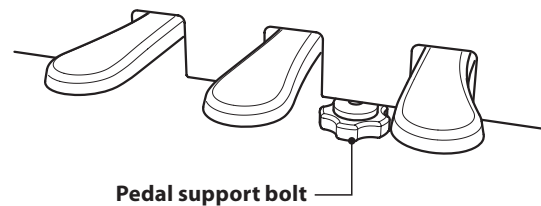
■ Sostenuto pedal (centre pedal)

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.



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 CN34 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

Sounds are arranged into nine categories, with multiple sounds assigned to each category button. For a complete listing of the available instrument sounds, please refer to page 111 of this owner's manual.

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

* The OTHERS button is assigned with 300 sounds, divided into 20 additional categories.

Sound categories and variations

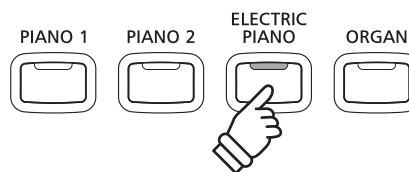
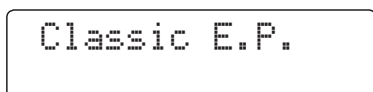
PIANO 1		PIANO 2		ELECTRIC PIANO		ORGAN	
1	Concert Grand	1	Concert Grand2	1	Classic E.P.	5	Church Organ
2	Studio Grand	2	Studio Grand2	2	Modern E. P.	6	Diapason
3	Mellow Grand	3	Mellow Grand2	3	60's E.P.	7	Full Ensemble
4	Modern Piano	4	Rock Piano	4	Modern E. P. 2	8	Diapason Oct.

HARPSI & MALLETS		STRINGS		CHOIR & PAD		BASS		OTHERS	
1	Harpsichord	1	Slow Strings	1	Choir	1	Wood Bass	300 sounds	
2	Harpsichord 2	2	String Pad	2	Choir 2	2	Electric Bass		
3	Vibraphone	3	Warm Strings	3	New Age	3	Fretless Bass		
4	Clavi	4	String Ensemble	4	Atmosphere	4	W. Bass & Ride		

1. 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.

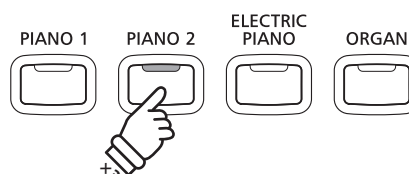
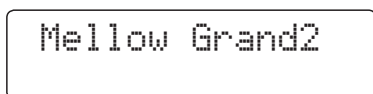
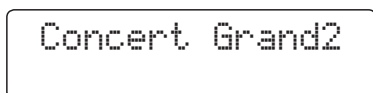


Example: To select the ELECTRIC PIANO category, press the ELECTRIC PIANO button.

2. Changing the selected sound variation

Several sound variations are assigned to each category button.

Press a SOUND button repeatedly to cycle through the different sound variations.



Example: To select the 'Mellow Grand2' sound, press the PIANO 2 button three times.

The ▼ or ▲ VALUE buttons can also be used to select sounds, and cycle through the different sound variations.

* While holding down one of the VALUE buttons, pressing the other VALUE button will jump to the next sound category within the OTHERS selection.



Demo Songs

The Demo function provides an excellent introduction to the varied capabilities of the CN34 digital piano. There are 31 different demonstration songs available, highlighting the instrument's rich selection of high quality sounds, and powerful speaker system.

For a complete listing of the available demonstration songs, please refer to page 110 of this owner's manual.

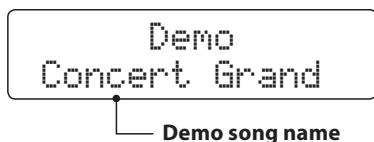
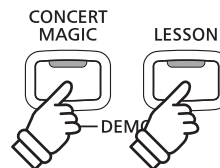
* Kawai regrets that sheet music for Kawai original demo songs is not available.

1. Entering demo mode

Press the CONCERT MAGIC and LESSON buttons simultaneously.

The LED indicators for both buttons will turn on and the SOUND buttons will start to flash.

The demo song for the PIANO 1 category will start. After the PIANO 1 demo songs have finished playing, the demo songs for another sound category will be selected at random.



* There are 4 songs stored for the PIANO 1 sound, which will be played in order. Pressing the PIANO 1 button repeatedly will select the next piano song.

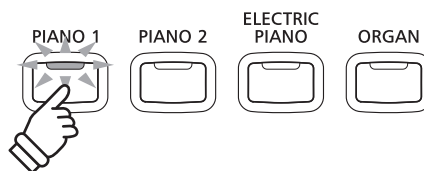
2. Selecting a demo song

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

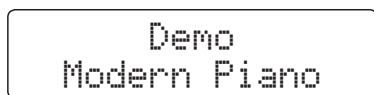
Press the desired SOUND button.

The LED indicator for the button will start to flash, and the first demo in the selected sound category will start to play.

Press the selected sound category button repeatedly to cycle through the different demo songs in that category.



Example: To select the Modern Piano demo song, press the PIANO 1 button four times.



The ▼ or ▲ VALUE buttons can also be used to cycle through all of the different demo songs.

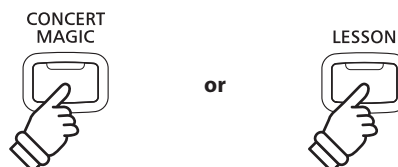


3. Stopping the demo song and exiting demo mode

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

Press the CONCERT MAGIC or LESSON button.

The LED indicators will stop flashing, the demo songs will stop playing, and the instrument will return to normal playing mode.



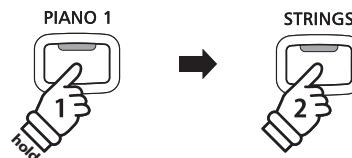
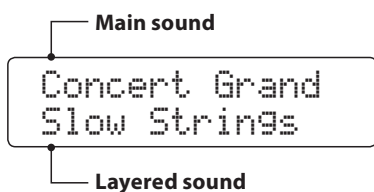
Dual Mode

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.

1. Entering Dual mode

Press and hold a SOUND button to select the main sound, then press another SOUND button to select the layered sound.

The LED indicators for both SOUND buttons will turn on to indicate that Dual mode is in use, and the respective sound names will be shown in the LCD display.

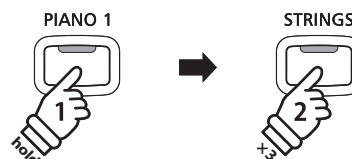
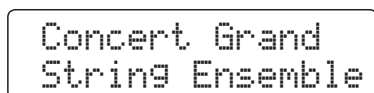


Example: To layer the 'Slow Strings' sound with the 'Concert Grand' sound, press and hold the PIANO 1 button, then press the STRINGS button.

2. Changing the main/layered sounds

To select a different variation for the layered sound:

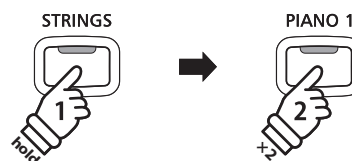
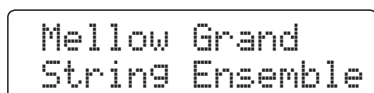
Press and hold the main SOUND button, then press the layered SOUND button repeatedly to cycle through the different sound variations.



Example: To change the layered 'Slow Strings' sound to the 'String Ensemble' sound, press and hold the PIANO 1 button, then press the STRINGS button three times.

To select a different variation for the main sound:

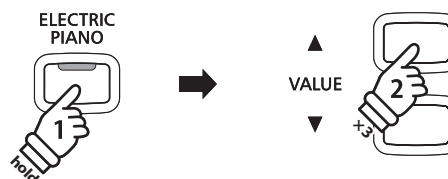
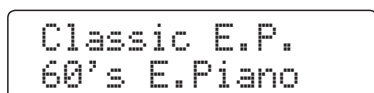
Press and hold the layered SOUND button, then press the main SOUND button repeatedly to cycle through the different sound variations.



Example: To change the main 'Concert Grand' sound to the 'Mellow Grand' sound, press and hold the STRINGS button, then press the PIANO 1 button twice.

To layer two variations assigned to the same SOUND button:

Press and hold a SOUND button, then press the ▼ or ▲ VALUE buttons to select the layered sound variation.



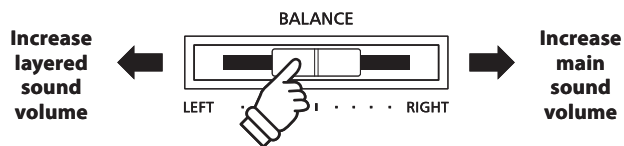
Example: To layer the 'Classic E.P.' and '60's E.Piano' sounds together, press and hold the ELECTRIC PIANO button, then press the VALUE ▲ button three times.

* Preferred Dual mode sound combinations can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

3. Adjusting the main/layered sound volume balance

While Dual mode is in use:

Use the BALANCE slider to adjust the volume balance between the two sounds.



As the volume of the main sound increases, the volume of the layered sound decreases, and vice versa.

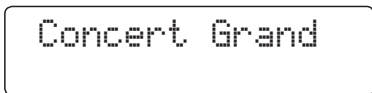
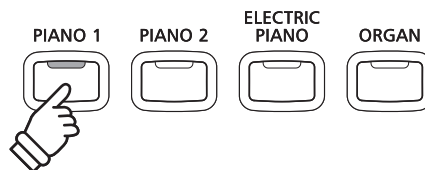
- * The preferred Dual mode volume balance can also be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.
- * The Layer Octave Shift setting can be used to adjust the octave range of the layered sound. Please refer to page 91 for more information.
- * The Layer Dynamics setting can be used to adjust the dynamic sensitivity of the layered sound. Please refer to page 92 for more information.

4. Exiting Dual mode

While Dual mode is in use:

Press a single SOUND button.

The LED indicator for the button will turn on, the name of the selected sound will be shown in the LCD display, and the instrument will return to normal (single voice mode) operation.



Split Mode

The Split Mode function divides the keyboard into two sections, allowing each section to be played with a different sound. For example, a bass sound in the lower section, and a piano sound in the upper section.

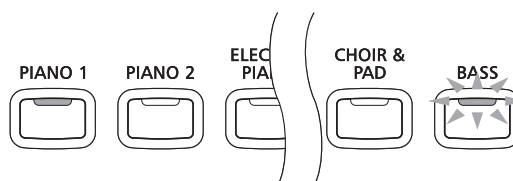
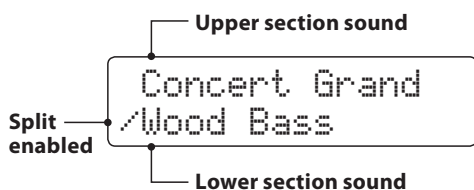
1. Entering Split mode

Press the SPLIT button.

The LED indicator for the SPLIT button will turn on to indicate that Split mode is in use.

* The default split point is set between keys B2 and C3.

The LED indicator for the upper section sound button will turn on, and the LED indicator for the lower section sound button will start to flash. The respective sound names will also be shown in the LCD display.



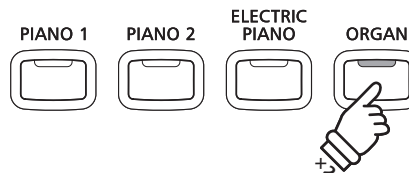
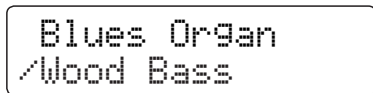
Default Split mode:

The previously selected sound is used for the upper section, and the 'Wood Bass' sound is selected for the lower section.

2. Changing the upper/lower section sounds

To select a different sound for the upper section:

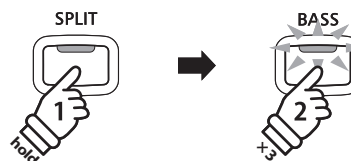
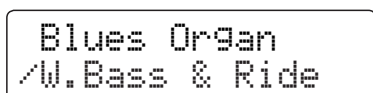
Press the desired SOUND button.



Example: To select the 'Blues Organ' sound for the upper section, press the ORGAN button twice.

To select a different sound for the lower section:

Press and hold the SPLIT button, then press the desired SOUND button.



Example: To select the 'W. Bass & Ride' sound for the lower section, press and hold the SPLIT button, then press the BASS button three times.

* The Lower Octave Shift setting can be used to adjust the octave range of the lower section. Please refer to page 89 for more information.

* The Lower Pedal setting can be used to enable/disable the damper pedal for the lower section. Please refer to page 90 for more information.

* Preferred Split mode upper/lower sound combinations can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

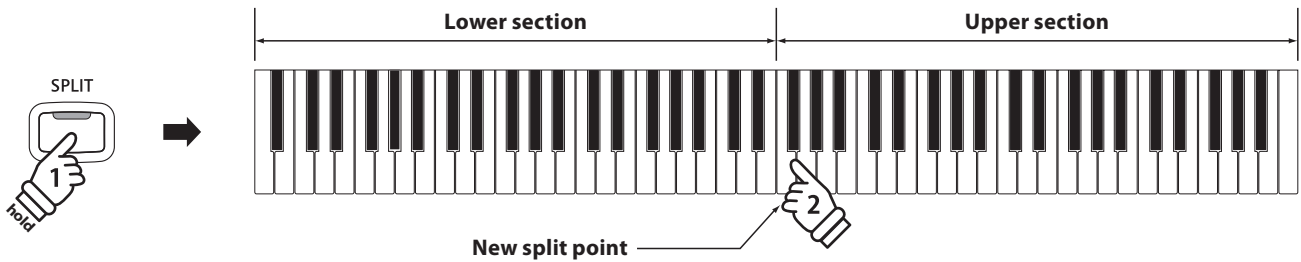
3. Changing the split point

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

The name of the pressed key will briefly be shown in the LCD display, and will become the new split point.



Example: To set the split point to key F3, press and hold the SPLIT button, then press the F3 key.

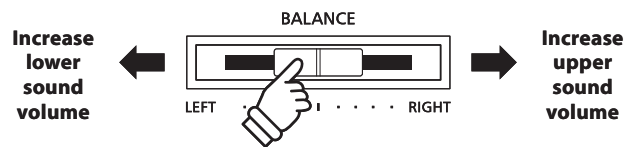


4. Adjusting the upper/lower sound volume balance

Use the BALANCE slider to adjust the volume balance between the upper and lower sections.

As the volume of the upper sound increases, the volume of the lower sound decreases, and vice versa.

* The preferred Split mode upper/lower volume balance can also be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.



5. Exiting Split mode

While Split mode is in use:

Press the SPLIT button.

The LED indicator for the SPLIT button will turn off, and the instrument will return to normal (full keyboard) operation.



Four Hands Mode

The Four Hands Mode function divides the keyboard into two sections in a similar way to that of the Split Mode function. However, with Four Hands Mode enabled, the octave/pitch of each section is automatically adjusted to create two separate 44-key instruments with the same playing range. This function is intended to allow two people to practise together or perform piano duets using a single instrument.

1. Entering Four Hands mode

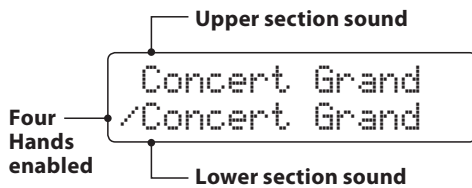
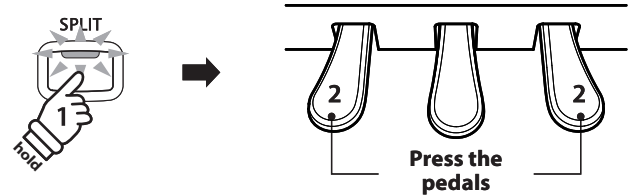
Press and hold the SPLIT button, then press the sustain (right) pedal and the soft (left) pedal together.

* It is also possible to activate Four Hands mode by using the Four Hands setting in the Basic Settings menu. Please refer to the instructions on page 78 for more information.

The LED indicator for the SPLIT button will start to flash to indicate that Four Hands mode is in use.

* The default four hands mode split point is set between keys E3 and F3.

The LED indicator for the PIANO 1 button will turn on, and the 'Concert Grand' sound will automatically be selected for both the upper and lower sections.



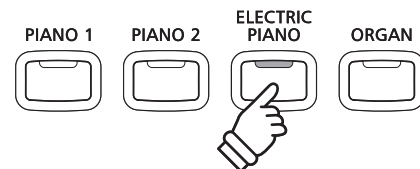
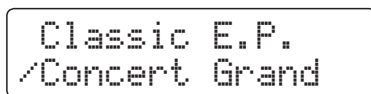
Default Four Hands mode:

The 'Concert Grand' sound is selected for both the upper and lower sections.

2. Changing the upper/lower section sounds

To select a different sound for the upper section:

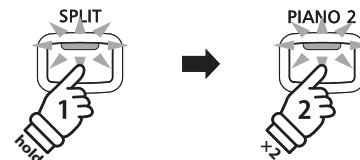
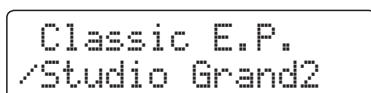
Press the desired SOUND button.



Example: To select the 'Classic E.P.' sound for the upper section, press the ELECTRIC PIANO button.

To select a different sound for the lower section:

Press and hold the SPLIT button, then press the desired SOUND button.



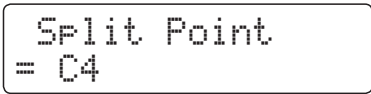
Example: To select the 'Studio Grand2' sound for the lower section, press and hold the SPLIT button, then press the PIANO 2 button twice.

* Preferred Four Hands mode upper/lower sound combinations can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

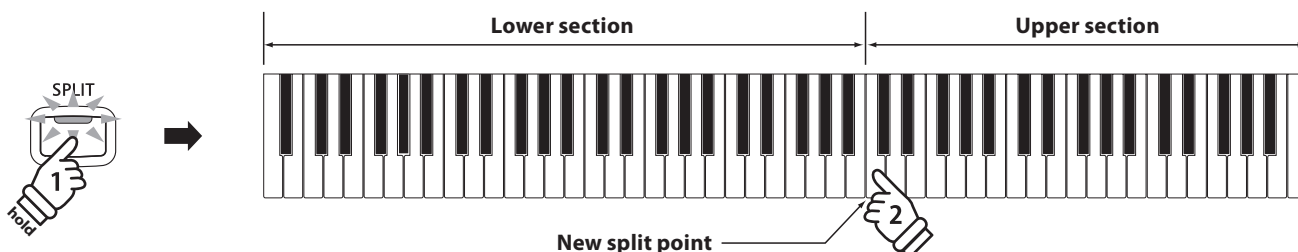
3. Changing the Four Hands mode split point

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

The name of the pressed key will briefly be shown in the LCD display, and will become the new Four Hands mode split point.



Example: To set the split point to key C4, press and hold the SPLIT button, then press the C4 key.

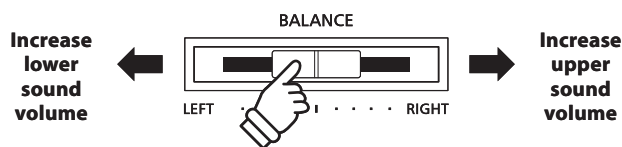


4. Adjusting the upper/lower sound volume balance

Use the BALANCE slider to adjust the volume balance between the upper and lower sections.

As the volume of the upper sound increases, the volume of the lower sound decreases, and vice versa.

* The preferred Four Hands mode upper/lower volume balance can also be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

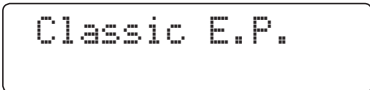


5. Exiting Four Hands mode

While Four Hands mode is in use:

Press the SPLIT button.

The LED indicator for the SPLIT button will stop flashing, and the instrument will return to normal (full keyboard) operation.



Enhancing the Sound

The CN34 digital piano offers a variety of features to adjust and enhance the character of a particular sound. Some of these features (e.g. Reverb), are enabled automatically when a sound is selected, however players may also wish to change or type of enhancement to suit their personal preferences or different styles of music.

1 Reverb

Reverb adds reverberation to the sound, simulating the acoustic environment of a recital room, stage, or concert hall. Some sound types, such as acoustic piano, enable reverb automatically in order to improve acoustic realism. The CN34 digital piano features six different reverb types.

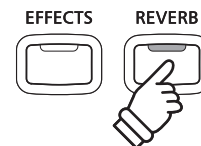
■ Reverb types

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

1. Turning Reverb on/off

Press the REVERB button to turn reverb on/off.

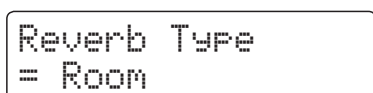
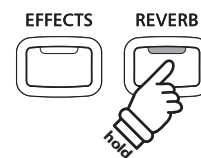
The LED indicator for the REVERB button will turn on to indicate when reverb is in use, and the current status will briefly be shown in the LCD display.



2. Changing the Reverb type

Press and hold the REVERB button.

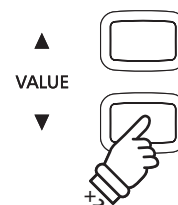
The reverb type screen will be shown in the LCD display.



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

To exit the reverb type screen and return to normal playing mode, press the REVERB button.

- * Reverb type is independent for each sound variation.
- * Any changes made to the reverb type, or on/off status will remain until the power is turned off.
- * Preferred reverb settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.



Example: To change the reverb type from 'Room' to 'Small Hall', press the VALUE ▼ button twice.

2 Effects

In addition to reverb, various other effects can be applied to the selected sound, altering the tonal character and feeling of the instrument. As with reverb, some sound types enable certain effects automatically in order to enhance tonal quality. The CN34 digital piano features thirteen different effect types.

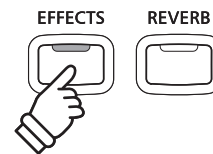
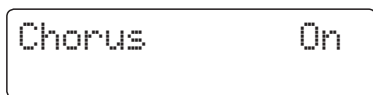
Effect types

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.

1. Turning Effects on/off

Press the EFFECTS button to turn effects on/off.

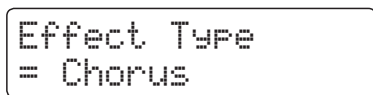
The LED indicator for the EFFECTS button will turn on to indicate when effects are in use, and the current status will briefly be shown in the LCD display.



2. Changing the Effects type menu

Press and hold the EFFECTS button.

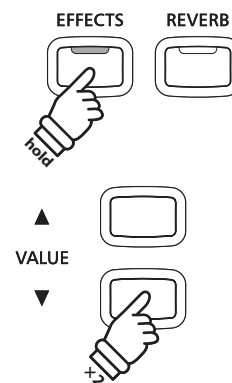
The effect type screen will be shown in the LCD display.



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

To exit the effects type screen and return to normal playing mode, press the EFFECTS button.

- * Effect type is independent for each sound variation.
- * Any changes made to the effect type, or on/off status will remain until the power is turned off.
- * Preferred effects settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.



Example: To change the effect type from 'Chorus' to 'Stereo Delay', press the VALUE ▼ button twice.

Touch

As with an acoustic piano, the CN34 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’.

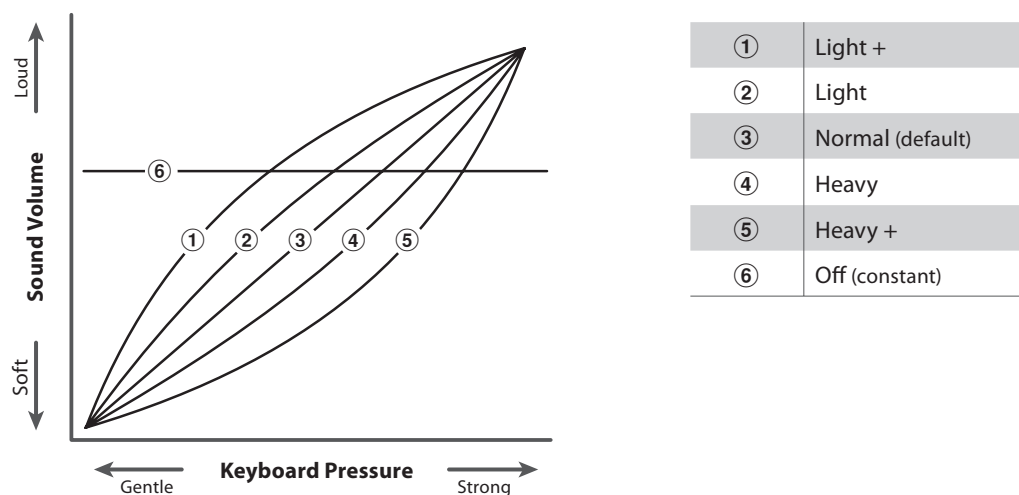
The Touch function allows the touch sensitivity of the keyboard to be changed to one of five different settings: Light +, Light, Heavy, Heavy + or Off.

■ Touch Curve types

Touch Curve	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 touch curve is recommended for children and organ players.
Normal (default)	Reproduces the standard touch sensitivity of an acoustic piano. * This touch curve is used when the Touch function is turned off.
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 (constant)	A constant volume is produced regardless of how hard the keys are struck. * This touch curve intended for playing sounds of instruments that have a fixed dynamic range (e.g. organ and harpsichord).

■ Touch Curve graph

The illustration below provides a visual representation of the different Touch Curve settings.



■ Changing from the standard (Normal) Touch Setting

Press the TOUCH button.

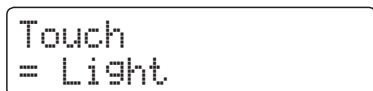
The LED indicator for the TOUCH button will turn on, indicating that the Touch function is in use, and that the piano is using a touch setting other than the standard ‘Normal’ type.



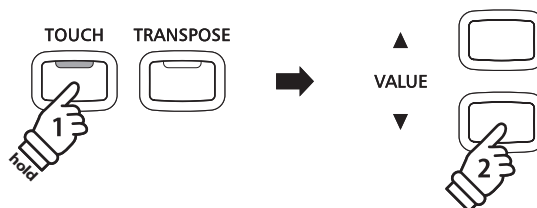
■ Selecting the touch sensitivity

Press and hold the TOUCH button, then press the ▼ or ▲ VALUE buttons.

The selected touch curve will be shown in the LCD display.



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



- * The touch setting is global for all of the preset sounds. It is not possible to specify individual touch settings for each preset sound.
- * Any changes made to the Touch settings will remain until the power is turned off.

- * Preferred Touch settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.
- * LIGHT and HEAVY do not represent the physical weight of the keys. These are settings that affect the sensitivity of the keys, which determines the volume level in response to the key movement.

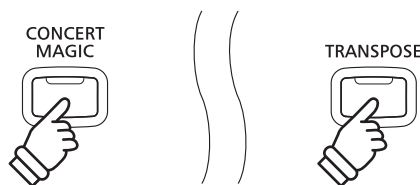
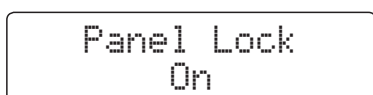
Panel Lock

The Panel Lock function allows the state of all panel buttons to be temporarily locked, preventing sounds and other settings from being changed. This function may prove useful in teaching environments, ensuring that students are not distracted by changing sounds etc.

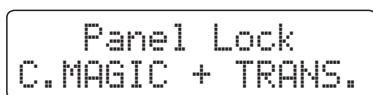
1. Activating the Panel Lock

Press the CONCERT MAGIC and TRANPOSE buttons simultaneously.

The Panel Lock screen will be shown in the LCD display, and the instrument will stop responding to panel button presses.



If panel buttons are pressed while the Panel Lock is activated, a reminder message will briefly be shown in the LCD display.

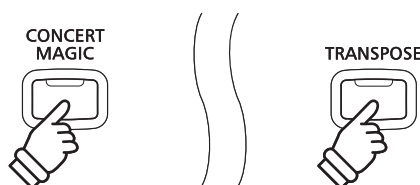
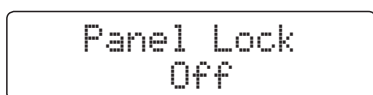


- * The Panel Lock will remain activated even after the instrument's power is turned off.

2. Deactivating the Panel Lock

Press the CONCERT MAGIC and TRANPOSE buttons simultaneously again.

A message will be shown in the LCD display to indicate that the Panel Lock has been deactivated, and the instrument will resume responding to panel button presses as normal.



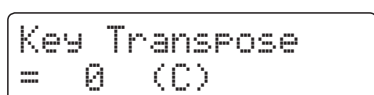
Transpose

The Transpose function allows the pitch of the CN34 digital piano's 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.

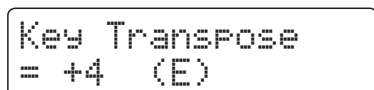
■ Adjusting the Key Transpose value: Method 1

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

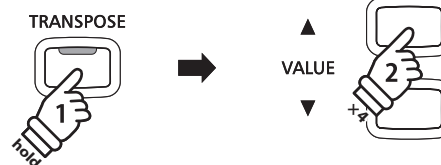
The LED indicator for the TRANSPOSE button will turn on to indicate that the transpose function is in use, and the key transpose value will briefly be shown in the LCD display.



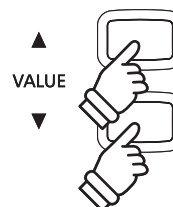
Key Transpose
= 0 (C)



Key Transpose
= +4 (E)



Example: To increase the key transpose value from 0 (off) to +4 (i.e. raise the keyboard pitch by 4 semi-tones), press and hold the TRANSPOSE button, then press the VALUE ▲ button four times.

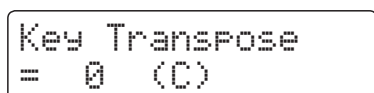


- * The keyboard pitch can be raised or lowered by up to 12 semi-tones.
- * To reset the key transpose value to 0, press and hold the TRANSPOSE button, then press the ▼ and ▲ VALUE buttons simultaneously.

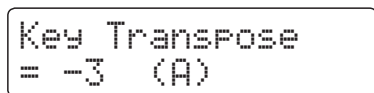
■ Adjusting the Key Transpose value: Method 2

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

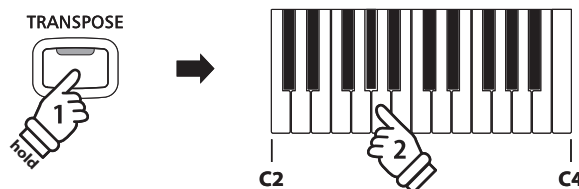
The LED indicator for the TRANSPOSE button will turn on to indicate that the transpose function is in use, and the key transpose value will briefly be shown in the LCD display.



Key Transpose
= 0 (C)



Key Transpose
= -3 (A)



Example: To change the key transpose from C (off) to A (i.e. lower the keyboard pitch by three semi-tones), press and hold the TRANSPOSE button, then press the A key.

- * The keyboard pitch can be adjusted within the range of C2 to C4.

■ Turning Key Transpose on/off

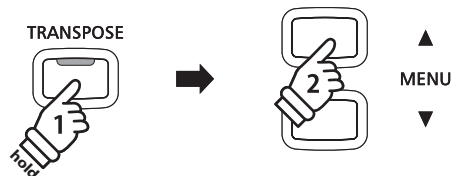
Press the TRANSPOSE button to turn the key transpose function on/off.

- * The specified key transpose setting will be retained even after the key transpose function is turned off. This allows the key transpose function to be turned on and off freely, without the need to adjust the value each time.
- * The specified key transpose setting will return to the default value of 0 after the power is turned off.
- * Preferred key transpose settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

Using the Song Transpose function it is also possible to transpose recorder songs stored in internal memory, and SMF song files stored on a USB memory device. This allows the pitch of the song to be adjusted without affecting the pitch of the keyboard.

■ Selecting the Song Transpose/Key Transpose settings

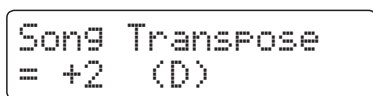
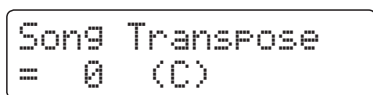
Press and hold the TRANSPOSE button, then press the ▼ or ▲ MENU buttons to alternate between the key transpose and song transpose settings.



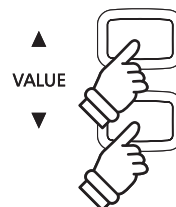
■ Adjusting the Song Transpose value

While the Song Transpose screen is shown in the LCD display:

Press the ▼ or ▲ VALUE buttons to adjust the song transpose value.



Example: To increase the song transpose value from 0 (off) to +2 (i.e. raise the song pitch by 2 semi-tones), press and hold the TRANSPOSE button, then press the VALUE ▲ button twice.



- * The song pitch can be raised or lowered by up to 12 semi-tones.
- * To reset the song transpose value to 0, press the ▼ and ▲ VALUE buttons simultaneously.
- * The song transpose value will automatically reset to 0 when a different song is selected.

Metronome / Drum Rhythms

The Metronome function provides a steady beat to aid practicing the piano at a consistent tempo. In addition to regular metronome beats, the CN34 digital piano also features a variety of drum rhythms to accompany most playing styles and musical genres.

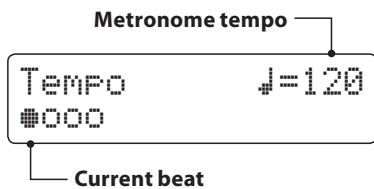
For a complete listing of available drum rhythms, please refer to page 123 of this owner's manual.

■ Turning the Metronome on/off

Press the TEMPO button.

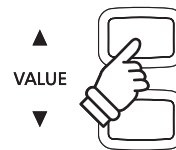
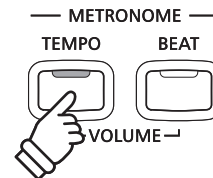
The LED indicator for the TEMPO button will turn on to indicate that the metronome function is in use, and a 4/4 beat will start to count.

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



Press the ▼ or ▲ VALUE buttons to increase or decrease the tempo within the range of 10 - 400 beats per minute. (20-800 BPM with eighth note rhythms).

Press the TEMPO button again to stop the metronome. The LED indicator for the TEMPO button will turn off.



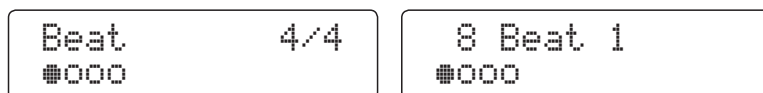
■ Changing the time signature and rhythm

Press the BEAT button.

The LED indicator for the BEAT button will turn on and the metronome will begin counting.

The currently selected time signature and a visual indicator of each beat will be shown in the LCD display.

If a rhythm is selected, the currently selected rhythm name will be shown in the LCD display.



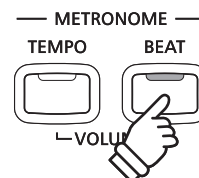
Press the ▼ or ▲ VALUE buttons to select the desired time signature / rhythm.

* There are ten different times signatures available :
1/4, 2/4, 3/4, 4/4, 5/4, 3/8, 6/8, 7/8, 9/8 and 12/8.

Alternatively, one of the 100 built-in rhythm styles can be used instead of a simple metronome click.

Press the BEAT button again to stop the metronome.

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



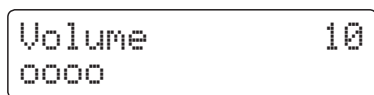
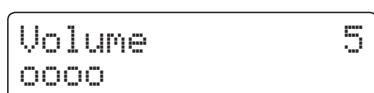
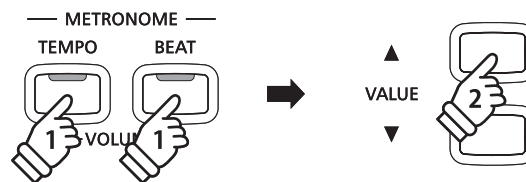
■ Adjusting the Metronome volume

To adjust the metronome volume:

Press the TEMPO and BEAT buttons simultaneously.

The volume level of the metronome will be shown in the LCD screen.

Press the ▼ or ▲ VALUE buttons to adjust the value of the metronome volume.



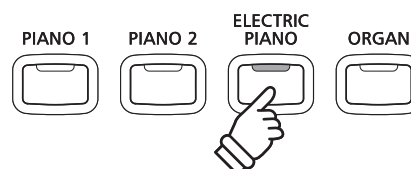
- * The metronome volume can be adjusted within the range of 0 - 10.
- * Any changes made to the metronome tempo, beat, or volume settings will remain until the power is turned off.
- * Preferred metronome settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

■ Changing sounds while the Metronome is in use

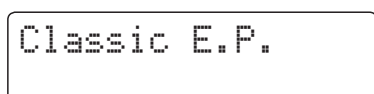
Press the desired SOUND button.

The LED indicator for the button will turn on to indicate that this category has been selected.

The name of the sound will briefly be shown in the LCD display, before returning to the metronome screen.



Example: To select the 'Classic E.P.' sound, press the ELECTRIC PIANO button.



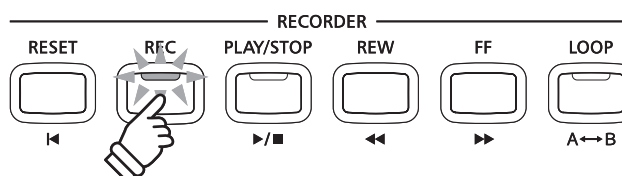
■ Jump to Recorder shortcut

While the Metronome function is in use:

Press the REC button.

The Recorder standby screen will be shown in the LCD display, and the metronome will stop to count. A one bar count-in will also be played before the recording begins.

- * Please refer to page 44 for more information about the instrument's Recorder functions.



Registration Memories

The Registration function allows the current instrument setup (sound selection, all settings, etc.) to be stored to a registration memory, and conveniently recalled at the touch of a button. There are 9 different registration memories to be stored.

Registrations can also be loaded from/saved to USB memory devices. Please refer to page 61 for more information.

■ Settings stored in Registration memories

General	Settings
Selected sound	Basic Settings*
Dual Mode / Split Mode (sounds, volume balance, split point)	Virtual Technician
Reverb, Effects, Touch, Transpose (Key Transpose only)	Key Settings
Metronome (Beat, Tempo, Volume)	MIDI Settings

* Speaker Volume, Phones Volume, Line Out Volume, Audio Recorder Gain, and Power Settings will not be stored to Registration memories.

■ 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, and the registration selection screen will be shown in the LCD display.



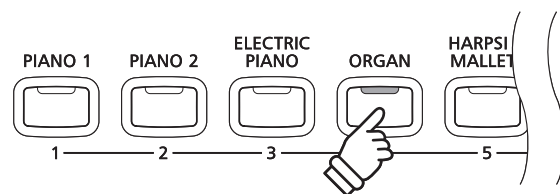
Concert Grand

Press the SOUND buttons to select the desired registration memory.

Registration 4



Jazz Organ
/Fretless Bass



Alternatively, press the ▼ or ▲ VALUE buttons to cycle through all 9 different registration memories.

■ Exiting Registration mode (restore previous settings)

To return to normal playing mode without selecting the registration (i.e. restore the previous panel settings):

Press the REGISTRATION button.

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

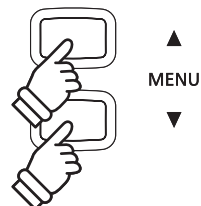


■ Exiting Registration mode (retain new settings)

To return to normal playing mode with the current registration memory settings selected:

Press the ▼ and ▲ MENU buttons simultaneously.

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

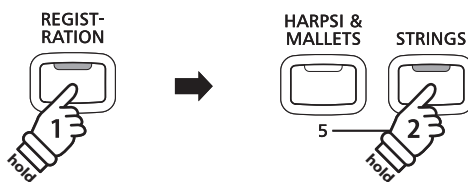
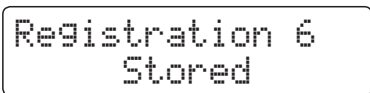


■ Storing a Registration memory

To store a registration memory:

Press and hold the REGISTRATION button, then press and hold a SOUND button.

The current instrument setup will be stored to the registration memory assigned to the pressed SOUND button, and a confirmation message will briefly be shown in the LCD display.

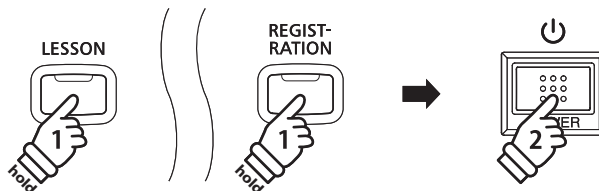


Example: To store the current instrument setup to memory 6, press and hold the REGISTRATION button, then press the STRINGS button.

■ Resetting all Registration memories

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

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



Lesson Function

The Lesson function allows budding pianists to practice the piano using a selection of built-in song books. The left and right hand parts for each piece can be practiced separately, while adjusting the tempo allows difficult passages to be perfected.

For a complete listing of available Lesson Function songs, please refer to the separate 'Internal Song Lists' booklet.

■ Built-in Lesson Function song books

US, Canada, Australasia

Alfred's Premier Piano Course Lesson 1A

Alfred's Premier Piano Course Lesson 1B

Alfred's Basic Piano Library Lesson Book Level 1A

Alfred's Basic Piano Library Lesson Book Level 1B

Alfred's Basic Adult Piano Course Lesson Book Level 1

Rest of the World

Burgmüller 25 (25 Etudes Faciles, Opus 100)

Czerny 30 (Etudes de Mécanisme, Opus 849)

Czerny 100 (Hundert Übungsstücke, Opus 139)

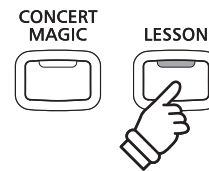
Beyer (Vorschule im Klavierspiel, Opus 101)

1 Selecting a lesson book/song

■ Entering lesson mode

Press the LESSON button.

The LED indicator for the LESSON button will turn on, and the name of the selected lesson book and song will be shown in the LCD display.

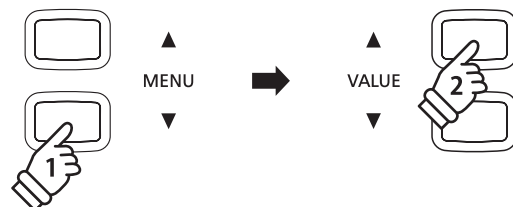


```
AlfredChild1A-01
1-1      ♩=104
```

■ Selecting a lesson book/song

While Lesson mode is selected:

Press the ▲ or ▼ MENU buttons to cycle through the available lesson books, then press the ▲ or ▼ VALUE buttons to select the desired song.



```
Book name      Song number
AlfredPrem1A-01
1-1      ♩=104
Bar and beat number      Tempo
```

It is also possible to select songs by pressing and holding the LESSON button, then pressing the relevant key on the keyboard.

* Please refer to the separate 'Internal Song Lists' booklet for a complete listing of available lesson songs.

2 Listening to the selected lesson song

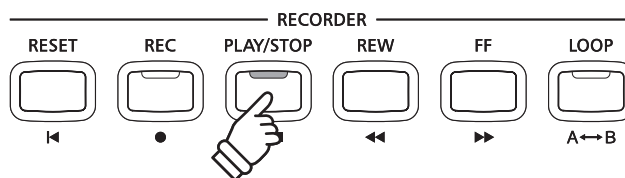
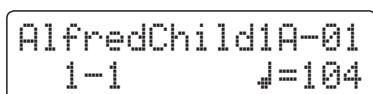
This page will explain how to play and stop the selected lesson song, and adjust the tempo.

■ Playing the lesson song

After selecting a lesson book and song:

Press the PLAY/STOP button.

The LED indicator for the PLAY/STOP button will turn on, and a one bar count-in will be heard before the song starts to play.



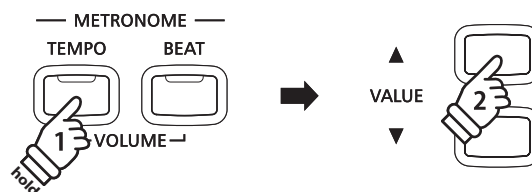
* If the first bar of the song begins on an 'up' beat (i.e. pickup notes), the first bar number will be shown as zero in the LCD display.

* The metronome will not continue after the count-in bar, but can be turned on manually by pressing the TEMPO button.

■ Changing the tempo of the lesson song

Press and hold the TEMPO button, then press the ▲ or ▼ VALUE buttons to increase or decrease the lesson song tempo.

Press the ▲ and ▼ VALUE buttons simultaneously to reset the lesson song tempo back to the default value.



■ Stopping and resuming the lesson song

Press the PLAY/STOP button again to stop the lesson song.

Press the PLAY/STOP button once again.

A one bar count-in will be heard before the lesson song resumes playback from the previous position.

Press the PLAY/STOP button to stop the lesson song, then press the RESET button to reset the playing position to the first bar.

■ Exiting lesson mode

Press the LESSON button.

The LED indicator for the LESSON button will turn off and the name of the selected sound will be shown in the LCD display.

3 Practicing left and right-hand parts separately

This page will explain how to adjust the left and right-hand part volume of the selected lesson song (allowing each part to be practiced separately), and how to start playing a lesson song from a specific bar.

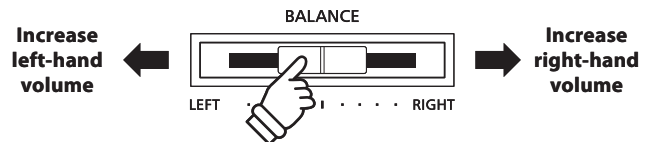
■ Adjusting the left/right-hand part volume

After selecting a lesson book and song:

Use the BALANCE slider to adjust the volume balance between the left-hand and right-hand parts.

As the volume of the left-hand part increase, the volume of the right-hand part decreases, and vice versa.

This function allows the left and right-hand parts of each lesson song to be practised separately, or simply reduce the volume of one part.



■ Beyer lesson songs and part volume

Please refer to page 34 for more information regarding the availability of Beyer lesson songs.

If the Beyer lesson book is selected, moving the balance slider to the left will decrease the volume of the student's part, while moving the balance slider to the right will decrease the volume of the teacher's part.

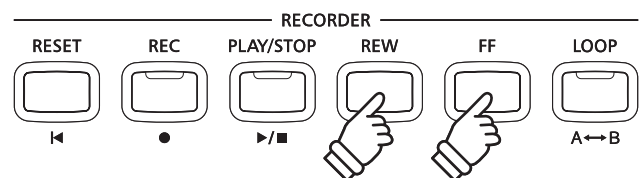
■ Playing the lesson song from a specific bar

Press the FF or REW buttons to advance or rewind the starting bar of the selected lesson song.

Press and hold the FF or REW buttons to fast-forward or fast-rewind the starting bar of the selected lesson song.

Press the PLAY/STOP button.

A one bar count-in will be heard before the song starts to play from the specified bar number.



4 Repeating sections of a lesson song

This page will explain how to repeat (loop) specific sections of the selected lesson song between a defined 'A' and 'B' point, allowing difficult passages to be practiced continuously.

1. Specifying the start point (A) of the loop

After selecting a lesson book and song:

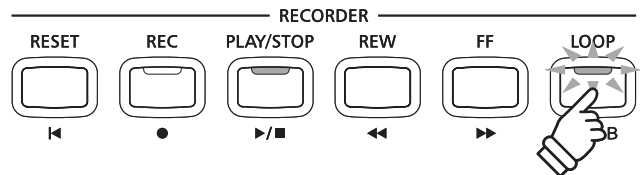
Press the PLAY/STOP button.

The LED indicator for the PLAY/STOP button will turn on, and a one bar count-in will be heard before the song starts to play.



Press the LOOP button to specify the start point of the loop.

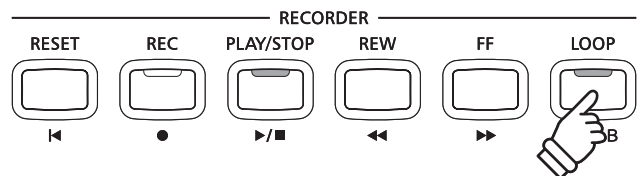
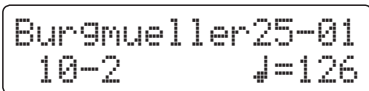
The LED indicator for the LOOP button will start to flash, indicating that the start point (A) of the loop has been set.



2. Specifying the end point (B) of the loop

Press the LOOP button again to specify the end point of the loop.

The LED indicator for the LOOP button will turn on, indicating that the end point of the (B) of the loop has been set.



The defined 'A-B' section of the lesson song will repeat (loop) continuously, allowing the passage to be practiced.

3. Cancelling the 'A-B' loop

Press the LOOP button once again to cancel the 'A-B' loop.

The LED indicator for the LOOP button will turn off and the lesson song will resume normal playback.

* The loop section can also be specified while the lesson song is paused by pressing the FF or REW button to select the bar. The last bar cannot precede the first bar.

5 Recording a lesson song practice

This page will explain how to record the left or right-hand parts of the selected lesson song, then play back the performance for self-evaluation.

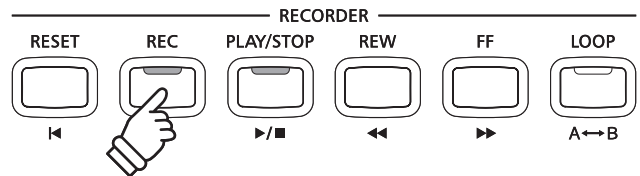
1. Starting the lesson song recording

After selecting a lesson book and song:

Press the REC button.

The LED indicators for the REC and PLAY/STOP buttons will turn on to indicate that recording mode is in use.

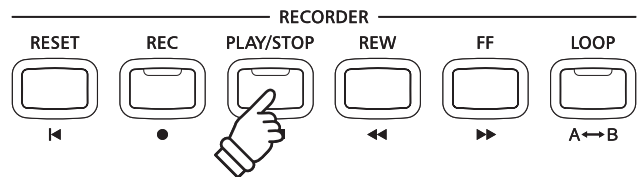
A one bar count-in will be heard before the lesson song starts to play and record.



2. Stopping the lesson song recording

Press the PLAY/STOP button.

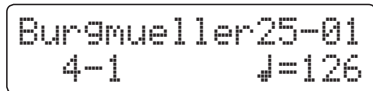
The LED indicators for the REC and PLAY/STOP buttons will turn off, and the lesson song recording and playback will stop.



3. Playing back the recorded lesson song

Press the PLAY/STOP button again.

The LED indicator for the PLAY/STOP button will turn on, and a one bar count-in will be heard before the recorded lesson song starts to play.



Press the PLAY/STOP button.

The LED indicator for the PLAY/STOP button will turn off, and the recorded lesson song will stop playing.

* The 'A-B' loop function cannot be used when recording a lesson song practice.

* Press the REC and PLAY/STOP buttons simultaneously to erase the recorded lesson song practice.

The recorded practice will be erased automatically when a different lesson song is selected.

Concert Magic

The Concert Magic function allows complete beginners to enjoy playing the piano by simply selecting one of the 88 pre-programmed songs, then tapping the keyboard with a steady rhythm and tempo.

For a complete listing of available Concert Magic songs, please refer to the separate 'Internal Song Lists' booklet.

1 Performing a Concert Magic song

The 88 Concert Magic songs are assigned to each of the 88 keys, and classified by song category into eight groups, such as Children's Songs, American Classics, Christmas Songs etc.

1. Entering Concert Magic mode

Press the CONCERT MAGIC button.

The LED indicator for the CONCERT MAGIC button will turn on to indicate that Concert Magic mode is in use.

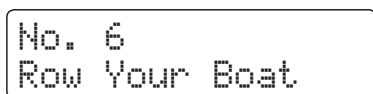
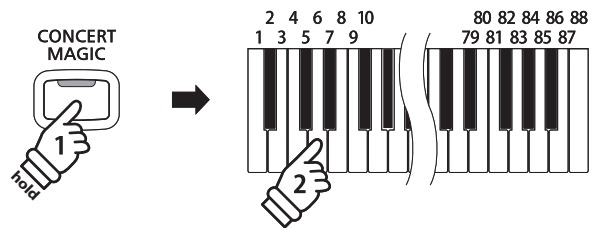
The name of the currently selected Concert Magic song will also be shown in the LCD display.



2. Selecting a Concert Magic song

Press and hold the CONCERT MAGIC button, then press the key to which the Concert Magic song is assigned.

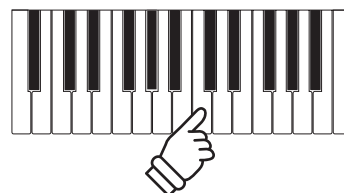
A Concert Magic song will be selected, with the song number and name shown in the LCD display.



3. Performing the selected Concert Magic song

Press a key on the keyboard.

The song will advance with every key that is pressed. Pressing the keys gently will produce a soft sound, while pressing heavily will produce a loud sound.

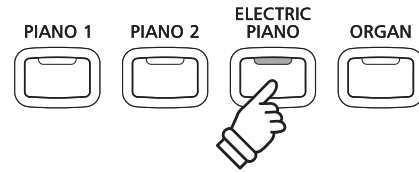


As the song advances, the ● symbols shown in the LCD will be replaced by + symbols. This is called the Note Navigator.

4. Changing the Concert Magic playback sound

Press a SOUND button to change the sound used for the Concert Magic song (melody and accompaniment parts).

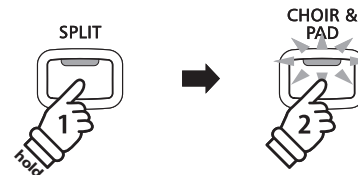
It is also possible to select independent sounds for the melody and accompaniment parts:



Press the SPLIT button to enable Concert Magic split mode.

Press a SOUND button to change the melody sound.

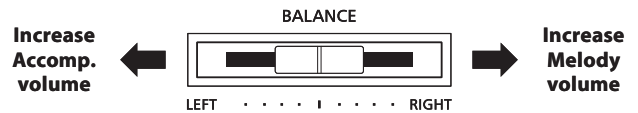
Press and hold the SPLIT button, then press a SOUND button to change the accompaniment sound.



■ Adjusting the Concert Magic part volume

Use the BALANCE slider to adjust the volume balance between the accompaniment and melody parts.

As the volume of the accompaniment part increase, the volume of the melody part decreases, and vice versa.



5. Exiting Concert Magic Mode

Press the CONCERT MAGIC button to exit Concert Magic mode.

The LED indicator for the CONCERT MAGIC button will turn off, and the instrument will return to normal playing mode.



2 Concert Magic demo mode

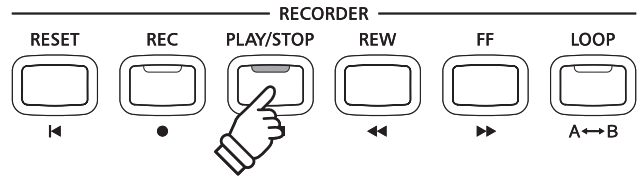
This function allows all of the Concert Magic songs to be played back in order, randomly or in designated categories.

■ All playback

Enter Concert Magic mode without selecting a song.

Press the PLAY/STOP button.

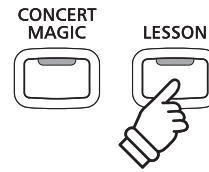
All 88 Concert Magic songs will be played in order until the PLAY/STOP button is pressed again.



■ Random playback

Enter Concert Magic mode and then press the LESSON button.

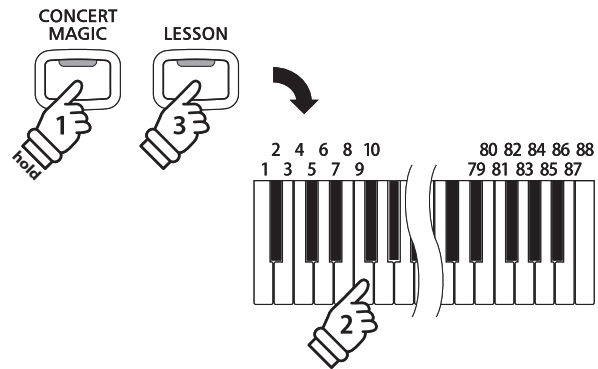
All 88 Concert Magic songs will be played in a random order until the PLAY/STOP button is pressed.



■ Category playback

Press and hold the CONCERT MAGIC button, press the key to which the desired song is assigned, then press the LESSON button.

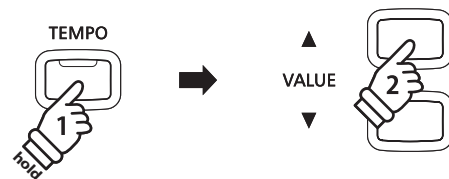
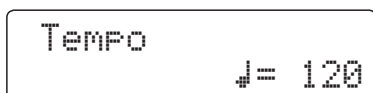
Songs in the same category as the selected song, will be played in sequential order until the PLAY/STOP button is pressed.



■ Adjusting the playback tempo of the Concert Magic song

While Concert Magic mode is in use:

Press and hold the TEMPO button, then press the ▼ or ▲ VALUE buttons to adjust the playback tempo.



The tempo of the selected Concert Magic song can be adjusted either before playback, or while the song is playing.

3 Concert Magic song arrangement types

Concert Magic songs are divided into three different arrangement types, each requiring a different level of skill to be performed correctly.

* The Concert Magic arrangement type for each song is indicated in the 'Internal Song Lists' booklet as 'EB', 'MP', or 'SK'.

Easy Beat

EB

These are the easiest songs to play. To perform them, simply tap out a constant steady beat on any key on the keyboard.

The following example shows the notated score for 'Für Elise', indicating that a constant, steady rhythm should be maintained throughout the song. This is the distinguishing characteristic of an Easy Beat song.

Key on: X

Melody Play

MP

These songs are also relatively easy to play, especially if they are familiar to the player. To perform them, tap out the rhythm of the melody on any key of the keyboard. Singing along as the rhythm is tapped can be helpful.

The following example shows the notated score for 'Twinkle, Twinkle, Little Star'.

* When performing fast Concert Magic songs, it may be easier to tap different keys with two alternating fingers in order to play at a greater speed.

Key on: X X X X X X X X X X X X X X X

Skillful

SK

These songs range in difficulty from moderately difficult to difficult. To perform them, tap out the rhythm of both the melody and the accompaniment notes on any key of the keyboard. The Note Navigator will be very helpful when playing the Skillful type songs.

The following example shows the notated score for 'Waltz of the Flowers'.

Key on: X X X X X X X X X X X X X X X

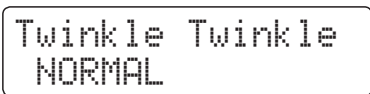
4 Steady Beat mode

Steady Beat mode allows all Concert Magic songs to be played by simply tapping any key with a constant steady beat, regardless of the song arrangement type.

■ Change the Concert Magic playing mode

Press and hold the CONCERT MAGIC button.

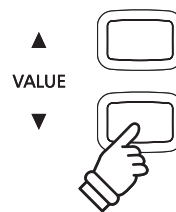
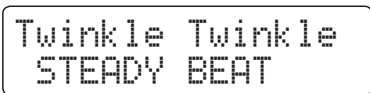
The current Concert Magic mode will be shown on the second line of the LCD screen.



* The default Concert Magic mode is NORMAL.

Press the ▼ or ▲ VALUE buttons.

The Concert Magic mode will change to STEADY BEAT.



Song Recorder (Internal memory)

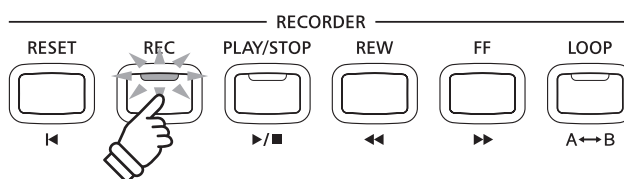
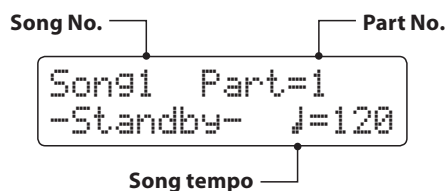
The CN34 digital piano allows up to 3 different songs to be recorded, stored in internal memory, and played back at the touch of a button. Each song consists of two separate tracks - referred to as 'parts' - that can be recorded and played back independently. This allows the left-hand part of a song 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 Internal Song Recorder screen will be shown in the LCD display.

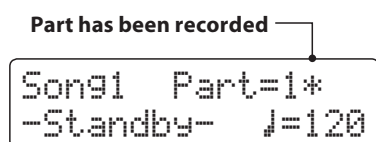


* If a USB memory device is connected, press the MENU ▲ button to select the 'Int. Recorder' function.

* The Recorder shares the song tempo setting with the Metronome functions.

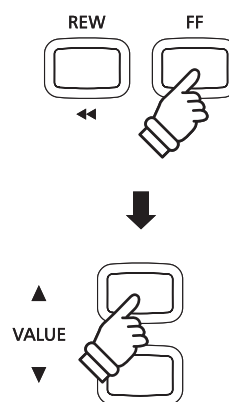
2. Selecting the song/part to be recorded

Press the REW or FF buttons to select the internal song memory (1-3) to be recorded to.



Then press the ▼ or ▲ VALUE buttons to select the part number (1 or 2) to be recorded.

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



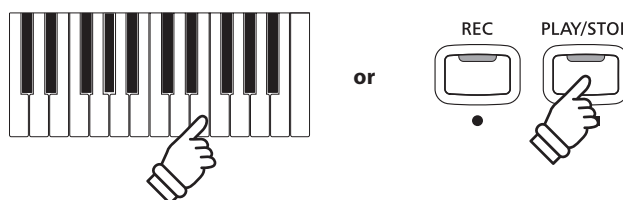
When recording part 1 and part 2 separately, select the song and part number carefully in order to prevent accidentally overwriting a previously recorded part.

3. Starting the song recorder

Press a key on the keyboard.

The LED indicators for the REC and PLAY/STOP buttons will turn on, and recording will start.

The current bar and beat will also be shown in the LCD display.



* 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.

4. Stopping the song recorder

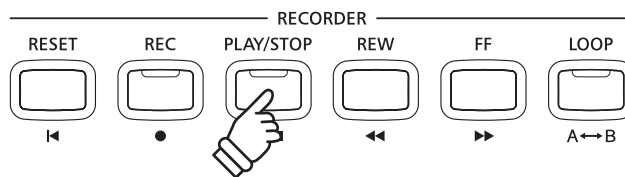
Press the PLAY/STOP button.

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 Internal Song Player screen will be shown in the LCD display, indicating that the song is ready for playback.

Song1 Part=1*
1-1 ♪=120

To play back the recorded song, please refer to the 'Playing a Song' instructions on page 46.



* The maximum recording capacity is approximately 90,000 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 a second part

To record a second part, repeat the above instructions, selecting the part that has not been recorded to.

■ Recording with the metronome

It is also possible to record songs with the metronome activated. This is useful when recording parts separately, or wishing to maintain correct timing throughout complex passages. Note that the standard metronome click and drum rhythm will not be heard when the song is played back.

* Please refer to page 30 for more information about using the instrument's Metronome function with the Recorder.

■ Changing panel settings while recording

In some cases, 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 buttons etc.)

Switching between dual/split modes.

Changes made to the volume balance in dual/split mode.

Panel operations NOT remembered during recording*

Changes made to the reverb settings.

Changes made to the effects settings.

Changes made to the tempo.

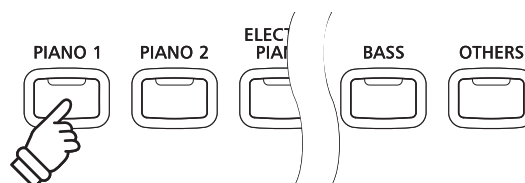
Changes made to transpose, tuning, touch, etc.

* Make changes to desired effects, reverb, and tempo settings etc. before recording a new song.

5. Exiting song recorder mode

Press a SOUND button to exit the Internal Song Recorder.

The instrument will return to normal playing mode.



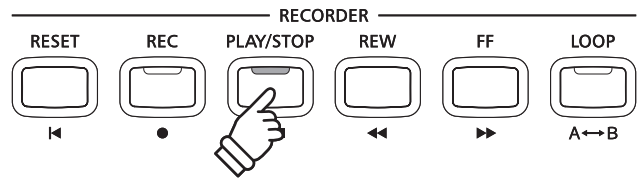
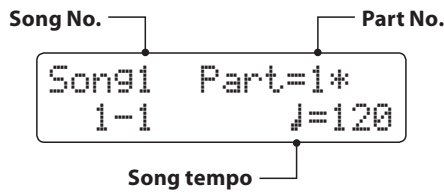
2 Playing a Song

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.

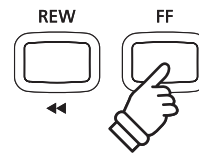
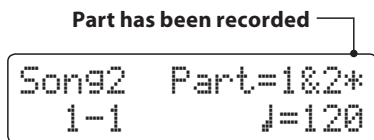
The LED indicator for the PLAY/STOP button will turn on, and the Internal Song Player screen will be shown in the LCD display.



* If a USB memory device is connected, press the MENU ▲ button to select the 'Int. Recorder' function.

2. Selecting the song to be played back

Press the REW or FF buttons to select the internal song memory (1-3) to be played back.

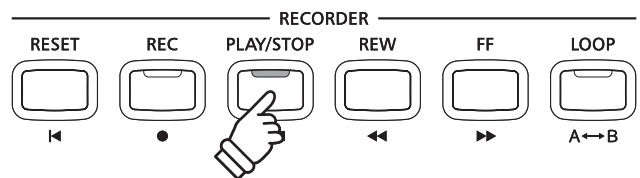
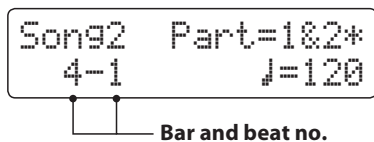


* If a part has already been recorded, a * symbol will be shown.

3. Starting song playback

Press the PLAY/STOP button.

The selected song/part(s) will start to play, and the current bar and beat will also be shown in the LCD display.



■ Controlling song playback

While the song is playing:

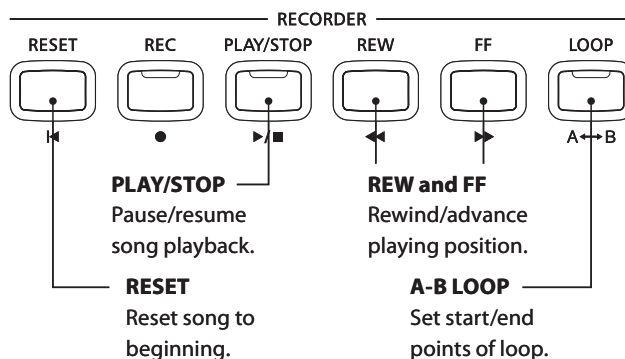
Press the REW or FF buttons to rewind or advance the playing position of the song.

Press the A-B LOOP button twice to set the start and end points of the loop.

* Pressing the A-B LOOP button for a third time will turn off the loop.

Press the PLAY/STOP button to pause and resume song playback.

Press the RESET button to return to the beginning of the song.

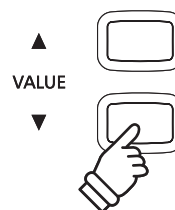


■ Adjusting the playback tempo

While the song is playing:

Press the ▼ or ▲ VALUE buttons to adjust the playback tempo.

* The playback tempo can be adjusted within the range of 10 - 400 beats per minute (BPM).

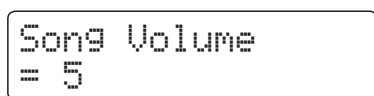


■ Adjusting playback settings (playback menu)

The playback menu features settings to adjust the song volume, and pitch (transpose), and change the selected playing part(s).

While the song is playing:

Press the ▼ or ▲ MENU buttons to enter the playback menu and select the desired setting, then press the ▼ or ▲ VALUE buttons to adjust the setting value.

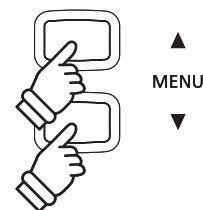
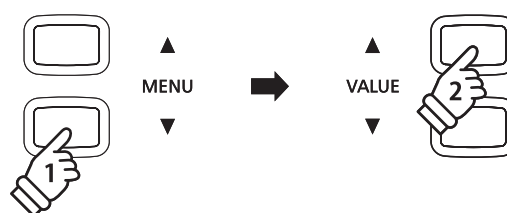


* The song volume setting can be adjusted within the range of 1 - 10.

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

* The song part setting cycles through part 1, part 2, and parts 1&2.

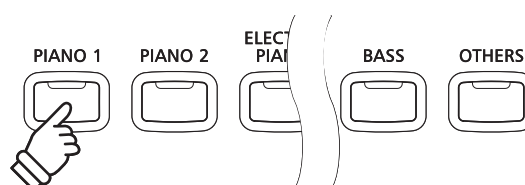
Press the ▼ and ▲ MENU buttons simultaneously to return to the Internal Song Play screen.



4. Exiting song play mode

Press a SOUND button to exit the Internal Song Player.

The instrument will return to normal playing mode.



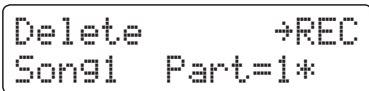
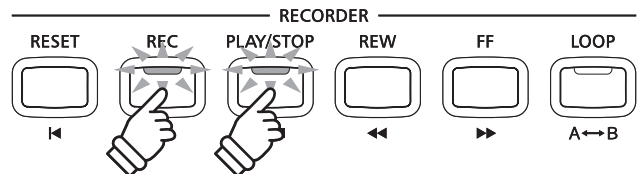
3 Erasing a Part/Song

This function is used to erase recorder parts that have been recorded incorrectly or songs that are no longer listened to. Once a part/song has been erased from memory it cannot be recovered.

1. Entering song erase mode

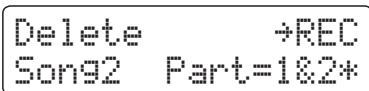
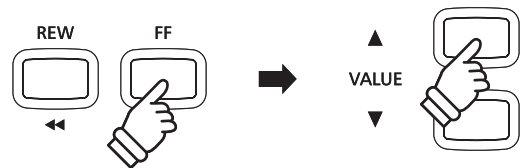
Press the REC and PLAY/STOP buttons simultaneously.

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



2. Selecting a song and part(s) to be erased

Press the REW or FF buttons to select the internal song memory (1-3) to be erased.



Parts have been recorded

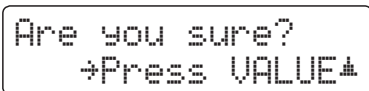
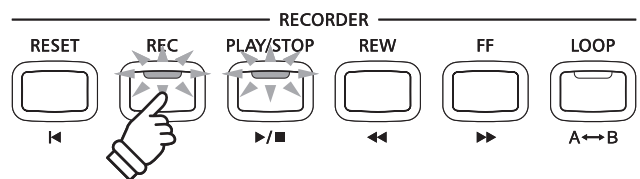
Then press the ▼ or ▲ VALUE buttons to select the part number(s) (1, 2, or 1&2) of the selected song to be erased.

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

3. Erasing the selected song and part(s)

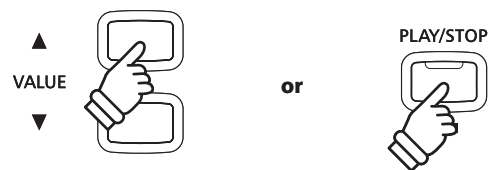
Press the REC button.

A confirmation message will be shown in the LCD display, prompting to confirm or cancel the erase operation.



Press the VALUE ▲ button to confirm the erase operation and return to the Internal Song Player screen.

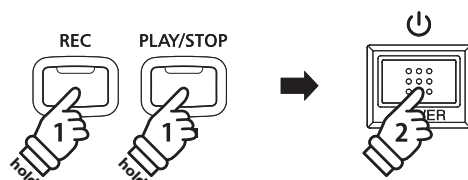
Press the PLAY/STOP button to cancel the erase operation.



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.



Audio Record/Playback (USB memory)

The CN34 digital piano is also capable of recording performances as digital audio - saving the data to a USB memory device in either MP3 or WAV format. This useful function allows professional quality recordings to be produced directly on the instrument - without the need for additional sound equipment - then emailed to band members, listened to away from the instrument, or edited and remixed further using an audio workstation.

■ Audio Recorder format specifications

Audio Format	Specifications	Bitrate
MP3	44.1 kHz, 16 bit, Stereo	192 kbit/s (fixed)
WAV	44.1 kHz, 16 bit, Stereo	1,411 kbit/s (uncompressed)

MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.
MP3 codec is Copyright (c) 1995-2007, SPIRIT.

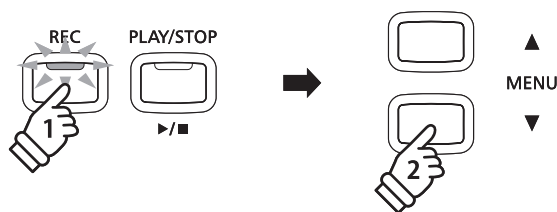
1 Recording an Audio file

1. Entering USB recorder mode

Connect a USB memory device to the USB port.

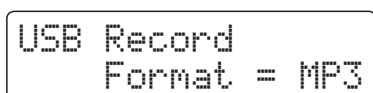
Press the REC button, then press the MENU ▼ button to select the 'USB Recorder' function.

The LED indicator for the REC and USB buttons will start to flash, and the USB Recorder screen will be shown in the LCD display.



2. Selecting the audio recorder file format

Press the ▼ or ▲ VALUE buttons to select the desired audio recorder file format (MP3 or WAV).



* MP3 audio files require less storage space than WAV audio files.

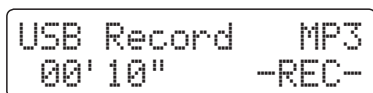
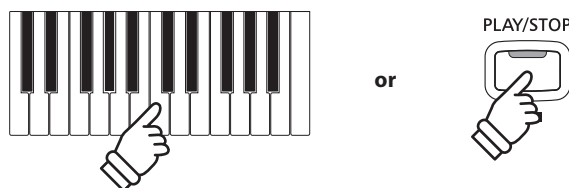
* A 1 GB USB memory device can store over 12 hours of MP3 audio data.

3. Starting the audio recorder

Press a key on the keyboard.

The LED indicators for the REC and PLAY/STOP buttons will turn on, and recording will start.

The recording status will also be shown in the LCD display.



Recording time

* 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.

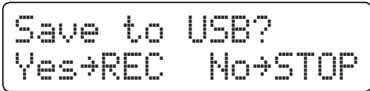
Audio Record/Playback (USB memory)

4. Stopping the audio recorder, saving to USB

Press the PLAY/STOP button.

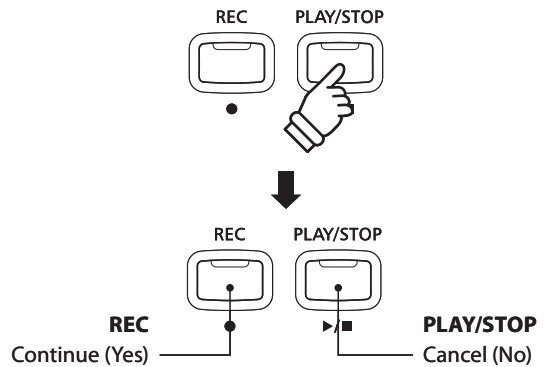
The LED indicators for the PLAY/STOP and REC buttons will turn off, and recording will stop.

A confirmation message will be shown in the LCD display, prompting to save the recorded audio file.



Press the REC button to continue, or the PLAY/STOP button to cancel the save operation.

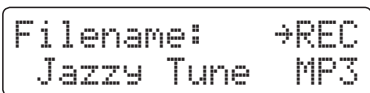
* If cancelled, the audio recorder will return to the previous screen.



5. Naming the recorded audio file, confirming save

After pressing the REC button to continue the save:

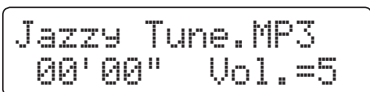
The filename entry screen will be shown in the LCD display.



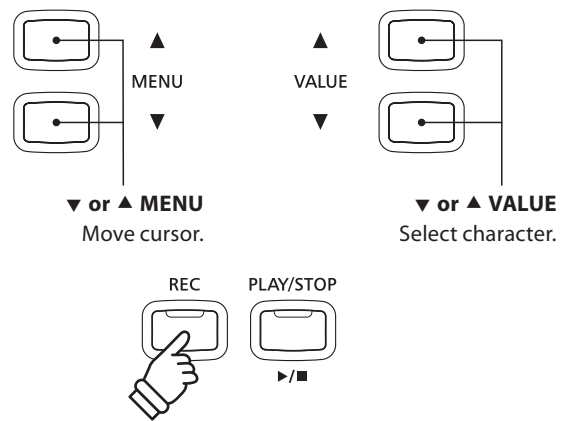
Press the ▼ or ▲ VALUE buttons to cycle through the characters, and the ▼ or ▲ MENU buttons to move the cursor.

Press the REC button again to save the recorded audio file with the specified filename.

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



To play back the recorded audio file, please refer to the 'Playing an Audio File' instructions on page 51.

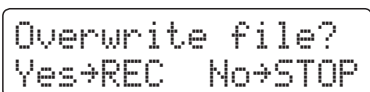


- * 'Audio-000.MP3' or 'Audio-000.WAV' will be used as the default name for the recorded audio files, with the number increasing automatically.
- * Save files are limited to a maximum name length of 11 characters.
- * The saved audio file will be stored in the root folder of the USB memory device. It is not possible to store the file in a different folder.
- * The audio recorder will only record sounds produced by the instrument. Devices connected via the LINE IN jacks will not be recorded.

Overwriting a file

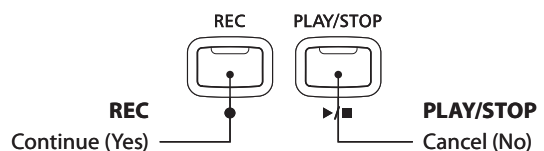
If the specified filename already exists:

A confirmation message will be shown in the LCD display, prompting to confirm or cancel the overwrite operation.



Press the REC button to confirm the overwrite, or the PLAY/STOP button to cancel.

* If cancelled, the audio recorder will return to the saving screen (step 4).



2 Playing an Audio file

The CN34 digital piano is also capable of playing MP3 and WAV audio files stored on a USB memory device directly through the instrument's speaker system. This function is particularly useful when attempting to learn the chords or melody to a new piece, or to simply play along with one's favourite song.

Audio Player supported format specifications

Audio Format	Specifications	Bitrate
MP3	32 kHz/44.1 kHz/48 kHz, Mono/Stereo	8-320 kbit/s (fixed & variable)
WAV	32 kHz/44.1 kHz/48 kHz, Mono/Stereo, 16 bit	-

MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.
MP3 codec is Copyright (c) 1995-2007, SPIRIT.

Preparing the USB memory device

First, prepare a selection of MP3 or WAV audio files, copying the data to a USB memory device.

* USB devices should be formatted to use the 'FAT' or 'FAT32' filesystems.
Please refer to page 107 for more information.

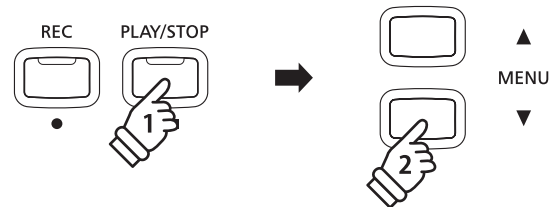


1. Entering USB playback mode

Connect a USB memory device to the USB port.

Press the PLAY/STOP button, then press the MENU ▼ button to select the 'USB Player' function.

The LED indicator for the PLAY/STOP button will turn on, and the file selection screen will be shown in the LCD display.



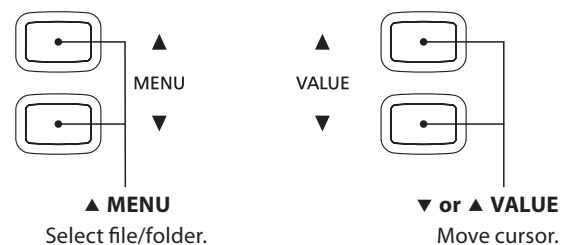
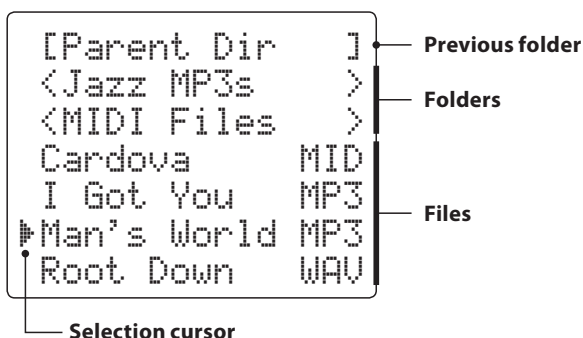
* The LED indicator for the USB button will start to flash.

File selection screen

The file selection screen provides a listing of relevant files and folders stored on the connected USB device.

The ▶ symbol is used to indicate the selected file/folder.
The < > symbols are used to indicate a folder.

An example of a typical file/folder listing screen is shown below.
The visible screen height has been extended for the purpose of this illustration.



* Files and folders will be listed in alphabetical order, with folders shown at the top of the screen.

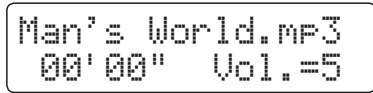
* When the USB Player function is selected, only MP3, WAV, and MID files will be shown.

* The LCD display is capable of showing filenames with a maximum length of 11 characters (+3 character suffix). Filenames longer than 11 characters will be truncated automatically.

2. Selecting and playing an audio file

Press the ▼ or ▲ VALUE buttons to move the selection cursor, then press the MENU ▲ button to select the file.

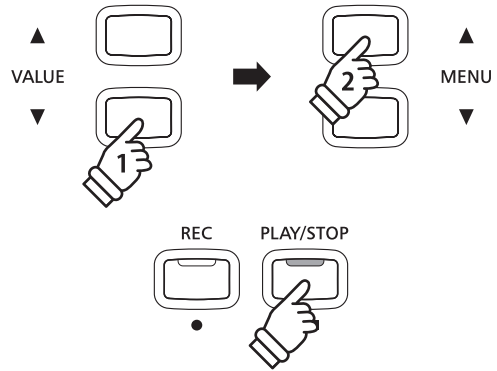
The audio play screen will be shown in the LCD display.



Press the PLAY/STOP button.

The LED indicator for the PLAY/STOP button will turn on and the selected audio file will start to play.

* To activate the 'Chain Play' mode, press and hold the PLAY/STOP button when selecting the file. The contents of the current folder will be played in alphabetical order after the initial file has finished playing.



* If the selected audio file contains embedded metadata (e.g. ID3 tags) such as artist name and song title, this information will be shown beside the filename, on the top line of the LCD display.

■ Controlling audio file playback

While the audio file is playing:

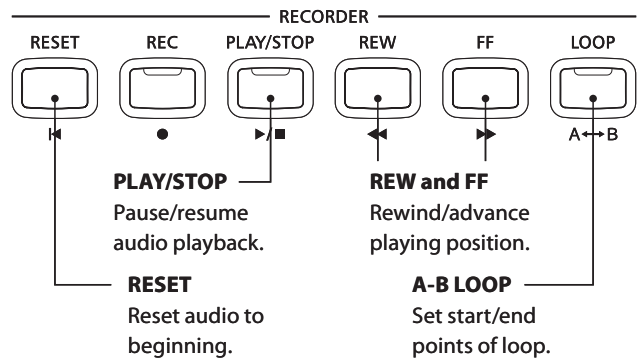
Press the REW or FF buttons to rewind or advance the playing position of the audio file.

Press the A-B LOOP button twice to set the start and end points of the loop.

* Pressing the A-B LOOP button for a third time will turn off the loop.

Press the PLAY/STOP button to pause and resume playback.

Press the RESET button to return to the beginning of the audio file.

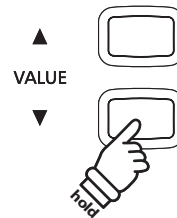


■ Adjusting the audio file playback volume

Press the ▼ or ▲ VALUE buttons to adjust the playback volume.

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

* There may be a noticeable difference in volume between audio file playback and the CN34 keyboard sound. When playing back MP3/WAV audio data, please adjust the volume of the audio file as desired.



3. Exiting USB playback mode

Press the USB button to exit the USB Player.

The instrument will return to normal playing mode.



3 Recording a MIDI file

This useful function allows 16 track SMF (Standard MIDI File) format songs to be recorded directly on the instrument, or for existing song files to be edited/modified without the need for additional sound equipment.

■ Song Recorder format specifications

Song Format	Specifications
MID	Format 0

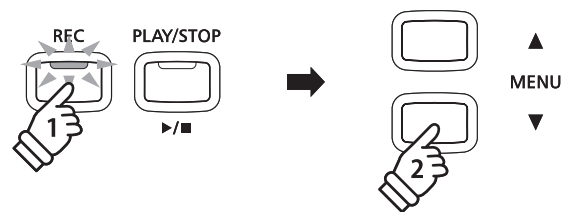
1. Entering USB recorder mode

Connect a USB memory device to the USB port.

Press the REC button, then press the MENU ▼ button to select the 'USB Recorder' function.

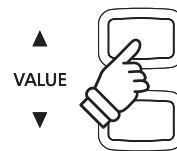
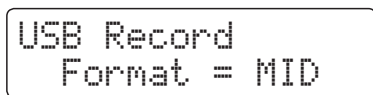
The LED indicator for the REC and USB buttons will start to flash, and the USB Recorder screen will be shown in the LCD display.

* It is also possible to re-record to an existing song. Before pressing the REC button, select the MIDI file and enter USB playback mode. Please refer to the 'Playing a MIDI File' instructions on page 55.



2. Selecting the recorder file format

Press the ▼ or ▲ VALUE buttons to select the MID format.



3. Selecting the part (track) to record

Press the REC button.

The part select screen will be shown in the LCD display.

Press the ▼ or ▲ VALUE buttons to select the part to record.

* Part 10 is reserved as a drum track. When selecting Part 10, only drum sounds can be played. Similarly, drum sounds can only be played on Part 10.

* When the Rec Part is set to MIDI, all data received from the MIDI IN jack will be recorded on Parts 1-16, according to the MIDI channel.

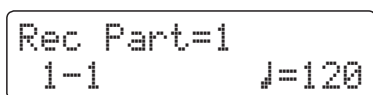
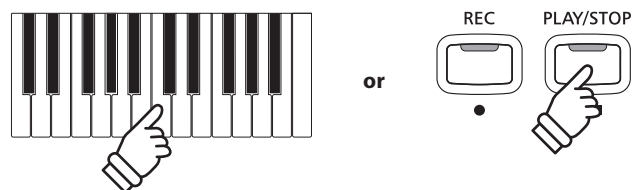
* An asterisk (*:) symbol will be shown beside the part number to indicate that the part has been recording and contains song data.

4. Starting the recorder

Press a key on the keyboard.

The LED indicators for the REC and PLAY/STOP buttons will turn on, and recording will start.

The recording status will also be shown in the LCD display.



Bar and beat no.

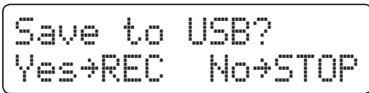
* Recording can also be started by pressing the PLAY/STOP button, allowing a rest period or empty bar to be inserted at the beginning of the song.

5. Stopping the song recorder, saving to USB

Press the PLAY/STOP button.

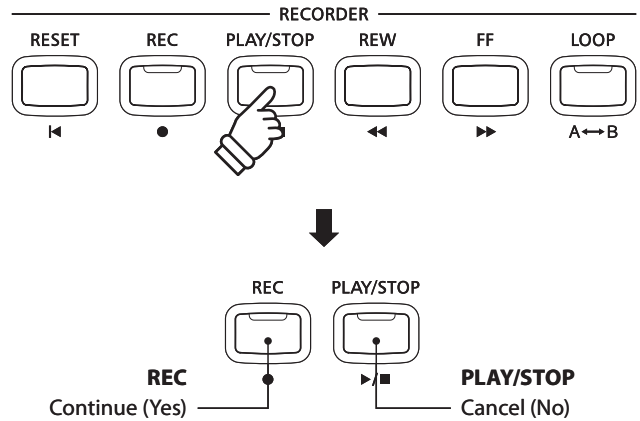
The LED indicators for the PLAY/STOP and REC buttons will turn off, and recording will stop.

A confirmation message will be shown in the LCD display, prompting to save the recorded SMF.



Press the REC button to continue, or the PLAY/STOP button to cancel the save operation.

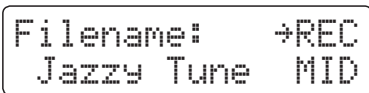
* If cancelled, the MIDI recorder will return to the previous screen.



6. Naming the recorded song file, confirming save

After pressing the REC button to continue the save:

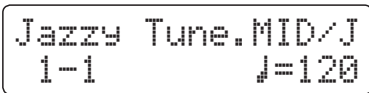
The filename entry screen will be shown in the LCD display.



Press the ▼ or ▲ VALUE buttons to cycle through the characters, and the ▼ or ▲ MENU buttons to move the cursor.

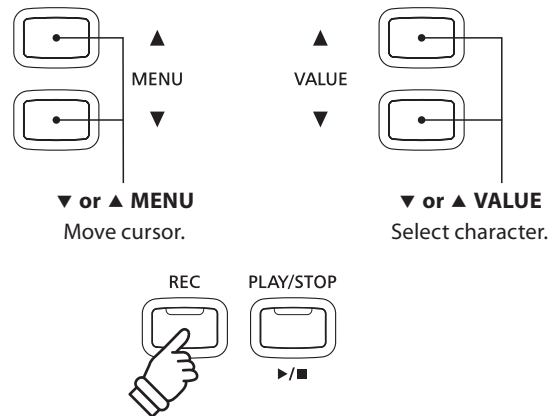
Press the REC button again to save the recorded audio file with the specified filename.

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



To record another part (track) repeat steps 3 and 4.

To play back the recorded MIDI file, please refer to the 'Playing a MIDI File' instructions on page 55.



* 'Song-000.MID' will be used as the default name for the recorded SMF, with the number increasing automatically.

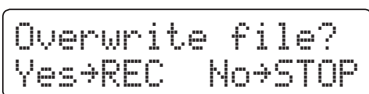
* Save files are limited to a maximum name length of 11 characters.

* The saved SMF will be stored in the root folder of the USB memory device. It is not possible to store the file in a different folder.

Overwriting a file

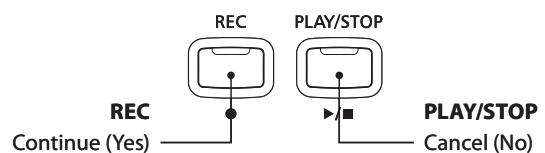
If the specified filename already exists:

A confirmation message will be shown in the LCD display, prompting to confirm or cancel the overwrite operation.



Press the REC button to confirm the overwrite, or the PLAY/STOP button to cancel.

* If cancelled, the audio recorder will return to the saving screen (step 5).



4 Playing a MIDI file

The CN34 digital piano also supports the playback of Standard MIDI File (SMF) song files stored on a USB memory device, allowing a vast selection of widely accessible music to be heard through the instrument's exquisite Progressive Harmonic Imaging sound engine.

■ Song Player supported format specifications

Song Format	Specifications
MID	Format 0, Format 1

■ Preparing the USB memory device

First, prepare a selection of MID (SMF) song files, copying the data to a USB memory device.

* USB devices should be formatted to use the 'FAT' or 'FAT32' filesystems. Please refer to page 107 for more information.



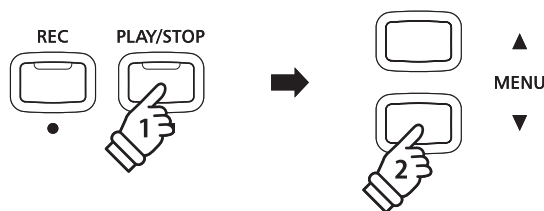
1. Entering USB playback mode

Connect a USB memory device to the USB port.

Press the PLAY/STOP button, then press the MENU ▼ button to select the 'USB Player' function.

The file selection screen will be shown in the LCD display.

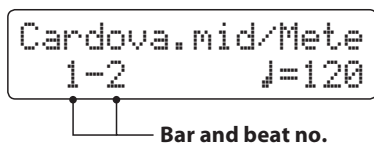
* Please refer to page 51 for information about the file selection screen.



2. Selecting and playing a MIDI file.

Press the ▼ or ▲ VALUE buttons to move the selection cursor, then press the MENU ▲ button to select the MIDI file.

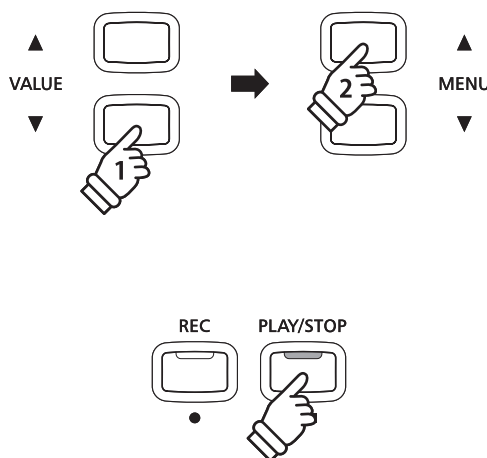
The MIDI player screen will be shown in the LCD display.



Press the PLAY/STOP button.

The LED indicator for the PLAY/STOP button will turn on and the selected MIDI file will start to play.

* To activate the 'Chain Play' mode, press and hold the PLAY/STOP button when selecting the file. The contents of the current folder will be played in alphabetical order after the initial file has finished playing.



Controlling MIDI file playback

While the MIDI file is playing:

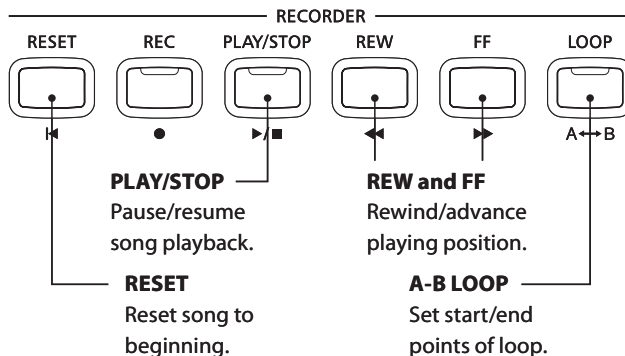
Press the REW or FF buttons to rewind or advance the playing position of the MIDI file.

Press the A-B LOOP button twice to set the start and end points of the loop.

* Pressing the A-B LOOP button for a third time will turn off the loop.

Press the PLAY/STOP button to pause and resume playback.

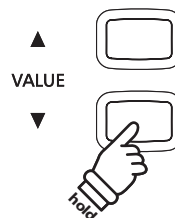
Press the RESET button to return to the beginning of the MIDI file.



Adjusting the MIDI file playback tempo

Press the ▼ or ▲ VALUE buttons to adjust the playback tempo.

* The playback tempo can be adjusted within the range of 10 -400.

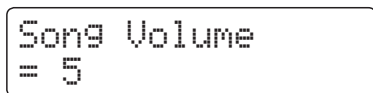
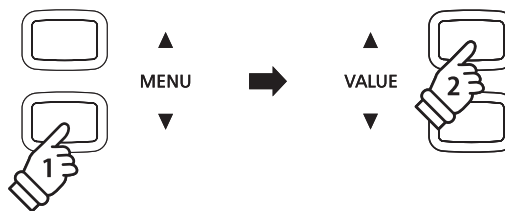


Adjusting playback settings (playback menu)

The playback menu features settings to adjust the MIDI file's song volume, and pitch (transpose), and select the muting parts.

While the MIDI file is playing:

Press the ▼ or ▲ MENU buttons to enter the playback menu and select the desired setting, then press the ▼ or ▲ VALUE buttons to adjust the setting value.



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

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

* The song part setting allows each of the 16 parts (tracks) of the SMF song to be individually muted or played.

Press the ▲ VALUE button to enter the song part screen.

Press the ▼ or ▲ VALUE buttons to mute/play the part (track).

Press the ▼ or ▲ MENU buttons to move the selection cursor.

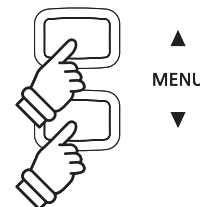
A '■' symbol is used to indicate a playing part.

An 'X' symbol is used to indicate a muted part.

An '---' symbol is used to indicate an empty part.

Press the ▼ and ▲ MENU buttons simultaneously to return to the playback menu.

Press the ▼ and ▲ MENU buttons simultaneously to return to the song player screen.



3. Exiting USB playback mode

Press the USB button to exit the USB Player.

The instrument will return to normal playing mode.



5 Converting a Song to an Audio file

The CN34 digital piano allows recorder songs stored in internal memory to be played back and saved (converted) as an audio file to a USB device in either MP3 or WAV format.

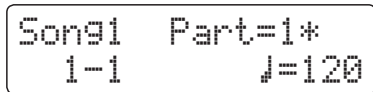
1. Selecting a song

After recording a song to internal memory:

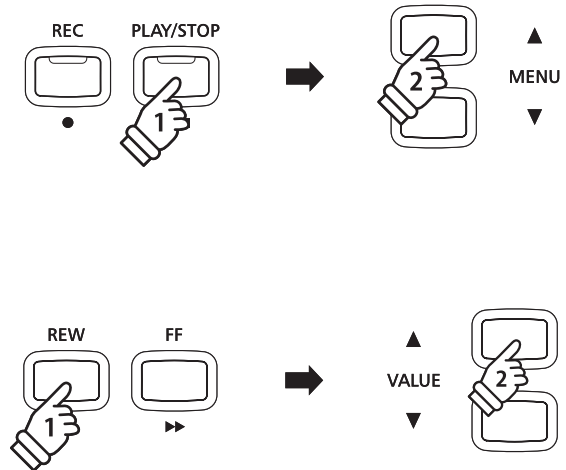
Connect a USB memory device to the USB port.

Press the PLAY/STOP button, then press the MENU ▲ button to select the 'Int. Player' function.

The Internal Song Player screen will be shown in the LCD display.



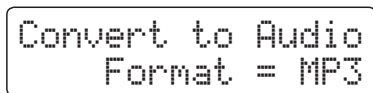
Press the REW or FF buttons to select the desired internal song memory, and the ▼ or ▲ VALUE buttons to select the desired part(s).



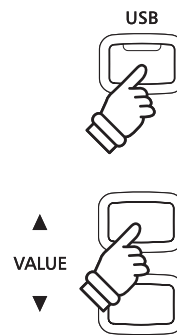
2. Selecting the Convert to Audio function

Press the USB button.

The Convert to Audio function will be shown in the LCD display.



Press the ▼ or ▲ VALUE buttons to select the desired audio file format for the converted song.

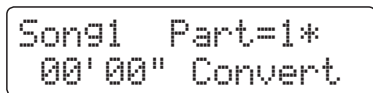


3. Starting the conversion

Press the PLAY/STOP button.

The LED indicators for the REC and PLAY/STOP buttons will turn on, and conversion will start.

The conversion status will also be shown in the LCD display.



- * Notes played on the keyboard will also be recorded to the audio file.
- * When the end of the song is reached, the conversion will stop and the save confirmation screen will be shown automatically.

4. Naming and saving the converted audio file

Please follow the 'Recording an Audio File' instructions on page 50 from step 4.

6 Deleting an Audio/MIDI file

This function is used to delete MP3/WAV audio files or MIDI song files stored on a USB device. Once a file has been deleted from the USB device it cannot be recovered.

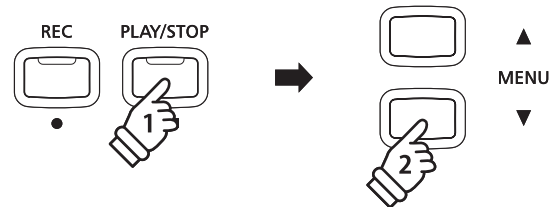
1. Entering USB playback mode

Connect a USB memory device to the USB port.

Press the PLAY/STOP button, then press the MENU ▼ button to select the 'USB Player' function.

The file selection screen will be shown in the LCD display.

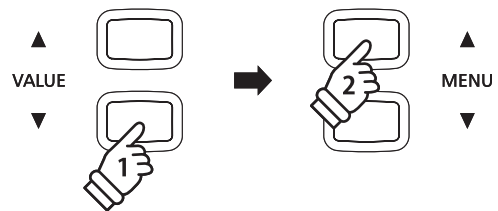
* Please refer to page 51 for information about the file selection screen.



2. Selecting the audio/MIDI file to be deleted.

Press the ▼ or ▲ VALUE buttons to move the selection cursor, then press the MENU ▲ button to select the audio/MIDI file.

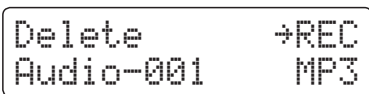
The USB player screen will be shown in the LCD display.



3. Deleting the selected audio/MIDI file

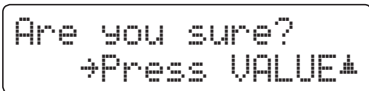
Press the REC button and PLAY/STOP buttons simultaneously.

The LED indicators for the REC and PLAY/STOP buttons will start to flash, and the Delete screen will be shown in the LCD display.



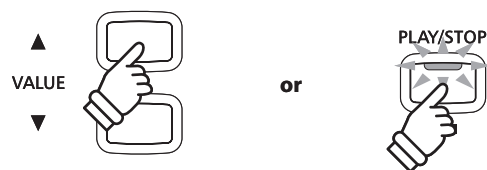
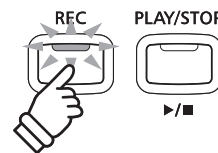
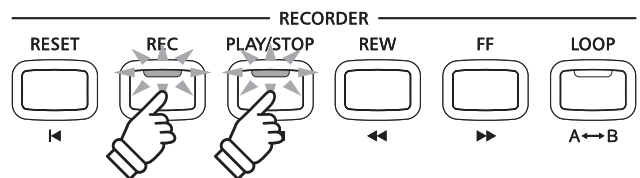
Press the REC button.

A confirmation message will be shown in the LCD display, prompting to confirm or cancel the erase operation.



Press the VALUE ▲ button to confirm the erase operation and return to the Internal Song Player screen.

Press the PLAY/STOP button to cancel the erase operation.



USB Menu

The USB Menu contains functions to load/save registration memories and recorder songs from/to a USB memory device. This menu also allows files to be renamed and deleted, and for the USB memory device to be formatted.

■ USB Menu functions

Page no.	Function	Description
1	Load Int. Song	Load a recorder song from a USB memory device into the instrument's internal memory.
2	Load Regist	Load registration memories (single or all) from a USB memory device into the instrument.
3	Save SMF Song	Save a recorder song stored in internal memory to a USB memory device as an SMF (MIDI) file.
4	Save Int. Song	Save a recorder song stored in internal memory to a USB memory device.
5	Save Regist	Save registration memories (single or all) from the instrument to a USB memory device.
6	Rename File	Rename a file stored on a USB memory device.
7	Delete File	Delete a file stored on a USB memory device.
8	Format USB	Format a USB memory device, erasing all stored data.

1. Entering the USB Menu

Connect a USB memory device to the USB port.

Press the USB button.

The LED indicator for the USB button will turn on, and the first page of the USB Menu will be shown in the LCD display.



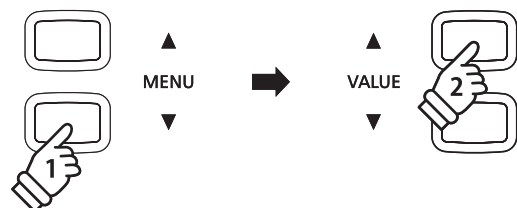
```
1 Load Int. Song
  →Press VALUE▲
```

2. Selecting the desired USB Menu function

Press the ▼ or ▲ MENU buttons to cycle through the different USB Menu function pages.

```
3 Save SMF Song
  →Press VALUE▲
```

Press the VALUE ▲ button to select the function.



3. Exiting the USB Menu

Press the USB button to exit the USB Menu.

The LED indicator for the USB button will turn off, and the instrument will return to normal playing mode.



1 Load Internal Song

The Load Internal Song function is used to load recorder songs stored on a USB memory device into the instrument's internal memory.

1. Selecting the Load Int. Song function

Connect a USB memory device, then press the USB button to enter the USB Menu.

Press the ▼ or ▲ MENU buttons then the VALUE ▲ button to select the Load Int. Song function.

The file selection screen will be shown in the LCD display, listing song files stored on the USB memory device.

* Please refer to page 51 for information about the file selection screen.

```
1 Load Int. Song
  →Press VALUE▲
```



```
▶Kendo Strut K50
  FnkyMiracle K50
```

Recorder song

2. Selecting the song file to be loaded

Press the ▼ or ▲ VALUE buttons to move the selection cursor, then press the MENU ▲ button to select the song file.

The memory selection screen will be shown in the LCD display.

```
▶FnkyMiracle K50
  Simple Song K50
```

3. Selecting the song memory

Press the ▼ or ▲ VALUE buttons to select the internal song memory for the song to be loaded into.

* If a song memory contains song data, a ※ symbol will be shown.

```
Load to:      →REC
= Song1※
```

Contains song data

4. Loading the selected song

Press the REC button to load the selected song.

A confirmation message will be shown in the LCD display.

Press the VALUE ▲ button to confirm the load operation.
Press the PLAY/STOP button to cancel the load operation.

To play back the loaded song, please refer to the 'Playing a Song' instructions on page 46.

```
Are you sure?
  →Press VALUE▲
```



```
Completed.
```

5. Exiting the Load Int. Song function

Press the USB button to exit the Load Int. Song function.

The LED indicator for the USB button will turn off, and the instrument will return to normal playing mode.

2 Load Registration

The Load Registration function is used to load registration memories stored on a USB memory device into the instrument's internal memory. There are two types of registration file: 'Single' and 'All'.

Registration file types

Registration type	Description	File extension
Single	A file containing a single registration memory.	KM6
All	A file containing all 9 registration memories.	KM3

1. Selecting the Load Regist function

Connect a USB memory device, then press the USB button to enter the USB Menu.

Press the ▼ or ▲ MENU buttons then the VALUE ▲ button to select the Load Regist function.

The file selection screen will be shown in the LCD display, listing the registration files stored on the USB memory device.

* Please refer to page 51 for information about the file selection screen.

```
2 Load Regist
  →Press VALUE▲
```



```
▶Rhodes+Bass KM6
PianoStrngs KM6
```

Registration file

2. Selecting the registration file to be loaded

Press the ▼ or ▲ VALUE buttons to move the selection cursor, then press the MENU ▲ button to select the registration file.

The memory selection screen will be shown in the LCD display.

```
▶Rhodes+Bass KM6
PianoStrngs KM6
```

3. Selecting the registration memory

Press the ▼ or ▲ VALUE buttons to select the registration memory for the registration to be loaded into.

* If an 'All Registration' file is selected, this step will be skipped.

```
Load to:      →REC
= 1
```

4. Loading the selected registration

Press the REC button to load the selected registration.

A confirmation message will be shown in the LCD display.

Press the VALUE ▲ button to confirm the load operation.
Press the PLAY/STOP button to cancel the load operation.

To use the loaded registration, please refer to the Registration instructions on page 32.

```
Are you sure?
  →Press VALUE▲
```



```
Completed.
```

3 Save SMF Song

The Save SMF Song function is used to save recorder songs stored in the instrument's internal memory to a USB memory device as a Standard MIDI File (SMF).

1. Selecting the Save SMF Song function

Connect a USB memory device, then press the USB button to enter the USB Menu.

Press the ▼ or ▲ MENU buttons then the VALUE ▲ button to select the Save SMF Song function.

The song selection screen will be shown in the LCD display.

```
3 Save SMF Song
  →Press VALUE▲
```



```
Save SMF      →REC
= Song1*
```

2. Selecting the song to be saved

Press the ▼ or ▲ VALUE buttons to select the internal song memory to be saved.

Press the REC button to continue.

The filename entry screen will be shown in the LCD display.

```
Save SMF      →REC
= Song3*
```



```
Filename:     →REC
  Song-000    MID
```

3. Naming the SMF song

Press the ▼ or ▲ VALUE buttons to cycle through the characters, and the ▼ or ▲ MENU buttons to move the cursor.

* Save files are limited to a maximum name length of 11 characters.

* The saved SMF file will be stored in the root folder of the USB memory device. It is not possible to store the file in a different folder.

```
Filename:     →REC
  Streetlife  MID
```

4. Saving the SMF song

Press the REC button again to save the SMF song with the specified filename.

A confirmation message will be shown in the LCD display.

Press the VALUE ▲ button to confirm the save operation.
Press the PLAY/STOP button to cancel the save operation.

```
Are you sure?
  →Press VALUE▲
```



```
Completed.
```

5. Exiting the Save SMF Song function

Press the USB button to exit the Save SMF Song function.

The LED indicator for the USB button will turn off, and the instrument will return to normal playing mode.

4 Save Internal Song

The Save Internal Song function is used to save recorder songs stored in the instrument's internal memory to a USB memory device in the CN34's native song format.

1. Selecting the Save Int. Song function

Connect a USB memory device, then press the USB button to enter the USB Menu.

Press the ▼ or ▲ MENU buttons then the VALUE ▲ button to select the Save Int. Song function.

The song selection screen will be shown in the LCD display.

```
4 Save Int. Song
  →Press VALUE▲
```



```
SaveInt.Song→REC
= Song1*
```

2. Selecting the song to be saved

Press the ▼ or ▲ VALUE buttons to select the internal song memory to be saved.

Press the REC button to continue.

The filename entry screen will be shown in the LCD display.

```
SaveInt.Song→REC
= Song3*
```



```
Filename:   →REC
  Song-000   K50
```

3. Naming the song

Press the ▼ or ▲ VALUE buttons to cycle through the characters, and the ▼ or ▲ MENU buttons to move the cursor.

* Save files are limited to a maximum name length of 11 characters.

* The saved song will be stored in the root folder of the USB memory device. It is not possible to store the file in a different folder.

```
Filename:   →REC
  Streetlife K50
```

4. Saving the song

Press the REC button again to save the recorded song with the specified filename.

A confirmation message will be shown in the LCD display.

Press the VALUE ▲ button to confirm the save operation.
Press the PLAY/STOP button to cancel the save operation.

```
Are you sure?
  →Press VALUE▲
```



```
Completed.
```

5. Exiting the Save Song function

Press the USB button to exit the Save Song function.

The LED indicator for the USB button will turn off, and the instrument will return to normal playing mode.

5 Save Registration

The Save Registration function is used to save registration memories stored in the instrument to a USB memory device. There are two types of registration file: 'Single' and 'All'.

Registration file types

Registration type	Description	File extension
Single	A file containing a single registration memory.	KM6
All	A file containing all 9 registration memories.	KM3

1. Selecting the Save Regist function

Connect a USB memory device, then press the USB button to enter the USB Menu.

Press the ▼ or ▲ MENU buttons then the VALUE ▲ button to select the Save Regist function.

The memory selection screen will be shown in the LCD display.

```
5 Save Regist
  →Press VALUE▲
```



```
Save Regist →REC
= All
```

2. Selecting the registration memory to be saved

Press the ▼ or ▲ VALUE buttons to select the registration memory to be saved.

* The 'All' option will save all registration memories to a single file.

Press the REC button to continue.

The filename entry screen will be shown in the LCD display.

```
Save Regist →REC
= 2
```



```
Filename:   →REC
  OneReg-000 KM6
```

3. Naming the registration file

Press the ▼ or ▲ VALUE buttons to cycle through the characters, and the ▼ or ▲ MENU buttons to move the cursor.

* Save files are limited to a maximum name length of 11 characters.

* The saved registration will be stored in the root folder of the USB memory device. It is not possible to store the file in a different folder.

```
Filename:   →REC
  DonnyH_   KM6
```

4. Saving the registration file

Press the REC button again to save the recorded registration with the specified filename.

A confirmation message will be shown in the LCD display.

Press the VALUE ▲ button to confirm the save operation.
Press the PLAY/STOP button to cancel the save operation.

```
Are you sure?
  →Press VALUE▲
```



```
Completed.
```


6 Rename File

The Rename File function is used to rename song, audio, and registration files stored on a USB memory device.

1. Selecting the Rename File function

Connect a USB memory device, then press the USB button to enter the USB Menu.

Press the ▼ or ▲ MENU buttons then the VALUE ▲ button to select the Rename File function.

The file selection screen will be shown in the LCD display, listing song, audio, and registration files stored on the USB memory device.

* Please refer to page 51 for information about the file selection screen.

```
6 Rename
  +Press VALUE▲
```



```
▶Audio-002  MP3
  Audio-003  MP3
```

2. Selecting the file to be renamed

Press the ▼ or ▲ VALUE buttons to move the selection cursor, then press the MENU ▲ button to select the file.

The filename entry screen will be shown in the LCD display.

```
▶Audio-003  MP3
  Audio-004  MP3
```

3. Renaming the selected file

Press the ▼ or ▲ VALUE buttons to cycle through the characters, and the ▼ or ▲ MENU buttons to move the cursor.

* Files are limited to a maximum name length of 11 characters.

```
Filename:   +REC
  James'G   MP3
```

4. Confirming the rename

Press the REC button to rename the file.

A confirmation message will be shown in the LCD display.

Press the VALUE ▲ button to confirm the rename operation.
Press the PLAY/STOP button to to cancel the rename operation.

```
Are you sure?
  +Press VALUE▲
```



```
Completed.
```

5. Exiting the Rename File function

Press the USB button to exit the Rename File function.

The LED indicator for the USB button will turn off, and the instrument will return to normal playing mode.

7 Delete File

The Delete File function is used to delete song, audio, and registration files stored on a USB memory device. Once a file has been deleted from the USB device it cannot be recovered.

1. Selecting the Delete File function

Connect a USB memory device, then press the USB button to enter the USB Menu.

Press the ▼ or ▲ MENU buttons then the VALUE ▲ button to select the Delete File function.

The file selection screen will be shown in the LCD display, listing song, audio, and registration files stored on the USB memory device.

* Please refer to page 51 for information about the file selection screen.

```
7 Delete
  →Press VALUE▲
```



```
▶Audio-002  MP3
  Audio-003  MP3
```

2. Selecting the file to be deleted

Press the ▼ or ▲ VALUE buttons to move the selection cursor, then press the MENU ▲ button to select the file.

```
▶Audio-003  MP3
  Audio-004  MP3
```

3. Confirming the delete

Press the REC button to delete the file.

A confirmation message will be shown in the LCD display.

Press the VALUE ▲ button to confirm the delete operation. Press the PLAY/STOP button to to cancel the delete operation.

```
Are you sure?
  →Press VALUE▲
```



```
Completed.
```

4. Exiting the Delete File function

Press the USB button to exit the Delete File function.

The LED indicator for the USB button will turn off, and the instrument will return to normal playing mode.

8 Format USB

The Format USB function is used to format the connected USB memory device, erasing all stored data.



The USB Format function will erase all data stored on the connected USB memory device. Exercise caution when using this function in order to prevent accidental data loss.

1. Selecting the Format USB function

Connect a USB memory device, then press the USB button to enter the USB Menu.

Press the ▼ or ▲ MENU buttons then the VALUE ▲ button to select the Format USB function.

An initial confirmation message will be shown in the LCD display.

```
8 Format
+Press VALUE▲
```



```
Format ?
Yes→REC No→STOP
```

2. Confirming the format operation (initial confirmation)

Press the REC button to confirm the format operation.
Press the PLAY/STOP button to cancel the format operation.

If the REC button is pressed, a final confirmation message will be shown in the LCD display.

```
Are you sure?
+Press VALUE▲
```

3. Confirming the format operation (final confirmation)

Press the VALUE ▲ button to confirm the format operation.
Press the PLAY/STOP button to cancel the format operation.

```
Are you sure?
+Press VALUE▲
```



```
Formatting...
30%
```



```
Completed.
```

4. Exiting the Format USB function

Press the USB button to exit the Format USB function.

The LED indicator for the USB button will turn off, and the instrument will return to normal playing mode.

Settings Menu

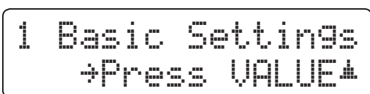
The Settings menus contain a variety of options to adjust the CN34's operation and sound. Settings are grouped by category, providing convenient access to relevant controls. Once adjusted, settings can be stored to one of the instrument's 9 registration memories, or selected as the default power-on settings with the User Memory function.

■ Entering the Settings menu

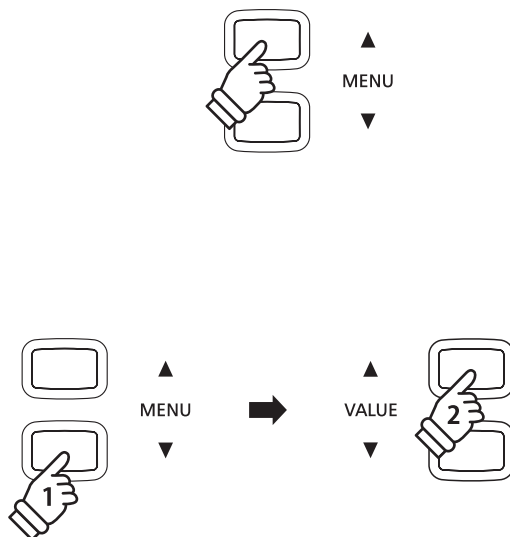
While the normal playing mode screen is shown in the LCD display:

Press the ▼ or ▲ MENU buttons.

The first settings menu (Basic Settings) will be shown in the LCD display.



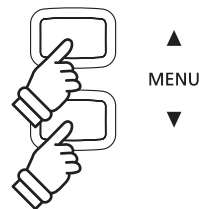
Press the ▼ or ▲ MENU buttons to cycle through the different settings menus, then press the VALUE ▲ button to enter the selected menu.



■ Exiting the Settings menu

Press the ▼ and ▲ MENU buttons simultaneously to return to the main settings menu.

Press a SOUND button to return to normal playing mode.



■ Overview of Settings menus

1. Basic Settings

Equaliser, Speaker Volume, Phones Volume, Line Out Volume,
Audio Rec Gain, Tuning, Damper Hold, Four Hands,
User Memory, Factory Reset

3. Key Settings

Lower Octave Shift, Lower Pedal On/Off, Layer Octave Shift,
Layer Dynamics

5. Power Settings

Auto Power Off

2. Virtual Technician

Damper Resonance, String Resonance, Key-off Effect,
Fallback Noise, Temperament, Key of Temperament

4. MIDI Settings

MIDI Channel, Send Program Change No., Local Control,
Transmit Program Change No., Multi-timbral Mode, Channel Mute

Basic Settings

The Basic settings menu contains settings to adjust the pitch, tuning, and general sound of the instrument. This menu also allows favourite panel settings to be stored, or reset back to the original factory configuration.

Basic Settings

Page no.	Setting	Description	Default setting
1-1	Equaliser	Change the EQ settings of the instrument's sound.	Off
1-2	Speaker Volume	Change the maximum volume level of the speaker output.	Normal
1-3	Phones Volume	Change the maximum volume level of the headphones output.	Normal
1-4	Line Out Volume	Adjust the output volume of the Line Out connectors.	10
1-5	Audio Rec Gain	Increase or decrease the recording level of the MP3/WAV audio recorder.	0 dB
1-6	Tuning	Increase or decrease the pitch of the instrument in 0.5 Hz steps.	440.0 Hz
1-7	Damper Hold	Change the effect of pressing the sustain pedal on organ, string, etc. sounds.	Off
1-8	Four Hands	Enable the 'Four Hands Mode' function.	Off
1-9	User Memory	Store current panel settings as the default (power-on) configuration.	-
1-10	Factory Reset	Restore all panel settings to the original factory configuration.	-

* Default settings will be shown in the first LCD display illustration (i.e. Step 1) for each setting explanation below.

Entering the Basic Settings menu

While the normal playing mode screen is shown in the LCD display:

Press the ▼ or ▲ MENU buttons.

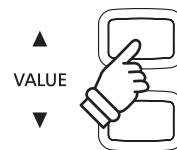
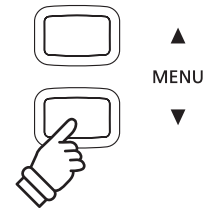
The Basic Settings page will be shown in the LCD display.

```

1 Basic Settings
  →Press VALUE←
    
```

Press the VALUE ▲ button to enter the Basic Settings menu.

The first page of the Basic Settings menu will be shown in the LCD display



Selecting the desired setting

After entering the Basic Settings menu:

Press the ▼ or ▲ MENU buttons to cycle through the different settings pages.

Settings page no.

```

1-1 Equaliser
= Off
    
```



1-1 Equaliser (EQ)

The Equaliser function allows the overall sound character of the CN34 digital piano to be adjusted to ensure the best sound quality within the area that the instrument is located. There are five different preset EQ types available, with an additional 'User' setting allowing finer control over the different frequency bands.

■ Equaliser types

Equaliser type	Description
Off (default)	The equaliser is turned off, and the sound character is unchanged.
Loudness	Emphasises frequencies to retain the instrument's sound character when playing at low volume levels.
Bass Boost	Emphasises low-range frequencies, creating a deeper sound.
Treble Boost	Emphasises high-range frequencies, creating a brighter sound.
Mid Cut	Reduces mid-range frequencies, creating a clearer sound.
User	Allows the low, mid, and high-range frequency bands to be adjusted separately.

1. Selecting the Equaliser setting

After entering the Basic Settings menu (page 69):

The Equaliser setting will be selected automatically.

```
1-1 Equaliser  
= Off
```

2. Changing the Equaliser type

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

* Any changes made to the equaliser type or User EQ settings will remain until the power is turned off.

* Preferred Equaliser settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
1-1 Equaliser  
= Off
```



```
1-1 Equaliser  
= Bass Boost
```

3. Exiting the Equaliser setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Equaliser setting and return to the main settings menu.

■ User EQ setting

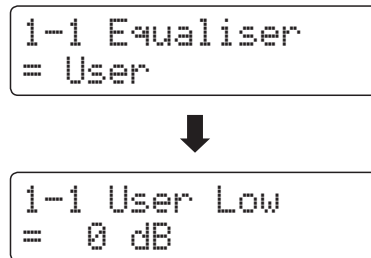
User EQ bands	Description
Low	Adjusts the low range frequency band.
Mid-low	Adjusts the mid-low range frequency band.
Mid-high	Adjusts the mid-high range frequency band.
High	Adjusts the high range frequency band.

1. Selecting the User EQ setting

While the Equaliser type screen is shown in the LCD display:

Press the ▼ or ▲ VALUE buttons to cycle through the different equaliser types. When the 'User' type is selected, press the MENU ▲ button.

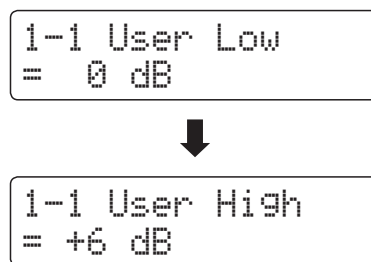
The User EQ setting screen will be shown in the LCD display.



2. Adjusting the User EQ bands (low/mid/high)

Press the ▼ or ▲ MENU buttons to cycle through the different User EQ bands, then press the ▼ or ▲ VALUE buttons to adjust the value of the selected band.

* Each User EQ band can be adjusted within the range of -6 dB - +6 dB



3. Exiting the User EQ setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the User EQ settings screen and return to the main settings menu.

1-2 Speaker Volume

The Speaker Volume setting allows the maximum volume level of the CN34 digital piano's speaker output to be reduced, providing finer adjustment control over the master volume. This setting can also function as a volume limiter, preventing the instrument from being played too loudly in the home or classroom etc.

* This setting does not affect the headphones or Line Out volume.

■ Speaker Volume settings

Speaker Volume	Description
Normal (default)	The instrument's speakers will output sound at the normal volume level.
Low	The instrument's speakers will output sound at a reduced volume level.

1. Selecting the Speaker Volume setting

After entering the Basic Settings menu (page 69):

Press the ▼ or ▲ MENU buttons to select the Speaker Volume setting.

```
1-2 Speaker Vol.  
= Normal
```

2. Changing the Speaker Volume setting

Press the ▼ or ▲ VALUE buttons to alternate between 'Normal' and 'Low' speaker volume settings.

* Any changes made to the Speaker Volume setting will remain until the power is turned off.

* Preferred Speaker Volume settings will not be stored to a Registration memory, but can be stored to the instrument's User memory for convenient recall. Please refer to page 79 for more information.

```
1-2 Speaker Vol.  
= Normal
```



```
1-2 Speaker Vol.  
= Low
```

3. Exiting the Speaker Volume setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Speaker Volume setting and return to the main settings menu.

1-3 Phones Volume

The Phones Volume setting allows the maximum volume level of the headphones output to be increased.

The default setting for Phones Volume is 'Normal' in order to protect an individual's ears from excessive volume levels. The 'High' setting may be selected when using headphones with a high impedance, or in situations where it is desirable to increase the maximum volume level of the headphones output.

* This setting does not affect the speaker or Line Out volume.

■ Phones Volume settings

Phones Volume	Description
Normal (default)	The instrument's headphone connectors will output sound at the normal volume level.
High	The instrument's headphone connectors will output sound at an increased volume level.

1. Selecting the Phones Volume setting

After entering the Basic Settings menu (page 69):

Press the ▼ or ▲ MENU buttons to select the Phones Volume setting.

```
1-3 Phones Vol.  
= Normal
```

2. Changing the Phones Volume setting

Press the ▼ or ▲ VALUE buttons to alternate between 'Normal' and 'High' phones volume settings.

* Any changes made to the Phones Volume setting will remain until the power is turned off.

* Preferred Phones Volume settings will not be stored to a Registration memory, but can be stored to the instrument's User memory for convenient recall. Please refer to page 79 for more information.

```
1-3 Phones Vol.  
= Normal
```



```
1-3 Phones Vol.  
= High
```

3. Exiting the Phones Volume setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Phones Volume setting and return to the main settings menu.

1-4 Line Out Volume

The Line Out Volume setting allows the level of the instrument's Line Out output to be adjusted. This setting may be useful when connecting the CN34 digital piano to mixers and other audio equipment.

* This setting does not affect the speaker or headphone volume.

1. Selecting the Line Out Volume setting

After entering the Basic Settings menu (page 69):

Press the ▼ or ▲ MENU buttons to select the Line Out Volume setting.

2. Adjusting the Line Out Volume setting

Press the ▼ or ▲ VALUE buttons to adjust the Line Out Volume setting.

- * The Line Out Volume setting can be adjusted within the range of 0 (no sound) to 10 (full volume).
- * Any changes made to the Line Out Volume setting will remain until the power is turned off.
- * Preferred Line Out Volume settings will not be stored to a Registration memory, but can be stored to the instrument's User memory for convenient recall. Please refer to page 79 for more information.



3. Exiting the Line Out Volume setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Line Out Volume setting and return to the main settings menu.

■ Jump to Line Out Volume setting shortcut

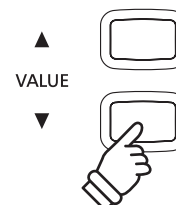
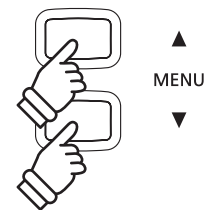
It is also possible to access the Line Out Volume setting directly using the following shortcut:

Press the ▼ and ▲ MENU buttons simultaneously while sound name is shown in the LCD display in normal playing mode.

The Line Out Volume setting will briefly be shown in the LCD display.

Press the ▼ or ▲ VALUE buttons to adjust the Line Out Volume setting.

To exit the Line Out Volume setting and return to the previous screen, press a SOUND button.



1-5 Audio Recorder Gain

The Audio Recorder Gain setting allows the recording level of MP3/WAV audio files to be adjusted. While the instrument's default audio recorder level is optimised to capture the broad dynamic range of a grand piano, there may be occasions where it is desirable to increase or decrease this gain setting for certain types of music.

1. Selecting the Audio Recorder Gain setting

After entering the Basic Settings menu (page 69):

Press the ▼ or ▲ MENU buttons to select the Audio Recorder Gain setting.

```
1-5 AudioRecGain
= 0 dB
```

2. Adjusting the Audio Recorder Gain setting

Press the ▼ or ▲ VALUE buttons to adjust the Audio Recorder Gain setting.

- * The Audio Recorder Gain can be adjusted within the range of 0 dB - +15 dB.
- * Increasing the Audio Recorder Gain may result in distorted recordings when playing loud/fortissimo passages.
- * Any changes made to the Audio Recorder Gain setting will remain until the power is turned off.
- * Preferred Audio Recorder Gain settings will not be stored to a Registration memory, but can be stored to the instrument's User memory for convenient recall. Please refer to page 79 for more information.

```
1-5 AudioRecGain
= 0 dB
```



```
1-5 AudioRecGain
= +10 dB
```

3. Exiting the Audio Recorder Gain setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Audio Recorder Gain setting and return to the main settings menu.

1-6 Tuning

The Tuning setting allows the overall pitch of the CN34 digital piano to be raised and lowered in 0.5 Hz steps, and may therefore prove useful when playing with other pitched instruments.

1. Selecting the Tuning setting

After entering the Basic Settings menu (page 69):

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

```
1-6 Tuning
= 440.0 Hz
```

2. Adjusting the Tuning setting

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

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

* Any changes made to the Tuning setting will remain until the power is turned off.

* Preferred Tuning settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
1-6 Tuning
= 440.0 Hz
```



```
1-6 Tuning
= 437.5 Hz
```

3. Exiting the Tuning setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Tuning setting and return to the main settings menu.

1-7 Damper Hold

The Damper Hold setting is used to determine whether sounds such as organ or strings should be sustained continuously when the sustain (damper) pedal is pressed, or whether these sounds should decay, naturally.

■ Damper Hold settings

Damper Hold	Description
Off (default)	Organ, string, etc. sounds will gradually decay, even while the sustain pedal is pressed.
On	Organ, string, etc. sounds will be sustained continuously while the sustain pedal is pressed.

1. Selecting the Damper Hold setting

After entering the Basic Settings menu (page 69):

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

```
1-7 Damper Hold
= Off
```

2. Changing the Damper Hold setting

Press the ▼ or ▲ VALUE buttons to turn the Damper Hold setting on or off.

* Any changes made to the Damper Hold setting will remain until the power is turned off.

* Preferred Damper Hold settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
1-7 Damper Hold
= Off
```



```
1-7 Damper Hold
= On
```

3. Exiting the Damper Hold setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Damper Hold setting and return to the main settings menu.

1-8 Four Hands

The Four Hands setting provides an alternative method to enabling the Four Hands Mode function, and may prove useful in teaching environments or situations where this function should be enabled automatically every time the CN34 digital piano is turned on.

* Please refer to page 22 for information about the Four Hands Mode function.

■ Four Hands settings

Four Hands	Description
Off (default)	Four Hands Mode will be turned off by default.
On	Four Hands Mode will be turned on by default.

1. Selecting the Four Hands setting

After entering the Basic Settings menu (page 69):

Press the ▼ or ▲ MENU buttons to select the Four Hands setting.



1-8 Four Hands
= Off

2. Changing the Four Hands setting

Press the ▼ or ▲ VALUE buttons to turn the Four Hands setting on or off.

- * When enabled, the LED indicator for the SPLIT button will start to flash.
- * Any changes made to the Four Hands setting will remain until the power is turned off.
- * Preferred Four Hands settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.



1-8 Four Hands
= Off



1-8 Four Hands
= On

3. Exiting the Four Hands setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Four Hands setting and return to the main settings menu.

1-9 User Memory

The User Memory function allows preferred panel settings to be stored in the instrument's memory, and automatically recalled as the default settings every time the CN34 digital piano is turned on.

■ Settings stored in User Memories

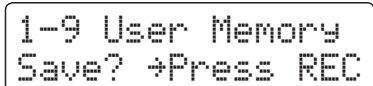
General	Settings
Selected sound	Basic Settings
Dual Mode / Split Mode (sounds, split point)	Virtual Technician
Reverb, Effects, Touch, Transpose (Key Transpose only)	Key Settings
Metronome (Beat, Tempo, Volume)	MIDI Settings

* Auto Power Off setting is stored to User Memory automatically.

1. Selecting the User Memory function

After entering the Basic Settings menu (page 69):

Press the ▼ or ▲ MENU buttons to select the User Memory function.



1-9 User Memory
Save? →Press REC

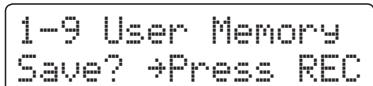
2. Storing current settings to User Memory

Press the REC button.

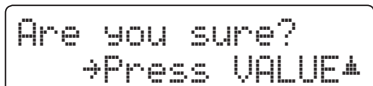
A confirmation message will be shown in the LCD display.

Press the VALUE ▲ button to confirm the store operation.
Press the PLAY/STOP button to cancel the store operation.

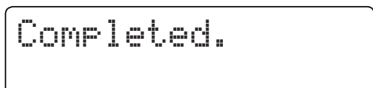
* After storing the User Memory settings, the instrument will exit the settings menu and return to normal playing mode.



1-9 User Memory
Save? →Press REC



Are you sure?
→Press VALUE▲



Completed.

3. Exiting the User Memory function

Press the ▼ and ▲ MENU buttons simultaneously to exit the User Memory function and return to the main settings menu.

1-10 Factory Reset

The Factory Reset function clears any settings stored using the User Memory function above, restoring the CN34 digital piano back to its factory default settings.

* This function does not clear registration memories or recorder songs stored in internal memory.

1. Selecting the Factory Reset function

After entering the Basic Settings menu (page 69):

Press the ▼ or ▲ MENU buttons to select the Factory Reset function.

```
1-10 FactoryReset  
Reset?→Press REC
```

2. Restoring factory settings

Press the REC button.

A confirmation message will be shown in the LCD display.

Press the VALUE ▲ button to confirm the reset operation.

Press the PLAY/STOP button to to cancel the reset operation.

* After performing a factory reset, the instrument will exit the settings menu and return to normal playing mode.

```
1-10 FactoryReset  
Reset?→Press REC
```



```
Are you sure?  
→Press VALUE▲
```



```
Completed.
```


Virtual Technician

An experienced piano technician is essential to fully realise the potential of a fine acoustic piano. In addition to meticulously tuning each note, the technician also performs numerous regulation and voicing adjustments that allow the instrument to truly sing.

The Virtual Technician settings of the CN34 digital piano simulate these refinements digitally, allowing performers to shape various aspects of the instrument's character to suit their personal preferences.

Virtual Technician

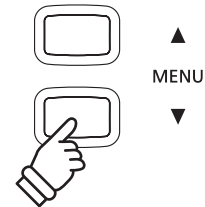
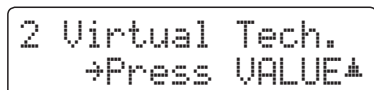
Page no.	Setting	Description	Default setting
2-1	Damper Resonance	Adjust the resonance that is heard when pressing the damper pedal.	5
2-2	String Resonance	Adjust the resonance that is heard when notes are held.	5
2-3	Key-off Effect	Adjust the volume of the sound that is heard when keys are released.	5
2-4	Fall-back Noise	Adjust the volume of the sound that is heard when the key action falls back.	5
2-5	Temperament	Adjust the tuning system to suit Renaissance and Baroque periods etc.	Equal Temp.
	Temperament Key	Adjust the key of the selected tuning system.	C

* Default settings will be shown in the first LCD display illustration (i.e. Step 1) for each setting explanation below.

Entering the Virtual Technician menu

While the normal playing mode screen is shown in the LCD display:

Press the ▼ or ▲ MENU buttons to select the Virtual Technician menu.



Press the VALUE ▲ button to enter the Virtual Technician menu.

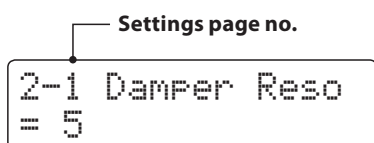
The first page of the Virtual Technician menu will be shown in the LCD display



Selecting the desired setting

After entering the Virtual Technician menu:

Press the ▼ or ▲ MENU buttons to cycle through the different settings pages.



2-1 Damper Resonance

Pressing the damper 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 pressed, not only will the strings of the notes played vibrate, but also the strings of other notes, vibrating in sympathetic resonance.

The CN34 digital piano recreates this phenomenon, with the Damper Resonance setting allowing the volume of this resonance sound to be adjusted.

1. Selecting the Damper Resonance setting

After entering the Virtual Technician menu (page 81):

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

```
2-1 Damper Reso.  
= 5
```

2. Adjusting the Damper Resonance volume

Press the ▼ or ▲ VALUE buttons to adjust the volume of the Damper Resonance setting.

- * The Damper Resonance volume can be adjusted within the range of Off, 1 - 10, with higher values resulting in a louder effect.
- * Any changes made to the Damper Resonance setting will remain until the power is turned off.
- * Preferred Damper Resonance settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
2-1 Damper Reso.  
= 5
```



```
2-1 Damper Reso.  
= 2
```

3. Exiting the Damper Resonance setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Damper Resonance setting and return to the main settings menu.

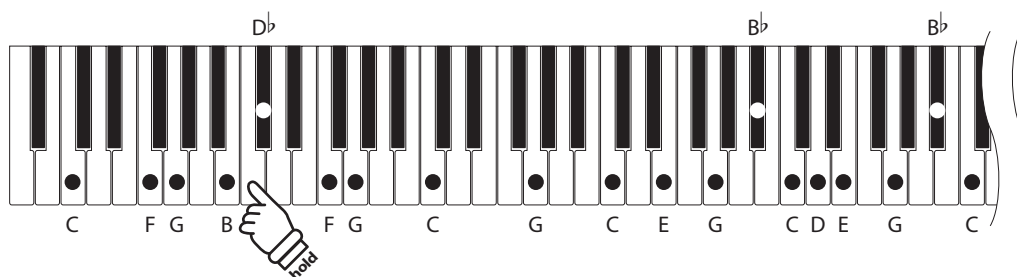
2-2 String Resonance

String Resonance refers to a phenomenon that exists in acoustic pianos whereby the strings of held notes resonate 'sympathetically' with other notes of the same harmonic series.

The CN34 digital piano recreates this phenomenon, with the String Resonance setting allowing the volume of this resonance to be adjusted.

■ Demonstrating String Resonance

To experience the string resonance phenomenon, gently hold down the 'C' key as shown in the illustration below, then press any of the keys marked with a ● symbol. In addition to the sound of each note played, it should also be possible to hear the strings of the first 'C' key resonating 'sympathetically', thus demonstrating String Resonance.



1. Selecting the String Resonance setting

After entering the Virtual Technician menu (page 81):

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

```
2-2 String Reso.  
= 5
```

2. Adjusting the String Resonance volume

Press the ▼ or ▲ VALUE buttons to adjust the volume of the String Resonance setting.

* The String Resonance volume can be adjusted within the range of Off, 1 - 10, with higher values resulting in a louder effect.

* Any changes made to the String Resonance setting will remain until the power is turned off.

* Preferred String Resonance settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
2-2 String Reso.  
= 5
```



```
2-2 String Reso.  
= 8
```

3. Exiting the String Resonance setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the String Resonance setting and return to the main settings menu.

2-3 Key-off Effect

When playing an acoustic piano – particularly in the bass region of the keyboard – if a key is played with force and released quickly, it is often possible to hear the faint sound of the damper touching the strings immediately before the vibrations are stopped.

In addition, the speed at which keys are lifted will also affect the character of the sound. For example, when lifting the keys quickly (e.g. staccato playing) the 'release' portion of the sound will be noticeably shorter than when lifting the keys slowly (e.g. legato playing).

The CN34 digital piano reproduces both characteristics, with the Key-off Effect setting allowing the volume of the key-off sound to be adjusted, and the key-off release speed detection to be turned on or off.

1. Selecting the Key-off Effect setting

After entering the Virtual Technician menu (page 81):

Press the ▼ or ▲ MENU buttons to select the Key-off Effect setting.

```
2-3 KeyOffEffect
= 5
```

2. Adjusting the Key-off Effect volume

Press the ▼ or ▲ VALUE buttons to adjust the volume of the Key-off Effect setting.

- * The Key-off Effect volume can be adjusted within the range of Off, 1 - 10, with higher values resulting in a louder effect.
- * When the Key-off Effect setting is set to Off, the key-off release speed detection will also be disabled, and the speed at which keys are lifted will not affect the character of the sound.
- * Any changes made to the Key-off Effect setting will remain until the power is turned off.
- * Preferred Key-off Effect settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
2-3 KeyOffEffect
= 5
```



```
2-3 KeyOffEffect
= 10
```

3. Exiting the Key-off Effect setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Key-off Effect setting and return to the main settings menu.

2-4 Fall-back Noise

When playing an acoustic piano, it is often possible to hear the faint sound of the keyboard action returning (i.e. 'falling back') to the neutral position after a key is released.

The CN34 digital piano reproduces this sound, with the Fall-back Noise setting allowing the volume of this sound to be adjusted.

1. Selecting the Fall-back Noise setting

After entering the Virtual Technician menu (page 81):

Press the ▼ or ▲ MENU buttons to select the Fall-back Noise setting.



```
2-4 Fallback Ns.  
= 5
```

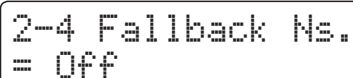
2. Adjusting the Fall-back Noise volume

Press the ▼ or ▲ VALUE buttons to adjust the volume of the Fall-back Noise setting.

- * The Fall-back Noise volume can be adjusted within the range of Off, 1 - 10, with higher values resulting in a louder effect.
- * Any changes made to the Fall-back Noise setting will remain until the power is turned off.
- * Preferred Fall-back Noise settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.



```
2-4 Fallback Ns.  
= 5
```



```
2-4 Fallback Ns.  
= Off
```

3. Exiting the Fall-back Noise setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Fall-back Noise setting and return to the main settings menu.

2-5 Temperament

The Temperament setting allows the tuning system used by the CN34 digital piano to be changed from the modern 'Equal Temperament' standard to one of the various temperaments popularised during the Renaissance and Baroque periods. It is also possible to create customised temperaments using the User Temperaments function.

■ 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 (Pure Major/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.

1. Selecting the Temperament setting

After entering the Virtual Technician menu (page 81):

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

```
2-5 Temperament
= Equal (P.only)
```

2. Changing the Temperament type

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

* Any changes made to the Temperament settings will remain until the power is turned off.

* Preferred Temperament settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
2-5 Temperament
= Equal (P.only)
```



```
2-5 Temperament
= Meantone
```

Temperament Key

The Temperament Key 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.

■ Changing the Temperament Key setting

After selecting a temperament **other than** Equal (piano) or Equal temperament types:

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

Press the ▼ or ▲ VALUE buttons to select the desired temperament key.

2-5 Temper. Key
= C



2-5 Temper. Key
= F

* The temperament key can be set within the range of C to B.

Key Settings

The Key Settings menu contains settings to adjust the instrument's operation when using the Dual or Split playing modes.

■ Key Settings

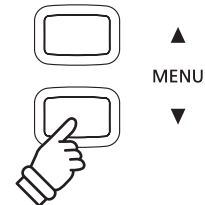
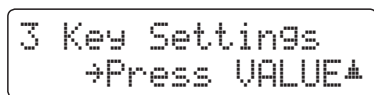
Page no.	Setting	Description	Default setting
3-1	Lower Octave	Raise the pitch of the lower section in octave steps when using Split mode.	0
3-2	Lower Pedal	Enable/disable sustain pedal for the lower section when using Split mode.	Off
3-3	Layer Octave	Raise the pitch of the layered sound in octave steps when using Dual mode.	0
3-4	Layer Dynamics	Adjust the dynamic sensitivity of the layered sound when using Dual mode.	10

* Default settings will be shown in the first LCD display illustration (i.e. Step 1) for each setting explanation below.

■ Entering the Key Settings menu

While the normal playing mode screen is shown in the LCD display:

Press the ▼ or ▲ MENU buttons to select the Key Settings menu.



Press the VALUE ▲ button to enter the Key Settings menu.

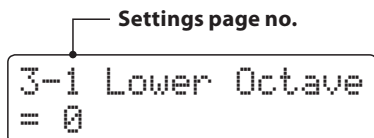
The first page of the Key Settings menu will be shown in the LCD display



■ Selecting the desired setting

After entering the Key Settings menu:

Press the ▼ or ▲ MENU buttons to cycle through the different settings pages.



3-1 Lower Octave Shift

The Lower Octave Shift setting allows the pitch of the lower section when using Split mode to be raised in octave steps.

1. Selecting the Lower Octave Shift setting

After entering the Key Settings menu (page 89):

The Lower Octave Shift setting will be selected automatically.

```
3-1 Lower Octave  
= 0
```

2. Changing the Lower Octave Shift value

Press the ▼ or ▲ VALUE buttons to decrease or increase the value of the Lower Octave Shift setting.

- * The pitch of the lower section can be raised by up to 3 octaves.
- * Any changes made to the Lower Octave shift setting will remain until the power is turned off.
- * Preferred Lower Octave Shift settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
3-1 Lower Octave  
= 0
```



```
3-1 Lower Octave  
= +3
```

3. Exiting the Lower Octave Shift setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Lower Octave Shift setting and return to the main settings menu.

3-2 Lower Pedal

The Lower Pedal setting determines whether or not the sustain pedal will affect (i.e. sustain) the lower sound when using Split mode.

■ Lower Pedal settings

Lower Pedal	Description
Off (default)	In Split mode, lower section sounds will not be sustained when the sustain pedal is pressed.
On	In Split mode, lower section sounds will be sustained when the sustain pedal is pressed.

1. Selecting the Lower Pedal setting

After entering the Key Settings menu (page 89):

Press the ▼ or ▲ MENU buttons to select the Lower Pedal setting.

```
3-2 Lower Pedal
= Off
```

2. Changing the Lower Pedal setting

Press the ▼ or ▲ VALUE buttons to turn the Lower Pedal setting on or off.

* Any changes made to the Lower Pedal setting will remain until the power is turned off.

* Preferred Lower Pedal settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
3-2 Lower Pedal
= Off
```



```
3-2 Lower Pedal
= On
```

3. Exiting the Lower Pedal setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Lower Pedal setting and return to the main settings menu.

3-3 Layer Octave Shift

The Layer Octave Shift setting allows the pitch of the layered sound when using Dual mode to be raised or lowered in octave steps.

1. Selecting the Layer Octave Shift setting

After entering the Key Settings menu (page 89):

Press the ▼ or ▲ MENU buttons to select the Layer Octave Shift setting.

```
3-3 Layer Octave
= 0
```

2. Changing the Layer Octave Shift value

Press the ▼ or ▲ VALUE buttons to decrease or increase the value of the Layer Octave Shift setting.

- * The pitch of the layered sound can be raised or lowered by up to 2 octaves.
- * Some layered sounds may not produce a tone when the octave range is raised beyond a certain value.
- * Any changes made to the Layer Octave shift setting will remain until the power is turned off.
- * Preferred Layer Octave Shift settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
3-3 Layer Octave
= 0
```



```
3-3 Layer Octave
= +2
```

3. Exiting the Layer Octave Shift setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Layer Octave Shift setting and return to the main settings menu.

3-4 Layer Dynamics

When using Dual mode, sometimes simply adjusting the volume balance between the two layered sounds is not enough to create the desired sound character, especially if both sounds are very dynamic. Layering two equally dynamic sounds can prove difficult to control and play comfortably.

The Layer Dynamics Function allows the dynamic sensitivity of the layered sound to be reduced, in order to improve the blend between the two combined sounds. In addition to reducing the volume of the layered sound, limiting its dynamic sensitivity also allows the layered sound to be controlled more easily in relation to the main sound.

1. Selecting the Layer Dynamics setting

After entering the Key Settings menu (page 89):

Press the ▼ or ▲ MENU buttons to select the Layer Dynamics setting.

```
3-4 LayerDynamic
= 10
```

2. Adjusting the Layer Dynamics setting

Press the ▼ or ▲ VALUE buttons to decrease or increase the value of the Layer Dynamics setting.

- * The layer dynamics value can be adjusted within the range of Off, 1 - 10.
- * Any changes made to the Layer Dynamics setting will remain until the power is turned off.
- * Preferred Layer Dynamics settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
3-4 LayerDynamic
= 10
```



```
3-4 LayerDynamic
= 5
```

3. Exiting the Layer Dynamics setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Layer Dynamics setting and return to the main settings menu.

MIDI Settings

MIDI Overview

The term MIDI is an acronym for Musical Instrument Digital Interface, an international standard for connecting musical instruments, computers, and other devices to allow the exchange of performance data.

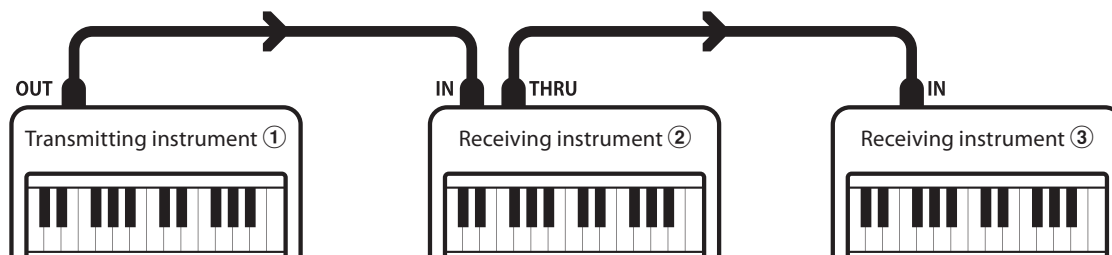
■ MIDI Terminals

MIDI terminal	Function
MIDI IN	Receiving note, program change, and other data.
MIDI OUT	Sending note, program change, and other data.

■ MIDI channels

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

The illustration below shows three musical instruments, connected together using MIDI.



Transmitting instrument ① sends transmit channel and keyboard information to receiving instruments ②/③.

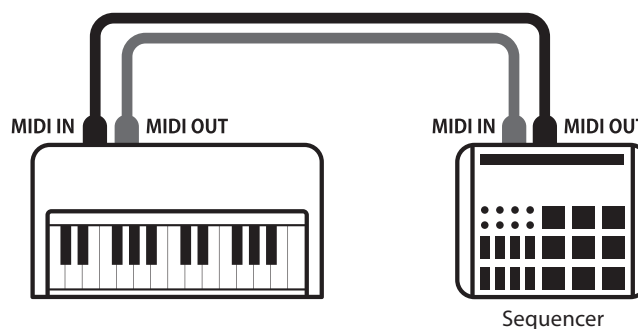
The information arrives at the receiving instruments ②/③.

Receiving instruments ②/③ will respond to MIDI data that is sent if their receive channel is the same as the transmit channel of the transmitting instrument ①. If the channels do not match, the receiving instruments ②/③ will not respond to any data that is sent.

For both receiving and transmitting, channels 1-16 can be used.

■ Recording/playing with a sequencer

When connected to a sequencer (or a computer running MIDI sequencing software), the CN34 digital piano can be used to record and playback multi-track songs, with separate sounds playing simultaneously on each channel.



MIDI Settings

■ MIDI Functions

The CN34 digital piano supports the following MIDI functions:

Transmit/receive note information

Transmit/receive note information to/from a MIDI-connected musical instrument or device.

Transmit/receive channel settings

Specify transmit/receive channels within the range of 1 to 16.

Transmit/receive exclusive data

Transmit/receive front panel or menu function settings as exclusive data.

Multi-timbral mode setting

Receive multiple channel MIDI data from a MIDI-connected musical instrument or device.

Transmit/receive program change information

Transmit/receive program change data to/from a MIDI-connected musical instrument or device.

Transmit/receive pedal data

Transmit/receive sustain, sostenuto, and soft pedal data to/from a MIDI-connected musical instrument or device.

Receive volume data

Receive MIDI volume data sent from a MIDI-connected musical instrument or device.

* Please refer to the 'MIDI Implementation Chart' on page 128 for further information regarding the MIDI capabilities of the CN34 digital piano.

■ MIDI Settings

Page no.	Setting	Description	Default setting
4-1	MIDI Channel	Specify the channel that is used to transmit/receive MIDI information.	1
4-2	Send PGM Change #	Send a MIDI program change number from 1 to 128.	1
4-3	Local Control	Specify whether internal sounds will be heard when the keyboard is pressed.	On
4-4	Trans. PGM Change	Specify whether program change data is sent when sounds are changed.	On
4-5	Multi-timbral Mode	Specify whether the instrument can receive Multi-timbral MIDI information.	Off
	Channel Mute	Specify which channels (1-16) are activated to receive MIDI information.	Play All

* Default settings will be shown in the first LCD display illustration (i.e. Step 1) for each setting explanation below.

■ Entering the MIDI Settings menu

While the normal playing mode screen is shown in the LCD display:

Press the ▼ or ▲ MENU buttons to select the MIDI Settings menu, then press the VALUE ▲ button to enter the menu.

4 MIDI Settings
+Press VALUE▲

The first page of the MIDI Settings menu will be shown in the LCD display.

■ Selecting the desired setting

After entering the MIDI Settings menu:

Press the ▼ or ▲ MENU buttons to cycle through the different settings pages.

Settings page no.
4-1 MIDI Channel
= 1

4-1 MIDI Channel

The MIDI Channel setting allows the transmit/receive channel to be specified. The selected channel will function as both the transmit and receive channel (separate transmit/receive channels cannot be specified).

1. Selecting the MIDI Channel setting

After entering the MIDI Settings menu (page 93):

The MIDI Channel setting will be selected automatically.



4-1 MIDI Channel
= 1

2. Changing the MIDI Channel value

Press the ▼ or ▲ VALUE buttons to decrease or increase the value of the MIDI Channel setting.

- * The MIDI Channel setting can be adjusted within the range of 1 - 16.
- * Any changes made to the MIDI Channel setting will remain until the power is turned off.
- * Preferred MIDI Channel settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.



4-1 MIDI Channel
= 1



4-1 MIDI Channel
= 5

3. Exiting the MIDI Channel setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the MIDI Channel setting and return to the main settings menu.

■ Omni mode

When the CN34 digital piano is turned on, the instrument is automatically set to 'omni mode on', allowing MIDI information to be received on all MIDI channels (1-16). When the MIDI Channel setting is used to specify a transmit/receive channel, the instrument will be set to 'omni mode off'.

■ Multi-timbral mode and Split/Dual mode

Using Split mode with Multi-timbral mode enabled

Notes played in the lower section of the keyboard will be transmitted on the channel that is 1 channel higher than the specified channel. For example, if the MIDI channel is set to 3, notes played in the lower section of the keyboard will be transmitted on channel 4.

Using Dual mode with Multi-timbral mode enabled

Notes played will be transmitted on two channels: the specified channel and the channel that is 1 channel higher.

For example, if the MIDI channel is set to 3, notes played on the keyboard will be transmitted on channels 3 and 4.

* If the specified MIDI channel is 16, the lower section / layered part will be transmitted on channel 1.

4-2 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.

1. Selecting the Send Program Change Number function

After entering the MIDI Settings menu (page 93):

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

```
4-2 Send PGM#  
= 1      ↗VALUE↘
```

2. Specifying and transmitting a Program Change Number

Press the ▼ or ▲ VALUE buttons to decrease or increase the Program Change Number.

* The program change number can be set within the range of 1-128.

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

```
4-2 Send PGM#  
= 1      ↗VALUE↘
```



```
4-2 Send PGM#  
= 15      Sent.
```

3. Exiting the Program Change Number function

Press the ▼ and ▲ MENU buttons simultaneously to exit the Program Change Number function and return to the main settings menu.

4-3 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 CN34 digital piano to control an external MIDI device.

Local Control settings

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

1. Selecting the Local Control setting

After entering the MIDI Settings menu (page 93):

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

```
4-3 LocalControl
= On
```

2. Changing the Local Control setting

Press the ▼ or ▲ VALUE buttons to turn the Local Control setting on or off.

* Any changes made to the Local Control setting will remain until the power is turned off.

* Preferred Local Control settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
4-3 LocalControl
= On
```



```
4-3 LocalControl
= Off
```

3. Exiting the Local Control setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Local Control setting and return to the main settings menu.

4-4 Transmit Program Change Numbers

The Transmit Program Change Numbers setting determines whether the CN34 digital piano will transmit program change information via MIDI when the instrument's panel buttons are pressed.

■ Transmit Program Change Numbers settings

Transmit PGM#	Multi-timbral setting	Effect of pressing panel buttons
On (default)	Off, On1	SOUND buttons will send PGM# shown in the left column*.
On	On2	SOUND buttons will send PGM# shown in the right column*.
Off	Off	Program Change information will not be transmitted via MIDI.

* Please refer to the 'Program Change Number List' on page 111.

1. Selecting the Transmit Program Change Numbers setting

After entering the MIDI Settings menu (page 93):

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

```
4-4 Trans. PGM#
= On
```

2. Changing the Transmit Program Change Numbers setting

Press the ▼ or ▲ VALUE buttons to turn the Transmit Program Change Numbers setting on or off.

* Any changes made to the Transmit Program Change Numbers setting will remain until the power is turned off.

* Preferred Transmit Program Change Numbers settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
4-4 Trans. PGM#
= On
```



```
4-4 Trans. PGM#
= Off
```

■ Program Change Numbers and Dual/Split mode

- When using Dual or Split mode, On/Off information and sound type settings for are transmitted as exclusive data, however program change numbers will not be transmitted.
- Program change numbers will also be transmitted when Multi-timbral mode is set to On1 or On2.

4-5 Multi-timbral Mode

The Multi-timbral Mode setting determines whether or not the CN34 digital piano is able to receive MIDI information on more than one MIDI channel simultaneously. This allows the instrument to play back multi-track, multi-timbral performance data sent from an external MIDI device.

Multi-timbral Mode settings

Multi-timbral Mode	Effect on sound heard
Off	The sound shown in the left column is selected*.
On1 (default)	The sound shown in the left column is selected*.
On2	The sound shown in the right column is selected*.

* Please refer to the 'Program Change Number List' on page 111.

1. Selecting the Multi-timbral Mode setting

After entering the MIDI Settings menu (page 93):

Press the ▼ or ▲ MENU buttons to select the Multi-timbral Mode setting.

```
4-5 Multi Timbre  
= On1
```

2. Changing the Multi-timbral Mode setting

Press the ▼ or ▲ VALUE buttons to change the Multi-timbral Mode setting.

* Any changes made to the Multi-timbral Mode setting will remain until the power is turned off.

* Preferred Multi-timbral Mode settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.

```
4-5 Multi Timbre  
= On1
```



```
4-5 Multi Timbre  
= Off
```

3. Exiting the Multi-timbral Mode setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Multi-timbral Mode setting and return to the main settings menu.

Channel Mute

The Channel Mute setting determines which MIDI channels (1-16) are activated to receive MIDI information when Multi-timbral mode is enabled.

* This setting is only available when the Multi-timbral Mode setting is set to 'On1' or 'On2'.

■ Channel Mute settings

Channel Mute	Description
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

After setting the Multi-timbral Mode to 'On1' or 'On2':

Press the ▼ or ▲ MENU buttons to select the Channel Mute setting for each MIDI channel.



```
4-5 Ch 1 Mute
= Play
```

2. Changing the Channel Mute setting

Press the ▼ or ▲ VALUE buttons to alternate between 'Play' and 'Mute' settings

* Any changes made to the Channel Mute setting will remain until the power is turned off.

* Preferred Channel Mute settings can be stored to a Registration memory for convenient recall. Please refer to page 32 for more information.



```
4-5 Ch 1 Mute
= Play
```



```
4-5 Ch 1 Mute
= Mute
```

3. Exiting the Channel Mute setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Channel Mute setting and return to the main settings menu.

USB MIDI (USB to Host connector)

The CN34 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. Please use the standard MIDI IN/OUT connectors.

■ USB MIDI information

- If the instrument's MIDI IN/OUT jacks and USB MIDI port are both connected simultaneously, the USB MIDI port will be given priority.
- 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.

Power Settings

5-1 Auto Power Off

The CN34 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	Description
Off	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

While the normal playing mode screen is shown in the LCD display:

Press the ▼ or ▲ MENU buttons to select the Power Settings menu, then press the VALUE ▲ button to enter the menu.

```
5-1 AutoPowerOff
= Off
```

The Auto Power Off setting will be selected automatically.

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.

```
5-1 AutoPowerOff
= Off
```



```
5-1 AutoPowerOff
= 60 min.
```

3. Exiting the Auto Power Off setting

Press the ▼ and ▲ MENU buttons simultaneously to exit the Auto Power Off setting and return to the main settings menu.

Assembly Instructions

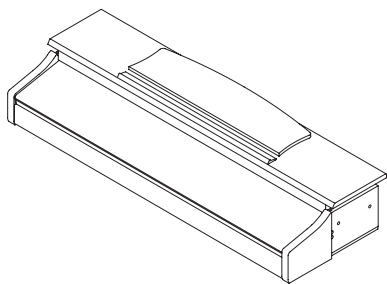


Please read these assembly instructions thoroughly before attempting to assemble the CN34 digital piano.

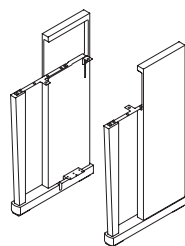
Please ensure that two or more people work on assembling the CN34 digital piano, especially when lifting the main body of the instrument onto the stand in step 3.

Included parts

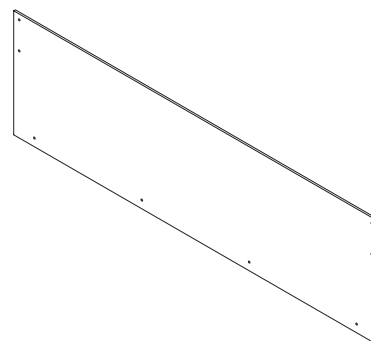
Before attempting to assemble the CN34 piano unit, ensure that all parts are included. A Phillips-head screwdriver will also be required to assemble the unit (not included).



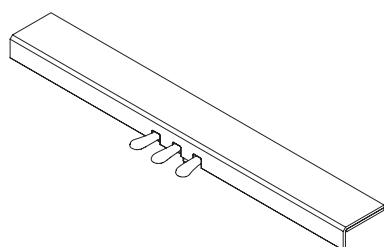
① Main body



② Side panel (left, right)



③ Back board



④ Pedal board (including support bolt)



⑤ Power cable

Screw set

⑥ Screw (with flat washer and spring washer) x 4



⑦ Tapping screw (long, black) x 4



⑧ Tapping screw (mid, black) x 4



⑨ Tapping screw (short, silver) x 4



⑩ Headphone hook set x 1

Headphone hook



Mounting screws
(14 mm) x 2



Assembly Instructions

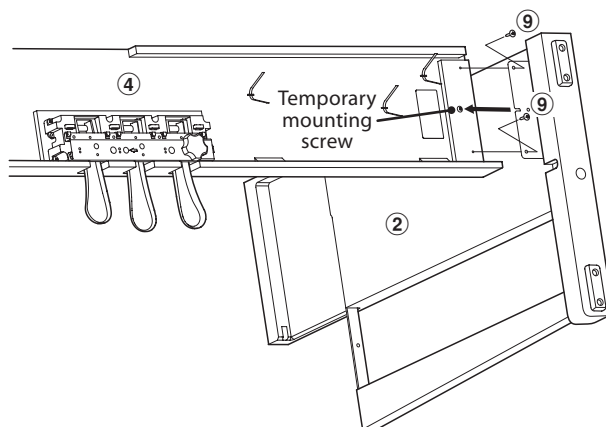
1. Attaching the side panels ② to the pedal board ④

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

Attach the left and right side panels ② to the pedal board ④ using the temporary mounting screws located on either end of the pedal board.

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

Insert two short silver tapping screws ⑨ into the holes at either end of the pedal board (four screws in total), and securely fasten the left and right side panels.



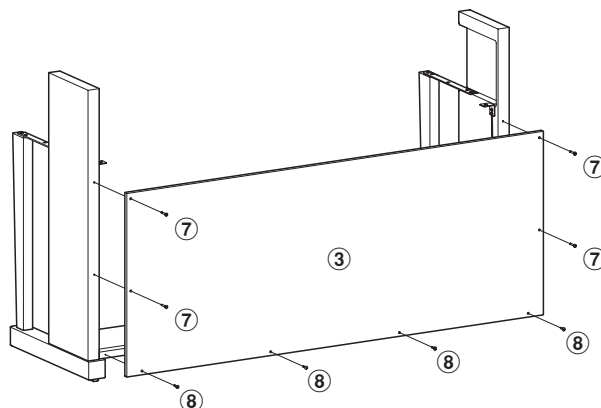
2. Attaching the back board ③

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

Loosely attach the back board ③ to the left and right side panels using the four long black tapping screws ⑦.

Loosely attach the back board to the pedal board using the four mid-length black tapping screws ⑧.

Adjust the positioning of the pedal board, side panels, and backboard to ensure that all parts are in alignment, then firmly tighten all the screws.



3. Mounting the main body ① onto the stand



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

Place the assembled stand against a wall to prevent it from moving/leaning backwards.

Carefully lift the main body ① onto the stand, and gradually slide the unit backwards until it is aligned with the rear of the side panels.

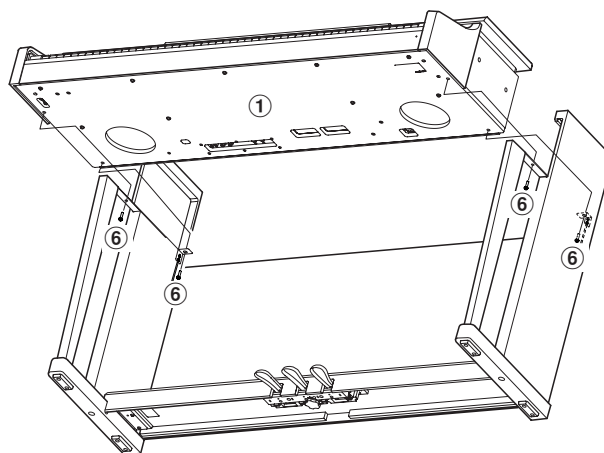


When sliding the main body into the stand, be careful not to catch/trap hands and fingers.

Securely fasten the main body to the stand using the four screws with spring washers ⑥.



Tighten all screws securely to ensure that the main body is firmly attached to the stand.

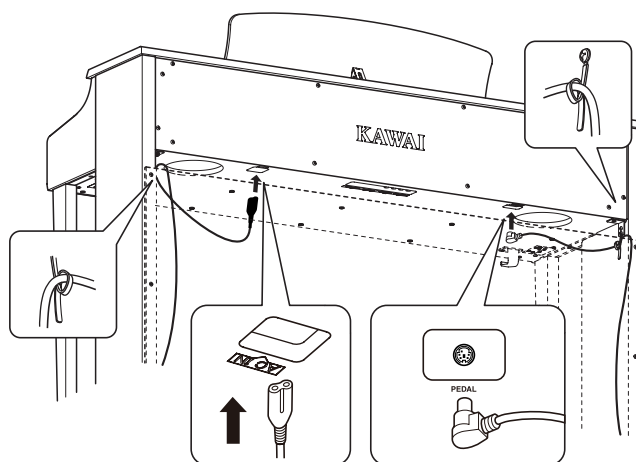


4. Connecting the pedal and power cables

Pass the pedal cable (extending from the rear of the pedal board) through the back board aperture to the front of the main body, and connect to the PEDAL terminal.

Connect the power cable ② to the AC IN terminal on the underside of the main body, then pass the cable through the back board aperture, and out to the rear of the instrument.

With the power and pedal cables connected, use the binders to fix the cables in place and tidy their appearance.

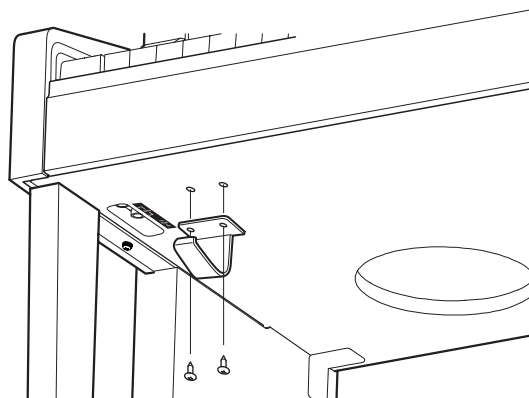


5. Attaching the headphone hook ② (optional)

A headphone hook is included with the CN34 digital piano and can be used to hang headphones when not in use.

If desired, attach the headphone hook to the underside of the main body using the two tapping screws provided.

* If the headphone hook will not be required, it can be kept with the instruction manual.

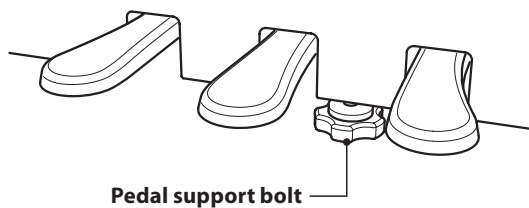


6. Adjusting the pedal support bolt

Turn the pedal support bolt anti-clockwise, extending the bolt until it makes contact with the floor and supports the pedals firmly.

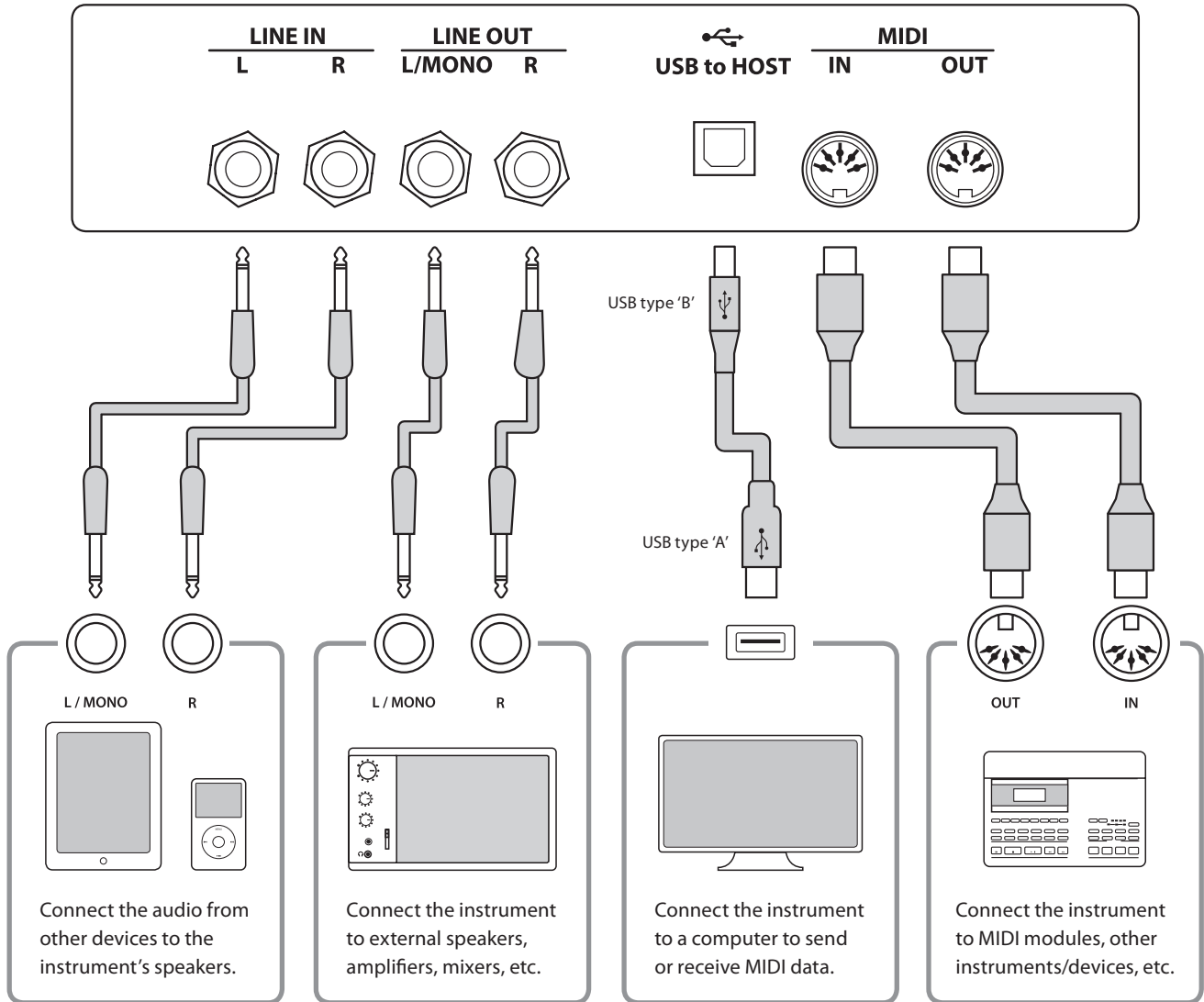


When moving the instrument, always adjust or remove the pedal support bolt, then readjust when the instrument is in its new position.



Connecting to Other Devices

The CN34 digital piano features a variety of jacks that allow the instrument to be connected to MIDI devices, computers, speakers, and mixers. It is also possible to connect external audio sources, such as an MP3 player, tablet, or a secondary keyboard, to the instrument's amplifier and speaker system. The illustration below provides a visual overview of the connectors and their typical applications.



Before connecting the CN34 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 CN34 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.

Do not connect the LINE IN and LINE OUT jacks of the CN34 digital piano together with the same cable. An audio loop (oscillation sound) will occur, resulting in damage to the unit.

Jack Panel

■ LINE IN jacks (1/4" phone jack)

These jacks are used to connect a pair of stereo outputs from other electronic instruments or audio equipment to the CN34 digital piano's speakers. To adjust the LINE IN level, please use the volume controls on the device itself.

To connect a device in mono, connect the cable to the L/MONO jack only.

■ USB to Host port ('B' type)

This USB port is used to connect the CN34 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 and receive MIDI data. Connect a 'B' type USB connector to the instrument, and an 'A' type USB connector to the computer.

* Please refer to page 101 for more information about USB MIDI.

■ LINE OUT jacks (1/4" phone jack)

These jacks are used to connect the stereo output of the CN34 digital piano'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.

The MASTER VOLUME slider does not affect the LINE OUT level.

* The 'Line Out Volume' setting can be used to adjust the level of the LINE OUT signal. Please refer to page 74 for more information.

■ MIDI IN/OUT jacks

These jacks are used to connect the CN34 digital piano to external MIDI devices, and also to a computer with a MIDI interface as an alternative to the 'USB to Host' port.

* Please refer to page 93 for more information about MIDI.

Headphone Panel

■ PHONES jacks (1/4" phone jack)

These jacks are used to connect stereo headphones to the CN34 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.

■ USB device information

- The 'USB to Device' functionality of the CN34 digital piano conforms to USB2.0 Hi-Speed standards. Older USB devices can still be used, however data transfer speed will be limited to the maximum transfer speed of the device.
- The 'USB to Device' port is intended for connecting USB memory devices, however USB floppy drive devices can also be used to save recorder songs stored in internal memory, or play SMF song files.
- It may be necessary to format the USB memory device before it can be used with the CN34 digital piano. If so, please refer to the USB Format function instructions on page 67. Formatting the device will erase all data.
- Avoid removing the USB memory device while data is being loaded or saved, files are being renamed or deleted, or the device is being formatted.
- Other USB devices, such as computer mice, keyboards, or battery chargers etc. cannot be used with this instrument.

Troubleshooting

The tables below summarise issues that may be experienced with the CN34 digital piano, explaining the typical cause(s), and recommended solution(s).

■ Power

Issue	Possible Cause and Solution	Page no.
<i>The instrument does not turn on.</i>	Check that the power cable is firmly attached to the instrument, and connected to an AC outlet.	p. 14
<i>The instrument turns itself off after a period of inactivity.</i>	Check that the 'Auto Power Off' function is not enabled.	p. 102

■ Sound

Issue	Possible Cause and Solution	Page no.
<i>The instrument is turned on, however no sound is produced when the keys are pressed.</i>	Check that the MASTER VOLUME slider is not set to the lowest position.	p. 14
	Check that a pair of headphones (or headphone adaptor plug) are not connected to the PHONES jacks.	p. 14
	Check that the 'Local Control' setting in the MIDI Settings menu is set to On.	p. 97
<i>The sound distorts when playing at very loud volume levels.</i>	Check that the MASTER VOLUME slider is set to an appropriate level, reducing the volume if excessive distortion is heard.	p. 14
	If connecting the instrument to an amplifier/mixer using the Line Out jacks, reduce the value of the 'Line Out Volume' setting in the Basic Settings menu	p. 74
<i>Strange sounds or noises are heard when playing with piano sounds.</i>	The CN34 digital piano attempts to reproduce the rich variety of tones created by an acoustic grand piano as accurately as possible. This includes string and damper resonances, key-off noises, and other subtle characteristics that contribute to the overall piano playing experience. While these additional tones are intended to enhance the realism of the instrument, it is possible to reduce their prominence, or disable the effects altogether using the settings in the Virtual Technician menu.	p. 81
<i>The top 18 notes of the keyboard sustain for longer than neighbouring notes, even when the damper pedal is not pressed.</i>	This is the correct behaviour, and intended to reproduce the undamped notes (typically the top two octaves) of an acoustic grand piano.	–

■ Pedals

Issue	Possible Cause and Solution	Page no.
<i>The pedals are unreliable or do not function at all.</i>	Check that the pedal cable is firmly connected to the instrument.	p. 105
<i>When depressing a pedal, the pedal board flexes and is not firm.</i>	Check that the pedal support bolt is fully extended.	p. 105

■ Headphones

Issue	Possible Cause and Solution	Page no.
<i>The headphone volume is too low.</i>	If the 'Nominal Impedance' specification of the headphones is less than 100 Ω (ohms), set the 'Phones Volume' setting in the Basic Settings menu to High.	p. 73

■ USB (memory device)

Issue	Possible Cause and Solution	Page no.
<i>A USB memory device is not detected, cannot be saved to, or does not appear to function when connected to the 'USB to Device' port.</i>	Check that the USB memory device is formatted to use the FAT/FAT32 filesystem, and not set to 'Write Protect' mode.	p. 107
	Disconnect the USB memory device, turn the instrument off then on, then reconnect the USB device. If the USB device still does not function, it may be damaged or incompatible. Please try using a different USB device.	–
<i>The instrument pauses briefly when connecting a USB memory device.</i>	This is recognised behaviour when using very large capacity (e.g. 8GB+) USB memory devices.	–

■ USB (MIDI)

Issue	Possible Cause and Solution	Page no.
<i>The instrument is connected to the computer using a USB cable, however the software does not respond to key presses.</i>	Check that a USB MIDI driver is installed on the computer.	p. 101
	Check that 'USB Audio Device' or 'KAWAI USB MIDI' is selected in the software's input/output device settings.	p. 101

■ MP3/WAV/SMF files

Issue	Possible Cause and Solution	Page no.
<i>No sound can be heard when playing an MP3 or WAV audio file stored on a USB memory device.</i>	Check that the audio player volume is not set to 0.	p. 52
	Check that the format of the audio file is supported and listed in the 'Audio Player supported format specifications' table.	p. 51
<i>An MP3/WAV audio file stored on a USB memory device sounds strange, or does not play back correctly.</i>	Check that the format of the audio file is supported and listed in the 'Audio Player supported format specifications' table.	p. 51
	The file transfer speed of the USB memory device may be too slow to play the audio file. Please try using a different USB memory device, ensuring that it conforms to USB2.0 Hi-Speed standards.	p. 107
<i>When recording MP3/WAV audio files, the volume is too low/too high (distorted).</i>	Check the 'Audio Recorder Gain' setting before recording the audio, and if necessary adjust to increase/decrease the recording level.	p. 75

Demo Song List

Sound Name	Song Title	Composer
PIANO1		
Concert Grand	Hungarian Rhapsodies No.6	List
Studio Grand	Original	Kawai
Mellow Grand	Sonata No.30 Op.109	Beethoven
Modern Piano	Original	Kawai
PIANO2		
Concert Grand 2	Petit Chien	Chopin
Studio Grand 2	Original	Kawai
Mellow Grand 2	La Fille aux Cheveux de lin	Debussy
Rock Piano	Original	Kawai
ELECTRIC PIANO		
Classic E.P.	Original	Kawai
Modern E.P.	Original	Kawai
Modern E.P. 2	Original	Kawai
ORGAN		
Jazz Organ	Original	Kawai
Blues Organ	Original	Kawai
Church Organ	Chorale Prelude "Wachet auf, ruft uns die Stimme."	Bach
Diapason	Wohl mir, daß ich Jesum have	Bach
Full Ensemble	Original	Kawai
HARPSI & MALLETS		
Harpsichord	French Suite No.6	Bach
Vibraphone	Original	Kawai
Clavi	Original	Kawai
STRINGS		
Slow Strings	Original	Kawai
String Pad	Original	Kawai
String Ensemble	Le quattro stagioni: la "Primavera"	Vivaldi
CHOIR & PAD		
Choir	Londonderry Air	Irish folk song
Choir 2	Original	Kawai
New Age	Original	Kawai
Atmosphere	Original	Kawai
BASS		
Wood Bass	Original	Kawai
Fretless Bass	Original	Kawai
W. Bass & Ride	Original	Kawai
OTHERS		
	Zwei Rapsodien Op.79 Nr.2	Brahms
	Piano Concerto a moll Op.16	Grieg

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

Program Change Number List

Sound Name	Multi-timbral mode = off/on1		Multi-timbral mode = on2		
	Bank LSB	Program Number	Bank MSB	Bank LSB	Program Number
PIANO1					
Concert Grand	0	1	121	0	1
Studio Grand	0	2	121	1	1
Mellow Grand	0	3	121	2	1
Modern Piano	0	4	121	0	2
PIANO2					
Concert Grand 2	0	5	95	16	1
Studio Grand 2	0	6	95	17	1
Mellow Grand 2	0	7	95	18	1
Rock Piano	0	8	121	1	2
ELECTRIC PIANO					
Classic E.P.	0	9	121	0	5
Modern E.P.	0	10	121	0	6
60's E.P.	0	11	121	3	5
Modern E.P. 2	0	12	121	1	6
ORGAN					
Jazz Organ	0	13	121	0	18
Blues Organ	0	14	121	0	17
Ballad Organ	0	15	95	5	17
Gospel Organ	0	16	95	3	17
Church Organ	0	17	121	0	20
Diapason	0	18	95	7	20
Full Ensemble	0	19	95	1	21
Diapason Oct.	0	20	95	6	20
HARPSI&MALLETS					
Harpsichord	0	21	121	0	7
Harpsichord 2	0	22	121	3	7
Vibraphone	0	23	121	0	12
Clavi	0	24	121	0	8
STRINGS					
Slow Strings	0	25	95	1	45
String Pad	0	26	95	8	49
Warm Strings	0	27	95	1	49
String Ensemble	0	28	121	0	49
CHOIR&PAD					
Choir	0	29	121	0	53
Choir 2	0	30	95	53	54
New Age	0	31	121	0	89
Atmosphere	0	32	121	0	100
BASS					
Wood Bass	0	33	121	0	33
Electric Bass	0	34	121	0	34
Fretless Bass	0	35	121	0	36
W. Bass & Ride	0	36	95	1	33

Program Change Number List

Sound Name	Multi-timbral mode = off/on1		Multi-timbral mode = on2		
	Bank LSB	Program Number	Bank MSB	Bank LSB	Program Number
OTHERS: Piano					
Jazz Grand	0	37	95	8	1
New Age Piano	0	38	95	9	1
New Age Piano 2	0	39	95	10	1
New Age Piano 3	0	40	95	11	1
Piano Octaves	0	41	95	1	1
Electric Grand	0	42	121	0	3
Electric Grand2	0	43	121	1	3
Honky Tonk	0	44	121	0	4
Wide Honky Tonk	0	45	121	1	4
OTHERS: E.Piano					
Dolce E.P.	0	46	95	2	5
Crystal E.P.	0	47	95	1	6
Tremolo E.P.	0	48	95	1	5
Classic E.P. 2	0	49	121	1	5
Classic E.P. 3	0	50	121	2	5
New Age E.P.	0	51	95	2	6
Modern E.P. 3	0	52	121	2	6
Legend E.P.	0	53	121	3	6
Phase E.P.	0	54	121	4	6
OTHERS: Harpsi & Mallet					
Harpichord Oct	0	55	121	1	7
WideHarpichord	0	56	121	2	7
Synth Clavi	0	57	121	1	8
Celesta	0	58	121	0	9
Glockenspiel	0	59	121	0	10
Music Box	0	60	121	0	11
Wide Vibraphone	0	61	121	1	12
Marimba	0	62	121	0	13
Wide Marimba	0	63	121	1	13
Xylophone	0	64	121	0	14
Handbells	0	65	95	1	15
Tubular Bells	0	66	121	0	15
Church Bells	0	67	121	1	15
Carillon	0	68	121	2	15
Dulcimer	0	69	121	0	16
OTHERS: Drawbar					
Drawbar Organ	0	70	95	1	17
Drawbar Organ 2	0	71	95	2	17
Drawbar Organ 3	0	72	121	2	18
Drawbar Organ 4	0	73	121	3	17
Drawbar Organ 5	0	74	121	1	17
Jizzer	0	75	95	1	18

Sound Name	Multi-timbral mode = off/on1		Multi-timbral mode = on2		
	Bank LSB	Program Number	Bank MSB	Bank LSB	Program Number
Soft Solo	0	76	95	8	17
ElectronicOrgan	0	77	95	9	17
60's Organ	0	78	121	2	17
Perc. Organ	0	79	121	1	18
Tibia Bass	0	80	95	14	18
Rock Organ	0	81	121	0	19
OTHERS: Church Organ					
Principal Oct.	0	82	95	24	20
Theater Organ	0	83	95	1	20
8' Celeste	0	84	95	5	20
Small Ensemble	0	85	95	8	20
Reeds	0	86	95	10	20
Chiffy Tibia	0	87	95	17	20
Principal Pipe	0	88	95	22	20
Church Organ 2	0	89	121	1	20
Church Organ 3	0	90	121	2	20
Reed Organ	0	91	121	0	21
Puff Organ	0	92	121	1	21
OTHERS: Accordion					
FrenchAccordion	0	93	121	0	22
Fr. Accordion 2	0	94	95	1	22
Accordion	0	95	121	1	22
Accordion 2	0	96	95	2	22
Blues Harmonica	0	97	95	2	23
Harmonica	0	98	121	0	23
Tango Accordion	0	99	121	0	24
OTHERS: Guitar					
FingerNylon Gtr	0	100	95	4	25
Nylon Acoustic	0	101	121	0	25
Nylon Acoustic2	0	102	121	2	25
Nylon Acoustic3	0	103	121	3	25
Ukulele	0	104	121	1	25
Steel Guitar	0	105	121	0	26
Steel Guitar 2	0	106	121	3	26
12 String	0	107	121	1	26
Mandolin	0	108	121	2	26
Ballad Guitar	0	109	95	6	26
Jazz Guitar	0	110	121	0	27
Modern Jazz Gtr	0	111	95	10	27
Pedal Steel	0	112	121	1	27
Rhythm Guitar	0	113	121	2	28
Electric Guitar	0	114	121	0	28
E. Guitar 2	0	115	121	1	28

Program Change Number List

Sound Name	Multi-timbral mode = off/on1		Multi-timbral mode = on2		
	Bank LSB	Program Number	Bank MSB	Bank LSB	Program Number
E. Guitar 3	0	116	121	2	29
Cutting Guitar	0	117	95	3	28
Cutting Guitar2	0	118	121	1	29
Cutting Guitar3	0	119	95	5	28
Muted Electric	0	120	121	0	29
Country Lead	0	121	121	3	29
OverdriveGuitar	0	122	121	0	30
Dynmic Ov.drive	0	123	121	1	30
Distortion	0	124	121	0	31
Dist Feedback	0	125	121	1	31
Dist Rhythm	0	126	121	2	31
E.Gtr Harmonics	0	127	121	0	32
Guitar Feedback	0	128	121	1	32
OTHERS: Bass					
Wood Bass 2	1	1	95	2	33
Wood Bass 3	1	2	95	4	33
Wood Bass 4	1	3	95	5	33
Electric Bass 2	1	4	95	5	34
Electric Bass 3	1	5	95	6	34
FingerSlap Bass	1	6	121	1	34
Pick Bass	1	7	121	0	35
Slap Bass	1	8	121	0	37
Slap Bass 2	1	9	121	0	38
Synth Bass	1	10	121	0	39
Synth Bass 2	1	11	121	0	40
Synth Bass 3	1	12	121	2	39
Synth Bass 4	1	13	121	1	40
Warm Synth Bass	1	14	121	1	39
Clavi Bass	1	15	121	3	39
Hammer Bass	1	16	121	4	39
Rubber Bass	1	17	121	2	40
Attack Bass	1	18	121	3	40
OTHERS: Strings & OrchInst					
Violin	1	19	121	0	41
Slow Violin	1	20	121	1	41
Viola	1	21	121	0	42
Cello	1	22	121	0	43
Contrabass	1	23	121	0	44
Tremolo Strings	1	24	121	0	45
Strings & Brass	1	25	121	1	49
60's Strings	1	26	121	2	49
Strings sf.	1	27	95	9	49
StringEnsemble2	1	28	121	0	50

Sound Name	Multi-timbral mode = off/on1		Multi-timbral mode = on2		
	Bank LSB	Program Number	Bank MSB	Bank LSB	Program Number
Synth Strings	1	29	121	0	51
Synth Strings 2	1	30	121	0	52
Synth Strings 3	1	31	121	1	51
Pizzicato	1	32	121	0	46
Harp	1	33	121	0	47
Celtic Harp	1	34	121	1	47
Timpani	1	35	121	0	48
OTHERS: Choir & Hit					
Choir 3	1	36	121	1	53
Voice Oohs	1	37	121	0	54
Humming	1	38	121	1	54
Synth Vocal	1	39	121	0	55
Analog Voice	1	40	121	1	55
Orchestra Hit	1	41	121	0	56
Bass Hit Plus	1	42	121	1	56
6th Hit	1	43	121	2	56
Euro Hit	1	44	121	3	56
OTHERS: Brass					
Trumpet	1	45	121	0	57
Solo Trumpet	1	46	121	1	57
Flugel Horn	1	47	95	1	57
SentimentalBone	1	48	95	7	58
Trombone	1	49	121	0	58
Trombone 2	1	50	121	1	58
Bright Trombone	1	51	121	2	58
Tuba	1	52	121	0	59
CupMute Trumpet	1	53	95	1	60
CupMuteTrombone	1	54	95	2	60
Muted Trumpet	1	55	121	0	60
Muted Trumpet 2	1	56	121	1	60
French Horns	1	57	121	0	61
Warm FrenchHorn	1	58	121	1	61
Brass Section	1	59	121	0	62
Brass Section 2	1	60	121	1	62
Synth Brass	1	61	121	0	63
Synth Brass 2	1	62	121	0	64
Synth Brass 3	1	63	121	1	63
Synth Brass 4	1	64	121	1	64
Jump Brass	1	65	121	3	63
Analog Brass	1	66	121	2	63
Analog Brass 2	1	67	121	2	64

Program Change Number List

Sound Name	Multi-timbral mode = off/on1		Multi-timbral mode = on2		
	Bank LSB	Program Number	Bank MSB	Bank LSB	Program Number
OTHERS: Reed					
Oboe & Strings	1	68	95	5	69
Soprano Sax	1	69	121	0	65
Alto Sax	1	70	121	0	66
Soft Tenor Sax	1	71	95	2	67
Tenor Sax	1	72	121	0	67
Baritone Sax	1	73	121	0	68
Oboe	1	74	121	0	69
English Horn	1	75	121	0	70
Bassoon	1	76	121	0	71
Clarinet	1	77	121	0	72
OTHERS: Pipe					
Flute & Strings	1	78	95	8	74
Piccolo	1	79	121	0	73
Jazz Flute	1	80	95	1	74
Big Band Winds	1	81	95	2	74
OrchestralWinds	1	82	95	3	74
Flute	1	83	121	0	74
Ballad Flute	1	84	95	13	74
Recorder	1	85	121	0	75
Pan Flute	1	86	121	0	76
Blown Bottle	1	87	121	0	77
Shakuhachi	1	88	121	0	78
Whistle	1	89	121	0	79
Ocarina	1	90	121	0	80
OTHERS: Synth Lead					
Square	1	91	121	0	81
Square 2	1	92	121	1	81
Sine	1	93	121	2	81
Classic Synth	1	94	121	0	82
Classic Synth 2	1	95	121	1	82
Lead	1	96	121	2	82
Classic Synth 3	1	97	121	3	82
SequencedAnalog	1	98	121	4	82
Caliope	1	99	121	0	83
Chiff	1	100	121	0	84
Charang	1	101	121	0	85
Wire Lead	1	102	121	1	85
Voice	1	103	121	0	86
Fifth	1	104	121	0	87
Bass & Lead	1	105	121	0	88
Soft Wire Lead	1	106	121	1	88

Sound Name	Multi-timbral mode = off/on1		Multi-timbral mode = on2		
	Bank LSB	Program Number	Bank MSB	Bank LSB	Program Number
OTHERS: Synth Pad					
Itopia	1	107	121	1	92
New Age 2	1	108	95	1	89
New Age 3	1	109	95	2	89
New Age 4	1	110	95	3	89
Warm Pad	1	111	121	0	90
Sine Pad	1	112	121	1	90
Bright Warm Pad	1	113	95	1	90
Polysynth	1	114	121	0	91
Choir	1	115	121	0	92
Bowed	1	116	121	0	93
Metallic	1	117	121	0	94
Halo	1	118	121	0	95
Sweep	1	119	121	0	96
Multi Sweep	1	120	95	1	96
OTHERS: Synth SFX					
Rain Pad	1	121	121	0	97
Soundtrack	1	122	121	0	98
Crystal	1	123	121	0	99
Synth Mallet	1	124	121	1	99
Brightness	1	125	121	0	101
Brightness 2	1	126	95	1	101
Goblin	1	127	121	0	102
Echoes	1	128	121	0	103
Echo Bell	2	1	121	1	103
Echo Pan	2	2	121	2	103
Sci-Fi	2	3	121	0	104
OTHERS: Ethnic					
Sitar	2	4	121	0	105
Sitar 2	2	5	121	1	105
Banjo	2	6	121	0	106
Shamisen	2	7	121	0	107
Koto	2	8	121	0	108
Taisho Koto	2	9	121	1	108
Kalimba	2	10	121	0	109
Bag Pipe	2	11	121	0	110
Fiddle	2	12	121	0	111
Shanai	2	13	121	0	112
OTHERS: Percussion					
Tinkle Bell	2	14	121	0	113
Agogo	2	15	121	0	114
Steel Drums	2	16	121	0	115
Woodblock	2	17	121	0	116

Program Change Number List

Sound Name	Multi-timbral mode = off/on1		Multi-timbral mode = on2		
	Bank LSB	Program Number	Bank MSB	Bank LSB	Program Number
Castanet	2	18	121	1	116
Taiko Drums	2	19	121	0	117
Concert BD	2	20	121	1	117
Melodic Toms	2	21	121	0	118
Melodic Toms 2	2	22	121	1	118
Synth Drum	2	23	121	0	119
Rhythm Box Tom	2	24	121	1	119
Electric Drum	2	25	121	2	119
Reverse Cymbal	2	26	121	0	120
Gtr Fret Noise	2	27	121	0	121
GtrCuttingNoise	2	28	121	1	121
CuttingNoise 2	2	29	95	1	121
Ac Bass Slap	2	30	121	2	121
OTHERS: SFX					
Breath Noise	2	31	121	0	122
Flute Key Click	2	32	121	1	122
Seashore	2	33	121	0	123
Rain	2	34	121	1	123
Thunder	2	35	121	2	123
Wind	2	36	121	3	123
Stream	2	37	121	4	123
Bubble	2	38	121	5	123
Bird Tweet	2	39	121	0	124
Dog Barking	2	40	121	1	124
Horse Gallop	2	41	121	2	124
Bird Tweet 2	2	42	121	3	124
Telephone	2	43	121	0	125
Telephone 2	2	44	121	1	125
Door Creak	2	45	121	2	125
Door Slam	2	46	121	3	125
Scratch	2	47	121	4	125
Wind Chime	2	48	121	5	125
Helicopter	2	49	121	0	126
Car Engine	2	50	121	1	126
Car Stopping	2	51	121	2	126
Car Passing	2	52	121	3	126
Car Crash	2	53	121	4	126
Siren	2	54	121	5	126
Train	2	55	121	6	126
Jet Plane	2	56	121	7	126
Starship	2	57	121	8	126
Burst Noise	2	58	121	9	126
Applause	2	59	121	0	127

Sound Name	Multi-timbral mode = off/on1		Multi-timbral mode = on2		
	Bank LSB	Program Number	Bank MSB	Bank LSB	Program Number
Laughing	2	60	121	1	127
Screaming	2	61	121	2	127
Punch	2	62	121	3	127
Heartbeat	2	63	121	4	127
Foot Step	2	64	121	5	127
Gunshot	2	65	121	0	128
Machine Gun	2	66	121	1	128
Laser Gun	2	67	121	2	128
Explosion	2	68	121	3	128
OTHERS: DRUMKIT					
Standard Set	2	69	120	0	1
Room Set	2	70	120	0	9
Power Set	2	71	120	0	17
Electronic Set	2	72	120	0	25
Analog Set	2	73	120	0	26
Jazz Set	2	74	120	0	33
Brush Set	2	75	120	0	41
Orchestra Set	2	76	120	0	49
SFX Set	2	77	120	0	57
Ambience Set	2	78	120	0	1 *1
Platinum Set	2	79	120	0	1 *2
Ballad Set	2	80	120	0	1 *3

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

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

*3 Exclusive message (F0, 40, 7F, 33, 04, 02, 10, ch, 7F, 05, 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	Power Kick Drum	Electric Bass Drum
	C#	Side Stick	Side Stick	Side Stick
	D	Acoustic Snare	Power Snare Drum	Electric Snare 1
	D#	Hand Clap	Hand Clap	Hand Clap
	E	Electric Snare	Electric Snare	Electric Snare 2
	F	Low Floor Tom	Power Low Tom 2	Electric Low Tom 2
	F#	Closed Hi-hat	Closed Hi-hat	Closed Hi-hat
	G	High Floor Tom	Power Low Tom 1	Electric Low Tom 1
	G#	Pedal Hi-hat	Pedal Hi-hat	Pedal Hi-hat
	A	Low Tom	Power Mid Tom 2	Electric Mid Tom 2
	A#	Open Hi-hat	Open Hi-hat	Open Hi-hat
	B	Low-Mid Tom	Power Mid Tom 1	Electric Mid Tom 1
C2	C	Room Hi Tom 2	Power Hi Tom 2	Electric Hi Tom 2
	C#	Crash Cymbal 1	Crash Cymbal 1	Crash Cymbal 1
	D	Room Hi Tom 1	Power Hi Tom 1	Electric Hi Tom 1
	D#	Ride Cymbal 1	Ride Cymbal 1	Ride Cymbal 1
	E	Chinese Cymbal	Chinese Cymbal	Reverse Cymbal
	F	Ride Bell	Ride Bell	Ride Bell
	F#	Tambourine	Tambourine	Tambourine
	G	Splash Cymbal	Splash Cymbal	Splash Cymbal
	G#	Cowbell	Cowbell	Cowbell
	A	Crash Cymbal 2	Crash Cymbal 2	Crash Cymbal 2
	A#	Vibra-slap	Vibra-slap	Vibra-slap
	B	Ride Cymbal 2	Ride Cymbal 2	Ride Cymbal 2
C3	C	High Bongo	High Bongo	High Bongo
	C#	Low Bongo	Low Bongo	Low Bongo
	D	Mute Hi Conga	Mute Hi Conga	Mute Hi Conga
	D#	Open Hi Conga	Open Hi Conga	Analog Mid Conga
	E	Low Conga	Low Conga	Analog Low Conga
	F	High Timbale	High Timbale	High Timbale
	F#	Low Timbale	Low Timbale	Low Timbale
	G	High Agogo	High Agogo	High Agogo
	G#	Low Agogo	Low Agogo	Low Agogo
	A	Cabasa	Cabasa	Cabasa
	A#	Maracas	Maracas	Maracas
	B	Short Whistle	Short Whistle	Short Whistle
C4	C	Long Whistle	Long Whistle	Long Whistle
	C#	Short Guiro	Short Guiro	Short Guiro
	D	Long Guiro	Long Guiro	Long Guiro
	D#	Claves	Claves	Claves
	E	Hi Wood Block	Hi Wood Block	Hi Wood Block
	F	Low Wood Block	Low Wood Block	Low Wood Block
	F#	Mute Cuica	Mute Cuica	Mute Cuica
	G	Open Cuica	Open Cuica	Open Cuica
	G#	Mute Triangle	Mute Triangle	Mute Triangle
	A	Open Triangle	Open Triangle	Open Triangle
	A#	Shaker	Shaker	Shaker
	B	Jingle Bell	Jingle Bell	Jingle Bell
C5	C	Bell Tree	Bell Tree	Bell Tree
	C#	Castanets	Castanets	Castanets
	D	Mute Surdo	Mute Surdo	Mute Surdo
	D#	Open Surdo	Open Surdo	Open Surdo
	E			

	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	Scratch Push	Scratch Push	Open Hi-hat 2
F#	Scratch Pull	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	Acoustic Bass Drum	Jazz Kick 2	Jazz Kick 2	Concert BD 2
C1	C	Analog Bass Drum	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	Electric Snare	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	Timpani 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
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
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
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

Drum Sound Mapping List

	SFX Set	Ambience Set	Platinum Set	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	Plat BD2	Bala BD2
C1	C	Ambi BD1	Plat BD1	Bala BD1
	C#	Ambi Rim	Plat Rim	Plat Rim
	D	Ambi SD1	Plat SD1	Bala SD1
	D#	High Q	Ambi Clap	Ambi Clap
	E	Slap	Plat SD2	Bala SD2
	F	Scratch Push	FunkLowTom2	FunkLowTom2
	F#	Scratch Pull	Ambi HHC	Funk HHC
	G	Sticks	AmbiLowTom1	FunkLowTom1
	G#	Square Click	Ambi HHP	Funk HHP
	A	Metronome Click	AmbiMidTom2	FunkMidTom2
	A#	Metronome Bell	Ambi HHO	Funk HHO
	B	Guitar Fret Noise	AmbiMidTom1	FunkMidTom1
C2	C	Guitar Cutting Noise Up	AmbiHiTom2	FunkHiTom2
	C#	Guitar Cutting Noise Down	Ambi Crash1	Funk Crash1
	D	String Slap of Double Bass	AmbiHiTom1	FunkHiTom1
	D#	Fl. Key Click	Ambi Ride1	Ambi Ride1
	E	Laughing	Chinese Cymbal	Chinese Cymbal
	F	Scream	Ambi Cup	Ambi Cup
	F#	Punch	Tambourlne	Tambourlne
	G	Heart Beat	Funk Splash	Funk Splash
	G#	Footsteps 1	Cowbell	Cowbell
	A	Footsteps 2	Funk Crash2	Funk Crash2
	A#	Applause	Vibra slap	Vibra slap
	B	Door Creaking	Ambi Ride2	Ambi Ride2
C3	C	Door	Hi Bongo	Hi Bongo
	C#	Scratch	Low Bongo	Low Bongo
	D	Wind Chimes	Mute Hi Conga	Mute Hi Conga
	D#	Car-Engine	Hi Conga	Hi Conga
	E	Car-Stop	Low Conga	Low Conga
	F	Car-Pass	Hi Timbale	Hi Timbale
	F#	Car-Crash	Low Timbale	Low Timbale
	G	Siren	Hi Agogo	Hi Agogo
	G#	Train	Low Agogo	Low Agogo
	A	Jetplane	Cabasa	Cabasa
	A#	Helicopter	Maracas	Maracas
	B	Startship	Short Whistle	Short Whistle
C4	C	Gun Shot	Long Whistle	Long Whistle
	C#	Machine Gun	Short Guiro	Short Guiro
	D	Lasergun	Long Guiro	Long Guiro
	D#	Explosion	Claves	Claves
	E	Dog	Hi Wood Blk	Hi Wood Blk
	F	Horse-Gallop	Low Wood Blk	Low Wood Blk
	F#	Birds	Mute Cuica	Mute Cuica
	G	Rain	Open Cuica	Open Cuica
	G#	Thunder	Mute Triangle	Mute Triangle
	A	Wind	Open Triangle	Open Triangle
	A#	Seashore	Shaker	Shaker
	B	Stream	Jingle Bell	Jingle Bell
C5	C	Bubble	Bar Chimes	Bar Chimes
	C#		Castanets	Castanets
	D		Mute Surdo	Mute Surdo
	D#		Open Surdo	Open Surdo
	E			

Drum Rhythm List

No.	Rhythm Name
1	8 Beat 1
2	8 Beat 2
3	8 Beat 3
4	16 Beat 1
5	16 Beat 2
6	16 Beat 3
7	16 Beat 4
8	16 Beat 5
9	16 Beat 6
10	Rock Beat 1
11	Rock Beat 2
12	Rock Beat 3
13	Hard Rock
14	Heavy Beat
15	Surf Rock
16	2nd Line
17	50 Ways
18	Ballad 1
19	Ballad 2
20	Ballad 3
21	Ballad 4
22	Ballad 5
23	Light Ride 1
24	Light Ride 2
25	Smooth Beat
26	Rim Beat
27	Slow Jam
28	Pop 1
29	Pop 2
30	Electro Pop 1
31	Electro Pop 2
32	Ride Beat 1
33	Ride Beat 2
34	Ride Beat 3
35	Ride Beat 4
36	Slip Beat
37	Jazz Rock
38	Funky Beat 1
39	Funky Beat 2
40	Funky Beat 3
41	Funk 1
42	Funk 2
43	Funk 3
44	Funk Shuffle 1
45	Funk Shuffle 2
46	Buzz Beat
47	Disco 1
48	Disco 2
49	Hip Hop 1
50	Hip Hop 2

No.	Rhythm Name
51	Hip Hop 3
52	Hip Hop 4
53	Techno 1
54	Techno 2
55	Techno 3
56	Heavy Techno
57	8 Shuffle 1
58	8 Shuffle 2
59	8 Shuffle 3
60	Boogie
61	16 Shuffle 1
62	16 Shuffle 2
63	16 Shuffle 3
64	T Shuffle
65	Triplet 1
66	Triplet 2
67	Triplet 3
68	Triplet 4
69	Triplet Ballad 1
70	Triplet Ballad 2
71	Triplet Ballad 3
72	Motown 1
73	Motown 2
74	Ride Swing
75	H.H. Swing
76	Jazz Waltz 1
77	Jazz Waltz 2
78	5/4 Swing
79	Tom Swing
80	Fast 4 Beat
81	H.H. Bossa Nova
82	Ride Bossa Nova
83	Beguine
84	Mambo
85	Cha Cha
86	Samba
87	Light Samba
88	Surdo Samba
89	Latin Groove
90	Afro Cuban
91	Songo
92	Bembe
93	African Bembe
94	Merenge
95	Reggae
96	Tango
97	Habanera
98	Waltz
99	Ragtime
100	Country & Western

Settings List

The tables below list all of the settings/functions that can be adjusted from the CN34 digital piano's panel interface, in addition to available ranges/types, default settings, and Registration/User Memory storing capabilities.

No.	Setting Name	Range / Type	Default Setting	Registration	User Memory
1. Basic Settings					
1-1	Equaliser	Off, Loudness, Bass Boost, Treble Boost, Mid Cut, User	Off	●	●
	User Low	-6 dB - +6dB	0 dB	●	●
	User Mid Low	-6 dB - +6dB	0 dB	●	●
	User Mid High	-6 dB - +6dB	0 dB	●	●
	User High	-6 dB - +6dB	0 dB	●	●
1-2	Speaker Volume	Normal, Low	Normal	-	●
1-3	Phones Volume	Normal, High	Normal	-	●
1-4	Line Out Volume	0 - 10	10	-	●
1-5	Audio Rec. Gain	0 dB - +15 dB	0 dB	-	●
1-6	Tuning	427.0Hz - 453.0 Hz	440.0 Hz	●	●
1-7	Damper Hold	Off, On	Off	●	●
1-8	Four Hands	Off, On	Off	●	●
1-9	User Memory	-	-	-	-
1-10	Factory Reset	-	-	-	-
2. Virtual Technician					
2-1	Damper Resonance	Off, 1 - 10	5	●	●
2-2	String Resonance	Off, 1 - 10	5	●	●
2-3	Key-off Effect	Off, 1 - 10	5	●	●
2-4	Fall-back Noise	Off, 1 - 10	5	●	●
2-5	Temperament	Equal (Piano), Pure Major, Pure Minor, Pythagorean, Meantime, Werckmeister, Kirnberger, Equal (Flat), Equal	Equal (Piano)	●	●
	Temperament Key	C - B (when NOT using Equal)	C	●	●
3. Key Settings					
3-1	Lower Octave Shift	0 - +3	0	●	●
3-2	Lower Pedal On/Off	Off, On	Off	●	●
3-3	Layer Octave Shift	-2 - +2	0	●	●
3-4	Layer Dynamics	Off, 1 - 10	10	●	●
4. MIDI Settings					
4-1	MIDI Channel	1 - 16	1	●	●
4-2	Send Program Change Number	-	1	●	●
4-3	Local Control	Off, On	On	●	●
4-4	Transmit Program Change Number	Off, On	On	●	●
4-5	Multi Timbral Mode	Off, On1, On2	Off	●	●
	Channel Mute	Play, Mute for each channel 1 - 16	All Play	●	●
5. Power Settings					
5-1	Auto Power Off	Off, 30 min., 60 min., 120 min.	Off	-	.*

* Auto Power Off setting is stored to User Memory automatically.

Setting Name	Range / Type	Default Setting	Registration	User Memory
Touch				
Touch Curve	Light+, Light, Normal, Heavy, Heavy+, Off	Normal	●	●
Transpose				
Key Transpose On/Off (button)	Off, On	Off	●	●
Key Transpose Value	-12 (C) - +12 (C)	0	●	●
Song Transpose Value	-12 (C) - +12 (C)	0	-	-
Split				
Split On/Off (button)	Off, On	Off	●	●
Split Point	A-1 - C7	C3	●	●
Metronome Menu				
Metronome On/Off (button)	Off, On	Off	-	-
Tempo	10 - 400 BPM	120 BPM	●	●
Beat	1/4, 2/4, 3/4, 4/4, 5/4, 3/8, 6/8, 7/8, 9/8, 12/8, 100 Drum Rhythms	4/4	●	●
Volume	0 - 10	5	●	●
Internal Recorder : Playback Mode Menu				
Tempo (main screen)	10 - 400 BPM	120 BPM	-	-
Song Volume	1 - 10	5	-	-
Song Transpose	-12 (C) - +12 (C)	0 (C)	-	-
Song Part	1, 2, 1&2	1&2	-	-
USB Recorder : SMF Playback Mode Menu				
Volume (main screen)	1 - 10	5	-	-
Song Tempo	10 - 400 BPM	120 BPM	-	-
Song Transpose	-12 (C) - +12 (C)	0 (C)	-	-
Song Part	Play, Mute	Play	-	-
Reverb Menu				
Reverb On/Off (button)	Off, On	Off	●	●
Reverb Type	Room, Lounge, Small Hall, Concert Hall, Live Hall, Cathedral	Sound's default	●	●
Effects Menu				
Effects On/Off (button)	Off, On	Off	●	●
Effect Type	Chorus, Classic Chorus, Song Part, Ping Delay, Triple Delay, Tremolo, Classic Tremolo, Phaser, Rotary1, Rotary2, Rotary3, Phaser+Amp, Auto Pan+Amp	Sound's default	●	●

Specifications

Keyboard	88 weighted keys with Ivory Touch key surfaces Responsive Hammer II (RHII) action with Let-Off	
Sound Source	Progressive Harmonic Imaging™ (PHI), 88-key piano sampling	
Internal Sounds	324 voices + 12 drum sets	PIANO1: Concert Grand, Studio Grand, Mellow Grand, Modern Piano PIANO2: Concert Grand 2, Studio Grand 2, Mellow Grand 2, Rock Piano ELECTRIC PIANO: Classic E.P., Modern E.P., 60's E.P., Modern E.P. 2 ORGAN: Jazz Organ, Blues Organ, Ballad Organ, Gospel Organ, Church Organ, Diapason, Full Ensemble, Diapason Oct. HARPSI & MALLETS: Harpsichord, Harpsichord 2, Vibraphone, Clavi STRINGS: Slow Strings, String Pad, Warm Strings, String Ensemble CHOIR & PAD: Choir, Choir 2, New Age, Atmosphere BASS: Wood Bass, Electric Bass, Fretless Bass, W. Bass & Ride OTHERS: 300 voices (incl. 12 drum sets)
Polyphony	max. 256 notes	
Keyboard Modes	Dual Mode, Split Mode, Four Hands Mode (Volume/Balance adjustable)	
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	
Virtual Technician	Resonance:	String Resonance, Damper Resonance
	Noise & Effects:	Fall-back Noise, Key-off Effect (incl. Key-off Release)
	Temperament:	Equal (Piano), Pure Major, Pure minor, Pythagorean, Meantone, Werckmeister, Kirnberger, Equal (Flat), Equal (Stretch), Key of Temperament
Internal Recorder	3 songs, 2 tracks recorder – approximately 90,000 note memory capacity	
USB Functions	Playback:	MP3, WAV, SMF
	Record:	MP3, WAV, SMF
	Other:	Convert Song to Audio, Load Internal Song, Save Internal Song, Save SMF Song, Load Registration, Save Registration, Rename File, Delete File, Format USB
Metronome	Beat:	1/4, 2/4, 3/4, 4/4, 5/4, 3/8, 6/8, 7/8, 9/8, 12/8 + 100 drum rhythms
	Tempo:	10 - 400 bpm (20 - 800 bpm for eighth note rhythms)
Internal Songs	Demo Songs:	31 songs
	Lesson Function:	Alfred or Burgmüller, Czerny, Beyer (depending on market location)
	Concert Magic:	88 songs
Registrations	9 memories	
Other Settings & Functions	Touch Curve Select, Key/Song Transpose, Equaliser (incl. User EQ), Speaker Volume, Phones Volume, Line Out Volume, Audio Recorder Gain, Tuning, Damper Hold, Four Hands, User Memory, Factory Reset, Lower Octave Shift, Lower Pedal On/Off, Layer Octave Shift, Layer Dynamics, MIDI Channel, Send PGM#, Local Control, Transmit PGM#, Multi-timbral Mode, Channel Mute, Auto Power Off	
Display	16 x 2 characters LCD	
Pedals	Sustain (with half-pedal support), Soft, Sostenuto	
Jacks	LINE IN (L/MONO, R), LINE OUT (L/MONO, R), Headphones x 2, MIDI (IN/OUT), USB to Host, USB to Device	
Speaker System	Speakers:	16 cm x 2 (full range speakers)
	Output Power:	20 W x 2
Power Consumption	30 W	
Dimensions (not including music rack)	1382 (W) x 473 (D) x 892 (H) mm 54 ½" (W) x 18 ⅔" (D) x 35 ⅓" (H)	
Weight	55 Kg 122 lbs.	

Specifications are subject to change without notice.

MIDI Exclusive Data Format

1st byte	2nd byte	3rd byte	4th byte	5th byte	6th byte	7th byte	8th byte	9th byte	10th byte
1	2	3	4	5	6	7	8	9	10

Byte	ID	Description
1	F0	Start code
2	40	Kawai ID number
3	00 - 0F	MIDI channel
4	10, 30	Function code (30 when setting Multi-timbre On/Off)
5	04	Indicates that the instrument is an electric piano
6	02	Indicates that the piano is a CN model
7	data 1	See table below
8	data 2	
9	data 3	
10	F7	End code

data 1	data 2	data 3	Function
00	00	-	Multi-timbre Off
02	00	-	Multi-timbre On 1
01	00	-	Multi-timbre On 2
0F	00 - 7F	-	Split Point
14	00 - 7F	-	Dual/Split balance
16	1F - 60	-	Tune, 40: 440 Hz
17	00, 7F	-	00: Program Change Off, 7F: Program Change On
18	00 - 05	-	00: Light, 01: Normal, 02: Heavy, 03: Off, 04: Light +, 05: Heavy +
19	00 - 03	-	Lower Octave Shift
20	00 - 7F	00 - 15	Dual, data 2: Main sound, data 3: Layer sound
21	00 - 7F	00 - 15	Split, data 2: Upper sound, data 3: Lower sound
22	00 - 7F	00 - 7F	Four Hands, data2: Right sound, data3: Left sound
25	00 - 08	00 - 0B	data 2: Temperament, data 3: Key
26	00, 7F	00 - 0F	Multi-timbre, data 2: 00 (On), 7F (Off), data 3: Channel
27	00 - 02	00 - 02	Dual/Split, Right (Upper)/Left (Lower), sound Bank LSB

MIDI Implementation Chart

■ Kawai CN34 digital piano

Date: June 2012 Version: 1.0

Function	Transmit	Receive	Remarks
Basic channel			
At power-up	1	1	
Settable	1 - 16	1 - 16	
Mode			
At power-up	Mode 3	Mode 1	* The default for the OMNI mode is On. Specifying MIDI channels automatically turns it Off.
Message	×	Mode 1, 3	
Alternative	*****	×	
Note number			
Range	9 - 120**	0 - 127	** The value depends on the Transpose setting.
	*****	0 - 127	
Velocity			
Note on	○	○	
Note off	○	○	
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	○ (Center pedal)	○	Sostenuto Pedal
67	○ (Left pedal)	○	Soft Pedal
69	○	○	Hold 2
70	×	○	Sustain Level
71	×	○	Resonance
72	×	○	Release Time
73	×	○	Attack Time
74	×	○	Cutoff
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	○	*1

Exclusive			
	○	○	On/Off Selectable
Common			
Song position	×	×	
Song selection	×	×	
Tune	×	×	
Real time			
Clock	×	×	
Commands	×	×	
Other functions			
All sound Off	×	○ (120)	
Reset all controller	×	○ (121)	
Local On / Off	×	○	
All notes Off	×	○ (123 - 127)	
Active sensing	×	○	
Reset	×	×	

*1 Please refer to the Program Change Number List on page 111.

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

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THE FUTURE OF THE PIANO

CN34 Owner's Manual
KPSZ-0545
OW1064E-S1208

