

KURZWEIL®

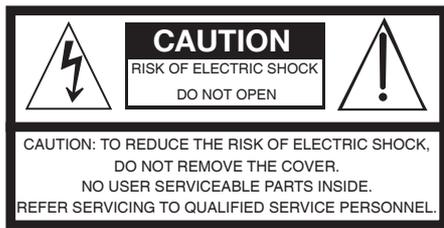
Andante

CUP310/320

USER'S MANUAL

English Manual

HDC YOUNG CHANG



The lightning flash with the 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.

IMPORTANT SAFETY & INSTALLATION INSTRUCTIONS

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

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

1. Read all the Safety and Installation Instructions and Explanation of Graphic Symbols before using the product.
2. This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a power supply cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet which is properly installed and grounded in accordance with all local codes and ordinances.
DANGER: Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Do not modify the plug provided with the product – if it will not fit the outlet, have a proper outlet installed by a qualified electrician. Do not use an adaptor which defeats the function of the equipment-grounding conductor. If you are in doubt as to whether the product is properly grounded, check with a qualified serviceman or electrician.
3. Do not use this product near water for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
4. This product should only be used with a stand or cart that is recommended by the manufacturer.
5. This product, either alone or in combination with an amplifier and speakers or headphones, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
6. This product should be located so that its location or position does not interfere with its proper ventilation.
7. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
8. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
9. This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.
10. The power supply cord of the product should be unplugged from the outlet when left unused for a long period of time. When unplugging the power supply cord, do not pull on the cord, but grasp it by the plug.
11. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
12. The product should be serviced by qualified service personnel when:
 - A. The power supply cord or the plug has been damaged;
 - B. Objects have fallen, or liquid has been spilled into the product;
 - C. The product has been exposed to rain;
 - D. The product does not appear to be operating normally or exhibits a marked change in performance;
 - E. The product has been dropped, or the enclosure damaged.
13. Do not attempt to service the product beyond that described in the user maintenance instructions. All other servicing should be referred to qualified service personnel.
14. **WARNING:** Do not place objects on the product's power supply cord, or place the product in a position where anyone could trip over, walk on, or roll anything over cords of any type. Do not allow the product to rest on or be installed over cords of any type. Improper installations of this type create the possibility of a fire hazard and/or personal injury.

RADIO AND TELEVISION INTERFERENCE

WARNING: Changes or modifications to the instrument not expressly approved by Young Chang could void your authority to operate the instrument.

IMPORTANT: When connecting this product to accessories and/or other equipment use only high quality shielded cables.

NOTE: This instrument 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 instrument 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 instrument does cause harmful interference to radio or television reception, which can be determined by turning the instrument 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 instrument and the receiver.
- Connect the instrument into an outlet on a circuit other than the one to which the receiver is connected.
- If necessary consult your dealer or an experienced radio/television technician for additional suggestions.

The normal function of this product may be disturbed by strong electro magnetic interference. If so, simply reset the product to resume normal operation by following the instruction manual. In case the function could not resume, please use the product in another location.

NOTICE

This apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

AVIS

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la class B prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

- 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 of the 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. Allow adequate ventilation for the power adapter. Do not hide it under a carpet or behind a curtain or place it in an enclosed space where heat buildup can occur. 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 prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 9) Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 10) Only use attachments/accessories specified by the manufacturer.
- 11) Use only with a 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.
- 12) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 13) 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 objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



Warning: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.

To completely disconnect this equipment from the AC Mains, disconnect the power supply cord plug from the AC receptacle.

Kurzweil International Contacts

Contact the appropriate Kurzweil office listed below to locate your local Kurzweil representative.

US Customers:

American Music & Sound
925 Broadbeck Dr #220
Newbury Park, CA 91320

Tel: 800-431-2609

Fax: 818-597-0411

Email: info@americanmusicandsound.com

Customers Outside the US:

HDC Young Chang Co., LTD.
196, Bongsu-daero, Seo-gu,
Incheon, Korea
South Korea
Tel: +82 32 570 1000

www.ycpiano.co.kr

www.youngchang.com



WWW

www.kurzweil.com



support@kurzweil.com



www.facebook.com/kurzweilmusicsystems/



www.twitter.com/KurzweilMusic



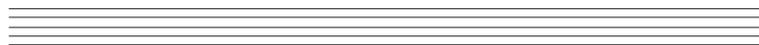
www.youtube.com/user/KurzweilTutorials

Table of Contents

Introduction	1
Primary Features	
CUP310 Carton Contents	
Assembly Instructions	
Power Connection	
MP3 - Aux In	
Volume	
Headphone Jacks	
Quick Start	
Overview	5
Input/Output Panel	
Control Panel Display, Buttons and Controls	
Operation	
Program Mode	9
Selecting a Program	
Selecting a Program with the Keyboard	
Play/Pause/Stop Metronome or Rhythm Pattern	
Demo Mode	10
Selecting Demo Songs	
Metronome/Rhythm Mode	11
Rhythm Pattern	
Metronome	
Tempo	
Rhythm Vol	
Metro Vol	
Tap Tempo	
Layer/Split/Dual Mode	13
Using Layer Mode	
Using Split Mode	
Using Dual Mode	
Song Mode	15
Selecting and Playing a Song	
Recording a Song	
Punch-in Recording	
Tempo, Rec.Rthm, and Rhythm Vol	
Selecting Metronome and Rhythm Settings	
Erasing a Song	
Settings Mode	17
Selecting Settings	
Touch	
Tune	
Reverb Lvl (Reverb Level)	
Local Ctrl (Local Control)	
AutoPwr (Auto Power Off)	
Version	
Hard Reset? (Restoring Factory Defaults)	

MIDI	19
About MIDI	
MIDI Channels	
MIDI In and Out Ports	
USB MIDI Connection	
System Mode (Boot Loader)	20
Appendix	21
MIDI Implementation Chart	
Demo Song List	
Program List	
Specifications	

Introduction



Congratulations on your purchase of the Kurzweil CUP310. You are certain to enjoy many hours exploring the variety of features as well as the beautiful preset Programs.

This manual introduces CUP310, 320. However, collectively, it is introduced as CUP310.

Primary Features

- CUP310 : 88-Note fully-weighted hammer-action keyboard with 3-point velocity sensor
CUP320 : 88-Note Graded hammer-action Wood keyboard with 3-point velocity sensor
- Dual 25-watt amplifiers with 4-speaker, stereo sound system
- 2 Gigabyte Sound ROM from the Forte SE featuring German and Japanese Grand Piano, Harpsichord, Clav, 73 Tine EP and Celeste
- 88 expressive sounds with 69 Rhythm Patterns
- 128 X 64 monochrome LCD screen
- Built-in sustain pedal (with half damper function), sostenuto pedal and soft pedal
- Kurzweil String Resonance (KSR) to simulate sympathetic string resonance for acoustic piano sounds
- Layer Mode (Layer two instrument sounds across the keyboard)
- Split Mode (Split two instrument sounds across the keyboard)
- Dual Mode (Split-keyboard dual 44-Key operation ideal for duets or piano lessons)
- Adjustable keyboard sensitivity
- Performance Recorder (10 song capacity with punch-in recording)
- Adjustable reverb effect, as well as preset effects from the Forte SE
- 51 Built In Demo Songs
- Stereo RCA Audio Input and Output Jacks
- Stereo 1/8" audio input (for playing backing tracks from a smart-phone or similar device)
- Two 1/4" Headphone Jacks
- Standard MIDI In and Out ports
- "Plug & Play" USB MIDI

Andante CUP310 Carton Contents

- CUP310 instrument (main cabinet)
- DC power adapter, with AC power cord
- Warranty Card
- CUP310 User's Manual (this manual)
- Hardware:

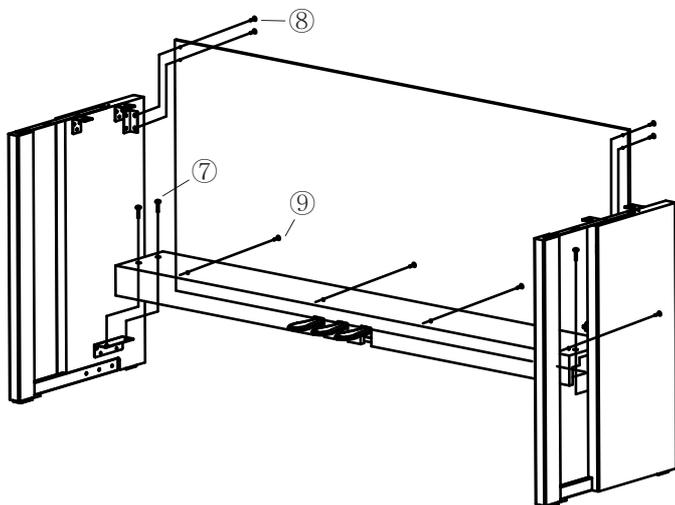
Part Name	Q ' ty	Part Name	Q ' ty
① Keyboard	1 EA	⑥ Screws for side panel and keyboard (25mm)	4 EA
② Side panel of stand (Left)	1 EA	⑦ Screws for side panel and pedal box (25mm)	4 EA
③ Side panel of stand (Right)	1 EA	⑧ Screws for side panel and rear panel	4 EA
④ Pedal box	1 EA	⑨ Screws for rear panel and pedal box	6 EA
⑤ Rear panel	1 EA	⑩ Cord holder	2 EA

If you are missing any of the above, please contact your Kurzweil dealer.
It is always a good idea to save the CUP310 cartons, in case they are needed for shipment.
Follow the procedure on the following pages to assemble the CUP310.

Introduction

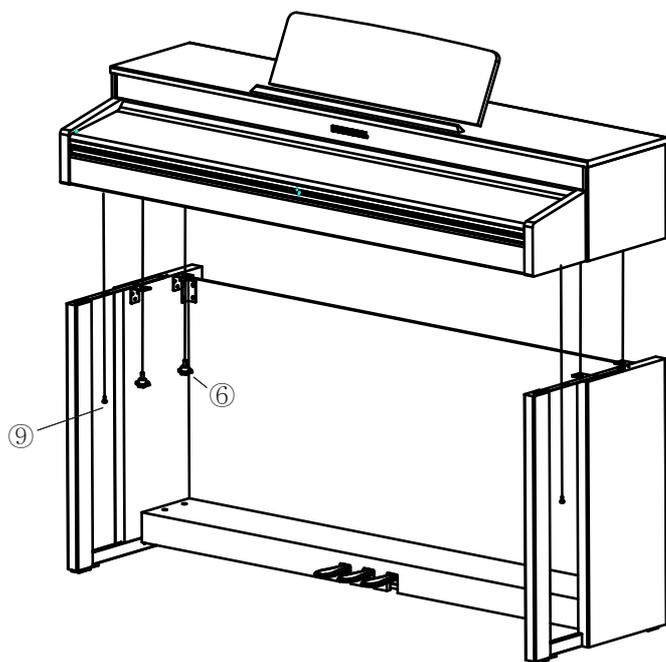
Assembly Instructions

In addition to the main piano cabinet, your instrument comes with a stand requiring assembly, using the parts shown below. Two people may be needed to complete the assembly, as the stand must first rest on the floor and then the instrument must be securely attached on top of it.



Step 1:

Place the stand parts on a carpeted floor or blanket. Use the four long bolts to attach the pedal unit to the side panels. Use the four shorter screws to attach the back panel to brackets, as shown below.



Step 2:

Move the stand into an upright position and then place the instrument upon it. To avoid possible damage, don't let the weight of the body rest on the stand until it is properly aligned and secured with the six screws as shown. Rotate the pedal adjuster until it comes in firm contact with the floor surface. If the adjuster is not in firm contact with the floor, the pedal will wobble and cause malfunctions.

Introduction



Step 3:

Insert the pedal cable connector into the pedal jack located on the bottom of the keyboard.

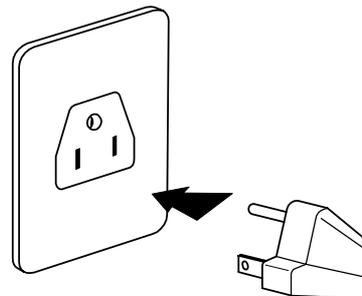
Be sure that the connector is inserted in the correct orientation. Make sure that the cable clamp fastens to the pedal cable.

Power Connection

A DC power adapter supplies the CUP310's power. Connect the power adapter to the DC receptacle on the rear panel of the CUP310. Then connect the power cord to an AC outlet.

CAUTION: Use only the DC power adapter supplied with the CUP310 / 320. Connecting the wrong DC power adapter could damage the instrument.

If the power adapter is damaged or lost, contact your Kurzweil dealer to order a replacement.



The AC plug shape will vary depending on location of use

The AC plug shape will vary depending on location of use. After the CUP310 is set up, turn the power on. While the unit is performing its power-up routine some of the front panel buttons will flash. After a couple of seconds, the LCD screen will display the first Piano Program. The CUP310 is now ready to play. Use the Quick Start instructions on the following pages for the basic steps to change Programs or play one of the Demo Songs.

Introduction



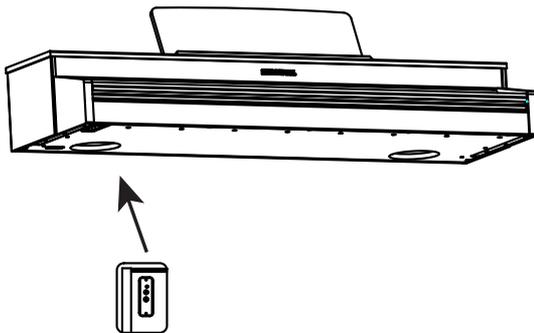
MP3 - Aux In

Connects an external audio source to the CUP310 sound system.

Volume

Before turning on the CUP310, it's always a good idea to set the volume at its minimum setting (all the way to the left). For a generally comfortable level of volume while playing, set the knob at its middle position.

The Volume Control is located on the right end of the keyboard. Turn this knob from left to right (clock- wise) to increase the volume. This adjusts the CUP310 speaker and headphone audio volume. The Volume control does not affect the volume of the sound coming from external sources through the Audio In jacks on the rear panel.



Headphone Jacks

The CUP310 has two 1/4" stereo headphone jacks located below the keyboard on the left end of the cabinet.

Plugging in headphones provides privacy during practice. Each jack operates the same so multiple people can play and hear the music together. When headphones are connected the CUP310's speakers are silent.

Quick Start

Playing the Programs:

1. Turn on the power.
2. The Piano CATEGORY button LED is lit and the first Program (Piano) is ready to play.
3. There are a number of different Programs available. Press a CATEGORY button, then press the LEFT or RIGHT navigation button to step through the available Programs in the selected category.

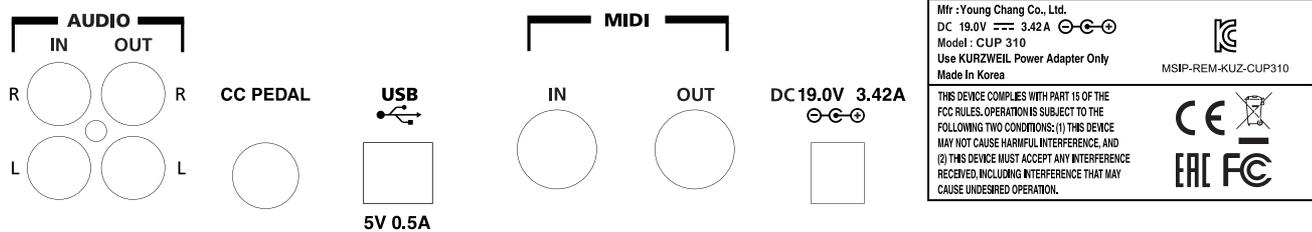
Playing a Demo Song:

1. Press the RECORD and PLAY/PAUSE buttons simultaneously to enter Demo Mode
2. The first demo song immediately plays.
When the current demo song finishes, the next song begins playing.
3. Press the LEFT or RIGHT navigation button to select the previous or next song.
4. You can also press PLAY/PAUSE and STOP buttons to start and stop the current demo.
5. To exit Demo Mode, press the EXIT button.

Overview

Input/Output Panel

The Input/Output panel is located on the rear of the instrument cabinet.



Audio In and Audio Out:

Audio Out (RCA jacks) may be used to connect the CUP310 to external audio equipment, such as an outboard mixer, powered speakers, or recording device. Audio In jacks are used to connect the CUP310's internal speakers to other devices such as a digital audio player or CD player. Always turn off the CUP310's power before plugging or unplugging cables into the Audio In jacks. The CUP310's Volume Control does not affect the volume of the sound coming from the Audio In jacks. Therefore it is best to use a device that has its own output level control and to use that to adjust the sound volume from the external device.

MIDI In and Out ports:

Use the MIDI In and Out ports to connect the CUP310 to other MIDI devices to receive and send MIDI data.

CC Pedal (Volume/Expression Pedal):

This jack is used to connect a continuous controller pedal for volume and expression control. The CUP310 requires a pedal with a TRS 1/4" connector and 10k linear potentiometer. Most manufacturers EXCEPT Yamaha and Korg make pedals with the same specifications and should work. Yamaha and Korg pedals typically use an exponential potentiometer and therefore will not work correctly. The CC-1 pedal is available from Kurzweil. You can order the CC-1 through your local Kurzweil dealer.

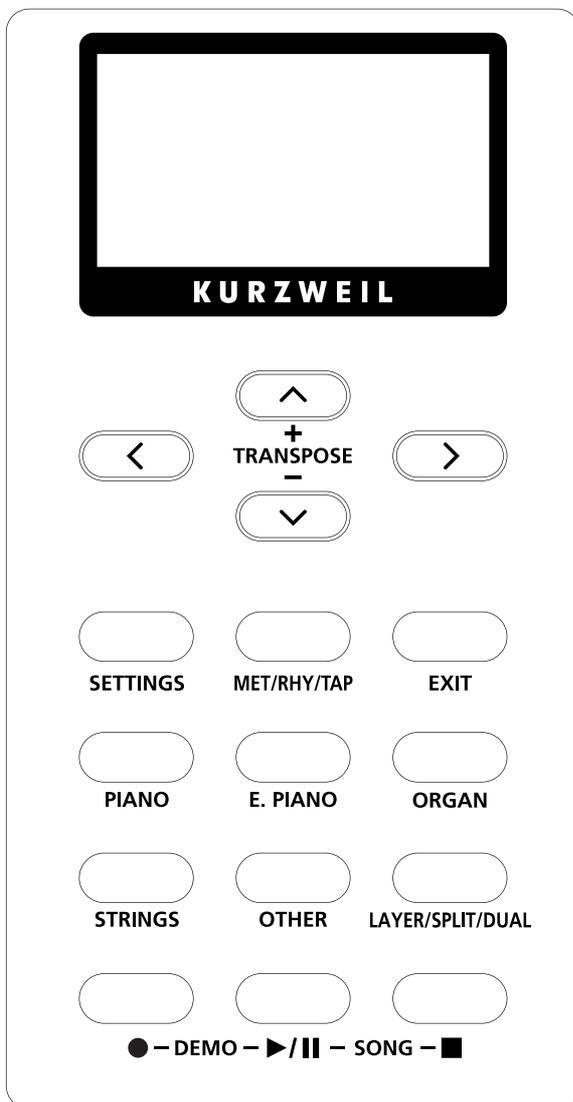
USB:

Connect a USB cable to this port to send and receive MIDI or to connect to a computer to apply system updates.

Overview

Control Panel Display, Buttons and Controls

The features labelled on the CUP310's front panel below are discussed in detail in the following chapters.



Display:

The 128 x 64 LCD graphic screen provides the main user interface for the CUP310. The screen displays text indicating the current instrument mode or parameter settings.

Navigation and TRANSPOSE Buttons:

In Program Mode, pressing the LEFT or RIGHT navigation buttons will select the previous or next program in the current category. Pressing the UP or DOWN navigation buttons will change the Transposition value. In other modes, pressing the UP or DOWN navigation buttons will select a parameter. Pressing the LEFT or RIGHT navigation buttons will change the value of the selected parameter. In any mode, you can press and hold any navigation button quickly scroll through parameters or values. Pressing the LEFT and RIGHT navigation buttons simultaneously allows you to reset certain parameters to a default value.

EXIT Button:

Press the EXIT button to exit any menu or mode and return to Program Mode. You can return to Program Mode at any time by repeatedly pressing the EXIT button.

SETTINGS Button:

Press the SETTINGS button to enter Settings Mode. Global settings affecting the instrument overall (such as keyboard velocity response) can be adjusted in this mode.

Overview

Category Buttons (Piano, E. Piano, Strings, Organ, Others)

Press any of these buttons to select the first program of each instrument category (or the category default program of the selected category). After selecting an instrument category, other programs in the category can be selected by pressing the LEFT or RIGHT navigation buttons. Pressing the LEFT or RIGHT navigation buttons will bring you to the previous or next sound in the category.

To set the current program as the category default program, press and hold the currently selected CATEGORY button.

MET/RHY/TAP Button

Press the MET/RHY/TAP button to enter Metronome/Rhythm Mode. This mode allows you to select whether a Metronome and/or Rhythm will be played when the PLAY/PAUSE button is pressed. You can select a Rhythm Pattern, set a tempo, and set the Metronome and Rhythm volume. You can also set the Rhythm or Metronome tempo by repeatedly tapping the MET/RHY/TAP button at the desired rate.

See the Metronome/Rhythm Mode chapter for more details.

LAYER/SPLIT/DUAL Button

The LAYER/SPLIT/DUAL button selects the Layer, Split, and Dual Modes. Press the LAYER/SPLIT/DUAL button repeatedly to select each mode.

- Layer Mode allows you to layer two different Program sounds on the keyboard.
- Split Mode allows you to split the keyboard into two regions containing two different Program sounds, with adjustable split point.
- Dual Mode allows you to split the keyboard into two regions, each transposed to the same range for 4-hand use (ideal for duets or instructors and students).

See the Layer/Split/Dual Mode chapter for more details on each of these modes.

RECORD Button

The RECORD button is used in Song Mode, which allows you to record up to ten user songs with optional Rhythm accompaniment.

See the Song Mode chapter for more details.

PLAY/PAUSE and STOP Buttons

The PLAY/PAUSE and STOP buttons are used to play, pause or stop a Metronome or Rhythm in Program Mode, user songs in Song Mode, and demo songs in Demo Mode.

Demo Mode

Press RECORD and PLAY/PAUSE buttons simultaneously to enter Demo Mode. Demo Mode allows you to hear a selection of demo songs performed in a variety of classical styles that demonstrate the Grand Piano Program. See the Demo Mode chapter for more details on Demo Mode.

Song Mode

Press PLAY/PAUSE and STOP buttons simultaneously to enter Song Mode.

Song Mode allows you to record up to ten user songs with optional Rhythm accompaniment.

See the Song Mode chapter for more details.



Overview

Double Button Presses

Several pairs of the buttons on the CUP310 have timesaving secondary functions when pressed simultaneously—think of them as keyboard shortcuts.

For convenience of reference, descriptions of all of the double-button press functions appear below.

- To enter Demo Mode, press the RECORD and PLAY/PAUSE buttons simultaneously
- To enter Song Mode, press the PLAY/PAUSE and STOP button simultaneously.
- While in Program Mode, press the TRANSPOSE – and + buttons (DOWN and UP) simultaneously to reset transposition.
- While in Settings Mode, press the LEFT and RIGHT navigation buttons simultaneously to select the default value of the selected parameter.

Press and Hold Buttons

By holding down some buttons, you can access secondary functions of other buttons.

- Press and hold the current CATEGORY button, to set the current program as the default program for that category (only if the current program belongs to the category of the button pressed).
- Press and hold any NAVIGATION button to quickly scroll through the available settings.



Operation

Operation

See below for an overview of the CUP310's various modes and features:

- Program Mode explains how to access the variety of different Programs available (also commonly known as presets or voices).
- Demo Mode explains how to play the pre-recorded songs in the CUP310.
- Metronome/Rhythm Mode explains how to select a Metronome or Rhythm, and how to set the tempo.
- Layer/Split/Dual Mode explains how to layer two different Program sounds on the keyboard, how to split the keyboard into two regions containing two different Program sounds, and how to split the keyboard into two regions containing the same Program sound for 4-hand use (ideal for duets or instructors and students).
- Song Mode explains how to record and play user songs in the CUP310.
- Settings Mode describes a variety of global parameter settings in the CUP310.
- MIDI introduces the Musical Instrument Digital Interface functions in the CUP310.

Program Mode

When you turn on the CUP310, Program Mode is active and the first Grand Piano Program is selected and ready to play. Program Mode is the main mode of the CUP310. You can return to Program Mode at any time by repeatedly pressing the EXIT button.

Selecting a Program

Follow these steps to select a Program:

1. While in Program Mode, press a CATEGORY button (Piano, E. Piano, Strings, Organ, or Others) to select the first Program (or Category Default Program) of the category.
2. After selecting a category, you can use the LEFT or RIGHT navigation buttons to select other Programs in the current category.

To set the current Program as the Category Default Program, press and hold the current CATEGORY button for three seconds

Selecting a Program with the Keyboard

Programs can also be selected by pressing specific keyboard keys. This is useful for quickly selecting favorite Programs. Follow these steps to select a Program via the keyboard.

1. Press the OTHERS category button twice. The LCD screen will show “Strike a key to select a sound” and OTHERS button LED will blink.
2. Strike a key on the keyboard (key 1 through 88) and a corresponding program will be selected. See the Appendix for a complete list of Programs and the corresponding keyboard keys that can be used to select them.

To cancel Program selection via the keyboard, press the EXIT button.

Play/Pause/Stop Metronome or Rhythm Pattern

Press the PLAY/PAUSE button to play or pause the Metronome and/or last selected Rhythm Pattern. If the STOP button is pressed, the Metronome/Rhythm Pattern will stop, and will play from beat 1 the next time the PLAY/PAUSE button is pressed.

See the Metronome/Rhythm Mode chapter for more details on Metronome and Rhythm Pattern settings.



Demo Mode

The CUP310 has selection of demo songs performed in a variety of classical styles that demonstrate the Grand Piano Program. See the Appendix for a complete list of the demo songs.

Selecting Demo Songs

Press the RECORD and PLAY/PAUSE buttons simultaneously to enter Demo Mode, and the first demo song will begin playing. The currently selected demo song number and name is displayed in the LCD screen. When the current demo song ends, the next song begins playing.

Press the LEFT or RIGHT navigation buttons to select the previous or next demo song. You can also press PLAY/PAUSE or STOP buttons to start and stop the currently selected demo song. Press the PLAY/PAUSE button again to play the selected demo song.

Press the EXIT button to stop the current demo song and return to Program Mode.

Metronome/Rhythm Mode

Press the MET/RHY/TAP button to enter Metronome/Rhythm Mode.

This mode allows you to select whether a Metronome and/or Rhythm will be played when the PLAY/PAUSE button is pressed in Program Mode.

You can select a Rhythm Pattern, set the Rhythm and Metronome volume, and set when the Metronome will be heard. While in Metronome/Rhythm Mode, press the UP or DOWN navigation buttons to select each parameter, then press the LEFT or RIGHT navigation button to select the previous or next setting.

From the Metronome/Rhythm Mode menu, press the EXIT button to return to the previously selected mode.

Rhythm Pattern

When Rhythm Pattern is selected, press the RIGHT navigation button to open the Rhythm Pattern sub-menu.

The Rhythm Pattern sub-menu displays the currently selected Rhythm Pattern.

Press the LEFT or RIGHT navigation button to select the previous or next Rhythm Pattern.

Press the EXIT button to return to the Metronome/Rhythm Mode main menu.

Metronome

The Metronome parameter determines when the Metronome will be heard.

Press the LEFT or RIGHT navigation button to select the previous or next setting. When Metronome is set to On, the Metronome will be heard whenever the PLAY/PAUSE button is pressed in Program Mode or Song Mode.

When Metronome is set to Off, the Metronome will not be heard. When Metronome is set to Rec Only, the Metronome will be heard only while recording in Song mode.

Tempo

The Tempo parameter determines the tempo that the Metronome and Rhythm will use in Program Mode.

Press the LEFT or RIGHT navigation button to change the tempo in BPM (beats per minute).

You can also set the tempo by repeatedly tapping the MET/RHY/TAP button at the desired rate.



Metronome/Rhythm Mode

Rhythm Vol

The Rhythm Vol parameter determines the volume of the selected Rhythm in all modes. The volume can be set from 0 (muted/off) through 10 (maximum). Press the LEFT or RIGHT navigation button to select the previous or next setting.

Metro Vol

The Metro Vol parameter determines the volume of the Metronome in all modes. The volume can be set from 0 (muted/off) through 10 (maximum). Press the LEFT or RIGHT navigation button to select the previous or next setting.

Tap Tempo

The Tap Tempo functions allows you to set the Rhythm or Metronome tempo by repeatedly tapping the MET/RHY/TAP button at the desired rate.

Layer/Split/Dual Mode

The LAYER/SPLIT/DUAL button selects the Layer, Split, and Dual Modes. Press the LAYER/SPLIT/DUAL button repeatedly to select each Mode.

- Layer Mode allows you to layer two different Program sounds on the keyboard.
- Split Mode allows you to split the keyboard into two regions containing two different Program sounds, with adjustable split point.
- Dual Mode allows you to split the keyboard into two regions, each transposed to the same range for 4-hand use.

Layer/Split/Dual Mode settings are reset to default values when the instrument is powered on.

Using Layer Mode

Layer Mode allows you to layer two different Program sounds on the keyboard. To select Layer Mode, press the LAYER/SPLIT/DUAL button until you see Layer displayed. In Layer Mode, use the UP and DOWN navigation buttons to select each parameter.

The L1 and L2 parameters allow you to select a Program for each layer by pressing one of the Category buttons, then using the LEFT or RIGHT navigation buttons to select a program within the Category.

The L1 Volume and L2 Volume parameters allow you to adjust the volume for each layer by pressing the LEFT or RIGHT navigation buttons. The volume can be set from 0 (muted/off) through 127 (maximum).

Using Split Mode

Split Mode allows you to split the keyboard into two regions containing two different Program sounds, with adjustable Split Point. To select Split Mode, press the LAYER/SPLIT/DUAL button until you see Split displayed. In Split Mode, use the UP and DOWN navigation buttons to select each parameter.

The S1 and S2 parameters allow you to select a Program for the left and right regions of the keyboard. With S1 or S2 selected, you can select a program by pressing one of the Category buttons, then using the LEFT or RIGHT navigation buttons to select a program within the Category.

The Split Key parameter determines the transition point between the Programs of the left and right regions of the keyboard in Split Mode. Use the LEFT or RIGHT navigation buttons to select a Split Key setting. The selected Split Key will be the highest note of the left region of the keyboard. You can adjust the Split Key value from 0 to 127. The default setting is 53 (F3).

The S1 Volume and S2 Volume parameters allow you to adjust the volume for each Program by pressing the LEFT or RIGHT navigation buttons. The volume can be set from 0 (muted/off) through 127 (maximum).



Layer/Split/Dual Mode

Using Dual Mode

Dual Mode allows you to split the keyboard into two regions, each transposed to the same range for 4-hand use (ideal for duets or instructors and students). The keyboard regions in Dual Mode are split at the C4 (middle C) key. The left region is transposed up two octaves; the right is transposed down two octaves. In Dual Mode, the left pedal functions as sustain for the left region, the right pedal functions as sustain for the right region.

To select Dual Mode, press the LAYER/SPLIT/DUAL button until you see Dual displayed. In Dual Mode, use the UP and DOWN navigation buttons to select each parameter.

The D1 and D2 parameters allow you to select a Program for the left and right regions of the keyboard. With D1 or D2 selected, you can select a program by pressing one of the Category buttons, then using the LEFT or RIGHT navigation buttons to select a program within the Category.

The D1 Volume and D2 Volume parameters allow you to adjust the volume for each Program by pressing the LEFT or RIGHT navigation buttons. The volume can be set from 0 (muted/off) through 127 (maximum).

Song Mode

Press the PLAY/PAUSE and STOP buttons simultaneously to enter Song Mode.

Use the UP and DOWN navigation buttons to choose between the available parameters Song, Tempo, Rec.Rthm, and Rhythm Vol.

Selecting and Playing a Song

To select a user song to play, use the UP and DOWN navigation buttons to select the Song parameter, then use the LEFT and RIGHT navigation buttons to select a song. The CUP310 can store 10 user songs, displayed as “Song 1” through “Song 10”. If a song has not been used, the LCD screen will show “Empty” next to the song name.

Press the PLAY/PAUSE button to play or pause the selected song. If the STOP button is pressed, the selected song will stop, and the song will play from beat 1 the next time the PLAY/PAUSE button is pressed.

Recording a Song

Follow these steps to record a song:

1. Select the desired Program in Program Mode.
2. Select a song: Enter Song Mode and use the UP and DOWN navigation buttons to select the Song parameter, then use the LEFT and RIGHT navigation buttons to select a song. If there are no unused/empty songs, recording a new song will replace the currently selected user song.
3. Set Metronome and Rhythm settings: If you wish to record with a Rhythm Pattern, set the Rec.Rthm parameter User to On. Press the MET/RHY/TAP button to enter Metronome/Rhythm Mode. See the Metronome/Rhythm Mode chapter for more details on these parameters. Press the EXIT button to return to Song Mode.
4. Press the RECORD button to provide the song for recording. The LED in the RECORD button will flash.
5. Start recording and perform the song: Press the PLAY/PAUSE button to start recording the song. If the Metronome/Rhythm Mode “Metro” parameter is set to On, one bar of the Metronome will play before recording begins. The LED in the RECORD and PLAY/PAUSE buttons will be lit while recording. The CUP310 will now record your keyboard performance.
6. Stop recording: When your performance is complete, press the STOP button to stop recording. The song is saved automatically.

Song Mode

Correcting Mistakes (Punch-in Recording)

You can fix mistakes in your performance by doing “punch-in” recording. Punch-in recording allows you to re-record a section in the middle of a song. This is useful for correcting mistakes without recording the whole song again.

Follow these steps to perform a “punch-in”:

1. Select a previously recorded song and press the PLAY/PAUSE button to begin playing.
2. When the song reaches the part you need to correct, press the RECORD button and play the corrected notes.
3. After playing the corrected notes, press the STOP button to stop recording. The start and end sections of the song will remain unchanged. If you don't press the STOP button after you punch-in, you will erase the remaining portion of the song. Changes to the song are saved automatically.

Tempo, Rec.Rthm, and Rhythm Vol

The Tempo, Rec.Rthm, and Rhythm Vol parameters can be adjusted for each song. After selecting a song, use the UP and DOWN navigation buttons to select the desired Tempo, Rec.Rthm, or Rhythm Vol parameter, then use the LEFT and RIGHT navigation buttons to change the settings of the selected parameter.

- The Tempo parameter adjusts the tempo of the current song in beats per minute (BPM).
- The Rec.Rthm parameter controls whether a Rhythm Pattern plays during recording. If you record a song and want the Rhythm Pattern recorded as well, be sure to change this parameter to On.
- The “Rhythm Vol” parameter controls the volume of the Rhythm Pattern. The volume range is from 0 (minimum) to 10 (maximum). The default volume setting is 5. This setting is not saved per song, but instead applies to all songs.

Selecting Metronome and Rhythm Settings

Press the MET/RHY/TAP button to enter Metronome/Rhythm Mode, where you can select a Rhythm Pattern and Metronome settings. See the Metronome/Rhythm Mode chapter for more details on these parameters.

Press the EXIT button to return to Song Mode.

Erasing a Song

You can erase a song by recording “nothing:”

1. Press the RECORD button.
2. Press the PLAY/PAUSE button to begin.
3. Press the STOP button again.

Settings Mode

The Settings Mode includes parameters that allow you to change the overall behavior of the entire instrument. The following parameters are available in Settings Mode:

- Touch
- Tune
- Reverb Lvl (Reverb Level)
- Local Ctrl (Local Control)
- AutoPwr (Auto Power Off)
- Version (OS/Object)
- Hard Reset? (Restoring Factory Defaults)

Selecting Settings

Press the SETTINGS button to enter Settings Mode. Press the EXIT button to return to the previously selected mode.

Use the UP and DOWN navigation buttons to select each parameter. Parameters that have left and right arrow icons can be adjusted by pressing the LEFT or RIGHT navigation button to select the previous or next setting. You can jump to the default setting by simultaneously pressing the LEFT and RIGHT navigation buttons.

Parameters that only have a right arrow icon will display a sub menu when the RIGHT navigation button is pressed. Press the LEFT navigation button or the EXIT button to return to the Settings Mode main menu.

Touch

The Touch parameter can be used to adjust the keyboard touch sensitivity to your playing technique. The selected Touch setting will be remembered across power cycles. The default setting is Linear.

Tune

The Tune parameter allows you to adjust the CUP310 tuning to match other instruments or recordings. You can adjust the tuning from -100 to +100 cents. The default setting is 0.

Reverb Lvl (Reverb Level)

The Reverb Lvl parameter controls the level of the reverb effect used by all Programs. You can adjust the effect level from 0 (no effect) to 100. The default setting is 20.

Local Ctrl (Local Control)

The Local Ctrl parameter allows you to control whether the CUP310's keyboard will trigger the internal sound engine. Usually Local Ctrl should be set to On. When using the CUP310 to record to an external sequencer or computer, turn this setting to Off to avoid creating a MIDI loop which may result in stuck notes or "echoes".

Settings Mode

AutoPwr (Auto Power Off)

“Auto Power Off” is an energy-saving feature that will automatically shut off power to the unit after a period of inactivity. Five minutes before the instrument is automatically powered off, a warning will be shown which displays the time remaining before power off. Pressing any button or key will reset the timer, and the instrument will not be powered off until it has been inactive for the selected amount of time again. After the instrument is automatically powered off, simply pressing the power button will power up the unit once again. This allows you to reduce overall power consumption, and also extends the lifetime of the instrument.

The AutoPower parameter determines how long the instrument must be inactive before automatically powering off. You can adjust the AutoPower parameter to the following settings: Off, 15 min, 30 min, 1 hour, 2 hours or 4 hours. The selected AutoPower setting is remembered across power cycles. The default setting is 4 hours.

Version

The Version parameter allows you to view the currently installed operating system (OS) and object version numbers. Press the RIGHT navigation button to view the Version sub menu where the version numbers can be viewed. Press the LEFT navigation button or the EXIT button to return to the Settings Mode main menu.

Visit the Kurzweil website (www.kurzweil.com) to verify that your CUP310 has the latest versions. These are located under the Downloads tab for the CUP310.

Complete installation instructions are included with the download. A standard USB cable will be required for this operation.

Hard Reset? (Restoring Factory Defaults)

This function resets the CUP310 to the original factory default settings.

All user settings are reset and the user recorded songs are erased. This action cannot be undone.

1. Use the UP and DOWN navigation buttons to select HardReset.
2. To perform the Hard Reset function press the RIGHT navigation button once.
3. The display now reads Confirm?
4. Press the RIGHT navigation button again to confirm and to reset the CUP310. The unit will then erase its user memory, restore all factory settings and reboot.
If you want to cancel the Hard Reset and remain in Settings Mode, press the LEFT navigation button or the EXIT button to return to Settings Mode. Press any other button to exit Settings Mode.

There is an alternate method for performing a Hard Reset:

1. Hold the highest key (C8) down while switching on the power.
2. Continue to hold C8 down until you see “RESETTING” in the display, then release the key.

MIDI

About MIDI

MIDI is the acronym for Musical Instrument Digital Interface. It is the industry standard protocol which allows the exchange of musical data between electronic musical instruments, devices (such as a sequencer), and computers. MIDI enables MIDI-equipped devices designed by different manufacturers to communicate MIDI data to each other.

MIDI data is sent or received using standard MIDI cables to connect to other MIDI devices or a USB cable to connect to a computer. The CUP310 is equipped with conventional MIDI In and Out ports, and a USB port. The CUP310 has a standard class-compliant USB-MIDI implementation. It does not require the installation of any additional drivers.

MIDI Channels

MIDI protocol transmits multiple channels of MIDI performance data. Typical MIDI instruments can play up to 16 channels at the same time. Each channel can be assigned its own Program.

When using the CUP310 to play an external MIDI device, the CUP310 sends notes played on the keyboard to the MIDI and USB out ports on Channel 1 (or channels 1 and 2 when using a split/layered sound).

When using an external MIDI device to play the CUP310, the CUP310 can receive notes on channels 1-16. The program on each channel can be selected by sending a MIDI Program Change message to each of the desired CUP310 MIDI channels.

Note: The CUP310 is not compatible with Program Change values used by "General MIDI" songs. In order for the CUP310 to properly play "General MIDI" songs, Program Change values in these songs may need to be edited to correspond to the correct instrument sounds on the CUP310.

MIDI In and Out Ports

The CUP310 is equipped with the conventional MIDI In and Out ports. The MIDI In port is used to receive MIDI data from another MIDI device; the MIDI Out port is used to transmit the MIDI data generated by the CUP310 to another MIDI device; the MIDI Thru port passes MIDI In data along to an external device.



When you connect the MIDI Out of the CUP310 to the MIDI In of another instrument, you can play the sounds of both instruments simultaneously from the CUP310's keyboard. When you connect the MIDI In of the CUP310 to the MIDI Out of another controller, you can control the CUP310 using the other controller.



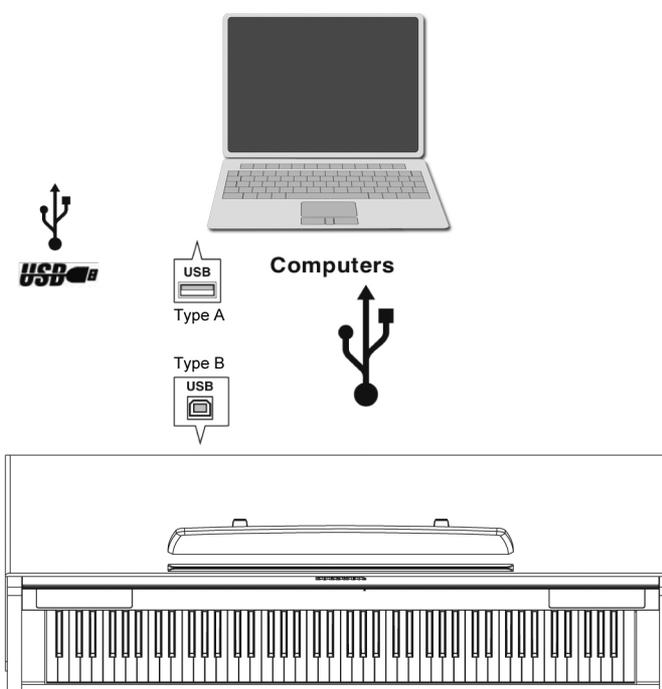
USB MIDI Connection

In addition to the conventional MIDI In and Out ports, the CUP310 also has a USB port on the panel on the back of the piano. You can connect the CUP310 directly to a computer with a USB cable. This connection transmits and receives MIDI data between the CUP310 and the computer.

The CUP310 supports the “Plug and Play” feature used in the Windows XP or higher and Macintosh operating systems. No drivers are required to use this connection; but you may need to enable MIDI on your computer’s sound and audio control panel.

To use the CUP310 as a MIDI controller with a computer, use any Type-A to Type-B USB cable.

If you have a sequencer program installed on your computer, you can use this USB connection to record and play MIDI sequences.



System Mode (Boot Loader)

The MAIN Boot Loader is entered by holding the MET/RHY/TAP button during power-on.

The ALT Boot Loader is entered if present, by holding the PLAY/PAUSE button during power-on.

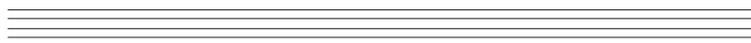
If it is not present, the Main Boot Loader will be entered.

The Boot Loader will display a list of items. Use the UP and DOWN Navigation buttons to scroll between different items in the Boot Loader.

Use the RIGHT navigation button to select the currently highlighted item or to begin the action indicated by the highlighted item. For some items, this can go to a new menu.

Use the LEFT navigation button or EXIT button as a cancel/no option or to exit the current page.

Appendix



ANDANTE CUP310 / 320 MIDI Implementation Chart

Models: Andante CUP 310 / 320

Manufacturer:
Young Chang

Date : 2016-09-14
Version 1.0

Function	Transmitted	Recognized	Remarks
Basic Channel	Default	1	Memorized
	Changed	1	
Mode	Default	Mode 3	Use Multi mode for multi-timbral applications
	Messages	Mode 3 All	
	Altered		
Note Number		0 - 127	Key Range: A0-C8
	True Voice	12 - 120	
Velocity	Note ON	O	
	Note OFF	O	
After Touch	Keys	X	
	Channels	X	
Pitch Bender		X	
Control Change	0, 32 Bank Select (MSB, LSB) 7 Volume 10 Pan 11 Expression 64 Sustain Pedal 66 Sostenuto Pedal 67 Soft Pedal	O	0 - 31 32 - 63 (LSB) 64 - 127
Program Change		O	0 - 127
	True #		0 - 127
System Exclusive		O	O* *Manufacturer's ID = 07 Device ID: default = 0
System Common	Song Pos.	X	X
	Song Sel.	X	X
	Tune	X	X
System Real Time	Clock	X	X
	Messages	X	X
Aux Messages	Local Control	X	O
	All Notes Off	X	O
	Active Sense	X	X
	Reset	X	X
Notes	Mode 1: Omni On, Poly Mode 2: Omni On, Mono Mode 3: Omni Off, Poly Mode 4: Omni Off, Mono		O = yes X = no

Appendix

Demo Song List

No	Song Name
1	5 Mazurkas
2	Valse Op.69 No.2
3	Grande Valse
4	Valse Op.64 No.2
5	Nocturne No.2
6	Valse Op.64 No.1
7	Preludes in Db
8	Fantaisie Improm
9	Traumerei
10	Frolicher Landma
11	Von fremden Land
12	Liebestraume #3
13	Dolly's Dreaming
14	Voices of Spring
15	The Swan
16	Blumenlied
17	Valsette
18	Old French Air
19	Mazurka
20	Polka
21	Barcarolle
22	Humoreska
23	Suite 'Peer Gynt
24	Ste. Bergamasque
25	Reverie
26	Arabesque I
27	Fuga II
28	Sonatine Op.36
29	Klavierstuck
30	Piano Sonate
31	Rondo in D
32	Piano Sonate K.3
33	Piano Sonate K.5
34	Minuette in G
35	Bagatelle No.25
36	Sonatine Op.55
37	March Militaire
38	Moments Musicaux
39	Impromptu No.2
40	Impromptu No.4
41	La Chevaleresque
42	Without Words
43	Venetianisches
44	Sostenuto
45	Valse KK
46	Brahms Rhapsody
47	Prelude I
48	Invention NO.4
49	Invention NO.8
50	Prelude II
51	ARIA Goldberg

Appendix



Program List

NO.	VOICE	NO.	VOICE
1	GrandPno1	45	AdagioOcts
2	GrandPno2	46	Violin
3	Bright Piano	47	Cello
4	Dark Piano	48	Clavi 1
5	Rock Piano 1	49	Clavi 2
6	Rock Piano 2	50	Wah Clavi
7	Piano&Strngs	51	Phase Clavi
8	R&B Stack	52	Harpsichrd1
9	Piano&Voice	53	Harpsichrd2
10	UprightPno	54	HpschrdLute
11	PnoBassRide	55	HornSect 1
12	Pno&Bass	56	HornSect 2
13	Dual Piano	57	Sax Section
14	EP 1	58	Bari Hits
15	EP 2	59	ClarinetFlute
16	Hybrid EP	60	BassnOboe
17	Pan EP	61	Trumpet
18	Phase EP	62	Trombone
19	Trem EP	63	Choir
20	Thick FM	64	Dark Choir
21	Bright EP	65	SynSoloVx
22	Ballad EP	66	Singers
23	EP&Bass	67	Synth Voice
24	FM Pno&Bass	68	Finger Bass
25	Organ 1	69	Slap Bass
26	Organ 2	70	Fretless Bs
27	Perc Organ	71	AC Bass
28	KB Organ	72	AC Guitar
29	CmboOrgn1	73	Nylon Guitar
30	CmboOrgn2	74	Clean E. Gtr
31	ChapelOrgn	75	Dist. E. Gtr
32	Pipe Organ	76	Xylophone
33	PipeOrgnVox	77	Marimba
34	Arco Strings	78	Vibraphone
35	AdagioStrgs	79	Celeste
36	Dark Strings	80	Chimes
37	PunchyStrgs	81	Bell Keys
38	TremStrngs	82	Accordion
39	Pizzicatos	83	Steel Drum
40	DulcetStrings	84	Room Kit
41	Stgs&Winds	85	Latin Kit
42	VoxStgsSplit	86	Electro Kit
43	Gothicmax	87	Brushes Kit
44	3WyMTron	88	Percussion

Appendix

Specifications

Keyboard	CUP310 : 88-Note fully-weighted hammer-action keyboard with 3-point velocity sensor CUP320 : 88-Note Graded hammer-action Wood keyboard with 3-point velocity sensor
Preset Programs	88 Expressive sounds, 2 Gigabyte sound ROM from the Forte SE featuring German and Japanese Grand Piano, Harpsichord, Clav, 73 Tine EP and Celeste
Layer/Split/Dual Mode	Layer or Split 2 sounds across the keyboard
Effects	Adjustable reverb effect, as well as preset effects from the Forte SE
Recorder	Single track song recording (10 song capacity with punch-in recording)
Sound System	Dual 25-watt amplifiers with 4-speaker, stereo sound system
Headphones	(2) 1/4" stereo audio outputs
I/O Jacks	Stereo 1/8" audio input MIDI In and Out connectors 2 RCA stereo input and 2 RCA stereo output jacks
USB	(1) port, "Plug and Play" functionality allows MIDI over USB for connecting to/ from an external computer sequencer; no software driver needed
Pedals	3 pedals: Soft, Sostenuto, Sustain (with half damper functionality). Optional volume/expression pedal input.
Polyphony	128 voices
Finish	White, Rosewood
Dimensions	142.24cm L x 48.26cm W x 88.9cm H (56in L x 19in W x 35in H)
Weight	47.5 kg
Power	100~240V AC 50/60Hz free voltage; external power supply 19V, 3.42A DC

NOTES

KURZWEIL

HDC YOUNG CHANG

196, Bongsu-daero, Seo-gu,
Incheon, Korea