

**KURZWEIL**

Ver 1.11

# **CUP2**

# USER'S MANUAL

English Manual

**YOUNG CHANG**

# **IMPORTANT SAFETY INSTRUCTIONS**

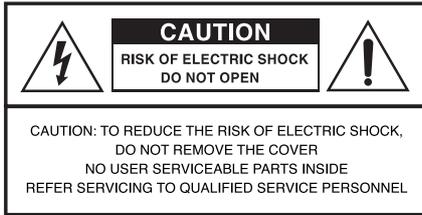
1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
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 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.
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 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.
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 objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. 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.



**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.

To reduce the danger of explosion if the lithium battery is incorrectly replaced, replace only with the same or equivalent type.



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 of 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. **WARNING :** This product is equipped with an AC input voltage selector. The voltage selector has been factory set for the mains supply voltage in the country where this unit was sold. Changing the voltage selector may require the use of a different power supply cord or attachment plug, or both. To reduce the risk of fire or electric shock, refer servicing to qualified maintenance personnel.
4. 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.
5. This product should only be used with a stand or cart that is recommended by the manufacturer.
6. 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 at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.

7. The product should be located so that its location or position does not interfere with its proper ventilation.
8. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
9. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
10. 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.
11. 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.
12. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
13. 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.
14. 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.
15. **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 this 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.

**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 présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

## SAVE THESE INSTRUCTIONS

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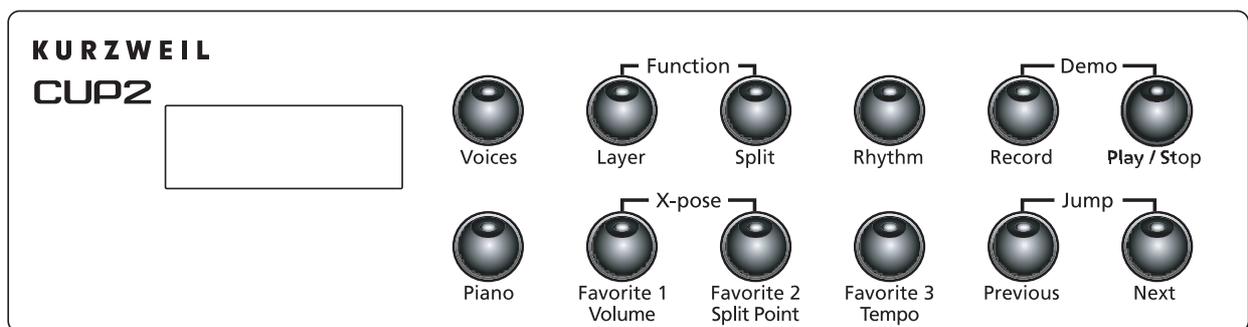
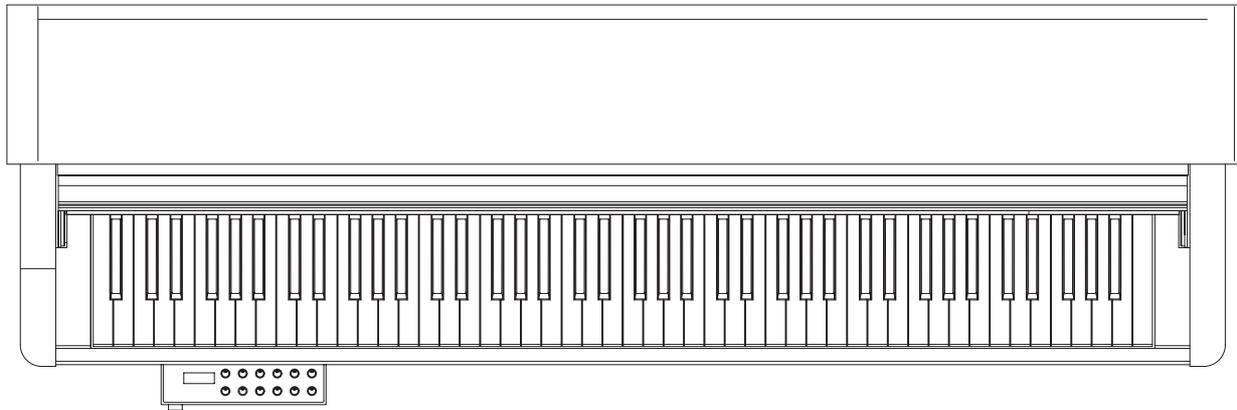
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## 1. Single Button Functions



### (1) Voices button

Selects one of the 88 instrument sounds using the keyboard.

### (2) Piano button

Always selects “1 GRAND PIANO” sound.

### (3) Layer button

Combines two voices together to create richer, more interesting sounds.

### (4) Split button

Splits the keyboard into 2 zones with a different voice in each zone.

### (5) Favorite 1, Favorite 2, Favorite 3 buttons

Provides quick access to 3 user selected or modified voices.

### (6) Rhythm button

Selects one of the 79 rhythm patterns for accompaniment.

### (7) Record button

Records user’s keyboard performance as a “song” for later playback.

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### (8) Play/Stop button

Starts and stops Record, Play, and Rhythm functions.

### (9) Next button

Selects the next higher Voice, Rhythm, or User Song.

Also increases the tempo of the metronome or a rhythm and tunes or transposes upward.

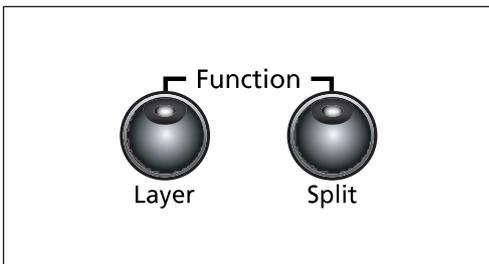
### (10) Previous button

Selects the next lower Voice, Rhythm, or User Song.

Also decreases the tempo of the metronome or a rhythm and tunes or transposes downward.

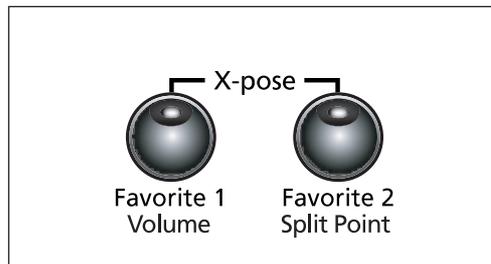
## 2. Double-Press Button Functions

(Press the two buttons indicated by the brackets together at the same time.)



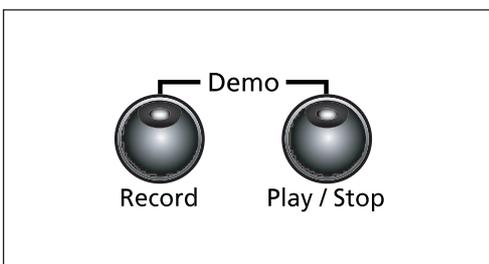
### (1) Func (Function) button pair

Press the [Layer] and [Split] buttons at the same time to access the CUP2 special functions.



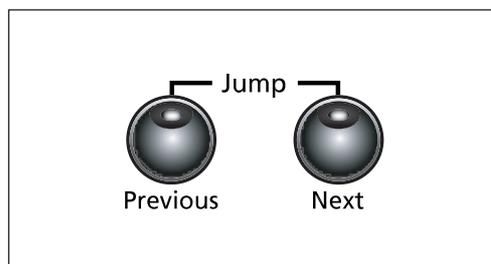
### (2) Xpose (Transpose) button pair

Press the [Favorite 1] and [Favorite 2] buttons at the same time to begin the Transpose function.



### (3) Demo button pair

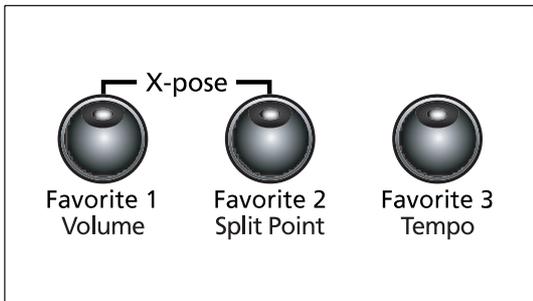
Press the [Record] and [Play/Stop] buttons at the same time to access the demo song.



### (4) Jump button pair

Press the [Next] and [Previous] buttons at the same time to skip forward or return to the default.

### 3. Buttons Used for Special Functions



**(1) Volume (Favorite 1 button)**

Adjusts the relative volume levels of the two voices when the Split or Layer function is used.

**(2) Split Key (Favorite 2 button)**

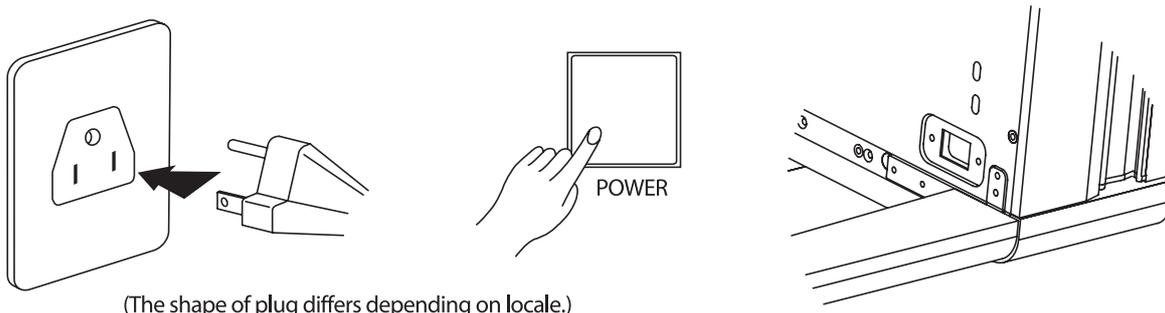
Changes the split point when the Split function is used

**(3) Tempo (Favorite 3 button)**

Adjusts the tempo of the metronome or rhythm pattern.

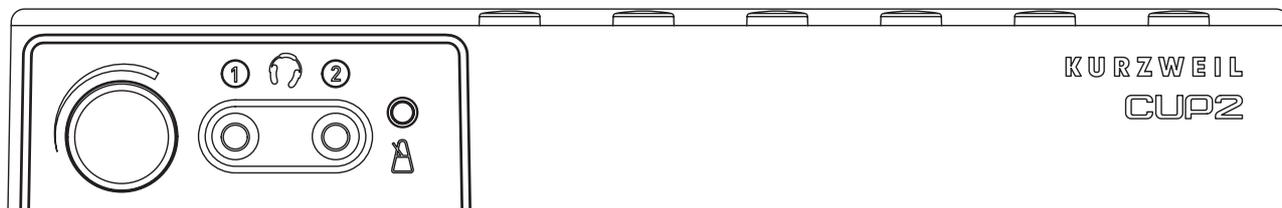
### 4. Turning on the Instrument (Power)

Before connecting the power cord, be sure that the power switch, located under the right side of the keyboard, is off. Then plug the power cord into an AC outlet. Once the power cord is connected, you can turn the power switch on.



(The shape of plug differs depending on locale.)

### 5. Setting the Volume



To be sure that you can hear the instrument, turn the Volume knob (on the front side of the control panel) to the middle of its range. This should be a reasonably comfortable level of volume which you can adjust if you wish the sound to be louder or softer.

Thank you for purchasing a Kurzweil CUP2 digital piano.

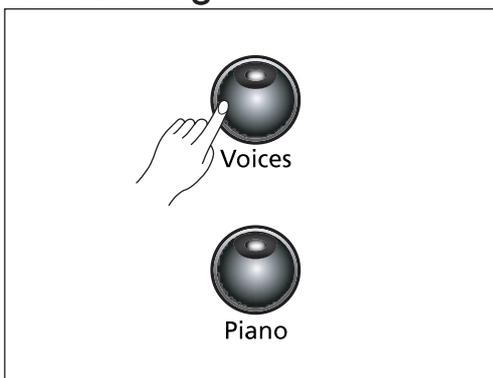
The CUP2 is designed with Kurzweil's latest sound technology that has made the professional PC3LE synthesizer famous. Players can easily hear the smallest details and appreciate the great care Kurzweil musicians and engineers took when preparing the sounds and rhythms for you to enjoy as if you are playing the real instruments.

## 1. Primary Features

- 88 Fully Weighted Hammer Action Wood Keys
- 3 Pedals (Sustain, Sostenuto, Soft)
- 10 Different levels of keyboard sensitivity
- Stereo audio Input and Output jacks
- 2 Headphone Jacks
- Standard MIDI In and Out
- USB Computer jack
- Scrolling alphanumeric LED display
- 88 Preset Voices
- 78 Preset Rhythm Patterns plus metronome
- 51 Demonstration Songs
- Layering and Splitting of two voices
- Transpose
- Shortcut button to instantly select Grand Piano voice
- Performance recorder with 9 song capacity
- MIDI File Compatibility with a PC
- Large variety of preset Reverberation, Echo, Delay, Chorus, and Distortion effects

We provided the Quick Operation Guide on pages 44~46 so you can see every button's function at a glance. Here are detailed instructions for using the buttons to perform needed tasks.

## 1. Selecting Voices



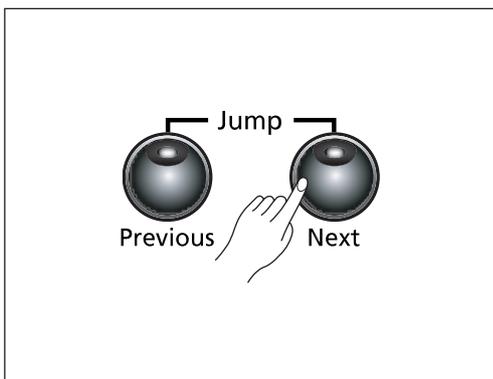
There are two ways of selecting one of the 88 main voices with the [Voice] button and the [Piano] button.

### 1) Press the [Voice] button.

Then use the [Next] or [Previous] button to select different voices in sequence.

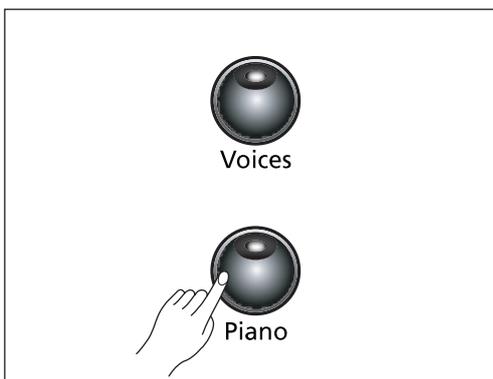
### 2) Hold down the [Voice] button,

then press and release any key between A0 and C8. Please, refer to the table on the next page which contains the list of all available voices and their assigned keys.



If you want to play the Grand Piano voice immediately, press the [Piano] button to set the current voice to "1 Grand Piano".

Regardless of the method you use, notice that the voice number and name scrolls across the display followed by the voice number again. You need not wait for the scrolling to finish before making another selection.



If you hold down the [Next] or [Previous] buttons, the voice numbers will begin to change quickly after a short delay.

Release the button to stop instantly.

If you press [Next] and [Previous] together, it will skip to the first voice in the next category of voices.

## 2. List of Voices

No.	Voice	Keyboard
1	Grand Piano	A 0
2	Bright Piano	A# 0
3	Concert Piano	B 0
4	Jazz Piano	C 1
5	Piano+Pad	C# 1
6	Piano+Vox	D 1
7	Piano+Str	D# 1
8	Blues Piano	E 1
9	Rock Piano	F 1
10	Upright Piano	F# 1
11	Stevie's EP	G 1
12	These Eyes EP	G# 1
13	Hotrod EP	A 1
14	E Piano+Pad	A# 1
15	Supertramp EP	B 1
16	Woodstock EP	C 2
17	Classic DX	C# 2
18	FM E Piano	D 2
19	Classic 70's	D# 2
20	Crisp Clav	E 2
21	Steely Clav	F 2
22	Wah Clav	F# 2
23	Fuzz Clav	G 2
24	Harpsichord	G# 2
25	Mellow Organ	A 2
26	Sweet Organ	A# 2
27	Perc Organ	B 2
28	Gregg's B	C 3
29	Blues+Gospel	C# 3
30	Gospel B	D 3
31	Farfisa	D# 3
32	Pipe Stops	E 3
33	Chapel Organ	F 3
34	All Stops	F# 3
35	AllStop Choir	G 3
36	Pop Horns	G# 3
37	Salsa Horns	A 3
38	Trumpet	A# 3
39	Tenor Sax	B 3
40	Flute	C 4
41	Horns+Str	C# 4
42	Winds+Str	D 4
43	Gothic Orch	D# 4
44	Silver Orch	E 4

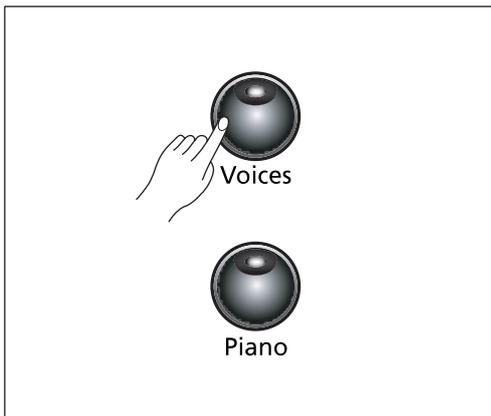
No.	Voice	Keyboard
45	Pastoral Orch	F 4
46	Victory Orch	F# 4
47	Imperial Orch	G 4
48	Vivaldi Orch	G# 4
49	Magic Orch	A 4
50	LA Strings	A# 4
51	Oct Strings	B 4
52	Pizzicato	C 5
53	Adagio Str	C# 5
54	Tremolando	D 5
55	Fast Strings	D# 5
56	Solo Violin	E 5
57	Solo Viola	F 5
58	Solo Cello	F# 5
59	Full Choir	G 5
60	Aah Vocals	G# 5
61	Jazzy Scat	A 5
62	Synth Vox	A# 5
63	E-Bass	B 5
64	Slap Bass	C 6
65	Fretless Bass	C# 6
66	Upright Bass	D 6
67	AC Guitar	D# 6
68	Nylon Guitar	E 6
69	Chorus Guitar	F 6
70	Lead Guitar	F# 6
71	QuadraPad	G 6
72	Pad+Vox	G# 6
73	Analog Bass	A 6
74	80's Synth	A# 6
75	Brass Synth	B 6
76	Xylophone	C 7
77	Marimba	C# 7
78	Vibraphone	D 7
79	Koto	D# 7
80	Mbira	E 7
81	Sitar	F 7
82	Harp/Mallets	F# 7
83	Steel Drums	G 7
84	Solid Kit	G# 7
85	Latin Kit	A 7
86	Electric Kit	A# 7
87	Brush Kit	B 7
88	Percussion	C 8

The voices with names consisting of two different instruments with "+" between them such as "5 Piano+Pad" or "41 Horns+Str" are preset layered combination of two voices.

## 1. Buttons used for layering

[Voices], [Piano], [Layer], [Volume], [X-pose], [Next], [Previous], [Jump]

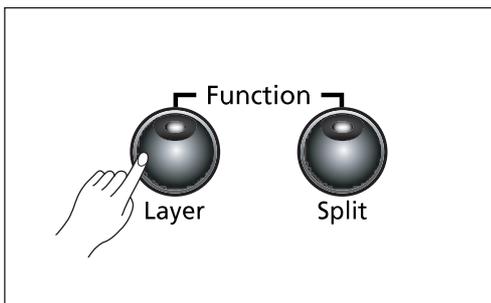
## 2. Mixing two Voices



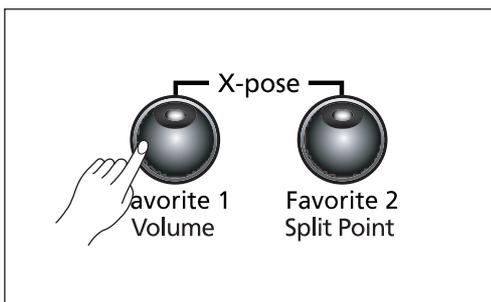
Layering is an easy way to make richer sounds by mixing an additional sound with the current one. Playing two sounds together across the entire key range will make your CUP2 sound like a larger ensemble of multiple performers.

Select the first voice in the usual way with the [Voices] button, the [Next] button or the [Previous] button.

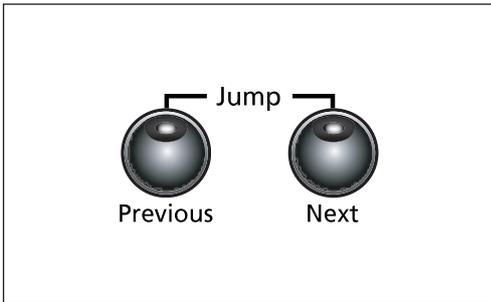
Or directly select a voice by holding down the [Voices] button and pressing a key assigned to the desired voice. Please, refer to the voice list on page 49.



Then, press the [Layer] button and use the [Next] or the [Previous] button to select a voice to be layered with the first one. Or directly select a voice by holding down the [Layer] button and pressing a key assigned to the desired layer voice. The default layer is "50 LA STRINGS". Once you select a different layer voice, it becomes the default.

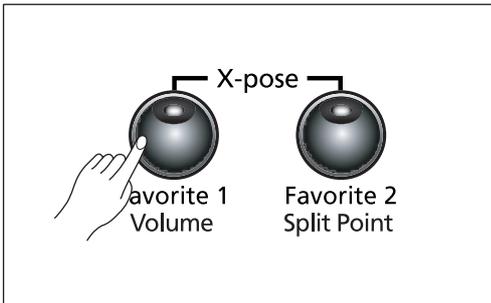


If you want, use the [Volume] button to adjust the volume balance between two voices. First press the [Volume] button and the LED will display "0" by default, which means the primary voice and the layered voice are at the same volume level.



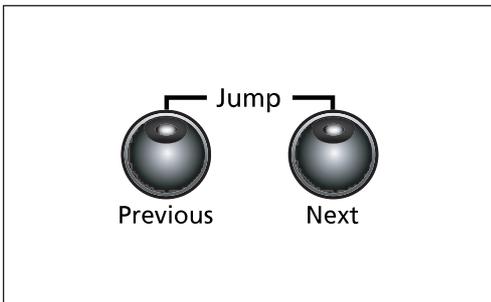
Use the [Next] button and the [Previous] button to adjust the relative volume level. Press the [Jump] button pair ([Next] and [Previous] buttons pressed together) to reset the volume balance to "0".

The range for the volume balance is between -9 and 9. Negative digits make the primary voice relatively louder, while positive digits make the layered voice relatively louder.



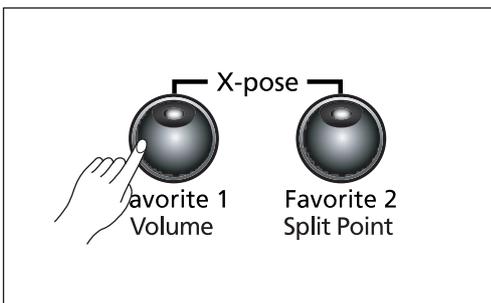
The layered voice can also be transposed. Press the [X-pose] button pair and the LED will display "0".

Then use the [Next] button and the [Previous] button to transpose the layered voice by octaves (12 semitones is an octave). The [Jump] button pair will reset the transposition. The range for transposition is from 2 octaves down to 2 octaves up (-24 to 24 semitones).



Now, you can play two voices simultaneously. Any two of the 88 voices can be layered for more timbral variety and you can enjoy much richer sounds with the layering function.

To save your layered and adjusted voices, hold down any of the [Favorite1], [Favorite2] or [Favorite3] buttons for 2 seconds. Your new voice will then be saved and can be recalled at any time by pressing the same button again. For example, if you choose [Favorite 1], then "F1" will be displayed.

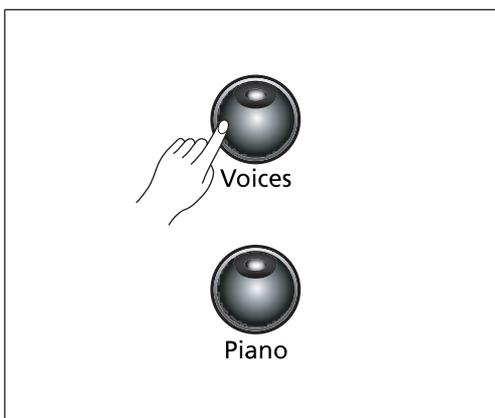


Unless you save your new voice as described above, it will disappear when you select another voice or the power is turned off. Your stored sounds can be also used as layering elements just like normal voices allowing you to build as many as 4 layers.

## 1. Buttons used for Splitting

[Voices], [Piano], [Split], [Split Key], [X-pose], [Next], [Previous], [Jump]

## 2. Splitting the keyboard into two different sections



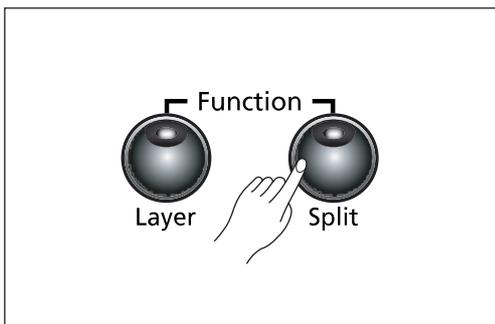
You can divide the keyboard into two parts and play a different voice on each part. You may then play two different instruments at the same time. Or, two players may share the same keyboard yet each has his or her own voice.

Select the first voice in the usual way with the [Voices] button, the [Next] button or the [Previous] button.

Or directly select a voice by holding down the [Voices] button and press a key assigned to the desired voice.

Please, refer to the voice list on page 49.

This will be the treble (higher) Voice.

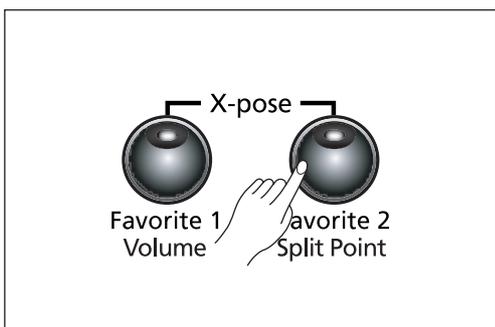


Then, press the [Split] button to create the split.

By default, the bass (lower) voice is preset to "63 E-Bass".

To change that, use the [Next] or the [Previous] button to select a different bass voice. Or directly select a voice by holding down the [Split] button and pressing a key assigned to the desired bass voice.

■ **NOTE** Once you select a bass voice, it becomes the default.



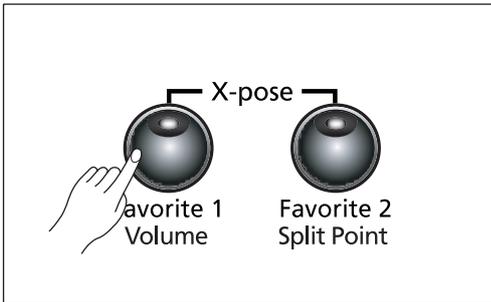
By default the split point is just above B3 (below Middle C).

To change the split point, use the [Split Key] special button.

While the keyboard is split, press the [Split Key] button and the LED will first display "B3" which is the default.

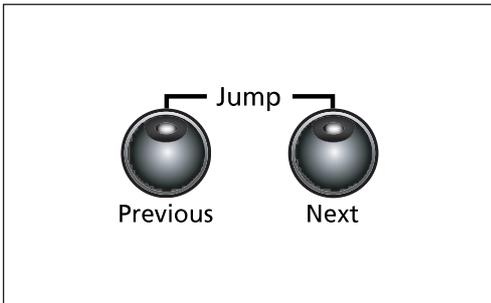
To change, press the [Next] button or [Previous] button until the display shows the desired split point.

The [Jump] button pair will reset the split point back to "B3".



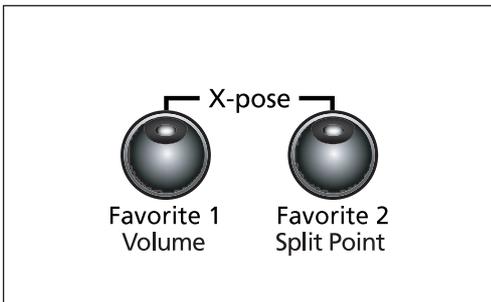
If you want, use the [Volume] button to adjust the volume balance between two voices. First press the [Volume] button and the LED will display “0” by default, which means the bass voice and the treble voice are at the same volume level.

Use the [Next] button and the [Previous] button to adjust the relative volume level. Press the [Jump] button pair to reset the volume balance to “0”.

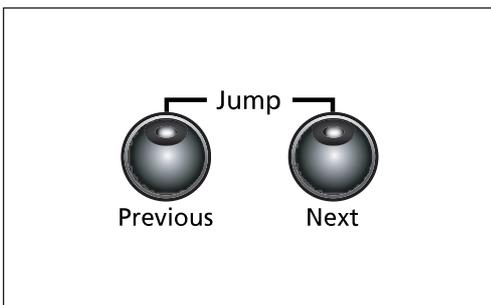


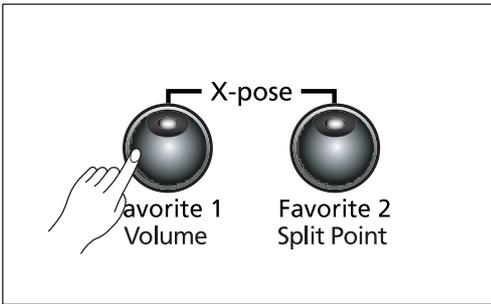
The range for the volume balance is between -9 and 9. Negative digits make the bass voice relatively louder, while positive digits make the treble voice relatively louder.

The lower voice can be transposed. Press the [X-pose] button pair and the LED will first display “0”.



Then use the [Next] button and the [Previous] button to transpose the lower voice by octaves (12 semitones is an octave). The [Jump] button pair will reset the transposition. The range for transposition is from 2 octaves down to 2 octaves up (-24 to 24 semitones).





To save your split keyboard and adjusted voices, hold down any of the [Favorite1], [Favorite2] or [Favorite3] buttons for 2 seconds. Your new keyboard/voice setup will then be saved and can be recalled at any time by pressing the same button again.

### 3. Examples

Pressing the [Piano] button then the [Split] button will select an initial split voice made of "Grand Piano" and "E-Bass". This is good for jazz for example.

**Numerous other combinations can be used for other types of music. Here are a few suggestions:**

- 4 Jazz Piano and 40 Flute,
- 3 Concert Piano and 56 Solo Violin,
- 50 LA Strings and 67 Acoustic Guitar,
- 63 E Bass and 39 Tenor Sax,

You can try any two voices from the 88 available sounds. Finding good combinations is a matter of experience and taste. Experiment and enjoy.

## Chapter 6 The Function(FUNC) Button Pair

### (1) Buttons used

[Func], [Layer], [Split], [Next], [Previous], [Jump]

In Function Mode, you can adjust 9 special parameters for detailed set up and customization of your CUP2.

### (2) The Function Mode Parameters

Transpose, Effect Level, Touch Sensitivity, Fine Tuning, MIDI Channel, Metronome, Local Control On/Off, Hard Reset.

### (3) Using [Func] mode

To go to Function Mode, press the [Func] button pair (pressing [Layer] and [Split] buttons together). The display will show "0 TRANSPOSE" which indicates the first Transpose setting. The number displayed is the current setting of the parameter. To change the parameter setting, use the [Next] and [Previous] buttons. Press the [Layer] or the [Split] button to move to the next or the previous parameter. When you want to quit Function Mode, press the [Voices] or [Piano] button.

### (4) Transpose

You can use the Transpose parameter to transpose the entire keyboard in semitone intervals. The range is between -24 to 24. The [Jump] button pair will reset the transposition to 0.

### (5) Effect Level

You can adjust the intensity of the reverberation or other effect used by each voice. Normal is 20% but that can be adjusted by using the [Next] and [Previous] buttons. The range is from 0% (no effect) to 100% (maximum effect). The [Jump] button pair will restore the Normal setting of 20%.

■ **NOTE** That drum effect levels are pre-set for best sound and cannot be changed.

### (6) Touch Sensitivity

You can adjust how the keyboard responds to your playing. The default is Linear which offers the greatest dynamic range.

The choices are:

<b>Linear</b>	Greatest dynamic range, best compromise for all instruments
<b>Light 1, Light 2, Light 3</b>	Progressively lighter touch needed for loud dynamics
<b>Hard 1, Hard 2, Hard 3</b>	Progressively heavier touch needed for loud dynamics
<b>Piano Touch</b>	Best for Piano dynamics
<b>Easy</b>	Light, easy touch for younger players
<b>GM Receive</b>	Use this when playing General MIDI songs (see MIDI, page 29)

You can choose a value from the list above according to your preference and finger strength.

### (7) Fine Tuning

You can finely tune the pitch of the CUP2 up or down by 1 cent (1/100 semitone) steps. This function is useful when you play or record with another instrument that is slightly out of tune or can't be easily retuned. The default setting is "0" (A4 = 440Hz). The range is -100 (1 semitone flat) to 100 (1 semitone sharp).

### (8) MIDI Channel

You can select a MIDI Channel from 1~9 or 11~15 for the CUP2's MIDI output and recorder. Channel 10 is used for playing rhythm patterns and channel 16 is for the metronome.

### (9) Metronome

There are three settings for the internal metronome. The "On" value plays when you are performing or recording. The "Rec" Value plays only when you are recording. The "Off" value turns off the metronome.

### (10) Local Control

You can set Local Control on or off here. Local Control is the connection between keyboard of the CUP2 and the internal sound producing circuitry ("engine"). When Local Control is set to On, the keyboard delivers your performance information to the sound engine, so you can hear the sounds you play. At the same time, the CUP2 transmits MIDI information via its MIDI Out port.

There are, however, cases you need to set Local Control to Off. When using the CUP2 with an external MIDI sequencer or computer via MIDI (either by USB cable or two MIDI cables, the CUP2 may play the same note twice-once by the direct sound engine connection and once by the "echo" through the sequencer and coming back. You can eliminate the echoing of notes by setting Local Control to Off which interrupts the direct connection. The default setting is "On".

### (11) Hard Reset

This function will initialize the keyboard and erase its memory. The LED will display "Hard Reset?". Press the [Next] button, and the LED will display "Confirm?". Press the [Next] button again to confirm and execute the hard reset. The CUP2 will then erase its memory, restore the factory settings, and reboot. To escape Hard Reset, select a different function by pressing the [Layer] or [Split] button.

## 1. Buttons used

[Xpose] ([Favorite1]+[Favorite2]), [Next], [Previous], [Jump]

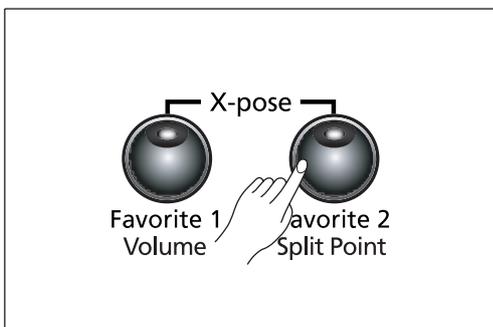
## 2. What is transpose?

Transpose allows you to play the keyboard in one key and have the notes sound in another key.

This is useful when accompanying singing if the key of the written music is too high or too low for the singer, or when playing music for a transposing instrument, such as a Clarinet.

The Transpose function makes it possible to shift the pitch of the entire keyboard up or down in semitone intervals.

## 3. How to transpose?



Press the [Xpose] button pair (press the [Favorite1] and [Favorite2] buttons together) and then use the [Next] and [Previous] buttons to increase or decrease the amount of transposition.

[Next] will transpose upward and [Previous] will transpose downward.

The [Jump] button pair will reset transposition to “0”.

The range for transposition is from -24 to 24.  
(two octaves down or up).

## 4. Example of Transpose Function Usage

Let's suppose that you are playing with a Bb Clarinet player from the same lead sheet.

The result will be unsatisfactory because you are playing the same tune in different keys.

This problem may be corrected by using the transposition function.

First press the [Xpose] button pair.

Bb is two semitones below C so press the [Previous] button twice to make the transposition parameter “-2”.

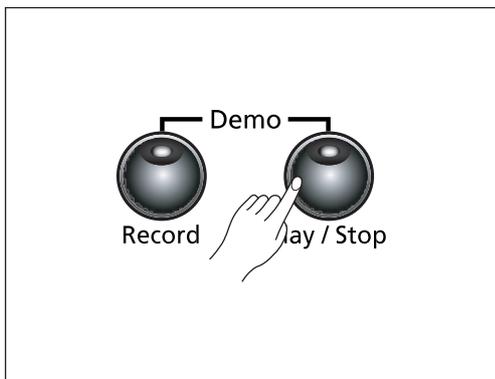
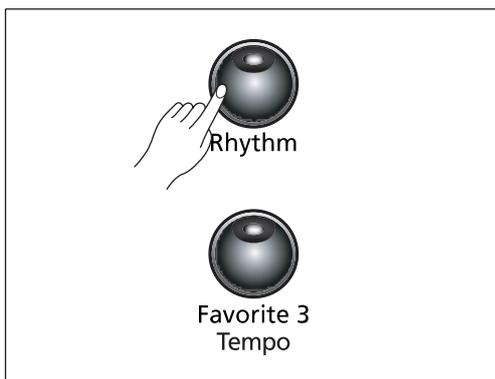
Now, the CUP2 is transposed to Bb and will play in tune with the Bb Clarinet.

## 1. Buttons used

[Rhythm], [Tempo], [Play/Stop], [Next], [Previous], [Favorite 1/2/3]

## 2. Explanation of the Rhythm Function

The CUP2 has 78 pre-recorded rhythms patterns in a variety of styles to aid your performance.



To select a rhythm, press the [Rhythm] button. The LED will display the currently selected preset rhythm pattern number. Choose different preset patterns with the [Next] and the [Previous] buttons. Alternatively, press and hold [Rhythm] and press a key to directly select a rhythm.

Pressing the [Play/Stop] button will start the rhythm pattern playback. Pressing the same button again will stop the playback.

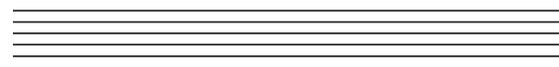
Change the rhythm tempo by pressing the [Tempo] button. [Next] and [Previous] buttons will speed up or slow down the tempo. The [Jump] button pair will restore the default tempo (120 beats/minute).

The CUP2 will remember the last selected rhythm pattern, so it can be used in the Voices Mode too. If you want to store it, use one of the [Favorite 1/2/3] buttons.

Use the [Volume] button then the [Previous] and [Next] buttons to adjust the volume level of the rhythm. The range is from 1 to 9 and the default is 9 (maximum).

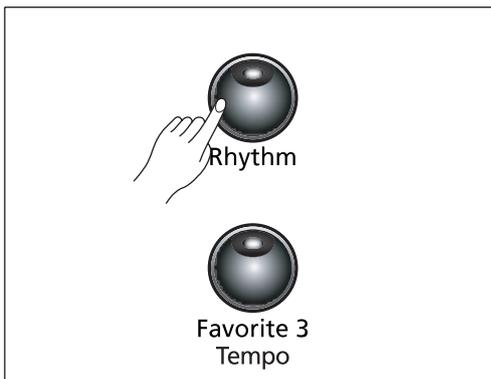
Rhythms 74-78 (keyboard keys A#6-D7) are simple metronome patterns usable with any musical style. Rhythm 74 is just a simple quarter-note tick while

75-78 are accented for common time signatures.



### 3. Example of Rhythm Function Usage

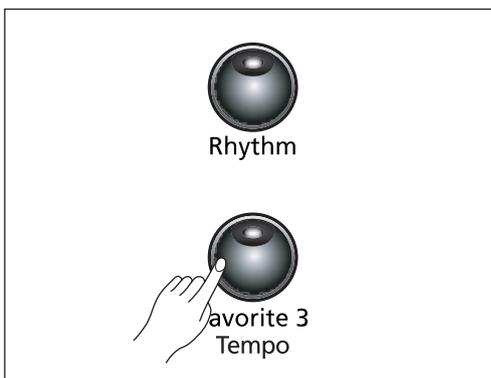
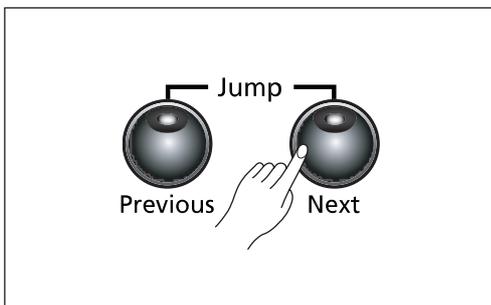
Playing along with a rhythm is more natural and effective than playing with a simple metronome.  
Change the tempo to match the style and speed of the music being played.  
Adjust the rhythm volume to your preference.



To start a rhythm, press the [Rhythm] button then the [Play/Stop] button.

Choose different preset patterns with the [Next] and [Previous] buttons.

Press the [Tempo] button then change the tempo with the [Next] and [Previous] buttons. The default setting is "120" which is moderately fast. The range for tempo is from 20 to 300. The [Jump] button pair resets 120.



# Chapter 9 List of Rhythm Patterns

No.	Pattern	Keyboard
1	Ballad1	A 0
2	Ballad2	A# 0
3	Ballad3	B 0
4	Ballad4	C 1
5	Ballad5	C# 1
6	Ballad6	D 1
7	Ballad7	D# 1
8	Ballad8	E 1
9	Country1	F 1
10	Country2	F# 1
11	Country3	G 1
12	Country4	G# 1
13	Country6	A 1
14	Country5	A# 1
15	Country7	B 1
16	Country8	C 2
17	Jazz1	C# 2
18	Jazz2	D 2
19	Jazz3	D# 2
20	Jazz4	E 2
21	Jazz5	F 2
22	Jazz6	F# 2
23	Jazz7	G 2
24	Jazz8	G# 2
25	Latin1	A 2
26	Latin2	A# 2
27	Latin3	B 2
28	Latin4	C 3
29	Latin5	C# 3
30	Latin6	D 3
31	Pop1	D# 3
32	Pop2	E 3
33	Pop3	F 3
34	Pop4	F# 3
35	Pop5	G 3
36	Pop6	G# 3
37	Pop7	A 3
38	Pop8	A# 3
39	R&B/Dance1	B 3
40	R&B/Dance2	C 4
41	R&B/Dance3	C# 4
42	R&B/Dance4	D 4
43	R&B/Dance5	D# 4
44	R&B/Dance6	E 4

No.	Pattern	Keyboard
45	R&B/Dance7	F 4
46	Rock1	F# 4
47	Rock2	G 4
48	Rock3	G# 4
49	Rock4	A 4
50	Rock5	A# 4
51	Rock6	B 4
52	Rock7	C 5
53	Rock8	C# 5
54	World1	D 5
55	World2	D# 5
56	World3	E 5
57	World4	F 5
58	World5	F# 5
59	World6	G 5
60	Polka	G# 5
61	Cha Cha	A 5
62	Salsa	A# 5
63	Rumba	B 5
64	Samba	C 6
65	Bossa Nova	C# 6
66	Son Clave	D 6
67	Calypso	D# 6
68	SongoCalypso	E 6
69	Mambo	F 6
70	Urban1	F# 6
71	Urban2	G 6
72	Club1	G# 6
73	Club2	A 6
74	Metro MP 1/4nt	A# 6
75	Metro MP 1/8nt	B 6
76	Metro MP 1/16nt	C 7
77	Metro MP 3/4	C# 7
78	Metro MP 6/8	D 7

## 1. Buttons used

[Record], [Voice], [Piano], [Favorite1], [Favorite2], [Xpose], [Rhythm], [Play/Stop], [Next], [Previous]

## 2. Recording

The CUP2 can record and playback your performance much like a tape recorder.

This function can greatly enhance your composition and performance results.

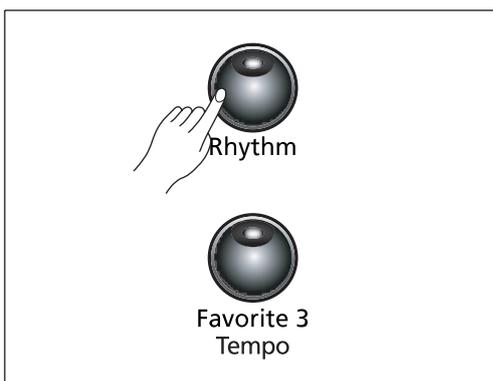
For example, you can use the recording function to play multiple parts with different sounds.

When you need to play an arrangement for two pianos by yourself alone,

you may record the first part then play the second part along with the recorded first part to get the job done.

## 3. How to Record

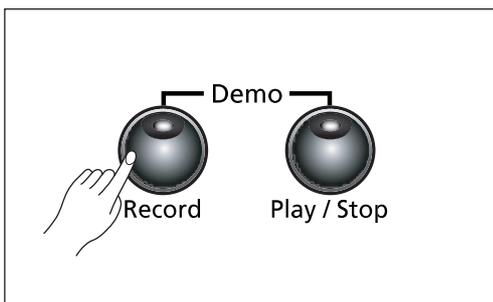
**Follow these easy steps to record your performance:**



1. Refer to The Rhythm Button (page 57).  
Press [Rhythm] then select a rhythm using the [Next] and [Previous] buttons or the [rhythm] + key method.

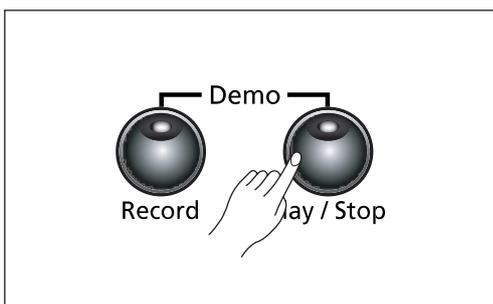
2. Press the [Record] button.  
The display will scroll "BEGIN RECORDING".

3. Then press the [Play/Stop] button.  
The selected rhythm will begin playing and the recording will begin immediately. Or, if the metronome is enabled (see [Function] mode), a lead in count of one Measure will be heard before recording begins.



4. Play your performance then press [Play/Stop] again to stop recording.

5. Now the display will scroll "PRESS RECORD TO SAVE AS U1".  
You can use the [Next] or [Previous] buttons to select the User Recording (from U1 to U8) to store the recorded song into. Then, press either [record] to store the song, [Play/stop] to listen to the recorded song, or any other button to cancel the recording.



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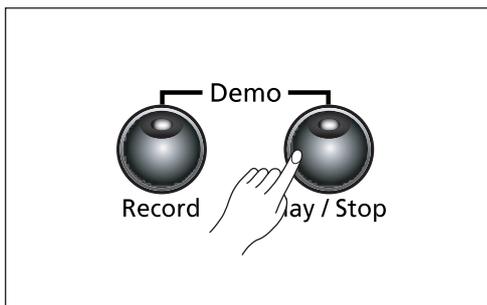
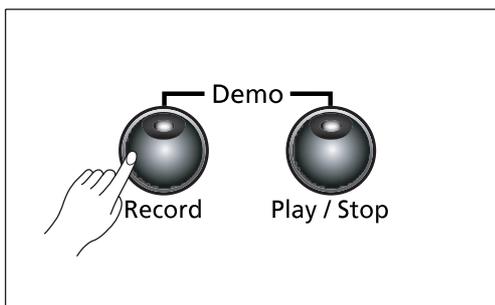
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## 4. Notes About Recording

You can easily replace all or part of a saved User Song.  
First, select the User Song [U1 to U8] that you'd like to modify.

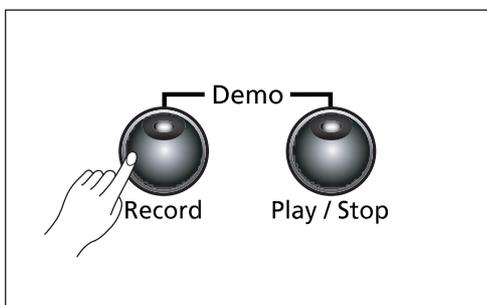
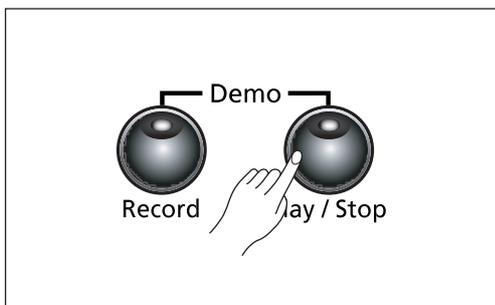
### a) To Record over your song from the beginning:

Press [Record] and then [Play/Stop] and start playing.  
Your new performance will replace the existing one from the beginning until you press [Play/Stop].



### b) To Replace only part of your song:

Press [Play/Stop] and listen to your Song.  
When you come to the part you want to replace, Press [Record] and play your new part.  
The CUP2 will continue to erase all the notes that were present in the song until you press [Play/Stop] again to exit recording.



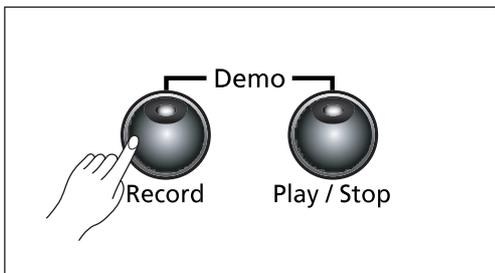
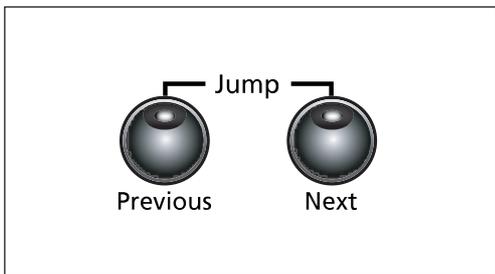
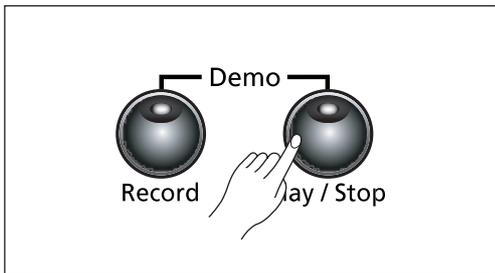
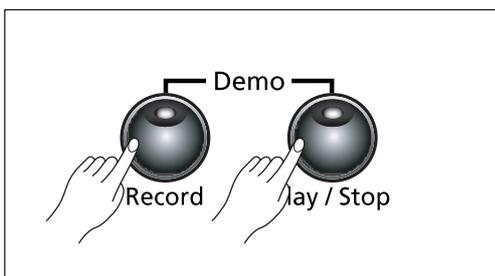
You may record a song with many different parts and sounds by selecting different Voices and Midi Channels before entering Rhythm Mode. (Voices, page 48) (Midi Channels, page 55)

## 1. Buttons used for playing Demonstration Songs

[Demo ([Record] + [Play/Stop]), [Previous], [Next], [Play/Stop], [Record]]

## 2. Demo Mode

The CUP2 has 51 pre-recorded grand piano songs in a variety of classic styles to illustrate the quality of its Grand Piano voice. Demo Mode allows you to easily select any demo song and control it's playing.



## 3. Starting Demo Mode

Press the [Demo] button pair (press the [Record] and [Play/Stop] buttons together) to start Demo Mode. The Demo LEDs will begin to flash and the first demo song(1 Brahms-Rhapsody) will begin to play immediately. The number and name of the song will be displayed while it plays. When it finishes, the next demo song begins to play. When all 51 songs have played, playing continues from the first one again.

To stop playing demo songs and exit Demo Mode, press [Piano].

## 4. Controlling Demo Mode

To stop the current demo song, press [Play/Stop].  
To restart playing from the beginning, press [Play/Stop] again.

To select the next demo song, press [Next].  
Its number and name will be displayed. If necessary, press [Play/Stop] to begin playing it.

You can skip forward 10 songs at a time by pressing the [Jump] button pair (press the [Previous] and [Next] buttons together).

To select the previous demo song, first press [Play/Stop] if necessary to stop the current song. Press [Previous] to select the previous song then press [Play/stop] again to begin playing it.

If the current song has been playing for a short time(less than 2 seconds), you can go directly to the previous song just by pressing [Previous]. After playing 2 seconds, the current song will be restarted instead.

You may go directly to any song by pressing [Record] then any keyboard key below C5.  
Please refer to the table on the next page.  
To cancel without selecting, press [Record] again.

## 5. Demo Songs List

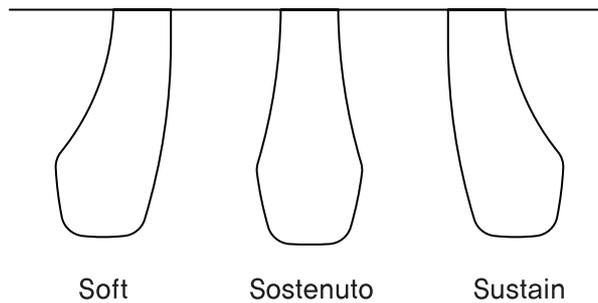
No.1	Song Name	Keyboard
1	Brahms-Rhapsody	A0
2	Prelude I	A#0
3	Invention NO.4	B0
4	Invention NO.8	C1
5	Prelude II	C#1
6	ARIA Goldberg	D1
7	Fuga II	D#1
8	Sonatine Op.36	E1
9	Klavierstück	F1
10	Piano Sonate	F#1
11	Rondo in D	G1
12	Piano Sonate K.3	G#1
13	Piano Sonate K.5	A1
14	Minuette in G	A#1
15	Bagatelle No.25	B1
16	Sonatine Op.55	C2
17	March Militaire	C#2
18	Moments Musicaux	D2
19	Impromptu No.2	D#2
20	Impromptu No.4	E2
21	La Chevaleresque	F2
22	Without Words	F#2
23	Venetianisches	G2
24	Sostenuto	G#2
25	Valse KK	A2
26	5 Mazurkas	A#2

No.1	Song Name	Keyboard
27	Valse Op.69 No.2	B2
28	Grande Valse	C3
29	Valse Op.64 No.2	C#3
30	Nocturne No.2	D3
31	Valse Op.64 No.1	D#3
32	Preludes in Db	E3
33	Fantaisie-Improm	F3
34	Traumerei	F#3
35	Frolicher Landma	G3
36	Von fremden Land	G#3
37	Liebestraume#3	A3
38	Dolly's Dreaming	A#3
39	Fruhlingstimmen	B3
40	The Swan	C4
41	Blumenlied	C#4
42	Valsette	D4
43	Old French Air	D#4
44	Mazurka	E4
45	Polka	F4
46	Barcarolle	F#4
47	Humoreska	G4
48	Suite 'Peer Gynt	G#4
49	SuiteBergamasque	A4
50	Reverie	A#4
51	Arabesque I	B4

## 1. CUP2 Pedals

The 3 pedals of the CUP2 provide the same functions as an acoustic grand piano. These are, from right to left: Sustain, Sostenuto, and Soft (Una Corda) pedals

## 2. Pedal Details



### (1) Sustain Pedal

The sustain pedal (rightmost pedal) functions in the same way as the damper pedal of an acoustic piano. When the sustain pedal is depressed, notes continue to sound after their keys have been released. Releasing the pedal will silence the sustained notes. As many notes as you want may be sustained.

### (2) Soft Pedal

The soft pedal reduces the volume of played notes while the pedal is depressed. The soft pedal will not affect notes that are already playing.

### (3) Sostenuto Pedal

The sostenuto pedal sustains only those notes which are playing at the same time that the pedal is depressed. This is useful for holding a chord in the bass while using both hands to play a phrase in the treble.

## 1. MIDI

MIDI is acronym for Musical Instrument Digital Interface, which is an industry-standard protocol for electronic musical instruments to communicate with each other.

Your CUP2 is compatible with other instruments via MIDI. For more information about the CUP2's MIDI feature, refer to the MIDI implementation chart.

## 2. USB MIDI Connection

USB is the abbreviation for Universal Serial Bus, which is a serial bus standard for computer interface devices. The CUP2 supports the "Plug and Play" feature of Windows and Macintosh operating systems.

The CUP2 has a single USB port on its rear panel.

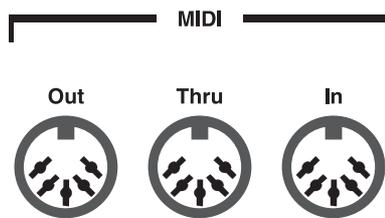
The CUP2 can transmit and receive MIDI data using a single USB cable to do the same functions as MIDI In and MIDI Out ports. So the CUP2 can be easily connected to a computer with a single USB cable.

No USB driver installation is needed on the computer.

You may need to enable MIDI with your computer's "Sound and Audio devices MIDI music playback" control panel however.

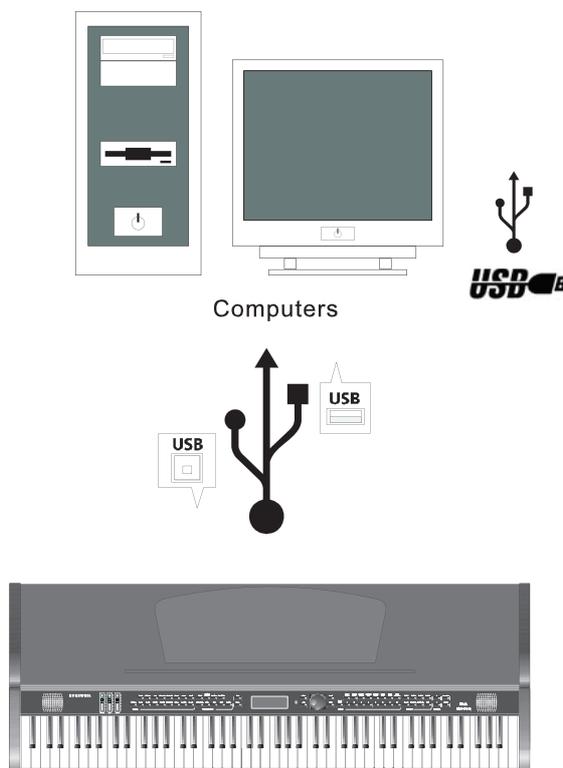
## 3. Conventional MIDI Connection

- The MIDI In port is for receiving MIDI data from another digital instrument equipped with a MIDI Out port.
- The MIDI Out port is for transmitting MIDI data that the CUP2 generates to another digital instrument equipped with a MIDI In port.
- The MIDI Thru port retransmits MIDI data received from the MIDI In port. This can allow another digital instrument equipped with a MIDI Out port to control the CUP2 and additional instruments at the same time.



You can also use the CUP2' s MIDI feature to record and play your music with computer based sequencer programs. When you record your performance into the memory of the CUP2, you are actually recording MIDI data, which does not contain audio signal but the digitized "performance data". You can also do that with any computer based sequencer program which offers the advantages of unlimited memory, editing, and posting on the Internet.

You can connect the CUP2 to a personal computer as illustrated in the picture below. Either a USB cable or a MIDI interface with conventional MIDI cables may be used.



## 4. MIDI Channel

The MIDI protocol can transmit multiple channels of performance data which is similar to the TV channels. Each channel can be assigned its own voice.

In other words, you can play back musical pieces performed by multiple instruments.

Typical MIDI instruments can play up to 16 channels at the same time which is equivalent to 16 soloists.

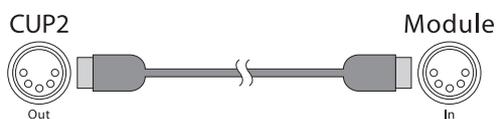
\* If you want to use the CUP2 with a computer, a sequencer program must have been installed on your computer.

## Chapter 14 Connecting MIDI

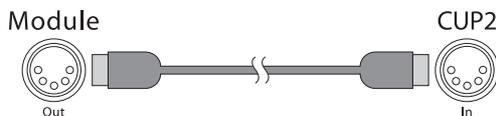
In addition to being a performance-suited musical instrument, the CUP2 is a powerful, but intuitive and easy-to-use MIDI controller. For descriptions of how to customize your CUP2 as a MIDI controller, and how to use its MIDI controller capabilities to their fullest potential, see Chapter 6.

### 1. Basic MIDI Hookup

To use the CUP2 as a MIDI controller for another sound module, use a MIDI cable to connect the MIDI port marked "OUT" to the MIDI input port of the module that you want to control.



To control the CUP2 using another MIDI controller, use a MIDI cable to connect the MIDI port marked "IN" to the MIDI output port of the controller that you will be using.



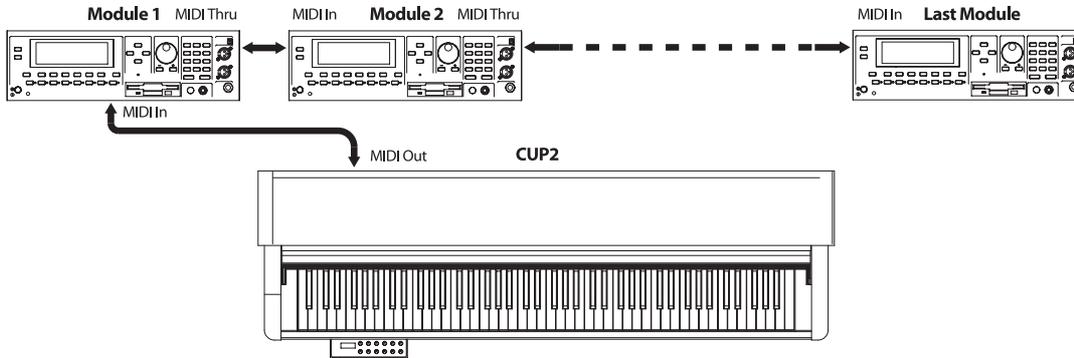
### 2. Connecting More Sound Modules

When using another instrument to control several instruments in a chain, your CUP2 may be in the middle or at the end of the chain.

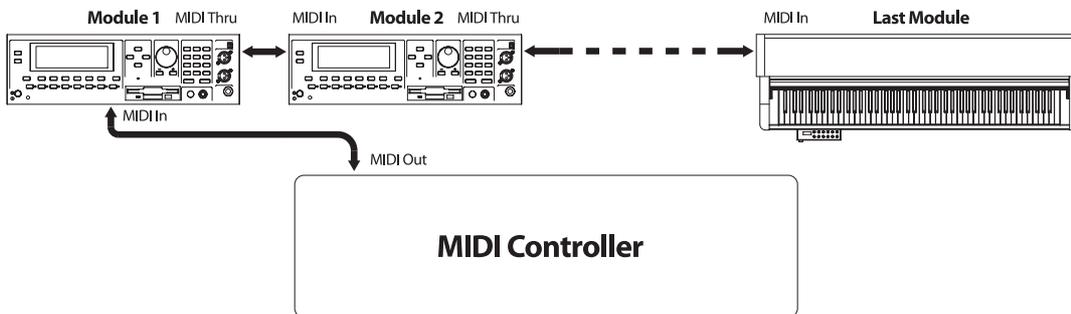
If it is in the middle, use the CUP2's MIDI Thru port to resend the MIDI In signal along to the next instrument in the chain.

Using the CUP2 as the controller, connect the MIDI OUT port to the MIDI IN port of the first module, and then connect that module's MIDI THRU port to the input of the next module, and so on, until the last module is connected. The MIDI chain should end in the MIDI IN port of the last module.

■ Scenario 1 : CUP2 as the MIDI controller

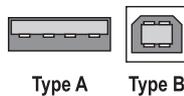


■ Scenario 2 : CUP2 as the last module in the MIDI chain

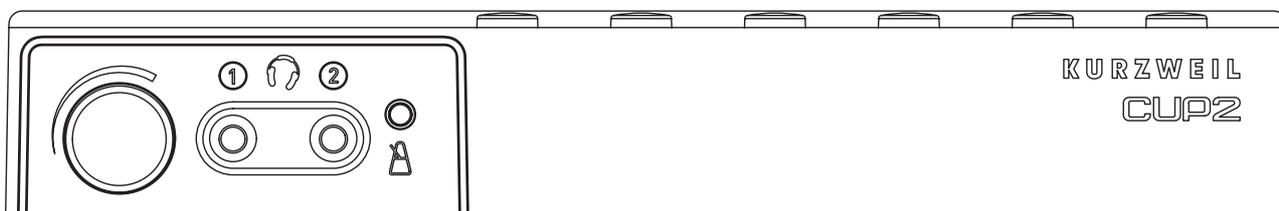


### 3. Connecting to a Computer Sequencer

To connect your CUP2 to a computer as a MIDI controller, simply connect the CUP2 to your computer using the provided cable. If you wish to use your own cable, make sure that it is a Type-A-to Type-B USB cable (because the CUP2's USB port is type B). By default, the CUP2 will act as a MIDI controller (rather than a hard drive) when connected to a computer.



## 1. Headphones



A headphone jack allows private practice. Plugging in a pair headphones turns off the speakers. The volume and effects setting made on the keyboard are applied directly to headphones. The CUP2 has two headphone jacks with equal function, so two people can play and hear the music together.

## 2. Audio In Jacks

The Audio in Jacks allow you to connect an MP3 player, a CD player or an external tone module to the CUP2's internal speakers with RCA cables. The volume level of the external sound source must be adjusted by the source's own volume control because the Volume knob located on the control panel of the CUP2 will not affect it.

## 3. Audio Out Jacks

The Audio out jack is used to boost the sound level coming from the CUP2 by connecting it to external amplifier and speaker systems. It can also be connected to a mixer or an audio recorder to preserve your performance. Use RCA cables. The CUP2's Volume knob also affects the volume of the Audio Out jacks.



## 4. CC Pedal Jack

A Kurzweil CC-1 Continuous Control Pedal may be plugged into this jack to control the volume with your foot. This is especially useful for playing organ sounds with realistic expression.

*MIDI Implementation Chart*

*Model: CUP2*

Function	Transmitted	Recognized	Remarks
Basic Channel	Default	1	Memorized
	Changed	1 - 16	
Mode	Default	Mode 3	Use Multi mode for multi-timbral applications
	Messages		
	Altered		
Note Number		0 - 127	
	True Voice	0 - 127	0 - 127
Velocity	Note ON	O	O
	Note OFF	O	O
After Touch	Keys	X	X
	Channels	X	O
Pitch Bender		X	O
Control Change	O      0 - 31 32 - 63 (LSB) 64 - 127	O      0 - 31 32 - 63 (LSB) 64 - 127	
Program Change		O      1 - 88	O      1 - 88
	True #	0 - 127	0 - 127
System Exclusive		O	O*
System Common	Song Pos.	O	O
	Song Sel.	O	O
	Tune	X	X
System Real Time	Clock	O	O
	Messages	O	O
Aux Messages	Local Control	O	O
	All Notes Off	O	O
	Active Sense	X	X
	Reset	X	X
Notes	*Manufacturer's ID = 07 Device ID: default = 0;		

## *CUP2 Features*

<b>Keyboard</b>	88 Note fully weighted Hammer Action Wood Keys with adjustable touch sensitive keys
<b>Polyphony</b>	64 voices
<b>Preset Programs</b>	88 Expressive sounds including award winning Triple Strike Grand Piano, all taken from the PC3. (See page 49 for a list.)
<b>Splits/Layers</b>	Quick Split/Layer, easy access with adjustable relative volume
<b>Effects</b>	Dual ambience and effect processors (reverberation and chorus). Rich and complex effects from the PC3 Series.
<b>Drum Patterns</b>	78 pre-recorded interactive patterns in a variety of styles
<b>Recorder/Sequencer</b>	8 Song, 1 Track Song Recorder with accompanying rhythm track
<b>Sound System</b>	140-watt 2-way 4-speaker stereo sound system
<b>Headphones</b>	(2) 1/8" stereo headphone outs
<b>MIDI I/O</b>	MIDI In, Out, Thru connectors
<b>USB</b>	(1) port; "Plug and Play" USB functionality allows MIDI over USB for connecting to/from an external computer sequencer; no software driver needed
<b>Pedals</b>	(3) built-in switch-type: sustain, sostenuto, soft
<b>Finishes</b>	Ebony Polish
<b>Bench</b>	Matching bench included
<b>Dimensions</b>	1426mm(L) X 422mm(W) X 1056mm(H) 56.1"(L) X 16.6"(W) X 41.6"(H)
<b>Weight</b>	213.8 lb / 97 Kg
<b>Power</b>	120V or 240V AC, 50-60Hz (Internal changeover, not user settable)

[www.ycpiano.co.kr](http://www.ycpiano.co.kr)

[www.kurzweil.com](http://www.kurzweil.com)

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# KURZWEIL

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