

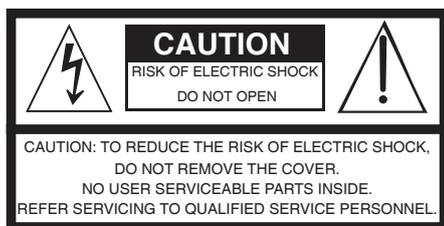
KURZWEIL®

M110

USER'S MANUAL

English Manual

HDC YOUNG CHANG
MUSIC



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 $\text{\textcircled{D}}$ 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:

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.kurzweil.com



support@kurzweil.com



www.facebook.com/kurzweilmusicsystems/



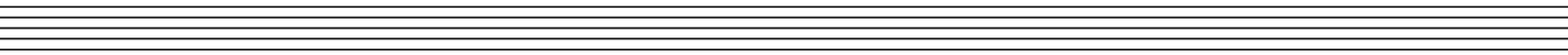
www.twitter.com/KurzweilMusic



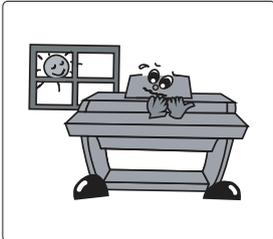
www.youtube.com/user/KurzweilTutorials

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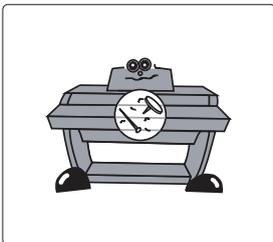
Installation Site and Precautions



- Avoid direct sunlight.
- Avoid excessive dusty or dirty location.
- Do not place near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



- Do not place objects, such as vases, glasses, and coffee cups, on the product.



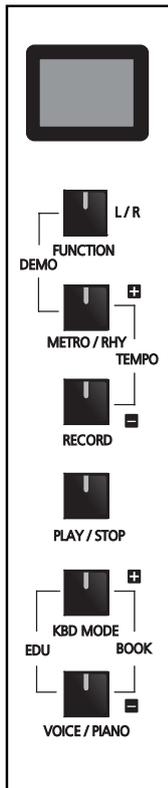
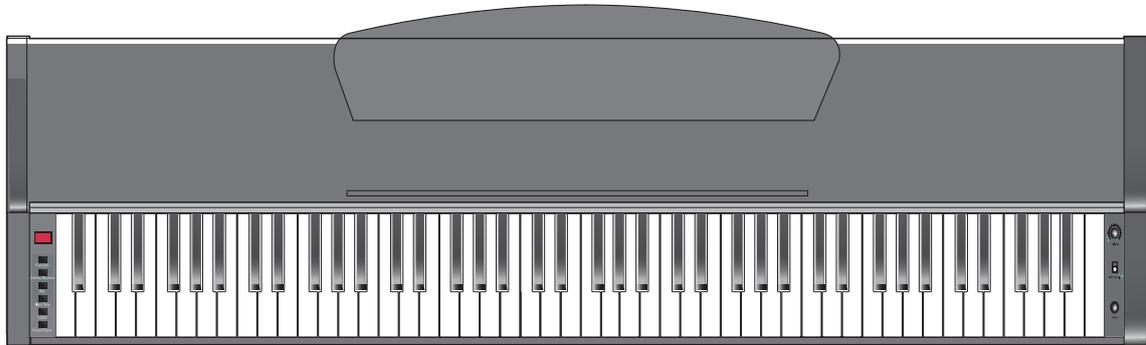
- Do not let paper, metallic, or other objects into the instrument.



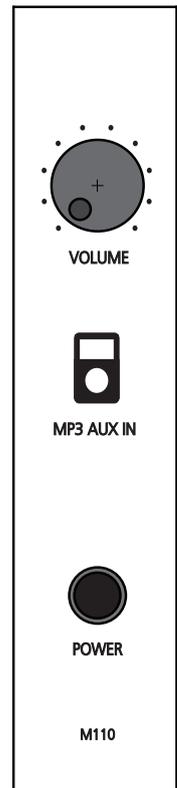
- Do not open inside personally.
- When repair is needed, please contact the Kurzweil A/S center.



- Clean only with a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.



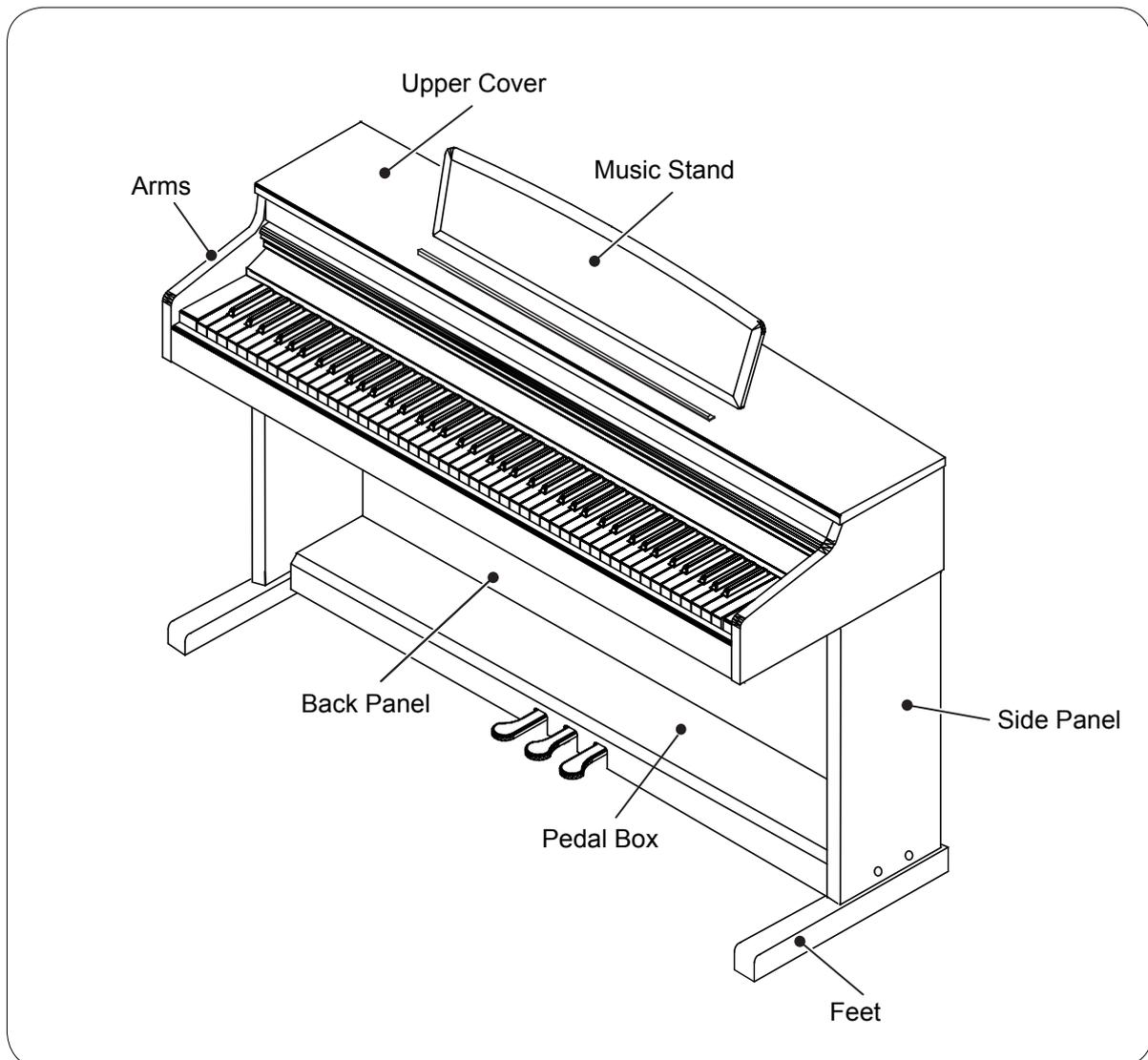
- ❶ LED Display
- ❷ Function Button
By pressing this button, you can access various functions.
- ❸ Metro/Rhythm Button
Press the [MET/RHY] button to enter Metronome/Rhythm Mode. This mode allows you to select whether a Metronome and/or Rhythm or a previously recorded song will be played.
- ❹ Record Button
Press this button to record your performance in real time.
- ❺ Play/Stop Button
Press this button to start or stop a song, a metronome, and rhythm.
- ❻ KBD MODE Button
The [KBD MODE] button selects the Layer, Split, and Duo modes. Press the [KBD MODE] button repeatedly to select each mode.
- ❼ Voice/Piano Button
This instrument features exceptionally realistic 88 voices. You can enjoy your performance with them.
- ❽ EDU Button
Press this button to play and practice some educational songs (among Beyer or Czerny 100/30/40, Sonatine). When the education mode is active, the LED of Layer and of Voice/Piano will blink.
- ❾ DEMO Button
Press this button to hear a selection of 50 demo songs performed in a variety of classical styles.
- ❿ MP3 AUX IN
Connect the audio output of an MP3 player or other audio source to the MP3 AUX IN jack on the control panel.
- ⓫ Power Switch
By pressing this switch, you can turn the power On/Off.



Chapter 3 Feature of M110

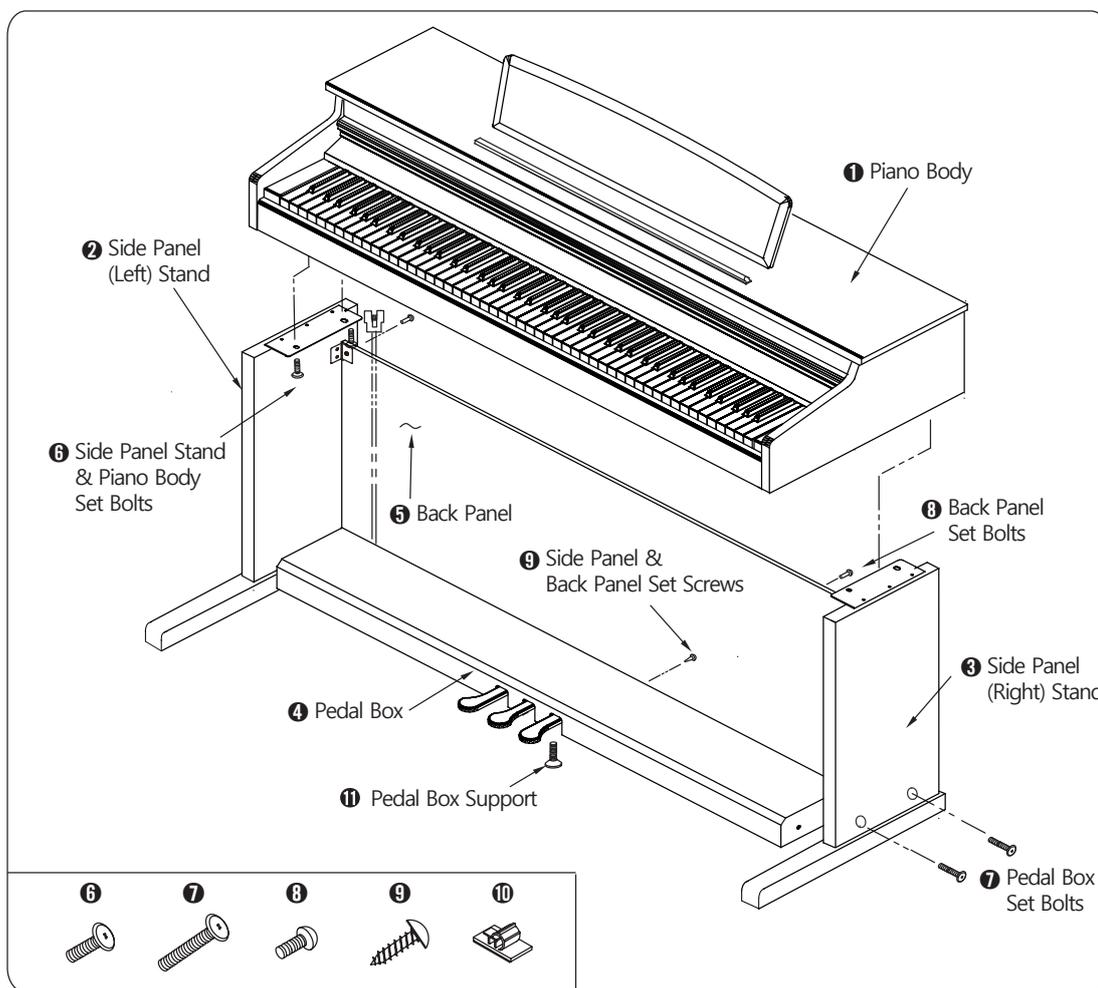
Congratulations on your purchase of the M110. You are certain to enjoy many hours exploring the variety of features as well as 88 kinds of the beautiful preset voices.

- 88-Note fully-weighted hammer-action keyboard
- Built-in Sustain Pedal, Sostenuto Pedal and Soft Pedal
- Adjustable keyboard sensitivity (7 steps setup)
- Stereo Audio Input and Output
- Two Headphone Jacks
- USB MIDI Input & Output terminal
- LED Display
- 88 Voices
- Layer Mode (Layer two instrument sounds across the keyboard)
- Transpose Function
- Favorite Button for Piano Voices
- Performance Recorder
- "Plug & Play" USB MIDI, USB Audio
- 51 Built-in Demo Songs

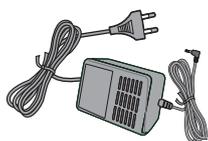


Assembly Instructions

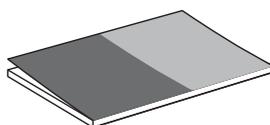
- 1 Piano Body x1
- 2 Side Panel(Left) Stand x1
- 3 Side Panel(Right) Stand x1
- 4 Pedal Box x1
- 5 Back Panel x1
- 6 Side Panel(Left/Right) Stand & Piano Body Set Bolts x 4
- 7 Side Panel(Left/Right) Stand & Pedal Box Set Bolts x 4
- 8 Back Panel Set Bolts x 2
- 9 Side Panel & Back Panel Set Screws x4
- 10 Cable Clamps x 2



Carton Contents



DC Power Adapter

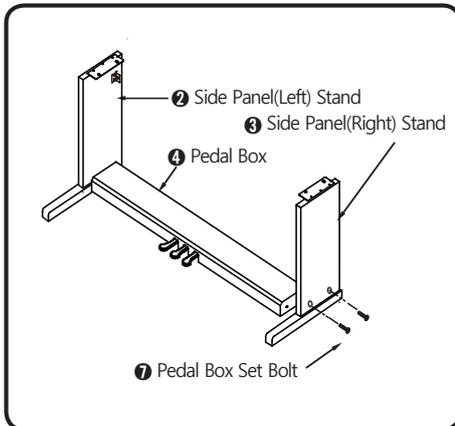


User's Manual



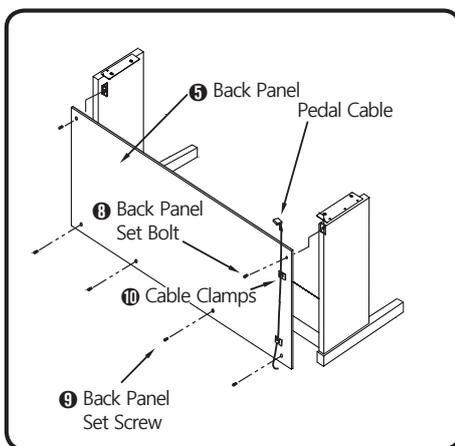
MP3 Cable

Assembling Left/Right Side Panel Stand



- 1) Put the cable in the Pedal Box 4 out.
- 2) Starting with the left stand leg 2, align the holes in the Pedal Box 4 with the holes in the left stand leg 2, then thread the Pedal Box Set Bolts 7 into the holes.
- 3) Repeat with the right stand 3 and tighten all bolts fully.

Assembling Back Panel

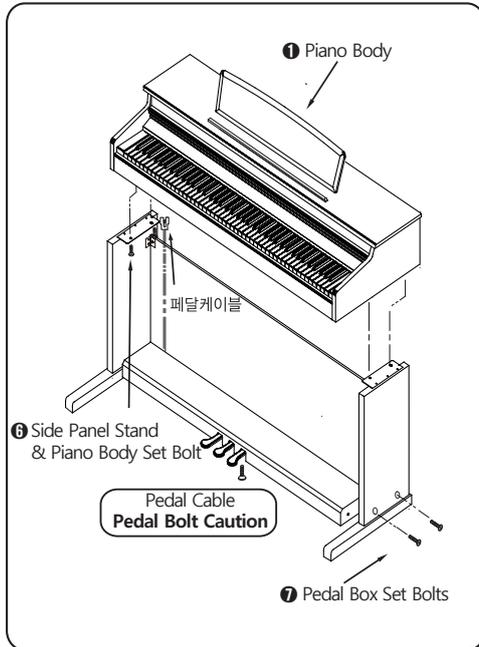


- 1) Place the Back Panel 5 on the assembled stand legs. Align the holes in the Back Panel 5 with the bracket in the stand legs, then fasten them by using the Back Panel Set Bolts 8 as shown.
- 2) Attach the Pedal Box 4 to the bottom of the Back Panel 5 and thread the Back Panel Set Screws 9 into the 4 holes.
- 3) After placing the Cable Clamps 10 over the pedal cable, stick it on the back panel, then arrange the cable behind the Back Panel 5.

Caution

Please arrange the pedal cable after completely assembling the back panel with the side panel and pedal box.

Assembling Left/Right Side Panel Stand



1) After putting the Piano Body on each side of the stand, align the 4 holes in the stands with the holes in the bottom of the Piano Body.

Before tighten up the bolts, do not press Piano Body(especially for keys).

The body may fall forward.

2) Fix the Piano Body and Side Panel Stand by using the Set Bolts ⑥.

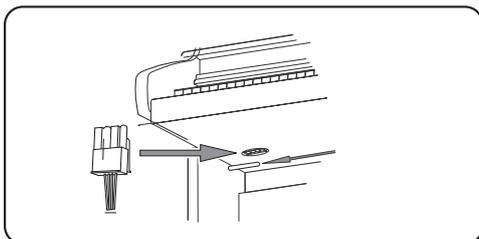
3) Connect the Pedal Cable with the pedal terminal in the Piano Body.

4) After decide the place for the piano, loose the Pedal Bolt when it goes to the ground to avoid damaging the Pedal Box with playing the piano.

Caution

Unless you loose the Pedal Bolt, it can be damaged.

How to connect Pedal Cable

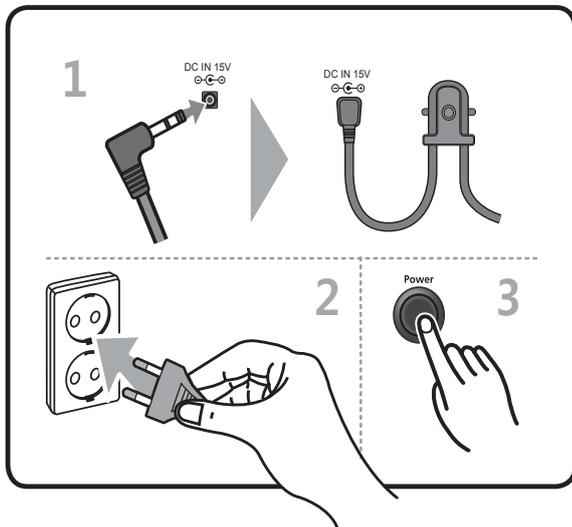


Insert the pin until it makes a “Tick” sound. If the pin is bent or is not completely connected, the Pedal will not work.

- When the assembly is complete, connect the pedal cable to the port in the bottom of piano body.
- If the pedal cable is not completely connected, the pedal will not work.
- Dress the pedal cable by using the cable clamps.

After decide the place for the piano, loose the pedal bolt when it goes to the ground to avoid damaging the pedal box with playing the piano.

Power Connection



(1) Connect the power adapter to the DC receptacle on the rear panel of the M110.

- After finishing the connection, dress the power line by using a cord winder.

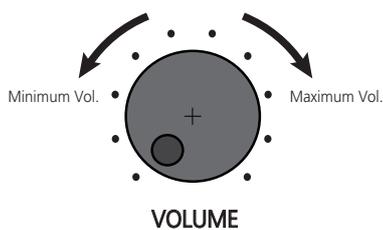
(2) Connect the power cord to an AC outlet (AC 220V, 60Hz).

Caution

Use an appropriate adaptor (AC 220V, 60 Hz/ DC 18V, 1A). Use only the DC power adapter supplied with the M110. Connecting the wrong DC power adapter could damage the instrument. Before connecting the power cord, please check whether the power switch is Off or not.

(3) When the M110 is set up, turn the power on by pressing the power switch.

Master Volume



Volume knob is located on the right end of the keyboard. Turn this knob from left to right (clock-wise) to increase the volume.

1. Selecting a Voice

When the [Voice/Piano] button is pressed, the LED will blink.

Now you can select a voice you want to play.

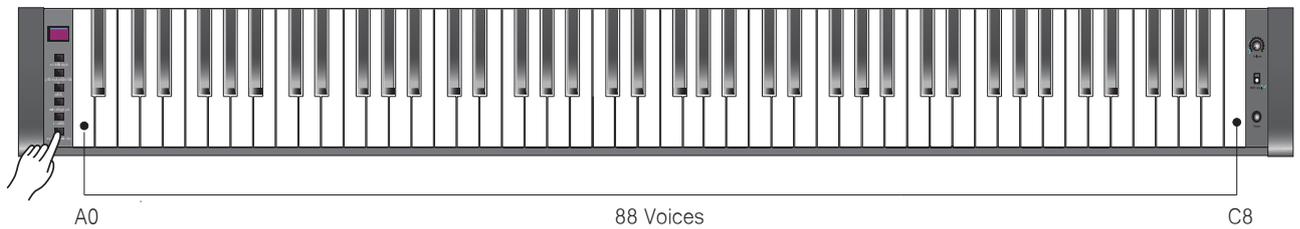
If you press the [Voice/Piano] button without pressing any key of the piano, a “GRAND PIANO” sound (the first voice) is selected.

You can select Layer voices in Layer mode and Split voices in Split mode.

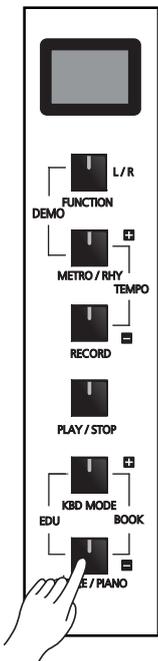
Voices are assigned to each key of the piano, depending on voice categories.

Please be well aware of the places where each of voices is assigned, before you play the keyboard.

See the Voice List below for more details on Voice setting.



Voice List



NO	VOICES	NO	VOICES	NO	VOICES	NO	VOICES
1	Grand Piano	23	Harmonica	45	Tremolo Strings	67	Tenor Sax
2	Dynamic Piano	24	Tango Accordion	46	Pizzicato Strings	68	Baritone Sax
3	Electric Grand	25	Nylon Guitar	47	Orchestral Harp	69	Oboe
4	Honky-tonk	26	Steel Guitar	48	Timpani	70	English Horn
5	Electric Piano 1	27	Jazz Guitar	49	String Ensemble 1	71	Bassoon
6	Electric Piano 2	28	Electric Guitar	50	String Ensemble 2	72	Clarinet
7	Harpichord	29	Muted Guitar	51	SynthStrings 1	73	Piccolo
8	Clavi	30	Ovd Guitar	52	SynthStrings 2	74	Flute
9	Celesta	31	Dist Guitar	53	Choir Aahs	75	Recorder
10	Glockenspiel	32	Guitar harmonics	54	Voice Oohs	76	Pan Flute
11	Music Box	33	AC Bass	55	Synth Voice	77	Blown Bottle
12	Vibraphone	34	E. Bass 1	56	Orchestra Hit	78	Shakuhachi
13	Marimba	35	E. Bass 2	57	Trumpet	79	Whistle
14	Xylophone	36	Fretless Bass	58	Trombone	80	Ocarina
15	Tubular Bells	37	Slap Bass 1	59	Tuba	81	Square Lead
16	Dulcimer	38	Slap Bass 2	60	Muted Trumpet	82	Sawtooth Lead
17	Drawbar Organ	39	Synth Bass 1	61	French Horn	83	Calliope
18	Perc Organ	40	Synth Bass 2	62	Brass Section	84	Chiff
19	Rock Organ	41	Violin	63	SynthBrass 1	85	Charang
20	Church Organ	42	Viola	64	SynthBrass 2	86	Voice Lead
21	Reed Organ	43	Cello	65	Soprano Sax	87	Fifths Lead
22	Accordion	44	Contrabass	66	Alto Sax	88	Bass&Lead

2. EDU (Teaching Mode)

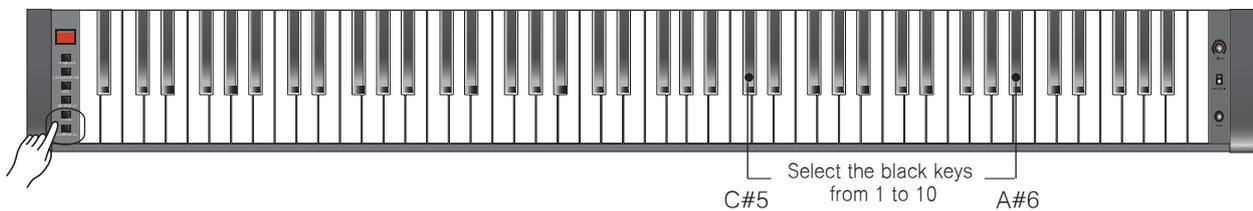
Press the [KBD] and [VOICE/PIANO] buttons simultaneously, the LEDs of those buttons will blink. Now Teaching mode is ready to start.

In Teaching mode, the current teaching material is displayed on the screen.

Select a teaching material by pressing the the [KBD] and [VOICE/PIANO] buttons.

You have a choice among “BAY”(Beyer), “C10”(Czerny 100), “C30”(Czerny 30), “C40”(Czerny 40), and “SON”(Sonatine).

Select a song you want to play by pressing the specific black keys as shown below.



3. Demo Song

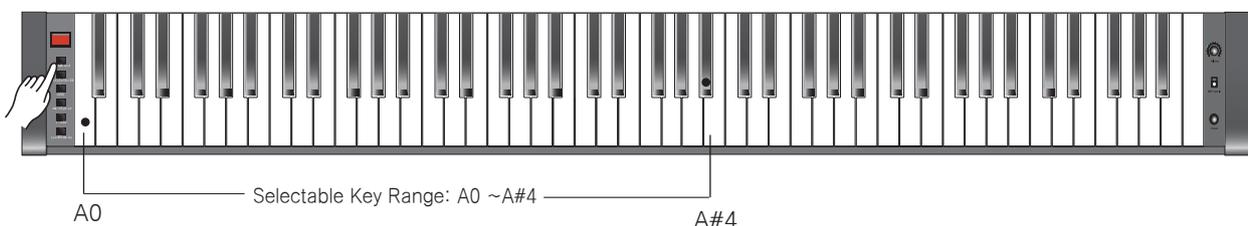
Press the [FUNCTION] and [METRO/RHY] buttons simultaneously to enter DEMO mode.

In DEMO mode, the LEDs of the [FUNCTION] and [METRO/RHY] buttons are blinking.

If you press a key in the key range (from A0 to A#4), the selected DEMO song is displayed on the screen.

To play or stop the song, press the [PLAY/STOP] button.

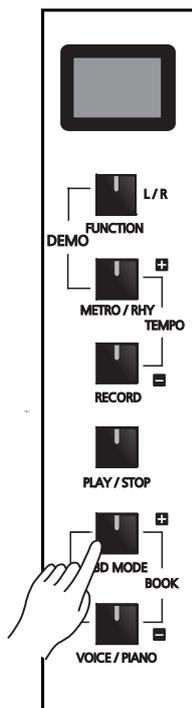
If you want to select another Demo song, while playing a DEMO Song, stop playing the song.



Demo Song List

6	Fuga II (A3 VOCl)	J.S.Bach	31	Preludes in Db Major Op.28 No.15	F.F.Chopin
7	Sonatine Op.36 No.4	M.Clementi	32	Fantaisie-Impromptu Op.66	F.F.Chopin
8	Klavierstück K. 15v	W.A. Mozart	33	Traumerei	R. Schumann
9	Piano Sonate K.333 1st mov.	W.A. Mozart	34	Frolicher Landmann Op.68-10	R. Schumann
10	Rondo in D-dur K.485	W.A. Mozart	35	Von fremden Landern und Menschen Op.1	R. Schumann
11	Piano Sonate K.331 Rondo Turkish March	W.A. Mozart	36	Liebestraume Nr.3	F. Liszt
12	Piano Sonate K.545 1st mov.	W.A. Mozart	37	Dolly's Dreaming And Awakening	T. Oesten
13	Minuette in G	L.v. Beethoven	38	Fryhlingsstimmen Op.410	J. Strauss
14	Bagatelle No.25 Fur Elise	L.v. Beethoven	39	The Swan	Saint-Saens
15	Sonatine Op.55 No.1	Fr.Kuhlau	40	Blumenlied	G. Lange
16	March Militaire Op.51 No.1	F.P.Schubert	41	Valsette	F. Borowski
17	Moments Musicaux 3.	F.P.Schubert	42	Old French Air	P.I.Tchaikovsky
18	Impromptu Op.90 N0.2	F.P.Schubert	43	Mazurka	P.I.Tchaikovsky
19	Impromptu Op.90 N0.4	F.P.Schubert	44	Polka	P.I.Tchaikovsky
20	La chevaleresque	J.F.Buramu ler	45	Barcarolle	P.I.Tchaikovsky
21	Without words song Op.38 No.2	J.L.F.Mendelssohn	46	Humoreska	A. Dvor A k
22	Venetianisches Zgondellied	J.L.F.Mendelssohn	47	Suite Peer Gynt Op.46-3 Anitras Tanz	E. Grieg
23	Sostenuto	F.F.Chopin	48	Suite Bergamasque Prelude	C.A.Deubussy
24	Valse KK IVB-11	F.F.Chopin	49	Reverie	C.A.Deubussy
25	5 Mazurkas I Op.7 NO.1	F.F.Chopin	50	Arabesque	C.A.Deubussy

4. KBD MODE Button

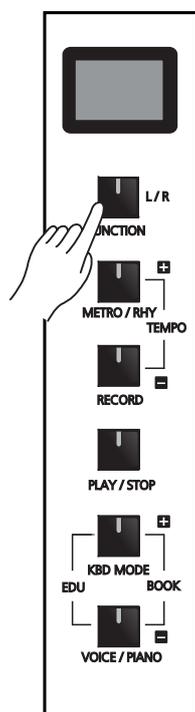


The [KBD MODE] button selects the Layer, Split, and Duo modes. With these functions, you can layer two different Program sounds on the keyboard (in Layer mode) and split the keyboard into two regions containing two different Program sounds, with adjustable split point (in Split mode). In addition, you can split the keyboard into two regions, each transposed to the same range for 4-hand use (in DUO mode).

If you press the [KBD MODE] button once, “LAR” is displayed and the screen shows the number of Layer voice. Then press the [VOICE/PIANO] button and press the key relevant to the desired voice to select a new Layer voice.

If you press the [KBD MODE] button twice, “SPL” is displayed and the screen shows the number of Split voice. Then press the [VOICE/PIANO] button and press the key relevant to the desired voice to select a new Split voice.

If you press the [KBD MODE] button three times, “DUO” is displayed and the screen shows the voice number.



You can change various settings by using the [FUNCTION] button in key combinations with some keys. See page 26 for more details on key operation.

1. Touch

Press and hold the [FUNCTION] button and press a key in the range of C1 to E1 to adjust the keyboard touch sensitivity. The default setting is Normal 2. You can adjust the Touch setting to the following settings (7 steps setup):

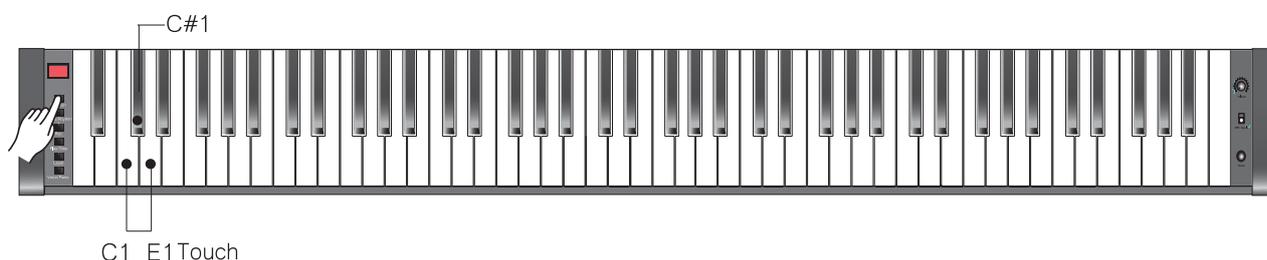
Hard 1,2
Normal 1,2,3
Soft 1,2

Adjust the keyboard touch sensitivity to your playing technique. Normally, setting to “Normal” is recommended.

C1: Select the previous setting

C#1: Select Normal 2

E1: Select the next setting



2. Tune

You can adjust the M110 tuning to match other instruments or recordings.

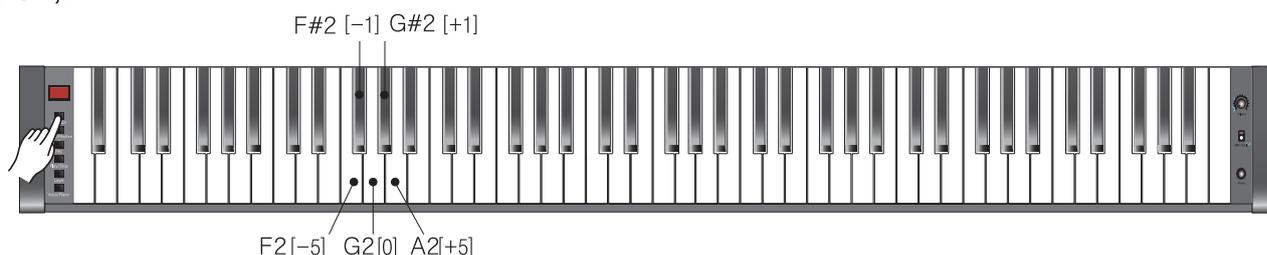
Press and hold the [FUNCTION] button and press F#2 or G#2 key to change the pitch value by one cent. By pressing F2 or A2 key (in combination with FUNCTION button), you can change the value by 5 cents.

You can adjust the tuning from -50 to +50 cents. The default setting is 0 cent.

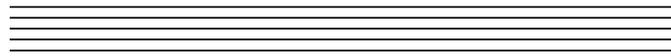
Hard 1,2

Normal 1,2,3

Soft 1,2



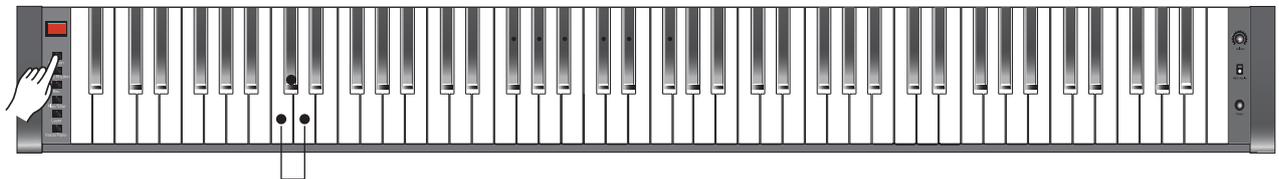
Chapter 6 **Function Button**



3. Transpose

You can change the tuning of notes played on the M110 keyboard in semitones, also known as half steps. This is a convenient way to change the key of a song without learning to play it in a different key.

Press and hold the [FUNCTION] Button and press C2 or C#2 or D2 key to change the transposition value.



- C2 Transposition D2 +

Key	Transposition Value
C2	- (Minimum -12)
C#2	0 (Default)
D2	+ (Maximum +12)

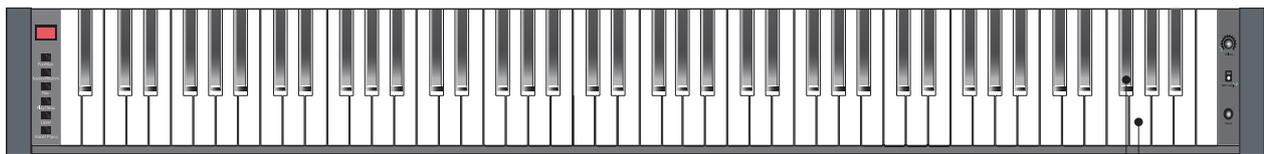
4. Local Control

Local Control allows you to control whether the M110's keyboard will trigger the internal sound engine. Usually Local Ctrl should be set to On. When using the M110 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”.

This function is used, when M110 is connected with an external sequencer.

Press and hold the [FUNCTION] button and press G7 or F#7 key to turn on/off Local Control.

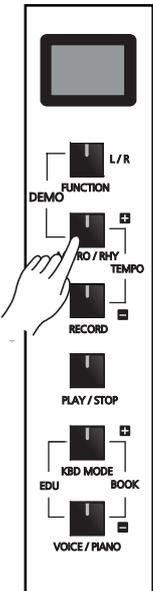
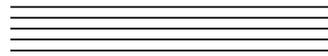
Key	Local Control
F#7	On (Default)
G7	Off



Note: : M110 doesn't make any sound when Local Control is Off.

Local On — Local Off

METRO/RHYTHM Button

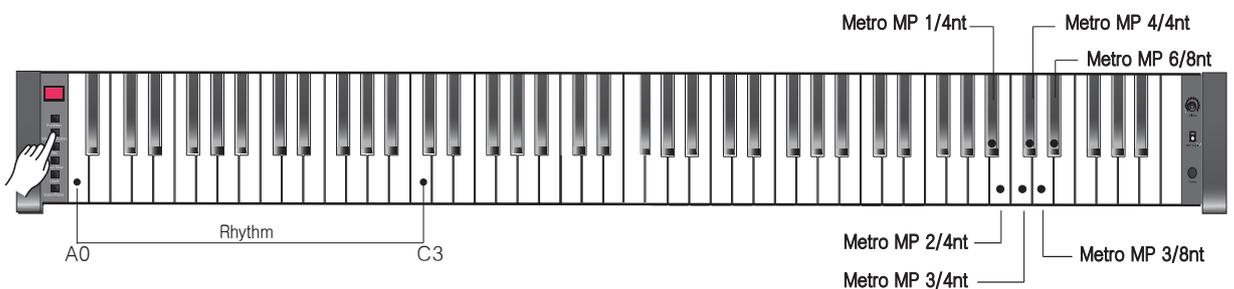


1. Metronome

Metronome sound is based on rhythm pattern, not just 'click' sound.
 Press and hold the [METRO/RHY] button and press a key in the range from A#6 to D7 to select Time signature.
 Press the [PLAY/STOP] button to start Metronome.
 Press the [PLAY/STOP] button again to stop Metronome

2. Rhythm

Press and hold the [METRO/RHY] button and press a key in the range from A0 to C3 to select Rhythm. 28 Rhythms are available.
 Press the [PLAY/STOP] button to start Rhythm.
 See the Tempo on the following section to change the tempo of Rhythm.



No	Rhythm	No	Rhythm	No	Rhythm	No	Rhythm
1	8 Beat	8	Samba Disco	15	Disco Love	22	8 Rock
2	Balade	9	Waltz	16	Euro	23	Bosanova
3	Disco	10	March	17	Light Rock	24	ChaCha
4	Dance Party	11	Trot	18	Slow Rock	25	Country
5	Rock&Roll	12	Pop	19	Jazz Acid	26	Dance Nonstop
6	SlowRock	13	16 Bit	20	HipHop	27	Foxtrot
7	Swing	14	Balade2	21	Tango	28	Hbeat

3. Tempo

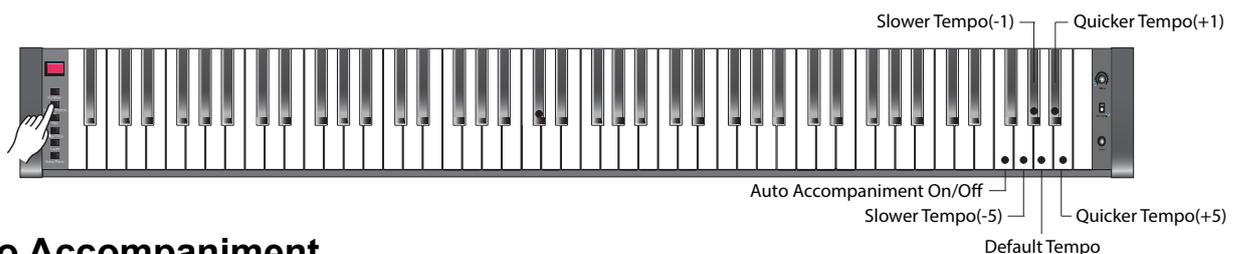
Press and hold the [METRO/RHY] button and press a key in the range from G7 to B7 to change Tempo.

The default Tempo setting is 120.

To set a quicker Tempo, press and hold the [METRO/RHY] button and press A#7 or B7 key.

To set a slower Tempo, press and hold the [METRO/RHY] button and press G#7 or G7 key.

To return to the default Tempo setting, press and hold the [METRO/RHY] button and press A7 key.



4. Auto Accompaniment

If you want to turn on/off Auto Accompaniment, press and hold the [METRO/RHY] button and press the 81st key of your keyboard.

REC & Play/Stop Button

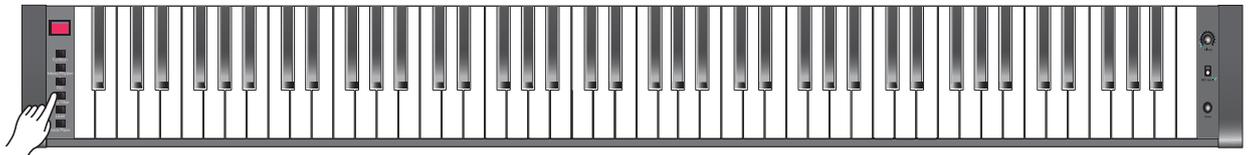
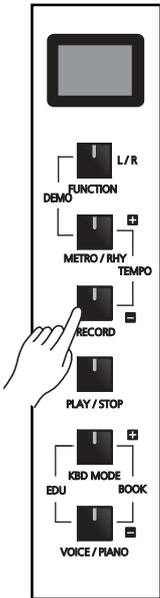
1. Recording a Song

If you press the [Record] button, one bar of the Metronome will play before recording begins.

Play your piano to start Recording, then The LED in the Play button will be lit.

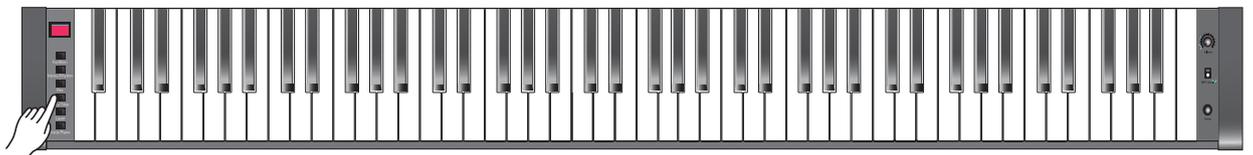
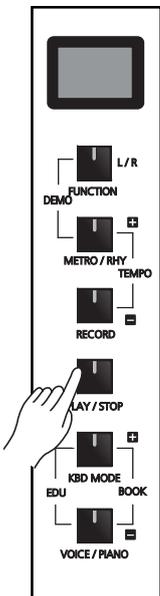
Press the [Record] button again to stop recording.

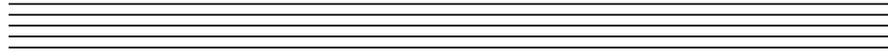
Press the [Record] button for 2-3 seconds. The display will show “dEL”, then the recorded song will be erased.



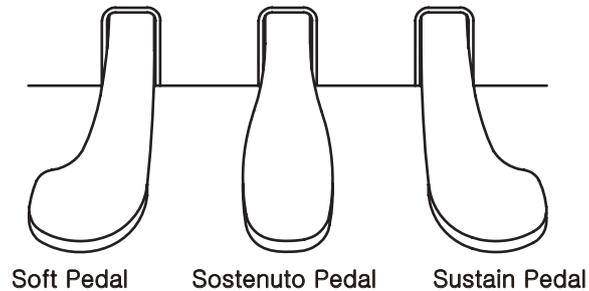
3. Play & Stop a Song

Press the [PLAY/STOP] button to start or stop the recorded song.



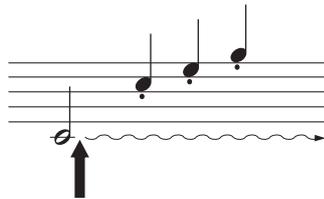


M110 contains three functional pedals. It also works the same way with Grand Piano. However, this product does not support the Silent Pedal (The middle pedal) of Upright Piano. You can control the volume as a function of Silent Pedal.



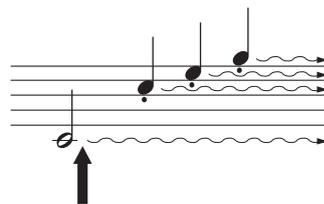
Pedal Type

1. Soft Pedal - When the soft pedal is pressed, all notes played on the keyboard will have a softer effect.
2. Sostenuto Pedal - When the sostenuto pedal is pressed, the notes played before you step on the pedal would have a sustain effect.



Press the Sostenuto Pedal from this point.

3. Sustain Pedal - When the sustain pedal is pressed, notes sustain longer. Releasing the pedal immediately stops any sustained notes.



Press the Sustain Pedal from this point.

Note

If you are having problems with using your pedal, please check the connection between the Piano body and Pedal box. (see Page 10 for more details.)

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.

See the MIDI Implementation Chart on page 24 for more details on supported MIDI messages.

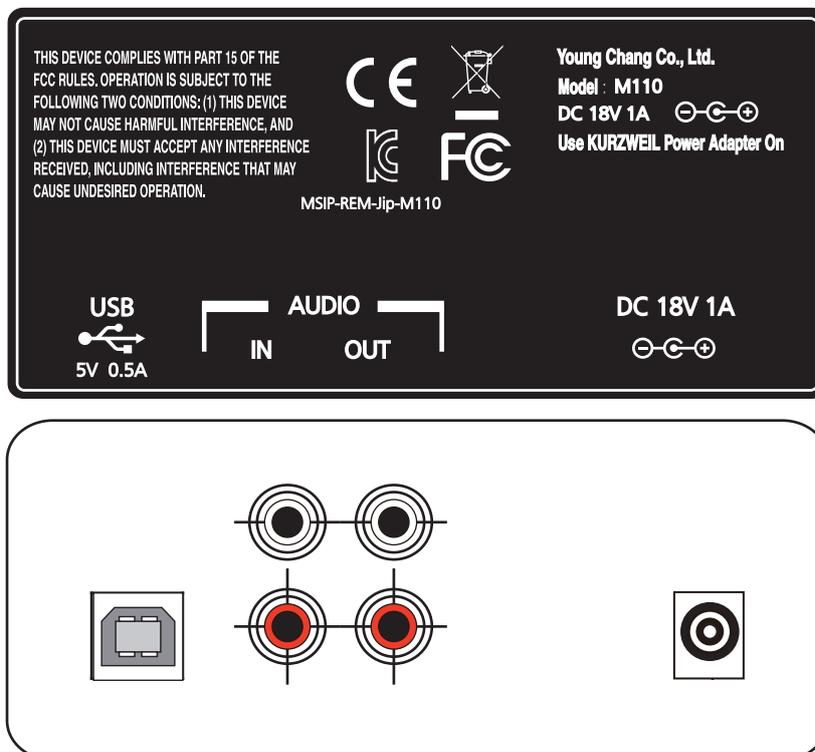
1. USB MIDI Connection

M110 has a USB port on the back panel of your instrument:

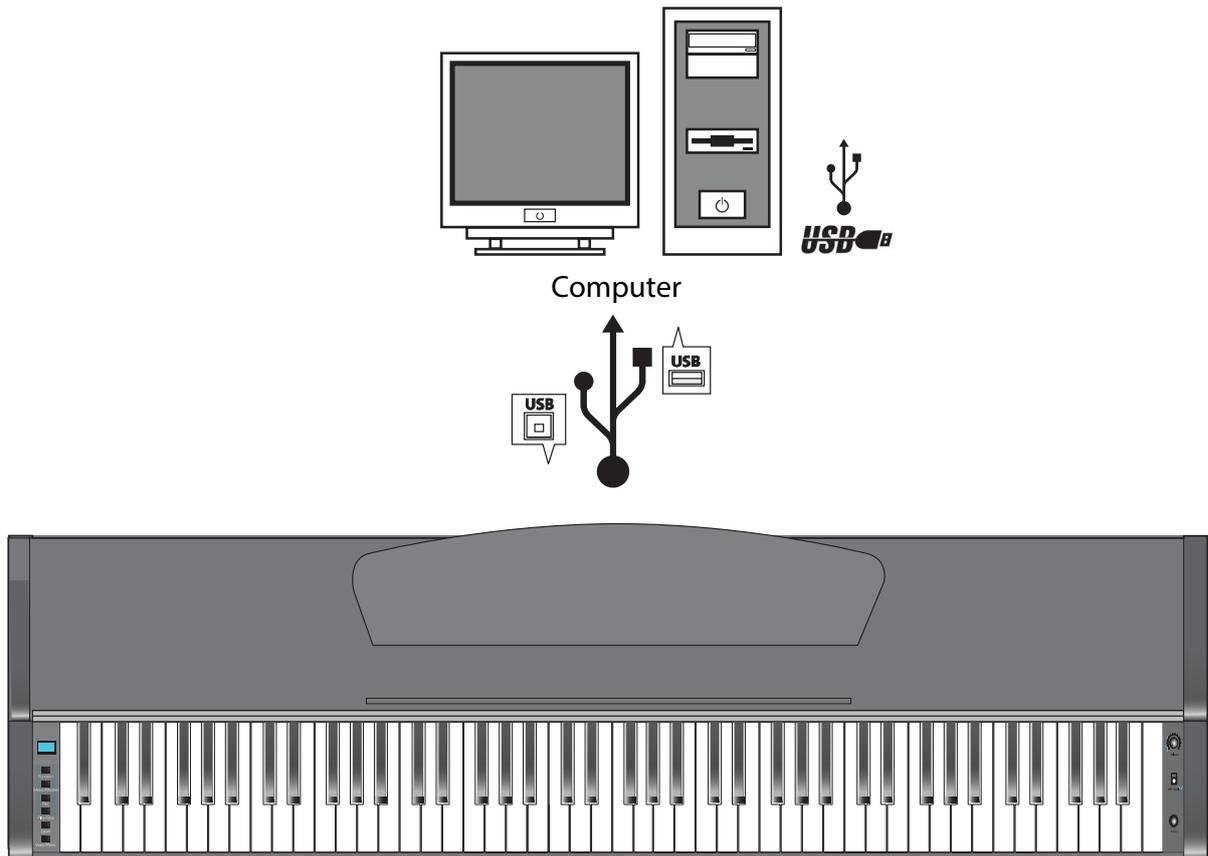
- The MIDI In port is used to receive MIDI data from another MIDI device.
- The MIDI Out port is used to transmit the MIDI data generated by the M110 to another MIDI device.

USB Connection can perform MIDI In/Out function with no need to use a MIDI cable. No drivers and additional MIDI interfaces are required to use this connection.

The M110 supports the “Plug and Play” feature used in the Windows XP or higher and Macintosh operating systems. 



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



2. 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.

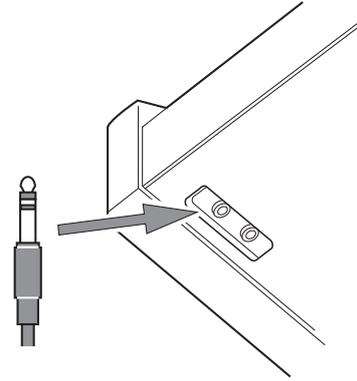
Note

If you are having problems with using your pedal, please check the connection between the Piano body and Pedal box. (see Page 10 for more details.)

1. Headphone

You will need a 1/4-inch stereo jack in order to use headphones and can use two headphones simultaneously.

To avoid the risk of hearing loss when using headphones, please do not play the piano with a high volume level for a long time.



2. Audio In

Connect the audio output of an MP3/CD player or other audio Source to the AUDIO IN jack. You will be able to hear the music through the speaker of your keyboard. A RCA cable is needed for the connection.

3. Audio Out

Audio Out ports can be used to transmit the audio signal of the piano to a keyboard amplifier, stereo sound system, mixing console or tape recorder.

When you connect an audio speaker, please ensure that the volume has been set to the minimum level.

A RCA cable is needed for the connection.

USB

USB connection transmits and receives MIDI data between the M110 and the computer. You can also update the M110 by the USB connection.

MIDI In & Out

These are used to connect a MIDI device with the M110.

Audio In

Connect the audio output of an MP3/CD player or other audio Source to the AUDIO IN jack. You will be able to hear the music through the speaker of your keyboard. A RCA cable is needed for the connection.

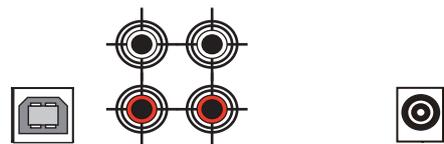
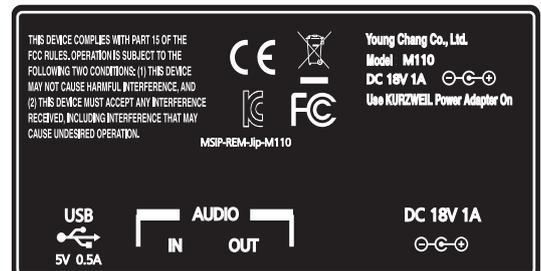
Be sure to turn off your instrument before you connect or disconnect

Audio Out

Audio Out ports can be used to transmit the audio signal of the piano to a keyboard amplifier, stereo sound system, mixing console or tape recorder. A RCA cable is needed for the connection.

DC Receptacle

Connect the power adapter to the DC receptacle on the rear panel of the M110.



Sonatine List

F. KUHLAU	Number
OP.20 NO.1-1	1
OP.20 NO.1-2	2
OP.20 NO.1-3	3
OP.20 NO.2-1	4
OP.20 NO.2-2	5
OP.20 NO.2-3	6
OP.20 NO.3-1	7
OP.20 NO.3-2	8
OP.20 NO.3-3	9
OP.55 NO.1-1	10
OP.55 NO.1-2	11
OP.55 NO.2-1	12
OP.55 NO.2-2	13
OP.55 NO.2-3	14
OP.55 NO.3-1	15
OP.55 NO.3-2	16
M. CLEMENTI	Number
OP.36 NO.1-1	17
OP.36 NO.1-2	18
OP.36 NO.1-3	19
OP.36 NO.2-1	20
OP.36 NO.2-2	21
OP.36 NO.2-3	22
OP.36 NO.3-1	23
OP.36 NO.3-2	24
OP.36 NO.3-3	25
OP.36 NO.4-1	26
OP.36 NO.4-2	27
OP.36 NO.4-3	28
OP.36 NO.5-1	29
OP.36 NO.5-2	30
OP.36 NO.5-3	31
OP.36 NO.6-1	32
OP.36 NO.6-2	33
J. HAYDN	Number
HOB.16-35-1	34
HOB.16-35-2	35
HOB.16-35-3	36

W. A. MOZART	Number
K.545-1	37
K.545-2	38
K.545-3	39
L. V. BEETHOVEN	Number
OP.49 NO.2-1	40
OP.49 NO.2-2	41
OP.49 NO.1-1	42
OP.49 NO.1-2	43
J. L. DUSSEK	Number
OP.20 NO.1-1	44
OP.20 NO.1-2	45

MIDI Implementation Chart

Version 1.0

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1	1	
	Changed	All	All	
Mode	Default		Poly	
	Messages	Any	Mode 3	
	Altered	X		
Note Number	Key range	0 - 127	0 - 127	
	True Voice	0 - 127	0 - 127	
Velocity	Note ON	O	O	
	Note OFF	O	O	
After Touch	Keys	X	X	
	Channels	X	X	
Pitch Bender		X	X	Bank Select
Control Change	0, 32	X	O	Mod Wheel
	1	X	O	Data Entry
	6	X	O	Volume
	7	X	O	Pan
	10	X	O	Expression
	11	X	O	Sustain Pedal
	64	O	O	Sostenuto Pedal
	66	O	O	Soft Pedal
	67	O	O	Reverb Select
	83	X	O	Reverb Wet/Dry
	91	O	O	Chorus Wet/Dry
	93	O	O	All Sound Off
	120	X	O	Reset All Controllers
	121	X	O	
Program Change		O 1 - 88	O 1 - 88	
	True #	O 0 - 87	O 0 - 87	
System Exclusive		X	X	
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	X	
	All Notes Off	O	O	
	Active Sense	X	X	
	Reset	X	X	

Notes

Mode 1 : Omni On, Poly
 Mode 3 : Omni Off, Poly

Mode 2 : Omni On, Mono
 Mode 4 : Omni Off, Mono

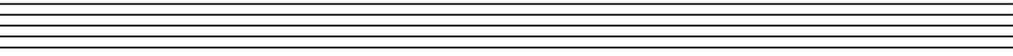
O = Yes
 X = No

Keyboard	88-NOTE, Fully-Weighted Hammer-Action Keyboard
Exterior Color	Rosewood, White, Mahogany
Appearance	Pattern (attached guard-rail on the cover)
Voice Type	Stereo PCM
Voice	88 Voices
Polyphony	88 Polyphony
Rhythm	28 Styles, 6 Metronome Rhythms
Function	SPLIT, LAYER, DUO
Song Learning	Beyer, Czerny 100/30/40, Sonatine
Demo Songs	50 Demo Songs
Recording	Record, Start/ Stop (20,000 Notes)
Pedal	Soft Pedal, Sostenuto Pedal, Sustain Pedal
Display	LED DISPLAY
Additional Functions	Mater Volume, Transpose, Metronome, Tune, Touch Sensitivity(7 Steps), Record/Play
Connection Terminal	Headphone x2, Audio Input, Audio Out, USB MIDI In/Out, MP3-Aux
Generating Capacity	15W X 15W
Power Consumption	30W
Speaker	2 WAY SYSTEM
Dimensions	1366 x 433 x 840 (W x D x H)
Weight	40Kg (88lb)

Check if one of the following might be the issue.

Problem	Cause	Solution
No sound is produced when the keys are played.	<ol style="list-style-type: none"> 1. The master volume is set in the minimal level. 2. Headphone is connected. 3. Local Control is set to Off. 	<ol style="list-style-type: none"> 1. Make sure the volume is set to an appropriate level. 2. Disconnect the headphones from the jack. 3. Set Local Control to On.
Sometime the speaker produce noise	<ol style="list-style-type: none"> 1. A noise neighboring electrical appliances. 2. A noise neighboring bulbs or neon signs. 	<ol style="list-style-type: none"> 1. Use an another outlet from the outlet used for the appliance. 2. Put your instrument far from the bulbs or the neon signs.
No sound when an amplifier is connected	<ol style="list-style-type: none"> 1. The master volume is set in the minimal level. 2. The extension cord is faulty. 	<ol style="list-style-type: none"> 1. Make sure the volume is set to an appropriate level. 2. Replace it with the new.

Please contact us If the problems continue.



NOTE

KURZWEIL

HDC YOUNG CHANG
MUSIC

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