



X4 pro mini /X6 pro mini

User Manual

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Introduction

Thank you for purchasing the **MIDIPLUS** X pro mini series MIDI keyboard.

The **MIDIPLUS** X pro mini series includes 49 and 61 keys variants. They features compact keys which maintain the comfort standard size keys, but with added portability. Includes the same stylish look and color matching as the X pro Series. Also, has assignable knob and transport controls, 8 velocity sensitive drum pads, touch sensitive pitch and modulation bars, and 128 built in tones. For added portability rechargeable NiMh batteries can be used to power the X pro mini (batteries not included).

Whats in the box:

- X pro mini keyboard
- USB cable
- Quick start manual
- **MIDIPLUS** posters

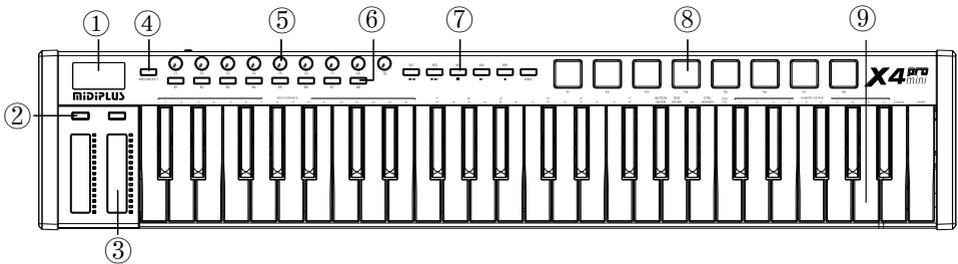
Important notes :

Please read the following precautions carefully before use to avoid damaging the equipment or causing personal injury. Precautions include but are not limited to the following:

1. Read and understand all the illustrations.
2. Always follow the instructions on the device.
3. Before cleaning the device, always remove the batteries and the USB cable. When cleaning, use a soft and dry cloth. Do not use gasoline, alcohol, acetone, turpentine or any other organic solutions; do not use a liquid cleaner, spray or cloth that's too wet.
4. Disconnect the USB cable and remove the batteries if not used for extended periods.
5. Make sure to turn off the power before install/remove the batteries.
6. Make sure to turn off the power while connect to speaker or other amplification system.
7. Do not use the device near water or moisture, such as a bathtub, sink, swimming pool or similar place.
8. Do not place the device in an unstable position where it might accidentally fall over.
9. Do not place heavy objects on the device.
10. Do not place the device near a heat vent at any location with poor air circulation.
11. Do not open or insert anything into the device that may cause a fire or electrical shock.
12. Do not spill any kind of liquid onto the device.
13. Do not use the device with thunder and lightning present; otherwise it may cause long distance electrical shock.
14. Do not expose the device to hot sunlight.
15. Do not use the device when there is a gas leak nearby.

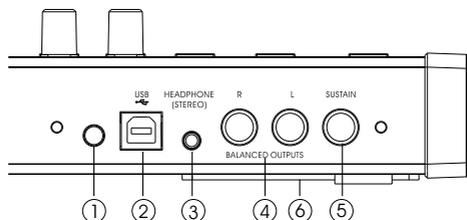
1. Overview

1.1 The Top Panel



- ① **Display:** Provides real time feedback of control information.
- ② **Octave buttons:** Activate keyboard's pitch control.
- ③ **Pitch & Modulation touch bar:** Control the pitch bend and modulation parameters of your sound.
- ④ **MIDI/SELECT button:** Enter or exit the Edit mode of the keyboard.
- ⑤ **Knobs:** Can control the effects of the built in sounds, as well as, DAW or software instrument parameters.
- ⑥ **Buttons:** Store favorites of built in sounds, and control DAW or software instrument parameters.
- ⑦ **Transport controls:** When the MMC button is activated, offers standard features to control your DAW: Record, Play, Stop, etc.,. When the MMC button is deactivated, control DAW or software instrument parameters.
- ⑧ **Pads:** To trigger the built in percussive sounds, as well as the samples within your DAW.
- ⑨ **Keyboard:** Trigger notes on/off, also can be used as shortcuts to access Edit more parameters.

1.2 The Rear Panel



- ① **Power Switch:** Hold to power the device on/off.
- ② **USB Connection:** This port provides both power, MIDI data and charge the batteries. You can use this to connect X pro mini to your computer or external USB 5V power via USB cable.
- ③ **Stereo Headphone Output:** Connect to headphone or active monitor.
- ④ **Balanced Line Output:** Connect to external amplifying system or linear recording system.
- ⑤ **Sustain Pedal Input:** The Sustain pedal input automatically detects the polarity of the pedal when X pro mini is turned on, so it can be used with any standard pedal.
- ⑥ **Battery Compartment:** Three nickel hydrogen batteries (AA) can be used to power this device.
Do not use alkaline batteries or carbon zinc batteries.

2. Basic Operation

2.1 Ready to use X pro mini

X pro mini comes ready to use as a standalone performance keyboard with 128 built in tones. It can also be used as a MIDI keyboard controller by connecting to the computer or other MIDI compatible hardware.

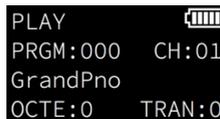
As a MIDI keyboard controller: Connect X pro mini to your PC or Mac using the included USB cable. Power is also supplied through this connection. Hold the power button to turn on the keyboard. X pro mini is a class-compliant USB device, so its drivers are automatically installed when connecting to a computer.

As a performance keyboard: Connect the sustain pedal, headphone or active speaker to the Pedal & Headphone connectors on the rear panel of X pro mini, or connect to the external mixer device through the balanced output, and then connect the device to the external USB power supply via USB cable, or hold the power button after the battery is installed correctly to turn on the device.

2.2 Display Screen

X pro Mini features a clear and easy to read OLED display screen. Content is displayed to provide real time information to know the current control status of the keyboard at any time.

The information displayed by default is:



```
PLAY   
PRGM:000 CH:01  
GrandPno  
OCTE:0 TRAN:0
```

PLAY : The keyboard is currently in Play mode

 : Displays the battery capacity and status when the battery is installed correctly, and no display when there is no battery installed

PRGM:000 : The Program Change number of current tone

CH:01 : The current MIDI Channel

GrandPno : The name of the current tone

OCTE:0 : The current Octave status

TRAN:0 : The current Transpose status

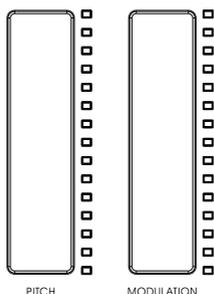
2.3 The Octave Buttons



These two buttons can shift the range of X pro mini's keyboard in real-time, giving you access to higher and lower pitches. The range that can be set is ± 3 Octaves.

When activated, the selected octave button will light up, the display will also show the selected octave, pressing the two octave buttons simultaneously will quickly reset the octave shift.

2.4 Pitch & Modulation Touch Bar



Two capacitive touch bars allow for real-time pitch bend and modulation control. The LED light strip will reflect the current status of each controller. The display also shows the value of the controller.

Sliding up or down on the Pitch touch bar will raise or lower the pitch of the selected tone. The range of this effect is set within the hardware or software instrument being controlled.

Sliding up on the Modulation touch bar increases the amount of modulation on the selected tone. The response depends on the settings of the instrument being controlled. Certain instruments or presets will not use the modulation parameter.

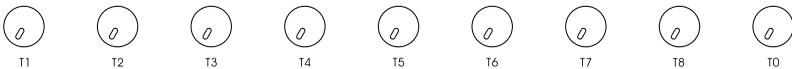
2.5 MIDI/SELECT Button



MIDI/SELECT

Press the **MIDI/SELECT** button to put the X pro mini into Edit Mode. Here you can change the MIDI channel of the keyboard, transpose, modify the velocity response curve, etc. for further detail, please refer to [3. Edit Mode](#).

2.6 Knobs



X pro mini features 9 assignable knobs that control the output effects of the built-in tones and the parameters of the DAW or software instrument.

When used with the built-in tones, the default control functions of each knob are as follows:

Knobs	Functions	MIDI CC Number
T1	Undefined	46
T2	Undefined	47
T3	Undefined	48
T4	Undefined	49
T5	Undefined	50
T6	Pan	10
T7	Expression Controller	11
T8	Reverb	91
T0	Volume	7

You can assign any MIDI CC (continuous controller) number to each knob in Edit Mode. Please refer to [3.6.1 Customizing The "T1 ~ T0" Knobs](#) for detailed operation steps.

2.7 Buttons



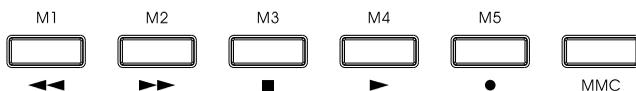
X pro mini features 8 buttons with dual functionality, they can send Program Change (tones) or MIDI CC messages. By default, it sends the Program Change message (backlight blue when pressed) to quickly switched the build-in tones. The default tones corresponding to the button are as follows:

Buttons	Program Change	Name
B1	000	Acoustic Grand Piano
B2	004	Bright Acoustic Piano
B3	019	Acoustic Guitar (Steel)
B4	049	Acoustic Bass
B5	088	Violin
B6	112	Alto Sax
B7	-	Previous Program
B8	-	Next Program

You can assign your favorite or frequently used tone's *Program Change* number to B1 to B6 button in Edit Mode. To change the tone corresponding to the buttons, please refer to [3.6.2 Customizing The "B1 ~ B8" Buttons](#) for detailed operation steps.

In addition (while in Edit mode) you can change the Button Mode to send MIDI CC messages (backlight white when pressed), to control DAW or software instrument parameters. For detailed operation steps, please refer to [3.3 Changing The "B1 ~ B8" Buttons' Mode](#). Any MIDI CC number can be assigned to each button, please refer to [3.6.2 Customizing The "B1 ~ B8" Buttons](#) for detailed operation steps.

2.8 Transport Controls



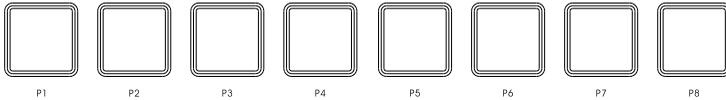
Like the buttons, X pro mini's 5 transport buttons have dual functions, which can send MMC (MIDI Machine Control) messages or MIDI CC messages.

When the MMC button is activated (backlight blue), the "M1 ~ M5" buttons are in MMC mode, and correspond to the rewind, fast forward, stop, play and record functions of DAW respectively.

When the MMC button is off (backlight white), the "M1 ~ M5" buttons are in MIDI CC mode, which can control

DAW or software instrument parameters. Any MIDI CC number can be assigned to each button, please refer to [3.6.3 Customizing The Transport Buttons](#) for detailed operation steps.

2.9 Pads



X pro mini's 8 velocity sensitive pads also have dual functions, sending MIDI note messages or MIDI CC messages. By default, MIDI notes are sent (blue backlight pressed) to trigger the built-in percussion sounds. The default output of the eight impact pads is as follows:

Pads	MIDI Notes	MIDI Channel	Instrument Name
P1	36/C+2	10	Bass Drum 1
P2	37/C#+2	10	Side Stick
P3	38/D+2	10	Acoustic Snare
P4	39/D#+2	10	Hand Clap
P5	40/E+2	10	Electric Snare
P6	41/F+2	10	Low Floor Tom
P7	42/F#+2	10	Closed Hi-Hat
P8	43/G+2	10	High Floor Tom

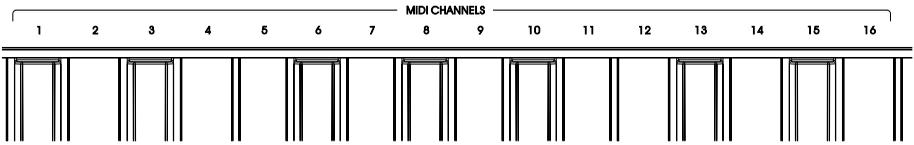
You can customize the MIDI note number for each pad. To change the sound corresponding to the pad, please refer to [3.6.4 Customizing The "P1 ~ P8" Pads](#) for detailed operation steps.

In Edit mode, you can change the Pad mode to send MIDI CC messages (backlight white when pressed), to control DAW or software instrument parameters. For detailed operation steps, please refer to [3.4 Changing The "P1 ~ P8" Pads' Mode](#). You can assign any MIDI CC number to each pad, please refer to [3.6.4 Customizing The "P1 ~ P8" Pads](#) for detailed operation steps.

2.10 Keyboard

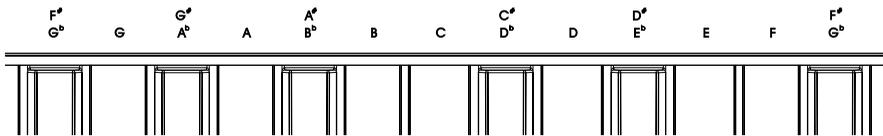
X pro Mini features 49 or 61 velocity sensitive slim keys for playing and sending note on/off messages. The keys can also be used as shortcuts to access parameters in Edit mode, such as: changing MIDI channel, transposition, switching keyboard velocity response curve, etc. for details, please refer to [3. Edit Mode](#).

2.10.1 MIDI Channels Keys



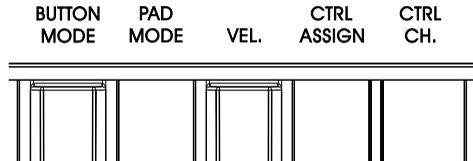
Used for changing the MIDI channel of keyboard in Edit mode. Please refer to [3.1 Changing MIDI Channel](#) for details.

2.10.2 Transpose Keys



Used for changing the transposition setting in Edit mode. Please refer to [3.2 Transposition](#) for details.

2.10.3 Other Functions Keys



Used for changing other advanced functions in Edit mode:

BUTTON MODE: Change the B1 to B8 buttons' mode. For detailed operation, please refer to [3.3 Changing The "B1 ~ B8" Buttons' Mode](#).

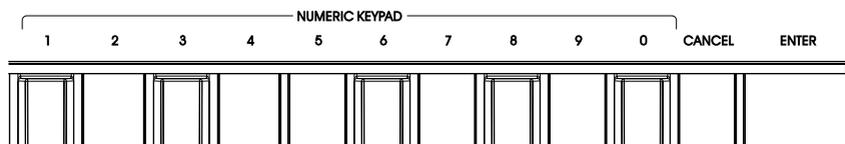
PAD MODE: Change the P1 to P8 pads' mode. For detailed operation, please refer to [3.4 Changing The "P1 ~ P8" Pads' Mode](#).

VEL.: Change the velocity response curve of the keyboard. For details, please refer to [3.5 Changing The Velocity Response Curve Of Keyboard](#).

CTRL ASSIGN: Select to customize the controllers (knobs, buttons, pads). For detailed operation, please refer to [3.6 Customizing The Controllers](#).

CTRL CHL: Select to change the channel of controllers. For detailed operation, please refer to [3.7 Changing The Channel Of Controller](#).

2.10.4 Numeric Keypads



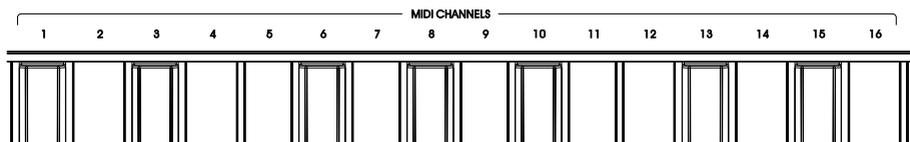
These numeric keypads can be used to enter the value of a selected controller in Edit mode. Press enter key to confirm, and press cancel key to delete the number.

3. Edit Mode

Press the MIDI/SELECT button (backlight will turn white). The screen will display "EDIT" in the upper left corner, indicating that X pro mini has entered *Edit Mode*. Here you can customize the X pro mini as you like.

Note: In Edit mode, the keys with labeled functions will be used as shortcuts to access the parameters, without sending any MIDI note message.

3.1 Changing the MIDI Channel

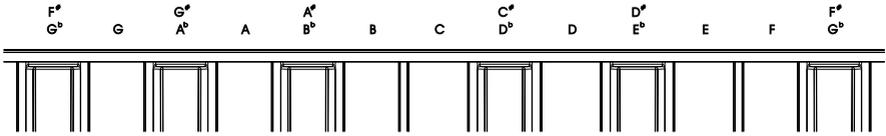


To change the MIDI channel, simply press the MIDI/SELECT button, and press the corresponding note on the keyboard below the MIDI channels you wish to select.

For example, to change X pro mini's MIDI output to channel 12, press the MIDI/SELECT button and press the key labeled with *12* below the MIDI channels.

Note: Channel 10 is the built-in percussion sounds channel. When using the built-in tones, if the MIDI channel is set to ch 10, the sound switching function and button will not work. You can only play the percussion sounds.

3.2 Transposition



The X pro mini provides a quick way to transpose keys. Press the MIDI/SELECT button, and one of the 13 keys labeled "F[#]/G^b, G, G[#]/A^b" to transpose. The notes lower than middle C will transpose down, and notes above middle C will transpose up. Press the middle C key to cancel the transposition.

Tips: The range of the transpose function is -6 to +6 notes. Use the octave buttons to extend this range.

3.3 Changing The "B1 ~ B8" Buttons' Mode



The X pro mini's 8 buttons has dual functions. You can change the button to Program Change mode or MIDI CC mode in Edit Mode.

To change the button mode, press the MIDI/SELECT button, and then press the key labeled "Button Mode". The display will show the currently selected button mode.

3.4 Changing The "P1 ~ P8" Pads' Mode



The X pro mini's 8 pads also has dual functions. You can change the pad to MIDI Note mode or MIDI CC mode in Edit Mode.

To change the pad mode, press the MIDI/SELECT button, and then press the key labeled "Pad Mode". The display will show the currently selected pad mode.

3.5 Changing The Velocity Curve Of Keyboard

VEL.



X pro mini features 8 velocity curves to suit different user preferences. The velocity curves are:

No.1 ~ 3: Light - shifts the focus of the MIDI velocity output to being softer, useful when playing songs with mostly low velocities.

NO.4: Linear - provides a balanced response where the strength of your key strikes are equally matched to the MIDI velocity output. *This is the default velocity curve.*

No.5 ~ 6: Heavy - shifts the focus of the MIDI velocity output to being harder, useful when playing songs with mostly high velocities.

No.7 ~ 8: Fixed - forces the MIDI velocity to always output at a fixed value. No matter how light or heavy you hit the keys, the output velocity of No.7 curve is 64, No.8 curve is 127.

To change the velocity curve of the keyboard, follow these steps:

1. Press MIDI/SELECT button to enter Edit mode
2. Press VEL. key
3. Enter a value using the numeric keypad (value range is between 1 to 8)
4. Press Enter key
5. Press MIDI/SELECT button to exit Edit mode

For example, to change the keyboard velocity curve to No.6, follow these steps:

1. Press MIDI/SELECT button
2. Press VEL. key
3. Enter a value "6" using the numeric keypad
4. Press Enter key
5. Press MIDI/SELECT button to exit Edit mode

3.6 Customizing The Controllers

CTRL
ASSIGN



All controllers of X pro mini have been set with reasonable function control according to the most frequently used, but you can customize these controllers as you like. The controllers that can be customized include: "T1 ~ T0" knobs, "B1 ~ B8" buttons, "M1 ~ M5" transport control buttons and "P1 ~ P8" pads. The customized setting range is 0 ~ 127.

3.6.1 Customizing The "T1 ~ T0" Knobs

To customize the knobs, follow these steps:

1. Press MIDI/SELECT button to enter Edit mode
2. Press "CTRL ASSIGN" key
3. Turn the knob you want to customize
4. Enter a value using the numeric keypad (value range between 0 to 127)
5. Press Enter key
5. Press MIDI/SELECT button to exit Edit mode

For example, to change the T1 knob to control the built-in tone's "Chorus" effect. According to [5.5 MIDI CC \(Continue Control\) Map](#), the MIDI CC number of "Chorus" is "93" please follow these steps:

1. Press MIDI/SELECT button to enter Edit mode
2. Press "CTRL ASSIGN" key
3. Turn the knob "T1"
4. Enter a value "93" using the numeric keypad
5. Press Enter key
6. Press MIDI/SELECT button to exit Edit mode

3.6.2 Customizing The "B1 ~ B8" Buttons

You can customize both modes of the buttons' controls. In Program Change mode (except B7 and B8), you can assign the button's Program number, and in MIDI CC mode, you can assign the button's MIDI CC number. To customize the buttons, follow these steps:

1. Press MIDI/SELECT to enter Edit mode
2. Press "CTRL ASSIGN" key
3. Press the button you want to customize
4. Enter a value using the numeric keypad (value range between 0 to 9)
5. Press Enter key
6. Press MIDI/SELECT button to exit Edit mode

For example: assign the "B1" button as a shortcut to the "Church Organ" tone. First, make sure the button is in Program Change mode (refer to [3.3 Changing The "B1 ~ B8" Buttons Mode](#) for details). According to [5.5 Instrument Patch Map](#), the number of "Church Organ" is "19", please follow the steps below:

1. Press MIDI/SELECT button to enter Edit mode
2. Press "CTRL ASSIGN" key
3. Turn the knob "B1"
4. Enter a value "19" using the numeric keypad
5. Press Enter key
6. Press MIDI/SELECT button to exit Edit mode

3.6.3 Customizing The Transport Buttons

To customize the transport buttons, make sure the MMC button is off (backlight is off), and then follow these steps:

1. Press MIDI/SELECT to enter Edit mode
2. Press "CTRL ASSIGN" key
3. Press the button you want to customize
4. Enter a value using the numeric keypad (value range between 0 to 127)
5. Press Enter key
6. Press MIDI/SELECT button to exit Edit mode

For example: assign the "M1" button to function as a "Sustain Pedal". First, make sure the MMC button is off (backlight is off). According to [5.5 Instrument Patch Map](#), the MIDI CC number of "Sustain" is "64", please follow the steps below:

1. Press MIDI/SELECT to enter Edit mode
2. Press "CTRL ASSIGN" key
3. Press the button "M1"
4. Enter a value "64" using the numeric keypad
5. Press Enter key
6. Press MIDI/SELECT button to exit Edit mode

3.6.4 Customizing The "P1 ~ P8" Pads

To customize the pads, please follow these steps:

1. Press MIDI/SELECT to enter Edit mode
2. Press "CTRL ASSIGN" key
3. Press the pad you want to customize
4. Enter a value using the numeric keypad (value range between 0 to 127)
5. Press Enter key
6. Press MIDI/SELECT button to exit Edit mode

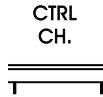
You can customize both modes of the pads. In MIDI Note mode, you can assign the pad's MIDI Note number, in MIDI CC mode, you can assign the pad's MIDI CC number.

For example, changing the note of the "P1" pad to C6, first make sure that the pad is MIDI Note mode (refer to [3.4 Changing The "P1 ~ P8" Pads' Mode](#) for details). According [5.4 MIDI Notes](#), the number of "C6" note is "84".

Please follow the steps below:

1. Press MIDI/SELECT to enter Edit mode
2. Press "CTRL ASSIGN" key
3. Press pad "P1"
4. Enter a value "84" using the numeric keypad
5. Press Enter key
6. Press MIDI/SELECT button to exit Edit mode

3.7 Assigning MIDI Channels



The channel of the controllers can be set between 0 and 16. The default global is channel 0. To change the channel of the controllers, please follow the steps below:

1. Press MIDI/SELECT to enter Edit mode
2. Press "CTRL CHL." key
3. Press or turn the controller you want to customize
4. Enter a value using the numeric keypad (value range between 0 to 16)
5. Press Enter key
6. Press MIDI/SELECT button to exit Edit mode

For example, to set the control channel of knob "T2" to channel 9, follow the steps below:

1. Press MIDI/SELECT to enter Edit mode
2. Press "CTRL CHL." key
3. Turn the knob "T2"
4. Enter a value "9" using the numeric keypad
5. Press Enter key
6. Press MIDI/SELECT button to exit Edit mode

3.8 Switching the Built in Tone

The X pro mini has 128 built-in tones. You can quickly switch between 6 tones using the B1 ~ B6 buttons, switch the previous or next tones by using the B7 and B8 buttons, or you can select the tones directly by following these steps:

1. Press MIDI/SELECT to enter Edit mode
2. Enter a value using the numeric keypad (value range between 0 to 127)
3. Press Enter key
4. Press MIDI/SELECT button to exit Edit mode

For example: to switch the current tone to "String Ensemble 1", according to [5.2 Instrument Patch Map](#), the program change number of "String Ensemble 1" is "48", please follow the steps below:

1. Press MIDI/SELECT to enter Edit mode
2. Enter value "48" using the numeric keypad
3. Press Enter key
4. Press MIDI/SELECT button to exit Edit mode

Note: The built-in percussion sounds cannot be switched by this method. You can change the MIDI channel to channel 10, which is the percussion sounds channel. For detailed operation, please refer to [3.1 Changing The MIDI Channel](#).

4. Factory Reset

At some point you may wish to reset your device back to factory settings. To perform a factory reset on your X pro mini, make sure the battery is installed correctly and has sufficient power or is connected to USB power, and then follow these steps:

1. Turn off the device via the power switch,
2. Press and hold the "B1" and "B2" buttons,
3. Turn the power back on,
4. Release the "B1" and "B2" buttons when the screen displays "FACTORY RESET".

Note: Performing a factory reset will clear all your changes to the keyboard. Please operates carefully.

5. Appendix

5.1 Specifications

Product Names	X4 pro mini / X6 pro mini
Keyboard	49/61 Slim keys with velocity-sensitive
Sounds	128
Maximum Polyphony	64
Display Screen	Black-and-White OLED display
Buttons	1 power switch button, 1 MIDI/SELECT button, 2 octave buttons, 8 shortcut sounds/CC buttons, 6 transport buttons
Knobs	9 assignable knobs
Pads	8 assignable velocity-sensitive pads
Connections	1 USB Type-B port, 1 3.5mm stereo headphone output, 2 balanced line outputs, 1 sustain pedal input
Dimensions	X4 pro mini : 703 × 137 × 51(mm) X6 pro mini : 850 × 137 × 51(mm)
Weight (Exclude battery)	X4 Pro mini : 1.85 kg X6 Pro mini : 2.35 kg
Accessory	USB Cable, User's manual, MIDIPLUS posters

5.2 Instrument Patch Map

Piano		Chromatic Percussion	
0	Acoustic Grand Piano	8	Celesta
1	Bright Acoustic Piano	9	Glockenspiel
2	Electric Grand Piano	10	Music box
3	Honky-tonk Piano	11	Vibraphone
4	Rhodes Piano	12	Marimba
5	Chorused Piano	13	Xylophone
6	Harpsichord	14	Tubular Bells
7	Clavichord	15	Dulcimer
Organ		Guitar	
16	Hammond Organ	24	Acoustic Guitar (nylon)
17	Percussive Organ	25	Acoustic Guitar (steel)
18	Rock Organ	26	Electric Guitar (jazz)
19	Church Organ	27	Electric Guitar (clean)
20	Reed Organ	28	Electric Guitar (muted)
21	Accordion	29	Overdriven Guitar
22	Harmonica	30	Distortion Guitar
23	Tango Accordion	31	Guitar Harmonics
Bass		Strings/Orchestra	
32	Acoustic Bass	40	Violin
33	Electric Bass(finger)	41	Viola
34	Electric Bass (pick)	42	Cello
35	Fretless Bass	43	Contrabass
36	Slap Bass 1	44	Tremolo Strings
37	Slap Bass 2	45	Pizzicato Strings
38	Synth Bass 1	46	Orchestral Harp
39	Synth Bass 2	47	Timpani
Ensemble		Brass	
48	String Ensemble 1	56	Trumpet
49	String Ensemble 2	57	Trombone
50	Synth Strings 1	58	Tuba
51	Synth Strings 2	59	Muted Trumpet
52	Choir Aahs	60	French Horn
53	Voice Oohs	61	Brass Section
54	Synth Voice	62	Synth Brass 1
55	Orchestra Hit	63	Synth Brass 2

Instrument Patch Map (continue):

Lead		Pipe	
64	Soprano Sax	72	Piccolo
65	Alto Sax	73	Flute
66	Tenor Sax	74	Recorder
67	Baritone Sax	75	Pan Flute
68	Oboe	76	Bottle Blow
69	English Horn	77	Shakuhachi
70	Bassoon	78	Whistle
71	Clarinet	79	Ocarina
Synth Lead		Synth Pad	
80	Lead 1 (square)	88	Pad 1 (new age)
81	Lead 2 (sawtooth)	89	Pad 2 (warm)
82	Lead 3 (caliope lead)	90	Pad 3 (polysynth)
83	Lead 4 (chiff lead)	91	Pad 4 (choir)
84	Lead 5 (charang)	92	Pad 5 (bowed)
85	Lead 6 (voice)	93	Pad 6 (metallic)
86	Lead 7 (fifths)	94	Pad 7 (halo)
87	Lead 8 (bass+lead)	95	Pad 8 (sweep)
Synth FX		Ethnic	
96	FX 1 (rain)	104	Sitar
97	FX 2 (soundtrack)	105	Banjo
98	FX 3 (crystal)	106	Shamisen
99	FX 4 (atmosphere)	107	Koto
100	FX 5 (brightness)	108	Kalimba
101	FX 6 (goblins)	109	Bagpipe
102	FX 7 (echoes)	110	Fiddle
103	FX 8 (sci-fi)	111	Shanai
Percussive		Sound FX	
112	Tinkle Bell	120	Guitar Fret Noise
113	Agogo	121	Breath Noise
114	Steel Drums	122	Seashore
115	Woodblock	123	Bird Tweet
116	Taiko Drum	124	Telephone Ring
117	Melodic Tom	125	Helicopter
118	Synth Drum	126	Applause
119	Reverse Cymbal	127	Gunshot

5.3 Percussion Sounds Map

Key#	Notes	Instrument Name	Key#	Notes	Instrument Name
27	D#+1	High Q	58	A#+3	Vibraslap
28	E+1	Slap	59	B+3	Ride Cymbal 2
29	F+1	Scratch Push	60	C+4	Hi Bongo
30	F#+1	Scratch Pull	61	C#+4	Low Bongo
31	G+1	Sticks	62	D+4	Mute Hi Conga
32	G#+1	Square Click	63	D#+4	Open Hi Conga
33	A+1	Metronome Click	64	E+4	Low Conga
34	A#+1	Metronome Bell	65	F+4	High Timbale
35	B+1	Acoustic Bass Drum	66	F#+4	Low Timbale
36	C+2	Bass Drum 1	67	G+4	High Agogo
37	C#+2	Side Stick	68	G#+4	Low Agogo
38	D+2	Acoustic Snare	69	A+4	Cabasa
39	D#+2	Hand Clap	70	A#+4	Maracas
40	E+2	Electric Snare	71	B+4	Short Whistle
41	F+2	Low Floor Tom	72	C+5	Long Whistle
42	F#+2	Closed Hi-Hat	73	C#+5	Short Guiro
43	G+2	High Floor Tom	74	D+5	Long Guiro
44	G#+2	Pedal Hi-Hat	75	D#+5	Claves
45	A+2	Low Tom	76	E+5	Hi Wood Block
46	A#+2	Open Hi-Hat	77	F+5	Low Wood Block
47	B+2	Low-Mid Tom	78	F#+5	Mute Cuica
48	C+3	Hi-Mid Tom	79	G+5	Open Cuica
49	C#+3	Crash Cymbal 1	80	G#+5	Mute Triangle
50	D+3	High Tom	81	A+5	Open Triangle
51	D#+3	Ride Cymbal 1	82	A#+5	Shaker
52	E+3	Chinese Cymbal	83	B+5	Jingle Bell
53	F+3	Ride Bell	84	C+6	Bell Tree
54	F#+3	Tambourine	85	C#+6	Castanets
55	G+3	Splash Cymbal	86	D+6	Mute Surdo
56	G#+3	Cowbell	87	D#+6	Open Surdo
57	A+3	Crash Cymbal 2	88	E+6	Applause2

5.4 MIDI Notes

Key#	Notes	Key#	Notes	Key#	Notes	Key#	Notes
0	C-1	32	G#+1	64	E+4	96	C+7
1	C#-1	33	A+1	65	F+4	97	C#+7
2	D-1	34	A#+1	66	F#+4	98	D+7
3	D#-1	35	B+1	67	G+4	99	D#+7
4	E-1	36	C+2	68	G#+4	100	E+7
5	F-1	37	C#+2	69	A+4	101	F+7
6	F#-1	38	D+2	70	A#+4	102	F#+7
7	G-1	39	D#+2	71	B+4	103	G+7
8	G#-1	40	E+2	72	C+5	104	G#+7
9	A-1	41	F+2	73	C#+5	105	A+7
10	A#-1	42	F#+2	74	D+5	106	A#+7
11	B-1	43	G+2	75	D#+5	107	B+7
12	C0	44	G#+2	76	E+5	108	C+8
13	C#0	45	A+2	77	F+5	109	C#+8
14	D0	46	A#+2	78	F#+5	110	D+8
15	D#0	47	B+2	79	G+5	111	D#+8
16	E0	48	C+3	80	G#+5	112	E+8
17	F0	49	C#+3	81	A+5	113	F+8
18	F#0	50	D+3	82	A#+5	114	F#+8
19	G0	51	D#+3	83	B+5	115	G+8
20	G#0	52	E+3	84	C+6	116	G#+8
21	A0	53	F+3	85	C#+6	117	A+8
22	A#0	54	F#+3	86	D+6	118	A#+8
23	B0	55	G+3	87	D#+6	119	B+8
24	C+1	56	G#+3	88	E+6	120	C+9
25	C#+1	57	A+3	89	F+6	121	C#+9
26	D+1	58	A#+3	90	F#+6	122	D+9
27	D#+1	59	B+3	91	G+6	123	D#+9
28	E+1	60	C+4	92	G#+6	124	E+9
29	F+1	61	C#+4	93	A+6	125	F+9
30	F#+1	62	D+4	94	A#+6	126	F#+9
31	G+1	63	D#+4	95	B+6	127	G+9

5.5 MIDI CC (Continue Control) Map

Number	Control Function	Number	Control Function
0	Bank Select MSB	68	Legato Footswitch
1	Modulation	69	Hold 2
2	Breath Controller	70	Sound Variation
3	Undefined	71	Harmonic
4	Foot Controller	72	Release Time
5	Portamento Time	73	Attack Time
6	Data Entry MSB	74	Brightness
7	Main Volume	75 ~ 79	Undefined
8	Balance	80 ~ 83	General Purpose Controller 5 ~ 8
9	Undefined	84	Portamento Control
10	Pan	85 ~ 90	Undefined
11	Expression Controller	91	Reverb Send Level
12 ~ 15	Undefined	92	Effects 2 Depth
16 ~ 19	General Purpose Controller 1 ~ 4	93	Chorus Send Level
20 ~ 31	Undefined	94	Effects 4 Depth
32	Bank Select LSB	95	Effects 5 Depth
33	Modulation LSB	96	Data Increment
34	Breath Controller LSB	97	Data Decrement
35	Undefined	98	NRPN LSB
36	Foot Controller LSB	99	NRPN MSB
37	Portamento LSB	100	RPN LSB
38	Data Entry LSB	101	RPN MSB
39	Main Volume LSB	102 ~ 119	Undefined
40	Balance LSB	120	All Sound Off
41	Undefined	121	Reset All Controllers
42	Pan LSB	122	Local Control On/Off
43	Expression Controller LSB	123	All Notes Off
44 ~ 63	Undefined	124	Omni Mode Off
64	Sustain	125	Omni Mode On
65	Portamento On/Off	126	Mono Mode On
66	Sostenuto On/Off	127	Poly Mode On
67	Soft Pedal On/Off		

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