# M-AUDIO®

# HAMMER88

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# Preset Editor

## User Guide

English

# M-AUDIO

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**M-AUDIO**

# Introduction

Thank you for purchasing the Hammer 88. At M-Audio, we know how serious music is to you. That's why we design our equipment with only one thing in mind—to make your performance the best it can be.

## Support

For the latest information about this product (documentation, technical specifications, system requirements, compatibility information, etc.) and product registration, visit **m-audio.com**.

For additional product support, visit **m-audio.com/support**.

## Installation

1. Double-click the **.exe** (Windows®) or **.pkg** (macOS®) installer file you downloaded.
2. Follow the on-screen instructions.

   After the installation has completed, open the **Hammer 88 Preset Editor** by doing the following:

      **Windows**: Click the **Start Menu**, click **All Programs**, click the **M-Audio** folder, and then click **Hammer 88 Preset Editor**.

      **macOS**: Double-click **Hammer 88 Preset Editor** in **Applications**.

## Getting Started

**To open the Hammer 88 Editor**:

1. **Optional**: Connect your Hammer 88 keyboard to your computer using a standard USB cable. (If you are connecting your keyboard to a USB hub, make sure it is a powered hub.) You can still use the editor without connecting a Hammer 88, but you will not be able to send presets to it or retrieve presets from it.
2. Open the Hammer 88 Editor. The window will show a graphical representation of your Hammer 88 with all of its editable controls.

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# Operation

## Managing Your Presets

### About Presets

A preset is a preset file (**.h88**) containing all of the MIDI control assignments you make in this editor. Using presets lets you maintain several different control configurations to use in different situations. For instance, you may use different presets with different kinds of software, or you may use some presets for production and others for performance.

Your Hammer 88 keyboard can store one preset at a time, though you can store additional presets on your computer to load onto your Hammer 88 keyboard using this editor.

This chapter explains how to load presets into the editor (*Loading & Retrieving Presets*), save presets onto your computer (*Saving Presets*), and send presets to your connected Hammer 88 keyboard (*Sending Presets*).

### Loading & Retrieving Presets

To edit a preset, you first have to load it into the Hammer 88 Editor. You can **load** a preset from your computer or **retrieve** a preset from your connected Hammer 88 keyboard's internal memory (RAM).

**To load a preset from your computer,** do one of the following:

- Click **File** and then click **Load Preset**.
- Press **Ctrl**+**O** (Windows) or **Control**+**O** (macOS).

After that, locate the desired preset file (**.h88**), and click **Open**.

**To retrieve a preset from your connected Hammer 88**, click **File** and then click **Retrieve Preset**. Alternatively, press **Ctrl**+**Shift**+**R** (Windows) or **Control**+**Shift**+**R** (macOS).

**Important**: Editing this preset will not affect the preset stored on your Hammer 88. See *Sending Presets* below to learn how to send the edited preset to your Hammer 88.

### Saving Presets

Saving a preset on your computer lets you edit it or send it to your Hammer 88 in the future. All MIDI assignments that you see in the editor will be saved in the preset.

**To save the preset,** do one of the following:

- Click **File** and then click **Save Preset**.
- Press **Ctrl**+**S** (Windows) or **Control**+**S** (macOS).

If this is the first time you are saving the preset, select the desired location, enter a file name, and click **Save**. The preset will be saved as an **.h88** file.

### Sending Presets
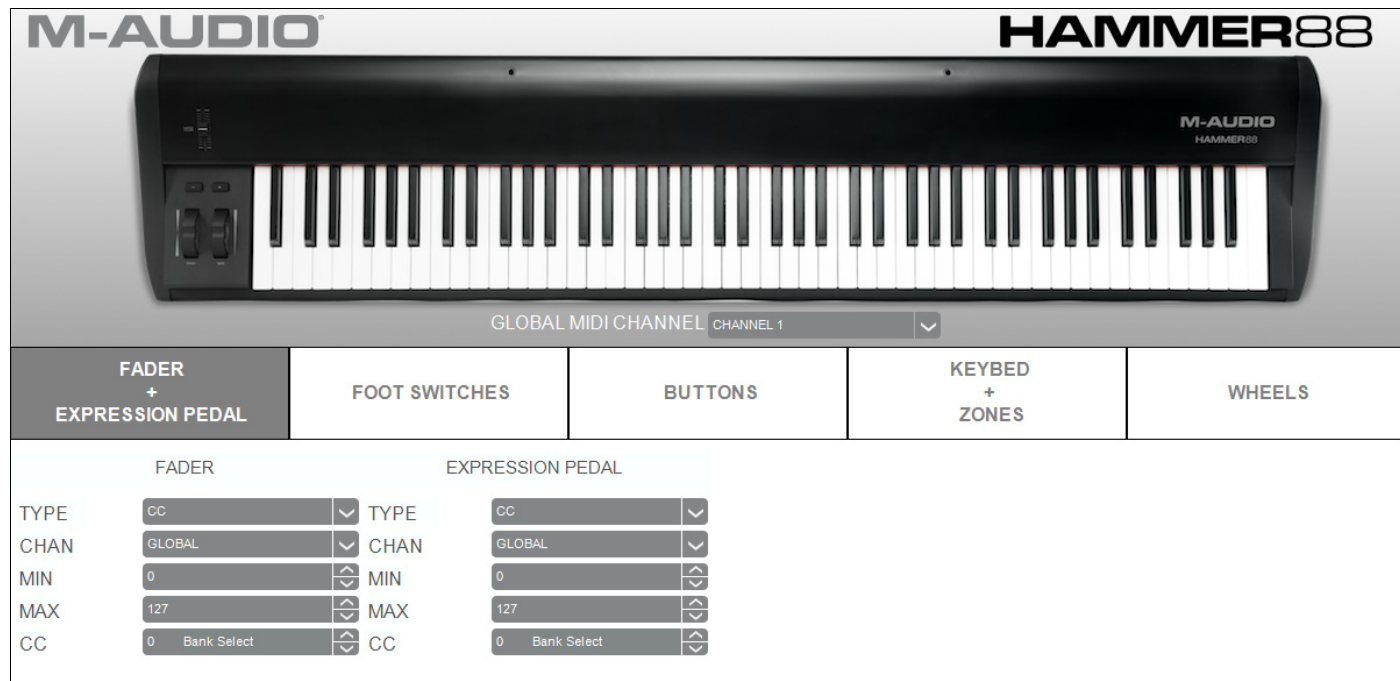
Sending a preset to your connected Hammer 88 lets you transfer the preset from the editor to your Hammer 88 keyboard's internal memory (RAM). All MIDI assignments that you see in the editor will be sent to your Hammer 88.

**To send a preset to your connected Hammer 88**:

1. Click **File** and then click **Send Preset**. Alternatively, press **Ctrl**+**Shift**+**S** (Windows) or **Control**+**Shift**+**S** (macOS).
2. Click **Send** to confirm your choice, or click the **X** in the upper-right corner to close the window and cancel the operation. (Sending the preset will overwrite the preset on your Hammer 88.)

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## Editing the Controls

### Overview



The upper part of the window is a graphical representation of your Hammer 88 plus a menu that determines the "global" MIDI channel. When a type of control is not set use to a specific MIDI channel (e.g., Channel 1, Channel 2, etc.), then it will use the global MIDI channel.

>   **To set the global MIDI channel**, click the **Global MIDI Channel** menu, and select **Omni** (all channels) or one of **Channels 1–16**.

The lower part of the window is the **control panel**, which shows the current parameters of the selected Hammer 88 control. The button for the currently selected type of control will be highlighted.

>   **To show and edit the parameters for a control on your Hammer 88**, click one of the five buttons in the middle of the window.

Click one of the types of controls to jump to that section of this user guide:

>   *Fader + Expression Pedal*

>   *Foot Switches*

>   *Buttons*

>   *Keybed + Zones*

>   *Wheels*

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**To use a drop-down menu,** click it to reveal the menu options, and then click an option to select it.

| TYPE | PROGRAM ⌄ |
|---|---|
| | OCTAVE |
| | PROGRAM |
| | PROGRAM LATCH |
| | PROGRAM INC/DEC |
| | CC ABSOLUTE |
| | CC LATCH |
| | CC INC/DEC |
| | MMC |
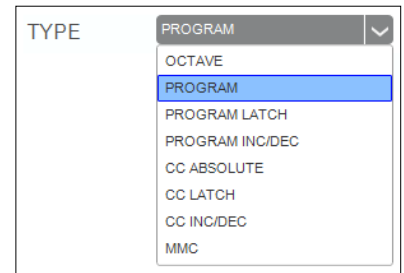
**To use a value field,** do any of the following:

- Click it and enter a number (**0–127**).

- Click the up (∧) or down (∨) arrows next to the field.

- Click it and then use your computer's up (⬆) or down (⬇) keys.

PROGRAM  127

**To use a checkbox,** click it to check (enable) or uncheck (disable) it. Enabling or disabling checkboxes may reveal or hide additional parameters that you can edit.

ZONE 1 ☑    ZONE 1 ☐

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## Fader + Expression Pedal

Click **Fader** + **Expression Pedal** to set the MIDI assignments for the **fader** and **expression pedal** on your Hammer 88.

Click the **Type** menu and select one of the following options. The parameters below will depend on your selection.

- **Aftertouch**: The fader or pedal will send aftertouch messages within the specified range when you move it. See *Aftertouch* to learn about the available settings.

- **CC**: The fader or pedal will send values within the specified range for a specific controller change (CC) message when you move it. See *CC* to learn about the available settings.

- **Pitch Bend**: The fader or pedal will send pitch-bend information within the specified range when you move it. See *Pitch Bend* to learn about the available settings.

## Aftertouch

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | FADER | | EXPRESSION PEDAL | |
|---|---|---|---|---|
| TYPE | AFTERTOUCH | TYPE | AFTERTOUCH | |
| CHAN | GLOBAL | CHAN | GLOBAL | |
| MIN | 0 | MIN | 0 | |
| MAX | 127 | MAX | 127 | |

When set to **Aftertouch**, the fader or pedal will send aftertouch messages within the specified range when you move it. These are the available parameters:

**Chan**: The fader or pedal will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Min**: This will be the lowest value that the fader or pedal can send (**0–127**).

**Max**: This will be the highest value that the fader or pedal can send (**0–127**).

## CC

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | FADER | | EXPRESSION PEDAL | |
|---|---|---|---|---|
| TYPE | CC | TYPE | CC | |
| CHAN | GLOBAL | CHAN | GLOBAL | |
| MIN | 0 | MIN | 0 | |
| MAX | 127 | MAX | 127 | |
| CC | 0    Bank Select | CC | 0    Bank Select | |

When set to **CC**, the fader or pedal will send values within the specified range for a specific controller change (CC) message when you move it. These are the available parameters:

**Chan**: The fader or pedal will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Min**: This will be the lowest value that the fader or pedal can send (**0–127**).

**Max**: This will be the highest value that the fader or pedal can send (**0–127**).

**CC**: The fader or pedal will send its MIDI messages using this CC number (**0–127**).

## Pitch Bend

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | FADER | | EXPRESSION PEDAL | |
|---|---|---|---|---|
| TYPE | PITCH BEND | TYPE | PITCH BEND | |
| CHAN | GLOBAL | CHAN | GLOBAL | |
| MIN | 0 | MIN | 0 | |
| MAX | 127 | MAX | 127 | |

When set to **Pitch Bend**, the fader or pedal will send pitch-bend information within the specified range when you move it. These are the available parameters:

**Chan**: The fader or pedal will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Min**: This will be the lowest value that the fader or pedal can send (**0–127**).

**Max**: This will be the highest value that the fader or pedal can send (**0–127**).

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## Foot Switches

Click **Foot Switches** to set the MIDI assignments for the **sustain pedal** and Footswitch 2 (**FS2**) on your Hammer 88.

Click the **Type** menu and select one of the following options. The parameters below will depend on your selection.

- **Note**: The sustain pedal or Footswitch 2 will send a MIDI note message when you press it and stop the note when you release it ("momentary" behavior). See *Note* to learn about the available settings.

- **Note Latch**: The sustain pedal or Footswitch 2 will send a MIDI note message when you press it and stop the note when you press it a second time ("latching" or "toggle" behavior). See *Note Latch* to learn about the available settings.

- **Program**: The sustain pedal or Footswitch 2 will send a combined program number, Bank MSB, and Bank LSB number. This can be useful for selecting a preset from a specific bank of a virtual instrument or synthesizer (the instrument or synthesizer must support these messages). See *Program* to learn about the available settings.

- **Program Latch**: The sustain pedal or Footswitch 2 will send a program number when you press it and send a different program number when you press it a second time. This can be useful for switching between two presets on a virtual instrument or synthesizer (the instrument or synthesizer must support these messages). See *Program Latch* to learn about the available settings.

- **Program Inc**: The sustain pedal or Footswitch 2 will increment the program number by **1** each time you press it. After it reaches its highest program, it will "wrap around" and start again at its lowest program. In other words, pressing the sustain pedal or Footswitch 2 will ascend (and cycle) through its entire range of programs by increments of 1. See *Program Inc* to learn about the available settings.

- **Program Dec**: The sustain pedal or Footswitch 2 will decrement the program number by **1** each time you press it. After it reaches its lowest program, it will "wrap around" and start again at its highest program. In other words, pressing the sustain pedal or Footswitch 2 will descend (and cycle) through its entire range of programs by increments of 1. See *Program Dec* to learn about the available settings.

- **CC Absolute**: The sustain pedal or Footswitch 2 will send a CC message with one value when you press it and another value when you release it. The values will alternate with each press. See *CC Absolute* to learn about the available settings.

- **CC Latch**: The sustain pedal or Footswitch 2 will send a CC message with one value when you press it and send a different value when you press it a second time ("latching" or "toggle" behavior). See *CC Latch* to learn about the available settings.

- **CC Inc**: The sustain pedal or Footswitch 2 will increment the CC number by **1** each time you press it. After it reaches its highest CC value, it will "wrap around" and start again at its lowest number. In other words, pressing the sustain pedal or Footswitch 2 will ascend (and cycle) through its entire range by increments of 1. See *CC Inc* to learn about the available settings.

- **CC Dec**: The sustain pedal or Footswitch 2 will decrement the CC number by **1** each time you press it. After it reaches its lowest CC value, it will "wrap around" and start again at its highest number. In other words, pressing the sustain pedal or Footswitch 2 will descend (and cycle) through its entire range by increments of 1. See *CC Dec* to learn about the available settings.

- **MMC**: The sustain pedal or Footswitch 2 will send a MMC (MIDI Machine Control) message. MMC is a transport control protocol that is used to remotely control some recording hardware and DAWs. See *MMC* to learn about the available settings.

## Note

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | SUSTAIN | | FS2 | |
|---|---|---|---|---|
| TYPE | NOTE ▾ | TYPE | NOTE ▾ | |
| CHAN | GLOBAL ▾ | CHAN | GLOBAL ▾ | |
| NOTE | 0    C (-1) ▴▾ | NOTE | 0    C (-1) ▴▾ | |
| ON VEL: | 127 ▴▾ | ON VEL: | 127 ▴▾ | |
| OFF VEL: | 0 ▴▾ | OFF VEL: | 0 ▴▾ | |

When set to **Note**, the sustain pedal or Footswitch 2 will send a MIDI note message when you press it and stop the note when you release it ("momentary" behavior). These are the available parameters:

**Chan**: The sustain pedal or Footswitch 2 will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Note**: The sustain pedal or Footswitch 2 will send this MIDI note number when you press it.

**On Vel**: The sustain pedal or Footswitch 2 will send the MIDI note number with this velocity when you press it to turn it on.

**Off Vel**: The sustain pedal or Footswitch 2 will send the MIDI note number with this velocity when you release it to turn it off. This value will usually be **0** (to turn the note off).

## Note Latch

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | SUSTAIN | | FS2 | |
|---|---|---|---|---|
| TYPE | NOTE LATCH ▾ | TYPE | NOTE LATCH ▾ | |
| CHAN | GLOBAL ▾ | CHAN | GLOBAL ▾ | |
| NOTE | 0    C (-1) ▴▾ | NOTE | 0    C (-1) ▴▾ | |
| ON VEL: | 127 ▴▾ | ON VEL: | 127 ▴▾ | |
| OFF VEL: | 0 ▴▾ | OFF VEL: | 0 ▴▾ | |

When set to **Note Latch**, the sustain pedal or Footswitch 2 will send a MIDI note message when you press it and stop the note when you press it a second time ("latching" or "toggle" behavior). These are the available parameters:

**Chan**: The sustain pedal or Footswitch 2 will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Note**: The sustain pedal or Footswitch 2 will send this MIDI note number when you press it.

**On Vel**: The sustain pedal or Footswitch 2 will send the MIDI note number with this velocity when you press it to turn it on.

**Off Vel**: The sustain pedal or Footswitch 2 will send the MIDI note number with this velocity when you press it to turn it off. This value will usually be **0** (to turn the note off).

## Program

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

|  | SUSTAIN |  | FS2 |
|---|---|---|---|
| TYPE | PROGRAM | TYPE | PROGRAM |
| CHAN | GLOBAL | CHAN | GLOBAL |
| PROGRAM | 1 | PROGRAM | 1 |
| MSB | 127 | MSB | 127 |
| LSB | 1 | LSB | 1 |

When set to **Program**, the sustain pedal or Footswitch 2 will send a combined program number, Bank MSB, and Bank LSB number. This can be useful for selecting a preset from a specific bank of a virtual instrument or synthesizer (the instrument or synthesizer must support these messages). These are the available parameters:

**Chan**: The sustain pedal or Footswitch 2 will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Program**: The sustain pedal or Footswitch 2 will send this program number when you press it.

**MSB**: The sustain pedal or Footswitch 2 will send this Bank MSB (Most Significant Byte) number when you press it.

**LSB**: The sustain pedal or Footswitch 2 will send this Bank LSB (Least Significant Byte) number when you press it.

## Program Latch

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

|  | SUSTAIN |  | FS2 |
|---|---|---|---|
| TYPE | PROGRAM LATCH | TYPE | PROGRAM LATCH |
| CHAN | GLOBAL | CHAN | GLOBAL |
| PROGRAM 1 | 1 | PROGRAM 1 | 1 |
| PROGRAM 2 | 127 | PROGRAM 2 | 127 |

When set to **Program Latch**, the sustain pedal or Footswitch 2 will send a program number when you press it and send a different program number when you press it a second time ("latching" or "toggle" behavior). This can be useful for switching between two presets on a virtual instrument or synthesizer (the instrument or synthesizer must support these messages). These are the available parameters:

**Chan**: The sustain pedal or Footswitch 2 will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Program 1**: The sustain pedal or Footswitch 2 will send this program number when you press it the first time.

**Program 2**: The sustain pedal or Footswitch 2 will send this program number when you press it the second time.

## Program Inc

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | SUSTAIN | | FS2 | |
|---|---|---|---|---|
| TYPE | PROGRAM INC | TYPE | PROGRAM INC | |
| CHAN | GLOBAL | CHAN | GLOBAL | |
| MIN | 1 | MIN | 1 | |
| MAX | 127 | MAX | 127 | |

When set to **Program Inc**, the sustain pedal or Footswitch 2 will increment the program number by **1** each time you press it. After it reaches its highest program, it will "wrap around" and start again at its lowest program. In other words, pressing the sustain pedal or Footswitch 2 will ascend (and cycle) through its entire range of programs by increments of 1. These are the available parameters:

**Chan**: The sustain pedal or Footswitch 2 will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Min**: This will be the lowest value that the sustain pedal or Footswitch 2 can send (**0–127**).

**Max**: This will be the highest value that the sustain pedal or Footswitch 2 can send (**0–127**).

## Program Dec

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | SUSTAIN | | FS2 | |
|---|---|---|---|---|
| TYPE | PROGRAM INC | TYPE | PROGRAM INC | |
| CHAN | GLOBAL | CHAN | GLOBAL | |
| MIN | 1 | MIN | 1 | |
| MAX | 127 | MAX | 127 | |

When set to **Program Dec**, the sustain pedal or Footswitch 2 will decrement the program number by **1** each time you press it. After it reaches its lowest program, it will "wrap around" and start again at its highest program. In other words, pressing the sustain pedal or Footswitch 2 will descend (and cycle) through its entire range of programs by increments of 1. These are the available parameters:

**Chan**: The sustain pedal or Footswitch 2 will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Min**: This will be the lowest value that the sustain pedal or Footswitch 2 can send (**0–127**).

**Max**: This will be the highest value that the sustain pedal or Footswitch 2 can send (**0–127**).

## CC Absolute

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | SUSTAIN | | FS2 | |
|---|---|---|---|---|
| TYPE | CC ABSOLUTE | TYPE | CC ABSOLUTE | |
| CHAN | GLOBAL | CHAN | GLOBAL | |
| CC | 0    Bank Select | CC | 0    Bank Select | |
| MIN | 0 | MIN | 0 | |
| MAX | 127 | MAX | 127 | |

When set to **CC Absolute**, the sustain pedal or Footswitch 2 will send a CC message with one value when you press it and another value when you release it. These are the available parameters:

**Chan**: The sustain pedal or Footswitch 2 will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**CC**: The sustain pedal or Footswitch 2 will send its MIDI messages using this CC number.

**Min**: The sustain pedal or Footswitch 2 will send this value when you release it.

**Max**: The sustain pedal or Footswitch 2 will send this value when you press it.

## CC Latch

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | SUSTAIN | | FS2 | |
|---|---|---|---|---|
| TYPE | CC LATCH | TYPE | CC LATCH | |
| CHAN | GLOBAL | CHAN | GLOBAL | |
| CC | 0    Bank Select | CC | 0    Bank Select | |
| MIN | 0 | MIN | 0 | |
| MAX | 127 | MAX | 127 | |

When set to **CC Latch**, the sustain pedal or Footswitch 2 will send a CC message with one value when you press it and send a different value when you press it a second time ("latching" or "toggle" behavior). These are the available parameters:

**Chan**: The sustain pedal or Footswitch 2 will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**CC**: The sustain pedal or Footswitch 2 will send its MIDI messages using this CC number.

**Min**: The sustain pedal or Footswitch 2 will send this value when you release it.

**Max**: The sustain pedal or Footswitch 2 will send this value when you press it.

## CC Inc

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | SUSTAIN | | FS2 | |
|---|---|---|---|---|
| TYPE | CC INC | TYPE | CC INC | |
| CHAN | GLOBAL | CHAN | GLOBAL | |
| CC | 0    Bank Select | CC | 0    Bank Select | |
| MIN | 0 | MIN | 0 | |
| MAX | 127 | MAX | 127 | |

When set to **CC Inc**, the sustain pedal or Footswitch 2 will increment the CC number by **1** each time you press it. After it reaches its highest CC number, it will "wrap around" and start again at its lowest number. In other words, pressing the sustain pedal or Footswitch 2 will ascend (and cycle) through its entire range by increments of 1. These are the available parameters:

**Chan**: The sustain pedal or Footswitch 2 will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**CC**: The sustain pedal or Footswitch 2 will send its MIDI messages using this CC number.

**Min**: This will be the lowest value that the sustain pedal or Footswitch 2 can send (**0–127**).

**Max**: This will be the highest value that the sustain pedal or Footswitch 2 can send (**0–127**).

## CC Dec

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | SUSTAIN | | FS2 | |
|---|---|---|---|---|
| TYPE | CC DEC | TYPE | CC DEC | |
| CHAN | GLOBAL | CHAN | GLOBAL | |
| CC | 0    Bank Select | CC | 0    Bank Select | |
| MIN | 0 | MIN | 0 | |
| MAX | 127 | MAX | 127 | |

When set to **CC Dec**, the sustain pedal or Footswitch 2 will decrement the CC number by **1** each time you press it. After it reaches its lowest CC number, it will "wrap around" and start again at its highest number. In other words, pressing the sustain pedal or Footswitch 2 will descend (and cycle) through its entire range by increments of 1. These are the available parameters:

**Chan**: The sustain pedal or Footswitch 2 will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**CC**: The sustain pedal or Footswitch 2 will send its MIDI messages using this CC number.

**Min**: This will be the lowest value that the sustain pedal or Footswitch 2 can send (**0–127**).

**Max**: This will be the highest value that the sustain pedal or Footswitch 2 can send (**0–127**).

## MMC

| FADER<br>+<br>EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED<br>+<br>ZONES | WHEELS |
|---|---|---|---|---|

| | SUSTAIN | | | FS2 | |
|---|---|---|---|---|---|
| TYPE | MMC | ⌄ | TYPE | MMC | ⌄ |
| CHAN | GLOBAL | ⌄ | CHAN | GLOBAL | ⌄ |
| MMC | STOP | ⌄ | MMC | STOP | ⌄ |

When set to **MMC**, the sustain pedal or Footswitch 2 will send a MMC (MIDI Machine Control) message. MMC is a transport control protocol that is used to remotely control some recording hardware and DAWs. These are the available parameters:

**Chan**: The sustain pedal or Footswitch 2 will send its messages over this channel. Select the global channel (**Global**) or a specific channel (**Channel 1–16**).

**MMC**: The sustain pedal or Footswitch 2 will send this MMC message when you press it: **Stop** or **Play**.

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## Buttons

Click **Buttons** to set the MIDI assignments for the **–** and **+** buttons on your Hammer 88.

Click the **Type** menu and select one of the following options. The parameters below will depend on your selection.

- **Octave**: The **–** and **+** buttons will shift the octave or transposition of the keybed down or up (respectively). See *Octave* to learn about the available settings.

- **Program**: The **–** and **+** buttons will each send a combined program number, Bank MSB, and Bank LSB number. This can be useful for selecting a preset from a specific bank of a virtual instrument or synthesizer (the instrument or synthesizer must support these messages). See *Program* to learn about the available settings.

- **Program Latch**: The **–** and **+** buttons will send a program number when you press it and send a different program number when you press it a second time. This can be useful for switching between two presets on a virtual instrument or synthesizer (the instrument or synthesizer must support these messages). See *Program Latch* to learn about the available settings.

- **Program Inc**/**Dec**: The **–** and **+** buttons will increment and decrement the program number (respectively) by **1** each time you press them. After it reaches its lowest or highest program, it will "wrap around" and start again at its highest or lowest program (respectively). In other words, pressing the **–** and **+** buttons will cycle through its entire range of programs by increments of 1. See *Program Inc*/*Dec* to learn about the available settings.

- **CC Absolute**: The **–** and **+** buttons will send a CC message with one value when you press it and another value when you release it. See *CC Absolute* to learn about the available settings.

- **CC Latch**: The **–** and **+** buttons will send a CC message with one value when you press it and send a different value when you press it a second time ("latching" or "toggle" behavior). See *CC Latch* to learn about the available settings.

- **CC Inc**/**Dec**: The **–** and **+** buttons will increment and decrement the CC number (respectively) by **1** each time you press them. After it reaches its lowest or highest value, it will "wrap around" and start again at its highest or lowest value (respectively). In other words, pressing the **–** and **+** buttons cycle through its entire range by increments of 1. See *CC Inc*/*Dec* to learn about the available settings.

- **MMC**: The **–** and **+** buttons will send a MMC (MIDI Machine Control) message. MMC is a transport control protocol that is used to remotely control some recording hardware and DAWs. See *MMC* to learn about the available settings.

## Octave

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|
| | | TYPE OCTAVE ⌄ | | |

When set to **Octave**, the **–** and **+** buttons will shift the octave of the keybed down or up (respectively) or will transpose the keys up or down a semitone.

Each button will light up **dim red** to indicate a shift of one octave in either direction or **bright red** for a shift of two octaves in either direction.

See the chart below to learn how the buttons indicate each transposition.

There are no editable parameters for this type.

| Semitones | Color | Brightness |
|---|---|---|
| +1 | Green | Dim 1 |
| +2 | Green | Dim 2 |
| +3 | Green | Fully lit |
| +4 | Blue | Dim 1 |
| +5 | Blue | Dim 2 |
| +6 | Blue | Fully lit |
| +7 | White | Dim 1 |
| +8 | White | Dim 2 |
| +9 | White | Fully lit |
| +10 | Yellow | Dim 1 |
| +11 | Yellow | Dim 2 |
| +12 | Yellow | Fully lit |

| Semitones | Color | Brightness |
|---|---|---|
| -1 | Green | Dim 1 |
| -2 | Green | Dim 2 |
| -3 | Green | Fully lit |
| -4 | Blue | Dim 1 |
| -5 | Blue | Dim 2 |
| -6 | Blue | Fully lit |
| -7 | White | Dim 1 |
| -8 | White | Dim 2 |
| -9 | White | Fully lit |
| -10 | Yellow | Dim 1 |
| -11 | Yellow | Dim 2 |
| -12 | Yellow | Fully lit |

## Program

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | | | TYPE | PROGRAM ⌄ | | |
|---|---|---|---|---|---|---|
| | **- BUTTON** | | | | **+ BUTTON** | |
| CHAN | GLOBAL ⌄ | | | CHAN | GLOBAL ⌄ | |
| PROGRAM | 1 | | | PROGRAM | 127 | |
| MSB | 1 | | | MSB | 127 | |
| LSB | 127 | | | LSB | 1 | |

When set to **Program**, the **–** and **+** buttons will each send a combined program number, Bank MSB, and Bank LSB number. This can be useful for selecting a preset from a specific bank of a virtual instrument or synthesizer (the instrument or synthesizer must support these messages).

The buttons will light **white** temporarily when pressed.

These are the available parameters:

**Chan**: The **–** and **+** buttons will send their messages over these channels. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Program**: The **–** and **+** buttons will send these program numbers when you press them.

**MSB**: The **–** and **+** buttons will send these Bank MSB (Most Significant Byte) numbers when you press them.

**LSB**: The **–** and **+** buttons will send these Bank LSB (Least Significant Byte) numbers when you press them.

## Program Latch

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | | | TYPE | PROGRAM LATCH ⌄ | | |
|---|---|---|---|---|---|---|
| | **- BUTTON** | | | | **+ BUTTON** | |
| CHAN | GLOBAL ⌄ | | | CHAN | GLOBAL ⌄ | |
| PROGRAM 1 | 1 | | | PROGRAM 1 | 127 | |
| PROGRAM 2 | 127 | | | PROGRAM 2 | 127 | |

When set to **Program Latch**, the **–** and **+** buttons will each send a program number when you press it and send a different program number when you press it a second time ("latching" or "toggle" behavior). This can be useful for switching between four presets on a virtual instrument or synthesizer (the instrument or synthesizer must support these messages).

The buttons will light up in the following way:

When the **–** button's first program is selected, the **–** button will be **white** and **dimly lit**.

When the **–** button's second program is selected, the **–** button will be **white** and **brightly lit**.

When the **+** button's first program is selected, the **+** button will be **white** and **dimly lit**.

When the **+** button's second program is selected, the **+** button will be **white** and **brightly lit**.

These are the available parameters:

**Chan**: The **–** and **+** buttons will send their messages over these channels. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Program 1**: The **–** and **+** buttons will send these program numbers when you press them the first time.

**Program 2**: The **–** and **+** buttons will send these program numbers when you press them the second time.

## Program Inc/Dec

| FADER<br>+<br>EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED<br>+<br>ZONES | WHEELS |
|---|---|---|---|---|

TYPE  [ PROGRAM INC/DEC ▼ ]

-  + BUTTONS

CHAN  [ GLOBAL ▼ ]
MIN   [ 0 ▲▼ ]
MAX   [ 127 ▲▼ ]

When set to **Program Inc/Dec**, the **–** and **+** buttons will increment and decrement the program number (respectively) by **1** each time you press them. After it reaches its lowest or highest program, it will "wrap around" and start again at its highest or lowest program (respectively). In other words, pressing the **–** and **+** buttons will cycle through its entire range of programs by increments of 1.

Each of the buttons will light up **white** briefly when pressed.

These are the available parameters:

**Chan**: The **–** and **+** buttons will send their messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Min**: This will be the lowest value that the **–** and **+** buttons can send (**0–127**).

**Max**: This will be the highest value that the **–** and **+** buttons can send (**0–127**).

## CC Absolute

| FADER<br>+<br>EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED<br>+<br>ZONES | WHEELS |
|---|---|---|---|---|

TYPE  [ CC ABSOLUTE ▼ ]

- BUTTON

CHAN  [ GLOBAL ▼ ]
CC    [ 0    Bank Select ▲▼ ]
MIN   [ 0 ▲▼ ]
MAX   [ 127 ▲▼ ]

+ BUTTON

CHAN  [ GLOBAL ▼ ]
CC    [ 0    Bank Select ▲▼ ]
MIN   [ 0 ▲▼ ]
MAX   [ 127 ▲▼ ]

When set to **CC Absolute**, the **–** and **+** buttons will each send a CC message with one value when you press it and another value when you release it.

Each button will light up **blue** when pressed.

These are the available parameters:

**Chan**: The **–** and **+** buttons will send their messages over these channels. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**CC**: The **–** and **+** buttons will send their MIDI messages using these CC numbers.

**Min**: The **–** and **+** buttons will send these values when you release them.

**Max**: The **–** and **+** buttons will send these values when you press them.

## CC Latch

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | | TYPE | CC LATCH ▾ | | |
|---|---|---|---|---|---|

| | – BUTTON | | | + BUTTON | |
|---|---|---|---|---|---|
| CHAN | GLOBAL ▾ | | CHAN | GLOBAL ▾ | |
| CC | 0    Bank Select | | CC | 0    Bank Select | |
| MIN | 0 | | MIN | 0 | |
| MAX | 127 | | MAX | 127 | |

When set to **CC Latch**, the **–** and **+** buttons will each send a CC message with one value when you press it and send a different value when you press it a second time ("latching" or "toggle" behavior).

The buttons will light up in the following way:

When the **–** button's first program is selected, the **–** button will be **blue** and **dimly lit**.

When the **–** button's second program is selected, the **–** button will be **blue** and **brightly lit**.

When the **+** button's first program is selected, the **+** button will be **blue** and **dimly lit**.

When the **+** button's second program is selected, the **+** button will be **blue** and **brightly lit**.

These are the available parameters:

**Chan**: The **–** and **+** buttons will send their messages over these channels. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**CC**: The **–** and **+** buttons will send their MIDI messages using these CC numbers.

**Min**: The **–** and **+** buttons will send these values when you press them the first time.

**Max**: The **–** and **+** buttons will send these values when you press them the second time.

## CC Inc/Dec

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| | | TYPE | CC INC/DEC ▾ | | |
|---|---|---|---|---|---|

| | | | – + BUTTONS | |
|---|---|---|---|---|
| | | CHAN | GLOBAL ▾ | |
| | | CC | 0    Bank Select | |
| | | MIN | 0 | |
| | | MAX | 127 | |

When set to **CC Inc/Dec**, the **–** and **+** buttons will increment and decrement the CC number (respectively) by **1** each time you press them. After it reaches its lowest or highest value, it will "wrap around" and start again at its highest or lowest value (respectively). In other words, pressing the **–** and **+** buttons cycle through its entire range by increments of 1.

Each of the buttons will light up **blue** briefly when pressed.

These are the available parameters:

**Chan**: The **–** and **+** buttons will send their messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**CC**: The **–** and **+** buttons will send their MIDI messages using this CC number.

**Min**: This will be the lowest value that the **–** and **+** buttons can send (**0–127**).

**Max**: This will be the highest value that the **–** and **+** buttons can send (**0–127**).

## MMC

| FADER<br>+<br>EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED<br>+<br>ZONES | WHEELS |
|---|---|---|---|---|
| TYPE | MMC ⌄ | | | |

When set to **MMC**, the **–** and **+** buttons will send MMC (MIDI Machine Control) message. MMC is a transport control protocol that is used to remotely control some recording hardware and DAWs.

The **–** button will send a **Stop** message, and the **+** button will send a **Play** message.

The buttons will be lit **red** while stopped and **green** while playing.

**M-AUDIO**

## Keybed & Zones

The **keybed** (the piano keys) on your Hammer 88 can be divided into 1–4 "zones." When a zone is active (i.e., when its checkbox is checked), it can send its controls' MIDI messages over its own MIDI channel. Zones are independent and can overlap each other, as well.

**Tip**: This feature is great for dividing your Hammer 88 between different virtual instruments or synthesizers. For example, you can create two zones, each using a different MIDI channel, and play and control two virtual instruments simultaneously—one with each half of the keys.

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

**KEYBED**

OCTAVE `0`    TRANSPOSE `0`    VELOCITY CURVE `HARD`

| ZONE 1 ☑ | | ZONE 2 ☑ | | ZONE 3 ☑ | | ZONE 4 ☐ |
|---|---|---|---|---|---|---|
| CHAN | `Global` | CHAN | `Channel 2` | CHAN | `Channel 2` | |
| FIRST | `1    A (0)` | FIRST | `1    A (0)` | FIRST | `51    B (4)` | |
| LAST | `88    C (8)` | LAST | `51    B (4)` | LAST | `88    C (8)` | |
| OCTAVE | `0` | OCTAVE | `0` | OCTAVE | `0` | |
| TRANSPOSE | `0` | TRANSPOSE | `0` | TRANSPOSE | `0` | |

Click each of the **Zone 1–4** checkboxes to enable or disable each zone. Use each zone's parameters to set the MIDI assignments for it on your Hammer 88. All 4 zones have the same parameters, which operate independently.

**Note**: If any keys on the keybed are **not** assigned to a zone, they will continue to send their messages over the global MIDI channel and use the **Octave** and **Transpose** menu settings above the **Zone** checkboxes.

**Note**: Each zone's Octave and Transposition settings are independent from the keybed's Octave and Transposition, but all of these affect the note that a key sends out.

These are the available parameters for the entire keybed, which work in conjunction with any zone settings:

**Octave**: The keybed will send its notes using this octave shift (from its original position on the keybed) (**-6** to **+6**).

**Transpose**: The keybed will send its notes using this transposition (from its original position on the keybed) (**-12** to **+12**).

**Velocity Curve**: This setting determines how much force is required to generate a note with a specific velocity:

- **Hard**: The keybed will require a lot of force to generate high-velocity notes. This is the default setting as it creates the most realistic "feel" for a hammer-action keyboard like Hammer 88.

- **Soft 1** & **Soft 2**: The keybed will require little force to generate high-velocity notes. Use one of these settings if you want to play high-velocity notes more easily.

- **Linear**: This is a straight "linear curve"—the note generated will always be proportional to the amount of force used.

- **Fixed 64**, **Fixed 100** & **Fixed 127**: These settings "lock" all notes at a single velocity, regardless of how much force you use to play them. **127** is the maximum velocity. **64** is considered half-velocity.

These are the available parameters for each zone:

**Chan**: The zone will send its messages over this channel. Select the global channel (**Global**) or a specific channel (**Channel 1–16**).

**First**: This will be the lowest key of that zone (**1/A0 – 88/C8**).

**Last**: This will be the highest key of that zone (**1/A0 – 88/C8**).

**Octave**: The zone's keys will send their notes using this octave shift (from their original position on the keybed) (**-6** to **+6**).

**Transpose**: The zone's keys will send their notes using this transposition (from their original position on the keybed) (**-12** to **+12**).

## M-AUDIO

### Wheels

Click **Wheels** to set the MIDI assignments for the the **modulation wheel** (the left wheel) or the **pitch-bend wheel** (the right wheel) on your Hammer 88.

The **pitch-bend wheel** can send out pitch-bend information only, within the specified range when you move it. These are the available parameters:

**PITCH WHEEL**

| | |
|---|---|
| CHAN | GLOBAL |
| MIN | 0 |
| MAX | 127 |

**Chan**: The pitch-bend wheel will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**) or a specific channel (**Channel 1–16**).

**Min**: This will be the lowest value that the pitch-bend wheel can send (**0–127**).

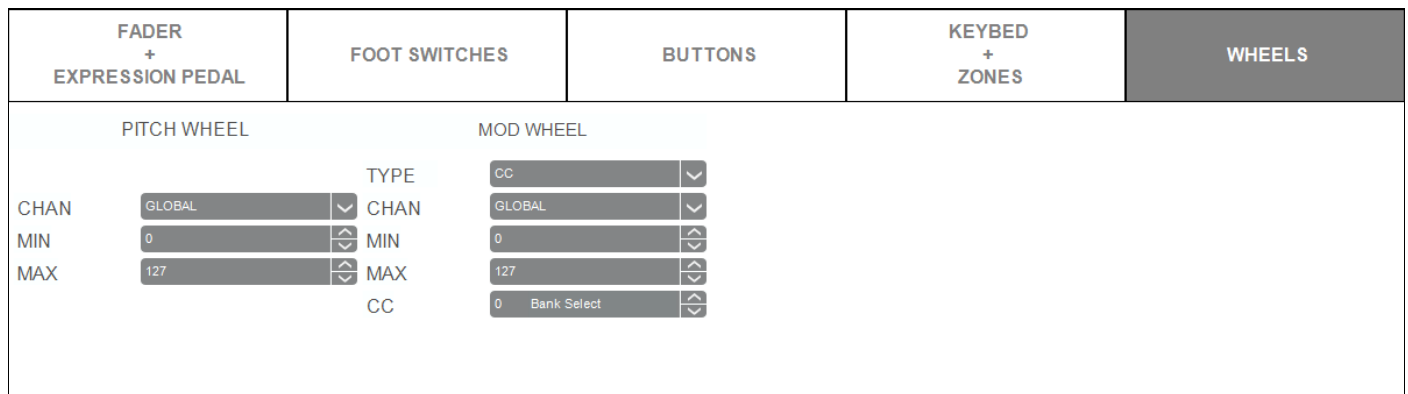**Max**: This will be the highest value that the pitch-bend wheel can send (**0–127**).
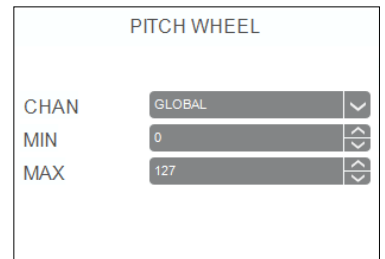
The **modulation wheel** can send aftertouch, CC, or pitch-bend messages.

Click the **Type** menu and select one of the following options. The parameters below will depend on your selection.

- **Aftertouch**: The modulation wheel will send aftertouch messages within the specified range when you move it. See *Aftertouch* to learn about the available settings.

- **CC**: The modulation wheel will send values within the specified range for a specific controller change (CC) message when you move it. See *CC* to learn about the available settings.

- **Pitch Bend**: The modulation wheel will send pitch-bend information within the specified range when you move it. See *Pitch Bend* to learn about the available settings.

### CC

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

**PITCH WHEEL**    **MOD WHEEL**

| | | | | |
|---|---|---|---|---|
| | | TYPE | CC | |
| CHAN | GLOBAL | CHAN | GLOBAL | |
| MIN | 0 | MIN | 0 | |
| MAX | 127 | MAX | 127 | |
| | | CC | 0    Bank Select | |

When set to **CC**, the modulation wheel will send values within the specified range for a specific controller change (CC) message when you move it. These are the available parameters:

**Chan**: The modulation wheel will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Min**: This will be the lowest value that the modulation wheel can send (**0–127**).

**Max**: This will be the highest value that the modulation wheel can send (**0–127**).

**CC**: The modulation wheel will send its MIDI messages using this CC number (**0–127**).

**M-AUDIO**

## Aftertouch

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| PITCH WHEEL | | | MOD WHEEL | |
|---|---|---|---|---|
| | | TYPE | AFTERTOUCH | ∨ |
| CHAN | GLOBAL ∨ | CHAN | GLOBAL | ∨ |
| MIN | 0 | MIN | 0 | |
| MAX | 127 | MAX | 127 | |

When set to **Aftertouch**, the modulation wheel will send aftertouch messages within the specified range when you move it. These are the available parameters:

**Chan**: The modulation wheel will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Min**: This will be the lowest value that the modulation wheel can send (**0–127**).

**Max**: This will be the highest value that the modulation wheel can send (**0–127**).

## Pitch Bend

| FADER + EXPRESSION PEDAL | FOOT SWITCHES | BUTTONS | KEYBED + ZONES | WHEELS |
|---|---|---|---|---|

| PITCH WHEEL | | | MOD WHEEL | |
|---|---|---|---|---|
| | | TYPE | PITCH BEND | ∨ |
| CHAN | GLOBAL ∨ | CHAN | GLOBAL | ∨ |
| MIN | 0 | MIN | 0 | |
| MAX | 127 | MAX | 127 | |

When set to **Pitch Bend**, the modulation wheel will send pitch-bend information within the specified range when you move it. These are the available parameters:

**Chan**: The modulation wheel will send its messages over this channel. Select the global channel (**Global**), all channels (**Omni**), or a specific channel (**Channel 1–16**).

**Min**: This will be the lowest value that the modulation wheel can send (**0–127**).

**Max**: This will be the highest value that the modulation wheel can send (**0–127**).

**M-AUDIO**

## Software Menus

### File

**Send Preset**  Select this to export the current settings from the Hammer 88 Editor to your connected Hammer 88 keyboard. Alternatively, press **Ctrl**+**Shift**+**S** (Windows) or **Control**+**Shift**+**S** (macOS).

**Retrieve Preset**  Select this to import the current settings from your connected Hammer 88 keyboard into the Hammer 88 Editor. Alternatively, press **Ctrl**+**Shift**+**R** (Windows) or **Control**+**Shift**+**R** (macOS).

**Load Preset**  Select this to locate and load a preset file (**.h88**) on your computer to the Hammer 88 Editor. Alternatively, press **Ctrl**+**O** (Windows) or **Control**+**O** (macOS).

**Save Preset**  Select this to save the Hammer 88 Editor's current settings to your computer as a preset file (**.h88**). Alternatively, press **Ctrl**+**S** (Windows) or **Control**+**S** (macOS).

**Exit**  Select this to close the Hammer 88 Editor.

**macOS users**: This option is in the **M-Audio Hammer 88 Preset Editor** menu.

### Help

**Open User Guide**  Select this to open this user guide.

**About**  Select this to view information about this version of the Hammer 88 Preset Editor.

**macOS users**: This option is in the **M-Audio Hammer 88 Preset Editor** menu.

**M-AUDIO**

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