

# HEADRUSH<sup>®</sup>

## **MX5**

**User Guide**  
(English)

Manual Version 1.5

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## Introduction

## Box Contents

HeadRush MX5

USB Cable

(2) 1/8" (3.5mm) to MIDI Adapters

Power Adapter

Software Download Card

Quickstart Guide

Safety & Warranty Manual

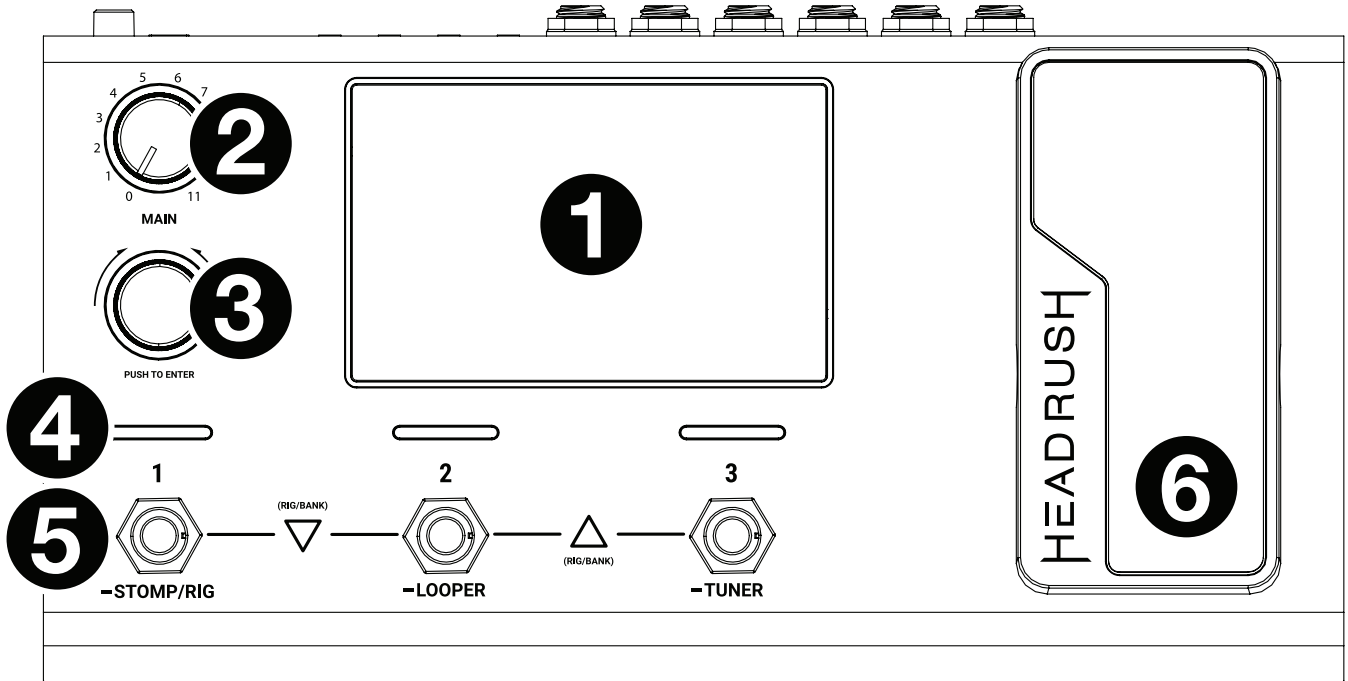
## Support

For the latest information about this product (documentation, technical specifications, system requirements, compatibility information, etc.) and product registration, visit [headrushfx.com](http://headrushfx.com).

For additional product support, visit [headrushfx.com/support](http://headrushfx.com/support).

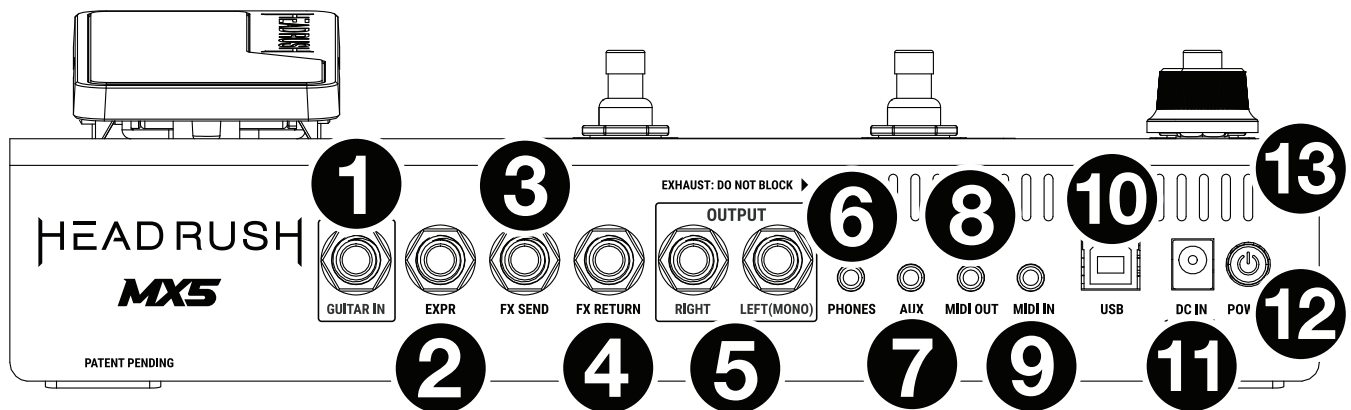
## Features

### Top Panel



1. **Display:** This full-color multi-touch display shows information relevant to HeadRush MX5's current operation. Touch the display (and use the hardware controls) to control the interface. See [Operation](#) to learn how it works.
2. **Main Volume:** Turn this knob to adjust the volume level of the **outputs**.
3. **Encoder:** Turn this encoder to scroll through the available menu options or adjust the parameter values of the selected field in the display. Push the encoder to confirm your selection.
4. **Footswitch Indicators:** These lights indicate whether the stomp, rig, or scene assigned to each footswitch is on (brightly lit) or off (dimly lit).
5. **Footswitches:** Press these footswitches to activate or deactivate the assigned model or scene, or to load the assigned rig.
6. **Expression Pedal:** Use this pedal to adjust the assigned parameter/parameters. See [Operation > Hardware Assign > Expression Pedal](#) for more information.

## Rear Panel

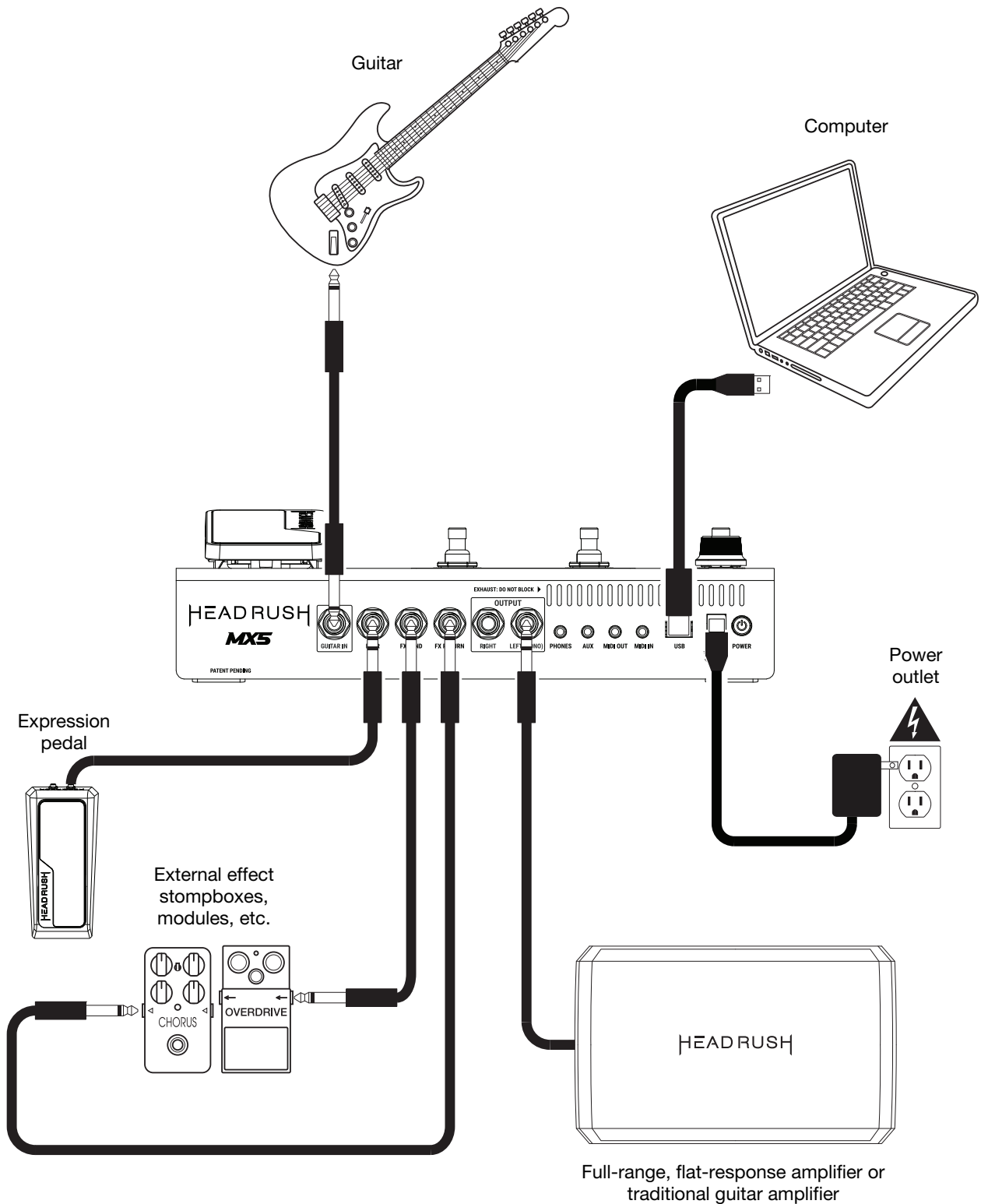


1. **Guitar Input** (1/4"/6.35 mm, mono): Connect your guitar to this input using a standard instrument cable.
2. **Expression Pedal Input** (1/4"/6.35 mm, TRS): Connect an optional additional expression pedal to this input using a standard 1/4" (6.35 mm) TRS cable.
3. **FX Send Output** (1/4"/6.35 mm, stereo): Connect this output to the input of another effects module, an effect pedal, or the effects loop return of an amplifier.
4. **FX Return Input** (1/4"/6.35 mm, stereo): Connect this input to the output of another effects module, an effect pedal, or the effects loop send of an amplifier.  
**Note:** You can set the FX Return Input to receive signal at rack level or stomp level (default) in the **Global Settings Menu**.
5. **Outputs** (1/4"/6.35 mm, balanced): Connect these outputs to the inputs of your amplifier, audio interface, etc. If you only need to use one output, use the one labeled **Left/Mono**.  
**Note:** You can set these outputs to send signal at amp level or line level (default) in the **Global Settings Menu**.
6. **Phones Output** (1/8"/3.5 mm, stereo): Connect standard 1/8" (3.5 mm) stereo headphones to this output.
7. **Aux Input** (1/8"/3.5 mm, stereo): Connect an optional audio source (e.g., smartphone, tablet, etc.) to this input using an 1/8"/3.5 mm stereo cable.
8. **MIDI Output** (1/8"/3.5 mm): Use the included 1/8"-to-MIDI adapter and a standard MIDI cable (not included) to connect this output to the MIDI input of an optional external MIDI device.
9. **MIDI Input** (1/8"/3.5 mm): Use the included 1/8"-to-MIDI adapter and a standard MIDI cable (not included) to connect this input to the MIDI output of an optional external MIDI device.  
**Important:** Do **not** connect audio devices (e.g., headphones, monitors, etc.) to the **MIDI Output** or **MIDI Input**. Use the included 1/8"-to-5-pin adapters to connect MIDI devices only.
10. **USB Port:** Connect this USB port to a computer using a standard USB cable. This connection allows HeadRush MX5 to send and receive the digital audio signal to and from your computer. You can also use this connection to import or export rigs, model presets, setlists and impulse responses.
11. **Power Input:** Connect this input to a power outlet using the included power adapter.
12. **Power Switch:** Press this button to turn HeadRush MX5's power on. Press and hold this button to turn HeadRush MX5's power off.
13. **Vent:** Make sure this vent is unobstructed while using HeadRush MX5.

## Setup

Items not listed under [Introduction > Box Contents](#) are sold separately.

**IMPORTANT!** In the **Global Settings Menu**, make sure you set the **Outputs** to send signal at amp level if you are using a traditional guitar amplifier, or line level (default) if you are using a full-range flat-response amplifier, mixer, PA speaker or audio interface.



## Operation

This chapter describes some of HeadRush MX5's basic functions.

## Main Screen

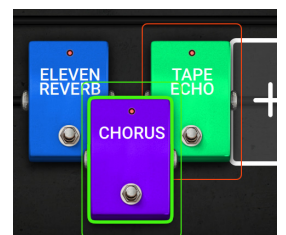
### Overview



## Basic Operations

**Important:** The sequence of models in your signal chain is not necessarily reflected in the footswitches. You can freely assign models to available footswitches without changing your signal chain at all—and vice versa. See [Hardware Assign](#) to learn about this.

**To assign a model (amp, cab, impulse response, or effect) to an empty slot,** tap it (+) and then use the list that appears. See [Rigs > Creating a New Rig](#) to learn about this.



**To rearrange the models in your signal chain,** tap and drag a model to another slot or between two other models (the ones after that position will shift one slot further down the signal chain).

**To activate or deactivate a model,** press the footswitch assigned to it, or tap the model and then tap the On/Off button that appears in the top right corner.



**To switch an amp and/or cab between a dual and single configuration,** tap the model and then tap the X 2 button that appears in the top right corner.

**To show a model's settings screen,** double-tap it.



# HEADRUSH

To load another rig (preset):

- Tap the name of the rig on the screen and then turn the **encoder**.
- Press **footswitches 1 and 2** (▽), or **footswitches 2 and 3** (△) simultaneously when MX5 is in Stomp Mode.
- Press a **footswitch** assigned to a preset when MX5 is in Rig Mode.
- Press a **footswitch** assigned to **Prev Rig** or **Next Rig** when MX5 is in Hybrid Mode.

To create a new rig, tap the ●●● button in the upper-right corner, and then tap **New Rig**.

To rename the current rig, double tap the rig name, or tap the ●●● button in the upper-right corner, and then tap **Edit Rig Name**.

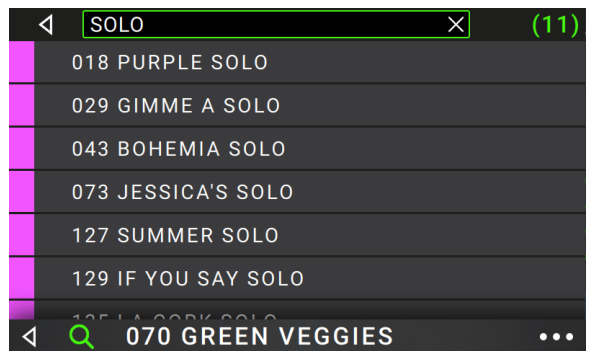
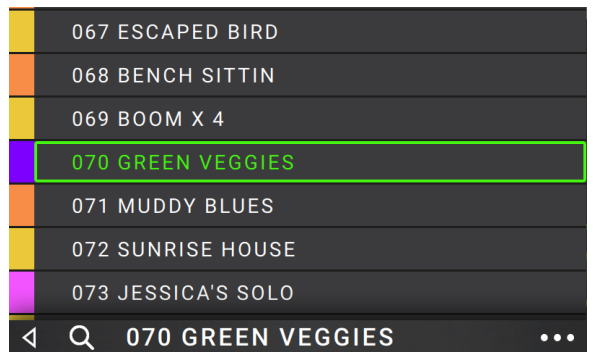
To delete the current rig, tap the ●●● button in the upper-right corner, and then tap **Delete Rig**, and then tap **Yes** to continue or **No** to cancel.

To show a list of available rigs on your HeadRush MX5, tap the rig name and drag downward. On this list you can tap a rig's name to load it.

To hide this list, tap the current rig name and drag upward.

**Note:** If you have not selected a setlist, all rigs on your HeadRush will be shown on this rig list. If you have selected a setlist, only the rigs from that setlist will appear on this rig list.

To search for a rig on your HeadRush, tap the **magnifying-glass icon** in the upper-left corner and use the virtual keyboard that appears to enter a search term (e.g., part of the rig name). The results will appear below. Tap a result to load that rig.



## Reverb/Delay Tail Spillover

The MX5 features two types of Reverb/Delay Tail Spillover:

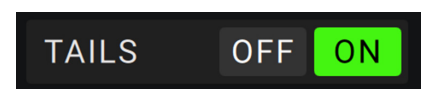
- If you have reverb and/or delay effect(s) active on your rig and then switch to a different rig, the effect(s) will continue to decay after switching to the second rig.
- If you have a reverb or delay effect active on your rig and then bypass this effect, it will continue to decay after it is bypassed.

To enable or disable this feature for the current rig, tap **Tail** on the **Main Screen**.



**Note:** This feature will not work if you are using the FX Loop or USB Audio features.


To enable or disable **Reverb/Delay Tail Spillover** for an individual effect, first double tap the effect on the **Main Screen**. Then, use the **Tails** parameter to toggle the feature **On** or **Off**.



**Note:** Adjusting this parameter will not impact the Reverb/Delay Tail Spillover setting for the whole rig.

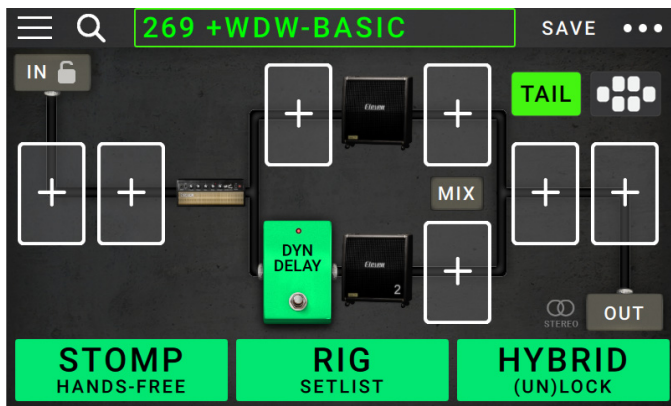
## Signal Path

You can easily reconfigure the path of your signal chain to split, which will create more complex routings.

To reconfigure the signal path, tap  toward the top right of the main screen. The icon will change to match one three possible signal paths (as shown below).

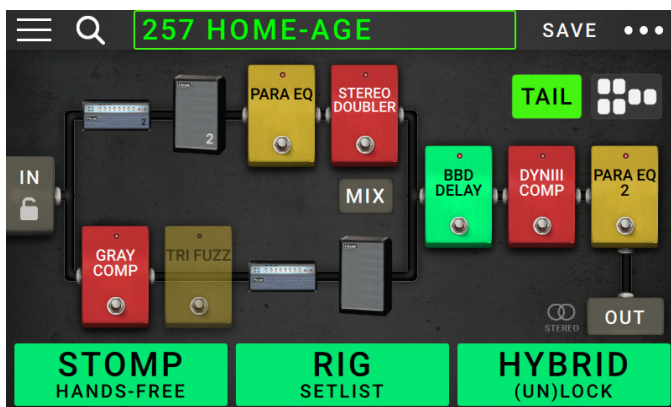


This straight signal path is the default and the most common.



This signal path splits in the middle and rejoins near the end. This configuration is useful if you want to use two types of effects (or chains of effects) but want to keep their signals separate.

See [Adjusting Settings > Parameters > Mix](#) to learn how to mix the split paths together.



This signal path splits immediately from the source and rejoins near the end. Like the second configuration, this one is useful for using two types of effects (or chains of effects independently, but it allows for more models in the split paths and the rejoined one).

See [Adjusting Settings > Parameters > Mix](#) to learn how to mix the split paths together.

## Stereo vs. Mono

The outgoing signal from the HeadRush MX5 can be mono or stereo, depending on the models in your rig, the signal path, and which outputs you are using. An indicator near the end of the signal path indicates the current configuration.



The signal will be **stereo** if you do any **one** of the following:

- Use any stereo effect model in your signal chain. Even if you have placed mono effect models after it. (This is possible because the mono effect is simply applied identically to both channels and not summed).
- Use a split signal path, even if the split paths rejoin before the output.
- Use a double-amp and/or double-cab configuration (i.e., if **2X** is **on**).

The signal will be **mono** if you do **all** of the following:

- Use no stereo effect models in your signal chain.
- Use the linear (not split) signal path.
- Use only single-amp and single-cab configurations, if you use an amp or cab model at all.

Alternatively, the signal will be mono if you do any one of the following:

- Use only the **L/Mono output** (of a stereo pair) on the rear panel.
- Reduce the **Rig Width** output setting to **0%**.

**To adjust the width of the stereo field**, tap the **Out** icon at the end of your signal path, and turn the third **parameter knob** to adjust the **Rig Width** output setting. This affects stereo signals only, not mono signals. **100%** uses the full stereo field, while **0%** produces a mono signal.

## Footswitch Modes

The three footswitches can be used to activate or bypass models (amps, cabs, impulse responses, or effects) as well as select scenes, rigs, or setlists. These footswitches are always in one of four modes: **Stomp**, **Rig**, **Hybrid**, or **Setlist**.

To change the mode, hold footswitch 1, then:

- To select **Stomp mode**, press footswitch 1
- To select **Rig mode**, press footswitch 2
- To select **Hybrid mode**, press footswitch 3
- To select **Setlist mode**, hold footswitch 2



### Stomp Mode

Footswitches 1-3 correspond to models (amps, cabs, or effects) in your signal chain. Press a footswitch to activate or deactivate its model.

To load the previous rig, press footswitches 1 and 2 (∇) simultaneously.

To load the next rig, press footswitches 2 and 3 (△) simultaneously.

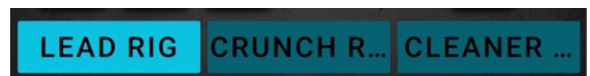


### Rig Mode

Footswitches 1-3 correspond to rigs you have previously saved. Press a footswitch to load its rig.

To show the previous bank of three rigs, press footswitches 1 and 2 (∇) simultaneously.

To show the next bank of three rigs, press footswitches 2 and 3 (△) simultaneously.



### Hybrid Mode

The first footswitch can be assigned to activate/deactivate a model or to select a scene in the currently selected rig.

To switch to the previous rig, press footswitch 2.

To switch to the next rig, press footswitch 3.



### Setlist Mode

To enter the currently shown setlist, press footswitch 1.

To show the previous setlist, press footswitch 2.

To show the next setlist, press footswitch 3.

To enter the All Rigs setlist, press and hold footswitch 1.



## Rigs

While using HeadRush MX5, a **rig** is a preset: the combination of assigned **models**—the amps, cabs, impulse responses, and effects—and the parameter settings of each of them. You can create, edit, save, and load rigs, making it easy to recall the perfect sound for each part of your performance.

Each rig has 11 **slots**, each of which can have one model (amp, cab, or effect) assigned to it. Assigned slots will show graphical representations of the models, and empty slots will show a **+** symbol.

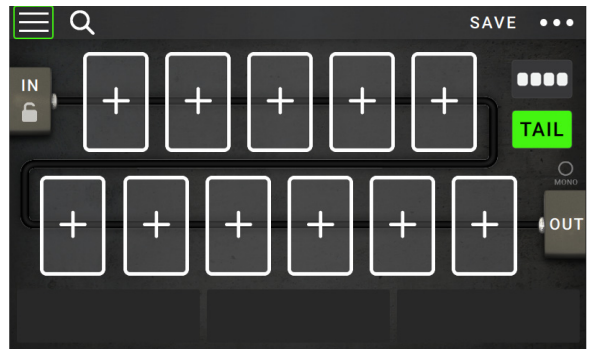
### Creating a New Rig

To create a new rig, tap the **•••** button in the upper-right corner of the screen, and tap **New Rig**.

To assign a model (amp, cab, or effect) to an empty slot:

1. Tap the empty slot (**+**).
2. In the list that appears, tap the type of model you want to assign: **Amp**, **Cab**, **IR** (impulse response), or effect (**Distortion**, **Dynamics/EQ**, **Modulation**, **Reverb/Delay**, **FX-Loop**, or **Expression**).
3. In the list that appears, tap the model you want to assign.
4. In the next list that appears, tap the preset you want to load for that model.

If you load an amp or cab to a slot with an empty adjacent slot, a matching amp or cab will be loaded automatically to the other slot. After that, you can configure them independently: you can separate them in the signal chain, you can change the type of the amp or cab, and you can delete each model separately.



LIST SELECTOR		
< BACK	< BACK	< BACK
EMPTY SLOT ×	MULTI CHORUS	+DEFAULT MONO
AMP	CHORUS	+DEFAULT STE...
CAB	FLANGER	+DEFAULT SYNC
DISTORTION	VIBRATO	MN SLOW
DYNAMICS/EQ	ROTARY	MN TRILL
MODULATION >	AIR FILTER	ST CHOPPER
REVERB DELAY	AIR FLANGER	ST LIGHT

### Optimizing Your Signal Chain

The **signal chain** is the path that the audio signal follows from your guitar through your selected models and ends at the outputs of HeadRush MX5. You can use the touchscreen to arrange your selected models in any sequence, but you may find that some configurations will sound better than others.

Here are some common model placement suggestions for creating tones with HeadRush MX5:

- Dynamics (e.g., **compressors**), filters (e.g., **wah**, **pitch shifters**), and **volume** pedals generally are placed at the beginning of the signal chain. Alternatively, you can place volume pedals at the end of the signal chain to provide a slight variance in functionality.
- Gain-based effects (e.g., **overdrive/distortion**, **fuzz**) usually come next.
- Equalization (**EQ**) is often used to shape the tonal characteristics of overdrive/distortion and fuzz effects, so put an EQ after them. Alternatively, place it before them to shape the guitar's general tone—cutting unwanted frequencies—before the gain pedals.
- Modulation effects like **flangers**, **phasers**, and **chorus** are typically placed next.
- Time-based effects like **delays** and **reverbs** are generally placed near the end of the signal chain.
- An **amp** and a **cab** (or an amp and impulse response) are often placed at the very end of the signal chain, although you can place it wherever you want.

## Saving a Rig

If you have made certain changes to the rig at all since loading it, you will see an asterisk (\*) next to its name at the top of the screen. You will see an asterisk if you have done any of the following:

001 SEARING LEAD\*

- Assigned a model to the rig
- Deleted a model from the rig
- Moved a model in the signal chain
- Changed a model's preset (see [Adjusting Settings](#) to learn more)
- Made any change in the Hardware Assign screen (see [Hardware Assign](#) to learn more)

Activating or deactivating a model or using the expression pedal on any screen will **not** cause the asterisk to appear.

You can save these changes to this rig, save these changes as another rig, or discard them altogether.

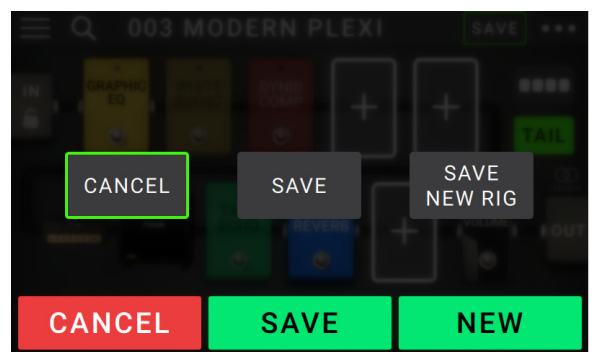
**To save a rig**, tap **Save** in the upper-right corner. The prompt shown left will appear.

**To save your changes to the current rig**, tap **Save**.

**To save your changes as a new rig**, tap **Save New Rig**, use the keyboard that appears to enter a name, and then tap **Save**.

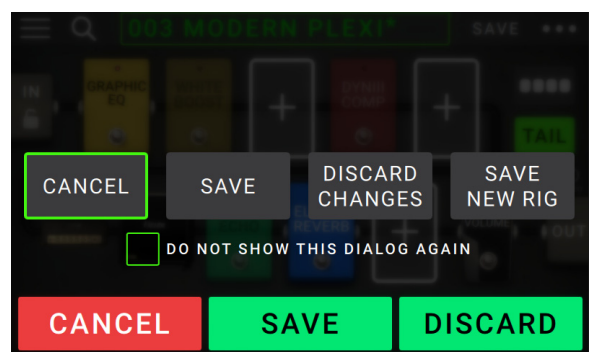
**To return to the previous screen without saving**, tap **Cancel** at any time.

**To discard any changes you've made to the rig**, tap the ●●● button in the upper-right corner, and tap **Discard Changes**.



If the asterisk is shown and you try to load a different rig, you will be asked to select one of these options:

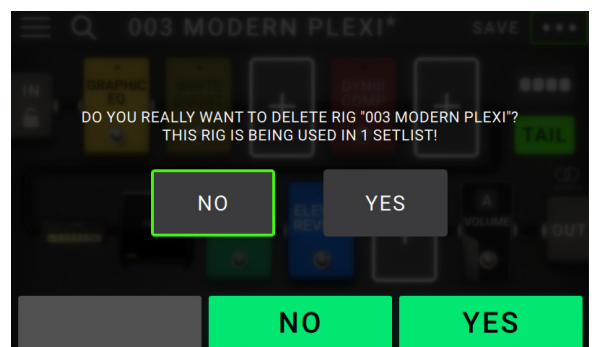
- **Cancel**: This option returns to the previous screen without saving the current rig or loading a new rig.
- **Save as a New Rig**: This option lets you save the current rig as a new rig. In the screen that appears, use the keyboard that appears to enter a name, and then tap **Save**. That rig will be saved, and the new rig will load.
- **Save**: This option saves any changes you made to the rig and then loads the new rig.
- **Discard Changes**: This option loads a new rig without saving any changes to the previous rig.



## Deleting a Rig

**To delete the current rig**, tap the ●●● button in the upper-right corner, tap **Delete Rig**, and then tap **Yes** to continue or **No** to cancel.

**Note:** Select **Do not show this dialog again** in the message to disable these confirmation messages. You can re-enable them in the [Global Settings](#) screen.



## Adjusting Settings

To adjust the settings of an item in your rig, double-tap it to open its settings screen. You can adjust the settings of any model (amp, cab, or effect), the input (the **In/Lock** icon), the output (the **Out** icon), or mix (the **Mix** icon).

### Overview

The screenshot shows the settings screen for the 'SEARING LEAD' model. At the top left is a back arrow, and at the top right is a 'SAVE' button and a menu icon. The main area features a 'PRESET' dropdown menu set to '+DEFAULT MONO'. Below this are two sliders: 'RATE' (set to 0.9 Hz) and 'SYNC' (set to OFF). To the right of the sliders are 'STEREO' and 'OFF ON' buttons. At the bottom, there is a 'DELETE' button, a row of seven colored squares (green, yellow, orange, red, purple, blue, cyan), and a 'CANCEL' button. A small inset image of the 'ORANGE PHASER' model is shown on the left side of the screen.

Callouts and instructions:

- Tap < to return to retain your changes and return to the main screen.
- Tap this button and tap **Discard Changes** to discard any changes you've made since opening this screen.
- Tap the **Preset** menu to select a preset. See [Saving a Block Preset](#).
- Turn encoder to move through selectable items onscreen or to adjust parameters. Press encoder as an **Enter** command.
- Tap an **Off/On** parameter button to change the parameter's setting accordingly.
- Tap and drag a slider left and right to adjust the parameter's settings. Alternatively, tap the slider and use the encoder for fine adjustments.
- Tap the model name to assign a different model to this slot.
- Tap **Delete** to unassign the model from the slot.
- Tap a color to assign it to this model. That color will be shown on the main screen, in the Hardware Assign screen, and in the footswitch indicator for this model.
- Tap **Cancel** to return to discard your changes and return to the main screen.

PUSH TO ENTER



## Parameters

These are some of the parameters that you can adjust for each type of rig item. The types include amps, cabs, effects, input settings, output settings, and mix settings (if you are using a split signal path). See [Saving a Block Preset](#) to learn how to save your preset after adjusting its parameters.

### Amp

The Amp category is a list of popular guitar amplifiers.

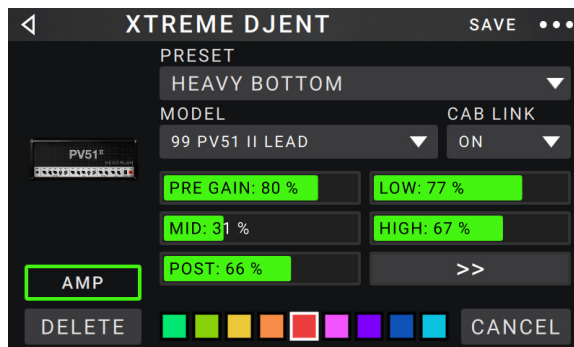
**Preset:** This is the current amp preset, which includes the model, all its settings, and its color assignment.

**Model:** This is the amp model.

**Amp Settings:** These are the settings for the selected amp model (different models may have more or fewer settings).

**Cab Link:** This setting determines whether a specific cab and microphone are associated with the amp. When set to **Off**, any cab and microphone used in the current rig will be completely independent of the amp you select. When set to **On**, a specific cab and microphone combination will be used if you change the amp's **Preset** setting or if you load a new amp to the rig. You can still change the cab and microphone manually afterward by adjusting the parameters of the cab model.

**Color:** This is the assigned color, which will appear in the Hardware Assign screen and the switch indicator if the amp is assigned to a switch.



### Cab

The Cab category is a list of popular amp cabinets, which contain the speakers. The HeadRush MX5 recreates not only the sound of the cabinet but also the type of microphone recording it.

**Preset:** This is the current cab preset, which includes the model, all its settings, and its color assignment.

**Cab Type:** This is the cab type. Numbers notated as **\_X\_** indicate the number of speakers it has and the size of each speaker (e.g., **2X12** denotes a cab with two 12-inch speakers, **4X10** denotes a cab with four 10-inch speakers). Numbers notated as **\_W** indicate the emulated wattage (output power) of the speaker.

**Mic Type:** This is the type of microphone being used on the cab. You can select different models of dynamic (**Dyn**), condenser (**Cond**), or ribbon (**Ribbon**) microphones.

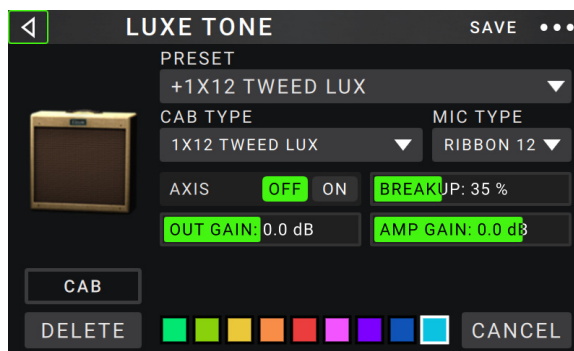
**Mic Settings:** These are the settings for the microphone:

**Break Up:** This determines the amount of speaker “breakup”—the natural distortion that occurs when the audio signal overdrives the speaker.

**On-Axis:** This determines the microphone position relative to the cab. On-axis placement (**On**) positions the microphone at the center of the speaker, usually resulting in a brighter sound with more definition. Off-axis placement (**Off**) is slightly offset at an angle from the center of the speaker and often sounds darker in tone.

**Out Gain:** This is the cab's output gain level.

**Color:** This is the assigned color, which will appear in the Hardware Assign screen and the switch indicator if the cab is assigned to a switch.



## IR

The IR category contains factory-loaded and user-loaded impulse response files. The HeadRush MX5 supports all .WAV format impulse response files with sample rates up to 192 kHz, bit depths up to 32-bit, and sample lengths up to 2,048 samples.

**Preset:** This is the current IR preset, which includes the impulse response, all its settings, and its color assignment.

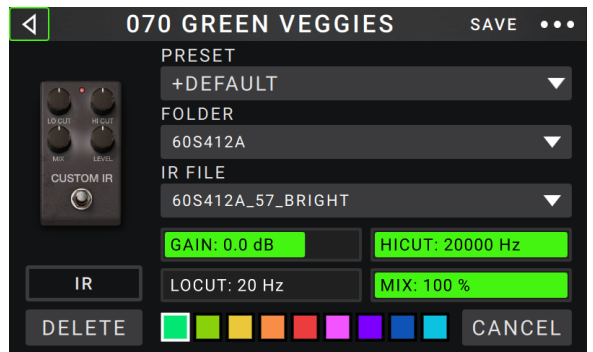
**Folder:** This is the folder containing your IR files. IRs can be organized into folders by creating a folder on your Mac or PC while using the USB Transfer Mode. IRs generally have a very small file size, so the MX5 can store thousands of IRs at once.

**IR File:** Once you have selected a folder above, you can select a specific IR file here.

**Gain:** Adjusts the overall volume level of the IR.

**HiCut** and **LoCut:** These settings adjust the high-end and low-end of the IR tone, respectively.

**Mix:** This setting adjusts the mix of between the incoming signal and the IR.



**Note:** While using the model selector to add a block, you can load a full 2,048 sample impulse response by selecting **IR**, or a truncated 1,024 sample IR by selecting **IR 1024**. For the highest quality sound, use the 2,048 sample IR type. To save DSP power for adding more effects to your rig, use the 1,024 sample IR type.

## Effects

There are several types of available effects. Their adjustable settings depend on the type of effect.



# HEADRUSH

## In

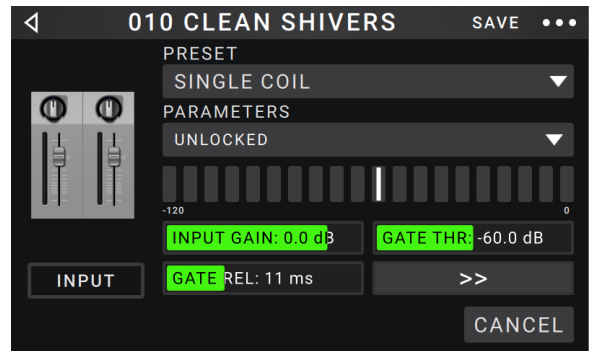
These input settings control the signal into the models of your rig:

**Preset:** This is the current input preset, which includes its settings on the right edge of the display and its locked/unlocked state.

**Parameters:** This menu determines whether these input settings are locked or unlocked.

When **unlocked**, the settings will change to the new rig's input settings each time you load a new rig. The lock icon on the main screen will be **grey**.

When **locked**, the settings will be retained as "global" input settings, regardless of the rig. The lock icon on the main screen will be **red**.



**Rig Input:** This setting determines whether the rig's input signal is taken from the **guitar input (Guitar)** or the left (L) **return input (FX Ret L)**. This menu is shown only when **Rig Input** is set to **Per Rig** in the global settings (see [Global Settings](#) to learn about this).

**Input Level Meter:** This level meter indicates the current level of your input signal **before** the input controls shown on this screen.

**Gain:** This setting controls the gain level of the signal sent from your guitar into your rig. The available range is **-60.0 to 12.0 dB**.

**Gate Thrsh (Threshold):** This setting controls the signal level required to open the noise gate, enabling the guitar signal to be sent to the rig. The available range is **-120.0 to 0.0 dB**. The threshold is represented by a white line on the **input level meter**.

**Gate Rel (Release):** This setting controls the amount of time it will take for the noise gate to close once the incoming guitar signal stops. The available range is **1-3000 ms**.

**USB Level:** This setting controls the level of the audio signal sent from your computer to the HeadRush MX5 over a USB connection. The available range is **-60.0 to 12.0 dB**.

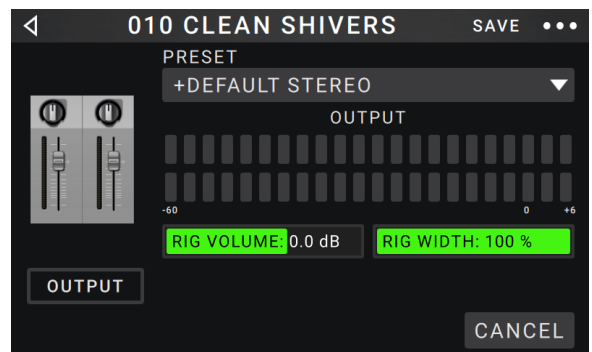
## Out

These output settings control the signal sent to the HeadRush MX5 outputs:

**Preset:** This is the current output preset, which includes its settings on the right edge of the display.

**Rig Vol (Volume):** This setting controls the level of the audio signal sent from the outputs. The available range is **-60.0 to 36.0 dB**.

**Rig Width:** This setting controls how much of the stereo field the output signal uses. **100%** uses the full stereo field, while **0%** produces a mono signal. This affects stereo signals only, not mono signals. See [Main Screen > Stereo vs. Mono](#) to learn how the HeadRush MX5 handles stereo and mono signals.



## Mix

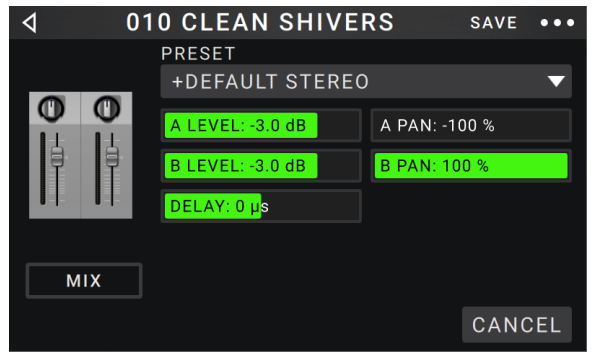
These settings control mix of a split signal path. This is available only for rigs with split signal paths (see [Main Screen > Signal Path](#) to learn more):

**Preset:** This is the current mix preset, which includes its settings on the right edge of the display.

**A Lev / B Lev (Level):** These settings control the volume levels the upper (**A**) and lower (**B**) branches of the signal path. The range is **-60.0 dB** to **+12.0 dB**.

**A Pan / B Pan:** These settings control the panning (position in the stereo field) the upper (**A**) and lower (**B**) branches of the signal path. The range is **-100%** to **+100%**.

**A/B Delay:** This setting controls a timing offset between the upper (**A**) and lower (**B**) branches of the signal path. The range is **-30000µs** to **+30000µs**. If the value is negative (-), the A branch is delayed. If the value is positive (+), the B branch is delayed.



## Saving a Block Preset

To save a block preset, tap **Save** in the upper-right corner.

To save your changes to the current block preset, tap **Save**.

To save your changes as a new preset, tap **Save New Preset**, use the keyboard that appears to enter a name, and then tap **Save**.



To return to the previous screen without saving, tap **Cancel** at any time.

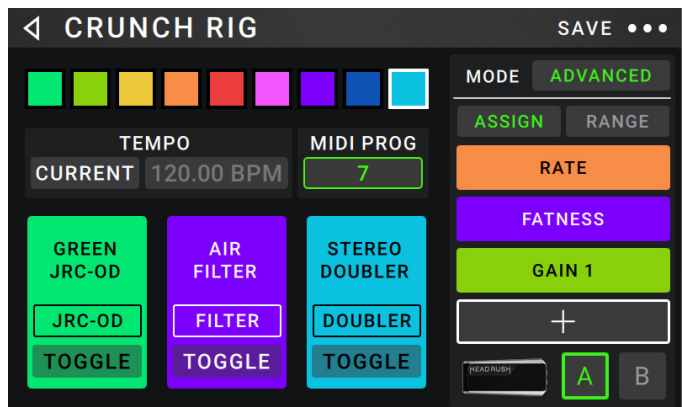
## Hardware Assign

The Hardware Assign screen enables you to customize how HeadRush MX5's footswitches and an expression pedal control each rig.

**To open the Hardware Assign screen**, tap the ●●● button in the upper-right corner of the main screen, and then tap **Hardware Assign**.

**To return to the main screen**, tap the ◀ button in the upper-left corner.

**Important:** The Hardware Assign settings are all part of the overall rig, so remember to save your changes you want to keep.



**To set the color associated with the rig**, tap it in the upper-left part of the screen. This color will appear next to the rig name when you view a list of all available rigs or when you view and create setlists. It will also be the color of the corresponding footswitch indicator when the HeadRush MX5 is in Rig Mode.

**To set the tempo of the rig's time-based effects** (delays, modulation, etc.), tap the button under **Tempo** to select **Current** or **Fixed**.

**Current:** The rig will use the last-used tempo or the one set by the **Tempo** footswitch.

**To set the tempo**, press the **Tempo** footswitch at the desired tempo 3–8 times to set the new tempo in beats per minute (**BPM**).

**Fixed:** The rig will use a tempo that you set here.

**To set the tempo**, turn the **encoder** to set the desired tempo in beats per minute (**BPM**). You can set the tempo only in this Hardware Assign screen.

**To load a rig when a MIDI program change is received from an optional external MIDI device, or to send a MIDI program change message when a rig is loaded**, tap the button under **MIDI**, and then turn the **encoder** to select a MIDI program change number. You can adjust whether MIDI program changes are received and/or sent in the [Global Settings](#) menu.

**Note:** If a rig is using a number, that number will be unavailable and cannot be assigned to another rig. Additionally, saving a rig with a new name will save the rig but without the program change number to prevent rigs from sharing the same number.

## Footswitches

The 3 boxes in the lower-left corner represent the 3 footswitches of HeadRush MX5. You can assign any switch-based parameters (ones with only two states) to any of the footswitches—regardless of their location in the signal chain.

### To assign a parameter to a footswitch:

1. Tap a box. **+** indicates an empty box.
2. In the list that appears, tap the model with the parameter you want to assign.
3. In the list that appears, tap the parameter you want to assign. Usually, the parameter will simply be **On** (to activate or deactivate it).

Tap **Unassigned x** to unassign that footswitch.

**To swap two assignments**, tap and drag one of them over the other, and then release it.

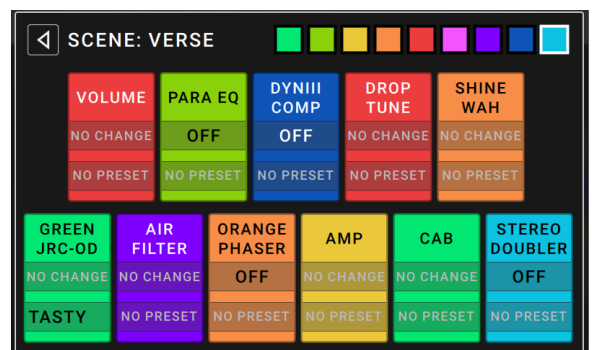


## Scenes

The **Scene** feature allows you to turn multiple models on or off in each rig, as well as select different change model presets. When you press the footswitch assigned to that scene, all models included in that scene will turn on or off, or change to a different preset, depending on how you assign them. This is a great way to create multiple tones in the same rig. For instance, you may want a particular reverb model to be on anytime a particular distortion model is also on. Alternatively, you may want to turn one delay model off when you turn another one on. Scenes enable you to do this with only one footswitch press.

### To create and edit a scene:

1. On the **Hardware Assign** screen, tap **Toggle/Scene** for the desired footswitch to cycle through the available options, and select **Scene**.
2. On that model, tap **Edit**. The Scene Editor will appear, which shows all models in your rig.
3. For each model in the rig, tap the first line of text to cycle through the available options:
  - **On**: This model will turn on when you turn the scene on.
  - **Off**: This model will turn off when you turn the scene on.
  - **No Change**: This model will remain unaffected when you turn the scene on.
4. For each model in the rig, tap the second line of text to configure a model preset to be loaded when the scene is activated.
5. Tap a **color** at the top of the touchscreen to select a color for the scene.
6. Tap the **<** button in the upper-left corner to return to the **Hardware Assign** screen.



**To rename a scene** (which appears in the footswitch indicators), tap the text in the box below **Edit** on the model, use the virtual keyboard that appears to enter a name, and then tap anywhere other than the text field.

## Expression Pedal

The expression pedal can control two parameters (in Classic Mode) or two sets of parameters (in Advanced Mode). Use the toe switch to switch between them—Expression Pedal A or B.

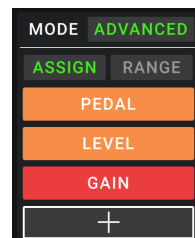
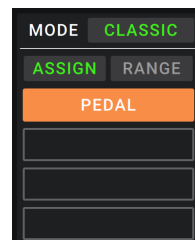
**To activate the toe switch**, move the “toe end” of the expression pedal so it touches the MX5, and then press down.

**Note:** When you save your rig, the current selected Expression Pedal state (A or B) will be saved and then recalled when you load the rig again.

The column of four boxes represents the expression pedal settings. You can assign one or more continuously adjustable parameters (ones with a range of values) to the expression pedal.

**To set the expression pedal mode**, tap the button above **Range** in the upper-right corner to select **Classic** or **Advanced**.

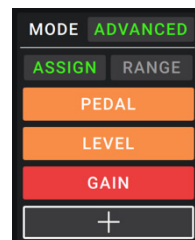
- **Classic:** You can assign one parameter to each expressional pedal (**A** and **B**). Using the toe switch will select the other expression pedal and deactivate (bypass) the current expression pedal’s parameter. For instance, if you assign a wah pedal to Expression Pedal A and a volume pedal to Expression Pedal B, only one of them will be active at any time; when you are controlling the wah pedal, the volume pedal will be bypassed, and vice versa.
- **Advanced:** You can assign up to four parameters to each expression pedal (**A** and **B**). Moving the pedal will adjust all of its assigned parameters simultaneously. Using the toe switch will select the other expression pedal and leave the current pedal’s parameters active and at their maximum values.



### To assign a parameter to the expression pedal:

1. If the **Assign** button is not on, tap it.
2. Tap a box under the **Assign** button. **+** indicates an empty box.
3. In the list that appears, tap the model with the parameter you want to assign.
4. In the list that appears, tap the parameter you want to assign.

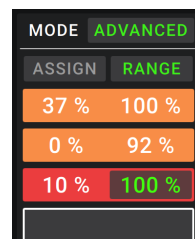
Tap **Unassigned** **x** to unassign that box.



**To swap two assignments** (while in Advanced Mode), tap and drag one of them over the other, and then release it.

### To set the range of an assigned parameter:

1. If the **Range** button is not on, tap it.
2. Tap a value under the **Range** button.
3. Turn the **encoder** to set the desired value as a percentage of the parameter’s entire range. Press the **encoder** or tap elsewhere to confirm the value.



## Setlists

You can use **setlists** to organize your rigs. A setlist is a saved collection of rigs, which you can save and recall at a later time. This is useful, for instance, if you only need some of your rigs for a performance; you can save a setlist of just those rigs so you don't have to spend time searching through all of your rigs before playing the next song.

**To view your setlists**, tap the ≡ button in the upper-left corner of the main screen. The **Setlists** screen will appear.

**To return to the main screen**, tap the < button in the upper-left corner.

### To create a setlist:

1. Tap **New** in the upper-right corner.
2. In the screen that appears, the left half is a list of all available rigs, and the right half is the list of rigs in the setlist.

**To add a rig to the setlist**, tap it to add it to the end of the list. Alternatively, tap and hold it, and then drag it to the desired location in the list. You can add the same rig to a setlist more than once. The **[Empty +]** rig in the lower-left corner is a slot to use as a placeholder to make rearranging the setlist easier; it will not be available as a selectable rig when moving through rigs in the setlist.

**To rearrange the setlist**, tap and hold a rig in the list on the right half, and then drag it to the desired location in the list.

**To remove a rig from the setlist**, tap the ✕ on its right edge.



**To save a setlist**, tap **Save** in the upper-right corner.

**To save your changes to the current setlist**, tap **Save**.

**To save your changes as a new setlist**, tap **Save New Setlist**, use the keyboard that appears to enter a name, and then tap **Save**.

(At any time) **To return to the previous screen without saving**, tap **Cancel**.



**To discard any changes you've made to the setlist**, tap the < button in the upper-left corner, and tap **Discard Changes**.

### To load a setlist:

1. While viewing the main screen, tap the ≡ button in the upper-left corner to view the **Setlists** screen. Each setlist will show the number of rigs in parentheses (including multiple instances of the same rig).
2. **Optional:** Tap the **magnifying-glass icon** in the upper-left corner, and use the virtual keyboard that appears to enter a search term (e.g., part of the setlist name). The results will appear below.
3. Tap the desired setlist. The first rig of that setlist will load immediately. Tap **All Rigs** to view all rigs instead of a specific setlist.



**To edit a setlist**, tap the ⋮ button on its left side, and then tap the pencil icon. You will see the same screen you used to create the setlist, where you can edit and save it.

**To delete a setlist**, tap the ⋮ button on its left side, and then tap the trash can icon. Tap **Yes** to confirm the deletion or **Cancel** to return to the Setlists screen without deleting it.



## Hands-Free Mode

Hands-Free Mode enables you to adjust any of the settings on your models by using just the footswitches and expression pedal.

**To enter Hands-Free Mode**, press and hold **footswitch 1** to enter the mode select page, and then press and hold **footswitch 1** again.

**To increase or decrease the value shown**, move the expression pedal.

**To decrease the value shown in small increments**, press **footswitch 1 and 2** (∇) simultaneously.

**To increase the value shown in small increments**, press **footswitch 2 and 3** (△) simultaneously.

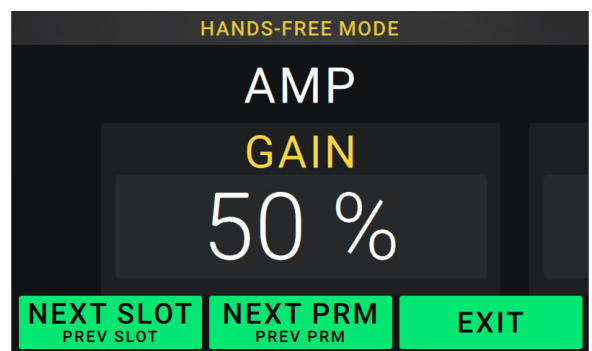
**To edit the next model in your rig**, press **footswitch 1**.

**To edit the previous model in your rig**, hold **footswitch 1**.

**To show the next parameter for the shown model**, press **footswitch 2**.

**To show the previous parameter for the shown model**, hold **footswitch 2**.

**To exit Hands-Free Mode**, press **footswitch 3**.



## Tuner/Tempo

You can use the Tuner/Tempo page to tune your guitar and set a tempo for time-based effects.

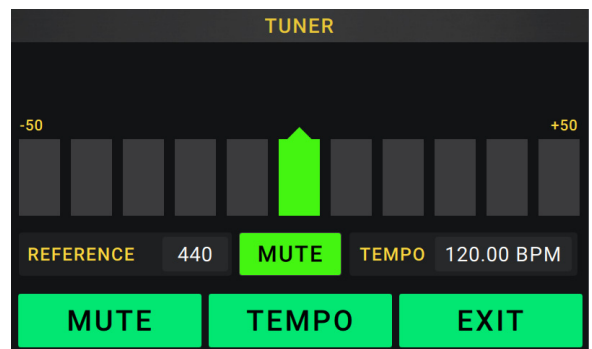
**To enter Tuner/Tempo mode**, press and hold **footswitch 3** for over one second. While in Tuner/Tempo Mode, the screen to the right is shown.

**To change the tuner reference pitch**, tap the parameter and then turn the encoder.

**To unmute your signal while tuning**, press **footswitch 1**.

**To enter a tempo via tapping a footswitch**, press **footswitch 2** at the desired tempo 3–8 times to set the tempo in beats per minute (BPM).

**To exit this page**, press **footswitch 3**.



**Tip:** You can also assign Tap Tempo to a footswitch within a rig on the [Hardware Assign](#) page.

## Looper

The HeadRush MX5 has a built-in looper that you can use to layer your performances. While the looper's operation is shown in the display, you can control most of it conveniently with the footswitches.

The looper can hold up to **20 minutes** of audio at a time across a maximum of **50 layers**. The first layer of your loop can be up to **5 minutes** long.

The screenshot shows the looper interface for a rig named "CRUNCH RIG". The interface includes a progress bar at the top, a timer showing "00:00.0" and "05:00.0", and a central display with "READY". Below the display are several control fields: "LAYERS" (1), "SPEED" (X 1), "MIX" (50%), "LENGTH" (X 1), "FEEDBACK" (100%), "PLAYBACK" (NORMAL), and "POSITION" (POST). At the bottom are three large buttons: "START" (green), "RECORD" (blue), and "MORE... EXIT" (blue). Callouts provide the following information:

- Rig name.**: Points to the "CRUNCH RIG" header.
- This meter indicates your current location in the loop during recording or playback.**: Points to the progress bar.
- This indicates how many layers are playing in the current loop, including the original.**: Points to the "LAYERS" field.
- This indicates the current speed of the loop as a multiple or fraction of the original.**: Points to the "SPEED" field.
- This indicates the length of the current loop.**: Points to the "LENGTH" field.
- This indicates the direction of playback.**: Points to the "PLAYBACK" field.
- Tap here to save, load, rename and delete loops.**: Points to the three-dot menu icon.
- This controls how much of the looper's signal you hear in the outputs.**: Points to the "MIX" field.
- This controls how much of the looper's signal is routed back through it when recording another layer.**: Points to the "FEEDBACK" field.
- This indicates whether the looper is located before (Pre) or after (Post) your signal chain. Moving the looper to the Pre position enables you to edit your rig without having to play the same riff over and over again.**: Points to the "POSITION" field.

**To record the first layer of a loop**, press the **Record** footswitch. Recording will begin immediately and the footswitch indicator will light **red**. Press the **Record** footswitch again to stop recording and start loop playback. The footswitch is now called **Overdub** and the footswitch indicator is **yellow**.

**To record additional layers onto the loop (overdub)**, press the **Overdub** footswitch. Overdubbing will begin immediately and the footswitch indicator will light **red**. Press the **Overdub** footswitch again to stop overdubbing and continue playback.

**To start or stop the loop**, press the **Start** footswitch while the loop is stopped, or press the **Stop** footswitch while the loop is playing.

**To access additional footswitch controls in the looper (Length, Peel, Clear)**, press the **More...** footswitch. You can press this footswitch again to return to the initial set of controls.

**To double the length of the loop**, press the **Length** footswitch or tap the button next to the **Length** field and then turn the encoder clockwise.

**To halve the length of the loop**, hold the **Length** footswitch or tap the button next to the **Length** field and then turn the encoder counterclockwise. The halving process is non-destructive, so you can restore your original loop and its content by doubling the length of the loop.

This screenshot shows the looper interface after pressing the "MORE... EXIT" button. The central display now shows "X2 LENGTH" and "1/2 LENGTH" options. The bottom row of buttons has changed to "X2 LENGTH 1/2 LENGTH" (green), "PEEL CLEAR" (blue), and "BACK... EXIT" (blue). The other fields (LAYERS, SPEED, MIX, LENGTH, FEEDBACK, POSITION) remain the same as in the previous screenshot.

**To erase the top-most** (last-added) **layer of the loop**, press the **Peel/Clear** footswitch. The top-most layer of the loop will be erased immediately. This process is destructive, so you can't re-add it later.

**To clear the full loop**, press and hold the **Peel/Clear** footswitch. This process will stop playback and is destructive, so you can't re-add it later.

**To halve or double the speed of the looper**, tap the button next to the **Speed** field and then turn the **encoder**.

**Tip:** Use this to create low bass lines or ultra-high guitar parts that you couldn't ordinarily play.

**To reverse looper playback**, tap the button next to the **Playback** field and then turn the **encoder**.

**Tip:** Create eerie effects by recording layers in reverse then switching back to normal playback.

**To set the looper's location**, tap the button next to the **Playback** field and then turn the **encoder** to place it before (**Pre**) or after (**Post**) the signal chain. Moving the looper to the **Pre** position enables you to edit your rig without having to play the same riff over and over again.

**To create a new loop**, tap the **•••** button in the top right corner, and then tap **New Loop**. Tap **Yes** to clear the looper and create a new loop, or tap **No** to return to the Looper screen without creating a new loop.

**To save a loop**, tap the **•••** button in the top right corner, and then tap **Save Loop**. Tap **Yes** to confirm the save, or tap **Cancel** to return to the Looper screen without saving it.

**To load a loop**, tap the **•••** button in the top right corner, and then tap **Load Loop**. Use the file browser that appears to select the loop to load, and then tap **Import** to load the loop, or tap **Cancel** to return to the Looper screen without deleting it.

**Tip:** You can import **.WAV** and **.MP3** audio files and load them into the looper by placing the files in the **/LOOPS/** directory of the HeadRush MX5 while using the **USB Transfer** feature.

**To edit a loop's name**, tap the **•••** button in the top right corner, and then tap **Edit Loop Name**. Use the keyboard to type a new name, and then tap **OK** to confirm the new name, or tap **Cancel** to return to the Looper screen without renaming the loop.

**To delete a loop**, tap the **•••** button in the top right corner, and then tap **Delete Loop**. Tap **Yes** to confirm the deletion, or tap **No** to return to the Looper screen without deleting it.

**To exit the looper and return to the main screen**, press and hold the **Exit** footswitch. If the looper is playing, playback will continue.

**To re-enter the looper**, press the **Looper** footswitch again.

**Tip:** Use this feature to create different effect configurations (adjust parameters, activate/deactivate models, etc.) for each layer, creating a multi-textured performance. You can also switch rigs while using the looper and use a different rig for each layer.

## External MIDI Control

The HeadRush MX5 can be controlled by incoming MIDI CC (control change) messages from external MIDI gear. These MIDI messages can be received from hardware connected to 1/8" (3.5 mm) **MIDI Input** only.

The chart below lists the available parameters that can be controlled by external MIDI hardware:

CC#	Action
50	Footswitch 1
51	Footswitch 2
52	Footswitch 3
64	Tap Tempo
65	Looper: 1/2 Speed
66	Looper: 2X Speed
67	Looper: 1/2 Loop
68	Looper: 2X Loop
69	Looper Start/Stop
70	Looper Record
71	Looper Insert
72	Looper Peel
73	Looper Mute

CC#	Action
74	Looper Reverse
75	Block 1 Toggle On/Off
76	Block 2 Toggle On/Off
77	Block 3 Toggle On/Off
78	Block 4 Toggle On/Off
79	Block 5 Toggle On/Off
80	Block 6 Toggle On/Off
81	Block 7 Toggle On/Off
82	Block 8 Toggle On/Off
83	Block 9 Toggle On/Off
84	Block 10 Toggle On/Off
85	Block 11 Toggle On/Off

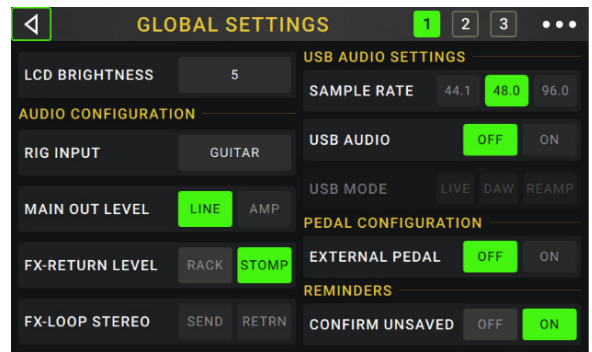
## Global Settings

Use the global settings to configure the HeadRush MX5's overall operation.

**To show the global settings**, tap the **•••** button in the upper-right corner of the screen, and tap **Global Settings**.

**To select each page of the global settings**, tap the number at the upper-right corner of the screen.

**LCD Brightness:** This setting determines the brightness of the main display. Tap this field, turn the **encoder** to select **1** (dim) through **5** (bright), and then press the **encoder**.



### Audio Configuration:

**Rig Input:** This setting determines whether each rig's input signal is taken from the **Guitar Input (Guitar)** or the left (L) **Return Input (FX Ret L)**. When set to **Per Rig**, the source is determined by the **Rig Input** setting of each rig in the Input block. When set to **FX Ret L** or **Per Rig**, the **FX-Loop Stereo Return** setting will be disabled; however, you can still use a mono FX loop for external pedals by using the right side of the FX Return input. You can access individual sides of the FX return input by using a standard 1/4" (6.35 mm) stereo to (2) 1/4" (6.35 mm) mono Y adapter (sold separately).

**Main Out Level:** This setting determines the signal level sent to the main **Outputs** (1/4"/6.35 mm, TRS). When set to **Line**, the output level will be +18 dBu. Use this setting if you are connecting the HeadRush MX5 to a full-range, flat-response amplifier, PA speaker, mixer, or audio interface. When set to **Amp**, the output level will be +6 dBu. Use this setting if you are connecting the HeadRush MX5 to a traditional guitar amplifier.

**FX Return Level:** This setting determines the signal level received by the **FX Return Input** (1/4"/6.35 mm, TRS). When set to **Rack**, the output level will be line level, +18 dBu. Use this setting if you are connecting a rack effects processor in the HeadRush MX5's FX-Loop. When set to **Stomp**, the output level will be +6 dBu. Use this setting if you are connecting a traditional guitar pedal ("stompbox") in the FX-Loop.

**FX-Loop Stereo:** These settings determine whether the incoming and outgoing signal in the effects loop is stereo or mono. Tap **Send** to enable or disable the stereo signal for the **Send Outputs**. Tap **Return** to enable or disable the stereo signal for the **Return Inputs**.

### USB Audio Settings:

**Important note for Windows users:** Before connecting the Headrush MX5 to your computer, download and install the necessary drivers from [headrushfx.com/support](http://headrushfx.com/support).

**Sample Rate:** This setting determines the sample rate of the USB audio signal: **44.1 kHz**, **48.0 kHz** or **96.0 kHz**. Remember to select the same sample rate as the one in your DAW. Also, set it **before** opening your DAW.

**USB Audio:** This setting determines whether or not HeadRush MX5 is sending a USB audio signal over a USB connection. Tap **On** to enable sending of the USB audio signal with the selected **Sample Rate**. Tap **Off** to disable the USB audio signal. (To change the Sample Rate, set **USB Audio** to **Off** first, select the correct sample rate, set **USB Audio** to **On** again, and restart your DAW.)

**USB Mode:** This setting determines how the HeadRush MX5 sends its audio signal over the USB connection and how its outputs function while doing so:

- **Live:** The audio signal will be sent to your computer as well as to the HeadRush MX5's **outputs**.
- **DAW:** The audio signal will be sent to your computer only. The HeadRush MX5's **outputs** will be disabled to prevent any latency while monitoring.
- **Reamp:** Your computer will send an audio signal to the HeadRush MX5, which will process it through the current rig and send it back to your computer. The HeadRush MX5's **outputs** will be disabled to prevent any latency while monitoring.

## Pedal Configuration:

**External Pedal:** This setting determines whether or not you are using an external expression pedal with the HeadRush MX5.

- Tap **On** to use the built-in expression pedal to control the parameter/parameters of Bank A while your external expression pedal controls the parameter/parameters of Bank B. (If you are using the expression pedal's Classic Mode, pressing the toe switch will activate or deactivate the parameter. If you are using Advanced Mode, the toe switch will be disabled entirely.)
- Tap **Off** to disable the expression pedal input and use the built-in expression pedal only.

## Reminders:

**Confirm Unsaved:** This setting determines whether or not you will see a confirmation message if you change the rig while there are unsaved changes on the current one. Tap **On** to enable these messages or **Off** to disable them.

Alternatively, tap **Do not show this dialog again** in the message itself to disable them.



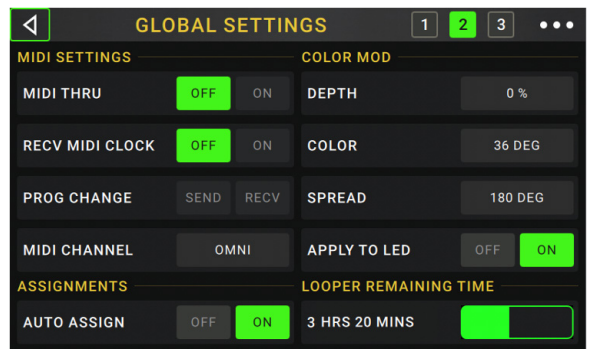
**MIDI Settings:** These settings determine how the HeadRush MX5 sends and receives MIDI information to and from external devices. These settings affect only the HeadRush MX5's MIDI input or MIDI output.

**MIDI Thru:** Tap **On** to use the **MIDI output** as a MIDI throughput; any MIDI information sent to the HeadRush MX5's MIDI input will be sent directly to the MIDI output. Tap **Off** to use the HeadRush MX5's MIDI output normally; the HeadRush MX5 will be able to send its own MIDI information out of the MIDI output.

**Recv MIDI Clock:** Tap **On** to enable the HeadRush MX5 to receive MIDI clock information. Tap **Off** to use the HeadRush MX5's own internal MIDI clock (which will not be sent out).

**Prog Change:** Tap **Send** to enable or disable the HeadRush MX5's transmission of MIDI program change messages when you load a rig. Tap **Recv** to enable or disable the HeadRush MX5's reception of MIDI program change messages from an external MIDI device.

**MIDI Channel:** This setting determines the MIDI channel(s) that the HeadRush MX5 will send and receive MIDI messages. Tap this field, turn the **encoder** to select all channels (**Omni**), or **1-16**, and then press the **encoder**.



## Assignments:

**Auto Assign:** This setting determines how models are assigned to the switches. Tap **On** if you want models to be automatically assigned to the next available switch when you load them. Tap **Off** if you want models to load without being assigned to a switch; you will have to assign them manually in the **Hardware Assign** screen.

## Color Mod:

If you have trouble distinguishing certain colors on your MX5's display or if you just want to further customize the color scheme, you can use the color mod parameters to adjust their default settings. While experimenting with the settings, a sample of your adjustments will be shown in real time. If you want to return to the default color scheme, the default settings are as follows:

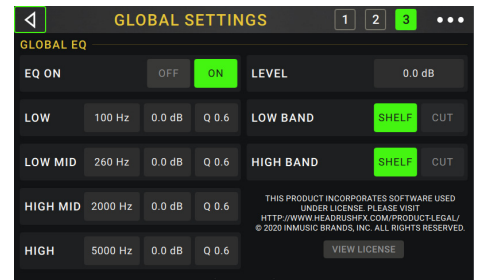
**Depth:** 0%      **Color:** 36 DEG      **Spread:** 180 DEG      **Apply to LED:** ON

**Note:** The **Color Mod** feature is disabled when the **Screen Lock** feature is enabled.

## Global EQ:

These settings on Page 3 determine if/how equalization is applied for your outputs. This equalizer is a four-band parametric equalizer.

**Tip:** These settings are especially useful when a venue, rehearsal space, etc. has different acoustic characteristics than the room where you originally created your presets (e.g., the venue may sound “boomier,” or a rehearsal space with soundproofing may deaden some of the high end). This page lets you quickly apply some additional equalization to **all** of your presets without permanently saving them.



**EQ On:** This setting determines whether equalization is enabled (**On**) or disabled (**Off**) for the outputs.

**Level:** This setting determines if/how much the outputs' audio signal level is boosted or cut. This value is applied the level set by the **Master** knob.

**Low Band & High Band:** These settings determine what type of equalization is applied to the lowest-frequency band (**Low Band**) and to the highest-frequency band (**High Band**): **Shelf** or **Cut**.

**Low, Low Mid, High & High Mid:** The three settings for each of these four frequency bands determine the shape of the equalization:

The **first setting (Hz)** determines the center frequency of the **low**-frequency band, **low-mid**-frequency band, **high**-frequency band, or **high-mid**-frequency band.

The **second setting (dB)** determines how much the equalizer boosts or cuts the signal at the corresponding frequency band.

The **third setting (Q)** determines the width of the frequency band. The higher the setting, the wider the band will be around the center frequency (the first setting). This setting is applied whether **Low Band** or **High Band** is set to **Shelf** or **Cut**.

## USB

You can use the HeadRush MX5's USB connection to your computer for **Recording** (to a digital audio workstation [DAW]), **Reamping**, or **Transferring Files & Settings** (e.g., rigs, setlists, presets, etc.).

**Important Note for Windows Users:** Before connecting the HeadRush MX5 to your computer, download the necessary drivers from [headrushfx.com/support](http://headrushfx.com/support) and install them.

## Recording

When the HeadRush MX5's USB port is connected to your computer, you can select and use the HeadRush MX5 as a 24-bit audio interface, enabling you to play audio through it or to send its audio signal to the computer. It can use sample rates of 48 kHz or 96 kHz.

**To use the HeadRush MX5 as an audio interface with your computer**, open your computer's **Control Panel** (Windows®) or **System Preferences** (macOS®), open its sound/audio settings, and select **HeadRush MX5** as the device for recording/input and/or for playback/output.

The HeadRush MX5 can send four separate audio signal channels to your computer. Before recording the HeadRush MX5's audio signal into your digital audio workstation (DAW), select the channel/channels you want to record:

- 1: the **left** channel of the **master outputs** with all active effects applied.
- 2: the **right** channel of the **master outputs** with all active effects applied.
- 3: a **mono** channel of the **guitar input** with no effects applied.
- 4: identical audio signal to 3.

The HeadRush MX5 can receive four separate audio signal channels from your computer. The channels are named and routed as follows:

- 1: the **left** channel of your computer's output audio signal, which will be sent directly out of the HeadRush MX5's **master outputs** and **phones output**.
- 2: the **right** channel of your computer's output audio signal, which will be sent directly out of the HeadRush MX5's **master outputs** and **phones output**.
- 3: a **mono** channel of your computer's audio signal, which will be sent back through the HeadRush MX5 (see **Reamping** below).
- 4: not used in this scenario.

**Important:** Remember to set your DAW's master outputs to be sent to 1/2.



## Reamping

Reamping is a process that adds the tone coloration of an amp to a pre-recorded audio signal—in this case, sending audio from your DAW through the HeadRush MX5 and then recording it back into your DAW. This is useful for saving time because you can change the sound of an already-recorded guitar track without having to manually play the same part again.

### To use the HeadRush MX5 to reamp an audio signal:

1. In your DAW, make sure **HeadRush MX5** is selected as your audio interface for both recording/input and playback/output.
2. Assign the output of the desired track to **3**.
3. On the HeadRush MX5, tap the **•••** button in the upper-right corner of the screen, and tap **Global Settings**.
4. In the Global Settings screen, tap **Reamp** next to **USB Mode**.

Also, make sure the **Sample Rate** is set to the same sample rate as the one in your DAW. To change the Sample Rate, set **USB Audio** to **Off** first, select the correct sample rate, set **USB Audio** to **On** again, and restart your DAW.

5. In your DAW again, create a new audio track and assign its input. For a **stereo** input signal, select **1/2**. For a **mono** input signal, select **1**.
6. Locate the point in your track where you want to start reamping.
7. On the HeadRush MX5, select the rig, models, or other parameters to achieve the sound you want.
8. In your DAW, start audio recording. The track you want to reamp will be sent through the HeadRush MX5 and recorded into the audio track you created earlier.

## Transferring Files & Settings

Over a USB connection, you can transfer rig, setlist, model preset, loop, and/or impulse response (IR) files between your computer and the HeadRush MX5.

We recommend creating a backup copy of your files to your computer before you make any changes.

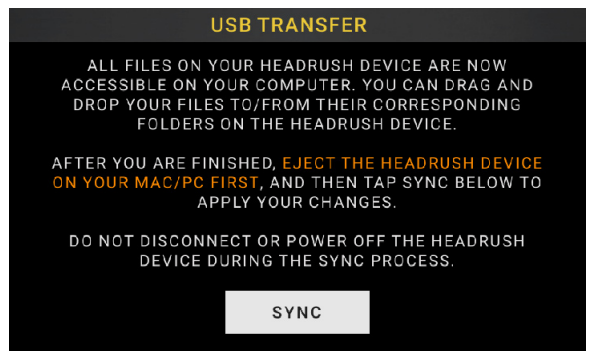
### Important:

Do **not** disconnect or power off the HeadRush MX5 during the process.

Any unsupported files will be ignored.

You cannot transfer a folder or .zip/archive folder to/from HeadRush MX5. Instead, transfer any supported files directly.

We recommend organizing the file structure of your rigs, setlists, model presets, and/or impulse response files on your computer so that it's identical to the file structure as shown on the HeadRush MX5 "drive."



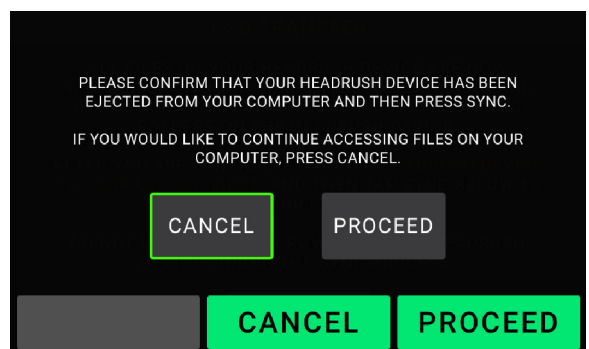
### To transfer files between the HeadRush MX5 and your computer:

1. Connect your computer to the HeadRush MX5's **USB port** using a standard USB cable.
2. With your computer powered on, power on the HeadRush MX5 using the **power switch**.
3. Tap the ●●● button in the upper-right corner of the screen and then tap **Global Settings**.
4. In the Global Settings screen, tap the ●●● button in the upper-right corner of the screen, and tap **USB Transfer**. On your computer, the HeadRush MX5 will appear as a mass-storage device called **HeadRush**.

**Windows users:** If this is the first time you've connected it to this computer, you may need to wait a minute while it installs the class-compliant drivers.

5. Open the **HeadRush** drive. You can now freely click and drag contents between **HeadRush** and your computer. Note that any changes you make to the contents of your **HeadRush** are immediate and cannot be cancelled.
6. **IMPORTANT:** When you are finished transferring contents, you must **unmount/eject** the HeadRush drive from your computer. File corruption may occur if the drive is not properly ejected before continuing.
7. After the drive has been ejected, tap **Sync** on your HeadRush MX5 to "commit" any changes you made to the contents of the HeadRush drive. An additional prompt will appear to confirm you have ejected the drive. Tap **Proceed** to continue or **Cancel** to continue accessing files on your computer.

As the HeadRush MX5 analyzes and imports the files, a meter on the display will indicate its progress. The normal Global Settings screen will reappear when the process is finished. Do not disconnect or power off HeadRush MX5 during the sync process.



## Screen Lock

The Screen Lock feature disables the **touchscreen** and gives you a simple interface that shows your current rig name, setlist name, and a customizable image.

**To activate the screen lock feature**, tap the ●●● button in the upper-right corner of the main page, and then tap **Lock Screen**.

**To deactivate the screen lock feature**, tap the unlock icon.



### To customize the Screen Lock image:

1. Connect your computer to the HeadRush MX5's **USB port** using a standard USB cable.
2. With your computer powered on, power on the HeadRush MX5 using the **power switch**.
3. Tap the ●●● button in the upper-right corner of the screen and then tap **Global Settings**.
4. In the Global Settings screen, tap the ●●● button in the upper-right corner of the screen, and tap **USB Transfer**. On your computer, the HeadRush MX5 will appear as a mass-storage device called **HeadRush**.

**Windows users:** If this is the first time you have connected the HeadRush MX5 to your computer, you may need to wait a minute while the class-compliant drivers are installed.

5. Open the **HeadRush** drive.
6. Place a **.png**, **.bmp**, **.jpg**, or **.jpeg** file named **LockScreenLogo** in the root directory of the **HeadRush** drive. We recommend using an **800x400**-pixel image (it will be automatically scaled to this size after transferring it). Note that any changes you make to the contents of your **HeadRush** are immediate and cannot be cancelled.
7. **IMPORTANT:** When you are finished transferring contents, you must **unmount/eject** the HeadRush drive from your computer. File corruption may occur if the drive is not properly ejected before continuing.
8. After the drive has been ejected, tap **Sync** on your HeadRush MX5 to "commit" any changes you made to the contents of the HeadRush drive. An additional prompt will appear to confirm you have ejected the drive. Tap **Proceed** to continue or **Cancel** to continue accessing files on your computer.

As the HeadRush MX5 analyzes and imports the files, a meter on the display will indicate its progress. The normal Global Settings screen will reappear when the process is finished. Do not disconnect or power off HeadRush MX5 during the sync process.

## Firmware Update Instructions

1. Connect the **USB port** on your HeadRush MX5 to your computer and ensure HeadRush MX5 and your computer are powered on.
2. On your HeadRush MX5, tap the ●●● icon in the upper-right corner, and tap **Global Settings**.
3. In the Global Settings screen, tap the ●●● icon in the upper-right corner again, and tap **Firmware Update**. In the screen that appears, tap **OK** to continue. After restarting, the screen will show **Update** at the bottom edge.
4. Open the **HeadRush Updater** application for your operating system—Windows or macOS. (You can download the latest updater application from [headrushfx.com](https://headrushfx.com))
5. When the updater window appears, click **Update HeadRush**. Do **not** disconnect or power off the HeadRush MX5 or your computer until the update is completed.
6. When the update is completed, the updater window will display **Done**, and your HeadRush MX5 will restart. Click **Done** to close the updater window.
7. Confirm your Headrush MX5 is using the latest firmware—tap the ●●● icon in the upper-right corner, and tap **Global Settings**. The firmware version will appear at the bottom of the screen.

## Appendix

### Technical Specifications

<b>Footswitches</b>	(3) footswitches with color LEDs	
<b>Knobs</b>	(1) 300° master volume knob (1) 360° navigation/data encoder	
<b>Display</b>	(1) full-color LED-backlit display with touch interface 4" / 102 mm (diagonal)	
<b>Connectors</b>	(1) 1/4" (6.35 mm) mono input (guitar) (1) 1/4" (6.35 mm) TRS input (expression pedal) (1) 1/4" (6.35 mm) stereo output (send) (1) 1/4" (6.35 mm) stereo input (return) (2) 1/4" (6.35 mm) balanced output (main) (1) 1/8" (3.5 mm) stereo output (headphones) (1) 1/8" (3.5 mm) stereo input (auxiliary device) (1) 1/8" (3.5 mm) MIDI output (1) 1/8" (3.5 mm) MIDI input (1) USB Type-B port (1) DC power adapter input	
<b>Power</b>	<b>Connection</b>	DC power adapter input
	<b>Input Voltage</b>	12 VDC, 3.0 A, center-positive
<b>Dimensions</b> (width x depth x height)	11.6" x 5.9" x 2.75" 295 x 150 x 70 mm	
<b>Weight</b>	3.46 lbs.	
	1.57 kg	

Specifications are subject to change without notice.

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