

HEAD RUSH[®]

L O O P E R B O A R D

User Guide

(English)

Version 2.0.0

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Introduction

Box Contents

Looperboard

USB Cable

Power Adapter

Software Download Card

Quickstart Guide

Safety & Warranty Manual

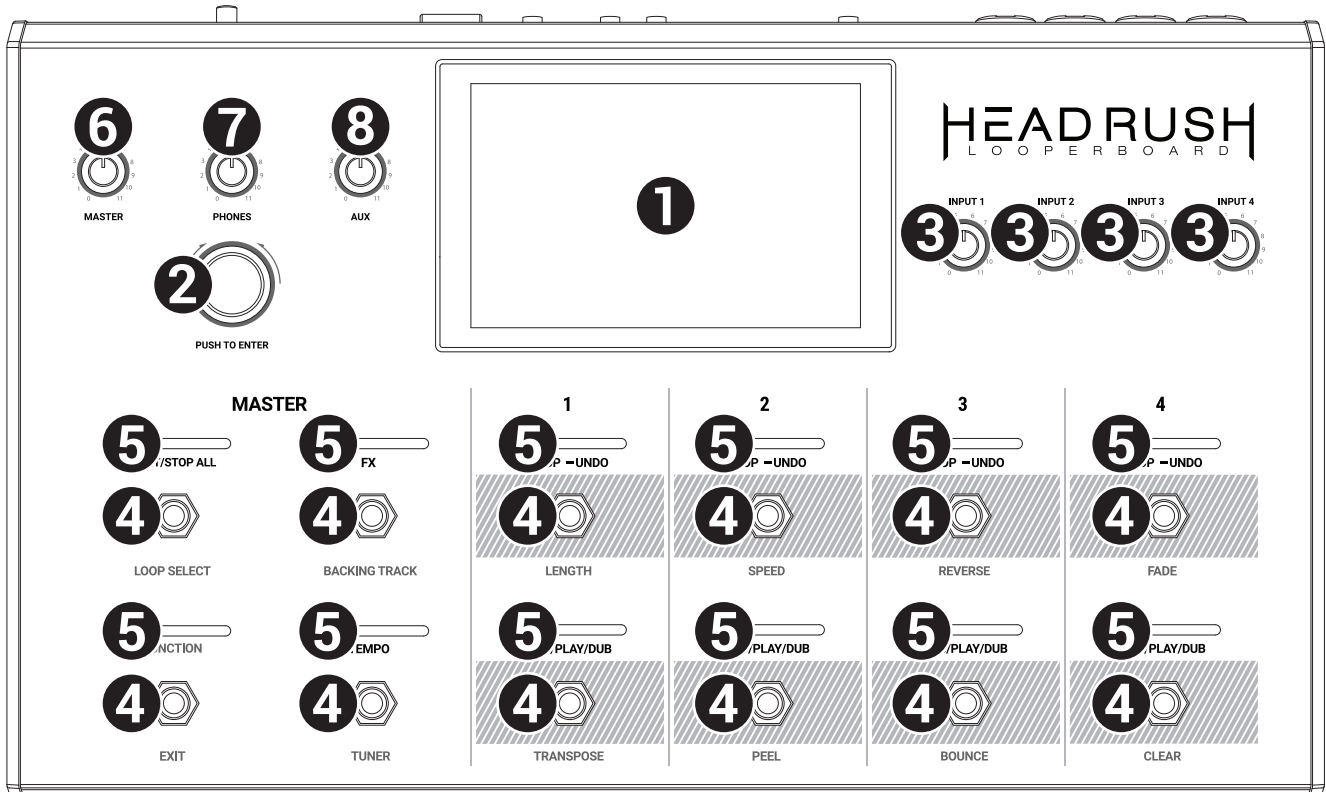
Support

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

For additional product support, visit headrushfx.com/support.

Features

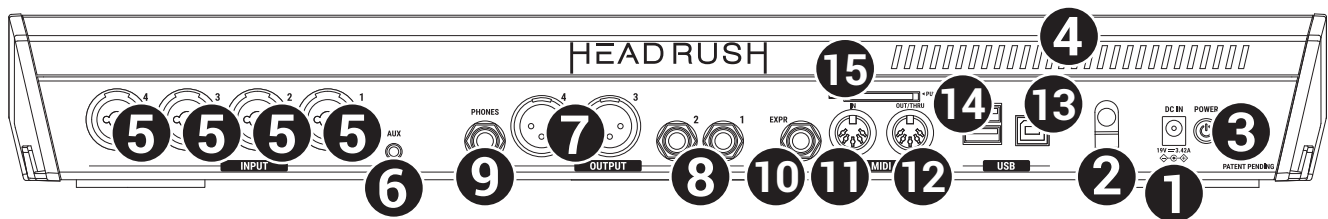
Top Panel



- 1. Touchscreen:** This full-color multi-touch display shows information relevant to the HeadRush Looperboard's current operation. Touch the display (and use the hardware controls) to control the interface. See [Operation > Overview](#) to learn how it works.
- 2. 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.
- 3. Input Gain:** Turn these knobs to adjust the independent gain level of each **input**.
- 4. Footswitches:** Use these footswitches to perform different functions. The eight right-most footswitches correspond to the four tracks of a loop. See the [Operation](#) chapter to learn how to use them.
- 5. Footswitch Indicators:** These lights indicate the status of different functions (performed by the footswitch below each one). See the [Operation](#) chapter to learn about them.
- 6. Master:** Turn this knob to adjust the volume level of the **outputs**.
- 7. Phones:** Turn this knob to adjust the volume level of the **Phones output**.
- 8. Aux:** Turn this knob to adjust the volume level of the **Aux input**.

Important: The audio signal from the **Aux input** is routed directly to the **outputs and cannot be used for recording directly to a looper track**. It is also unaffected by the master volume or phones volume knobs.

Rear Panel



1. **Power Input** (19 VDC, 3.42 A, center-positive): Connect this input to a power outlet using the included power adapter.
2. **Power Adapter Restraint**: Secure the power adapter cable to this restraint to prevent it from accidentally unplugging.
3. **Power Switch**: Press this button to turn the HeadRush Looperboard's power on. Press and hold this button to turn the HeadRush Looperboard's power off.
4. **Vent**: Make sure this vent is unobstructed while using the HeadRush Looperboard.
5. **Inputs** (XLR or 1/4"/6.35 mm, balanced): Connect your guitar, instrument, drum machine, keyboard, or other audio source to these inputs. You can enable or disable +48V phantom power for these inputs in the [Global Settings](#) page.

Important: Only enable phantom power if your microphone requires it. Most dynamic microphones and ribbon microphones do not require phantom power, while most condenser microphones do. Consult your microphone's documentation to find out whether it needs phantom power.
6. **Aux Input** (1/8"/3.5 mm, TRS): Connect an optional audio source (e.g., smartphone, tablet, etc.) to this input. Use the **Aux** knob to control the volume level.
7. **Outputs** (XLR): Connect these outputs to the inputs of your mixer, active loudspeaker, etc. Use the **Master** knob to control the volume level. You can adjust the ground-lift setting for these outputs in the [Global Settings](#) page.
8. **Outputs** (1/4"/6.35 mm, balanced): Connect these outputs to the inputs of your amplifier, audio interface, mixer, etc. Use the **Master** knob to control the volume level. You can switch the level of these outputs between **Amp** and **Line** in the [Global Settings](#) page.
9. **Phones Output** (1/4"/6.35 mm, TRS): Connect stereo headphones to this output. Use the **Phones** knob to control the volume level.
10. **Expression Pedal Input** (1/4"/6.35 mm, TRS): Connect an optional expression pedal to this input.
11. **MIDI In** (5-pin DIN): Use a standard MIDI cable to connect this input to the MIDI output of an optional external MIDI device. See [External MIDI Control](#) for more information.
12. **MIDI Out/Thru** (5-pin DIN): Use a standard MIDI cable to connect this output to the MIDI input of an optional external MIDI device. You can set this output to be a standard MIDI output or MIDI throughput in the [Global Settings](#) page.
13. **USB Type-B Port**: Connect this USB port to a computer using a standard USB cable. This connection allows the HeadRush Looperboard to send and receive the digital audio signal to and from your computer. You can also use this connection to import or export loops, individual audio files, backing tracks, etc. See [USB Connection](#) for more information.

This connection is also used to update the firmware. Visit headrushfx.com to check for available firmware updates.

14. **USB Type-A Ports:** Connect USB flash drives to these USB ports for additional storage. You can save and load loops with the connected USB flash drive, as well as record loops directly to the flash drive itself. See [Storage](#) for more information.

You can also play backing tracks directly from the USB drive. See [Backing Track Player](#) for more information.

Lastly, you can connect class-compliant USB devices to these USB ports for external MIDI control. See [External MIDI Control](#) for more information.

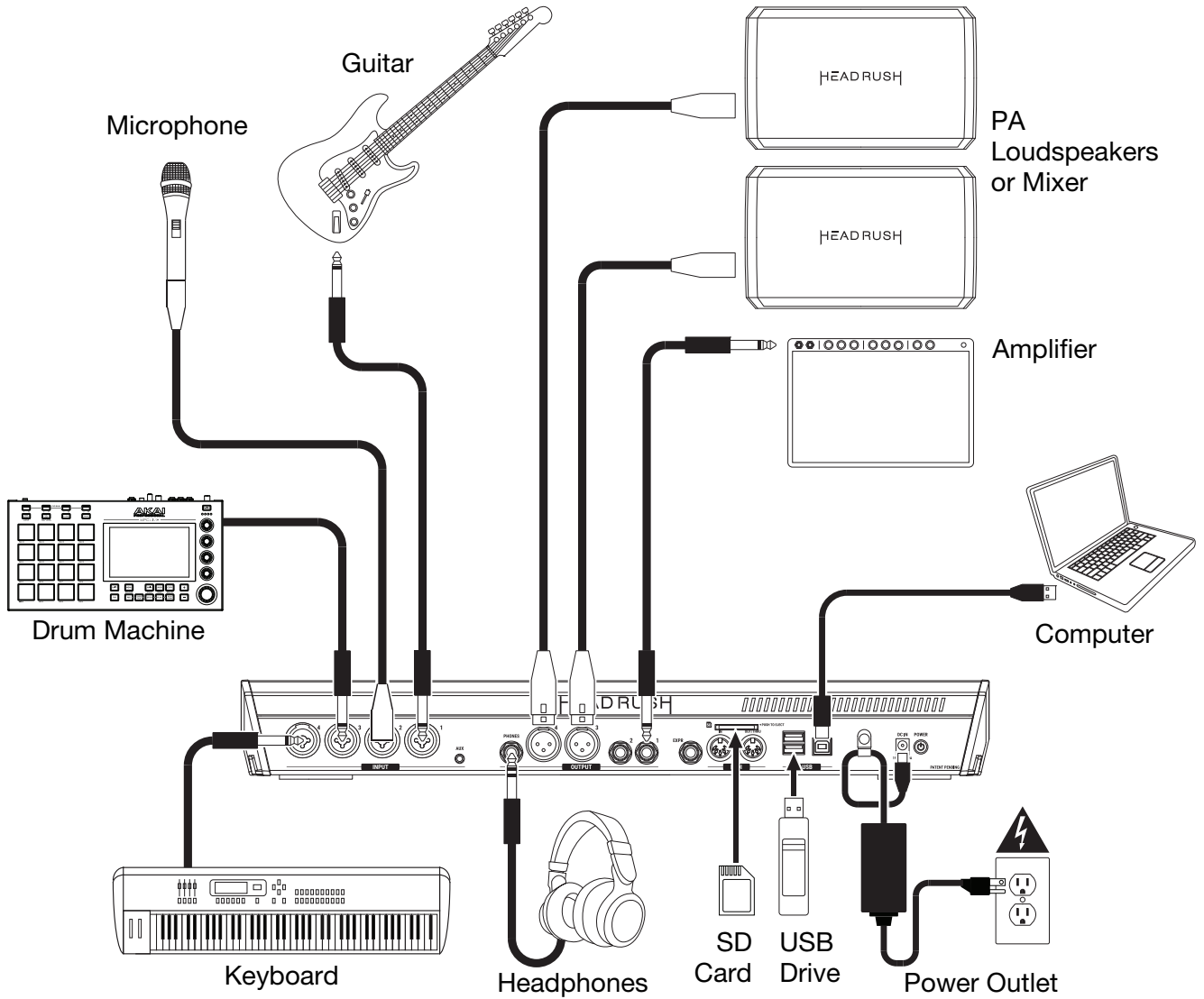
15. **SD Card Slot:** Insert a standard SD/SDHC card into this slot for additional storage. You can save and load loops with the connected USB flash drive, as well as record loops directly to the flash drive itself. See [Storage](#) for more information.

You can also play backing tracks directly from the USB drive. See [Backing Track Player](#) for more information.

Important: To avoid file loss or damage to your media, only disconnect USB and SD storage devices from HeadRush Looperboard while it is powered off. Alternatively, go to the Storage page and then tap the storage device's eject icon.

Setup

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



Operation

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

Overview

Timeline Page

Tap here to access the navigation menu.

This is the name of the loop.

Tap here to save the loop.

The track info boxes show each track's name, number of bars, and the number of recorded layers.

Double-tap the track name to change it.

Each lane displays the track's recorded audio

120.00 BPM

0:00:0943

0:00:1119

FIXED

This is the current tempo, which you can change by pressing the **Tempo** footswitch at the desired speed, or by tapping here and turning the **encoder**.

This is the current playback position.

This is the length of the longest track in this loop.

This is the Looper Mode indicator.

Mixer Page

Touch and drag these sliders to adjust the balance of each track. Double-tap to enlarge the slider for fine adjustments.

These meters show the volume level of the tracks as they play. Tap and drag the **white line** at the top of a meter to adjust the volume level of a track.

LOOP FOREVER

VOCALS GUITAR SYNTH DRUMS CLICK BACKING TRACK

START/STOP 1 START/STOP 2 START/STOP 3 START/STOP 4

BARS LAYERS BARS LAYERS BARS LAYERS BARS LAYERS

A 1 A 2 A 20 A 5

18 R 61 R 44 L

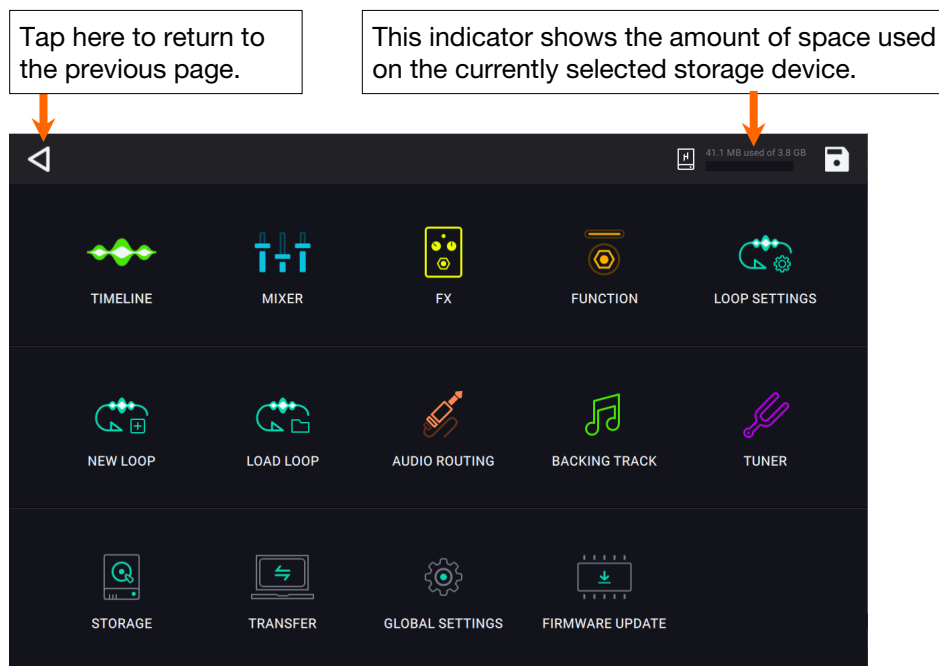
120.00 BPM

0:00:0285

0:00:1119

FIXED

Navigation Menu



On the Navigation Menu page, you can tap an icon to quickly navigate to HeadRush Looperboard's features:

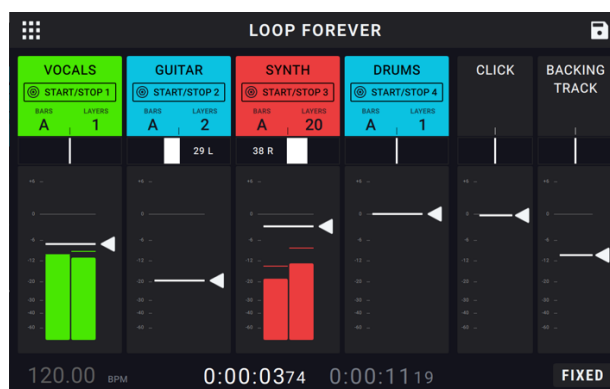
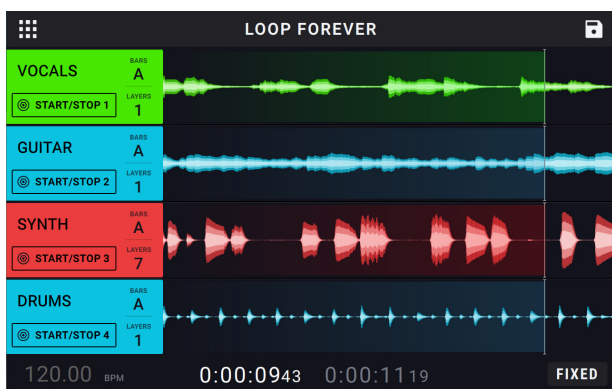
- **Timeline:** Tap here to access HeadRush Looperboard's timeline performance view.
- **Mixer:** Tap here to adjust volume and panning of looper tracks, the click track, and the backing track.
- **FX:** Tap here to assign and use the built-in FX.
- **Function:** Tap here to access the features of the **Function** footswitch.
- **Loop Settings:** Tap here to adjust the available settings that can be configured per loop.
- **New Loop:** Tap here to discard the current loop and create a new loop.
- **Load Loop:** Tap here to load a previously saved loop.
- **Audio Routing:** Tap here to adjust HeadRush Looperboard's audio routing settings.
- **Backing Track:** Tap here to access the backing track player feature.
- **Tuner:** Tap here to access the tuner feature.
- **Storage:** Tap here to view available storage and to select a target storage device.
- **Transfer:** Tap here to enter USB Transfer Mode and transfer files to/from a computer.
- **Global Settings:** Tap here to adjust the available settings that can be adjusted globally.
- **Firmware Update:** Tap here to enter Firmware Update mode.

Recording & Playing Tracks

HeadRush Looperboard lets you record audio onto **four tracks** and store each set of four tracks as a **loop**. Each track can have up to **99 layers**. Each track can be a minimum of 1 second long, with no maximum length limit. You can record, play, and stop tracks independently of each other depending on the loop mode and other settings.

Each track's info box, meter, and/or waveform will use a color to indicate its current state:

- **Red:** recording or overdubbing
- **Green:** playing
- **Blue:** stopped



Use the **Timeline** page to view the waveforms of each track's recorded audio in your loop.

To show the Timeline page, tap the **Navigation Menu icon** at the top left of the touchscreen, then tap the **Timeline icon**.

Use the **Mixer** page to adjust the volume levels and panning of each track.

To show the Mixer page, tap the **Navigation Menu icon** at the top left of the touchscreen, then tap the **Mixer icon**.

To adjust the volume level of a track, tap and drag the **white line** at the top of a meter.

To adjust the volume of the main outputs, turn the **Master knob**.

The *left* time counter in the bottom bar of the Timeline and Mixer pages indicates the current playback position of the loop. The *right* time counter in the bottom bar indicates the length of the longest track in the loop. Both are displayed as **hours:minutes:seconds.centiseconds**.

Tip: You can tap the **Function** footswitch twice to quickly return to the Timeline page from any other HeadRush Looperboard page.



To record a track, press its **•Rec/Play/Dub** footswitch.

Important: Before recording anything, set the input volume level by turning the **Input (1–4)** knob for each input you want to use.

To finish recording and start playback of a track, press its **•Rec/Play/Dub** footswitch again.

To overdub on a track that is currently playing, press the **•Rec/Play/Dub** footswitch again.

Tip: Use the [Global Settings](#) page to set HeadRush Looperboard to overdub immediately after recording a track (instead of just playing it).

To stop a track at any point, press its **•Stop/–Undo** footswitch.

To restart a track's playback, press its **•Stop/–Undo** footswitch again.

To restart a track and immediately start overdubbing, press its **•Rec/Play/Dub** footswitch.

Tip: Use the [Global Settings](#) page to configure HeadRush Looperboard to restart a track's playback without overdubbing when pressing the **•Rec/Play/Dub** footswitch.

To stop all tracks at any point, press the **Start/Stop All** footswitch when one or more tracks are playing.

To start playback of all tracks simultaneously, press the **Start/Stop All** footswitch when all tracks are stopped.

To undo everything you have recorded since you last pressed a **•Rec/Play/Dub** footswitch, press and hold the **•Stop/–Undo** footswitch for that track for approximately **1.5 seconds**.

To re-add everything you just undid, press and hold the **•Stop/–Undo** footswitch for that track for approximately **1.5 seconds** again.

To peel the most recent layer of a track, hold the **•Rec/Play/Dub** footswitch for approximately **1.5 seconds**.

Important: If a track only has 1 layer, performing the undo function will clear the track, and the layer cannot be restored.

Tip: Use the [Global Settings](#) page to customize the hold functions for the **•Stop/–Undo** and **•Rec/Play/Dub** footswitches.

Looper Modes

HeadRush Looperboard provides 5 different Looper Modes to record, overdub and play your looper tracks. The currently selected Looper Mode is indicated in the bottom right of the touchscreen in the Timeline and Mixer Pages.

Generally, each mode supports a different style of looping workflow. The best way to find out which Track Mode works best with your workflow is to experiment and have fun!

To set how the looper records, overdubs, or plays your tracks, tap the **Looper Mode** tab on the Loop Settings page and then select a mode. You can access this setting quickly by tapping the **Looper Mode** icon in the Timeline or Mixer Pages.



Tip: Set your Looper Mode before recording or importing any audio into your loop. While you may be able to change the selected mode after recording, your options may be limited.

- Fixed Mode:** Use this mode if you want 4 looper tracks with the same length. In this mode:
 - You can record, overdub or play all looper tracks simultaneously.
 - All track lengths will be the same length as the first recorded looper track.
 - When you set a track to record, overdub or play, it will happen immediately.
- Serial Mode:** Use this mode if you want to use each of the 4 looper tracks as a different section of a song (e.g., verse, chorus, bridge and outro). In this mode:
 - You can record, overdub or play on only one looper track at a time.
 - All looper tracks can be different lengths.
 - When you set a currently playing track to overdub, it will happen immediately.
 - When you set a currently stopped track to play or record/overdub, it will happen as soon as the currently playing track reaches its end and stops. When a track is armed for playback or recording/overdubbing while another track is playing back, the corresponding LED will flash green or red, respectively.
- Sync Mode:** Use this mode if you want 4 looper tracks with different lengths that always stay in sync. In this mode:
 - You can record or play multiple tracks simultaneously.
 - You must record a primary track first.
 - After the primary track has been recorded, all other looper tracks must be the same length, or a multiple of its length.
 - If new tracks are shorter or longer than the primary track, HeadRush Looperboard will automatically quantize them to keep them in sync with the primary track.

Tip: You can change how tracks start and stop in Sync Mode in the **Track Start/Stop** tab of the Loop Settings Page.

4. **Serial-Sync Mode:** This mode is similar to Serial Mode, but it enables you to keep 1 primary looper track (e.g., a drum or percussion track) playing at all times while switching between different song sections on looper tracks 2, 3 and 4 (e.g., verse, chorus and bridge). In this mode:
- The primary track and only one other looper track can be playing, recording or overdubbing at the same time.
 - You must record a primary track first.
 - After the primary track has been recorded, all other looper tracks must be the same length, or a multiple of its length.
 - HeadRush Looperboard will auto-trim (or extend) the endpoints of the other looper tracks to always keep them in sync.

Tip: You can change how tracks start and stop in Serial-Sync Mode in the **Track Start/Stop** tab of the Loop Settings Page.

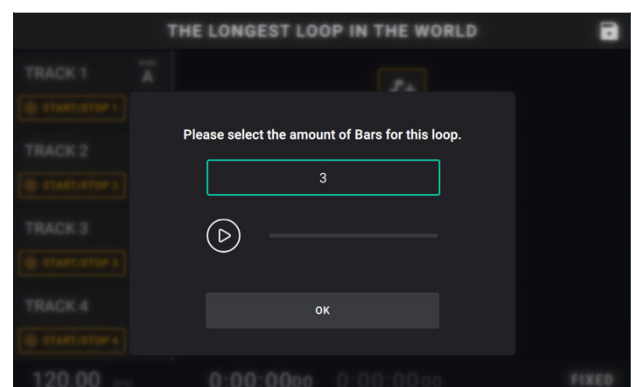
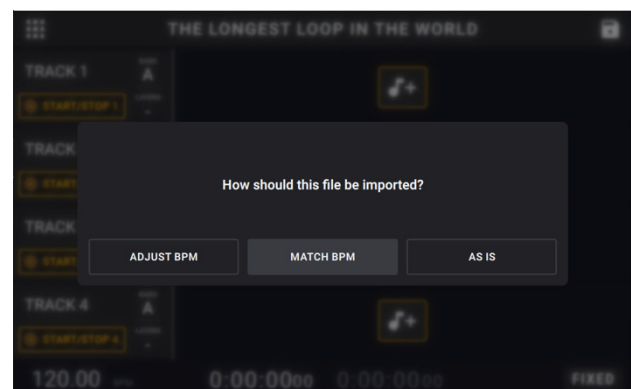
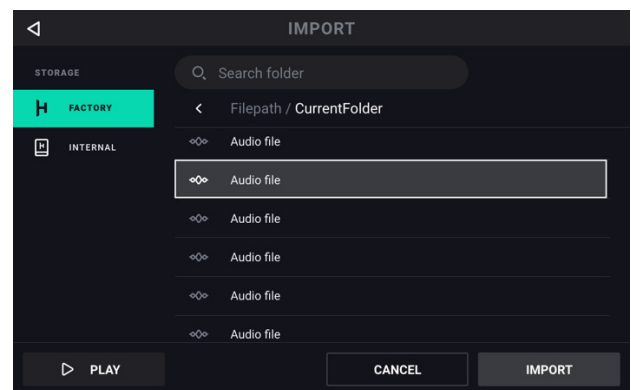
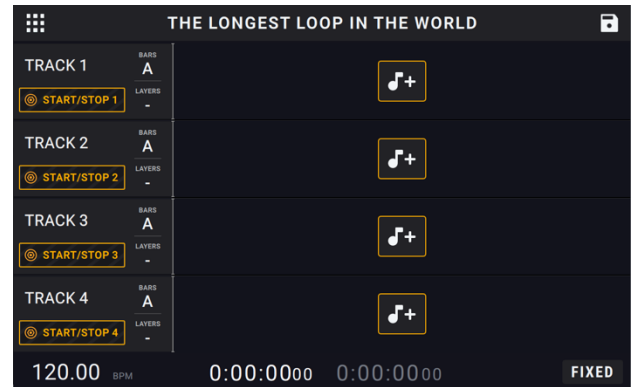
5. **Free Mode:** This mode is useful for creating ambient soundscapes or for musicians who just like to break the rules! In this mode:
- You can record, overdub or play all looper tracks simultaneously.
 - All looper tracks can be different lengths.
 - When you set a track to record, overdub or play, it will happen immediately.

Importing Audio

In addition to creating loops using input sources, you can also import a .WAV or .MP3 audio file (such as a recorded drum beat) directly into an empty looper track.

To import an audio file:

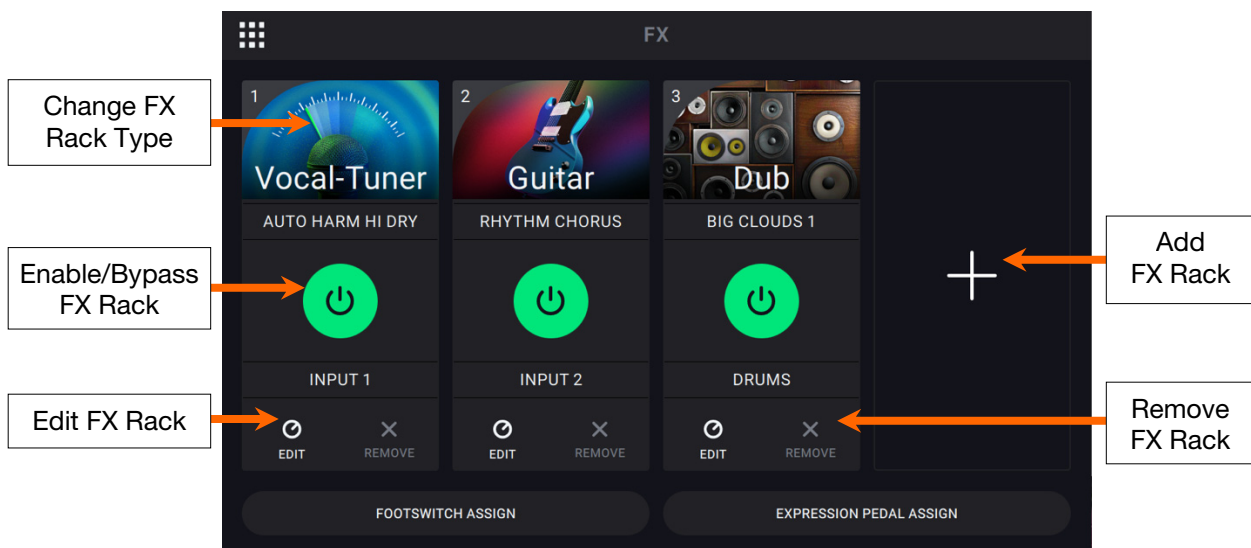
1. While viewing the Timeline Page, tap the **Import Audio icon** on any empty track.
2. Select a source by tapping one of the icons in the left column of the browser:
 - **Factory:** This is a collection of over 300 exclusive drum and percussion loops provided by HeadRush.
 - **Internal:** This is the internal storage of HeadRush Looperboard.
 - **USB 1/USB 2/SD:** These sources will appear if you have external storage connected to the respective ports on the rear panel of HeadRush Looperboard.
3. Use the **touchscreen** to navigate through folders, as necessary. You can search for an audio file in a folder by tapping in the search field in the top center of the touchscreen, next to the magnifying glass. Tap the **X** icon to clear your search.
4. Select a file, and then tap the **Play** button if you would like to preview the audio file, or tap the **Import** button to load the audio file into the looper track.
5. After tapping the **Import** button, a dialog will appear with up to 3 options:
 - **ADJUST BPM:** This will change your loop's tempo to match the automatically detected tempo of the imported audio file.
 - **MATCH BPM:** This will change the imported audio file to match the current tempo of your loop.
 - **AS IS:** This will import the audio file without changing the tempo of the audio file, or the tempo of your loop.
6. You may also need to indicate the number of bars of your imported file. You can tap the **Play** icon to preview the file for reference, if needed.



FX Racks

Applying FX

On the **FX Page**, you can assign multiple effects (called **FX Racks**) at once to an audio input or looper track. Each FX Rack is made up of multiple effects that can be individually edited and toggled on the **FX Rack Edit** page.



To enter the FX Page, press the footswitch labeled **FX**, or tap the **Navigation Menu** icon at the top-left of the touchscreen, and then tap the FX icon.

To add an FX Rack, tap the plus sign (+) in an empty slot.

To enable or bypass an FX Rack, tap the footswitches labeled 1–4, or tap the **On/Off** button on the touchscreen.

To change the FX Rack type of an existing FX Rack, tap the **FX Rack icon** on the touchscreen. This icon looks like a guitar, drums, etc.

To change the settings for the FX Rack, tap the **knob icon** on the touchscreen.

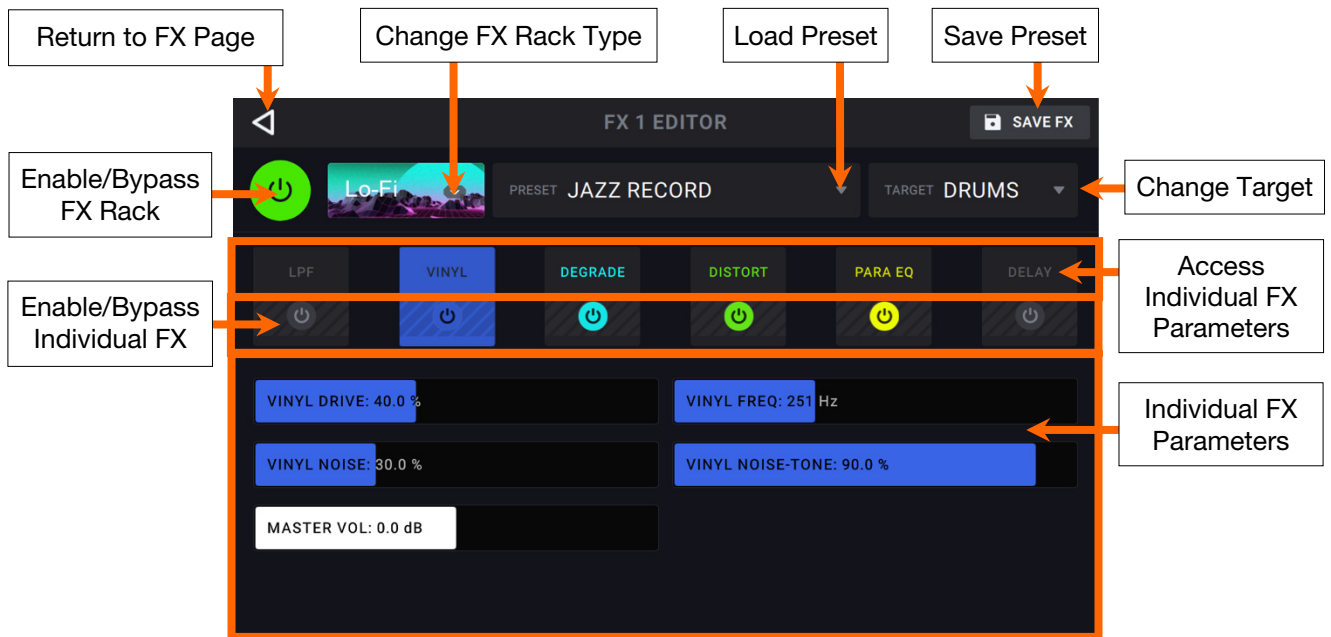
To remove an FX Rack, tap the **X icon** on the touchscreen.

To customize the footswitch assignments of the FX Racks, tap the **Footswitch Assign** button at the bottom of the touchscreen.

To assign FX parameters to an external expression pedal, tap the **Expression Pedal Assign** button at the bottom of the touchscreen.

To exit the FX Page, press the footswitch labeled **FX**, or tap the **Navigation Menu** icon in the top-left corner of the touchscreen.

Editing FX



To enable or bypass the full FX Rack, tap the **Enable/Bypass** button in the top-left corner of the touchscreen, underneath the back arrow.

To change the FX Rack type, tap the **FX Rack** drop-down menu, and then tap the FX Rack type you would like to load.

To load a factory or previously saved FX Rack preset, tap the **Preset** drop-down menu, and then tap the preset you would like to load.

To save your settings as an FX Rack preset, tap the **save icon** in the top right corner of the touchscreen.

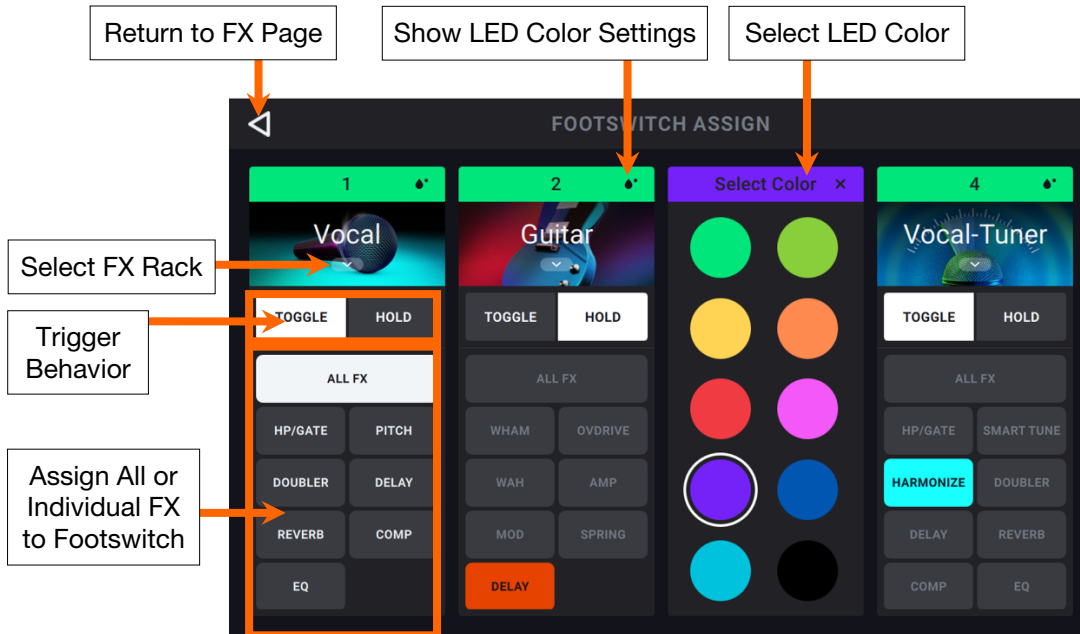
To set the target audio for the FX Rack, tap the target dropdown menu and then select **Inputs 1–4** or **Tracks 1–4**. If you have previously named your loop’s tracks, the new names will appear instead of Tracks 1-4.

To enable or bypass individual effects within the FX rack, tap the **Enable/Bypass** buttons located under each individual effect’s name.

To view and adjust an individual effect parameter within the FX rack, tap the individual FX rack’s name, and then tap and drag a parameter slider in the lower section. You can also tap the parameter slider and then turn the encoder for fine adjustment.

Footswitch Assignment

On the **Footswitch Assign** page, you can modify the functions of HeadRush Looperboard's footswitches in an FX Rack.



To select the FX Rack controlled by the footswitch, tap the icon that shows the name of the **FX Rack** (e.g., Vocal, Guitar, Lo-Fi), and then select the new FX Rack to control. To hide the selections, tap the block with the name of the FX Rack again.

To change the footswitch's LED color, tap the **Show LED Color** icon on the top right corner of the FX rack to view the selectable colors. Tap to select the color, and then tap the **X** icon to hide the colors.

To change the trigger behavior of the footswitch, tap the block that says either **Toggle** or **Hold** (momentary). The text shown will be the behavior of that footswitch.

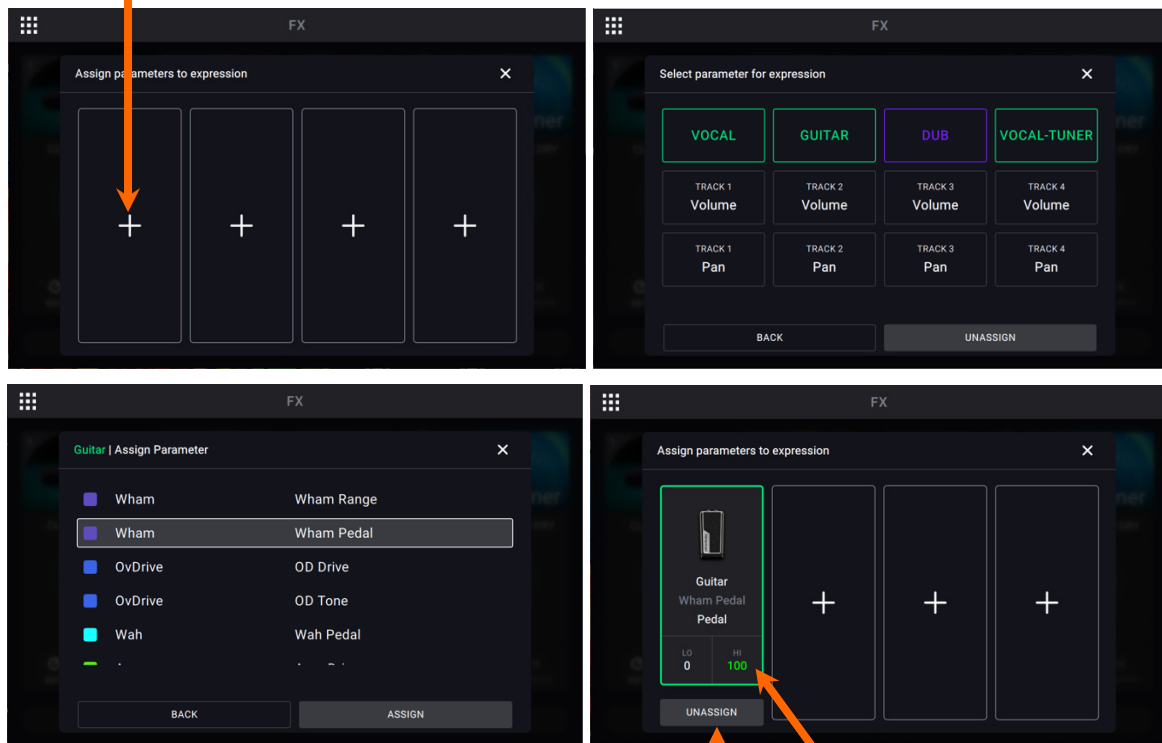
To assign a footswitch to enable/bypass all active FX within an FX Rack, tap to select the **ALL FX** block for the footswitch.

To assign a footswitch to enable/pass individual FX within an FX Rack, tap to select the desired **individual FX blocks** for the footswitch.

Expression Pedal Assignment

In the **Expression** menu, you can assign up to 4 parameters, volume or panning controls to your connected expression pedal.

Assign Expression Parameter



Unassign Parameter

Change Parameter Range

To assign a parameter to the expression pedal, tap the **+** sign in an empty slot, and then select an FX Rack, looper track volume or looper track panning parameter to assign.

To change the range of the assigned parameter, tap the **Range** button. Tap the **LO** or **HI** % for the parameter, and then use the **encoder** to adjust the value.

Managing Loops



To create a new loop (and discard unsaved changes), tap the **Navigation Menu** icon, and then tap **New Loop** icon.

To save the current loop, tap the **Save** icon in the top right corner of the **Timeline**, **Mixer**, or **Navigation Menu** pages. Tap **Save** (to save over the existing file) or **Save New Loop** (to save the loop as a new file), or tap **Cancel** to return to the previous screen. A save browser will then appear for you to select your desired target storage device and folder for saving.

Note: When saving to a storage device using the exFAT or FAT32 file system, the maximum file size for saving .WAV files is 4GB (about 6 hours and 11 minutes of audio). If you are saving to a storage device using the FAT16 file system, then the limit for saving .WAV files is 2GB.

To load a previously saved loop, tap the **Navigation Menu** icon, and then tap the **Load Loop** icon. The Load Loop browser will then appear, where you can locate a loop and then tap the **Load** button to load it.

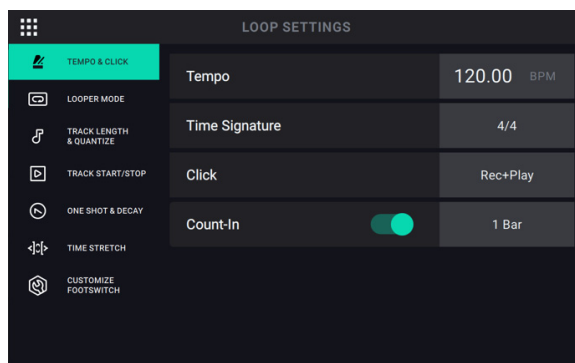
You can also **Delete** or **Rename** a previously saved loop in the load loop browser by tapping the loop name, and then tapping **Delete** or **Rename** buttons accordingly.

Tip: You can search for a Loop in a folder in the Load or Save Loop browsers by tapping in the search field in the top center of the touchscreen, next to the magnifying glass. Tap the **X** icon to clear your search.

Loop Settings

Use the Loop Settings page to configure the settings for an individual loop.

To show the loop settings, tap the **Navigation Menu icon** in the top-left corner of the touchscreen, and then tap the **Loop Settings icon**.



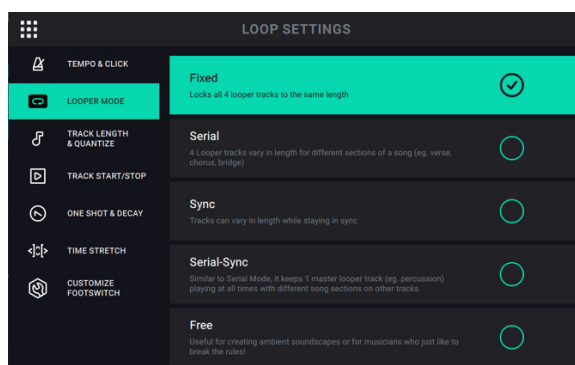
Tempo and Click Tab:

Tempo: This setting determines the tempo of the loop. Tap the **BPM** on the **touchscreen**, and then use the **encoder** to set the current loop's tempo, from **30–280 BPM**.

Time Signature: This setting determines the time signature of the loop. Tap the **time signature**, and then use the **encoder** to set the time signature of the current loop: **2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 5/8, 6/8, 7/8, 8/8, 9/8, 10/8, 11/8, 12/8, 13/8, 14/8** or **15/8**.

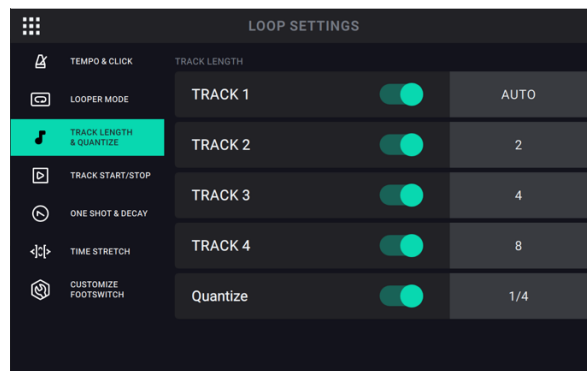
Click: This setting determines the function of the click track. Set to **Rec** to enable while recording and overdubbing, or set to **Play+Rec** to enable when playing or recording and overdubbing. Set to **Off** to disable the click.

Count-In: This setting determines how the count-in feature functions. Set to **On** to enable the count-in before a loop starts to play, record or overdub. Tap the **Bar value** on the **touchscreen** and turn the **encoder** to adjust the number of measures for the count-in. Set to **Off** to disable the count-in.



Looper Mode Tab:

Looper Mode: Choose one of the five available Looper Mode settings on this tab for your loop. For more information about the Looper Mode settings, see the [Looper Modes](#) chapter of this manual.



Track Length and Quantize Tab:

Track Length: This setting enables you to predetermine the length of a looper track. Use the **On/Off** switch to enable/disable this feature. You can then tap the field to the right of the **On/Off** switch and use the **encoder** to set this parameter to **AUTO** or **1-64 bars**.

When set to **AUTO**, HeadRush Looperboard determines the tempo of your loop based on the first recorded looper track. Any additional tracks also set to **AUTO** will match the same length as the first recorded track. The loop tempo can still be changed after it has been automatically detected by the first recording.

When set to **1-64 Bars**, HeadRush Looperboard will set that individual track to be that specific length of bars, based on the loop's current tempo.

If you are using the **FIXED** looper mode, there will be one **TRACK LENGTH** setting where you can set the length for all four looper tracks at once. If you are using the other looper modes (**SERIAL**, **SYNC**, **SERIAL-SYNC**, **FREE**) you can select **TRACK LENGTH** for all four tracks individually.

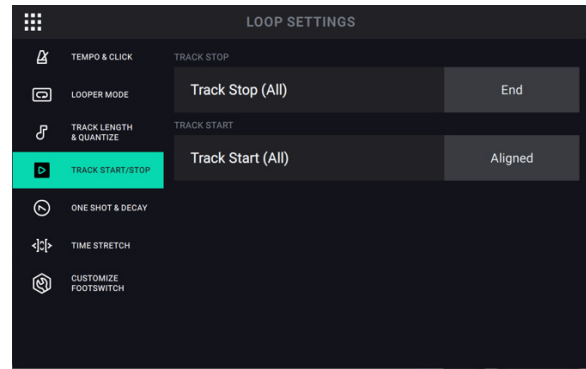
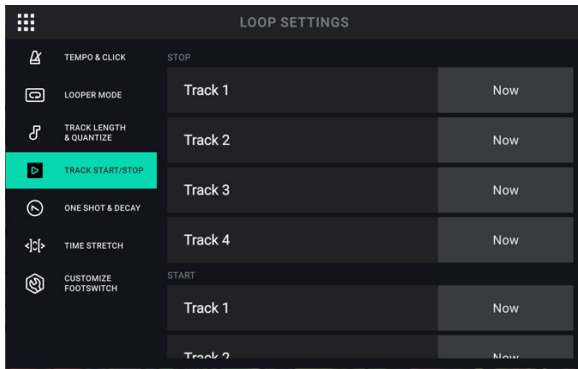
When using the **SYNC** and **SERIAL-SYNC** looper track modes, the **TRACK LENGTH** setting will only apply to the first recorded track. This is to stay consistent with the existing rules of these modes and ensure that all other looper tracks are either the same length, or a multiple of its length. In this case, **AUTO** will be selected for all tracks recorded after the first track. The looper track's length will be quantized to a number of bars indicated as "**AUTO (Bars)**". The only exception to this rule is when track lengths are set to be half, double or quadruple of each other.

When the first recorded looper track is set to **AUTO**, and the **CLICK** is **OFF**, HeadRush Looperboard will automatically detect the tempo and number of bars of this track. If the **CLICK** is **ON**, HeadRush Looperboard will automatically detect the number of measures and leave the tempo unchanged.

When the first recorded looper track is set to **1-64 BARS**, and the **CLICK** is **OFF**, the tempo will be calculated and set automatically. If the **CLICK** is **ON**, HeadRush Looperboard will finish recording the first layer and start overdubbing after reaching the set number of bars.

This track length function is only available if **MIDI CLOCK RECEIVE** is set to **OFF** on the second page of [Global Settings](#).

Quantize: This setting determines the quantization of the start and end points of your loop, if any. Set this to **On** to enable quantization. Tap the **time division** to the right and then use the **encoder** to set the amount of quantization, to the nearest **1 bar**, **1/2 note**, **1/4 note**, **1/8 note** or **1/16 note**. Set this to **Off** to disable quantization.



Track Start and Track Stop Tab:

Track Stop: This setting determines how a track stops when using the **Sync** and **Serial-Sync** looper modes. This setting is not available for the **Fixed**, **Serial**, and **Free** looper modes.

In the **Sync** looper mode, the following selections are available per track:

- When set to **NOW**, the track will stop immediately.
- When set to **FADE**, the track will fade out (at the rate set on the [Fade](#) function page) and then stop.
- When set to **END**, the track will stop when the end of the track has been reached.

In the **Serial-Sync** looper mode, the following selections are available for all tracks:

- When set to **NOW**, the track will stop immediately.
- When set to **END**, the track will stop when the end of the track has been reached.

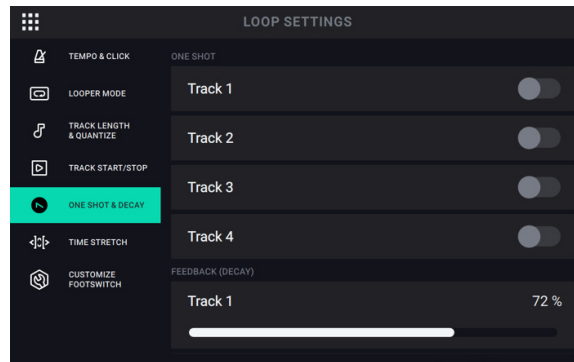
Track Start: This setting determines how a track starts when using the **Sync** and **Serial-Sync** looper modes. This setting is also not available for the **Fixed**, **Serial**, and **Free** looper modes.

In the **Sync** looper mode, the following selections are available per track:

- When set to **NOW**, the track will start immediately.
- When set to **ALIGNED**, the track will start at the beginning of the next loop cycle.

In the **Serial-Sync** looper mode, this setting is only available when the track stop setting is set to **ALIGNED**. The following selections are available for all tracks:

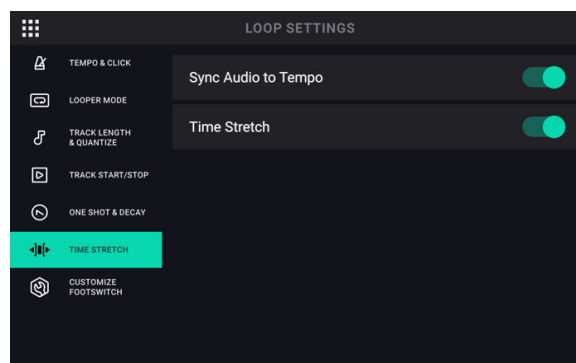
- When set to **NOW**, the track will start immediately, and the primary track will return to the beginning of the loop.
- When set to **ALIGNED**, the track will start once the primary track returns to the beginning of the loop
- When set to **END**, the track be stop when the end of the track has been reached.



One Shot and Decay Tab:

One Shot: This setting enables you to set an individual track to play just once and then stop by enabling the **One Shot** setting for the track. This is particularly useful for playing backing tracks when loaded directly to a looper track.

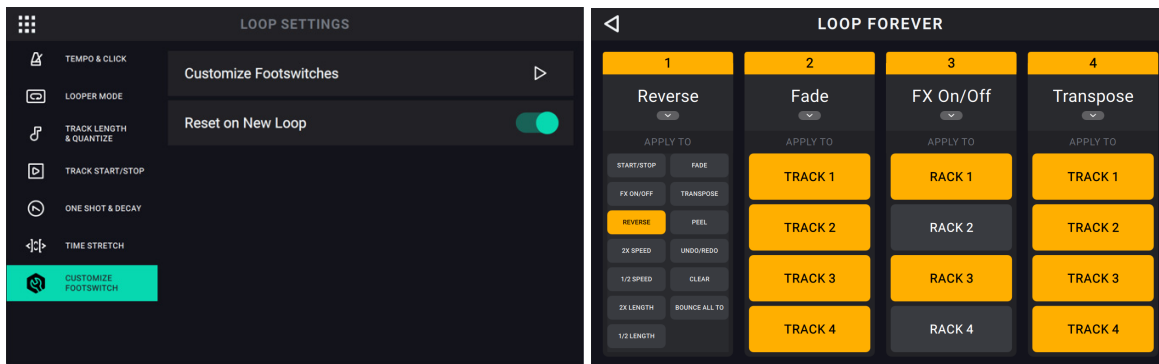
Feedback (Decay): This setting configures how each looper track decays over time when it is being recorded or overdubbed. When this parameter is set to 100% for a track, it will not decay over time. As you decrease this parameter, HeadRush Looperboard will gradually fade out the track at this newly set rate. The lower the number, the faster the loop will decay.



Time-Stretch Tab:

Sync Audio to Tempo: This setting determines whether changes in tempo affect your loop's audio. Set to **On** to enable changes to your loop's audio according to changes in tempo. Set to **Off** to leave your loop's audio unaffected by changes to the tempo.

Time Stretch: This setting determines whether changes in tempo affect your loop's audio *and* pitch. You can stretch your recorded audio to be anywhere from half the speed of the original recording, all the way to up to twice as fast as the original recording. For example, if you recorded your loop at 120 BPM, you could stretch it to be as slow as 60 BPM or as fast as 240 BPM while still retaining the pitch of the original recording without any unwanted artifacts. Set to **On** to enable or **Off** to disable.



Customize Footswitch Tab:

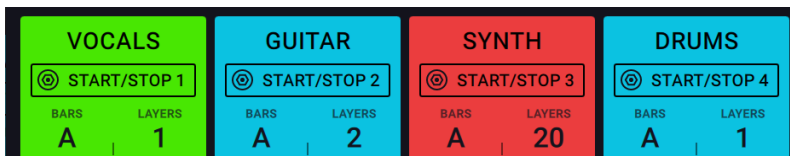
Tap the arrow next to **Customize Footswitches** to customize the **•Stop/-Undo** footswitches for each for the four looper tracks to perform other looper functions, thus reducing the amount of footswitch presses needed to access your favorite HeadRush Looperboard functions.

You can customize each track **•Stop/-Undo** footswitch to perform the function for one looper track or multiple looper tracks. Similarly, if you are using the **FX ON/OFF** function, you can set the footswitch to enable/bypass one FX rack, or multiple FX racks.

Once you have entered the customization page:

- You can select the footswitch’s function by tapping the downward arrow.
- Then, you can select which tracks the footswitch should affect by tapping the four boxes labeled **TRACK** or **RACK 1-4**.

After you’re done customizing the footswitch, the current function of the switch will show up in the track information boxes that are shown on the **Timeline** and **Mixer** pages.



Some additional important notes:

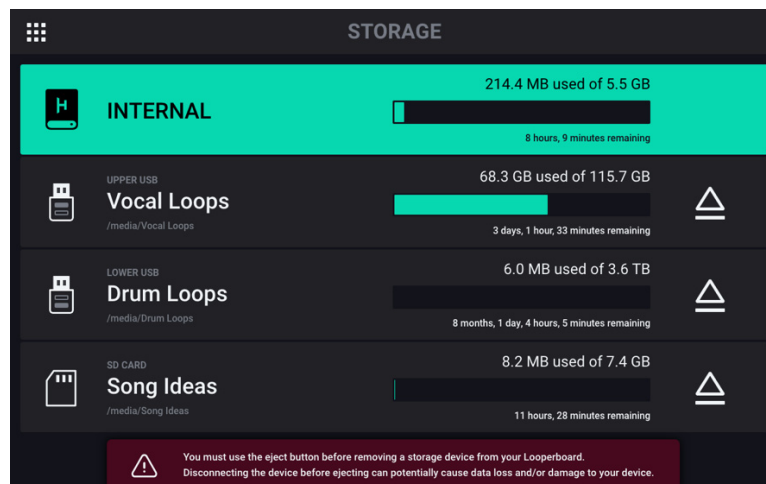
When this feature is enabled, the **•Rec/Play/Dub** footswitch for each track functions as normal, but you can also perform start/stop functions:

- When the track already contains audio, you will now be able to start the looper track by pressing the **•Rec/Play/Dub** footswitch when the track is stopped.
- If the track does not contain audio, then the track will start to Record once you press the **•Rec/Play/Dub** footswitch.
- You will be able to stop the looper track by double tapping the **•Rec/Play/Dub** footswitch when the looper track is playing.
- If you want the function of each track’s start/stop footswitch to return to their original functionality when you create a new loop, make sure to change the **RESET ON NEW LOOP** setting to **ON**.
- If you want your customized footswitches from your current loop to carry over when you create a new loop, make sure to change the **RESET ON NEW LOOP** setting to **OFF**.

Storage

As you create and save loops, your HeadRush Looperboard's internal storage may become full. To prevent this, you can connect external USB or SD storage as needed. This gives you virtually unlimited storage of loops!

To enter the Storage page, tap the **Navigation Menu icon** in the top-left corner, and then tap the **Storage icon**.



On the storage page, you will see meters that show the available storage space as well as the remaining available looping time for HeadRush Looperboard's internal storage, as well as any connected USB/SD external storage devices.

To select a new storage device to use for looping, tap the name of the device. Once the device has been selected, all new loops created will be stored using this device.

After making your selection, you can exit the **Storage** page by tapping the **Navigation Menu icon** in the top-left corner of the touchscreen.

Tip: If you save a loop to an external storage device before changing to the external storage device on the storage page, you will still be working with the loop in its initial location. If you want to continue to work on the external storage device, you will need to load the loop from its new storage device.

Important: To avoid file loss or damage to your media, only disconnect external USB and SD storage devices from HeadRush Looperboard while it is powered off. Alternatively, tap the device's eject icon on the storage page.

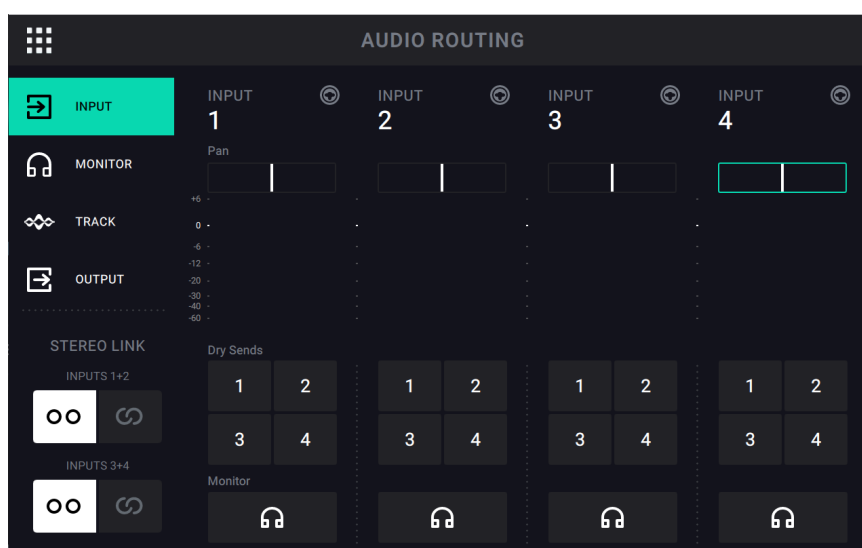
Audio Routing

You can use the Audio Routing page to control where your input, looper track and output audio signals are sent. These settings are global settings (not per loop) so that you can quickly configure HeadRush Looperboard to work best for your gear and performance settings.

To show the Audio Routing page, tap the **Audio Routing** icon on the **Navigation Menu** page.

To show the page for the inputs, tracks, or outputs, tap **Input Setup**, **Track Setup** or **Output Setup**, respectively.

Input Setup



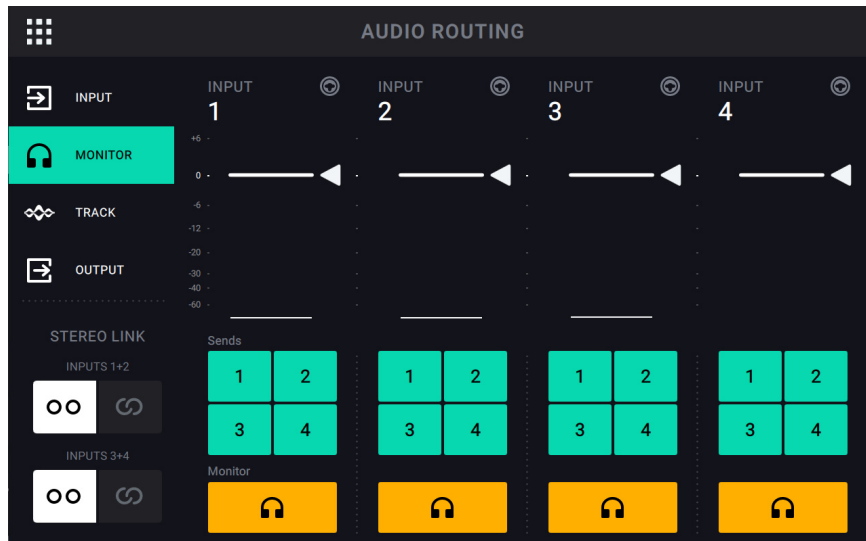
To adjust the level of an input signal, turn its **Input Gain** knob (1–4) on the top panel.

To adjust the panning of an input signal, tap its **Pan** slider and drag left or right. You can enlarge this slider to make more detailed adjustments by double-tapping.

To select an output to directly monitor the input signal, tap the desired **Output 1–4** button under **Dry Sends**, or the **Headphones Icon button** under **Monitor**. Audio signal from the input will be sent directly to the selected output(s). Use the **Master** and **Phones** knobs to adjust the output volume level of the **outputs** and **phones**, respectively.

To stereo link your inputs if you are using a stereo audio source (e.g., drum machine, keyboard, etc.), tap the **On** button for **Inputs 1+2** and/or **Inputs 3+4** under **Stereo Link** on the right side of the touchscreen. Tap the **Off** button to disable stereo link.

Monitor Setup



You can use the Monitor Setup page for listening to your inputs while recording, overdubbing, and playing back loops. You can control the level of each input, as well as which output that you would like to monitor to them on.

To adjust the monitor level of an input, tap and drag the **white line** at the top of its meter.

To select an output for monitoring, tap the desired **Output 1–4** buttons under **Sends**, or the **Headphone Icon** monitor button.

Track Setup



To route an input to a looper track, tap the desired **Input 1–4** button. When **Stereo Link** is enabled, **Inputs 1+2** and/or **Inputs 3+4** will be selected together.

To select a track output mode, tap the **Mono** (monoaural) or **Stereo** (binaural) buttons.

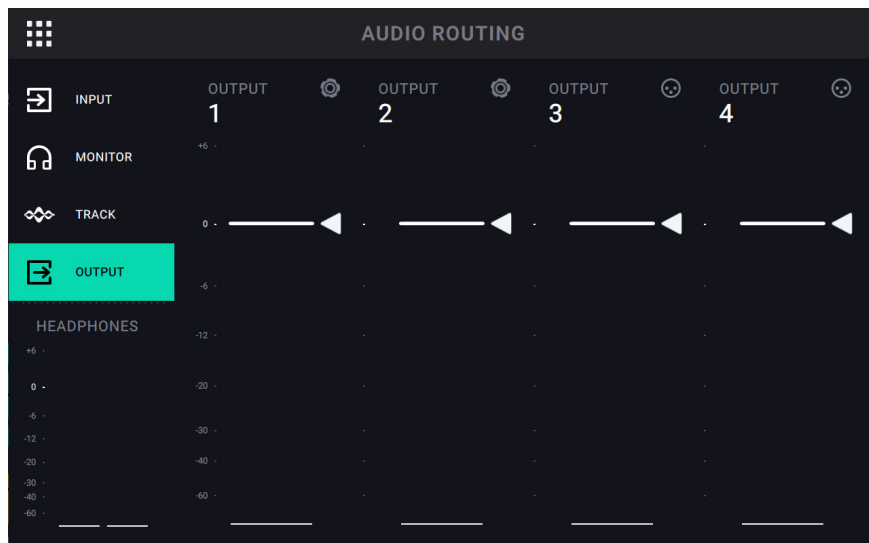
To route a track to an output, tap the desired **Output 1–4** button. If the output mode is **Stereo**, **Outputs 1+2** and/or **Outputs 3+4** will be selected together.

To route a track to the phones output, tap the **headphone icon** at the bottom of each track. Use the **Phones** knob to adjust the output volume level.

To route the click to an output, tap an **Output 1–4** button under **Click Output** on the left side of the touchscreen. Tap the **headphone icon** to route the click to the **phones output**. Use the **Master** and **Phones** knobs to adjust the output volume level of the **outputs** and **phones**, respectively.

To select routing for the stereo backing track, tap the **1+2** or **3+4** buttons under **Backing Track Output** on the left side of the touchscreen. Tap the **headphone icon** to route the backing track to the **phones output**. Use the **Master** and **Phones** knobs to adjust the output volume level of the **outputs** and **phones**, respectively.

Output Setup



To adjust the output level of an individual output, tap and drag the **white line** at the top of its meter.

Functions

Press the **Function** footswitch to show the **Functions** page in the touchscreen. The **footswitch indicator** will be lit **orange**.

To select a function, press the corresponding **footswitch** (labeled on the top panel in orange) or tap it on the **touchscreen**.

To exit the Functions page, press the **Function/Exit** footswitch.

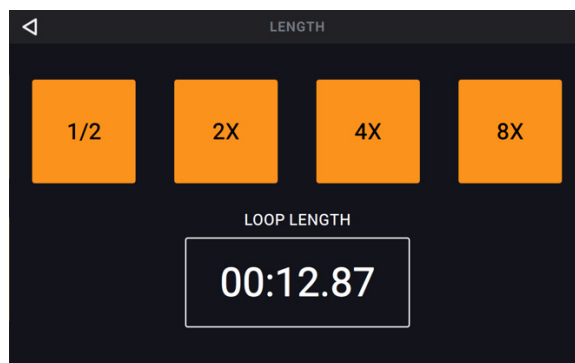


You can access these functions by using their corresponding **footswitches 3–6** or **9–12** or tapping the respective icon on the touchscreen:

Length:

Use **footswitches 3–6** to adjust the length of the full loop by **1/2**, **2X**, **4** or **8X**. If the minimum or maximum length limits have been reached, unavailable options will be grayed out.

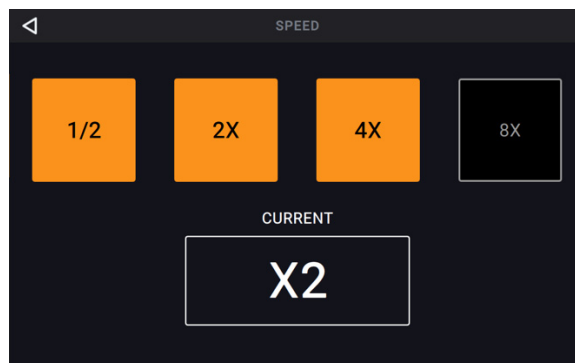
The total loop length will be shown in the box below.



Speed:

Use **footswitches 3–6** to adjust the speed (and pitch) of the full loop by **1/2**, **2X**, **4** or **8X**. If the speed limits for the loop have been reached, unavailable options will be grayed out.

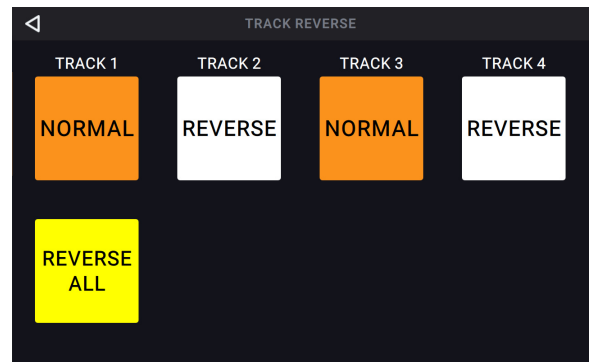
The current speed setting will be shown in the box below.



Reverse:

Use **footswitches 3–6** to adjust the playback direction of each looper track. If no looper track is recorded, the track option will be grayed out.

You can also use **footswitch 9** to adjust the playback direction of all looper tracks at the same time.

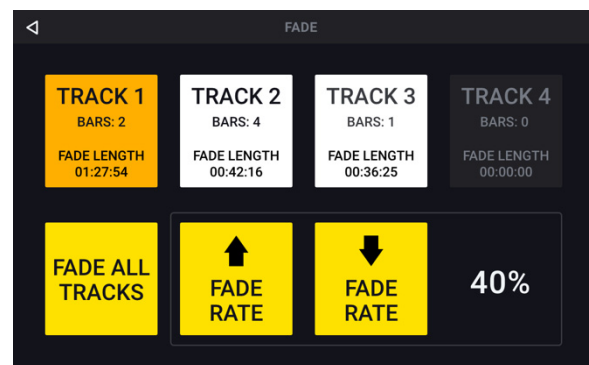


Fade:

Use **footswitches 3–6** to apply a fade out or fade in to each looper track. If the track is playing and available to fade out, the track option will be orange. If the track is stopped and available to fade in, the track option will be white.

Use **footswitches 10–11** to adjust the rate of the fade, or tap the corresponding buttons on the **touchscreen**.

You can also use **footswitch 9** to apply the fade function to all tracks at the same time. If some tracks are playing and some tracks are stopped, this function will cross-fade the tracks.



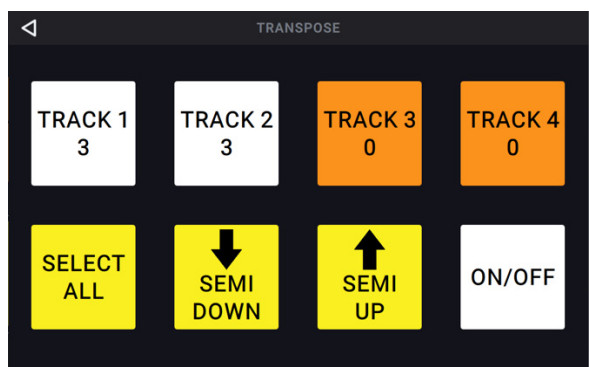
Transpose:

Use **footswitches 3–6** to select a looper track to adjust the transposition.

Use **footswitch 9** to select all looper tracks at the same time.

Use **footswitches 10–11** to adjust the amount of transposition (in semitones) for the selected track.

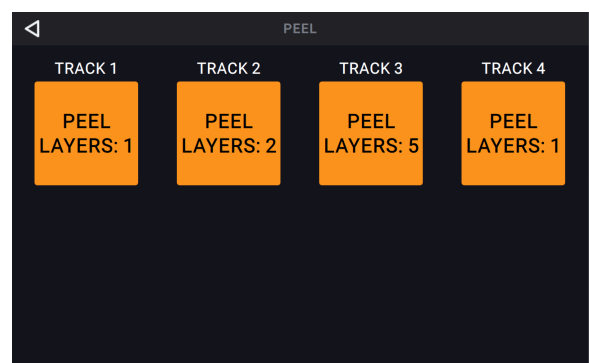
Use **footswitch 12** to enable or disable transposition for all tracks, whether they are currently selected or not. If the transposition for a track is set to **0**, no change is made.



Peel:

Use **footswitches 3–6** to permanently "peel off" the last recorded layer of a looper track.

If no layers are available to be peeled, the looper track will be grayed out.



Bounce:

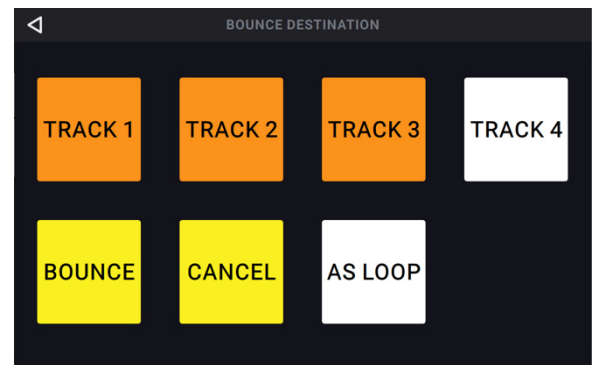
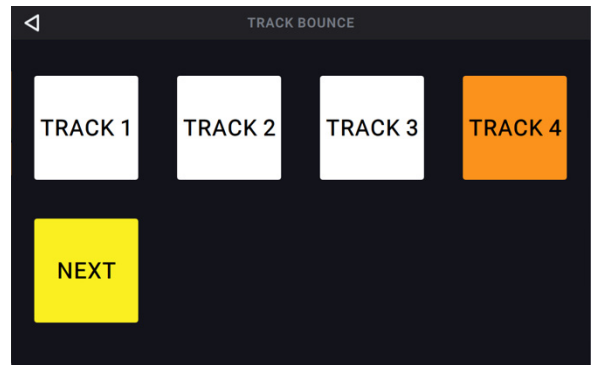
On the first Bounce page, use **footswitches 3–6** to select which tracks you would like to bounce. Then, press **footswitch 9** to navigate to the next page.

If the looper track is empty, the option will be grayed out.

On the next Bounce page, use **footswitches 3–6** to select the destination looper track for the bounce.

When **As Loop** is enabled, reverb and delay FX on each bounced track will not be cut off at the loop point. When **As Loop** is disabled, reverb and delay FX on each bounced track will be cut off at the loop point.

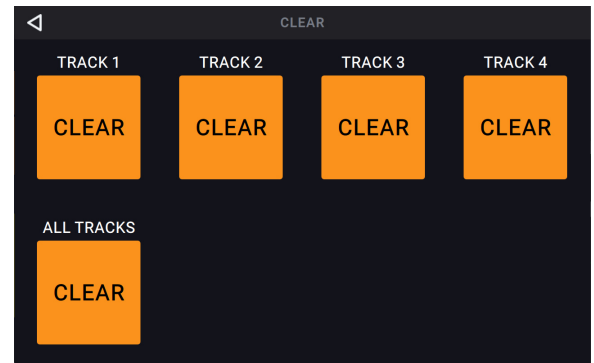
Use **footswitch 9** to perform the bounce, or press **footswitch 10** to cancel and return to the previous page.



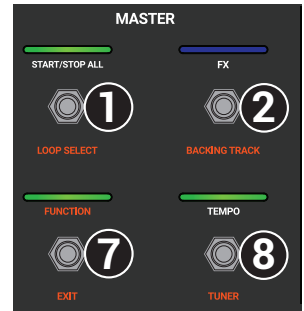
Clear:

Use **footswitches 3–6** to permanently clear all audio from a looper track. If there is no audio on a looper track, the option will be grayed out.

Use **footswitch 9** to clear all audio from all tracks at once. If there is no audio on all looper tracks, the option will be grayed out.



You can access these functions by using the corresponding **footswitches 1–2** and **7–8** only:

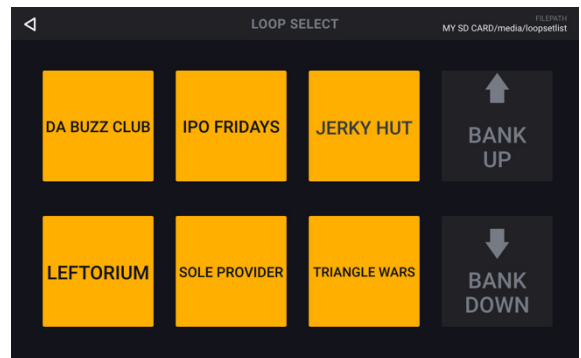


Loop Select:

Select this option to load a loop using the footswitches. You are only able to select loops that are on the same storage device and in the same folder as the currently loaded loop.

Use **footswitches 3–5** and **9–11** to load a different loop.

Use **footswitches 6** and **12** to move up or down in your banks of loops.



Backing Track:

Select this option to control the *Backing Track* feature.

Exit:

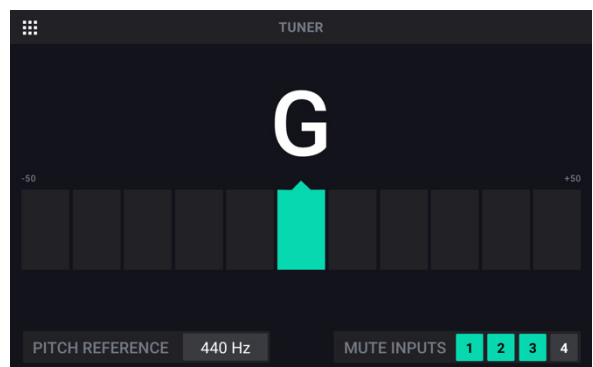
Use **footswitch 7** to return to the previous page from the Functions page.

Tuner:

When using the built-in tuner, all input signal will be muted from the outputs. Loop playback will continue to play back to the outputs.

If you would like to leave an input active, tap the **Mute Inputs 1-4** buttons in the lower right corner to unmute the input. This is useful in performance situations where you would still like the ability to talk to your crowd while tuning your muted guitar.

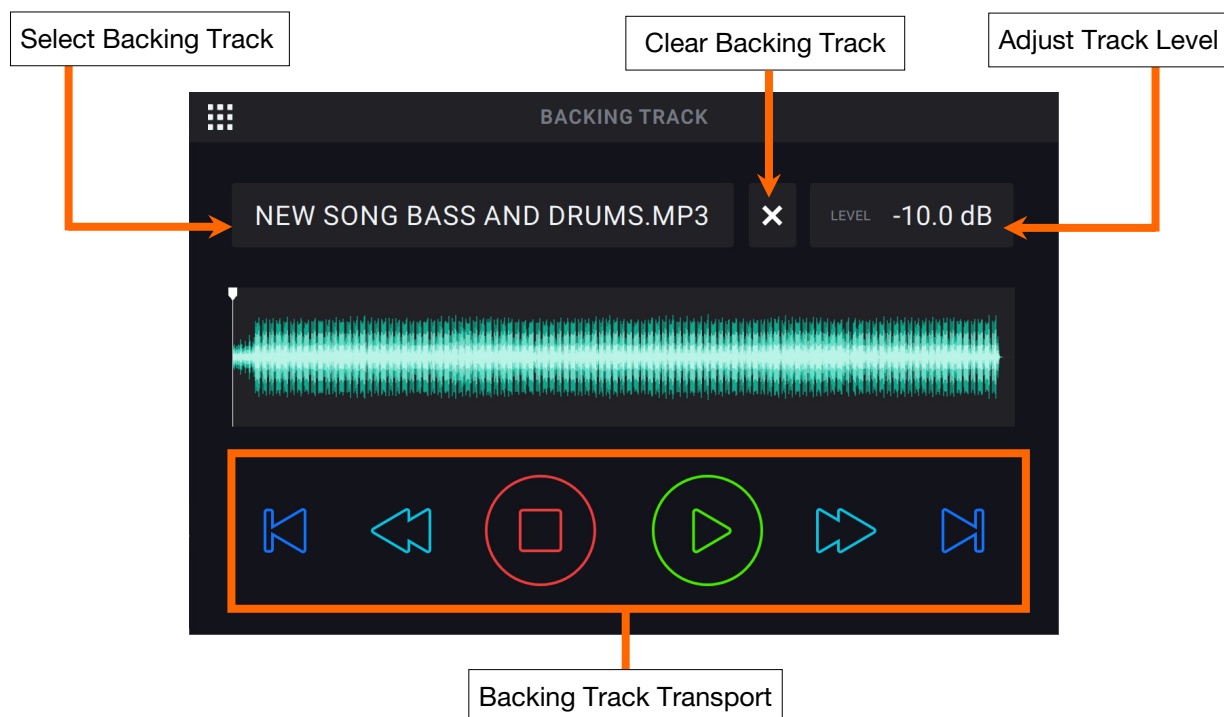
Tap the **Pitch Reference** and use the **encoder** to adjust the tuning reference frequency. The default is **440 Hz**.



Backing Track Player

The Backing Track feature enables you to play audio files (.WAV or .MP3) when you are not looping. This feature operates completely independently from the four looper tracks, and can be especially useful for performance situations when you need a simple backing track accompaniment.

Backing Tracks can be played directly from internal storage, or from external USB/SD storage devices. Backing tracks can be loaded to the HeadRush Looperboard's internal storage by using the [USB Connection](#). See the following chapter to learn more.



To select a backing track, tap the drop-down menu below **File**.

To adjust the Track Level, tap the current **Track Level dB** setting and then turn the **encoder** to change the value. You can also adjust this on the [Mixer](#) page.

To rewind the currently selected backing track, press **footswitch 3**.

To stop the currently playing backing track, press **footswitch 4**.

To play the currently selected backing track, press **footswitch 5**.

To fast forward the currently selected backing track, press **footswitch 6**.

To load the previous backing track, press **footswitch 9**.

To load the next backing track, press **footswitch 12**.

USB Connection

You can use the HeadRush Looperboard's **USB Type-B Port** to connect to a computer for **Transferring Files and Settings** (such as loops, backing tracks, etc.), or for **Recording** (to a digital audio workstation [DAW]).

Transferring Files and Settings

You can transfer loops, backing tracks, audio for importing and FX Rack preset files over a USB connection between your computer and HeadRush Looperboard.

To transfer files between HeadRush Looperboard and your computer:

1. Use a standard USB cable to connect HeadRush Looperboard's **USB Type-B Port** to an available USB port (type-A) on your computer.
2. With your computer already powered on, power on HeadRush Looperboard using the **power switch**.
3. Tap the **Navigation Menu icon** in the top-left corner of the **touchscreen**, and then tap **USB Transfer**.
4. On your computer, HeadRush Looperboard will appear as a mass-storage device called **HeadRush**.

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

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.

Important: When you are finished transferring contents, you must unmount/eject the HeadRush drive from your computer.

6. After the drive has been ejected, tap **Sync** on your HeadRush Looperboard 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.

Important:

Do **not** disconnect or power off HeadRush Looperboard or your computer during the process. Doing so may result in damage.

Any files unsupported by HeadRush Looperboard will be ignored.

You cannot transfer an archived folder (such as a .zip) to and from HeadRush Looperboard. Instead, transfer supported files directly.

Recording

When connected to your computer using the **USB Type-B Port**, you can select and use the HeadRush Looperboard as a 24-bit audio interface, enabling you to play audio through it or send its audio signal to your computer. The HeadRush Looperboard can operate at sample rates of **44.1, 48, 88.2 or 96 kHz**.

Important Note for Windows Users: Before connecting HeadRush Looperboard to your computer, download and install the necessary drivers from headrushfx.com/support.

To use HeadRush Looperboard as an audio interface:

1. Use a standard USB cable to connect HeadRush Looperboard's **USB Type-B Port** to an available USB port (type-A) on your computer.
2. With your computer already powered on, power on HeadRush Looperboard using the **power switch**.
3. Tap the **Navigation Menu icon** in the top-left corner of the **touchscreen**, and then tap the **Global Settings icon**.
4. Under the **USB Audio** tab, set **Enable to On**.
5. On your computer, open the **Control Panel** (Windows®) or **System Preferences** (macOS®) menu.
6. Open the sound or audio settings, and then select **HeadRush Looperboard** as the device for **recording/input** and/or for **playback/output**.

The HeadRush Looperboard will send a stereo audio signal to your computer. This stereo audio signal mirrors your analog **master outputs 1 and 2**, and can be selected as an input in your digital audio workstation (DAW).

The HeadRush Looperboard will also receive a stereo audio signal from your computer. The channels are named and routed directly out of the HeadRush Looperboard's **master outputs** and **phones output**. You can adjust the level of the incoming audio signal in the **Global Settings**.

External MIDI Control

The HeadRush Looperboard can be controlled by incoming MIDI CC (control change) messages or MIDI Note messages from external MIDI gear. These MIDI messages can be received from hardware connected to the **USB Type-A Ports** or the 5-pin **MIDI Input**.

Tip: You can enable or disable this feature and change the MIDI Channel used for HeadRush Looperboard to receive messages in the **Global Settings** menu.

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

MIDI Control: Variable Parameters

CC#	Data Range	Parameter
3	0-60	Footswitch Actions
7	0-127	Master Level
9	0-127	Phones Level
14	0-127	Track 1 Volume
15	0-127	Track 2 Volume
20	0-127	Track 3 Volume
21	0-127	Track 4 Volume
22	0-127	Track 1 Pan
23	0-127	Track 2 Pan
24	0-127	Track 3 Pan
25	0-127	Track 4 Pan
26	0-127	Backing Track Volume
27	0-127	Backing Track Pan
28	0-127	Click Track Volume
29	0-127	Click Track Pan
85	0-127	Output 1 Volume
86	0-127	Output 2 Volume
87	0-127	Output 3 Volume
88	0-127	Output 4 Volume
89	0-127	Input 1 Pan
90	0-127	Input 2 Pan
91	0-127	Input 3 Pan
92	0-127	Input 4 Pan
93	0-127	Expression Pedal
94	0-99	Fade Rate
95	0-99	Track 1 Feedback (Decay)
96	0-99	Track 2 Feedback (Decay)
97	0-99	Track 3 Feedback (Decay)
98	0-99	Track 4 Feedback (Decay)

MIDI Control: Footswitch Actions (CC#3 or MIDI Note)

All actions on this page are triggered by sending the listed **Data Messages** using **MIDI CC#3** messages, or by sending MIDI note messages.

Data/Note	Action
0	Start/Stop/All
1	FX 1 Toggle
2	FX 2 Toggle
3	FX 3 Toggle
4	FX 4 Toggle
6	Tap Tempo
7	Track 1 Stop
8	Track 2 Stop
9	Track 3 Stop
10	Track 4 Stop
11	Track 1 Record/OD/Play
12	Track 2 Record/OD/Play
13	Track 3 Record/OD/Play
14	Track 4 Record/OD/Play
15	All Tracks Half Length
16	All Tracks Double Length
17	All Tracks Half Speed
18	All Tracks Double Speed
25	Track 1 Reverse
26	Track 2 Reverse
27	Track 3 Reverse
28	Track 4 Reverse
29	All Tracks Reverse
30	Track 1 Fade
31	Track 2 Fade
32	Track 3 Fade
33	Track 4 Fade
34	All Tracks Fade
35	Track 1 Half-Step Up

Data/Note	Action
36	Track 2 Half-Step Up
37	Track 3 Half-Step Up
38	Track 4 Half-Step Up
39	Track 1 Half-Step Down
40	Track 2 Half-Step Down
41	Track 3 Half-Step Down
42	Track 4 Half-Step Down
43	All Tracks Half-Step Up
44	All Tracks Half-Step Down
45	Track 1 Undo/Redo
46	Track 2 Undo/Redo
47	Track 3 Undo/Redo
48	Track 4 Undo/Redo
49	Track 1 Clear
50	Track 2 Clear
51	Track 3 Clear
52	Track 4 Clear
53	Track 1 Peel
54	Track 2 Peel
55	Track 3 Peel
56	Track 4 Peel
57	B. Track Rewind
58	B. Track Stop
59	B. Track Play/Pause
60	B. Track Fast Forward
63	B. Track Prev Track
64	B. Track Next Track
65	Load Previous Loop
66	Load Next Loop

MIDI Clock Receive

The HeadRush Looperboard can be synced to the tempo of an external MIDI device (e.g., a drum machine) while recording and playing your loops in **Fixed**, **Sync** and **Serial-Sync** modes.

The HeadRush Looperboard can receive MIDI clock from a device connected to the traditional 5-pin **MIDI Input**, or from a class compliant device connected to the **USB Type-A Ports** on the rear panel. You can enable or disable the MIDI Clock Sync feature, as well as set the MIDI Clock Source, in the **Global Settings** menu.

Tips:

- Tempo cannot be changed during recording, so make sure the HeadRush Looperboard is accurately receiving the MIDI clock before beginning.
- Receiving MIDI Clock Sync works best when using properly cut loops. Loops that are miscut or have odd or uncommon bar lengths may not work properly or cause unexpected results.

When MIDI Clock Receive is **enabled**:

- Looper tracks can be armed for recording or overdubbing by pressing their respective **•Rec/Play/Dub** footswitches. The LEDs for these footswitches will flash when the track has been armed and is ready for recording or overdubbing.
 - If the external MIDI device's clock is not running yet, and the looper track mode is set to **Fixed**, tracks will begin recording or overdubbing when a MIDI Start command is received.
 - If the external MIDI device's clock is already running, and the looper track mode is set to **Fixed**, tracks will wait to begin recording or overdubbing until the next downbeat.
 - If the external MIDI device's clock is already running, and the looper track mode is set to **Sync** or **Serial-Sync**, tracks will wait for the master track to return to the beginning to begin recording or overdubbing.
- HeadRush Looperboard will stop recording or overdubbing once a MIDI Stop command is received from the external MIDI device.
- If the external MIDI device's clock is running, looper track playback can be started and stopped using the **•Stop/–Undo** footswitch.
 - In **Fixed** mode, tracks will stop immediately after pressing the **•Stop/–Undo** footswitch.
 - In **Sync** or **Serial-Sync** mode, tracks will stop when the end of the master track is reached.
- If the external MIDI device's clock is not running, looper track playback cannot be started and stopped using the **•Stop/–Undo** footswitch.
- The loop's tempo cannot be manually changed.
- The **Sync Audio to Tempo** feature in **Global Settings** cannot be disabled.
- The **Start/Stop All** and **After Record** features in **Global Settings** will not be applied.

MIDI Clock Send

HeadRush Looperboard can send MIDI clock and MIDI start/stop messages to an external MIDI device (e.g., a drum machine) while recording, overdubbing, and playing your loops in **Fixed**, **Sync** and **Serial-Sync** modes.

HeadRush Looperboard can also send MIDI clock from a device connected to the traditional 5-pin **MIDI Output**, or from a class compliant device connected to the **USB Type-A Ports** on the rear panel.

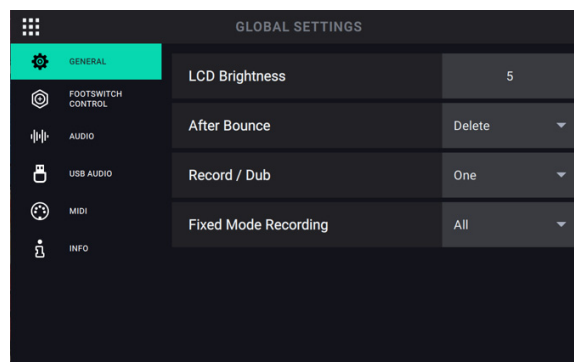
You can enable or disable the MIDI Clock Sync feature, as well as set the MIDI Clock Destination, in the [Global Settings](#) menu.

Tip: Sending MIDI Clock works best when using properly cut loops. Loops that are miscut or have odd or uncommon bar lengths may not work properly or cause unexpected results.

Global Settings

Use the Global Settings page to configure HeadRush Looperboard's overall settings, including settings that affect all loops.

To show the Global Settings, tap the **Navigation Menu icon** in the top-left corner of the touchscreen, and then tap the **Global Settings icon**.



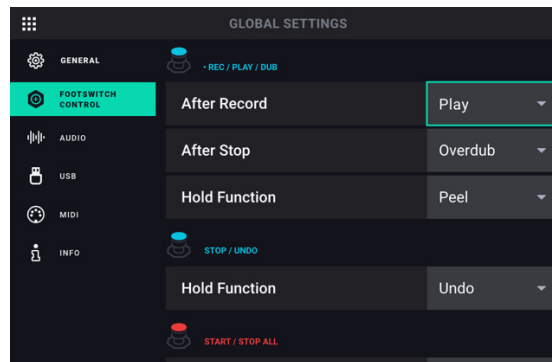
General Tab:

LCD Brightness: This setting determines the brightness of HeadRush Looperboard's touchscreen. Tap the field and turn the **encoder** clockwise to increase the brightness. Turn the **encoder** counter-clockwise to decrease the brightness.

After Bounce: This setting determines what happens to the source tracks after a bounce has been performed. Set this to **Delete** to remove the source tracks after a bounce. Set this to **Keep** to retain the source tracks after a bounce.

Record/Dub: This setting determines how many tracks that HeadRush Looperboard can record or overdub at a time. Set this to **One** if you would like to reduce the amount of footswitch presses when building a loop. Set this to **Multi** if you would like to be able to record or overdub more than one track at once.

Fixed Mode Recording: This setting determines how looper track playback is triggered after all tracks have been stopped in Fixed mode. When set to **All**, pressing a **•Rec/Play/Dub** footswitch for one track will cause that track to begin recording or overdubbing and all other looper tracks to play back. When set to **Solo**, pressing a **•Rec/Play/Dub** footswitch for a track will cause only that track to begin recording or overdubbing.



Footswitch Control Tab:

Rec/Play/Dub After Record: This setting determines what HeadRush Looperboard will do after an initial layer is recorded on a looper track. When set to **Play**, the looper track will begin playback after the initial layer is recorded. When set to **Overdub**, the looper track will immediately start overdubbing after the initial layer is recorded.

Rec/Play/Dub After Stop: This setting determines what HeadRush Looperboard will do when a track's **Rec/Play/Dub** footswitch is pressed for a stopped track. When set to **Play**, the looper track will begin playback of the track. When set to **Overdub**, the looper track will begin overdubbing to the track.

Rec/Play/Dub Hold Function: This setting determines what HeadRush Looperboard will do when a track's **Rec/Play/Dub** footswitch is held for more than 1.5 seconds. This hold function can be assigned to **Peel** or **Clear** the track.

Stop/Undo Hold Function: This setting determines what HeadRush Looperboard will do when a track's **Stop/Undo** footswitch is held for more than 1.5 seconds. This hold function can be assigned to **Undo/Redo** or **Clear** the track.

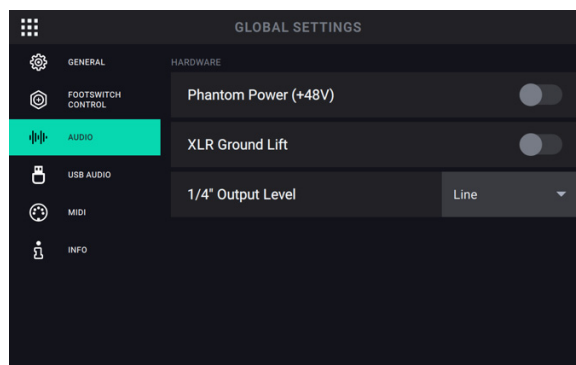
Important: If a track only has 1 layer, performing the undo function will clear the track, and the layer cannot be restored.

Stop/-Undo Function: This setting determines whether the individual **Stop/-Undo** footswitch functions will perform its action when the footswitch is initially pressed (**On Press**), or when it is released (**On Release**).

Start/Stop All After Stop: This setting determines what happens after you use the **Start/Stop All** footswitch to stop all of your tracks and then press it again. When set to **Return**, all tracks will start at the beginning of the loop. When set to **Pause**, all tracks will restart from where you initially hit the **Start/Stop All** footswitch to stop all tracks.

Note: This parameter only applies when using Fixed, Serial or Free **Looper Modes**.

Start/Stop All Function: This setting determines what HeadRush Looperboard whether the **Start/Stop All** footswitch function will perform its action when the footswitch is initially pressed (**On Press**), or when it is released (**On Release**).



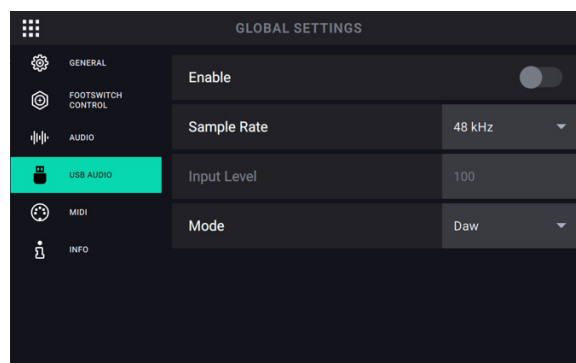
Audio Tab:

Phantom Power (+48V): This setting determines whether phantom power (+48V) is enabled (**On**) or disabled (**Off**) for all four **Inputs**.

Important: Only enable phantom power if your microphone requires it. Most dynamic microphones and ribbon microphones do not require phantom power, while most condenser microphones do. Consult your microphone's documentation to find out whether it needs phantom power.

XLR Ground Lift: This setting determines whether the XLR ground lift feature is enabled (**On**) or disabled (**Off**). Use this feature to reduce hum or noise in the signal from the **XLR Outputs**.

1/4 Output Level: This setting determines the output level of the **1/4" Outputs**. When set to **Line**, the output level will be **+18 dBu**. Use this setting if you are connecting HeadRush Looperboard 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 Looperboard to a traditional guitar amplifier.



USB Audio Tab:

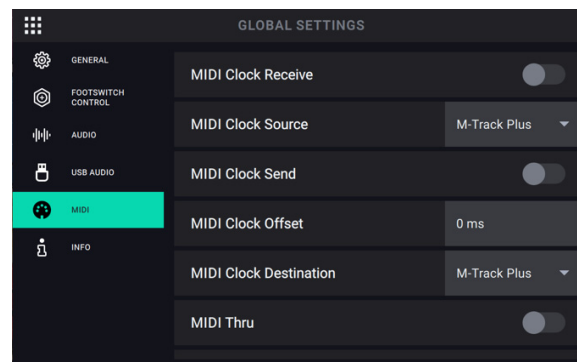
Enable: This setting determines whether or not HeadRush Looperboard is sending a USB audio signal over a USB connection. Set to **On** to enable sending of the USB audio signal with the selected **Sample Rate**. Set to **Off** to disable the USB audio signal. (To change the Sample Rate, set **USB Audio**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

Sample Rate: This setting determines the sample rate of the USB audio signal: **44.1 kHz**, **48.0 kHz**, **88.2 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.

Input Level: This setting determines the incoming level of the USB audio signal coming from your computer.

Mode: This setting determines what audio signal how the HeadRush Looperboard 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 Looperboard's **outputs**.
- **DAW:** The audio signal will be sent to your computer only. The HeadRush Looperboard's **outputs** will be disabled to prevent any latency while monitoring.



MIDI Settings Tab:

MIDI Clock Receive: This setting determines whether HeadRush Looperboard will sync to an external MIDI clock source. Set to **On** to sync tempo to an external source, or set **Off** to disable.

MIDI Clock Source: This setting determines how HeadRush Looperboard will receive MIDI clock messages. Tap the field and then use the **encoder** to select the desired source. Select **Looperboard** to receive MIDI clock messages from the 5-pin **MIDI Input** on the rear panel. If you have a class-compliant MIDI device connected to the **USB Type-A Ports**, select the **device's name** to set it as the MIDI clock source.

MIDI Clock Send: This setting determines whether HeadRush Looperboard will send MIDI clock to an external MIDI clock destination. Set to **On** to send MIDI clock to an external device, or set to **Off** to disable.

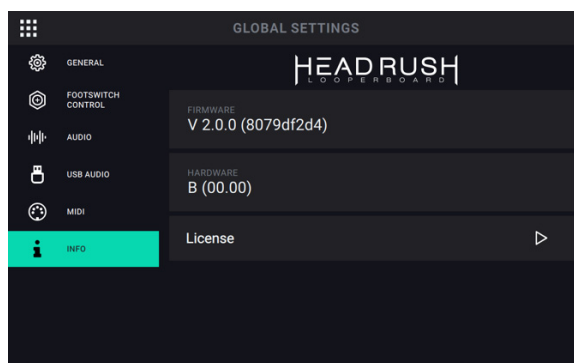
MIDI Clock Offset: This setting determines can be used to set an offset (-10ms to 10ms) for sent MIDI clock to an external destination. This is sometimes needed to compensate for delays that are introduced by some MIDI hardware. Tap this field and turn the encoder to choose a setting.

MIDI Clock Destination: This setting determines how HeadRush Looperboard will send MIDI clock messages. Tap the field and then use the **encoder** to select the desired destination. Select **Looperboard** to send MIDI clock messages from the 5-pin **MIDI Output** on the rear panel. If you have a class-compliant MIDI device connected to the **USB Type-A Ports**, select the **device's name** to set it as the MIDI clock destination.

MIDI Thru: This setting determines the function of the **MIDI Output**. When set to **On**, MIDI sent to the HeadRush Looperboard **MIDI Input** will be sent directly to the **MIDI Output**. When set to **Off**, HeadRush Looperboard will only send its own MIDI information out of the MIDI output.

External MIDI Control: This setting determines whether HeadRush Looperboard will respond to incoming MIDI CC and MIDI Note messages. When set to **On**, HeadRush Looperboard will receive MIDI CC and MIDI Note messages from an external device on the selected channel. When set to **Off**, HeadRush Looperboard ignore incoming MIDI CC and MIDI Note messages.

External MIDI Channel: This setting determines which channel that HeadRush Looperboard will listen to when set to respond to incoming MIDI CC and MIDI Note messages. To change the MIDI Channel, tap the field and then turn the **encoder** to select the channel, **1–16** or **Omni** (all channels).



Info Tab:

On this tab, you can view the currently installed firmware version. You can also access HeadRush Looperboard’s EULA by tapping the License field.

Appendix

Technical Specifications

All specifications are measured at 20 kHz bandwidth. Specifications are subject to change without notice.

Inputs 1–4 (balanced XLR)	Frequency Response	20 Hz – 20 kHz (± 0.2 dB)
	Dynamic Range	111 dB (A-weighted)
	Signal-to-Noise Ratio	110 dB (1 kHz, +4 dBu, A-weighted)
	THD+N	0.003% (1 kHz, +4 dBu, -1 dBFS)
	Preamp EIN	-133 dBu (max gain, 40 Ω source, A-weighted) -127 dBu (max gain, 150 Ω source, unweighted)
	Max Input Level	+13 dBu
	Sensitivity	-46 dBu
	Gain Range	59 dB
Inputs 1–4 (balanced 1/4" / 6.35 mm TRS or unbalanced 1/4" TS)	Frequency Response	20 Hz – 20 kHz (± 0.2 dB)
	Dynamic Range	111 dB (A-weighted)
	Signal-to-Noise Ratio	110 dB (1 kHz, +4 dBu, A-weighted)
	THD+N	0.003% (1 kHz, +4 dBu, -1 dBFS)
	Max Input Level	+20 dBu
	Input Impedance	1 M Ω
	Sensitivity	-20 dBu
	Gain Range	40 dB
Main Outputs 1–2 (impedance-balanced 1/4" / 6.35 mm TRS)	Frequency Response	20 Hz – 20 kHz (± 0.2 dB)
	Dynamic Range	113 dB (A-weighted)
	THD+N	0.003% (1 kHz, -1 dBFS)
	Maximum Output Level	+20 dBu
	Output Impedance	100 Ω
Main Outputs 3–4 (balanced XLR)	Frequency Response	20 Hz – 20 kHz (± 0.2 dB)
	Dynamic Range	113 dB (A-weighted)
	THD+N	0.001% (1 kHz, -1 dBFS)
	Maximum Output Level	+20 dBu
	Output Impedance	100 Ω

Headphone Output (1/4" / 6.35 mm TRS)	Frequency Response	20 Hz – 20 kHz (± 0.2 dB)
	Dynamic Range	112 dB (A-weighted)
	THD+N	0.008% (1 kHz, 10mW per channel into 32)
	Maximum Output Level	+20 dBu (unloaded)
	Power Output	100 mW RMS (per channel into 32 Ω)
	Output Impedance	32 Ω
Aux Input (stereo 1/8" / 3.5 mm TRS)	Input Level	2.0 Vrms (+8.22 dBu)
USB/SD Storage Support	File Systems	FAT16, FAT32, exFAT
	File Types	Format: .WAV, .MP3 Sampling Rates: 44.1, 48, 96, 192 kHz Bit Depths: 16, 24, 32 bits
Display	(1) full-color LED-backlit display with touch interface 6.9" / 176 mm (diagonal) 5.9" x 3.7" / 150 x 93 mm (width x height)	
Footswitches	(12) footswitches with color LEDs	
Knobs	(1) 360° navigation/data encoder with push-to-enter function (4) input volume knobs (1) master volume knob (1) phones volume knob (1) auxiliary volume knob	

Connectors	(4) XLR+1/4" (6.35 mm) balanced mono inputs (1) 1/8" (3.5 mm) stereo input (auxiliary device) (1) 1/4" (6.35 mm) TRS input (expression pedal) (2) XLR outputs (2) 1/4" (6.35 mm) balanced mono outputs (1) 1/4" (6.35 mm) TRS output (headphones) (1) 5-pin MIDI input (1) 5-pin MIDI output (2) USB Type-A ports (1) USB Type-B port (1) SD card slot (1) power adapter input	
Power	Connection	DC power adapter input
	Input Voltage	19 VDC, 3.42 A, center-positive
Dimensions (width x depth x height)	20.16" x 12.24" x 3.0" 51.2 x 31.1 x 7.6 cm	
Weight	12.13 lb.	
	5.5 kg	

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