

HeadRush Prime

Latest Firmware Version: 5.2.0

Release Date: October 2026

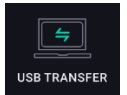
Minimum System Requirements

- Windows 10 or macOS 11
- Host USB 2.0 port

File Backup Instructions

Important: Please back up all of your current rig, setlist, model preset, clone, loop and/or impulse response (IR) files from HeadRush Prime to your computer before updating the firmware.

1. Connect your computer to HeadRush Prime's **USB-B port** using a standard USB cable.
2. With your computer powered on, power on HeadRush Prime using the **power switch**.
3. Tap the **Menu** () icon in the upper-left corner of the **Main** screen, and then tap the **USB Transfer** icon.
4. On your computer, HeadRush Prime will appear as a mass-storage device called **HeadRush**.

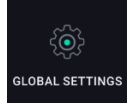


Windows users: If this is the first time you've connected it to this computer, you may need to wait a minute while it installs the class-compliant drivers.

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 Prime to "commit" any changes you made to the contents of the HeadRush drive.

As HeadRush Prime analyzes and imports the files, a meter on the display will indicate its progress. The last screen you were on before opening USB Transfer will reappear when the process is finished. Do not disconnect or power off HeadRush Prime during the sync process.

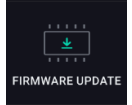
Firmware Update Instructions – Wi-Fi (if an update is available)



1. Tap the **Menu** (⋮) icon in the upper-left corner of the **Main** screen, and then tap the **Global Settings** icon.

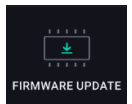
Note: To switch through each tab of the global settings, tap the tabs along the left edge of the screen.

2. Tap **WI-FI** on the left edge of the screen.
3. Tap the **ON** button at the top of the screen. Then, tap the local network that you would like to connect to, and enter the password for the network when prompted.
4. Return to the **Menu** screen and select **Firmware Update**.
5. In the Firmware Update screen, you will be presented with three options: **Cancel**, **Via USB** and **Via WI-FI**. Tap the **Via Wi-Fi** button.
6. A screen will then open asking you if you would like to update to the latest version of the HeadRush Prime firmware. Select **Yes** to download and install the latest version of the HeadRush Prime firmware.
A screen will appear with the status and programming of the firmware update.
7. Once your unit has finished updating, it will power off and then back on again. When HeadRush Prime is powering on, you will see the version number of the firmware at the bottom of the screen. You can also check the version of the firmware in the **INFO** tab of the **Global Settings** page.



Firmware Update Instructions – USB

1. Download the latest Firmware Updater application for your PC or macOS from the **Downloads** section of HeadRush Prime's webpage, from the **Downloads** section of the HeadRush Support webpage, or from your HeadRush account.
2. Connect the **USB-B port** on your HeadRush Prime to your computer, and ensure both HeadRush Prime and your computer are powered on.
3. On your HeadRush Prime, and tap the **Menu** (⋮) icon in the upper-left corner of the **Main** screen, and then tap the **Firmware Update** icon.
4. On the Firmware Update screen, you will be prompted to shut down your HeadRush Prime and update your firmware. Select **YES** to continue. After restarting, the screen will show **Update** at the bottom edge.
5. Open the **HeadRush Prime Updater** application for your Windows or macOS operating system. (You may need to unzip an additional .zip file to access the actual application.)
6. When the updater window appears, click **Update HeadRush Prime**. Do **not** disconnect or power off HeadRush Prime or your computer until the update is completed.
7. When the update is completed, the updater window will display **Done**, and your HeadRush Prime will restart. Click **Done** to close the updater window.
8. When HeadRush Prime is powering on, you will see the version number of the firmware at the bottom of the screen. You can also check the version of the firmware in the **INFO** tab of the **Global Settings** page.



For additional help, visit support.headrushfx.com.

Changes

Firmware Version 5.2.0

NAM (Neural Amp Modeler) A2 Enhancements

- Added support for loading up to **2 NAM A2 Full files** per rig natively (without conversion), either by using **2 separate NAM A2 blocks** or by enabling the **Stereo Doubling** or **Switch Doubling** feature within a single NAM A2 block.
- Added support for loading up to **4 NAM A2 Lite files** per rig natively (without conversion) by enabling **Stereo Doubling** or **Switch Doubling** across **2 separate NAM A2 blocks**.
- Added support for **NAM A2 Calibration Metadata**, improving gain matching by honoring the input and output levels stored during the creation of compatible captures.

Other Improvements & Bug Fixes

- Fixed an issue where NAM files could have unintended EQ applied when previewing them through **TONE3000** on the device.
- Fixed an issue where NAM A1 files would not appear in **TONE3000** unless specific filters were selected.
- Fixed an issue where an unwanted delay or burst of noise could occur when switching **Scenes** or **Rigs** containing NAM files.
- Fixed a rare issue where unwanted noise could occur while using **USB Audio** with certain DAWs.
- Fixed a rare issue where CPU usage could occasionally be reported incorrectly when using NAM files.
- Various minor bug fixes, UI/UX refinements, and DSP performance improvements.

Firmware Version 5.1.0

Neural Amp Modeler Support and TONE3000 Integration

- **NAM (Neural Amp Modeler)** is a free, open-source guitar amp modeling system that uses machine learning to recreate the sound of real amplifiers, pedals, and signal chains with extremely high accuracy.
- **TONE3000**'s massive library of **500,000+** NAM files can now be accessed directly from your HeadRush device via the onboard **Wi-Fi** connection, making it easier than ever to discover, download, and start playing with **NAM** files.
- One **NAM A2** (Full or Lite) or one **NAM A1** (Standard, Lite, Feather, or Nano) file can be loaded natively per rig without any required conversion or loss.
- **NAM** files can also be downloaded and shared via the **HeadRush Cloud** as standalone files and within rigs, as well as transferred via **USB Transfer** or **Dropbox**.

Amp Model & FX Improvements

- Added a new **Amp Model** to the **ReValver Amp** category: **90 ACM 900**.
- Added **90 ACM 900.wav** to the **Impulse Responses/Matched Cabs** folder.
- Added **Graphic Bass EQ** to the **EQ** category.
- Added a **Gain Reduction Meter** to all effects in the **Compressor** category.
- Added a **Phase Invert** parameter to the **Advanced Block Edit** page to correct phase cancellations when using the **Block Mix** parameter and other scenarios.
- Added a new **Mode** parameter to the **BBD Delay** effect. When set to "**CLASSIC**", the BBD Delay performs as in firmware v5.0.0 and earlier, authentic to the vintage delay pedal that it is inspired by. When set to "**MOD**", it improves on that vintage pedal's quirks, including a more consistent level when engaged/bypassed, more consistent volume between repeats, and a more linear **Feedback** control with a wider usable range.

Other Improvements

- Added the ability to control the **Drum Machine** via **Wi-Fi** using **HeadRush Remote**.
- Added convenient **Clock**, **Timer**, and **Stopwatch** features.
- Added the ability to automatically engage the built-in **Tuner** when a **Volume** pedal is set to **0%** (heel down/toe up) in a rig.
- Other minor bug fixes, UI improvements, and DSP performance improvements.

Firmware Version 5.0.1

Improvements & Bug Fixes

- Fixed a bug where artifacts could be heard while using the **Drop Tune** effect when using in a clean rig, and added a **Mode** parameter where the **Legacy** setting is using the previous algorithm from firmware versions prior to v5.0.0 and the **Refined** setting is the algorithm added in v5.0.0 that improves tracking speed and overall tonal quality.
- Other minor bug fixes.

Firmware Version 5.0.0

Drum Machine

- Added an onboard **Drum Machine** for enhanced songwriting, jamming, and live performance.
- Includes **16 drum kits and styles** created by world-renowned sound design experts at **Alesis** and **BFD**.
- Features **134 styles** across **15 genres**, each with main and variation patterns, drum fills, transitions, and endings—all easily triggered with your feet.
- Use the **Accent** footswitch to emphasize beats with crash, kick, or other sounds, or the **Mute** footswitch to silence drums for dramatic effect.
- Instant access to the onboard **Looper** lets you capture a bass line or chord progression and build a song idea from scratch.
- Fine-tune your kit sounds with **Mix, EQ, Timbre, Length, Tuning, Reverb**, and **Drive** controls.
- Adjust **Intensity** and **Groove** (swing) settings to shape the feel of each style.

TIDAL Integration

- Added support for connecting a **TIDAL Account** with their **DJ Extension** to HeadRush devices, enabling you to load songs from your **TIDAL** library directly into the **Practice Tool**.
- Once connected, browse your existing playlists, explore featured playlists like **TIDAL Rising** or **Moods**, or search directly for new songs by artist, track, or album.
- Change the **tempo** of a loaded song without affecting pitch, set loop points, and slow down fast passages for detailed practice.
- Shift the **pitch** of a loaded song without altering tempo, making it easy to rehearse songs in different keys.

Amp Model & FX Improvements

- Added three new **Amp Models** to the **ReValver Amp** category: **25 ON-1 Clean**, **Crunch**, and **Lead**.
- Added **25 ON-1.wav** and **25 ON-1 Tight.wav** files to the **Impulse Responses/Matched Cabs** folder.
- Added two new **FX** to the **Overdrive FX** category: **Jimmy OD** and **Palace OD**.
- Added **Up Tune** to the **Pitch FX** category.
- Improved the **Drop Tune** effect with enhanced pitch tracking, sound quality, and added additional interval settings.
- Improved the **Vocal Harmony** effect with enhanced pitch tracking and sound quality.

Other Improvements

- Added access to the **HeadRush Cloud** in the **HeadRush Remote** Wi-Fi editor.
- Added **Authentication** to **HeadRush Remote**, providing an extra layer of security when pairing your device at gigs via a temporary PIN.
- Added a **Block Mix** parameter to the **Advanced Block Edit** page, allowing control over the wet/dry blend of a block's input and output signals.
- Added an **Auto-Engage** expression pedal mode, which automatically bypasses the assigned effect based on pedal inactivity or pedal position.
- Added the ability to toggle the **Dry Mic** feature via footswitch when using the **Tuner**, so that FX can be quickly disabled when speaking to an audience during a live performance.
- Various other minor bug fixes, UI/UX refinements, and DSP performance improvements.

Firmware Version 4.1.1

Bluetooth & Wi-Fi Improvements & Bug Fixes

- Added **Reset Bluetooth Settings** and **Reset Wi-Fi Settings** buttons to their respective tabs in **Global Settings** for improved control over external connections.

Note: After updating to version 4.1.1, you will need to re-pair your Bluetooth device to prevent potential audio dropouts.

- Added a **Bluetooth In Level** control to the **Global Settings > Bluetooth** page for better management of the incoming Bluetooth audio level.
- Fixed an issue where the **Pair Bluetooth Devices** button appeared active even when Bluetooth was turned off.
- Fixed a **Bluetooth** issue where it was possible to connect more than one external Bluetooth device at a time.
- Fixed a very rare **Bluetooth** issue where the HeadRush device would hang on shutdown when Bluetooth audio was actively streaming.

Other Performance Improvements & Bug Fixes

- Fixed a **Looper** issue where the **Start** or **Record** actions incorrectly waited for an external clock source when **MIDI Clock Receive** was enabled in **Global Settings** and **Global Tempo Sync** was disabled in **Looper Settings**.
- Fixed a **Looper** issue where a short gap could be heard at the end of the first loop layer when **MIDI Clock Receive** was enabled.
- Fixed a **MIDI** issue where copying a rig with a **Scene** containing a **MIDI Out** message to another HeadRush device failed to send the message as expected.
- Fixed a **MIDI** issue where only 15 saved MIDI Out presets were visible and available for selection in the preset drop-down.
- Fixed a **HeadRush Remote** issue where dismissing the **Save Rig** dialog on the device did not dismiss the same dialog on HeadRush Remote.
- Fixed a **HeadRush Remote** issue where changing **Tempo** on the **Hardware Assign** page did not reflect correctly on the device.
- Fixed a **HeadRush Remote** issue where the **Dyn 12** and **Dyn 20** microphones were missing when using the **+8X10 Blue Line** cab.
- Fixed a **DB-33 Organ** issue where switching the **Rotary** parameter to **On** was not applying the set **Rotary Rate** frequency.
- Fixed a **Setlist Mode** issue where cancelling setlist edits could cause the rig edit page's drop-down rig list to show the **All Rigs** setlist instead of the correct selected setlist.
- Fixed a **Song Mode** issue where the **Bank Up/Down** footswitches were not working as expected.
- Fixed a rare **Amp Cloner** issue where completing an amp clone could cause system audio problems requiring a full restart.
- Fixed a rare **Factory Reset** issue where the device would freeze on the **"Reverting"** message after a factory reset.
- Fixed other very minor bugs, UI enhancements, and performance improvements.

Firmware Version 4.1.0

New Features:

- **New FX**

Added three new FX:

- o **C-Verb** (HeadRush original Convolution Reverb IR Loader)
 - Added 50+ convolution reverb files to the available factory **Reverb** folder.
- o **Multi Delay** (HeadRush original Multi-Tap Delay)
- o **Grain Delay** (HeadRush original Granular Delay)

Improvements:

- **MIDI Improvements**

Added the ability to send a command of up to five MIDI messages (**Program Change**, **Control Change**, **Note On/Off**) when a footswitch is pressed, when a scene is activated, or when a rig is loaded.

Added the ability to store these commands as a preset for easy recall when building new rigs or editing older rigs.

Added additional external control via MIDI Control Change messages for users who would like to control their HeadRush device externally for many other requested functions (e.g., **Next/Prev Rig**, **Next/Prev Bank**, **Scenes**, **Change Footswitch Mode**, **Metronome Volume**, etc.).

- **Amp Cloner Improvements**

Improved the cloning process to more accurately and consistently capture low end and overall tonal response, especially with fuzz pedals, high-gain amps, and mid-gain/edge of breakup amps.

- **Other Improvements**

Added an **Output Level** parameter to all HeadRush and ReValver Amps to allow for better balancing of amp volumes in rigs and scenes.

Added a **Range** parameter to the built-in **Tuner** to improve tuning speed and accuracy with lower pitched instruments like bass and extended range guitars.

Added the ability to select **0** in the Metronome's **Time Signature** parameter to turn off all metronome accents.

Added the ability to access the **Tuner** and **Global Settings** while using the **HeadRush Remote** app.

Many other minor bug fixes, UI improvements, and performance improvements.

Firmware Version 4.0.0

New Features:

- **Introducing HeadRush Remote:**

Your HeadRush Prime can now be conveniently edited via a web browser on a computer or tablet. This introduces an incredibly accessible way to use your HeadRush hardware without taking up valuable room on your studio desk, as well as reducing the need to bend and make edits directly on the hardware itself. Best of all, you don't need to install any special software!

To access HeadRush Remote and get started today, follow the directions below:

1. Connect your HeadRush Prime to the same Wi-Fi network as your computer or tablet in the **Global Settings > Wi-Fi** menu.
2. In the same menu, ensure that the **HeadRush Remote** setting is turned **On**. You should then see an IP address here.
3. On your computer or tablet's web browser, enter your unique IP address into the URL field. Alternatively, you can enter **headrushprime.local** into the web address.

Note: For best results, we recommend using a computer or tablet with a 7" or larger screen, and using the native web browser for that device (e.g., Microsoft Edge for Windows-based devices, Safari for macOS/iOS-based devices, or Google Chrome for Android-based devices). You may find that other browsers are incompatible with the Remote Editor web UI.

Important: If the remote editor page is shown as "not found" in your browser, you may need to reset your Wi-Fi router when making the connection for the first time.

For more information on using the remote editor, consult the latest *User Guide*.

- **Added support for HeadRush SuperClones**

SuperClones are an enhanced version of HeadRush Clones that combine multiple clones of an amp or pedal captured with different gain settings, making gain adjustments much more realistic to the cloned amp or pedal. SuperClones can be assembled from existing clones using the included Amp Cloner desktop software for mac/PC.

Additionally, **10 SuperClones** have been added to the clone factory folders:

- o Famous Cobra Crunch.sc
- o Flathill TA Tweed.sc
- o Freeman DS.sc
- o Lead ACM800 ZW.sc
- o Marketbass TA501.sc
- o Morgen AC20.sc
- o Vagner Shiva Lead.sc
- o DT Monkey.sc
- o EH Soul.sc
- o Precise Drive.sc

Important: When auditioning SuperClones in existing rigs (either factory or user rigs), make sure to use the **Master Volume** control to find the best level first before adjusting other controls.

Improvements:

- **New Content and FX Block Improvements**

Added two new FX in the new **Rhythmic** FX category:

- o Kill Seq
- o Splicer

Added one new FX to the **Reverb** FX category:

- o Spring Guru

Added the **Matched Cab** collection to the available factory IRs in the **/Impulse Responses** folder. These 48 guitar cabinet impulse response files were crafted for our ReValver plugin to provide a great sounding, easy starting point for each of the HeadRush and ReValver amp models.

Added **Arpeggiator** controls for the **Hybrid Synth**, **DB-33 Organ**, and **Electric Piano** synth blocks.

Added **Pedal Clone** to the available list of selectable blocks that can be added to a rig for better organization.

- **Main Rig Page Improvements**

Added **Rig Output** level meters to the main edit page of the output block.

Added two additional split signal path options for guitar-only signal chains:

- o **5 – 3/3 – 3** features five slots after the Input, a six-slot split Mix section, and then three slots before the Output.
- o **7 – 2/2 – 3** features seven slots after the Input, a two-slot split Mix section, and then three slots before the Output.

- **Block Edit Page Improvements**

Added **Block Output** level meters to each block in a rig.

Added an **Advanced Edit** page for each block in a rig, accessible by tapping the **settings icon** in the lower-right corner of the block edit page. This includes **Input Gain**, **Output Gain**, and **Touch EQ** controls for each block.

- **Hardware Assignment Improvements**

Added an option in **Global Settings** to change all footswitches to **On Press**, which disables hold functionality and provides better timing with a snappier feel when using the footswitches.

Added the **Hold Functions** category to the **Hardware Assign** footswitch assignment menu, giving the ability to assign **View**, **Hands-Free**, **Looper**, and **Tuner** to individual footswitches via press. This is especially useful if your footswitches are assigned to **On Press** in the **Global Settings**.

Added the ability to easily assign a footswitch or scene to switch between two amps, cabs, or IRs located within a single slot. See the **Switch Doubling** section of the latest *User Guide* for more information.

Added the ability to easily reassign a footswitch or scene to switch between the top and bottom paths of a split signal chain rig.

Added the ability to assign an **A/B Mix** parameter to the expression pedal to easily blend between the top and bottom paths of a split signal chain rig.

- **Amp Clone Improvements**

Made improvements to the Amp and Pedal cloning process, particularly for low/medium gain pedals and amplifiers.

Improved the efficiency of Amp and Pedal clones to use a lower percentage of DSP when loaded to a rig.

Added the ability to demo an Amp Clone when browsing the **HeadRush Cloud**.

- **Looper Improvements**

Added an **Unpeel** control, accessed by holding the **Peel** footswitch, which brings layers back in the order that they were removed.

Added a **Threshold** parameter to the **Looper Settings** page that enables the Looper to be automatically armed for recording when the set audio level is detected.

Added a **Quantize Changes** parameter to the **Looper Settings** page that syncs the **Speed Change** function to the next downbeat of a measure when enabled and when the Looper has **Global Tempo Sync** enabled.

Added **Rig Out** as a routing option for the Looper to allow it to play vocals and guitar out of both XLR and 1/4" Outputs at the same time.

- **Advanced Audio Output Settings**

Added an **Advanced Audio Output** mode in the **Global Settings > Audio** menu that provides more flexibility in routing the audio output of your hardware. For example, this mode gives the ability to route a vocal output to the left **XLR + 1/4"** and a guitar output to the right **XLR + 1/4"**. Tap the **info icon** on this page in your HeadRush Prime to learn more about how to adjust these settings.

- **Other Features, Performance Improvements, and Bug Fixes**

Added external control by MIDI CC messages for the Practice Tool and Metronome.

Removed the artificial latency that was added when a bypassed FX Loop block was present in a rig.

Fixed an issue where the Pitch Delay's echoes were out of tune.

Fixed a rare issue where synth effects could potentially cause dropouts or a glitch noise when changing rigs.

Added an **IR Loader** to the **Amp Clone Comparison** page that appears after making a clone.

Added the ability to import and load rigs created on HeadRush Flex Prime.

Fixed an issue where the **Vocal Harmony** effect was not functioning correctly when the **Source** parameter was set to **MIDI**.

Fixed a rare issue where the three parameter knobs would potentially not function on certain blocks.

Many other minor bug fixes, UI improvements, and performance improvements.

Firmware Version 3.2.0

6 New FX:

- Added 3 HeadRush original FX to the new **Synth** category:
 - **Hybrid Synth**
 - **Electric Piano**
 - **DB-33 Organ**
- Added **Glorious Drive** to the **Overdrive** category.
- Added **White Bass Wah** to the **Wah/Filter** category.
- Added **Sustain** to the **Volume/Dynamics** category.

New Features:

- Added two new signal paths options for Dual Guitar & Vocal chains:
 - **Dual Path 2-12:** 2 Vocal blocks + 12 Guitar blocks
 - **Dual Path 4-10:** 4 Vocal blocks + 10 Guitar blocks
- Bluetooth and USB Audio On settings can now be retained through power cycles.
- Added an option to opt in or out of HeadRush's data analytics program.

UI improvements:

- Added contextual information dialogs to the block edit pages for **Sustain**, **Hybrid Synth**, **Electric Piano**, **DB-33 Organ**, and **Side Comp** effects. Tap the "i" icon located on the block's graphic to learn more about these effects.
- Moved the location of **Ambi Verb** to the new **Synth** FX category as this better reflects the effect since the reverb is generated via a synth.
- Other very minor cosmetic improvements.

Performance Enhancements and Bug Fixes:

- Significantly improved the Bluetooth pairing of devices.
- Fixed an issue where Bluetooth audio would sometimes jitter during playback.
- Fixed a rare macOS/iOS issue where the HeadRush device would not disconnect from the paired device.
- Fixed a rare Bluetooth issue on Windows computers where disconnecting would occasionally cause a freeze on the HeadRush device.
- Fixed an issue where the HeadRush device sometimes failed to establish a Wi-Fi connection after an external Bluetooth device was connected.
- Fixed an issue where a freeze would sometimes occur during power off and the unit would reboot.
- Fixed an amp cloner issue where loading certain clone types would sometimes sound different to when they were previously saved.
- Fixed an issue where the Cloud rig upload counter would be out of sync when using two separate HeadRush devices.
- Fixed an issue where an incorrect dialog was shown when attempting to upload a rig which included an IR with a file size greater than 1 MB to the HeadRush Cloud.

- Fixed an issue where the **Budda Zenman** effect had the incorrect labelling for the vintage and phat parameters.
- Fixed a rare issue where the incorrect LED color was occasionally shown if switching between two rigs that each had scenes with dual states.
- Fixed an issue where reordering rigs on the All Rigs setlist from Z-A would incorrectly impact the order of user created setlists.
- Fixed an issue on the amp cloner wizard where sometimes the wrong connection diagram would be loaded when using the push encoder.
- Fixed an issue where after a successful amp clone and file save, it would disable the footswitch mode if the page was left via the Exit button.
- Fixed an issue where an imported block preset could not be loaded in the file browser.
- Fixed a looper issue where holding the view footswitch (FS6) would incorrectly change the footswitch view on the looper.
- Fixed an issue where if two of the same effects were added to a rig, the parameter knob values were not updating correctly when switching between the two effects.
- Other very minor bug fixes and performance improvements.

Firmware Version 3.1.2

- Fixed an issue where clones that were created prior to v3.1.1 sounded different regarding low end and volume. Clones created prior to v3.1.1 will return to their original sound in v3.1.2, and clones created in v3.1.1 and later will continue to sound the same.

IMPORTANT: Clones created or imported to v3.1.2 firmware will *NOT* be compatible with previous versions of firmware (e.g., v3.1.0 and v3.1.1). If you intend to revert to an earlier firmware, please make sure to back up your files from your current firmware *BEFORE* updating to v3.1.2, so that you can restore them when rolling back.

- Fixed an issue where the device would reset when quickly changing rigs with clones loaded.
- Fixed an issue where an Amp Clone's settings would not load correctly if the rig was reloaded when the footswitches were set to Rig Mode or Hybrid mode.
- Fixed a rare issue where the cloning process would freeze at 100%.
- Fixed an issue where the Wi-Fi status icon would appear as off incorrectly after a firmware update until user entered the Wi-Fi Settings page or the HeadRush Cloud page.
- Fixed an issue on HeadRush Cloud where clone and IR files were missing when a rig was downloaded while in demo mode.
- Added a dialog that informs the user of any issues related to HeadRush Cloud downloads.

Firmware Version 3.1.1

Cloning Improvements

- Significantly removed latency from Amp Clones and improved overall system latency.
- Improved the amp cloner algorithm to provide better identification of overall distortion level and sustain during the measurement process.
- Improved Amp Clone quality when cloning a very clean amp connected directly to HeadRush Prime.
- Fixed an issue where the Sag, Chug, and Master settings were not saved as part of a clone file, which could cause unexpected volume jumps.
- Improved switching between scenes that have Amp Clones assigned to each.
- Fixed an issue where the wrong clone icon type would be shown if the block was switched from an amp clone to a pedal clone.
- Fixed an issue where a reset could occur if a clone was loaded directly from a USB drive, then powered off, then powered back on with the USB drive disconnected.
- Fixed an issue where an externally corrupted clone file or a clone file moved to another folder in the internal storage could potentially cause a reset.
- Fixed a very rare issue where the device could potentially freeze if cloning an amplifier or other target device that has a noise gate enabled.

Wi-Fi/HeadRush Cloud Improvements

- Fixed an issue where a reset would sometimes occur when connected to a Wi-Fi mesh network.
- Fixed an issue where users could not connect to an open Wi-Fi network that did not have password protection.
- Fixed an issue where the user was not warned if they were trying to upload a rig with a missing amp clone, resulting in being stuck on the “Uploading” dialogue.
- Fixed an issue where the user was not warned if they were downloading the same rig multiple times.
- Fixed an issue on HeadRush Cloud where some genre filters were not sorting correctly.

FX Improvements

- Improved the UI of the Global EQ feature, as well as the Para EQ effect block, to use a new “touch UI” for easier adjustments.
- Fixed an issue where two instances of the Budda Comp in a rig would result in having no parameters appear for the second instance.
- Fixed an issue where the Harmony sound of the Vocal Harmony effect would go missing if the Mode parameter were set to Fixed and then the effect was bypassed and then turned back on.
- Fixed an issue with Auto-Tune where setting the Tune Speed parameter to 400ms and Humanize parameter to 100% would cause a reset.
- Fixed an issue where the Stutter effect would not correctly bypass when switching to another rig with the Stutter effect.
- Added the ability to assign the Mode parameter for the Vibe Phaser to a footswitch.
- Added the ability to assign the Voices and LFO Shape parameters for the Multi Chorus to a footswitch.
- Added the ability to assign the Chorus Mode and Stereo parameters for the 84 J-120H to a footswitch.

Other UI/UX Improvements

- Changed the “triple tap to rename” function for the top bar to only require a double tap to rename the current rig.
- Fixed an issue where missing rigs were not displayed in the setlist editor after being reimported unless the active setlist was changed and loaded again.
- Fixed an issue where the number of rigs in a setlist was not updated after adding a new rig.
- Fixed an issue where the Practice Tool feature would not play stereo audio files correctly through the 1/4” outputs.
- Fixed a very rare issue where USB Transfer would get stuck scanning files and not connect to the Mac/PC.
- Fixed an issue where if a doubled amp were deleted, the next amp added to the slot would also be doubled.
- Fixed an issue where a scene’s LED indicator was not accurate if a second scene was added for a footswitch, deleted, and then added again.
- Fixed an issue where after a block preset was exported to a USB drive and then reimported to a new rig, its name was shown incorrectly.
- Fixed an issue where the “Sort” features for the “All Rigs” setlist was not working after entering/exiting the “Cloud” setlist.