



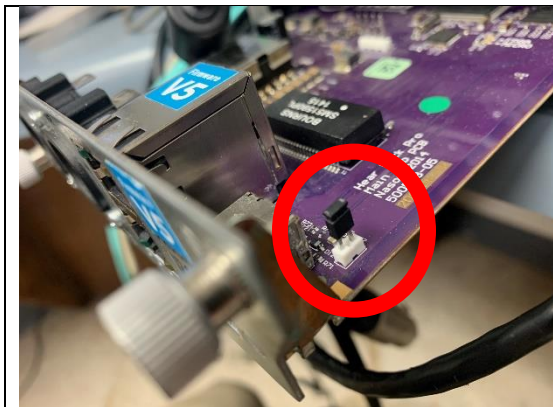
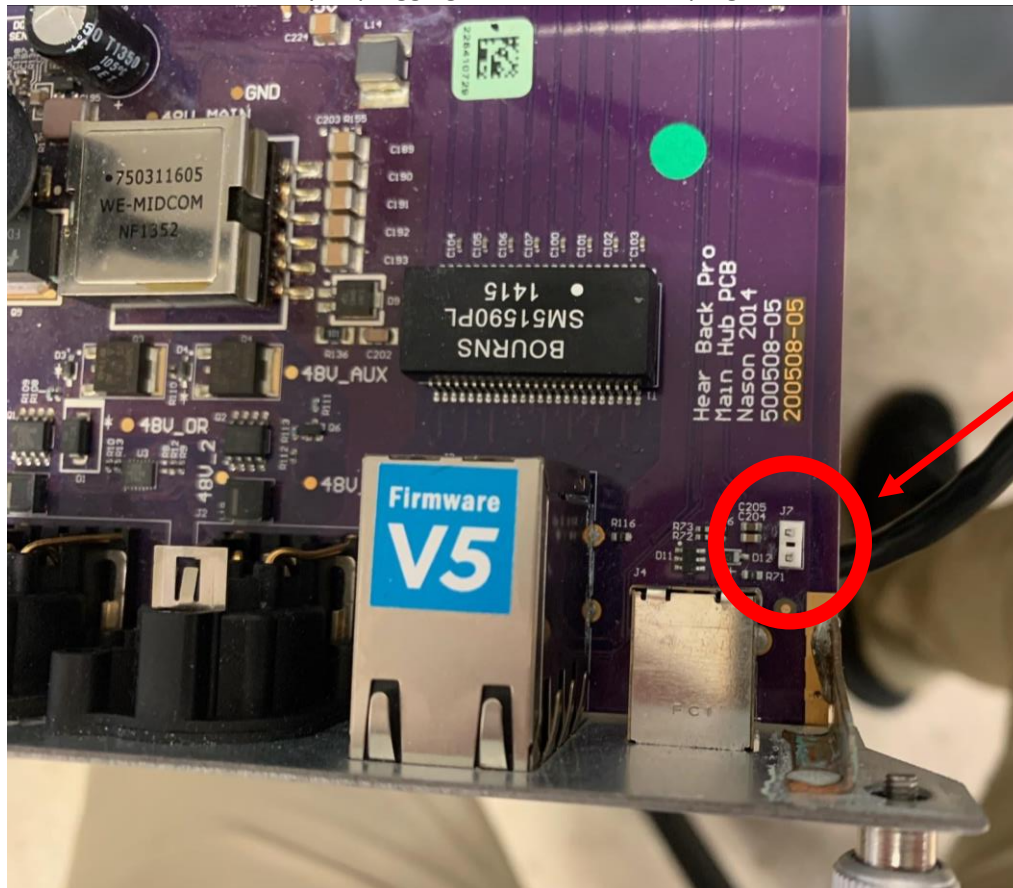
## Hear Back PRO – Hub Bootloader Update Instructions



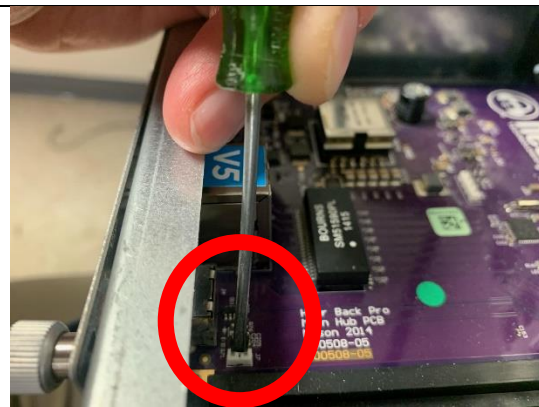
1. Unzip all files from the “Hear Back PRO Hub Bootloader Update.zip” file you downloaded. You can do this by highlighting all the files inside the zip folder and then drag them to your desk top.
2. Double click the “Update.exe” file to run the update program.
3. Windows may display a message like the one below. If so, click “More Info” and then click “Run Anyway”.
4. The update program will guide you through the rest of the update process.



1. Turn the Hear Back PRO hub power off.
2. Connect a USB cable to your computer.
3. Short the J7 jumper on the main card. You can do this by putting a jumper on it (you can borrow a jumper from an analog input card, MADi card, AES/EBU card, etc) or you can unscrew the lid and hold something metal against the pins while powering on.
4. Power the Hear Back PRO Hub on and try to do the firmware update. If your computer does not see the device, try unplugging the USB cable and plug it back in and it should see it.



Option 1 – use a jumper



Option 2 – remove lid and touch something metal

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## Hear Back Pro Hub -- Firmware Release Notes

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The Hear Back PRO system consists of two main components: the Hub and the Mixer. The modular Hub consists of four card slots, which can be populated with any configuration of input and/or output cards to fit your exact needs. Each Hub has the ability to supply signal and power to as many as 32 Mixers (8 per Network Card), each over a single standard CAT5e/6 cable. And with the built-in HBus In/Out ports, multiple Hubs can be daisy-chained together, allowing for truly unlimited system expansion.

The standard Hub (included in the "4-pack") comes pre-loaded with one Network Card and two 8-channel Analog Input Cards which can accept input signals from an audio mixer via auxiliary, matrix, monitor, and/or direct outputs.

More information is available at <http://hearback.com>

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### Bootloader Release 2.10 - February 2, 2022

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NOTE: This version is V2.7f with a bug fix. V2.8 and V2.9 are unreleased versions and will only work with V6.7 or later firmware.

#### CHANGES:

\*Fixed bug with naming channels 31 and 32 would try to write 33,34,35,36 to memory but the array was not that big so it would crash the microcontroller

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### Bootloader Release 2.9 - December 2, 2021

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#### CHANGES:

\*Added TDM2, TDM4, TDM8 format setting in the config.txt file for the new 6.13 Hub firmware that supports multiple card audio formats so that it can support the 16 channel cards and also the newer 32 channel cards (MADI, Waves, Dante).

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### Bootloader Release 2.8 - August 13, 2021

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#### CHANGES:

\*Removes the ability to remotely change the clock source to external. Erroneous data was reported to cause the clock to change to external, rendering the whole system useless until it was discovered that the clock source was changed. Now the only way to change the clock to external is to edit the CONFIG.TXT file on the hub.

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## Bootloader Release 2.7 - March 16, 2021

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### CHANGES:

\*Fixes a bug with external clock for input B not working after the config.txt file is generated by the hub after a mixer updates stereo channel links or if the iOS app updates channel names or stereo linking. Also changes the way the USB mass storage works because it was not working reliably on Mac OSX. A USB disconnect and reconnect is sequenced after the config file is modified, forcing the operating system to remount and reload the files so that they refresh. We do not recommend keeping USB connecting all the time. It should be connected to make changes and then ejected. The hub and the USB now have mutually exclusive code for reading and writing from the mass storage to prevent file corruption when they are both connected and accessing the drive.

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## Bootloader Release 2.6 - March 12, 2021

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Internal Testing – Not released to the public

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## Bootloader Release 2.5 - August 12, 2020

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### CHANGES:

\*Bug fixes for Mixer Digital Overlay. Added support for symbols in channel names. Added temperature readings and power supply monitoring that was removed in version 2.4 due to memory issues.

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## Bootloader Release 2.4 - April 21, 2020

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### CHANGES:

\*Added support for storing channel names for new Mixer Digital Overlay

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## Bootloader Release 2.3 - July 10, 2018

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### CHANGES:

\*Added stereo linking capability to the CONFIG.txt file (shows up on mass-store drive when you plug the USB into hub) to support the new 128 CH firmware. Channels are now linked globally.  
\*Added UDP support for stereo link set and status messages.

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## Bootloader Release 2.2 - February 13, 2018

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CHANGES:

- \* Discontinued the use of the STEREO.txt configuration file (shows up on mass-storage drive when you plug the USB into hub)
- \* Added support for new Word-Clock card to input and output Word-Clock (goes in slot 2 for input A or slot 4 for input B)
- \* Added a new CONFIG.txt file that contains settings for new Word-Clock card internal/external settings for input A and input B (shows up on mass-storage drive when you plug the USB into hub)

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Bootloader Release 2.1 - August 4, 2017

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CHANGES:

- \* Changed A,B,C,D Error LEDs on back of Hub main card to blink twice on boot to indicate V2.1 bootloader
- \* Increased Hub status UDP packet transmit rate to 16 updates per second to make iOS Status look more real time.

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Bootloader Release 2.0 - June 1, 2017

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CHANGES:

- \* Support for iOS app communication to allow level metering of audio inputs, and feedback of input source, sampling rate, clock status, & internal temperature.
- \* USB mass storage updated to fix issues with file modification and unmounting the drive (used when USB is connected to hub).
- \* Added firmware file backup copy feature which copies the firmware if boot is successful (if boot is not successful it will revert to the backup copy).
- \* Added stereo.txt settings file for editing which channels are stereo

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Bootloader Release 1.0 - October 29, 2014

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NOTES: \* Initial Release