# Qu-Bit Bloom Firmware Update

Firmware can be loaded onto the Bloom using a .wav firmware update file.

In order to upload firmware to the Bloom, you will need to use a device that is capable of audio output such as a smartphone, tablet, or computer.

## Check Firmware Version:

Before attempting to update the module, we recommend checking the current version of the firmware (you may already be on the latest version).

To do so, hold the RATCHET encoder down during bootup. After the module boots you will see the following based on the firmware version:

Versions before v1.0.6:

- The module will boot up normally, and there will be no special indication.
- The top-most Trunk LED, and the top-most central LED will both blink gold

V1.0.6:

for three seconds while ratchet is held down.

## Firmware Update Procedure:

1. Make sure that the only sounds being outputted from your device will be playback of the firmware audio file. This can easily be accomplished on a smartphone by putting your device into airplane mode. On a computer, make sure that any alerts or notifications are silenced.
2. Load the firmware update audio file onto your device.
3. Connect the output of your audio device into the Clock Rate CV input of the Bloom.
4. Power on the Bloom while holding down the Reset button. The LEDs will begin to blink blue to indicate that it is waiting for a firmware update.
5. Start playing the firmware update audio file into the Bloom. Once the Bloom starts updating, the LEDs will flash green indicating that it is

updating. A successful update will change the LEDs to white, Green, and briefly back to white before beginning normal operation of the module on the new firmware.

**If the LEDs blink red at any point, the update has failed.**

**You can reset the audio file to the beginning, and press the Reset button on the Bloom to reset the firmware loader. You can then restart the firmware audio file, and try to update again.**

## Troubleshooting:

If you are having trouble updating, here are some things to try:

1. Turn the volume up louder on your device. Most update failures are related to the amplitude being too low.
2. Try playing the audio file from a different device. In our experience audio interfaces offer the most reliable performance.
3. Try a different cable to connect to the module.

If you have trouble updating, please contact support@qubitelectronix.com

## Restoring Output Loss

If the outputs on the Bloom have previously stopped working, this can now be easily reset without having to enter calibration mode.

Hold SHIFT + LENGTH while the module boots up. This will restore all calibration data to the factory **default** (Calibration mode can still be reached if you want to fine tune the calibration). Upon booting, the LEDs will cycle between **blue** and **gold** for three seconds to indicate that the data has been restored.

Outputs and CVs should work again at this point.