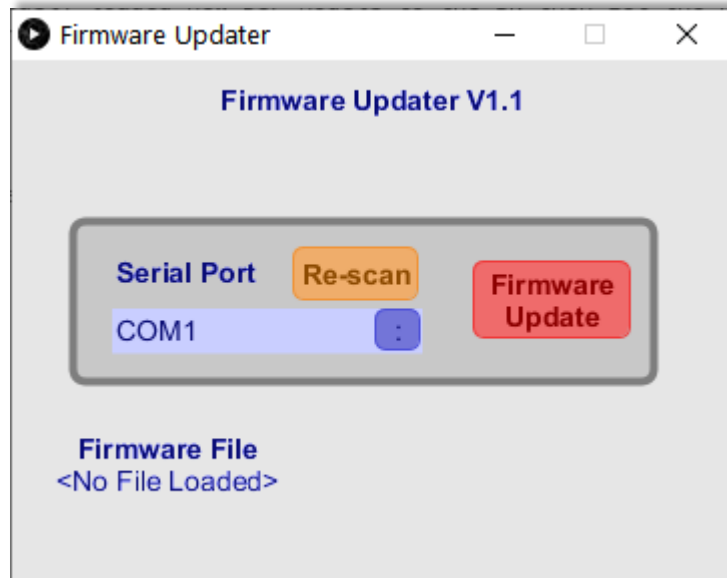


Firmware Updater App



This app may be used with any product that has an embedded Atmel (Microchip) ATmega328 microcontroller, for example the StanleyFX Blue Nebula and the PDH Designs tenEQ guitar pedals.

These instructions use the Blue Nebula as an example, but the procedure is very similar for any other product.

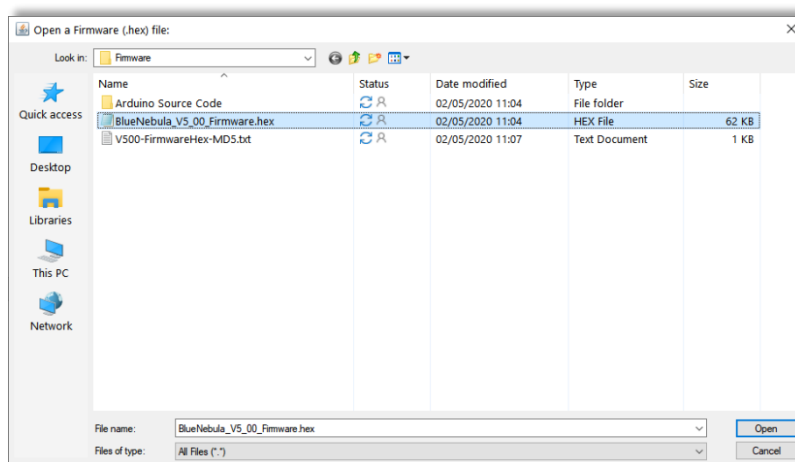
*Please note an up to date version of Java 8 must be installed on your computer in order to run this application. The 64-bit version requires 64-bit Java to run. If you only see a grey box with no controls or buttons when you run the 64-bit version then it means you only have 32-bit Java installed – the 32-bit version **will** work, or if you prefer, you can install a 64-bit version of Java.*

*This can be downloaded from the official Oracle website [here](#). I do **not** recommend that you download java from any other sites as it could contain **undesirable** stuff such as viruses or spyware.*

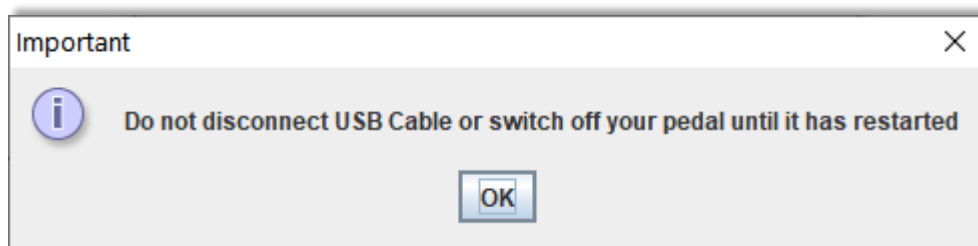
UPDATING THE BLUE NEBULA FIRMWARE

The **firmware** is the internal software that controls your Blue Nebula pedal and from time to time we may release updates to improve it or fix minor bugs. **Firmware Updater** avoids the need to use third-party software to update your Blue Nebula.

When a firmware update is released the first step is to download it to your computer from our website and make a note of where you saved it (by default it is usually saved in the **Downloads** folder). Now connect your Blue Nebula to the computer via the USB cable and choose the Serial Port that it is connected to. Click the red **Firmware Update** button and a file browser will open to allow you to locate the file you downloaded previously:



Select the correct file (it will have a **.hex** extension) and click **Open**. When you have selected the file the following dialog box will appear to remind you not to disconnect the USB cable or interrupt the power to the Blue Nebula until the update has finished, otherwise you may corrupt the installation and your Blue Nebula won't work properly. Click OK to start the update.



Depending on the speed of your computer the update takes about 15-30 seconds after which the Blue Nebula will restart. As it displays the Welcome screen, you can check that it now shows the version number of the updated firmware to confirm the update has been successful.

TROUBLESHOOTING

If you find that your Blue Nebula stops responding after carrying out a 'firmware update' the most likely reason is that you chose the wrong **.hex** file. Remember that DSP code files also have a **.hex** extension and if you mistakenly upload one of these the Blue Nebula will stop working!

To fix this, simply repeat the procedure but this time choose the correct file. *Firmware update files are usually named something like **BlueNebula_V5_00.hex** where the 'V5_00' part indicates the version number.*