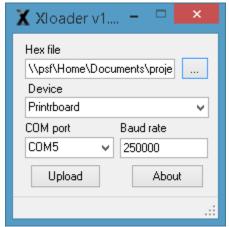
## Copperhead Firmware Instructions

## **Printrboard**

Newer Printrboards come with a CDC (USB Communication Device Class) bootloader installed. This allows the Printrboard to use drivers that should be pre-installed on your Windows system. These instructions assume a CDC bootloader. (TODO: Document installing the CDC bootloader on incompatible Printrboards.)

- 1) Place the boot jumper on the boot pins of the Printrboard. IMPORTANT: Do not remove the boot jumper until told to do so!
- 2) Reset the Printrboard using the reset button so it enters the CDC bootloader. As you reset the device you'll see the COM port number change in Windows Device Manager
- If you haven't already, unzip XLoader.zip located in Tools/XLoader to your desktop.
- 4) Double click XLoader.exe.
- 5) Select the **Hex file** you want to upload to your Printrboard.
- 6) Select **Printrboard** from the **Device** drop down menu.
- 7) Select the new **COM port** for the Printrboard in CDC bootloader mode.
- 8) Set the Baud rate to 250000.
- 9) Your settings should look something like this:



- 10) Click the **Upload** button to upload the firmware to the Printrboard. As the file uploads you'll see an **Uploading...** status message at the bottom of the window. When the upload is complete, the number of bytes uploaded will be displayed.
- 11) Remove the boot jumper from the boot pins on the Printerboard.
- 12) Reset the Printerboard using the reset button to boot the new firmware.
- 13) You can now attempt to connect to the Printrboard using your favorite printer management software.