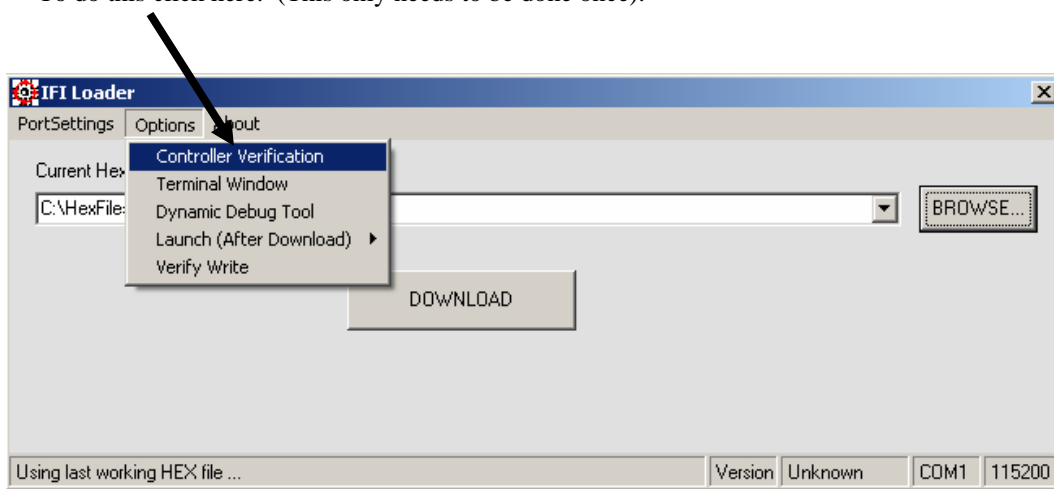
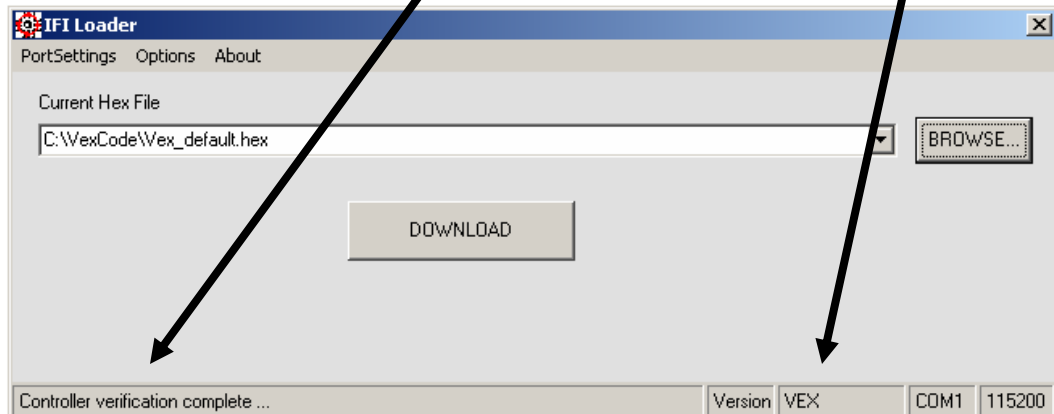


The following process is how to update firmware in the Master processor.

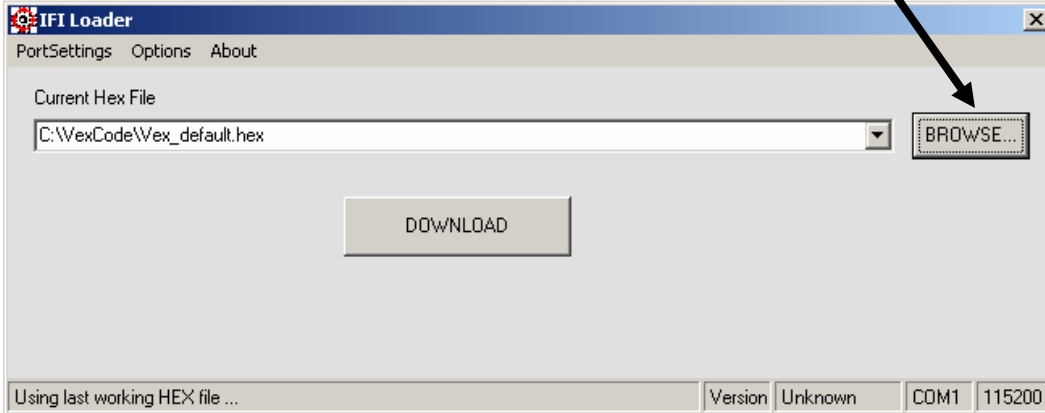
The **1st Step** is to make sure that the robot controller has been verified first. Make sure a serial cable has been attached from the PC to the programming board prior to this operation. The IFI-Loader supports many different robot controllers. The verification allows the Loader to select the appropriate protocol used during the download process. To do this click here. (This only needs to be done once).



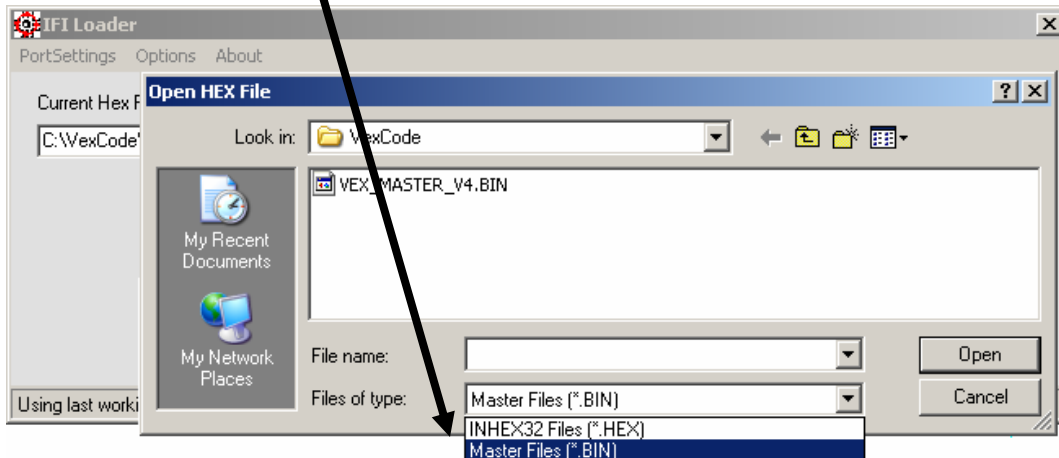
Now you should see 'Controller verification complete ...' on the lower left and 'VEX' in the lower right of the status window.



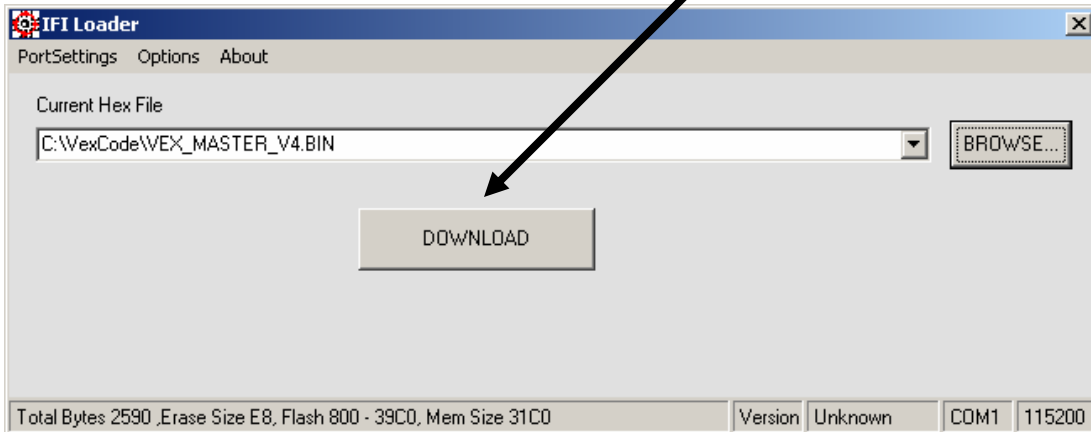
The **2nd Step** is to download the BIN file. To do this, click on the browse button.



Next, select “Master Files (*.BIN)” in the combo box.



Once the appropriate BIN file has been selected, click on the DOWNLOAD button.



The **3rd Step** is to download the user code. Once the master firmware has been updated, the user code must be reloaded. In order to do this, repeat **Step 2**. Rather than selecting “Master Files (*.BIN)”, you must select the “INHEX32 Files (*.HEX)” option. After downloading the appropriate user code (file), the robot controller is ready for use.

To verify that the master code and user code is downloaded correctly, make sure the RC is turned off then open the terminal window (from the options menu of the IFI Loader). Turn the RC unit on for a second then turn it off. On the terminal window, you should see the proper master version number and user version number (note: the user has the ability to change the user version number—the default is “User v2”).

Currently, the terminal window should display “Master v5” if the latest master file was downloaded correctly. “User v1” is the “out-of-the-box” default firmware.

