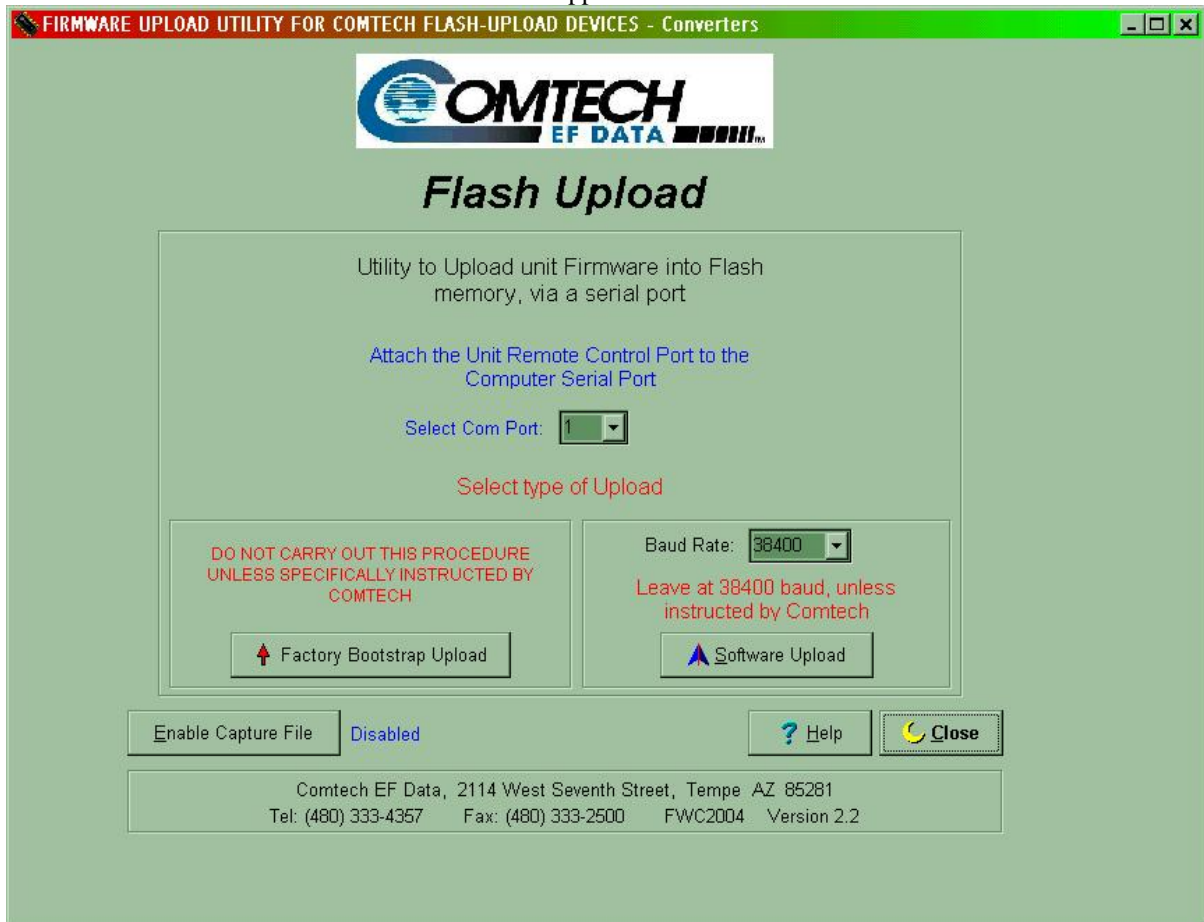
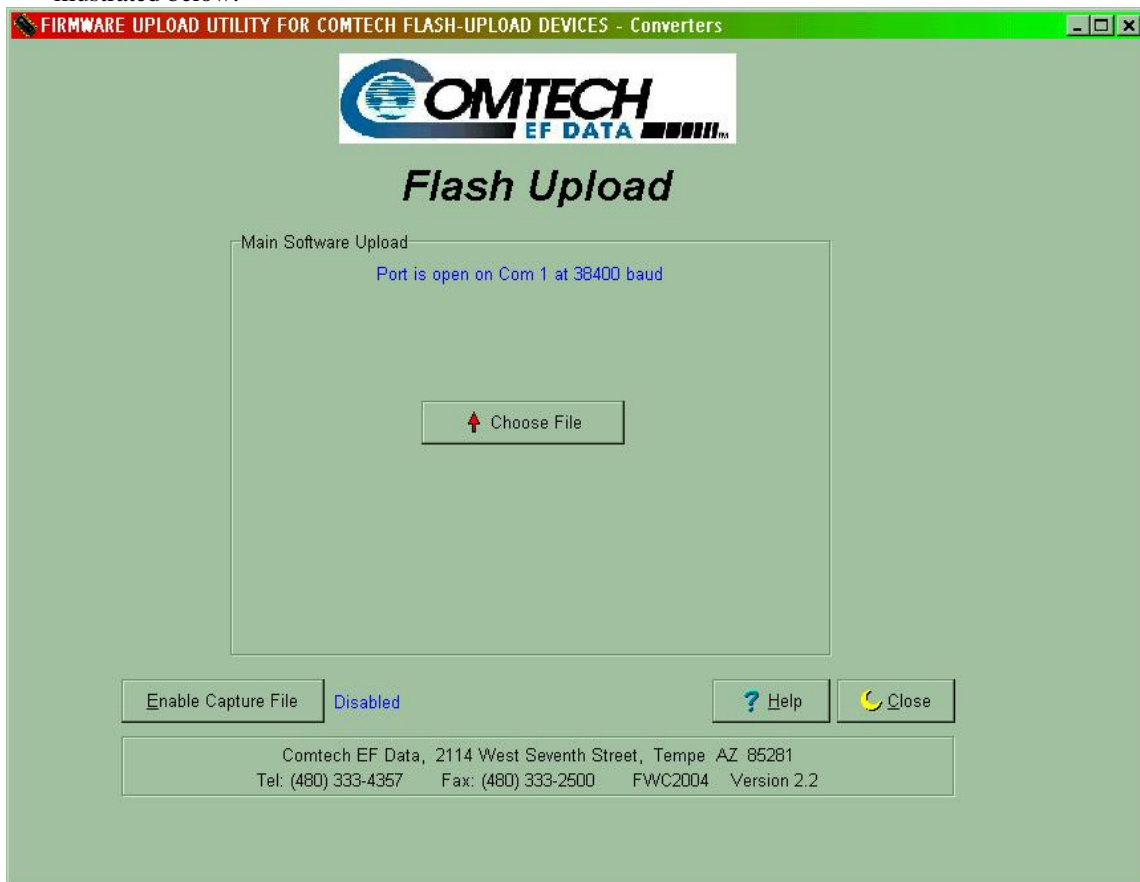


INSTRUCTIONS FOR UPLOADING THE M&C FIRMWARE OF COMTECH'S FREQUENCY CONVERTER

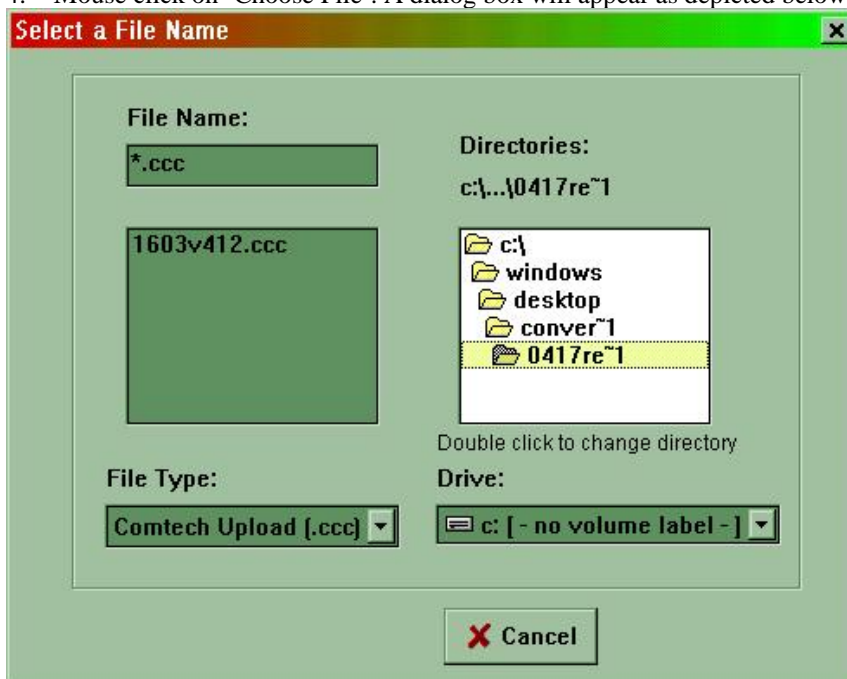
1. Before running the flash program, make sure the frequency converter is set to RS232 using the front panel. Please check that the computer's specified COMM port is connected to J1 port of the converter (located at the rear chassis).
2. Run the 'FLASH22.EXE'. The first menu will appear as shown below:



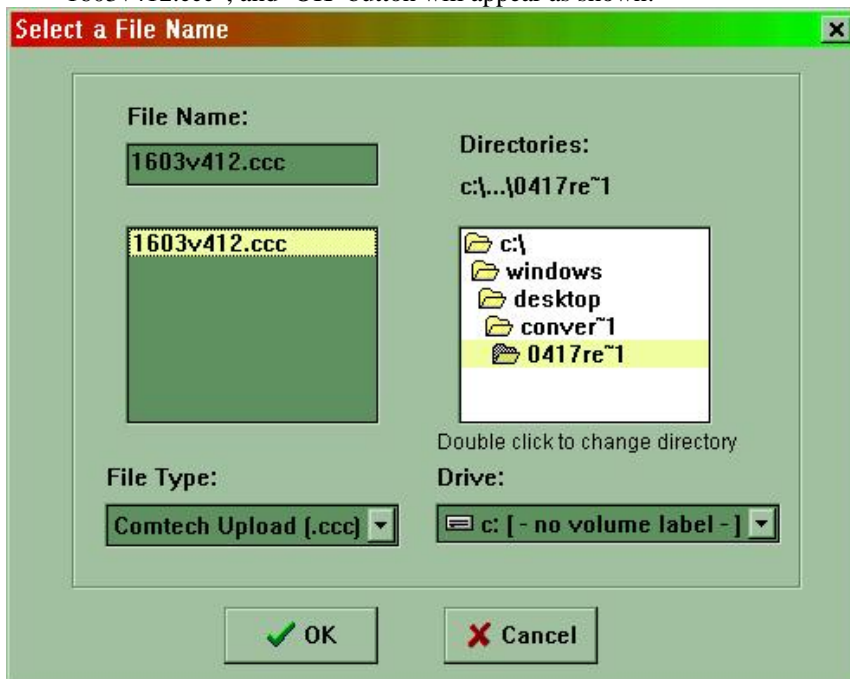
3. Select the serial COMM port. Mouse click on 'Software Upload'. The a new screen will appear as illustrated below:



4. Mouse click on 'Choose File'. A dialog box will appear as depicted below:



5. Locate the file where the firmware (1603v412.ccc) was saved. Then mouse click the filename “1603v412.ccc”, and ‘OK’ button will appear as shown:



6. Mouse click on ‘OK’ button. The next screen should display as illustrated below:



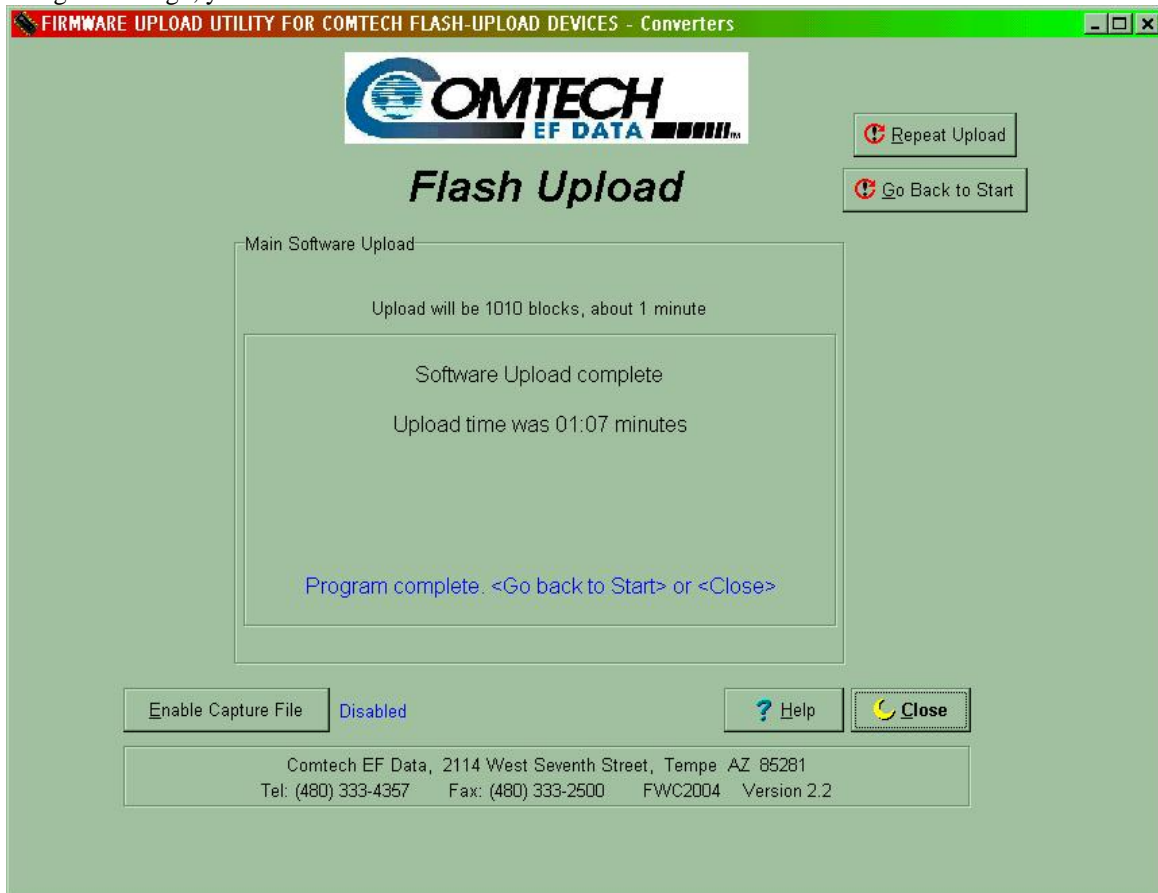
7. At this moment, the converter unit should be TURNED-OFF. Mouse click the 'Start Upload' button. The screen should display as shown below:



8. Then immediately TURN-ON the power of the unit. You should see the next screen below:



9. If the uploading process is interrupted, you can repeat the procedure from the beginning. If everything goes through, you should see the final screen as shown below:



10. You can close the window by mouse clicking the 'Close' button or the 'X' button located at the upper right hand corner.