

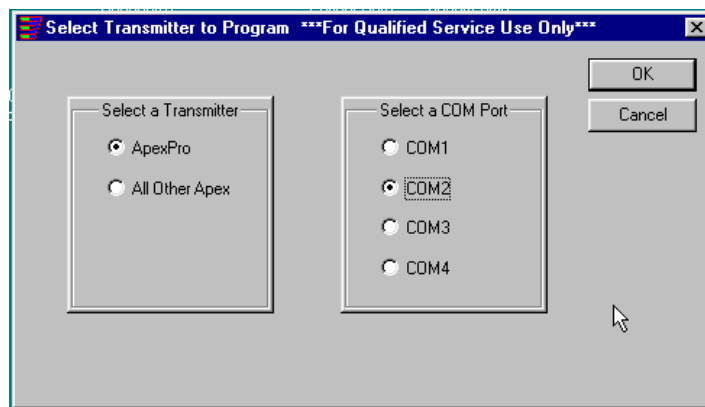
Using the Programming Device to Upgrade Apex-Pro Telemetry Software

Connect Hardware

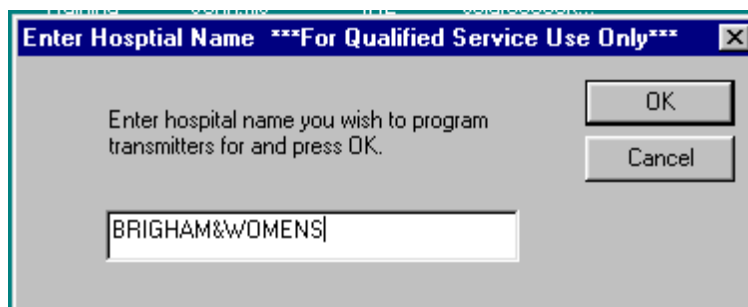
1. Connect the 9 pin serial cable from the PC to the transmitter programming device
2. Replace the ApexPro transmitter batteries with two new AA alkaline batteries.
3. Remove the transmitter's leadwire set and the interface connector port dust covers.
4. Insert the programming device connector port.

Start Programming Software

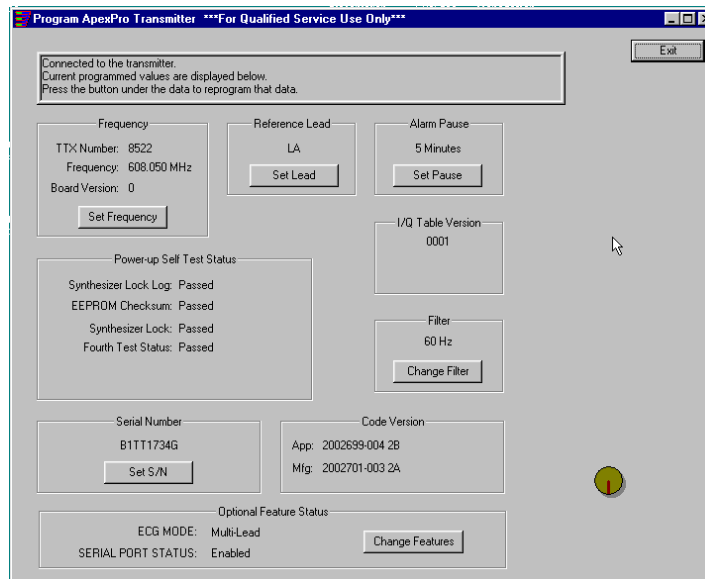
1. Under the PC's start menu, select Programs>Apex & ApexPro Tx Config>Apex_prg to start the programming software.
2. Select ApexPro and COM Port the serial cable is connected to. Then select OK.



3. Enter "BRIGHAM&WOMENS" as the hospital name and select OK.

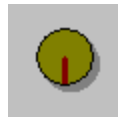


4. Within 30 seconds, the transmitter's settings should appear.

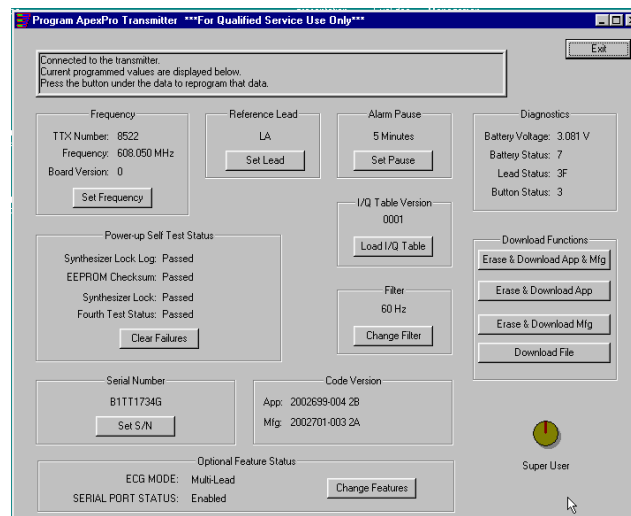


Download the Transmitter's Application software

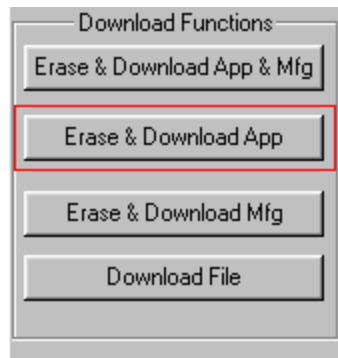
1. After connecting the hardware and starting the programming software, access the Super User mode as follows:
2. Click on the clock icon



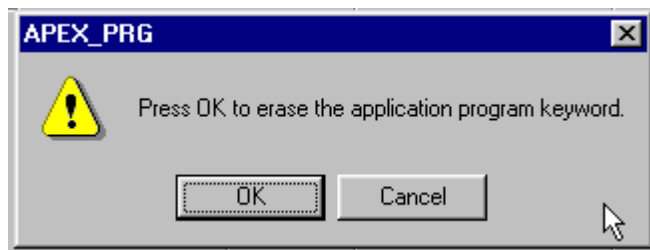
3. Type password: *mms_aps*
4. Select OK. The main screen will show additional buttons and "Super User" will appear under the clock icon.



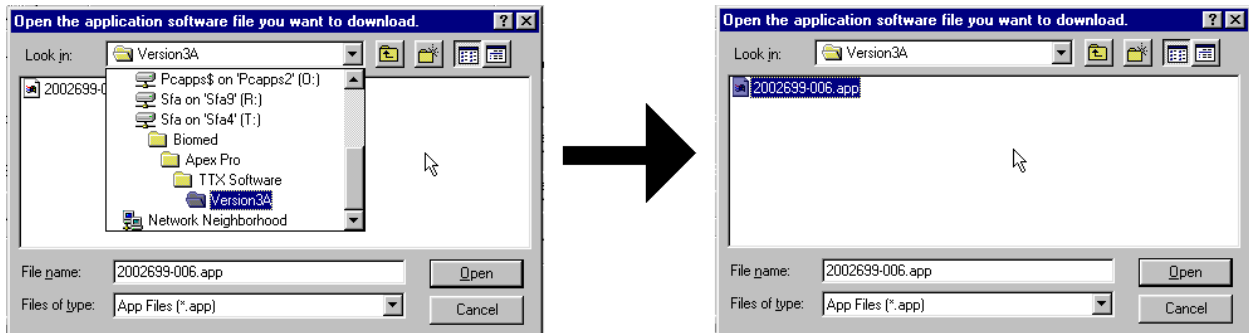
5. On the main screen, select Erase & Download App



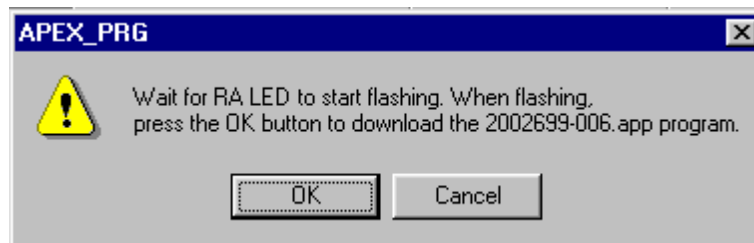
6. In the APEX_PRG window, when asked to “Press OK to erase the application program keyword”, select OK.



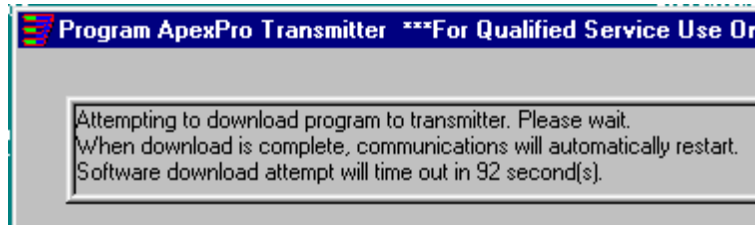
7. Navigate to the T:\Biomed\ApexPro\TTX Software\Version3A folder. Select the application file (.app) and select Open.



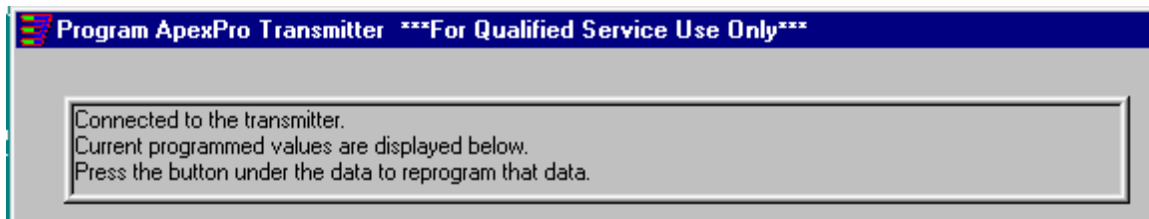
8. Wait for the transmitter’s RA LED to flash rapidly, then select OK to start updating the transmitter’s software.



- During the upgrade, the message box on the PC displays a countdown timer and the transmitter parameter settings appear greyed out.



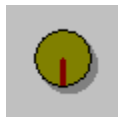
- Wait until the first line in the PC message box displays the text, “Connected to the transmitter.”



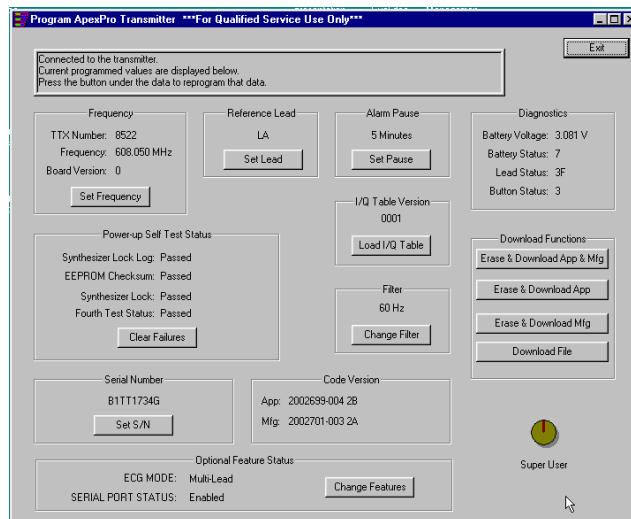
- Disconnect the transmitter from the programming device and wait for the transmitter to reboot. Note that the Code Version section of the main screen may or may not list the new version.

Download the Transmitter’s Manufacturing software

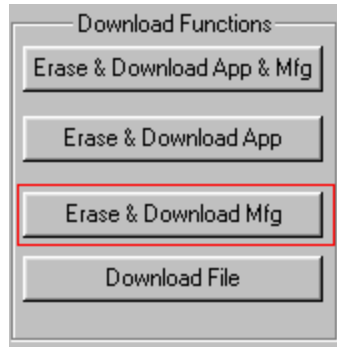
- After connecting the hardware and starting the programming software, access the Super User mode as follows:
- Click on the clock icon



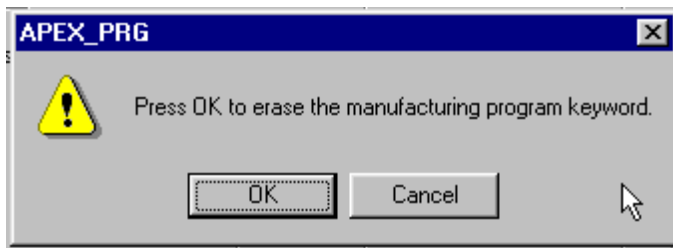
- Type password: *mms_aps*
- Select OK. The main screen will show additional buttons and “Super User” will appear under the clock icon.



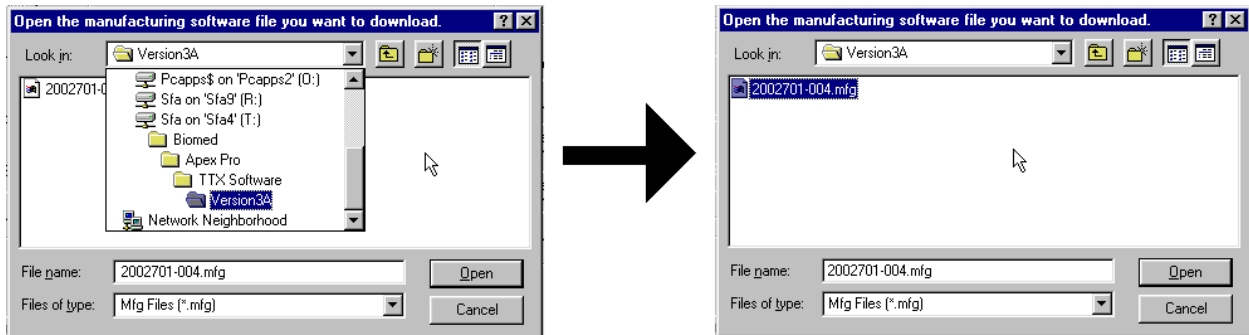
5. On the main screen, select Erase & Download Mfg.



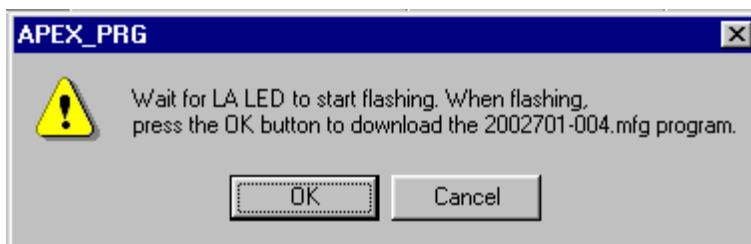
6. In the APEX_PRG window, when asked to “Press OK to erase the manufacturing program keyword”, select OK.



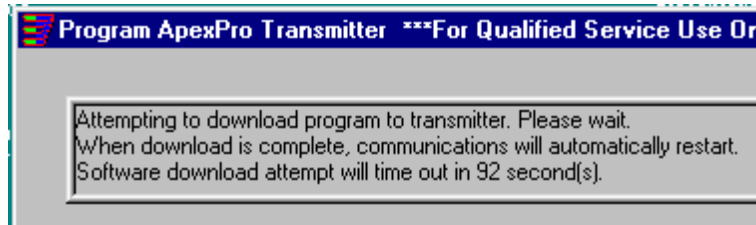
7. Navigate to the T:\Biomed\ApexPro\TTX Software\Version3A folder. Select the manufacturing file (.mfg) and select Open.



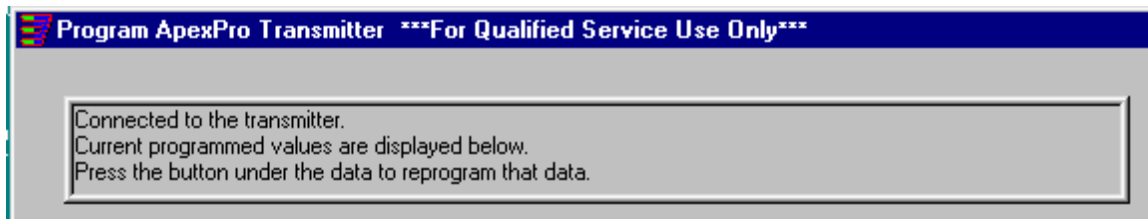
8. Wait for the transmitter's LA LED to flash rapidly, then select OK to start updating the transmitter's software.



9. During the upgrade, the message box on the PC displays a countdown timer and the transmitter parameter settings appear greyed out.



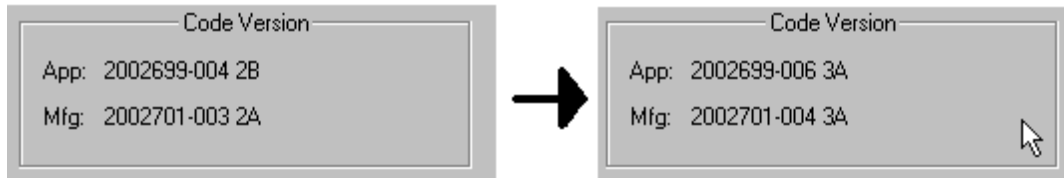
10. Wait until the first line in the PC message box displays the text, "Connected to the transmitter."



11. Disconnect the transmitter from the programming device and wait for the transmitter to reboot. Note that the Code Version section of the main screen may or may not list the new version.

Verify the transmitter's software version

1. Reconnect the transmitter to the programming device
2. When the transmitter's settings reappear in the PC configuration window, verify the Code Version text string matches the file names listed in the T:\Biomed\ApexPro\TTX Software\Version3A folder.



3. Confirm that all Power-up Self Test Status messages indicate Passed. Call Technical Support if any failures occurred.

Complete the Procedure

1. Disconnect the transmitter from the programming device.
2. Complete the procedure to verify the transmitter is fully functional.