XV. Bootloading

The Optowave Wireless Optical Probe is a capable of remote firmware updates. This process is referred to as Bootloading. The process is as follows.

A. Determine if your probe is bootloadable. If the probe has a red LED to the right of the two orange LED's then it is a bootloadable probe. See Optowave Back View on page 4. The bootload LED will flash briefly when the power on button is first pressed. If there is no red LED call Probe-TEC for further assistance.

B. Check to be sure Microsoft.NET Framework 3.5 is installed on the PC which is used with the probe. (*Check %systemroot%\microsoft.net\framework for a folder named v3.5.*). If it is not installed install it @ http://msdn.microsoft.com/en-us/netframework/cc378097.aspx. Follow Mircosoft's instructions.

C. On the same PC create a folder named Optowave under Programs Files.

D. Unzip the bootload program (Optowave Flash Tool.zip) and the new firmware file (Optowave_X_X.opw) and Optowave_0x00_i2c.opw into the Optowave directory.

E. Run the program and select File from the menu. Then select Open. Browse to C:/Program Files/Optowave and select the file Optowave_0x00_i2c.opw.

F. Using the drop down box set the Com Port to the port number for your probe.

G. Using the drop down box set the Bit Rate to 115200.

H. Turn on the probe to be flashed (*be sure the batteries are not low*). Orient the optical interface towards a distant non-reflective surface.

I. Select the Connect Button. The button should turn green and the blue LED should light.

J. Select the Flash Button. It should turn green, the program should indicate "Flashing", and the red Bootload LED should flash rapidly for about 30 seconds. When the LED stops flashing the program should indicate "Flash Complete" and the blue LED should turn off.

K. Power cycle the probe.

L. Repeat the process by selecting File from the menu. Then select Open. Browse to C:/Program Files/Optowave and select the file Optowave_X_X.opw. (*Note X_X should correspond to the firmware version you are attempting to install. For example 2.1 would be Optowave_2_1.opw*)

M. The version number should now appear just above and to the right of the file name.

N. Check to be sure the probe is still on (*be sure the batteries are not low*). Orient the optical interface towards a distant non-reflective surface.

O. Select the Connect Button. It should turn green and the blue LED should light.

P. Select the Flash Button. It should turn green, the program should indicate "Flashing", and the red Bootload LED should flash rapidly for about 30 seconds. When the LED stops flashing the program should indicate "Flash Complete" and the blue LED should turn off.

Q. Power cycle the probe – Turn it off. Then turn it on BUT DO NOT RELEASE THE POWER BUTTON UNTIL RED BOOTLOAD LED TURNS OFF (about 40 seconds). Release the power button and then power the probe on again. This time the red Bootload LED should flash briefly. The green LED should latch after 5 seconds - the probe is now running the new firmware.

If the probe or program does not behave as describe above call probe-tec @ 765-252-0257 for further assistance.