






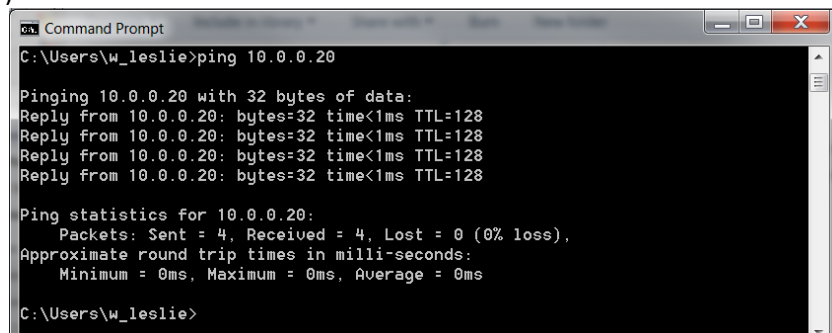


1. Set up your computer port IP address for correct IP Address range (e.g. 10.0.0.222 if wobbler at 10.0.0.20). Instructions are in user guide for this if need more detail. Default wobbler Navigate to web page of wobbler controller. Note IP address if not 10.0.0.20. Plug into Ethernet Input of Wobbler Controller.
2. **Take Screen shot or otherwise note all user pages in wobbler so they can be checked after suite install to make sure they are kept the same for customer.** Recommended to turn off wobble.
 - a. Programs page- note program settings if customer wants to keep them
 - b. Configuration page- note all settings
 - c. Optics, note orientation, trim, **focal length** and seam track distance/invert.
 - d. The Support page shows the currently installed firmware.
3. Turn off wobbler controller power. **Remove 25 D connector to head. Do not unplug head with power on. It is best to update software with head disconnected.** Power wobbler back on.
4. If your pc does not have the “Net Upgrade Utility - NXP” program, Unzip the Utility folder and run “NXPUUpgradeUtilitySetup.msi”. Follow directions to install the Utility.
5. **Unzip** Software suite (extract all files) and put in folder in convenient place like desktop. **Note that you need the correct suite for D30 or D50 head.**

FLASH_USB (F:) ▶ P65-000027_Rev_2_1_0_D50.zip ▶ P65-000027_Rev_2_1_0_D50

Name	Type	Compressed size
 P60-001380_Wobbler_Init_2.0.2_D50_m.txt	Text Document	1 KB
 P60-001380_Wobbler_Init_2.0.2_D50.txt	Text Document	1 KB
 P60-001378_Wobbler_Dict_2.0.3.txt	Text Document	3 KB
 P60-001377_Wobbler_FPGA_2.0.2.rbf	RBF File	139 KB
 P60-001343_IPGP563_Wobbler_Controller_2.1.0.bin	BIN File	159 KB
 P60-000377_Bootloader_3.3.0.bin	BIN File	12 KB
 D50 Wobbler .xml	XML Document	1 KB

6. You can **ping 10.0.0.20** or the current Ethernet IP address to verify connection (optional but nice idea)



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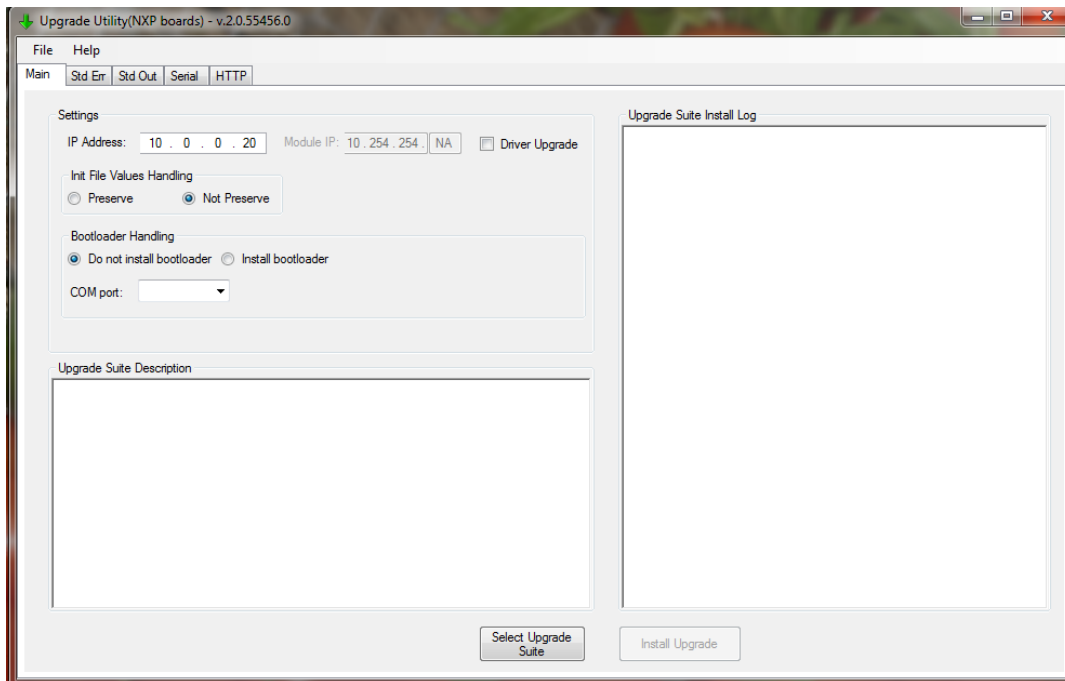
C:\Users\w_leslie>ping 10.0.0.20

Pinging 10.0.0.20 with 32 bytes of data:
Reply from 10.0.0.20: bytes=32 time<1ms TTL=128
Reply from 10.0.0.20: bytes=32 time<1ms TTL=128
Reply from 10.0.0.20: bytes=32 time<1ms TTL=128
Reply from 10.0.0.20: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.20:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

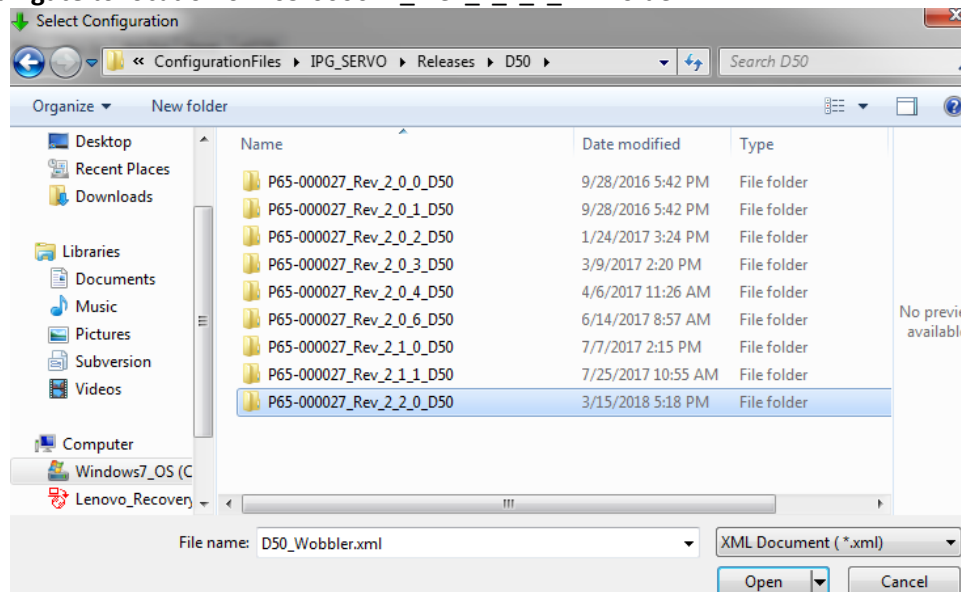
C:\Users\w_leslie>
  
```

7. Start Upgrade Utility program
8. Set for **Bootloader Present, App Present, Not Preserve.**
9. If IP Address of wobbler is different than the default 10.0.0.20, set installer to current IP address.

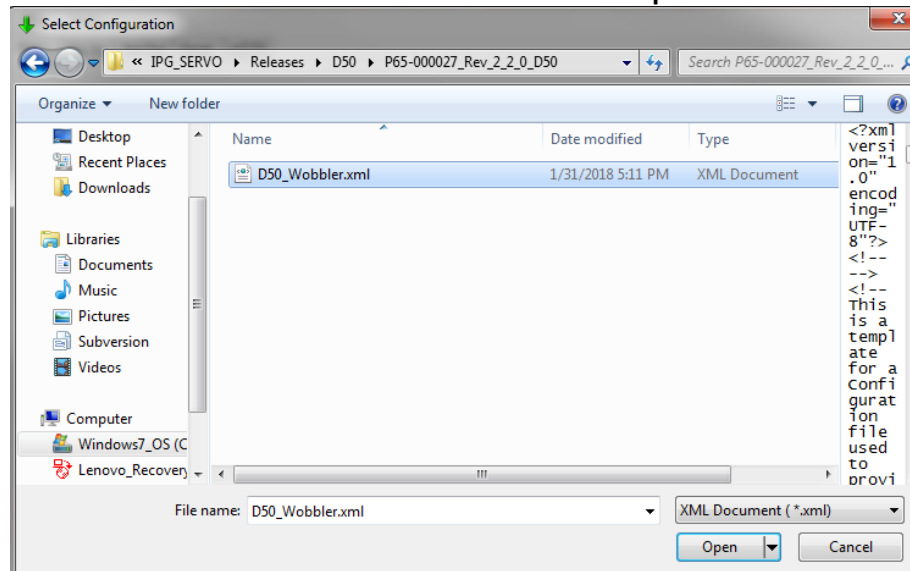


Example of updater

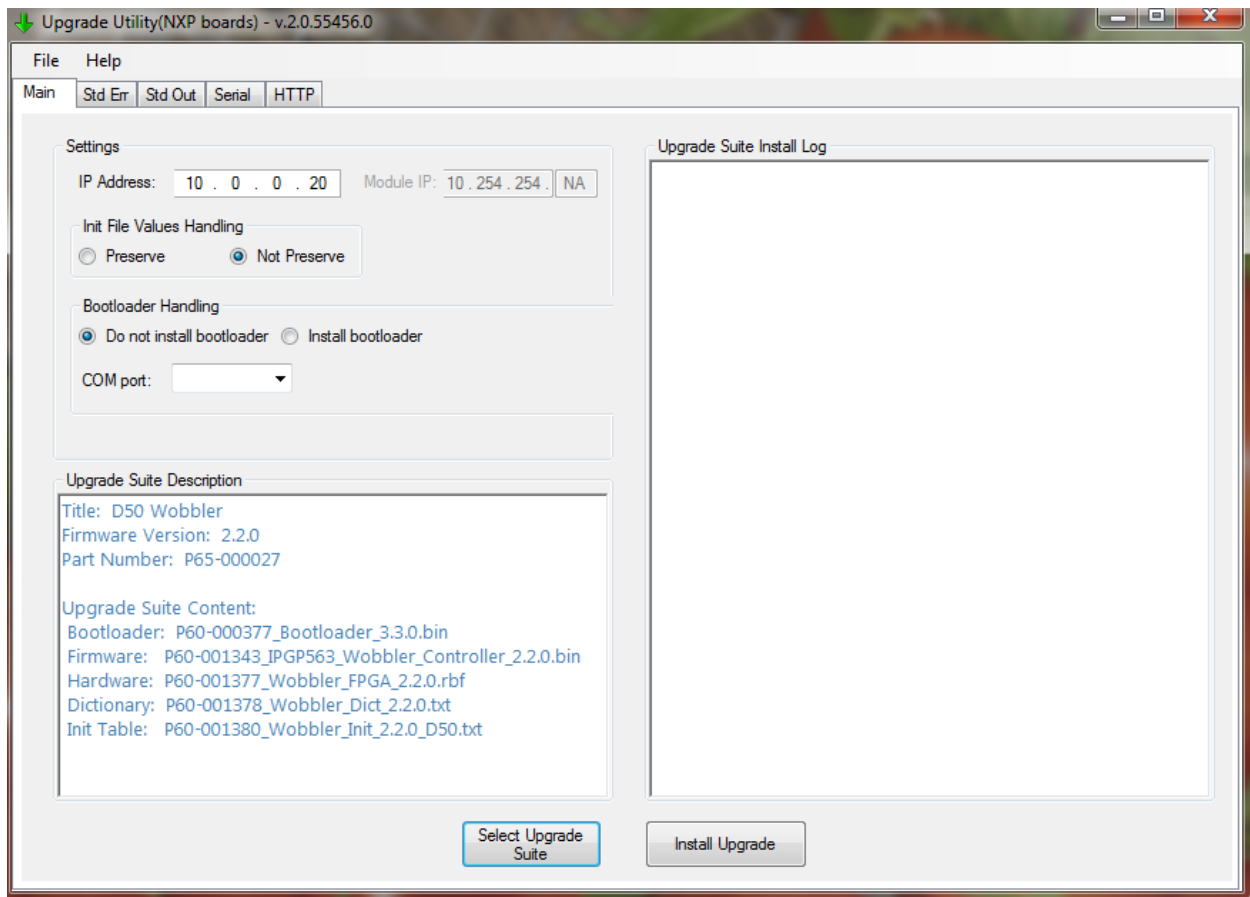
10. Click **Select Upgrade Suite**
11. **Navigate** to location of P65-000027_Rev_x_x_x_Dxx folder.



12. Click on folder and select the D50 Wobbler.xml file and click **Open**

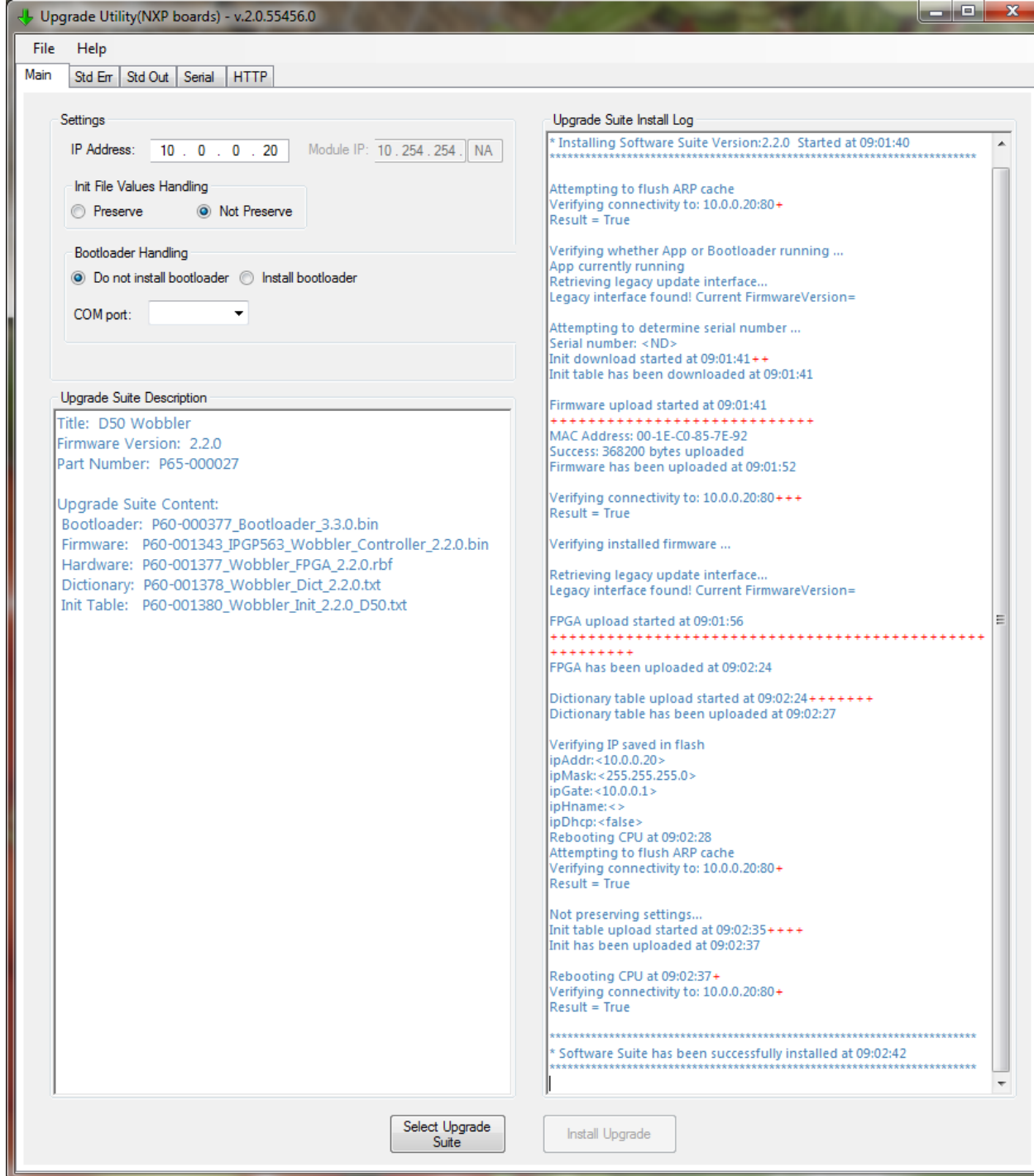


13. Upgrade Utility now will fill in suite description. **Verify you have correct suite for D30 or D50 depending on head.**



14. Click **Install Upgrade**

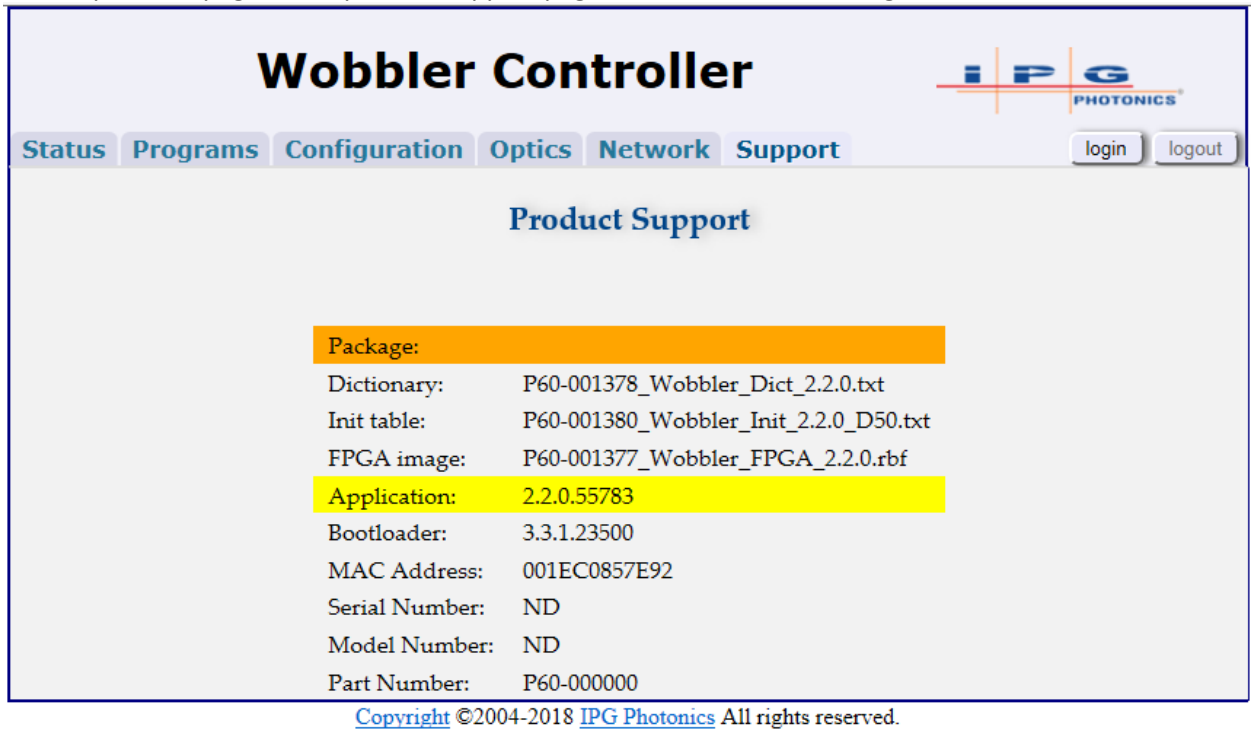
Successful completion looks like:



15. Exit Upgrade Utility.

16. Power Down, Reconnect Head Connector, Power Up. **DO NOT HOT PLUG HEAD.**

17. Open web pages. The product support page should reflect the changed code names.



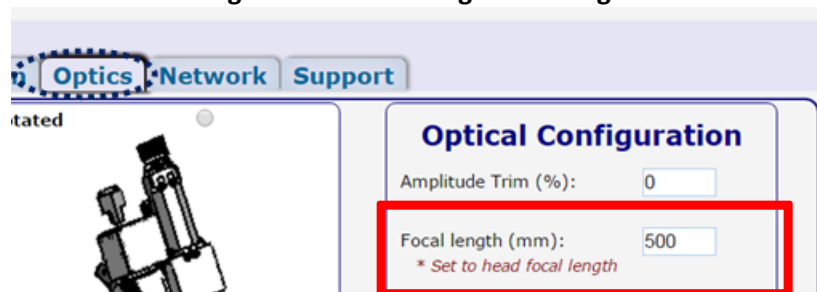
The screenshot shows the 'Wobbler Controller' web interface. At the top, there is a navigation bar with tabs: Status, Programs, Configuration, Optics, Network, and Support. The 'Support' tab is selected. Below the navigation bar, the 'Product Support' section is displayed. It contains a list of software components and their versions:

Package:	
Dictionary:	P60-001378_Wobbler_Dict_2.2.0.txt
Init table:	P60-001380_Wobbler_Init_2.2.0_D50.txt
FPGA image:	P60-001377_Wobbler_FPGA_2.2.0.rbf
Application:	2.2.0.55783
Bootloader:	3.3.1.23500
MAC Address:	001EC0857E92
Serial Number:	ND
Model Number:	ND
Part Number:	P60-000000

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18. Reset Optical, Configuration and Programs web pages .

- Note Focal length of wobbler head changes to default 300mm, change back to actual head FL if different. Changing focal length will erase Amplitude, Frequency, and Offset values in Program table so change focal length FIRST.



The screenshot shows the 'Optical Configuration' page. The 'Optics' tab is selected. The page displays the following fields:

Optical Configuration	
Amplitude Trim (%)	0
Focal length (mm)	500

Below the Focal length field, there is a note: * Set to head focal length.

19. Restore customer connections to Wobbler and test performance

20. End of Procedure.