

Firmware Upgrade Instructions

[Using NovAtel Update Version](#) | [Using NovAtel OEM Version \(Requires authcode\)](#) | [Using the AUTH Command](#)

Using NovAtel Firmware [Update Version]

1. Download, unpack, and install the firmware from NovAtel.
2. Run Winload - usually installs to Programs -> NovAtel Inc -> Vers# Update Disk -> Winload
3. On the File Menu, select Open Script File... (Figure 1)

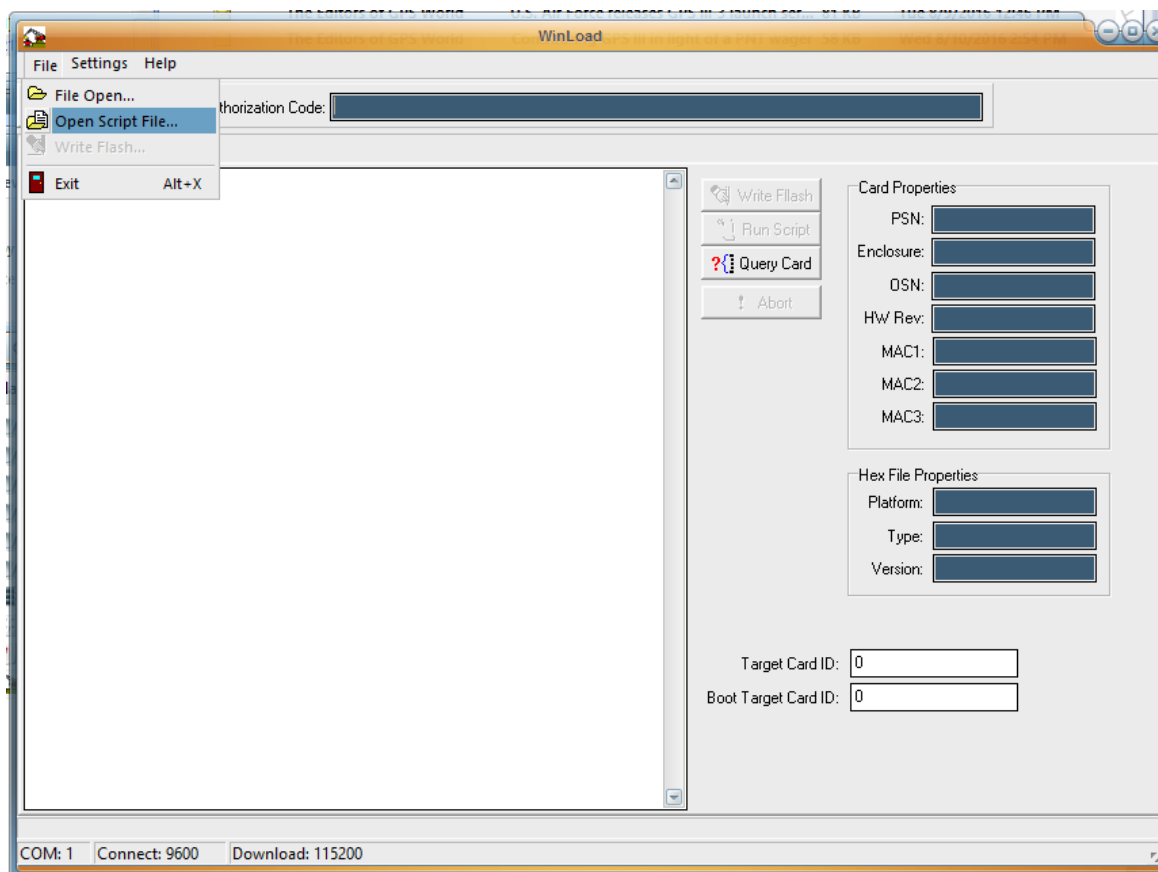


Figure 1

4. Navigate to and select the Update.txt, and Click Open (or double-click on the file) (Figure 2)

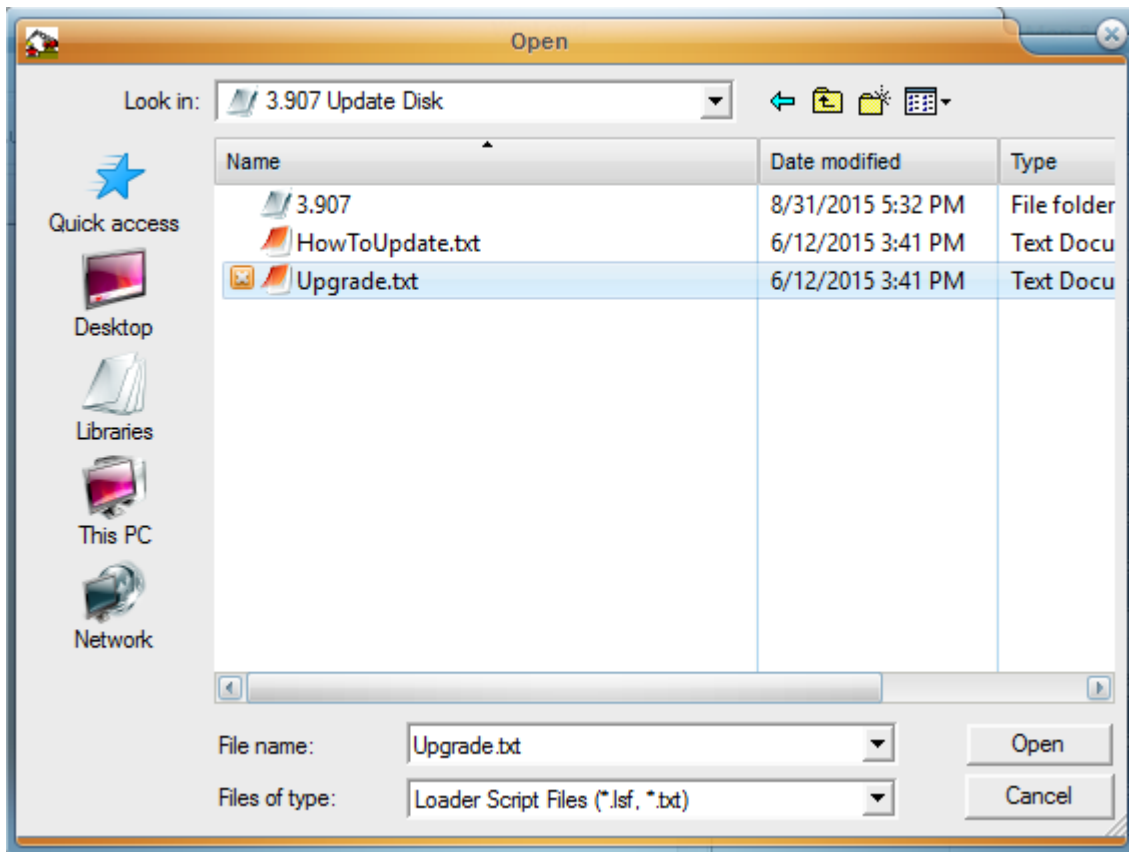


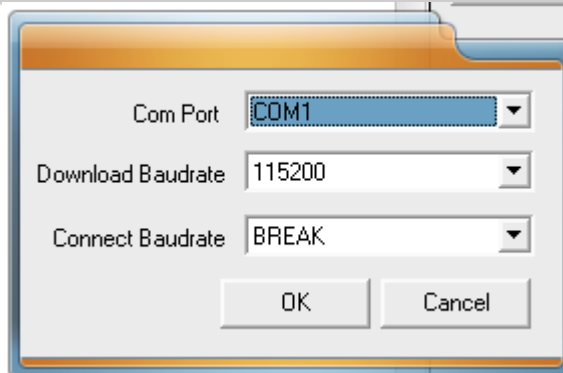
Figure 2

5. Make sure power is NOT connected to GPS receiver, but have power ready to connect



Optional:

If you want to leave power applied to the receiver, change the Settings -> Com Settings... -> Connect Baud Rate to BREAK. This will allow you to leave power applied and Winload will issue a break to the unit to initiate the firmware installation process.



6. Click on Run Script button in the Winload program (Figure 3)

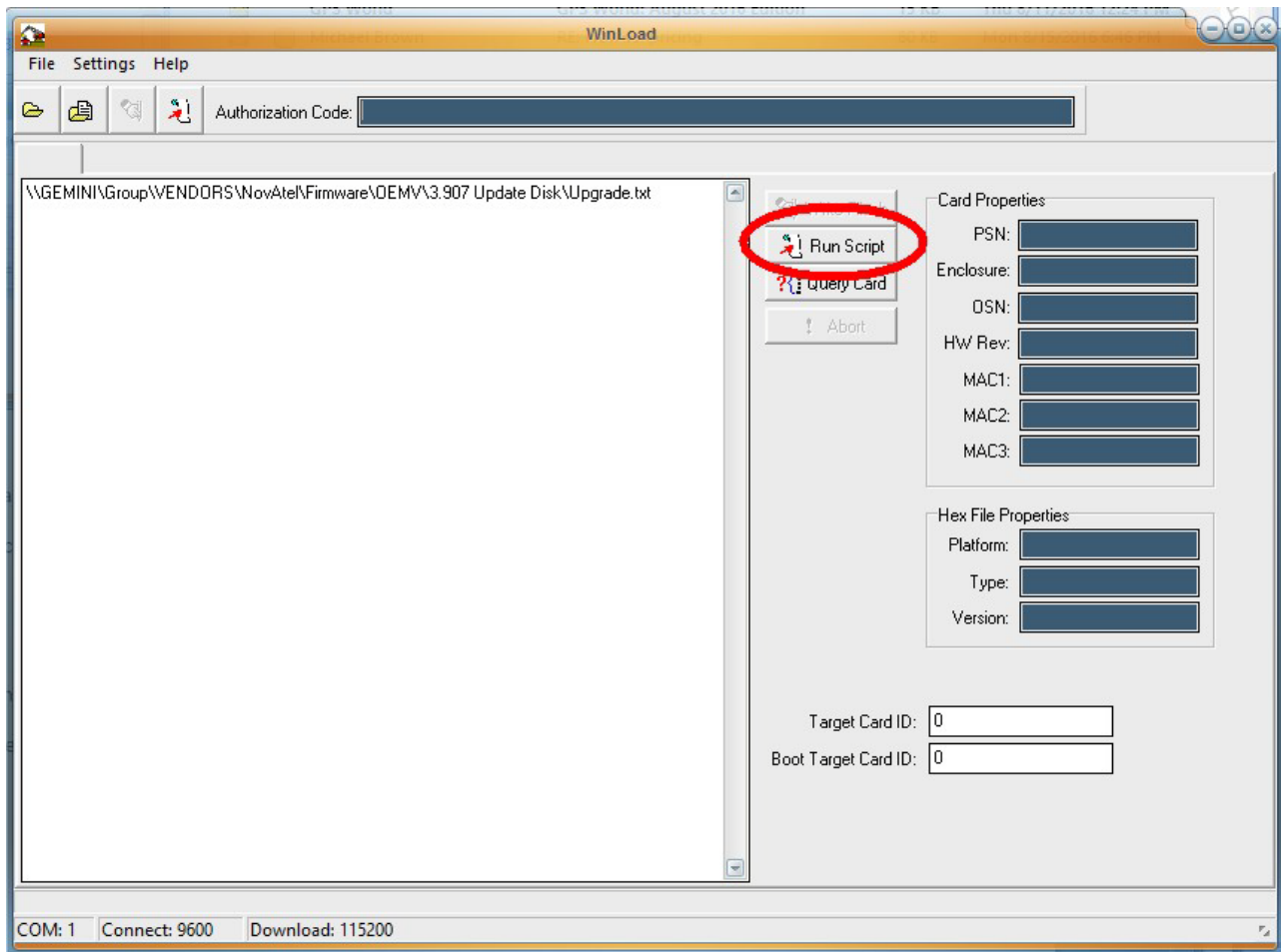


Figure 3

7. When the countdown starts - Apply power to receiver
(leave power applied if using the BREAK setting mentioned in Step 5)
8. The Winload program should automatically provide the auth code and start the update.
 1. If you get prompted for an auth code --> Cancel the firmware upgrade and contact SLAinc
 2. Firmware update should take approximately a couple of minutes to complete

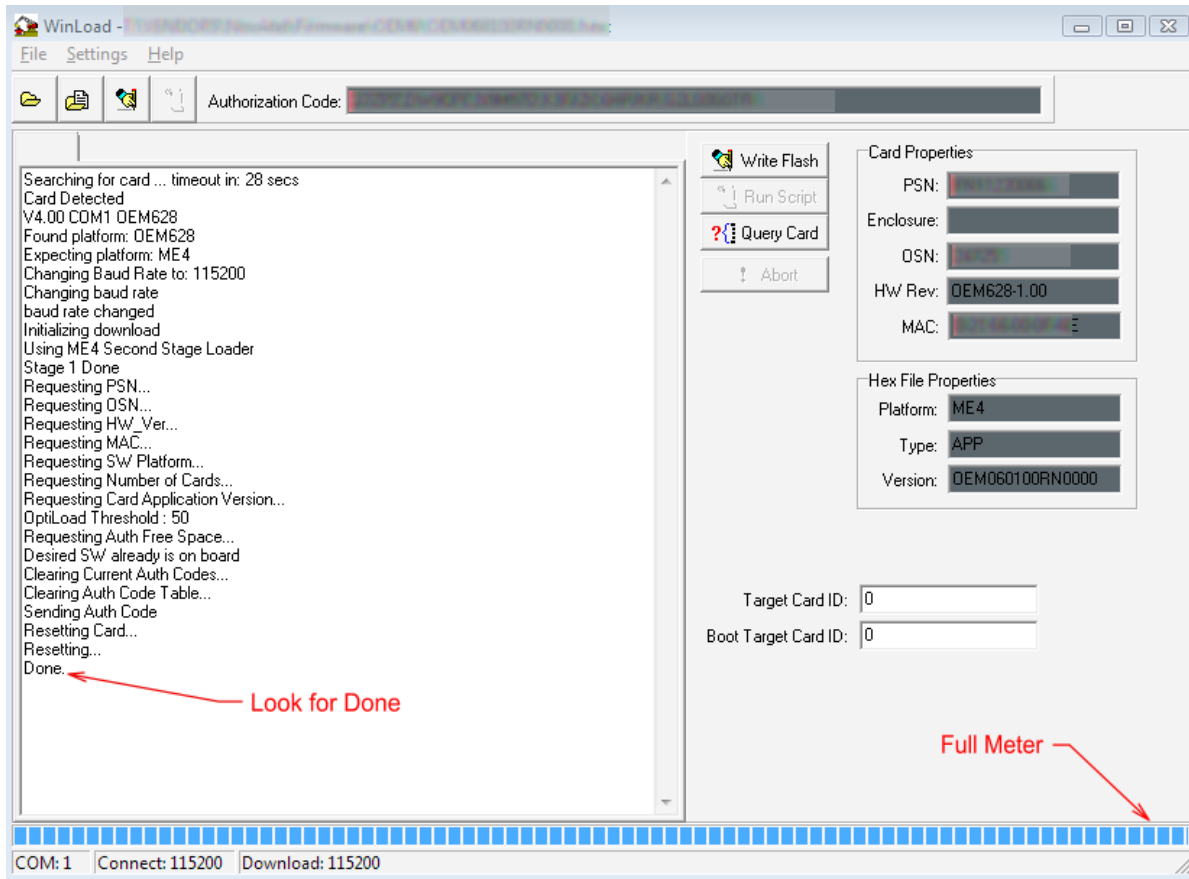


Figure 4

9. Once the firmware update has completed, it is highly recommended to perform a factory reset on the unit to clear out any potential issues.
 - a. Connect to the unit through NovAtel CDU/Connect or a terminal program (ex. HyperTerminal, Terra Term, Procomm, etc) and issue the following command:
 - i. FRESET [Enter]
 - b. The unit will reset to factory defaults. If connected at a baud rate other than 9600, you will have to reconnect at 9600
10. Configure your receiver as needed

Using NovAtel OEM Version (requires authcode)

1. Download and unpack the firmware from NovAtel.
2. Run Winload.exe
3. On the File Menu, select Open File (Figure 5)

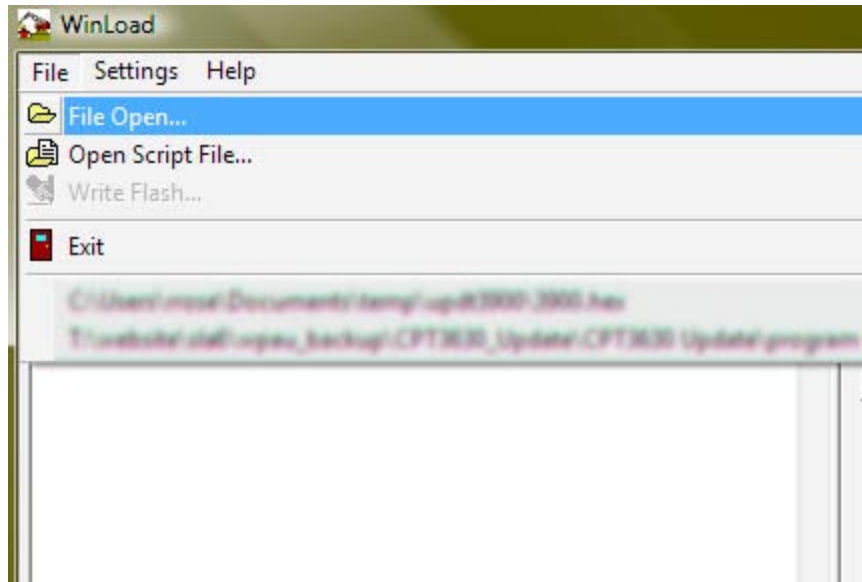
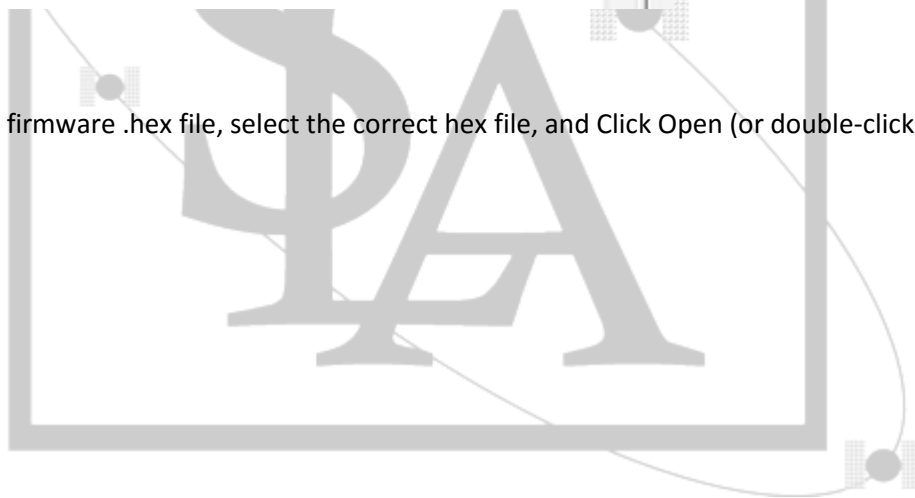


Figure 5

4. Navigate to the firmware .hex file, select the correct hex file, and Click Open (or double-click on the hex file) (Figure 6)



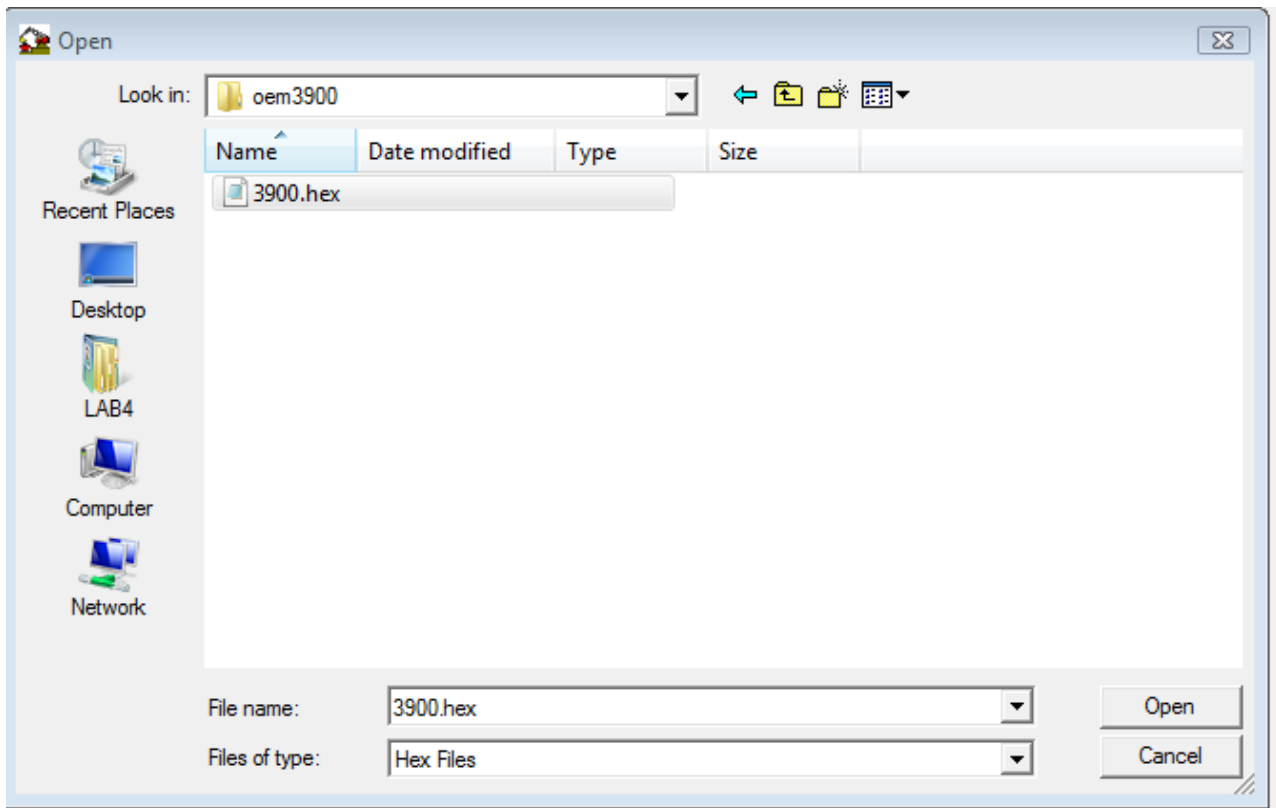


Figure 6

5. Locate the provided Authorization Code from NovAtel or SLAinc. Highlight the auth code (making sure there are no extra spaces in the front or end of the code) and Copy (CTRL-C or Right Click -> Copy). See Figure 7

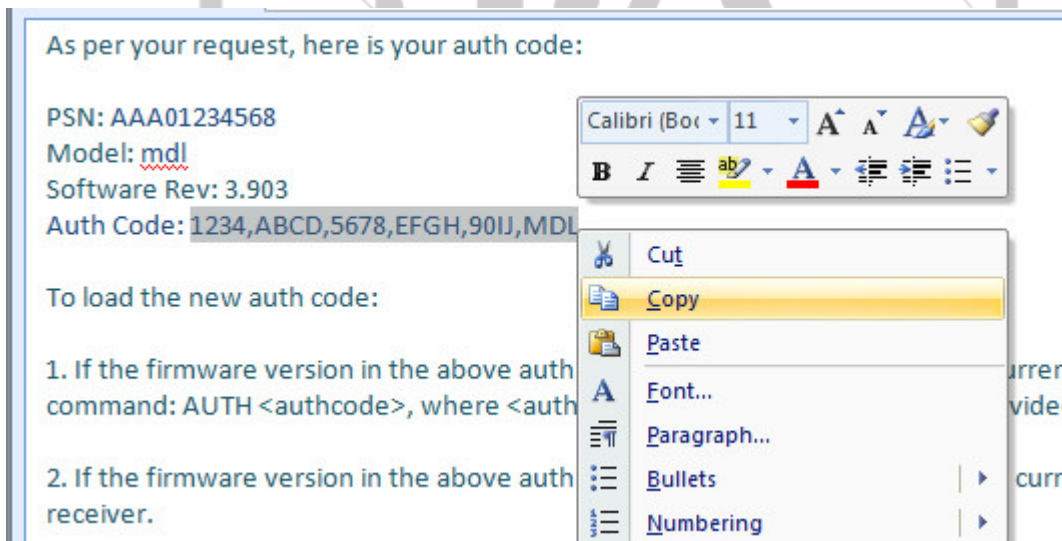


Figure 7

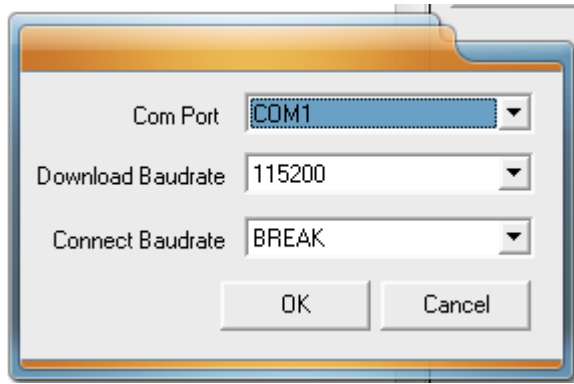
6. Make sure power is NOT connected to GPS receiver, but have power ready to connect



Optional:

If you want to leave power applied to the receiver, change the Settings -> Com Settings... -> Connect Baud Rate to BREAK. This will allow you to leave power applied and Winload will issue

a break to the unit to initiate the firmware installation process.



7. Click on Write Flash button in the Winload program (Figure 8)

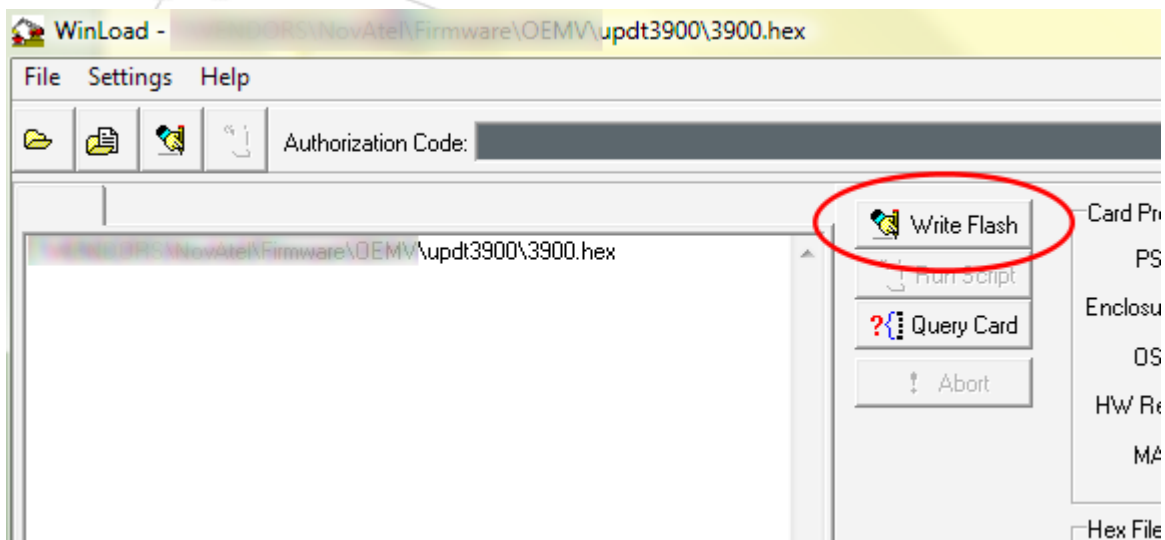


Figure 8

8. When the countdown starts - Apply power to receiver (leave power applied if using the BREAK setting mentioned in Step 6 above)
9. The Winload program should connect and prompt you for an auth code. See Figure 9

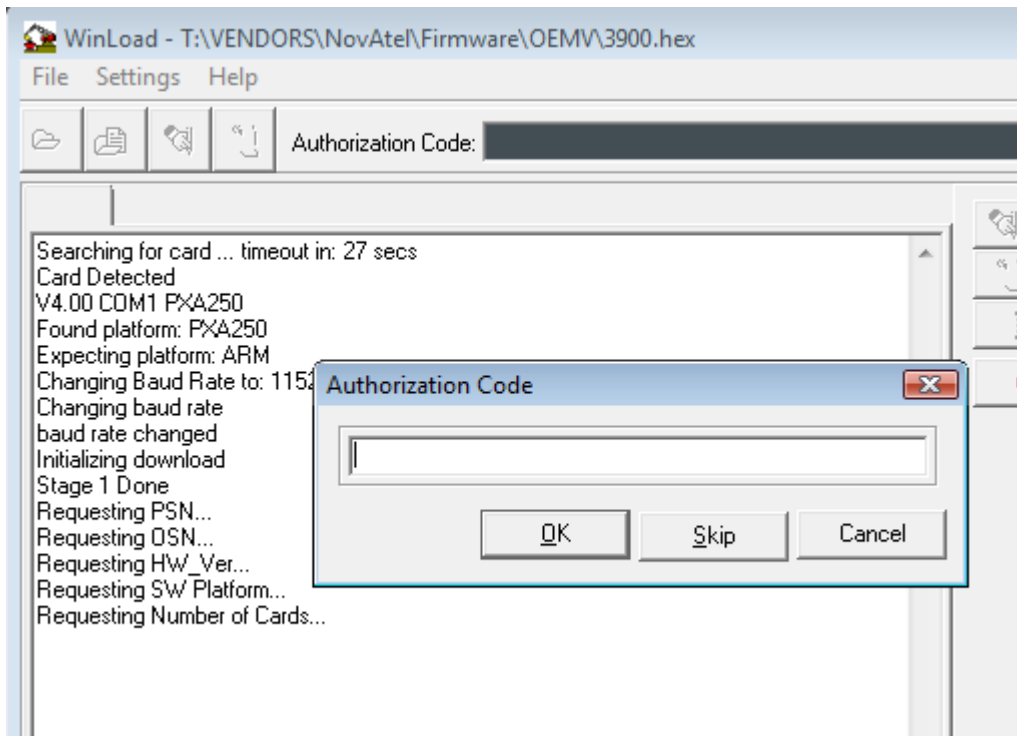


Figure 9

1. Enter the authcode or paste (CTRL-V or Right-Click -> Paste)
 - If using the copy and paste method, make sure there are NOT any extra spaces at the beginning or end of the auth code. This will cause an invalid authcode error
2. Firmware update should take approximately a couple of minutes to complete

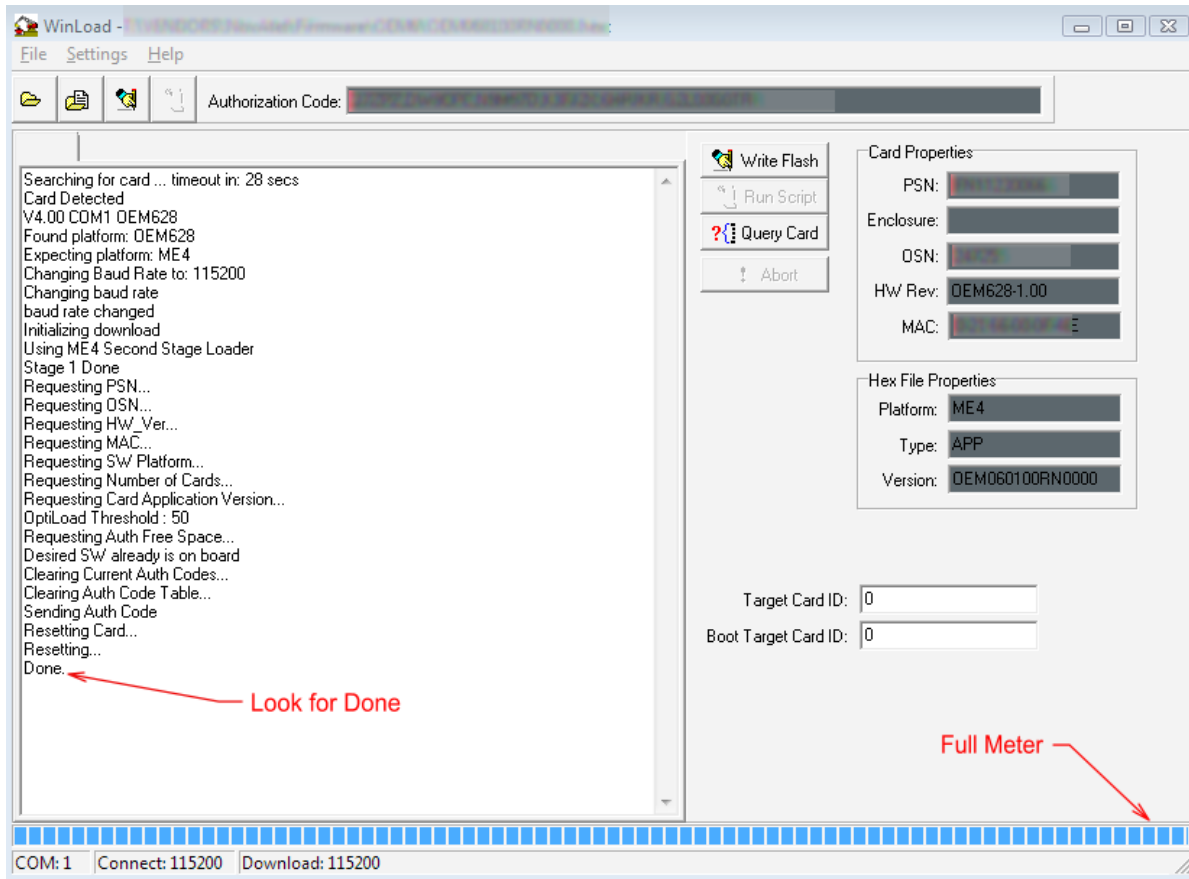


Figure 10

10. Once the firmware update has completed, it is highly recommended to perform a factory reset on the unit to clear out any potential issues.
 - a. Connect to the unit through NovAtel CDU/Connect or a terminal program (ex. HyperTerminal, Terra Term, Procomm, etc) and issue the following command:
 - i. FRESET [Enter]
 - b. The unit will reset to factory defaults. If connected at a baud rate other than 9600, you will have to reconnect at 9600
11. Configure your receiver as needed

Using the AUTH Command

1. Connect the receiver to a computer and power up.
2. Use either a terminal program or NovAtel's CDU to Connect software and connect to the unit

NOTE:

(OEM6) SIGNATURE auth codes do not require a specific auth code for each firmware version. (OEMV and non-SIGNATURE) This method requires that the Auth code is for the same version of firmware that is currently installed on the receiver. Check the current version by using the LOG VERSION command.

- LOG VERSION [Enter]

The firmware version is shown below highlighted in **yellow**

OEMV:

```
#VERSIONA,COM1,0,71.5,FINESTEERING,1362,340308.478,00000008,3681,2291;1,GPSCARD,"L12RV","DZZ06040010","OEMV2G-2.00-2T","3.901","3.000A9","2006/Feb/ 9","17:14:33"*5e8df6e0
```

OEM6:

```
#VERSIONA,COM1,0,89.0,FINESTEERING,1610,504872.194,00000000,3681,6293;1,GPSCARD,"D2LR0RCCR","BFN10260022","OEM628-.00","OEM060000RN0000","OEM060000SB0002","2010/Nov/05","16:11:18"*
```

3. Once the version has been verified, use the AUTH command in your terminal program or in the Console of the NovAtel CDU or Connect software. Type AUTH followed by the provided authorization code.

TO ADD A NEW AUTH CODE:

```
AUTH ADD PART1,PART2,PART3,PART4,PART5,MODEL [ENTER]
```

TO REMOVE AN AUTH CODE:

```
AUTH REMOVE PART1,PART2,PART3,PART4,PART5,MODEL [ENTER]
```

4. The unit will reset once the command is issued. You may have to reconnect if using the NovAtel software.
5. Verify the new model is installed by using the LOG VALIDMODELS command and LOG VERSION command:

- LOG VALIDMODELS [Enter]

The model(s) are shown below highlighted in **yellow**

OEMV:

```
#VALIDMODELSA,COM1,0,54.0,FINESTEERING,1337,414753.310,00000000,342f,1984;1,"ME3",0,0,0*16c0b1a3
```

OEM6:

```
#VALIDMODELSA,COM1,0,92.0,FINESTEERING,1610,499139.682,00000000,342f,6293;1,"D2LR0RCCR",0,0,0*d0580c1b
```

- LOG VERSION [Enter]

OEMV:

#VERSIONA,COM1,0,71.5,FINESTEERING,1362,340308.478,00000008,3681,2291;1,GPSCARD,"L12RV","DZZ06040010","OEMV2G-2.00-2T","3.901","3.000A9","2006/Feb/ 9","17:14:33"*5e8df6e0

OEM6:

#VERSIONA,COM1,0,89.0,FINESTEERING,1610,504872.194,00000000,3681,6293;1,GPSCARD,"D2LR0RCCR","BFN10260022","OEM628-.00","OEM060000RN0000","OEM060000SB0002","2010/Nov/05","16:11:18"*

