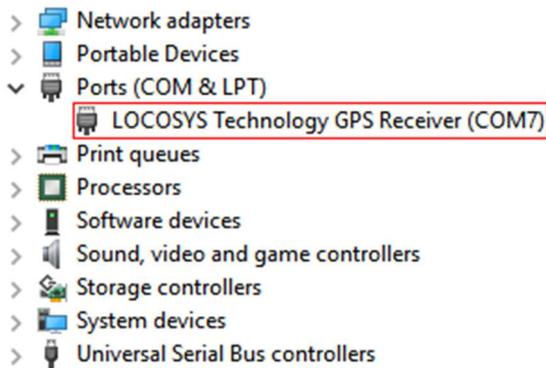


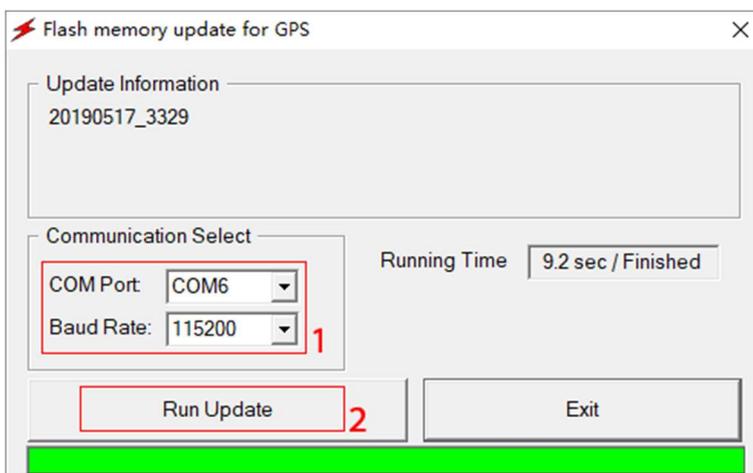
V-900/V-990 Firmware Updating Guide for the WNRO

The following steps take Windows10 as an example.

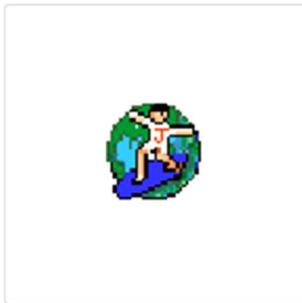
1. Prepare a standard Mini-USB cable, connect V-900/V-990 to your computer (**Do NOT use the auto on/off cable that device attached**).
Make sure there is no memory card inside the device. Turn on the device.
2. View the COM port of the V-900/V-990 (COM6 shown).



3. Run "FW_WNRO". Select the COM Port and click "Run Update".
After about ten seconds, the progress bar below turns green to indicate the end of the first part of updating.

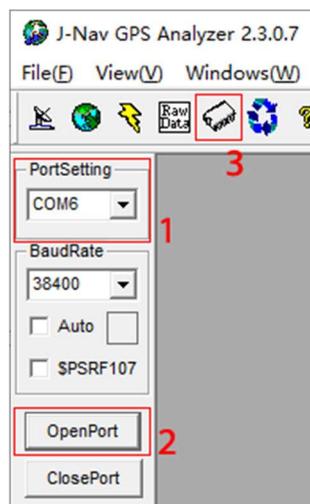


4. Run "J-Nav GPS Analyzer".



J-Nav GPS Analyzer.exe

- (1) Select the COM PORT where the device is located, click "OpenPort", and then click the icon in the upper right corner.



- (2) Click "Read Information". **All parameter settings must be consistent as shown in Box 2.**

Click "Select" .and finally click "Execute".

The screenshot shows the 'CommandSetting' dialog box with the following elements and callouts:

- Callout 1:** A red box around the 'Read Information' button.
- Callout 2:** A red box around the 'FLASH Write' section, which includes:
 - Com A Protocol: NMEA
 - Product Select: Standard (selected), MT3339
 - Com B Protocol: Other
 - BaudRate: 38400
 - NMEA parameters: GGA 1, GLL 0, GSA 1, GSV 5, RMC 1, VTG 0, USER 0
- Callout 3:** A red box around the 'Select' button.
- Callout 4:** A red box around the 'Execute' button, which is located next to the 'CR' and 'LF' checkboxes.

Other visible settings in the dialog include:

- User Define Message: \$PSRF110,1,10,10,2,1,1,0,0,0,10,21*3a
- LED indicator control: User define selected, Not Fix LED On 1000 ms, Fix LED On 200 ms
- PPS: Option Disable PPS, PPS Pluse(High) 1ms

- (3) **All parameter settings must be consistent as shown in Box 1.**

Click "Select" and finally click "Execute".

- (4) Click "Factory" and then click "Execute".

5. Turn off V-900/V-990 to complete the firmware updating.