

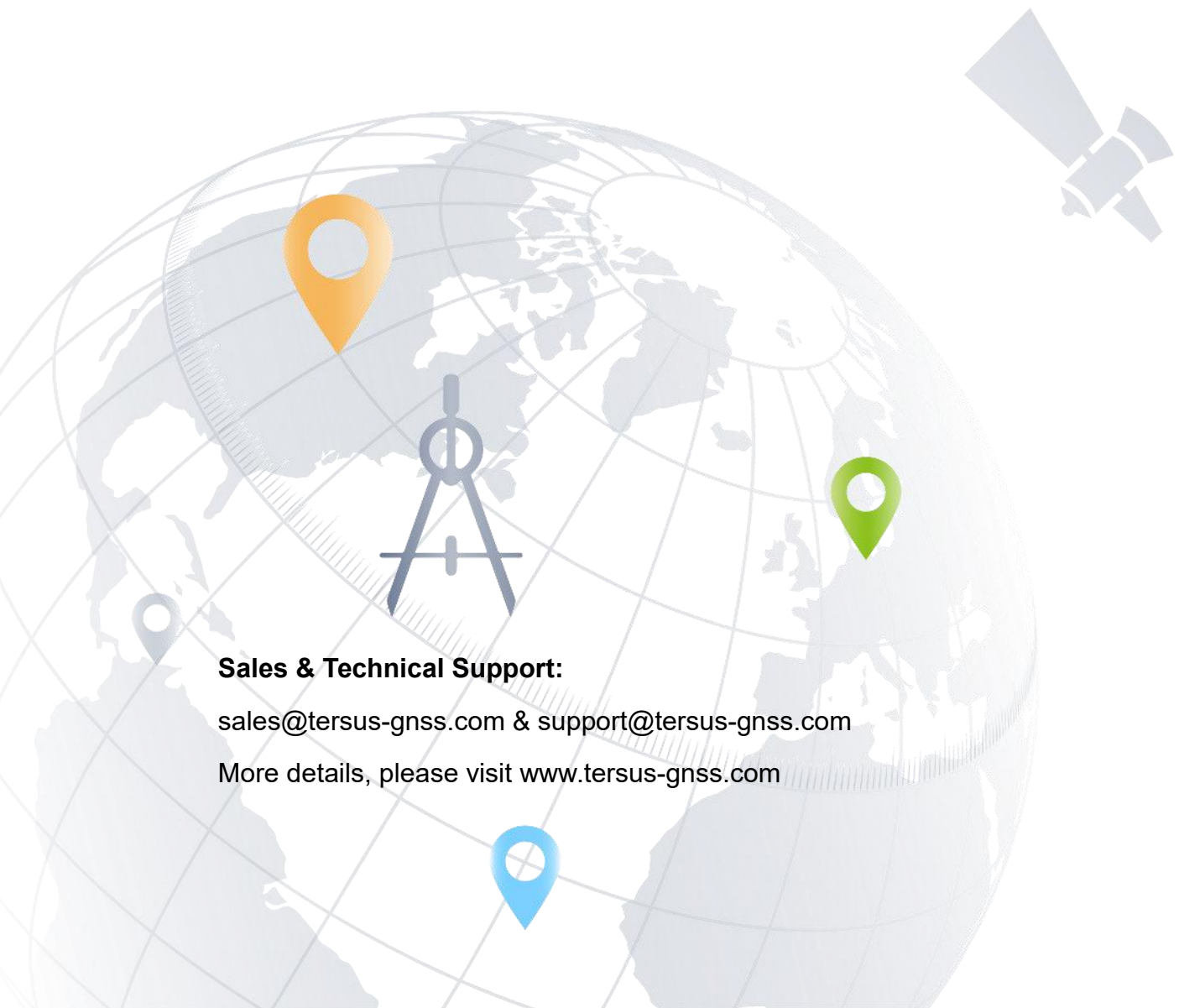
## Guide

Version V1.1-20200723



# Oscar GNSS Receiver Firmware Upgrade Guide

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## 1. Interfaces of Oscar

The bottom of Oscar receiver is shown as below.

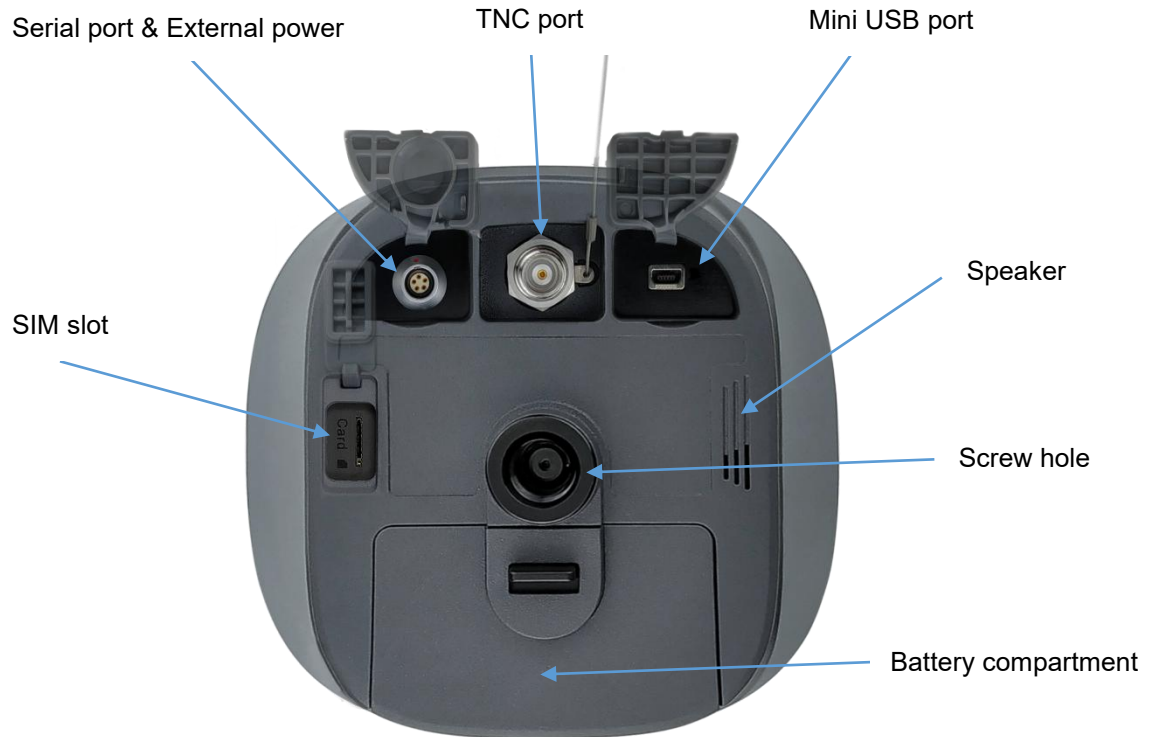









Figure 1 Bottom of Oscar

Table 1 Interfaces on the bottom side

Icon	Connector	Name	Connections
		Serial port & External power	External power, RS-232 communication, external radio
		Mini USB port	Device, computer, USB drive
SIM		SIM slot	Nano SIM card
-		TNC port	410-470MHz Radio Antenna
		Screw hole	It is a 5/8" x 11 UNC female connector for corresponding connector and pole.

## 2. Firmware Upgrade

There are two methods to upgrade firmware for Oscar GNSS Receiver: wired upgrade and wireless upgrade.

### 2.1 Wired Upgrade

The detailed steps of Oscar upgrade are as follows.

- 1) Download the latest firmware file from Tersus website <https://tersus-gnss.com/software/oscar-receiver> for different versions. If your Oscar firmware version is V1.2.x or previous versions, it is needed to download the specific upgrade package that is designated for your Oscar version (Ultimate/Advanced/Basic). If your Oscar firmware version is V1.3.0 or later, download the unified upgrade package only.

Please be noted that the downloaded file is a .zip file, unzip this file to find a pdf document and the firmware file of .GZ format or .BIN format (for V1.3.0 or later firmware upgrade).

- 2) Prepare a USB flash drive, ensure the file system of this drive is **FAT32**. Create a folder named "**OscarUpdate**" under the root directory of the USB flash drive, then put the latest firmware file in it (DO NOT unzip the firmware file further). Make sure there is only one firmware file in this folder.

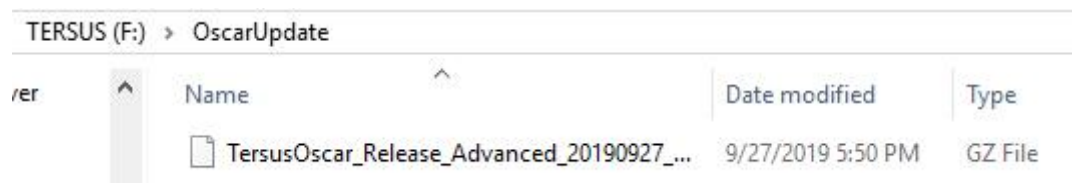


Figure 2 Copy the .GZ firmware file to a USB flash drive

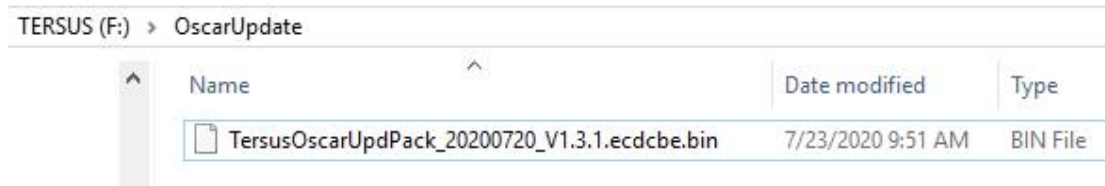


Figure 3 Copy the .BIN firmware file to a USB flash drive

- 3) Ensure Oscar is powered off, and use the Mini-USB OTG cable to connect Oscar to the USB flash drive.



Figure 4 Connect Oscar to a USB flash drive

- 4) Press the power button to power on Oscar. It will detect the firmware stored in the USB flash drive and starts upgrading automatically. For Ultimate and Advanced versions, the OLED displays 'SYSTEM UPGRADE', then 'SYSTEM REBOOT' and it restarts to the main interface after finishing the firmware upgrade. For Basic version, all its six LEDs light up for one second thereafter only power LED lights up, then all six LEDs light up when upgrading, lights off when restarting. It lights up all six LEDs for one second thereafter only power LED lights up means it restarts successfully with updated firmware.

## 2.2 Wireless Upgrade

There are two methods for wireless upgrade: one is using web upgrade via WiFi, the other is using Nuwa app via PDA network.

The details are to be updated. Stay tuned for the new version of this guide.

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