



Oscar Trek Firmware V1.3.0 Release

October 8, 2025

Overview

This release is V1.3.0, and the model targeted for the release is Oscar Trek. This firmware supports the wired upgrade. Please upgrade the firmware according to the upgrade guide.

Features

- Supports multiple constellations & frequencies:
 - GPS L1 C/A, L1C, L2C, L2P, L5C
 - BDS B1I, B2I, B3I, B1C, B2a, B2b
 - GLONASS L1OF, L2OF, L3OC
 - Galileo E1, E5a, E5b, E5AltBOC, E6
 - QZSS L1 C/A, L1C, L2C, L5C
 - SBAS L1 C/A, L5
 - IRNSS L5
 - L-Band
- Supports 1792 channels
- 410-470MHz UHF radio, 4G network, Wi-Fi, Bluetooth, NFC
- Various working modes
- Up to 12 hours working in 4G/3G/2G network and Rover radio mode

Change from Previous Versions

Issue	Type	FW
Update GNSS board firmware version	New function	20251107 _V1.3.0
Fix the tilt calibration issue in tilt library	Bug fix	
Update algorithm library and tilt library	New function	20251021 _V1.2.12
Optimize WiFi connection, enhance stability	New function	
Optimize visual positioning process, release memory upon completion	New function	
Bug fixes	Bug fix	
Update GNSS board firmware version	New function	20250718 _V1.2.9
Bug fixes in algorithm library	Bug fix	
Add TAP function for Oscar Trek TAP	New function	20250318 _V1.2.4
Bug fixes in algorithm library	Bug fix	
Add support for transferring base info in visual positioning to Nuwa	New function	20241210 _V1.2.3
Optimize Bluetooth and WiFi name	New function	
Update algorithm library	New function	
Optimize commands transmission in WiFi communication with Nuwa	New function	
Bug fixes	Bug fix	
Add support for WiFi connection with Nuwa	New function	20241122 _V1.2.0
Bug fixes in algorithm library	Bug fix	
Fix the issue in serial data export	Bug fix	
Add dense point cloud function	New function	20241029 _V1.1.2
Add exposure and gain adjustment	New function	
Update algorithm library and tilt library	New function	
Optimize keyframe transformation	New function	
Optimize the Trek firmware upgrade process	New function	
Bug fixes	Bug fix	
Add WiFi channel settings	New function	20240913 _V1.0.4
Bug fixes in algorithm library	Bug fix	
Fix an issue where IMU data became abnormal for 30 seconds after reopening tilt, preventing visual positioning from starting	Bug fix	
Update algorithm library	New function	20240820 _V1.0.3
Add watchdog program	New function	
Add photo group management	New function	
Add camera calibration parameters recording	New function	
Add point cloud function	New function	
Bug fixes	Bug fix	

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Initial release	New function	20240423 _V1.0.1
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