

Mesh Rider Release Notes – June 2022

Advanced MIMO Mesh Router for Resilient Private Wireless Networks

June 2022 Release

The June 2022 Mesh Rider firmware release includes important optimizations for video and C&C traffic. These enhancements result in higher network throughput and enhanced C&C resiliency under high network load.

The release also supports UART-Network bridging to multiple clients. This is useful when connecting multiple GCS to a single UAV.

Enhanced Radio Features

- Protocol optimization for enhanced telemetry and video performance
 - The C&C queue is now significantly more robust when the network is flooded
 - Video traffic is optimized for higher throughput and lower packet loss
- Added the ability to connect to the UART-Network bridge from multiple clients
 - This could be used for multiple GCS support
- Added support for 3.5 GHz model (RM-3625) for unlicensed CBRS band in USA
- Added support for 5.7 GHz model (RM-5700) for “Japan’s Robot Band”
- Added support for Multi-band (Mini OEM) radio platform

Useability Enhancements

- Added port 14550 to CS6 by default so that MAVLink packets are routed to the C&C queue by default
- Dynamic TX Power Control is now enabled by default for better close-range operation

Bug Fixes

- Worked with Mission Planner team to fix a bug which caused slow parameters download.
 - The fix is available in Mission Planner beta release 1.3.77.1. Open up Mission Planner, click “Help”, and “Check for Beta Updates”.

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- Fixed a bug where Wearable radio rebooted when running “ifconfig wlan1 up”
- Fixed a bug where “ip link set wlan0 <up|down>” caused a kernel panic
- Limited distance setting to less than 114.20 Km (driver limit)
- Fixed a bug in GPS receiver page where enabling/disabling “bind to all interfaces” sent an error
- Removed 192.168.1.1 from br-wan in Gateway mode
- Fixed a bug where the MR LED was blinking even on a good connection
- Fixed a bug where the hotspot wizard failed to setup the IP configuration properly in the Wearable models
- General improvements to the Wearable radio monitor daemon
- Fixed a bug where the 192.168.153.1 fallback address was not available in certain modes
- Adjusted the timeout on some of the GUI pages which could cause the page not to load correctly following certain configuration changes
- Fixed a bug where the radio’s drivers were reloaded
- Fixed a bug to add missing packages/dependencies for the Image Builder

Misc. Changes

- Added a country code GV (Government)
- Disabled meshmap when Alfred is not running
- Disabled MQTT when Central Config isn’t enabled
- Support for stream-lined Wearable hardware (no internal antennas, GPS, altimeter)
- Removed syslog messages from Fast Re-routing