

Spectracom released a software update for VersaSync. Customers can download this software update at no charge from the Spectracom website (see [How to download and install the new SW.](#)) This latest software update will upgrade the unit's system software to **Version 1.1.5**.

This update provides added benefits through new features, enhancements to existing functionality, as well as software fixes and security updates, as described in this document.

For your convenience, older legacy releases are also described in this document.

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Version 1.1.5

Newly released features

- The **Galileo** constellation is now supported.
- The brightness of the **front panel LEDs** is now adjustable. To turn OFF the LEDs, set the brightness to zero.
- The GNSS configuration now supports the **Manual Position** option which, in Standard receiver mode and Stationary dynamics, allows the user to manually set the geographic position. This may be necessary if the GNSS receiver could not complete a survey e.g., if GNSS reception is poor.
- In Standard receiver mode and Stationary dynamics setting, on startup of the unit, a **GNSS resurvey** will now be performed automatically.
- The default GNSS mode is now **Mobile mode**, rather than Stationary. SW upgrades will not change the user-set configuration.

Enhancements and Fixes

The following defects were corrected and improvements were applied to existing features and functions:

Networking:

- Fixed issues with services failing to start when **ETH1 was disconnected** on startup.
- Fixed issues with services failing to start on bootup when **DHCP was disabled**.
- When using the 'net' command, the **MAC address** will now be displayed correctly.

NTP & PTP:

- Fixed **startup issues with NTP** (previously released patch).

WebUI:

- The **FAULT indicator** in the Web UI will now be ON only if a fault condition is present.
- The **Saving Logs** functionality now saves all logs at the same time (in the Web UI, navigate to Management > Log Configuration)

Miscellaneous:

- The **output on pins 1 & 2** will no longer be lost after a power cycle.
- Fixed an issue with the **system time** being 1/1/2000 until a valid reference was found.
- The **MIB** now displays the product name “VERSASYNC”.
- Fixed an issue with the **deletion of logs**.

Version 1.1.0

Newly released features

- Added support for event timestamping (paid license option)
- Blackout mode for front panel Status LEDs (NOTE: lights are ON temporarily during startup)
- Added hardware timestamping to PTP (NOTE: In 1.1.0 PTP is restricted to ETH0. The interface for PTP data will likely change in a future release.)
- Added support for zero-configuration networking

Enhancements and fixes

The following defects were corrected and improvements were applied to existing features and functions:

Networking:

- Fixed an issue with creating static routes
- Fixed an issue with handling DHCP leases
- Fixed an issue with handling traffic on ETH1
- Allow pinging with sudo (e.g., sudo ping 192.168.1.1)
- Now provide a unique dynamic hostname for device

PTP:

- Improved status reporting in PTP
- Improved PTP compatibility with certain slaves
- Fixed incorrect timescale in PTP

WebUI:

- Performance improvements
- Validation of pin configuration
- Page cleanup
- Fixed an issue with viewing GNSS satellite data

Misc:

- LED behavior now matches the documented behavior.
- Improvements to the configuration restoration
- Fixed an issue causing pin configuration changes to require a reboot to take effect
- Fixed an issue with applying leap seconds to NTP/PTP packets late
- Improved runtime hardware monitoring
- Added signing of upgrade bundles for robustness
- Cleanup of logging, removing erroneous log messages
- Improved system stability
- Applied improvements to system cleaning functionality
- Fixed an issue with creating user accounts

Known Issues:

- Pin configuration is not restored in a configuration restore.
- Issue updating from versions older than 1.0.2
- Fault indicator in Web UI is always illuminated
- Constant $\sim 10 \mu\text{s}$ offset in PTP packets on ETH0
- System time is sometimes reset on power-up
- 10 MHz outputs cannot be disabled
- Incorrect default GNSS configuration (should be 'Mobile')

Version 1.0.2

Newly released features

- It is now possible to generate xPPS signals.
- A REST API for VersaSync is now available.

Enhancements and fixes

The following defects were corrected and improvements were applied to existing features and functions:

- Ethernet1 is now available.
- sshd is now supported
- The Havequick input is now available.
- The default 1PPS output pulse width is now 200ms.
- It is now possible to configure PTP via the Web UI.
- It is now possible to use 2 reference inputs of the same type.
- The default mux configuration does work now.
- A defect with the network configuration has been fixed.

Which SW version is installed on my VersaSync?

To determine the software version currently installed on your unit:

1. Login to the unit's Web UI
2. Navigate to **Tools > Upgrade/Backup**. The **System Configuration** panel in center of the screen displays the current version number under System:

The screenshot shows the Spectracom VersaSync Web UI. The top navigation bar includes HOME, INTERFACES, MANAGEMENT, TOOLS, and HELP. The main content area is divided into three panels: Actions, System Configuration, and Upgrade Log. The System Configuration panel is the central focus, displaying various system parameters. The 'System' field shows 'Spectracom VersaSync' and 'SW V [X] (943348f8Ba50)', which is circled in orange. Other fields include Model (1228-0110-0601), Serial # (25), Power Supply (DC 10-32V), Oscillator (OCXO (50ppb)), Timing Processor (SW V4.0.0 (691e13581035) / FPGA V0103), GNSS Receiver (u-blox M8T SW V2.30), HW Slot 1 (Empty), and Option. The Upgrade Log panel on the right shows a successful update 2 weeks, 1 day ago. The Software Versions panel at the bottom right lists various software components and their versions: Apache (2.4.20), NTP (4.2.8p7), OpenSSL (1.0.2h), NetSNMP (5.6.2.1), OpenSSH (7.2p2), and PHP (5.6.22). The Actions panel on the left includes buttons for Update System Software, Apply License File, Save Configuration, Restore Configuration, Upload Configuration, Restore Factory Defaults (Clean), Rollback System, and Clean Configuration and Halt. The Disk Status panel at the bottom left shows Total (5.2G), Used (290.9M), Free (4.6G), and Percent (6%), with buttons for Clear All Logs and Clear All Stats.

Figure 1: Software revision reported under **Tools > Upgrade/Backup**.

How to download and install the new SW

Downloading the Software Update

The latest VersaSync software update can be downloaded from the Spectracom website under <https://spectracom.com/products-services/mobile-pnt/versasync-rugged-gps-time-and-frequency-reference-system#anchor-2182>

Installing the Software Update

Instructions on how to install the new software update can be found under http://manuals.spectracom.com/VSS/Content/VSS/SYSAD/SW_Upgrades.htm.

How to contact Spectracom Technical Support

Should you have any questions or comments regarding any of the above-mentioned features or fixes, please contact one of the global Spectracom Technical Support centers for more information:

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