

### LT-500 SW v1.05 Release Notes

Product Name: LT-500 Attitude Heading Reference System (AHRS)

Unit and Part Numbers: P/N: 51-100294

SW Part Number: 71-100227

SW Version: 1.05 LT-Service Tool: v1.06 (minimum req. SW)

Release Date: 14. January 2019

SW Update:  Optional  Recommended  Mandatory

File Name: LT-500\_v1.05.lti File size: 141.0 kB

Checksum (MD5): d7940284123f915817859361031b33ca

Downloads: <https://www.thrane.eu/lt-500-ahrs>

Contact: [support@thrane.eu](mailto:support@thrane.eu)

#### New Features

- KVH format special output sentence

We now support the special formatted KVH output sentence: %AAAA,BBBB,CCCC <cr><fr>, where % is sentence identifier, AAAA stabilized pitch attitude in tenths of degrees, BBBB stabilized roll attitude in tenths of degrees, and CCCC stabilized magnetic heading in tenths of degrees. The KVH output sentence can be configured using the LT-Service Tool v1.06 or newer.

#### Changes

- World Magnetic Model (WMM) update

The WMM model describes the magnetic field of the Earth and is used to calculate true heading. As the Earth's magnetic field changes over time, international bodies update the WMM model every few years - typically scheduled every 5 years. The next update was scheduled in 2020. However, due to unusual rapid changes to Earth's magnetic field, especially near the magnetic poles, an unscheduled updated WMM model was released in December 2018. This software release includes version 2 of the WMM2015 model (WMM2015v2) for best performance.

### Fixes

- NA

### SW Update Procedure

Follow this procedure to upload a new application SW to the LT-500 AHRS:

- 1) Connect the LT-500 AHRS (NMEA 0183 interface) to a PC using one of these interfaces: USB to RS-422 adapter, serial RS-422 or RS-232. Details are available in the LT-500 User & Installation Manual.
- 2) When the LT-500 AHRS is connected and powered (9 - 40 VDC) - start the LT-Service Tool by double-click on the 'LT-Service\_v1.06.exe' file. The LT-Service Tool will automatically scan and detect any LT-500 AHRS connected to the PC. Type 'help' to get a full list of available commands.
- 3) Use the following command to upload the application SW: 'upload LT-500\_v1. 05.Iti'.