

Release note

Topic u-connectLocate v1.2.0 for NINA-B41

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Author Erik Carlberg

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1 General information

1.1 Scope

This release note describes u-connectLocate v1.2.0 software for NINA-B410-40B and NINA-B411-40B. It documents the changes that have been implemented since the release of the v1.0.1 software.

1.2 Released software image

File	Description
NINA-B4-nRFC-DF-SW-1.2.0-005.bin	Software binary

1.3 Supported hardware

Ordering code	Description
ANT-B10	Bluetooth LE Direction Finding antenna board.
NINA-B410-40B	Bluetooth LE module for Direction Finding. U.FL connector for external antenna array.
NINA-B411-40B	Bluetooth LE module for Direction Finding. Antenna pin to connect external antenna array.
XPLR-AOA-1	Bluetooth Direction Finding explorer kit with C211 antenna board.
XPLR-AOA-2	Bluetooth Indoor Positioning explorer kit with C211 antenna board.
XPLR-AOA-3	Bluetooth Direction Finding explorer kit with ANT-B10 antenna board.



1.4 Related documentation

- [1] NINA-B41 data sheet, <u>UBX-20035327</u>
- [2] ANT-B10 product summary, UBX-21047856
- [3] XPLR-AOA-1 product summary, <u>UBX-21015378</u>
- [4] XPLR-AOA-2 product summary, <u>UBX-21017999</u>
- [5] XPLR-AOA explorer kits user guide, UBX-21004616

2 New features and improvements

2.1 Improved angle calculation performance

The improved angle calculation algorithm calculates angles in the peripheral areas of the direction-finding range more accurately. The algorithm's calculation time is also reduced.

2.2 Increased number of simultaneously tracked tags

The maximum number of tags simultaneously tracked by each anchor point has been increased from 5 to 20.

2.3 Support for ANT-B10 antenna

Support has been added to use u-connectLocate software with the u-blox ANT-B10 antenna [2]. The AT+UDFCFG command includes an option to configure ANT-B10.

3 Solved issues

Description	Reference
Number of simultaneously tracked tags is limited to five.	PGM_TE_BIP-144

4 Known limitations

Description	Reference
Not possible to include user payload data in the advertisement messages.	PGM_TE_BIP-140
External low frequency clock crystal required (32.768 kHz).	PGM_TE_BIP-146

5 Changed behavior

The RSSI information for 2^{nd} polarization (rssi_pol2) is removed from the +UUDF event and is set to 0.

The module identification command, AT+GMM, now returns the complete ordering code of the host module, for example, NINA-B411-40B.

6 Other

Updating to u-connectLocate v1.2.0 software from v1.0.0 or v1.0.1 erases all customer settings and reinstates all configuration settings in the module to default.