



u-center v18.09

GNSS evaluation software for Windows

Release Note

Abstract

This release note contains general information, features, improvements, changes and known limitations for u-center v18.09.

Document Information

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1 General Information

The u-center GNSS evaluation software for automotive, mobile terminal and infrastructure applications provides a powerful tool for evaluation, performance analysis and configuration of the u-blox GNSS receiver.

1.1 Released Files

The following table lists the files that have been released.

File	Description
u-center_v18.09.exe	u-center installer including u-blox GNSS Standard Driver for windows 64 v18.08 (win 7 and 8 only), u-blox GNSS Sensor Device Driver for Windows v2.40 (win 7 and 8 only)
u-center-v18.09_ReleaseNote_(UBX-18055922).pdf	Public release note
u-center_UserGuide_(UBX-13005250).pdf	User guide

1.2 Version and Checksum of Files

The following table lists the versions and the checksums of the [Released Files](#).

File	Version	MD5
u-blox GNSS Standard Driver for Windows	1.2.0.8	
u-Center.exe	18.09	6e9320aa64fc1071955c420b875f5aec
flash.xml	200037	1ae20dc9ebfde3ac34274af335521053
flash.xml_changelog.txt		1c89c7fb5d4fd42d204366bf0a07dcf1
flash.txt	101098	b49a4b5d33efa113737208e788cf3afc
NMEA.dll	18.09	07fb369a8a38c56e681cfbe0e8ad8517
RTCM.dll	18.09	a812b2386ff0ee3aae9d0aecb3700ef9
sqlite3.dll	3.21.0.0	07fb6d31f37fb1b4164bef301306c288
UBX.dll	18.09	1ab449870e3308f465f439c2eb3f892c
ubxfwupdate.exe	18.09	

1.3 Released Documentation

- Public Release Note (UBX-18055922)
- u-center User Guide (UBX-13005250)

2 Features

2.1 Supported Microsoft Windows versions

u-center v18.09 will run on Microsoft Windows Vista and later versions up to (including) Windows 10.

2.2 Supported Receiver Generations

u-center v18.09 can update the firmware of the following receiver generations:

- u-blox 5 with ROM 3.00, ROM 4.00, ROM 5.00
- u-blox 6 with ROM 6.00, ROM 6.02, ROM 7.03
- u-blox 7 with ROM 0.10, ROM 0.11, ROM 0.14, ROM 1.00
- u-blox 8/M8 with ROM 0.21, ROM 0.22, ROM 2.01, ROM 3.01
- u-blox F9 with ROM 0.30, ROM 0.40, ROM 1.01



u-blox 5 receiver support is end of life and will be removed in one of the next versions.

2.3 Supported Protocol Specification Version

u-center v18.09 supports the u-blox protocol specification from version 10.00 and later versions up to (including) version 27.

2.4 External hardware support

The following external hardware is supported to interface with the receiver:

Interface	Device	DLL version
DDC/I2C	Totalphase Aardvark I2C/SPI Host Adapter	aardvark.dll v5.15 for Windows 32-bit
DDC/I2C	Diolan U2C-12 USB-I2C/SPI/GPIO Adapter	i2cbrdg.dll v1.0.0.9 for Windows 32-bit
SPI	Totalphase Aardvark I2C/SPI Host Adapter	aardvark.dll v5.15 for Windows 32-bit
SPI	Totalphase Cheetah SPI Host Adapter	aardvark.dll v5.15 for Windows 32-bit
SPI	Diolan U2C-12 USB-I2C/SPI/GPIO Adapter	i2cbrdg.dll v1.0.0.9 for Windows 32-bit

2.5 Multiple GNSS AssistNow Service

u-center v18.09 includes the multiple GNSS AssistNow Service (libMGA) version 1.10.

2.6 Debug Messages

The following messages will be enabled or polled when pressing the "Debug Messages" button:

- Any UBX-INF
- UBX-MON-MSGPP
- UBX-NAV-CLOCK
- UBX-NAV-PVT
- UBX-NAV-SIG
- UBX-NAV-ORB
- UBX-NAV-SAT
- UBX-RXM-SVSI (every 30 seconds)

- UBX-MON-HW (polled)
- UBX-MON-EXCEPT (polled)
- and additional u-blox debug messages

The following messages will additionally be enabled or polled when pressing the "Debug Messages" button for ADR product line:

- UBX-ESF-MEAS
- UBX-ESF-STATUS

The following messages will additionally be enabled or polled when pressing the "Debug Messages" button for HPG product line:

- UBX-NAV-RELPOSNED
- UBX-NAV-SVIN
- UBX-MON-IO
- UBX-NAV-SOL
- UBX-NAV-AOPSTATUS

The following messages will additionally be enabled or polled when pressing the "Debug Messages" button for SPG product line:

- UBX-MON-IO
- UBX-NAV-SOL
- UBX-NAV-AOPSTATUS

3 Improvements and Changes

3.1 Version 18.09

- Bug fix: Child processes will now automatically be killed if u-center terminates unexpectedly.
- Improvement: Added support for new message UBX-MON-HW3.
- Improvement: Added support for new message UBX-MON-RF.

3.2 Version 18.08

- Improvement: The visible gap until the new map is loaded while using the map view is removed.
- Improvement: The "Info" toolbar button in the GNSS driver view has been activated.
- Bug fix: A single SV is now visualized in satellite views (satellite level and satellite level history).
- Improvement: Added option in the config Tool to sort groups and items alphabetically. Added search facility to find groups/items containing a text string.
- Improvement: Updated UI view on epoch detection; views enable reading consistent data from the DB.
- Bug fix: No more crashes while opening the u-center.
- Bug fix: No more crashes caused by Satellite ground track view.

3.3 Version 18.06

- Update of CFG-VALSET: Added CFG-MSGOUT-RTCM3X_TYPE1097.
- Update of table view, statistic view, chart view, histogram view: Added PSM state (Power Save Mode).
- Bug fix: UBX-CFG-TP5 message view fixed so that duty cycle shows correctly when toggling between length/duty cycle of the Time Pulse (TP).
- Bug fix: Fix for crashes during download of MGA online data.
- Update of UBX-CFG-SPT and UBX-MON-SPT: Added support for LSM6DSL sensor.
- Update of UBX-MON-HW: Fixes on scope and names of virtual pins for u-blox 9.
- Update of mechanism for properly closing the crash reporting application, which was randomly crashing while being closed.
- Update of CFG-VALDEL, CFG-VALGET, CFG-VALSET messages: Trimmed layout, change in handling of hex displayed values; i.e. correct handling of negative values.
- Update in storing the messages coming from/to receiver; added new database.
- Update of Player menu: New menu and toolbar items added which enable user to step backward in time one step at a time.
- Bug fix: In the CFG-SBAS SV122, the new Australian SBAS is removed from WAAS.
- Update in multi-constellation and multi-band visualization by using NMEA (4.1) messages.
- Update of NTRIP server screen: Added two tabs. First tab contains the basic configuration (port only) and the second tab contains the rest of the configuration options.
- Update of Reference of RTCM: Version 3.2 changed to version 3.3.
- Improvement in Satellite signal information clean up: primarily takes care of unwanted flickering of the views and consistent data coming from different messages carrying signal information.
- BugSplat feature has been added for collecting crash reports.
- Update of UBX-CFG-NAV5: Now supports bike as a dynamic platform model, for receivers with prot-ver = 19.20.
- Update of UBX-CFG-ESFLA: A type 4 Lever Arm related IMU (inertial measurement unit) to CRP (configurable reference point) is introduced.
- Update of UBX-CFG-SLAS and UBX-NAV-SLAS: Audience changed to PUB.

- Update of debug messages: The UBX-NAV-SIG message added; to support debugging for multi-band products.
- Bug fix: Update of UBX-SUBX-TCI, fixed the disappearing lines when paused. Fixed chip 1 view.
- Update of NMEA-GRS: Added descriptive GNSS ids and signal ids.
- Update of NMEA-GBS: Added descriptive GNSS ids and signal ids.
- As of April 2018, the u-center release number has a new release version definition, where the current "year.month" defines the release number. For example, the version number for April, 2018 release is 18.04.

3.4 Version 8.29

- Update of UBX-CFG-PM2: Updated version 3 option names for the optTarget field.
- Update of UBX-ESF-MEAS: Added combo box to allow selection of which data id to visualize.
- Update of UBX-CFG-PRT: Data bit, stop bit, parity and bit order control now public.
- Update of UBX-CFG-OPT: Updated field names.
- Rename QZSS SAIF and LEX signals. QZSS signal SAIF -> L1S. QZSS signals LEXS, LEXL -> L61D, L61E. Added QZSS signals L62D, L6E.
- Bug fix for debug messages: Now enabled regardless of the audience.
- Bug fix for deviation plot view: Max zoom fix.
- Bug fix for satellite view: Visualization of signals for multi-frequency case.
- Bug fix for corrupted messages in log files when sending information to receiver.
- Bug fix: u-center now recognizes Windows 10 USB to Serial driver.
- Update in HTTP response to support Google Earth Pro.
- QZSS signal name changes: QZSS_SAIF->QZSS_L1S and QZSS_LEX->QZSS_L61
- Improved NTRIP client.
- Tidied up UI issues in the NTRIP server dialog: Can enter periods correctly. Confusing "Store" check box removed.

3.5 Version 8.28

- Update of UBX-DBG-NAV: Added SLAS RAIM source.
- Update of UBX-MON-HW: New pins added.
- Improved NTRIP server dialog UI.
- Improved NTRIP client dialog UI.
- Improved NTRIP server stability and bug fixes.
- Improved NTRIP client reconnection.
- Added firmware update support for u-blox next generation products, including "update to ram" and no fis features.
- UI improvements for u-blox F9 in the firmware update tool dialogs.
- Updated the sqlite lib to version 3.21.
- Google server can now be started with just a loaded log file.
- Improved NTRIP client reconnection to caster.

4 Known Limitations

4.1 Known Issues

- Enumerating the ports on a computer with many ports can take a long time
- Using the protocol filter with "silent" or "no receiver" results in an empty message tree



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