

MiX 4000

Internal Release Notes

Release Notes: 5.8.16

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New features and enhancements

| Description | Component | Version |
|--|--------------------------|---------|
| Port MIX4000 & MIX2xxx Project to STM32 Cube Framework to facilitate rapid development. | Architecture | 5.0.0 |
| Bluetooth Driver ID (BT-DID) | Driver ID, Bluetooth | 5.4.0 |
| The State Line Crossing detection feature that has been implemented on the cloud is now deprecated in the firmware. | Config Engine, Events | 5.4.0 |
| Tacho V3 – High-resolution Tacho support | Tacho | 5.4.0 |
| Enhanced accelerometer orientation to apply calibration in trip after the 11th trip. Accelerometer calibration will now be cleared if the unit experiences more than 300mG (18 degrees) change in direction from the start to the end of the trip. Implemented a mechanism to reset accelerometer orientation calibration remotely. | Accelerometer | 5.6.0 |
| Device Trouble Codes (DTC). | CAN | 5.6.0 |
| Bring Your Own Device (BYOD) – ELD solution. | ELD | 5.8.0 |
| BTSOC Firmware Updates. | Bluetooth | 5.8.0 |
| EG915N-EA Modem support. | GSM | 5.8.1 |
| Reverse BTS of flash partitions. | Diagnostics | 5.8.1 |
| GPS - Refactor Initialization, power management and general state machine for robustness. | GPS | 5.8.1 |
| Enable sleep mode during EG915N initialization. | GSM, Power | 5.8.1 |
| Faster turn-around time between sending and receiving on a socket. Instead of waiting up to 10 seconds before polling for revived data, the firmware should now read the packet within 1 second of receiving it. This speeds up comms as seen when looking at the AT logs, makes the MesaView GPRS pipe more responsive, and reduces current consumption on the EG915N modem by allowing it to sleep for longer. | Comms | 5.8.1 |

| Added a statistical profiler to determine CPU time profiles based on function and thread. The information is returned via the Tacho mechanism. | Diagnostics | 5.8.2 |
|--|-------------|-------|
| Mitigate a possible comms delay when an APN detach was not done when required. | Comms | 5.8.2 |

Hotfix

| Description | Component | Version |
|---|---------------------|---------|
| Fixed an issue where the Driver ID was latched as the previous driver for subsequent trips, even if no driver or a new driver tried to identify with the Blue Plug. | Blue Plug Driver ID | 5.8.16 |

Fixes

| Description | Component | Version |
|--|-----------------------------|---------|
| Send error information to the server in case of repeated reconnects (3) that do not result in working comms. | Comms | 5.0.13 |
| The ADC component occasionally experienced an overrun error resulting in external voltage values not updating until the unit was reset. We now log such events and recover the ADC operation. | Analog Inputs | 5.0.13 |
| CAN.J1939.250KBPS.v1.19.0.0_MG Odo resets to 0 in some circumstances. This has been corrected. | CAN, Odometer | 5.4.0 |
| Tacho service will only try to upload if there is an established internet connection. This reduces the chances of Tacho upload thread from blocking while waiting for an internet connection. | BTS, Tacho | 5.6.3 |
| Optimized the Magix stack to use less CPU. When context switching Magix Thread will be at normal priority (and not high anymore), which previously was leading to thread starvation when there were many Magix messages being handled. | Magix | 5.6.0 |
| The identified Driver ID will no longer be lost after each sub-trip ends. | Config Engine, Driver ID | 5.8.1 |

| Improved config uploads by fixing an edge case where Forward BTS would carry on opening TCP sockets even after the transfer data limit has been reached. | BTS | 5.8.3 |
|---|--|--------|
| The BTS service did not wait for the Transfer Complete message to be sent before closing the TCP socket, resulting in MiX Connect intermittently receiving the Transfer Complete message. This led to duplicate uploads of config, firmware or settings to the unit. | BTS, Config firmware and settings load | 5.8.7 |
| Improved accelerometer Orientation to eliminate false cornering severities. | Accelerometer | 5.8.7 |
| This is to compensate for SIMs that change their IMSI numbers in the field. Units will no longer clear the isCommissioned flag when the IMSI changes, but instead build up a list of up to 8 APNs matching previously seen IMSIs, thus eventually not needing to contact Alpha when the IMSI changes. | Comms (MIX6000LTE WiFi) | 5.8.7 |
| Accelerometer Severities will now latch maximum values measured between each config cycle. | Accelerometer | 5.8.7 |
| 5V power supply to the harness will now be switched on correctly under the required conditions. | Power, CAN | 5.8.9 |
| Slow-charge was not disabled when charging was disabled and caused a 20mA charge current. Disabled slow-charge to stop the 20mA charge current when charging is disabled. | Power | 5.8.11 |
| For devices that make use of the Nordic Bluetooth module, when upgrading from a previous version, the upgrade will no longer fail to be applied due to a non-volatile state parameter that did not exist on previous versions. | Bluetooth | 5.8.14 |
| | | |

Known issues with workarounds

| ID (hyperlink) | Description | Severity |
|----------------|-------------|----------|
| | none | |

Known issues

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| ID (hyperlink) | Description | Severity |
|----------------|-------------|----------|
| | none | |