MiX | TELEMATICS
MOBILE INFORMATION EXCHANGE

MiX 2310i
Release Notes

Contents

New features and enhancements

Description	Component	Version
Eliminated the 10s delay that suppressed the change of persisted trip state on startup. Created an NV (nonvolatile) parameter containing the persisted ext batt type. Instead of assuming 12V until detection completes, the last persisted type will rather be assumed.	Trips	4.8.61
Improved internet session back off mechanism to reduce unnecessary comms downtime.	Comms	4.10.1
Reduced the RAM footprint for the current comms stack.	Comms	4.10.1
Various GPS enhancements to improve tracking (ongoing).	GPS	4.10.2
Report modem firmware and app versions including details with new diagnostics message.	Comms	4.10.4
Added new Telenor APN (tlnr01.mixtel.cxn) for new IMSI prefix.	GSM	4.10.9
Added new APNs for Nigeria (best.net, moove.net, obctracking.net).	GSM	4.10.10
Devices updating from below 4.10.12 to >= 4.10.12 will update the GRPS session limit to 1000 if it was set to 100, once only, immediately following the firmware update.	Comms	4.10.13
Altered the primary power connected state change message so that the *disconnect* event is sent on high priority (SMS fallback) while the *reconnect* event is sent on normal priority (GPRS only).	Events	4.10.16

Fixes

Description	Component	Version
Fixed a vulnerability in GPS initialization which could affect the 1Hz signal output required for Magix RF Calibration. Sometimes the 1Hz would not be present.	GPS, Magix	4.10.1
Frequency Input counts will now accumulate correctly instead of resetting to zero after each 1Hz interrupt.	Frequency Input	4.10.1
GPS will now power again after device leaves the stop / shut down mode.	Power Management, GPS	4.10.1
The system will now better detect and handle settings loss when occurred with settings version 0 message.	Driver ID, Settings	4.10.2
Charging is now completely disabled when primary power is disconnected preventing internal battery charge wastage.	PMM	4.10.2
Introduced parameter read watchdog that will recover units immediately if parameter reads fail (previously caused by parameters clear and reboot diagnostic command).	Settings	4.10.2
Implemented Magix watchdog recovery strategy in case RF Transceiver is flagged as faulty. Also addressed a firmware bug where the transceiver faulty flag was only ever cleared after reboot.	Magix	4.10.4
Added retries and extended retry timeouts to better deal with SIM card read failures at startup, which previously could cause comms outages until the 72-hour comms watchdog reset the unit.	Trips, Comms	4.10.5
Improve timeout tolerance on sending SMS to subsequently reduce timeouts that were leading to unnecessary re-sends and modem reboots.	Comms	4.10.6
Reverse BTS will now wait for the transfer result before closing the connection, thus minimizing risk of data loss during block transfers.	BTS	4.10.6

The internal battery charging will now halt for the following two conditions: when going out of trip with external low and when the modem boosts out of sleep.	Battery, Power	4.10.8
Addressed a vulnerability with issuing socket write commands on u-blox modems that could lead to temporary lockup followed by a modem reset if a URC is received before the data prompt.	Comms	4.10.8
Addressed a u-Blox U201 modem specific flash wear leveling vulnerability by limiting the unit from resetting the modem to no more than every 2 hours.	Comms	4.10.9
Increased the GPS no lock 4-minute watchdog to 15 minutes to allow the GPS more time to resolve before cold booting the device in case it got stuck.	GPS	4.10.12
The GSM modem is rebooted after having lost registration for 10 minutes. Previously the time from losing registration to the modem rebooting was nondeterministic, but generally very quick. This change prevents unnecessary reboots and allows more time for the modem to recover by itself.	GSM, Comms	4.10.12
Enhanced Beame MK6 Network frequency calibration to improve calibration accuracy to within 400Hz while Dual Baud is enabled and within 200Hz accuracy while disabled. Addressed the Beame MK6 Network frequency calibration bug where the Beame latched onto the last received FEI which can cause the MK6 Beame center frequency to drift by at most +- 3400 Hz. Temporarily disable dual baud for 5 minutes when a MK6 Beame in recovery mode is seen to enable using highest precision calibration for that period.	Magix	4.10.13
MiX2310i Codeplug Socket LED flashing will now resume normally when updating from 3.1.x to above 4.10.x.	Driver ID, Codeplug	4.10.13
The unit will no longer spam GPRS status changes messages every 2 minutes while in SMS (GSM only) mode.	Event	4.10.14
Fixed 4.8 regression where RBTS result codes from MCS was not handled. Previously this could lead to missing tacho blocks.	BTS	4.10.16
Resolved a PMM transition issue which delayed the unit from switching to external power supply long enough for the internal battery low voltage persisted fault to be set due to under-voltage	Battery, Power Management	4.10.17
Magix RF Transceiver watchdog will now correctly catch and resolve RF transceiver lockups on non-MiX4000 platforms.	Magix	4.10.18