



TELEMATICS  
MOBILE INFORMATION EXCHANGE

Version 1: 25 October 2023



**MiX 4000**  
Release Notes

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## New features and enhancements

Description	Component	Version
Firmware support of AVL Plus – TAR enhancement to reduce comms delays. This will only be usable once the software support is in place.	Comms	4.14.1
Firmware support to enable Canadian ELD VIN reporting. This will only be usable once the software support is in place.	CAN, Events	4.14.1

## Fixes

Description	Component	Version
Implemented a workaround for an issue in the EG912 LTE modem that was preventing the unit with certain SIM configurations from commissioning.	GSM	4.14.1
Implemented faster recovery when the modem flags an unknown GSM issue. This will reduce the chances of generating a TAR event when updates are delayed by more than 12 minutes.	GSM	4.14.1
The remote command to relay to "Progressively switch on" the relay has been fixed. The relay was previously performing a progressively switched-off function.	Relay	4.14.1
Improved error handling when socket opening attempts fail, preventing the unit from backing off its comms and causing reconnection delays.	Comms	4.14.1
Improved GPRS detachment behavior when closing internet sessions. This ensures that potentially unreliable connections are refreshed to speed up reconnection time.	Comms	4.14.1
Implemented handling a known issue in BG96 modem firmware for the AT&T version to speed up commissioning and reconnection when a new SIM is inserted.	Comms	4.14.1
The trip start logic for accelerometer movement now requires the unit to have a valid time. This does not change the unit's "active" state which will still trigger as soon as accelerometer movement is detected.	Trips	4.14.1
Resolved an issue that could occur if both firmware and config were downloaded and pending at the same time. Under certain conditions, the config was not loaded after the firmware update.	Config loss, Firmware upload, Trips	4.14.1
RTC was not able to calibrate because the time was running too slow. The RTC will now be able to calibrate both when it is running too fast or too slow.	Time	4.14.1
Resolved various issues that reduce the occurrence and/or severity of CPU load-induced issues.	CPU	4.14.1
Optimized CAN message handling to reduce CPU load.	CAN	4.14.1
Improved management of the internal battery fault state such as short-circuiting, disconnection, battery status, and fault detection in general.	Battery	4.14.1
Improvements were made to modem initialization behavior when starting up out of coverage, reducing connection time when coverage returns.	GSM	4.14.1
Increased the command timeout for some modem commands based on the observed modem behavior. Allowing the modem more time to get through its initialization sequence, even if this is taking longer than it should, generally reduces connection time.	Comms	4.14.1

Registration behavior on the Ublox r410 modems (MiX 45MC) has been improved to speed up the process.	Comms	4.14.1
Harsh acceleration and Harsh braking events will now trigger correctly from DTCO speed.	DTCO, Events	4.14.1
Improved the ability to fast charge the internal battery after a reboot.	Battery	
Reduced the chances of CAN dropouts by adding more robust error handling.	CAN	4.14.1
Detect and manage unsolicited modem reboots during registration on the network to minimize reconnection delays.	Comms	4.14.2
The engine hour value will be updated and visible immediately and not only applied to a trip end.	Engine Hours	4.14.2
Added 10% hysteresis on Magix RF jamming detection to eliminate repeated retriggering around the threshold.	Magix	4.14.4
Fixes were made to reduce the possibility of random RPM and fuel spikes occasionally observed in the field.	RPM, Fuel	4.14.5
Additional reconnection comms delay improvements were made by better managing simultaneous socket requests.	Comms	4.14.6
Protection was added to prevent the system odometer value from incorrectly syncing to zero if an ODO source on the vehicle (e.g., DTCO, CAN) happens to report a zero value.	Odometer	4.14.7
Improved BLE connection issues resulting from the system advertising a zero IMEI at startup before the actual value was available.	BLE	4.14.8

## Known issues

Description	Severity
Comms delays on MiX 4000 devices seemingly resulting from bad network conditions.	High
Power loss (cold boot) mid-trip can lead to missing tachometer for sections prior to a cold boot.	High
GPS TTFF improvement to address jumps from garages or tunnels. GPS Jumps when departing from garages.	Med