

## DZMx Firmware Release Notes

### Platform 3/4

Version	Date	Features	Bug Fixes
V3.5.1/ V4.5.1	23 <sup>rd</sup> June 2020	<p>Added support for Sierra Wireless 7610 modem</p> <p>Added support for hardware version number in DZMx Connect</p> <p>Updated the Kawak fire tank interface to allow tank filling from a tanker on the ground</p>	<p>Corrected issue setting the default PTT talkgroup</p> <p>Improved version 4 start up timing</p> <p>Corrected issue with direction finder display updates in Firefox browser</p> <p>Corrected issue with DZMx Connect displaying signal metrics for cell modems</p> <p>Corrected Kawak fire tank issue where multiple drops were being reported during a single drop</p>
V3.5.0	1 <sup>st</sup> May 2020	<p>Asset Tracking (Bluetooth Low Energy Beacons):</p> <ul style="list-style-type: none"> <li>Automated asset manifest creation and reporting</li> <li>IQOnboard Bluetooth Beacons supported</li> </ul> <p>Hobbs/Maintenance Counters:</p> <ul style="list-style-type: none"> <li>Added engine start and landing counters</li> <li>Added email reporting</li> <li>Hobbs reporting changed from 2 decimal places to 1 decimal place, to match mechanical meters.</li> </ul> <p>Email service:</p> <ul style="list-style-type: none"> <li>Added outbox function to queue emails</li> </ul> <p>Custom Applications:</p> <p>Kawak fire tank update</p> <ul style="list-style-type: none"> <li>Preferred network route selection via API for dual cell modem systems</li> <li>SIM card no longer needed for SBD messaging (not applicable to a DZMx working with a cradle)</li> </ul>	<p>Corrected cell tracking configuration error popup issue</p> <p>Corrected calling issue on second cell modem</p>

Version	Date	Features	Bug Fixes
		<p>Modem Support:</p> <ul style="list-style-type: none"> <li>• U-Blox Toby L2 series modem support</li> <li>• Sierra WP76XX series mode support (beta)</li> </ul> <p>Platform Support:</p> <ul style="list-style-type: none"> <li>• Initial Platform 4 firmware support</li> <li>• Initial DZMx Plus firmware support</li> </ul>	
v3.4.0	2nd December 2019	<p>Custom Applications:</p> <ul style="list-style-type: none"> <li>• Support for Kawak fire tank</li> <li>• PTT - Faster update of talk group lists</li> <li>• Implemented support for AIS marine vessel location system</li> </ul> <p>Tracking:</p> <ul style="list-style-type: none"> <li>• Suspend/resume periodic tracking via SBD message</li> </ul> <p>Updated Iridium Service Center options</p>	<p>Corrected issue with incorrect flight state on start-up</p> <p>Corrected issue with load manager reports</p> <p>Corrected issue with Agriculture application job number and totals</p>
v3.3.1	1st August 2019		External modem now correctly detected after system reboot
v3.3.0	15th Jul 2019	<p>Custom Applications:</p> <ul style="list-style-type: none"> <li>• Load management application added to DZMx Connect</li> <li>• Rotheta RT-600 Direction Finder Support added to DZMx Connect</li> <li>• Updated Ag application to better handle take-off/landing events</li> </ul> <p>Tracking:</p> <ul style="list-style-type: none"> <li>• Added manual mark with color code feature to front panel interface</li> <li>• Added quick message SMS to multiple contacts/tracking provider using numeric shortcut keys.</li> </ul> <p>Bluetooth Phonebook Support</p> <p>DZMx Connect can now store a list of manual connections</p> <p>Privacy: Call/SMS logs - added auto-deletion feature</p>	<p>Fixed issue with Satellite modem locking up on SBD registration</p> <p>Corrected handling of DZMx Connect email password entry</p> <p>Fixed issue with spurious call forwarding notifications when modifying operator BT controls.</p> <p>Fixed issue with firmware upgrade</p> <p>Fixed issue with SBD not going out on SBD only modem</p> <p>User can now modify / enter phone-book contacts from the front panel interface</p>
v3.2.2	9th May 2019		Resolved Bluetooth issues with hands free (HFP) and media (A2DP) connectivity.

Version	Date	Features	Bug Fixes
			Email configuration password setting has been added to DZMx Connect.
v3.2.1	10th April 2019		Firmware upgrades were not initialising for some customers. This was relevant to both USB and DZMx Connect upgrade methods.
v3.2.0	28th March 2019	<p>Added logging and reporting of cellular and satellite network coverage and radio performance.</p> <p>Add Telit LM940 cellular modem support (better Cellular 4G support on US networks).</p> <p>Cellular Band Select: additional settings for enabling and disabling individual LTE bands for Sierra Wireless 4G modems.</p> <p>Added Call Forwarding support for Cellular networks (requires network support).</p> <p>Tracking: now supports sending a generic Manual Position/Mark tracking event triggered from a DZMx input.</p> <p>Modem Audio configuration:</p> <ul style="list-style-type: none"> <li>Allows assignment of a specific ICS channel per modem</li> <li>When multiple modems are sharing the same ICS, audio priority can be set per modem for auto muting lower priority calls</li> <li>In multiple modem configurations, dial interface allows choice of which modem (i.e. ICS channel) to use</li> </ul> <p>Audio Cancellation on discrete input: an input can be configured to cancel any current playing tone so a pilot can dismiss audio alerts (if the tone is an incoming call the ring is muted but the call is not cancelled).</p> <p>FDR notification: users can now be auto-notified by email once a flight has completed so they can quickly access to FDR data and other logs.</p> <p>Bluetooth Call Alert: can add ringtones for incoming and outgoing calls for phones that don't generate them.</p> <p>Bluetooth and Wifi on/off control (new EASA requirements):</p> <ul style="list-style-type: none"> <li>Installers can now prohibit Operators from turning wireless on and off</li> </ul>	<p>Audio sidetone no longer forced on, now adheres to setting option (can be off or 'on in call').</p> <p>Fixed Bluetooth call issue when multiple phones are connected to the DZMx simultaneously.</p> <p>Fix to Bluetooth name changing when using DZMx Connect.</p> <p>Fixes to USB drive file copying (improvements when using Dropbox).</p> <p>Fixed a bug when upgrading using a USB stick which has been plugged into a MacOS computer.</p> <p>Other minor bugfixes.</p>

Version	Date	Features	Bug Fixes
		<ul style="list-style-type: none"> <li>Wifi and Bluetooth can now be disabled/enabled using a discrete input</li> </ul> <p>DZMx Connect Contacts now highlight the speed dial numbers.</p> <p>Added ability to enter a manual IP address in DZMx Connect which assists in situations using external routers.</p> <p>External User Interface (XUI over RS485) now allows control of DZMx menus externally.</p>	
v3.1.1	8th February 2019	Improved external backlighting control	Firmware upgrade fixes
v3.1.0	December 2018	<p>Auto-Connect for Bluetooth now supported.</p> <p>Iridium PTT Enhancements:</p> <ul style="list-style-type: none"> <li>Option for PTT to start as the default application</li> <li>Iridium modem starts in PTT mode without a SIM</li> <li>Caller location provided</li> <li>The ability to export caller location</li> <li>Aircraft location tracking over PTT</li> </ul> <p>Three Internal timers added:</p> <ul style="list-style-type: none"> <li>Total Time Airframe Hours (TTAF and also known as Hobbs Meter). Once set it is non-resetable</li> <li>Daily Flight Timer (DFT)</li> <li>Trip timer</li> </ul> <p>Advanced Cellular band select: can now select an individual GSM/WCDMA band using the advanced band select.</p> <p>External DZMx control: XUI interface now supported over ARINC-429 as well as RS485.</p> <p>Helicopter rotor brake and winch reporting to tracking provider for New Zealand National Ambulance Sector Office (NASO).</p> <p>Added external modem configuration to UI menu option (previously was only available in DZMx Connect only).</p> <p>Added support for secondary Ethernet Interface and fail-over routing.</p> <p>External DZMx control: API now supports answering incoming calls.</p>	<p>Stability fixes.</p> <p>Fixed the inability to reject incoming Sat calls.</p> <p>Bluetooth audio volume control: fixed 10 second delay, fixed one way only audio when call initiated from mobile device.</p> <p>Fixed occasional audio hiss at startup.</p> <p>Improved firmware upgrade version checking.</p>

Version	Date	Features	Bug Fixes
		Added barometer support for the Flight Data Recorder.	
v3.0.0	September 2018	v3.x.x firmware is a new software platform that supersedes firmware v2.x.x. It has different architecture to v2.x.x and it is an enabler for DZMx WiFi and Bluetooth functionality. This firmware only works with new DZMx hardware that supports built in WiFi and Bluetooth and High Definition (HD) audio.	

## Platform 2

Version	Date	Features	Bug Fixes
v2.21.0	28th March 2019	Improved external backlighting control. Added Cellular 4G bands to the list of switchable bands in the settings. Added usb drive eject option to menu (required for Dropbox file copying)	Fixed reject incoming sat call issue. Automatic DNS server configuration for Cell 3G modem (required for Dropbox)
v2.20.0	27th September 2018	Added Text Message Manager capability.	Updated Turkish languages strings.
v2.19.2	4th September 2018		DZMx Manager Phonebook import fix.
v2.19.1	24th August 2018	DZMx Manager now has a network routing table added to the Data Manager page.	Fire Application: Fixed an issue with the Fill pump and Additive pump timers which was causing 5x the expected volume to be reported.
v2.19.0	25th July 2018	The tracking message protocol has been updated to protocol suite 4. Before upgrading to this firmware version, check with your tracking provider to ensure they support protocol suite 4.  Tracking accuracy has improved and there is a new option to use either PDOP or HDOP for GPS dilution of precision (positional accuracy).  Dual cell modem configuration has been improved. Previously a global configuration affected both modems. Now, data and SBD settings can be configured individually for each modem.	

Version	Date	Features	Bug Fixes
		<p>Added 'PTT transmitting' to the DZMx external output configuration options so that a visual or audible indicator can be configured to indicate Iridium Push-To-Talk (PTT) transmission.</p> <p>Cell modem transmission and reception can be automatically disabled at take-off, if required. The operator can still manually enable and disable the modem from the keypad.</p> <p>The emergency reporting interval has been reduced from 30 seconds to 15 seconds.</p> <p>The RS485 XUI (eXternal User Interface) now supports text messaging, the ability to turn modem data on and off, and UI popups.</p>	
v2.18.1	4th May 2018	<p>Added support for Open Virtual Private Network (Open VPN).</p> <p>Added Flight Data Recorder (FDR) functionality. This configuration option saves GPS location, acceleration, and g-force data to SD card, at 1 second intervals.</p> <p>Cellular IP tracking auto-switching has been enhanced.</p> <p>In 'Static IP Address' mode, the user can now configure the unit for a specific IP address from the keypad.</p> <p>Implemented geofencing cost-saving enhancement for units fitted with cellular modems.</p> <p>Added support for XUI remote head applications (e.g. mission computer, glass cockpit) using the external RS485 interface.</p> <p>Firefighting mode enhancement: The user can now switch between two delivery systems (e.g. bucket and tank) without the need for manual reconfiguration.</p> <p>The interface to the AKV ETM1000 has been enhanced to report real-time exceedances.</p> <p>Improved the usability of the DZMx Manager's phone book manager, canned message manager and ON/OFF and YES/NO toggle switches.</p>	<p>Fixed an issue where the internal communication between modules could intermittently cause GPS and modem failure. The workaround was a power off/on reset.</p> <p>Fixed an issue where the Iridium Push-To-Talk operation disabled Cellular IP Tracking.</p>
v2.17.0	22nd December 2017	<p>Added Dropbox file transfer functionality.</p> <p>Enhanced collective take-off event to use engine running input instead of using speed threshold when available.</p> <p>Improved reliability of remote head firmware upgrade</p>	<p>Important enhancement to prevent occasional loss of tracking and call functionality in some units.</p>

Version	Date	Features	Bug Fixes
v2.16.1	10th November 2017	It is now possible to enable and disable firefighting mode from the DZMx menu without having to enter the installer password first.	
v2.16.0	19th September 2017	Added ground to air transfer of operational files via email to the DZMx using Iridium SBD messaging.  Received files can be viewed and printed via the new SBD Inbox page added to the DZMx Manager interface.	
v2.15.0	8th September 2017	Added GPS Data logging to SD card Added functionality to "+" key to allow option to cancel Geofence mode  Phone book is now mirrored between DZMx and DZMx Manager without requiring a reboot  Data Manager now switches Sat and Cell data connections exclusively and shows additional network metrics	Fixed potential loss of a restored queued tracking message on start-up. Will affect customers using tracking and who routinely power down with messages in the queue.
v2.14.0	26th June 2017	HD tracking improvements including faster switching back to HD after loss of signal.  Added audio volume adjustment function when in a call.  Improved keypad responsiveness.  New AKV ETM1000 interface for reporting cycle counting information.	
v2.13.2	17th March 2017	HD tracking improvements.  Audio bug fix.	
v2.13.1	1st March 2017	Improvements to how Tracking rate changes when switching between HD tracking and other methods of transmission.  Tracking pop-ups that indicate a message has been queued will now only appear when viewing the main screen.	
v2.13.0	22nd February 2017	Now supports faster HD Tracking frequency to send position reports every 15 seconds over cellular data network (when in flight).  Improved back-lighting control at the lower end of the setting scale.	
v2.12.1	17th Jan 2017	Fixes a major bug with the date calculation, introduced in v2.12.0, that made protocol version v3 unusable and the tracking to not work at all due to wrong dates (one day in advance)	Fixed Day of Year calculations causing tracking message to be one day in the future.

Version	Date	Features	Bug Fixes
v2.12.0	21st December 2016	Now using new Tracking Protocol 3 for all tracking messages. *** IMPORTANT *** Tracking Protocol 2 is no longer supported. Ensure your tracking provider supports the new protocol before upgrading your firmware.	
v2.11.0	7th December 2016	Now supports new Iridium 9523 PTT Modem Now supports new Iridium 9603 SBD Modem Now supports new cellular MPL200 modem Added Simultaneous Calling support, two phone calls can now be made on the same ICS channel. Added Call Priority support. A modem which has been given priority will automatically mute all other calls when it makes or receives a call. When a priority call has ended, it automatically unmutes all other calls. Form editing: Auto-advances to next field when entering Form data Power off button does not power down when there are messages queued. Override added: Press Power again to power off with messages in the queue.	
v2.10.0	4th November 2016	Tracking over (IP) cellular data network. DZMx Manager: Data Manager page added to monitor and control Satellite and Cellular data network services. Turkish language support added.	Memory usage fix to prolong hardware life.
v2.8.1	21st July 2016	Added Dual calling support. A new dual calling setting in the DZMx Manager can be turned on, this will map ICS1 to modems on the A key, and ICS2 to modems on the B key. Fire App: updates.	
v2.7.0	22nd April 2016	Tracking Automatic Remote Monitoring updates	
v2.6.0	4th March 2016	Fire App: updates including support for Erickson Water Tank controller.	
v2.5.3/4	12th February 2016	Added 4G Cellular modem support. DZMx Manager: Operator can now initiate a firmware upgrade from here (no longer need to use a USB stick)	