119-00092 DZP_04 Flightcell Service Bulletin: Firmware Upgrade 4.12.0

Product Details

- Part No. DZP_04
  - Rev 4.0 onwards

Service Bulletin History

Document No.	Rev No.	Description	Effective Date
119-00092	1.0	Firmware Upgrade	06 Sep 2024

Planning Information

Reason

Firmware v4.12.0 is a feature release for:

- Controller API (CAPI)
- Certus IP Tracking
- ARINC429 Logging
- UAT 978 Support (beta)
- GDL-90 Support for transmitting ADSB data
- AIS NMEA UDP Broadcaster over Ethernet and WiFi
- Phonebook expanded to 100 contacts
- Support for emailing settings/logs to maintenance
- Auto start of Software Defined Receiver (SDR) on power-up

Firmware v4.12.0 also includes changes in functionality to call forwarding. A new global call forwarding disable setting has been introduced. This may impact customers currently utilising call forwarding on their DZMx. See the Call Forwarding section below for mitigation steps.

Prerequisites

To determine which firmware version is applicable, and if an upgrade is required, please check your current DZP_04 firmware version by going to MENU>Diagnostics Menu>About DZMx.

Install this firmware release if:

- The firmware version number reported on the About DZMx page is "3.5.0-P4" or
- The firmware version number reported starts with v4.x.x and is prior to v4.12.0

Description

The firmware release is issued as a single package file named dzmx-v4.12.0r1598-upgrade.package

The firmware packages can be downloaded from our web page https://www.flightcell.com/support/firmware .

The DZMx manuals can be downloaded from https://www.flightcell.com/resources .

Follow the upgrade instructions outlined in the Accomplishment Instructions section to upgrade your unit.

Compliance

This firmware upgrade is Optional.

This firmware is only suitable to be installed on Flightcell DZP_04 Platform 4 units.

All existing Flightcell DZP_04 DZMx Revision 4.0, Revision 5.0, Revision 6.x and Revision 7.x units in the field can upgraded using the firmware outlined in this bulletin.

Upgraded DZMx Revision 5.0 units and above must be marked/labelled on the outside of the unit with the appropriate modification status letter from the following table

Product Revision	Modification Status Letter
5.0	**H**
6.0	**H**
6.1	**G**
6.2	**E**
6.3	**D**
6.4	**C**
7.0	**B**

Manpower

The manpower required to accomplish the procedures described in this service bulletin is detailed below:

Firmware Updates	20 Minutes
Verification	2 Minutes
Total Time Required:	Approx 22 Minutes

Software Accomplishment Summary

See the table below for a list of new features and bug fixes for the DZMx.

New Features	Bug fixes
- Controller API - Certus IP Tracking - ARINC429 Logging - UAT 978 Support (beta) - GDL-90 Support for transmitting ADSB data - AIS NMEA UDP Broadcaster over Ethernet - Phonebook expanded to 100 contacts - Support for emailing settings/logs to maintenance	- Fix for network crashes when DZMx is configured with multiple DHCP servers - Fix for ICS2 sidetone not always enabled correctly on start-up - Fix for SBD registration errors when switching SBD providers

• Auto start setting for SDR on power-up	

Known Issues

Issues with Spark LTE in New Zealand:

- SMS sending occasionally does not work when device in in LTE mode.
- VOLTE outgoing calls to Vodafone do not connect.

Call Forwarding Changes

Call forwarding is a feature that allows calls to the internal cellular modems to be routed to another landline or cellular number, in the event of loss of signal (powered down, or no cell reception). The introduction and roll-out of 4G and LTE has changed how network operators support call forwarding on their networks.

The current method of setting up and configuring call forwarding on the DZMx is slowly being deprecated in networks globally. To address these changes, Flightcell has disabled this feature from activating or querying the network by default in 4.12.0. Customers currently utilising the call forwarding feature will need to re-enable this feature after upgrading to 4.12.0.

For customers NOT using call forwarding

No impact or changes required to the DZMx after upgrading to 4.12.0.

For customers actively using call forwarding

After installing 4.12.0, call forwarding can be enabled by opening DZMx Connect and turning off the setting under:

Settings->Modem->Cell Modems->Disable All Call Forwarding Functions

Disable All Call Forwarding Functions

Material Information

Material - Price and Availability

Qty	Part Number	Part Name	Requirement Notes	Unit Cost	Lead Time
1	dzmx-v4.12.0r1598-upgrade.package	DZP_04 Platform 4 Firmware Package	For all platform 4 units	N/A	N/A
1	Commercially Available	28V DC power supply	If not using cockpit/battery power power	N/A	N/A
1	Commercially Available	PC or laptop		N/A	N/A
1	Commercially Available	USB memory stick	If using USB stick upgrade method	N/A	N/A
1	Commercially Available	Ethernet cable	If using DZP_04 Connect upgrade method	N/A	N/A
1	CLP_00002	Bench Loom	If not upgrading the DZP_04 fitted in an aircraft	N/A	N/A
1	IDP_00012	USB/Ethernet Military Connector Box	For military DZP_04 versions	N/A	N/A
1	IDP_00013	USB/Ethernet Civilian Connector Box	For civilian DZP_04 versions	N/A	N/A

Accomplishment Instructions

System Firmware Upgrade

Before commencing the upgrade:

1. Identify your Platform version and check the current firmware version running on the DZMx by going to MENU>Diagnostics Menu>About DZMx.
   1. This should be shown as firmware version v3.5.0 P4 or v4.x.x for

Platform 4 units.
   2. It is also possible to view the version information via DZMx Connect after logging in as an Installer and viewing the About page (see below).
2. Refer to the table above to identify the correct firmware package and equipment you will require for this upgrade.
3. Download the correct firmware package file directly from: https://www.flightcell.com/support/firmware and save it to your local PC or laptop hard drive.
4. Ensure there is enough battery power to run the DZMx for at least 1 hour (DZMx draws approximately 1A at 28VDC).

To perform the upgrade:

Upgrading the DZMx using DZMx Connect:

1. Locate the IDP_00012 or IDP_00013 USB/Ethernet Connector Box connected to the DZMx and plug in an ethernet cable.
2. Connect the other end to a laptop or PC to the DZMx Ethernet port.
3. Open a web browser and in the address/URL/location bar, enter the IP address: 192.168.4.1.
4. If a picture of a DZMx does not automatically appear in the auto-detected DZMx pane, then click on Discover and wait for the DZMx to appear.
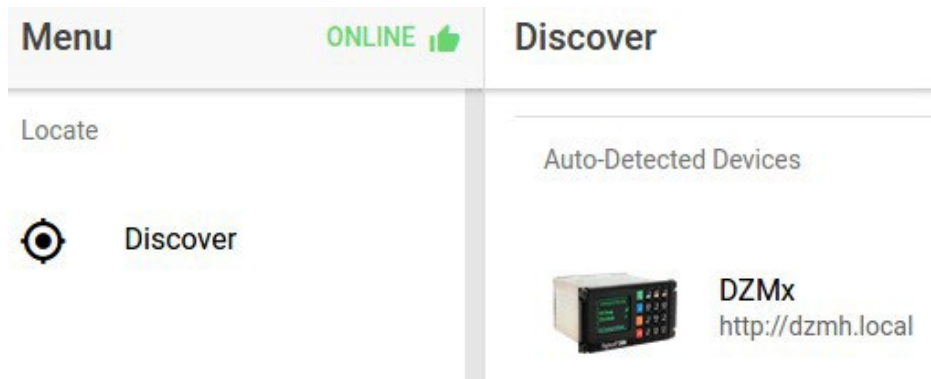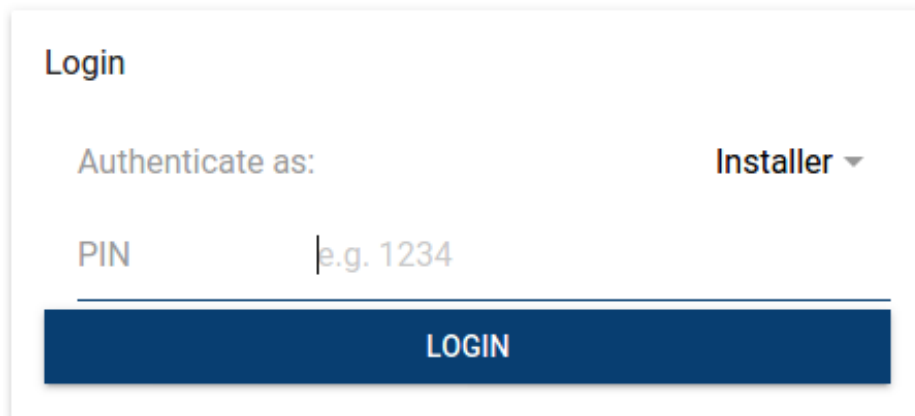
5. Click on the picture of the DZMx and then click on Login.
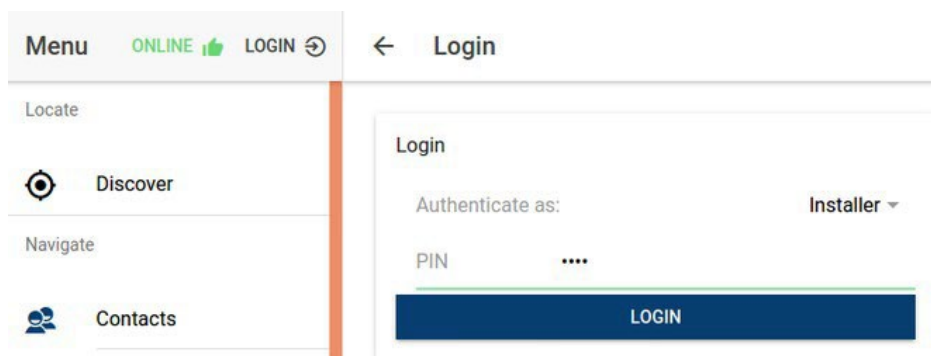
6. Click on "Authenticate as" and select Installer, then click on OK.
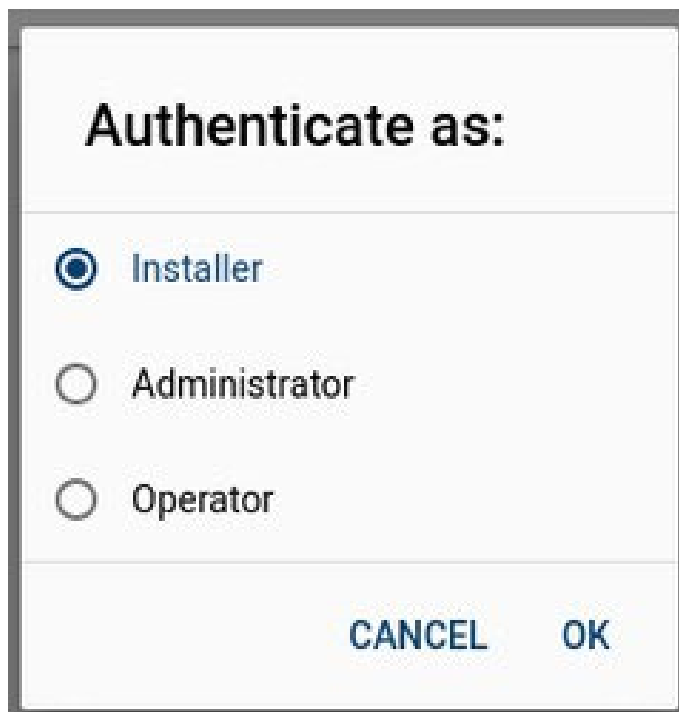
7. Click on the PIN field and enter the installer password.

8. Navigate to the About section and under Version Information section, check the firmware version:

9. Refer to the 'Before commencing upgrade' section to check your current firmware version, if you haven't already, then select the UPGRADE button to proceed.

10. Select the firmware package file. Either:
    1. Select Browse and locate where you copied the firmware package and select the file (by default, it would have been copied to your downloads folder).
    2. Drag and drop the package file from another file explorer window into the 'Drop file here' boxed area.
11. Click on UPLOAD then wait while the package file is transferred to the DZMx.
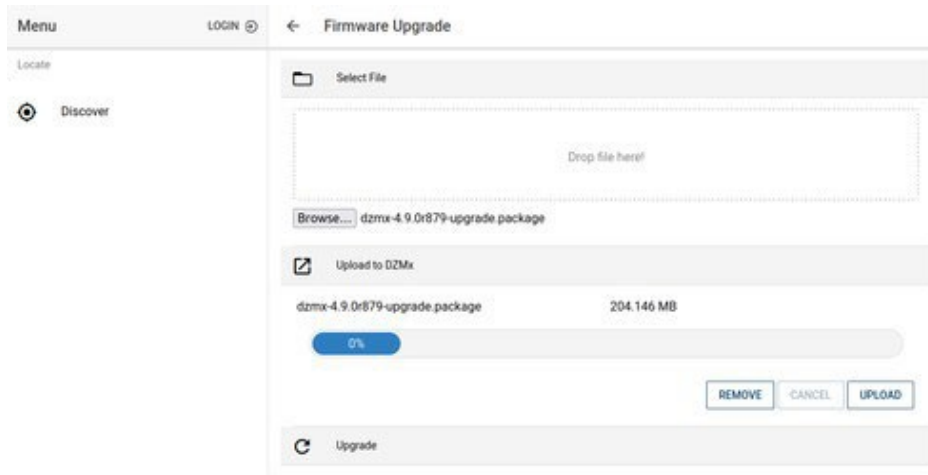
12. Once the file has been fully uploaded the upgrade process will start automatically.
13. After the upgrade, the DZMx will reboot automatically.

Verification

After the upgrade process has completed, and the DZMx has rebooted to show the main screen, verify that the firmware upgrade has completed successfully.

Using the DZMx Keypad:

1. Check the current DZMx firmware by going to MENU>Diagnostics Menu>About DZMx. This should now be shown as firmware version v4.12.0r1598 (Platform 4)

Using DZMx Connect:

1. After being redirected to the Discovery area, wait for the DZMx to fully reboot before re- discovering it. The display and keyboard may alternatively flash on and off during this period.
2. Wait for the DZMx to boot up and show the main screen, then follow instruction steps 3- 8 above and check that the new firmware version is now v4.12.0r1598 (Platform 4).

Update nameplate

Label the unit with the appropriate Modification Status Letter. See the Compliance section above for details.

Approval

This service bulletin contains no modification information that revises the approved configuration and therefore does not require governmental or other regulatory agency approval.

Form No. F069 (R1) **Effective Date:** 28 Sep 2022