

# Flightcell® DZM2

The world's most advanced all-in-one communications and tracking system

Iridium satellite phone

Cell phone

GPS flight following

External audio/MP3 integration



# Maintenance Manual

(All DZM2 military and civil units)



| Version history

# Version history

### DZM2 Maintenance Manual

Issue	Date	Author	Description	PCB Revision
Issue 1 - CURRENT	16 Mar 2010	F. Twissell	Initial version (FCN0055)	B to E

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| About this manual

## About this manual

## Flightcell® DZM2 models

The instructions and information contained within this manual are for three different models of the DZM2:

Flightcell<sup>®</sup> DZM2 English Civil Unit
Flightcell<sup>®</sup> DZM2 English Military Unit
Flightcell<sup>®</sup> DZM2 Spanish Military Unit

#### Who should use this manual?

This manual is intended for use by engineers maintaining the DZM2.

Information on installing and configuring the DZM2 is provided in the Technical Installation Manual and the Operation Manual.

Flightcell manuals are regularly updated. The latest version of each manual and the latest wiring diagrams are available on the Flightcell website at <a href="http://www.flightcell.com/downloads.aspx">http://www.flightcell.com/downloads.aspx</a>, or by contacting Flightcell International Ltd.

| Your Flightcell® DZM2 at a glance

# Your Flightcell® DZM2 at a glance

#### Front panel (English military – other variants differ slightly)



FIGURE 1: FRONT PANEL - ENGLISH MILIATRY UNIT

### Rear panel (All DZM2 units)



FIGURE 2: REAR PANEL – ALL DZM2 UNITS

| Periodic Maintenance

## Periodic Maintenance

The DZM2 requires no periodic maintenance. The front panel should be kept clean and may be wiped using a slightly damp lint-free cloth. In general, solvents and abrasive cleaners should be avoided, but if necessary the unit can be cleaned using a small quantity of isopropyl alcohol.

There are no user-serviceable parts inside the DZM2. It is a sealed unit and should not be dismantled. In the event of a failure, the entire unit should be replaced.

#### Reliability figures

Based on in-service data from existing installations, we have observed an MTBF in excess of 50,000hrs.

#### Time to Replace

Excluding procurement, the engineering time taken to replace a DZM2 unit is approximately 30 minutes.

| Removal and Replacement

## Removal and Replacement

#### Tools required

Screwdriver with 7mm (5/16") flat blade

#### Removal

Before removing the DZM2 it is advisable to make a note of the settings (audio levels, tracking configuration, other inputs e.g. collective switch).

Check that DC power is isolated from the DZM2.

Release the four DZUS fasteners on the front panel by pushing and turning each one by 90 degrees anti-clockwise. The DZM2 can then be withdrawn from the panel. Unscrew and remove the D38999 connector and then the TNC coaxial connector.

Note that some DZM2 units are supplied with a 'GA' front panel which is fitted to the instrument panel using screws rather than DZUS fasteners.

#### Refitting

Screw the TNC coaxial connector fully home. Locate the d38999 connector (the large lug should be aligned at the top) and screw this into place. The red band on the connector is entirely hidden when the connectors are fully mated.

Offer the DZM2 into the panel, and check that the slots in the DZUS fasteners are aligned horizontally. The DZM2 can now be pushed fully into place and the four DZUS fasteners locked by pushing each one in and turning it clockwise 90 degrees.

For DZM2 units that are fitted with the 'GA' front panel, the four fixing screws should be refitted.

 $After installing \ a \ replacement \ DZM2, the settings from \ the \ original \ unit \ should \ be \ configured.$ 

| Warranty and contact details

## Warranty and contact details

### Limited warranty for your Flightcell® DZM2

Flightcell International Ltd's quality products are proudly designed and manufactured to the highest standards in New Zealand.

Your DZM2 is warranted for two years from date of sale. This warranty covers Flightcell manufactured items only. Any ancillary items may be covered by individual manufacturer warranties.

The warranty is void if any labels are removed or if it is determined that your DZM2 has been:

Connected to a power supply delivering more than 32 Volts;

Connected with reverse polarity;

Installed in direct contravention to the guidelines outlined in the technical installation manual;

Physically damaged, or a fault has occurred due to the product being used beyond what is considered normal use, causing unusual deterioration of the product.

If the product is deemed to be faulty or in need of repair, please contact Flightcell International Ltd to obtain a Returned Materials Authorization or download from <a href="http://www.flightcell.com">http://www.flightcell.com</a>.

## Flightcell® International contact details

Flightcell<sup>®</sup> International Ltd

PO Box 1481

98 Vickerman Street

Nelson 7040

New Zealand

Telephone +64 3 5458651 Fax +64 3 5488091

Email <u>admin@flightcell.com</u>

Website <u>http://www.flightcell.com</u>

| User notes

## **User notes**