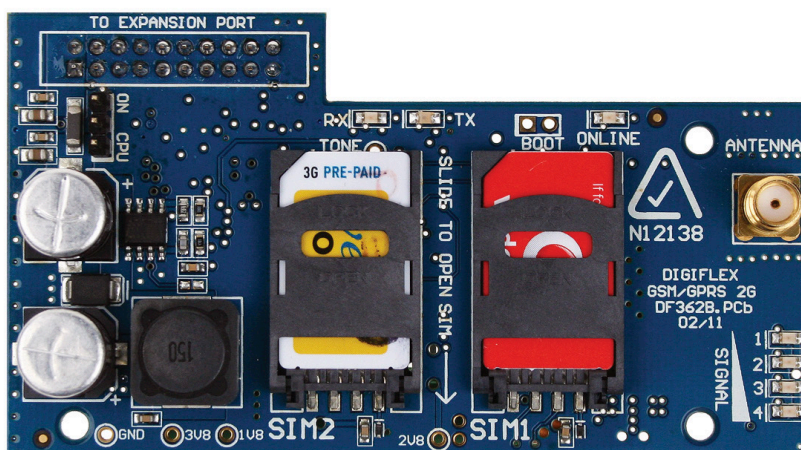# INSTALLER REFERENCE GUIDE

Rev 1.6

CM743
2G Radio Module

CM743 2G Radio Module

Introduction

The CM743 2G radio module allows you to interface compatible security control panels to the GSM/GPRS / SMS network providing a high reliability primary or backup reporting path.

The unit is designed to plug onto the main control panel with the supplied antenna mounting onto the metal cabinet.

| Module Compatibility	
Panels Supported	**Version**
Vision-X	2.12

Getting Started

There are four main steps required to configure the CM743 for reporting to the control room. The instructions assume that you already have purchased a SIM card and that the card has been charged with credit and activated on the network if necessary.

1. Install the CM743 hardware on the control panel.
2. Install the antenna.
3. Configure the module's features and parameters.
4. Configure the control panel for reporting.

Step 1 - Installing the Radio Module

Ensure that the panel is powered off before proceeding. Plug the 3 short plastic standoffs into the module and then plug it onto the Expansion Port header pins on the panel as shown in. If you are connecting the CM743 to a panel which also has a CM101 Voice Module fitted then you should use the longer standoffs from the HW750 Riser Kit.

Install the SIM card into the SIM 1 card position.
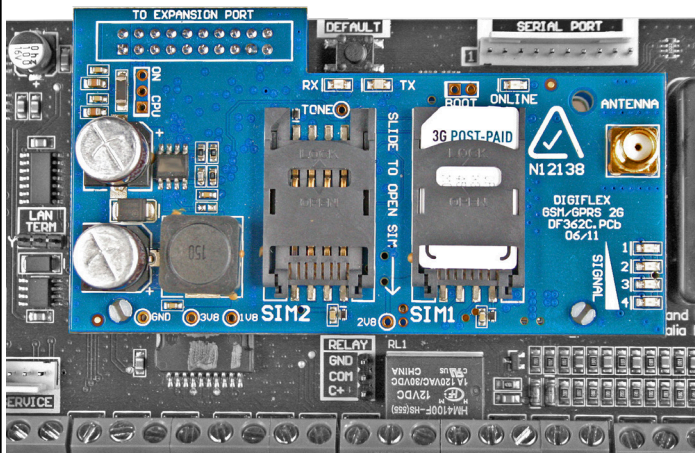
Step 2 - Installing the Antenna

Remove the knockout in the top of the cabinet and pass the antenna lead through the hole ensuring the antenna is on the outside of the cabinet. Screw the lead to the socket on the radio module before power the panel.

Do not fix the antenna in place at this stage.

Step 3 - Configuring The Module

Once powered the radio will attempt to connect to the network. This may take up to a minute to complete. During this time the online indicator on the module will be on solid. Once the radio has registered the online indicator will begin to flash and the signal strength indicators will show the current signal condition.

Experiment with the position of the antenna to find the best signal strength before fixing it in place.

Step 4 - Configuring The Panel Reporting

Reporting configuration will vary depending on the required options and whether or not the GSM module is to be used as the primary or secondary reporting route.

Configure the required reporting formats in MENU 5-4-0 and 5-4-1. The system can be configured to report to the base in CID and also to selected phone numbers via SMS, or to the base in CID via PSTN line and then CID via GSM if the PSTN line is cut.

All reporting scenarios are configured by varying the programming of the reporting format and reporting routes configurations options.

Module Indicators

The module includes 7 led indicators which are used to show status and signal strength. See table below.

Module Indicators	
Indicator	**Meaning**
TX	Module Transmitting Data (Tx Data In CID)
RX	Module Receiving Data (Kiss Off In CID)
Online	ON Steady = Not Registered On Network Pulsing = Registered On Network
Signal 1	Signal strength indicators show relative signal level at the radio. Signal indicator 1 on indicates weak signal and all 4 indicators on indicates stronger signal strength.
Signal 2	
Signal 3	
Signal 4	

CLI Triggers

The CLI trigger tables in MENU 6-5-5-1 and 6-5-6-2 can be used to store a list of telephone numbers that can trigger an output on the control panel. If you call the GSM unit from a telephone number that matches a number in the CLI list then the appropriate output will be operated.

An output needs to be programmed with an event type of CLI Trigger and event assignment of 1 or 2 depending on which table is to be checked.

Simply call the GSM unit from a telephone number that is programmed in the CLI trigger list to activate the output.

Module Status

MENU 6-5-0 can be used to obtain various information on the radio module. The following information is currently available.

1) Connected Network
2) Signal Strength in dB
3) IMEI Number
4) Radio Firmware Revision
5) SIM Card Present

Dial Number Test

It is possible to check the SIM phone number by selecting the dial number test via GSM option in MENU 5-9-5.

SMS Remote Control

The SMS control option in MENU 6-5-6 allow you to program up to 10 telephone numbers that are allowed to send SMS commands to the GSM unit. The first number in this list is considered as the administrator who will also receive SMS messages that the GSM unit is unable to interpret. i.e. any message sent to the radio which cannot be interpreted will be sent back via SMS to the first number in the SMS control number list.

Numerous commands can be sent to the panel using the SMS control functions including arming/ disarming areas, controlling outputs and doors or checking system status.   The panel can also be requested to send a confirmation SMS if required.

The control messages must be sent to the SIM phone number.

The following table shows the correct method for constructing the SMS messages. Note there are no spaces between the fields only commas as shown.

The MyAlarm SMS Control App for iOS and Android devices is now available and can be used to simplify the configuration and sending of SMS control messages.

You can search for the app in the app store or scan the QR codes below using your device's barcode reader for a direct link to the app.

Description	SMS String
Arming / Disarming Areas	
Turning Area 1 On	\<User Code>,AREA,1,ON
Turning Area 1 On With Confirmation	\<User Code>,AREA,1,ON,CONFIRM
Turning Area 1 Part 1 On	\<User Code>,AREA,1,PART 1
Turning Area 1 Part 1 On With Confirmation	\<User Code>,AREA,1,PART 1,CONFIRM
Turning Area 1 Part 2 On	\<User Code>,AREA,1,PART 2
Turning Area 1 Part 2 On With Confirmation	\<User Code>,AREA,1,PART 2,CONFIRM
Turn Multiple Areas On	\<User Code>,AREA,1,2,3,4,ON
Turn All Areas On That the User Belongs To	\<User Code>,AREA,ON
Turning Area 1 OFF	\<User Code>,AREA,1,OFF
Turning Area 1 OFF With Confirmation	\<User Code>,AREA,1,OFF,CONFIRM
Check Area Status	\<User Code>,AREA,1,STATUS
Check Status Of Multiple Areas	\<User Code>,AREA,1,2,3,STATUS
Turning Outputs On/Off	
Turn Output 1 On	\<User Code>,OUTPUT,1,ON
Turn Output 1 On With Confirmation	\<User Code>,OUTPUT,1,ON,CONFIRM
Turn Multiple Outputs On	\<User Code>,OUTPUT,1,2,3,4,ON
Turn Multiple Outputs On With Confirmation	\<User Code>,OUTPUT,1,2,3,4,ON,CONFIRM
Turning Output 1 OFF	\<User Code>,OUTPUT,1,OFF
Turning Output 1 OFF With Confirmation	\<User Code>,OUTPUT,1,OFF,CONFIRM
Turning Multiple Outputs OFF	\<User Code>,OUTPUT,1,2,3,4,OFF
Turning Multiple Outputs OFF With Confirmation	\<User Code>,OUTPUT,1,2,3,4,OFF,CONFIRM
Check Output Status	\<User Code>,OUTPUT,1,STATUS
Check Status Of Multiple Outputs	\<User Code>,OUTPUT,1,2,3,4,STATUS
Locking and Unlocking Doors	
Unlock Door 1	\<User Code>,DOOR,1,UNLOCK
Unlock Door 1 With Confirmation	\<User Code>,DOOR,1,UNLOCK,CONFIRM
Unlock Multiple Doors	\<User Code>,DOOR,1,2,3,UNLOCK
Unlock Multiple Doors With Confirmation	\<User Code>,DOOR,1,2,3,UNLOCK,CONFIRM
Lock Door 1	\<User Code>,DOOR,1,LOCK
Lock Door 1 With Confirmation	\<User Code>,DOOR,1,LOCK,CONFIRM
Lock Multiple Doors	\<User Code>,DOOR,1,2,3,LOCK
Lock Multiple Doors With Confirmation	\<User Code>,DOOR,1,2,3,LOCK,CONFIRM
Check Status Of A Door	\<User Code>,DOOR,1,STATUS
Check Status Of Multiple Doors	\<User Code>,DOOR,1,2,3,STATUS
System Information	
Check System Status	\<User Code>,SYSTEM,STATUS
SIM Balance Check - Must have been configured under site settings	
Check Current SIM Balance	\<User Code>,SIMBAL

 E&OE