SAFETY

Care should be taken when connecting telecommunications equipment to ensure only like interfaces are connected to avoid safety hazards.

SELV: SELV (Safety Extra-Low Voltage) is defined as a secondary circuit which is so designed and protected that under normal and single fault conditions the voltage between any two accessible parts does not exceed a safe value (42.4V peak or 60V dc maximum)

The interfaces on the IRIS have the following safety classifications:

- Power Interface: SELV for connection to a DC supply
- Inputs: SELV for connection to alarm output pin.

CONFORMANCE

European Directives

The IRIS-4 6 Series complies with the following European Directives:

- 2014/53/EU (Radio Equipment Directive)
- 2013/35/EU (Electromagnetic Fields)
- 2004/108/EC (CE directive)
- 2002/96/EC (WEEE)
- 2011/65/EC (ROHS)

CONTACT AND SUPPORT

Installation and Service Engineer Support Telephone: +44 871 977 1133 (Calls are charged 13 pence per minute plus your phone company's access charge)

Sales enquiries: +41 435 080 870 **Email:** iris.support@addsecure.com

www.addsecure.com

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EN50131, EN50136 (VdS Certified)

The dialler is compliant with the requirements of European Standards:

EN 50131-1: 2006+A2:2017 & EN 50131-10:2014

EN 50136-1: 2012 & EN 50136-2: 2013

Security Grade 4

ATS-SP6 over Ethernet, ATS-SP5 over 2/3/4G, ATS-DP4 (IRIS-4 640D)

Environmental Class II





IRIS-4 6 Series

Quick Installation and Maintenance Guide



FRIS-4 by ADDSECURE

IRIS-4 6 Series

Quick Installation and Maintenance Guide

CONTENTS

١.	Introduction						
2.	Product Features						
3.	Package Contents.	4					
4.	Board Configuration	4					
5.	Before You Start	6					
6.	Installing the IRIS-4 6 Series Dialler	7					
	6.1. Mounting	7					
	6.2. Power	7					
	6.3. Connections.	7					
	6.4. 2/3/4G SIM card (IRIS-4 640D)	10					
	6.5. Pin Inputs.	10					
	6.6. Switch on	11					
	6.7. 2/3/4G Signal Strength (IRIS-4 640D)	11					
	6.8. Configuration	11					
	6.9. Panel configuration.	12					
	6.10. Testing	16					
7.	Maintenance	16					
	7.1. Confirm Current Status	16					
	7.2. Communication Path Checks and Communication to Monitoring Centre	16					
	7.3. Test Alarm Panel Alarms and Communication to Monitoring Centre	17					
8.	Specifications	18					

I. INTRODUCTION

The IRIS-4 6 Series offers cost effective Alarm over IP (AoIP) for the commercial and residential sectors.

All IRIS-4 6 Series diallers are certified as suitable for all Grade 4 systems with an Alarm Transmission System (ATS) configuration up to SP6 for single path, or ATS configuration DP4 for dual path (IRIS-4 640D only).

The IRIS-4 6 Series range is based on the successful IRIS Touch NG range of AoIP diallers with the same hardware and software used in all IRIS

diallers; with the same level of security and features provided to military, governments, banks and commercial industry markets. Polling and alarm transmission are performed via the Ethernet or 2/3/4G communications to the monitoring centre using the IRIS Secure Apps monitoring software.

This manual gives a quick guide to the installation of products from the IRIS-4 6 Series. For the full engineering manual, including multilingual versions, please visit our website http://www.addsecure.com.

2. PRODUCT FEATURES

FEATURES	IRIS-4 6 SERIES		
	620D	640D	
Ethernet	2	2	
2/3/4G	_	•	
Relays	4	4	
Inputs (Pins)	6	6	
Serial RS485	•	•	
Serial TTL	•	•	
RS232 (Basic)	2 x l	Basic	
Text messaging	_	•	
Multi language menus	•	•	

PDK-11355-v.2.0 IRIS-4 6 Series Quick Installation and Maintenance Guide 2018.12.17

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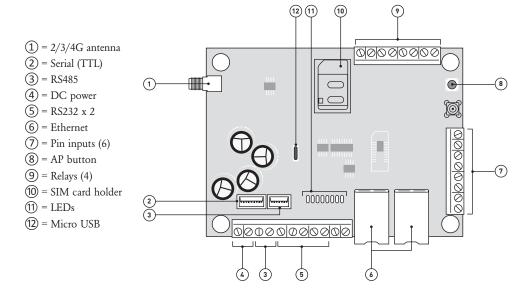
Quick Installation and Maintenance Guide

3. PACKAGE CONTENTS

Contents dependent on model type:

- Dialler board
- Ethernet cable (IRIS-4 620D & 640D)
- 2/3/4G antenna (IRIS-4 640D)

4. BOARD CONFIGURATION



LED & COLOUR	IN	DICATION
SYS		
	On	Shows dialler is operational and all systems ok
	Flashing	Shows the dialler has a system trouble
SIM		
	On	Dialler is seeing the SIM card (IRIS-4 640D)
	Off	Dialler not currently seeing the SIM card (IRIS-4 640D)
GSM		
	On	GSM connected/registered (IRIS-4 640D)
	Off	GSM Not connected/registered (IRIS-4 640D)
GPRS/3G		
	On	2/3/4G is attached to the network (IRIS-4 640D)
	Off	2/3/4G is not attached to the network (IRIS-4 640D)
ETHERNET		
	On	ETH connected/synchronized
	Off	ETH disconnected/not synchronized
SERIAL		
	Flashing 0.2s On, 0.2s Off	Shows not communicating with panel
	Flashing 1.5s On, 1.5s Off	Shows dialler not configured
	Flashing 0.1s On, 0.9s Off	Shows normal communication
POLL		
	On	Successfully polling with monitoring centre Note: Flickers off to show each poll
	Off	Not polling with monitoring centre

4

Quick Installation and Maintenance Guide

5. BEFORE YOU START

Monitoring Centre (ARC)

Make sure that the monitoring centre to which the IRIS 4 6 Series device will send alarm signals is equipped with the appropriate IRIS Secure Apps receiving system. The following information should be obtained from the Monitoring Centre.

Dialler account number:	er:
Manitarina contro ID address	
Monitoring centre IP address:	ss:

Ethernet Connection Details

The customer's Ethernet (LAN) network details are required in order to connect the IRIS-4 6 Series. Obtain the following information from the customer.

Fixed IP address or DHCP:	Fixed	☐ DHCP
	If using DHCP then the following info as it will be assigned by the network.	ormation will not be required
IP address:		
Gateway address:		
Subnet mask address:		

2/3/4G SIM Card and Access Point Name

If the installation uses 2/3/4G then a SIM card will be required. The IRIS-4 640D will also need to be given a 2/3/4G 'Access Point Name' (APN) and other possible configurations as shown below. Obtain these from the SIM card provider.

Access Point Name (APN):	
User name (USR):	
Password (PWD):	
SIM Pin:	

Note: SIM cards with a SIM Pin will require a PC/Laptop connected via USB for configuration.

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6. INSTALLING THE IRIS-4 6 SERIES DIALLER

6.1. Mounting

Choose a suitable location, taking into consideration the routing of both power and dialler interface cables, within the alarm panel or separate enclosure. Secure the dialler within the enclosure using the fitted standoff or the alternative self-adhesive feet.

Note: For EN50131-10 compliance, the dialler must be mounted in an enclosure compliant with EN50131-3 or EN50131-6 and use the supplied standoffs and not the self-adhesive feet.

6.2. Power

The IRIS-4 6 Series dialler can be powered using a separate or Aux 9-28V DC power supply specified to deliver a minimum of 1A current using the screw terminals, or receive power directly via the 4 or 5 Pin Molex connector (RS485 or Serial TTL) headers indicated in Section 4 "Board Configuration".

Note: For Radio Equipment Directive compliance, the power cable must be no longer than 3 meters in length.

Fit the power cable. DO NOT APPLY POWER TO THE DIALLER UNTIL INDICATED.

6.3. Connections

Connect cables to the PCB for the system as shown on in Section 4 "Board Configuration".

Ethernet enabled systems: Connect the 'LAN1'
connector using the Ethernet cable to the local
IP router/switch or socket that has been allocated
for the LAN/WAN network IP connection.

- 2/3/4G enabled systems (IRIS-4 640D): Fit the supplied T-bar 2/3/4G antenna to the 'Cell Ant' connector but do not fix in place until after performing the 2/3/4G network scan.
- 6 x Pin Inputs (optional for more information see section below).

Optional serial connection

The following 5 connections are optional and depend on the panel connection method to be used. By default, the IRIS-4 RS485 connection is for Honeywell Galaxy panels and the Serial TTL header is for Texecom Premier Panels.

Note: For alternative panel manufacturers' selection, you will need a Laptop/PC connected via USB to change the configuration of the IRIS-4 6 Series, please contact AddSecure for further details or download the full panel installation manual available from http://www.addsecure.com.

- RS485 currently available for Honeywell Galaxy data bus (Alarms and Upload/download) or Risco ProSys bus (Upload/download) connections (optional).
- RS485 4pin header (Molex) currently available for Honeywell Galaxy data bus connections (optional).
- Serial (TTL) currently available for Texecom Com1 connections (optional).
- RS232 port 1 screw terminal (optional for Hayes command terminal).
- RS232 port 2 screw terminal (optional for integrated panel connection).

For more details on the cable requirements/connections please see detail on next page.



Quick Installation and Maintenance Guide

RS485 CONNECTIONS (HONEYWELL GALAXY OR RISCO PROSYS)

You can use the screw terminal blocks or the four Pin headers (Molex). If using the screw terminals the connections are:

IRIS-4 6 Series to Honeywell Galaxy panels

IRIS RS485 screw terminals]	Го	Galaxy Data Bus terminal
0V (Power)	←	\rightarrow	Galaxy (-)
VIN (Power)	←	\rightarrow	Galaxy (+)
A	←	\rightarrow	Galaxy (A)
В	←	\rightarrow	Galaxy (B)

IRIS-4 6 Series to Risco ProSys panels

IRIS RS485 screw terminals	То		Risco Bus I terminal
0V (Power)	←	\rightarrow	COM
VIN (Power)	←	\rightarrow	AUX
A	←	\rightarrow	YEL
В	←	\rightarrow	GRN

TTL CONNECTIONS (TEXECOM PREMIER RANGE)

Ordered from AddSecure

Description = Texecom Serial Cable

Part No = TEX600



RS232 PORT 2 CONNECTIONS (HHL AND ESPA)

IRIS-4 6 Series to HHL panels

IRIS RS232 screw terminals	-	Го	HHL Com Port (X3)
TX2	←	\rightarrow	2 (RX)
RX2	←	\rightarrow	3 (TX)
0V	←	\rightarrow	1 (GRD)

IRIS-4 6 Series to ESPA panels

IRIS RS232 screw terminals	-	То	DB9 Male connector (possible screw terminals)
TX2	←	\rightarrow	Pin 2 (RX)
RX2	←	\rightarrow	Pin 3 (TX)
0V	←	\rightarrow	Pin 5 (GRD)

Quick Installation and Maintenance Guide

6.4. 2/3/4G SIM card (IRIS-4 640D)

If you are using the 2/3/4G connection then insert the SIM card into the SIM cardholder.

6.5. Pin Inputs

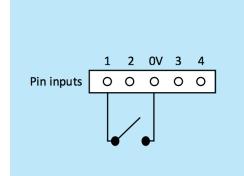
The IRIS-4 6 Series dialler has 6 pin inputs that can be used to generate alarm messages, These can be:

- Text messages via SMS (IRIS-4 640D 2/3/4G).
- SIA, Contact ID or Fast Format alarm messages over IP to the Monitoring Centre.

Note: You can also use the Pin alarm inputs when directly connected to an alarm panel via the dial capture, serial or RS485 connections.

Via Open/Close Contact Source

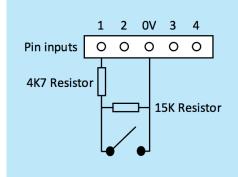
Each pin input is designed to be connected in a loop via an open/close contact source from an alarm panel, or other device, to a reference ground pin available on the IRIS-4 6 Series dialler, as shown below. Opening the contact (i.e. loop is open circuit) generates an alarm signal. Closing the contact generates the equivalent restore signal.



Via Sense Resistors

It is also possible to link the contacts to the IRIS-4 6 Series dialler via sense resistors so that an open or short circuit tamper on the loop is detectable and the Monitoring Centre alerted. In this case, the connections made should be as shown below.

Note: For this feature to work correctly it is essential to connect the resistor at the contact end of the loop and not the dialler end. The Monitoring Centre must also enable the monitoring of this facility on the dialler within the IRIS Secure Apps receiving system.



6.6. Switch on

To confirm power is applied, look for the indicator 'SYS LED' flashing yellow on.

6.7. 2/3/4G Signal Strength (IRIS-4 640D)

With the IRIS-4 640D using the 2/3/4G communication you will need to perform a signal strength check, to confirm that in the current installation you have the required signal strength for a reliable connection.

Press and hold the "AP" button which will allow you to see the current signal strength indicated across the LEDs. For a reliable 2/3/4G connection it is recommended that you have signal strength of 3 or more LEDs on as shown on the examples below:

Signal strength too low

Minimum signal strength

0000000

Maximum signal strength

If the signal strength is below or close to minimum then try to reposition the antenna or use an external high gain antenna to improve signal strength (if necessary). Rerun the signal strength test and reposition again if necessary to gain best signal strength possible. Once you have the required 2/3/4G signal strength you can then move onto the configuration.

6.8. Configuration

To configure the dialler, use any of the following methods:

• Alarm panel integration e.g. Honeywell Galaxy (RS485 connection) Texecom Premier range (Serial TTL connection). Please refer to Section 6.9 "Panel configuration".

Note: Please configure the alarm panel first for connections to Honeywell Galaxy or Texecom Premier on the serial integration, as these will transmit configuration to the IRIS-4 6 Series dialler. For the Galaxy Flex installation, you will need to change the Bus selection in menu 56.3.2.8 for IRIS-4 640D and 56.3.3.8 for IRIS-4 620D and 640D. For more details on the alarm panel integration, download the full panel installation manual from http://www.addsecure.com.

 Connect the board's Micro USB connector to a laptop/PC running the IRIS Toolbox software.
 Download the IRIS Toolbox user guide from http://www.addsecure.com.

Note: If you want to use the IRIS-4 6 Series dialler for pin inputs only or HHL/ESPA serial connections then you will need to connect a Laptop/PC and configure the dialler using the IRIS Toolbox software, using the remote Touch screen and Installation Wizard.

Defaulting

If at any point a complete default of the dialler is required, use the following procedure:

- 1. Completely power down the IRIS-4 unit.
- 2. Now Press and hold down the AP button.
- 3. Reapply power whilst still holding down the AP button pushed down for another 10 seconds.

Quick Installation and Maintenance Guide

6.9. Panel configuration

Configurations of the IRIS-4 6 Series dialler with integration with certain panel manufacturers is possible, please find further details below:

Configuration on Honeywell Galaxy Intruder Control Panel Range via RS485

The IRIS-4 6 Series dialler can simulate a Galaxy Ethernet Module (Comm's Mod 4) and remote keypad, for both Alarms and Remote Service Suite upload/download connection.

Note: If you want to use the SMS messaging function from the Galaxy panel then you will need to emulate the external PSTN module, and setup the Galaxy External PSTN module settings see the IRIS Honeywell Galaxy Installation Manual, or the IRIS-4 6 Series Engineering Manual.

For further information on both the Galaxy installation and Remote Service Suite upload/download connection, please refer to the IRIS Honeywell Galaxy Installation Manual, IRIS-4 6 Series Engineering Manual or IRIS Remote Service App Client User Guide for Honeywell Galaxy range available from http://www.addsecure.com.

Note: For 2/3/4G it is not possible to configure the settings (e.g. APN) from the Galaxy keypad as the Galaxy has no entry method.

Connect the IRIS-4 dialler to the Galaxy Data bus as indicated in Section 6.3 "Connection", then power up the Galaxy control panel, if not already powered up.

IRIS-4 640D with 2/3/4G connection:

The 2/3/4G configurations are configurable via an SMS message from any mobile phone. If 2/3/4G is used, you will need to set the 2/3/4G APN at least, and possibly user name and password.

Note: SIM cards with a SIM Pin will require a PC/Laptop connected via USB for configuration.

You can do this by sending a text message to the phone number of the SIM card. The text should be in the format:

AT%G10='apn'%I2='username'%I3='password' If no username, password required the text format would be as followed:
AT%G10='apn'%I2="%I3="%G90="

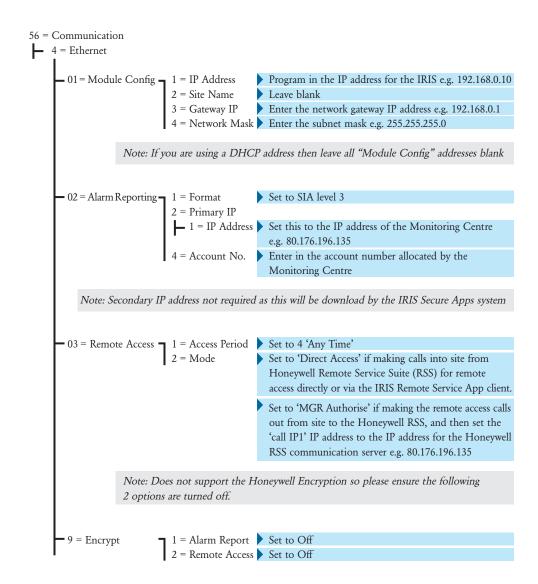
Where the 'apn' is the Access Point Name for the SIM, e.g. 'orangeinternet'. The 'username' is the user name and 'password' is the password for the sim card if required. Confirm with SIM card provider if unsure.

Note: Configure the 2/3/4G settings before the IRIS-4 6 Series is polling, as SMS configuration are rejected for security once the dialler is polling.

Alternatively, the information can be set via the IRIS Toolbox software on a PC/Laptop, which connects via the Micro USB connector. This is available from http://www.addsecure.com.

The configuration menu on the Galaxy panel that will need to be configured are located at menu option 56 (Communications), please enter the required information. Below is an example for the Galaxy Dimension v6.75 and above for other variant in both type e.g. Flex, Classic, G3, G2 or software version please refer to the IRIS-4 6 Series Engineering Manual.

You must enter Engineer Mode on the Galaxy to access these options.



Quick Installation and Maintenance Guide

After you have entered in the relevant information, exit Engineer Mode and the panel should now detect 2 new RS485 modules (Comms Mod and Remote Keypad (Dimension, G3, G2 and Classic panels)). If the new modules are not detected then you may need to power off the Galaxy panel, check the dialler connections, and power back on.

Now go back into Engineer Mode and send an ETHERNET ENGINEER TEST Alarm (refer Galaxy Dimension/Flex Installation Manual). Check to see if the Monitoring Centre has received this test alarm.

Note: If you are required to default the IRIS-4 dialler and start again you can do this by setting the primary IP address within the Galaxy menu 56.04.02.02 or Galaxy Flex menu 56.01.01.01.04.01 to an IP address of 127.0.0.1 and then send an Engineer test alarm.

You can now perform the alarm signals commissioning and sign off required by the Monitoring Centre.

Configuration from Texecom Premier panels via Serial TTL

The IRIS-4 6 Series has been fully integrated into the Texecom Premier Alarm panel range and most configurations can be configured from the panel keypad.

Note: 2/3/4G connections you will need to enter in the 2/3/4G settings (e.g. APN).

With the latest integration on the Texecom Premier Elite panel, this configuration is possible via the keypad. For older/different models, it is currently not possible to configure the 2/3/4G settings (e.g. APN) from the keypad, as the Texecom has no entry method.

Connect the IRIS-4 6 Series dialler via the TTL header to a free Texecom Com port header as indicated in Section 6.3 "Connections", then power up the Texecom panel, if not already powered up.

IRIS-4 640D with 2/3/4G connection:

The 2/3/4G configurations are configurable via an SMS message from any mobile phone. If 2/3/4G is used, you will need to set the 2/3/4G APN at least, and possibly user name and password.

Note: SIM cards with a SIM Pin will require a PC/ Laptop connected via USB for configuration.

You can do this by sending a text message to the phone number of the SIM card being used. The text should be in the format:

AT%G10='apn'%I2='username'%I3='password' If no username, password required the text format would be as followed:
AT%G10='apn'%I2="%I3="%G90="

Where the 'apn' is the Access Point Name for the SIM, e.g. 'orangeinternet'. The 'username' is the user

name and 'password' is the password for the sim card if required. Confirm with SIM card provider if unsure.

Note: Configure the 2/3/4G settings before the IRIS-4 6 Series is polling, as SMS configuration are rejected for security once the dialler is polling.

On the next page is a detailed description of the configuration setting for the latest Texecom Premier Elite range. If you have different version of the Texecom Premier Range or want to perform upload/download connection via Wintex then please refer to the IRIS-4 6 Series Engineering manual, IRIS Texecom Premier Installation manual or IRIS Remote Service App Client User Guide for Texecom range from http://www.addsecure.com.



Texecom Premier Elite Series (12, 24, 48, 88, 168, 640)

7 = UDL/DIGI Options 3 = Program Digi Set to the alarm format requested by the Monitoring Centre or customer i.e. Arc 1 Protocol Fast Format, Contact ID, or SIA level 2/3. Set this to the IP address of the Monitoring Centre in a 12 digit format i.e. Primary No 80.176.196.135 = 080176196135.Leave blank as the IRIS System will receive the secondary number from the Secondary No Monitoring Centre IRIS Secure Apps system. Account Number Enter in the account number allocated from the Monitoring Centre. Leave as the default 3. Dialler Attempts Report options The reporting options will change depending on the alarm format selected, please set up the various reporting option for the alarm event you wish to send to the Monitoring Centre. Enable the Connect via IP (Key press 7). Config 1 Config 2 Select the Comport the IRIS-4 6 Series dialler is connected to. (version 4 and above) 4 = Digi Options Enable the Digi (key press 1) should now see E on keypad option screen now. 5 = UDL Options 4 = UDL Password Must match the UDL password setup within Wintex. Set to 1 for use with the IRIS Remote Service App. 6 = Ring Count 7 = Setup Modules 2 = Setup IP Data Note: To use DHCP please leave the ComIP Address and Gateway blank/default values. 1 = ComIP Address Program in the IP address for the IRIS in a 12 digit format i.e. 192.168.0.10 = 192168000010. 2 = ComIP Port Program the Port number for Wintex connection normally 10001. Enter the network gateway IP address in a 12 digit 3 = ComIP Gateway format i.e. 192.168.0.1 = 192168000001. Enter the network subnet mask i.e. 255.255.255.000. 4 = ComIP Netmask 5 = Polling/SMG IP Set this to the IP address of the Monitoring Centre in a 12 digit format i.e. 80.176.196.135 = 080176196135. 3 = Setup GPRS Data 0 = Access Pnt Name Enter the 2/3/4G access point name for the SIM card you are installing. 1 = User Name Enter the user name for the SIM card if assigned. 2 = PasswordEnter the password for the SIM card if assigned. 8 = Com Port Setup

You can now perform the alarm signals commissioning and sign off required by the Monitoring Centre.

Set to IRIS IP Module.

14

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IRIS-4 6 Series

Quick Installation and Maintenance Guide

6.10.Testing

Once all configurations are complete, perform a full commissioning test with the Monitoring Centre. This will normally involve testing normal alarm transmissions from the alarm panel over all communication paths to the Monitoring Centre. Verifying acknowledgement of these alarms with the operators at the Monitoring Centre.

7. MAINTENANCE

There is no requirement for any onsite maintenance on the IRIS-4 6 Series.

If engineers want to carry out a maintenance inspection, please perform the following:

- Confirm the status of the IRIS-4 6 Series unit.
- Clear any faults on the dialler.
- Test the configured communication paths (Ethernet and/or 2/3/4G).
- Perform full test of alarms from the alarm panel and confirm acknowledgement of these by the operators at the monitoring centre.

The IRIS-4 6 Series dialler will give a visual indication of the current system status via the 'SYS LED'. If this is yellow constant the current setup of the dialler is reporting OK, yellow flashing means the dialler is reporting some trouble events.

SYS LED: Yellow Constant = OK Yellow Flashing = Dialler is reporting some trouble events

7.1. Confirm Current Status

The IRIS-4 6 Series will indicate the status via the LEDs as per the information in Section 4 "Board Configuration". For further information, please refer to the IRIS-4 6 Series Engineering Manual available from http://www.addsecure.com.

7.2. Communication Path Checks and Communication to Monitoring Centre

Test communication paths for both polling and alarm communications by using the following procedure:

• Confirm Poll LED On.

For the IRIS-4 640D dual path only

- Remove 2/3/4G antenna and confirm after
 3 minutes that the GSM & GPRS/3G LED are Off.
- Confirm Poll LED still On.
- Send an alarm from the alarm panel and confirm acknowledgement from the Monitoring Centre.
 This confirms the Ethernet path is functioning correctly.

For the IRIS-4 640D dual path only

- Reconnect the 2/3/4G antenna and wait approximately 5 minute and then confirm that the GSM & GPRS/3G LED are now On.
- Disconnect the Ethernet connection to the dialler and confirm after 3 minutes that the Ethernet LED is Off.
- Send another alarm from the alarm panel and confirm acknowledgement from the Monitoring Centre. This confirms the 2/3/4G path is functioning correctly.
- Reconnect the Ethernet and wait approximately
 5 minutes and confirm the Ethernet LED is now On.

If you have an IRIS-4 640D with dual paths enabled repeat these tests for the other communication path.

7.3. Test Alarm Panel Alarms and Communication to Monitoring Centre

Depending on the Monitoring Centre, engineers will now be required to perform alarm test and possibly other tests to the Monitoring Centre. Before leaving site, the engineer should obtain confirmation from the Monitoring Centre that all is working correctly.



Quick Installation and Maintenance Guide

8. SPECIFICATIONS

Transmission paths		620D 640D				
Ethernet						
Standard		UTP 10/100 Base T with auto-negotiation				
Connection		Rj45 socket for CAT5 cabling				
IP addressing		Dynamic (DHCP) or fixed				
Fault detection		Loss of Ethernet synchronisatio	n			
2/3/4G						
Frequencies		-	Penta band LTI	E (4G)		
		-	800/900/1800 1	MHz		
		-	2100/2600 MH	z		
		-	Dual band UM	TS (3G)		
		-	900/2100 MHz			
		-	Dual band GSM (2G)			
		-	900/1800 MHz			
Connection	Connection		SMA socket for antenna			
Fault detection		-	Loss of registration with network			
IP						
TCP ports (outbound)	53165 (Ala	nrms & Polling), 51292 (Diagnostic	& Reflashing), 100	01 (Upload/Download)		
Alarm transmission						
Interface to Monitoring Centre		IRIS Secure Apps or IRIS Management Suite via EN 50136-2 pass-through mode				
Serial interface to alarm par	nel	RS485, TTL, RS232 x 2 Note: RS232 cabling must not exceed 30 meters				
PIN Inputs interface to ala	rm panel	Maximum input voltage range (
		Input 'low' (alarm) threshold <	1V	Note: Cabling must not		
		Input 'high' (restore) threshold	> 2V			
		Internal pull-up impedance 10K	exceed 3 meters			

Transmission paths	620D	640D			
Fault reporting to the alarm panel	If the dialler is unable to poll to the monitoring centre it reports this to the alarm panel using a method dependent on the panel interface mechanism: <i>Dial capture</i> : The line voltage is dropped to simulate loss of a PSTN connection. <i>Serial:</i> Either regular polls to the interface are ignored or an explicit message is sent to the panel, depending on the serial protocol in use. <i>Pin inputs</i> : A relay output can be set open to indicate fault.				
Alarm protocols	SIA (level 1 to 3) reference SIA	DC-03-1990.01(R2003.10)			
	Contact ID reference SIA DC-	05-1999.09			
	Fast format (Scancom)				
Tamper detection reporting to Monitoring Centre	Serial interface, Pin inputs				
Fault reporting to Monitoring Centre	Transmission interface/path fault The IRIS dialler constantly 'polls' the monitoring centre to operational and to report any interface or transmission fau identified. If the dialler has more than one transmission papaths are monitored and faults are reported by an operation of all paths or the dialler fail this is identified by the loss of This allows the monitoring centre to monitor and calculate dialler's availability.				
Substitution protection and information security		ted and encrypted using a unique automatically updated every day.			
Relay outputs					
Maximum operating voltage	24V DC				
Maximum current rating	100mA DC				
Power supply					
Supply voltage	9V to 28V DC				
Typical current	101mA @ 12V DC	109mA @ 12V DC			
Maximum current	1A @ 12V DC				
Recommended external PSU	Note: For Radio Equipment I no longer than 3 meters in le	Directive the power cable needs to be			
Environmental					
Operating temperature range	-10°C to 55°C				
Operating humidity range	95% max., non-condensing				
Weights and dimensions					
Physical dimensions	12 cm x 9 cm				
PCB weight	60 grams				
Fully packaged weight	160 grams				

18