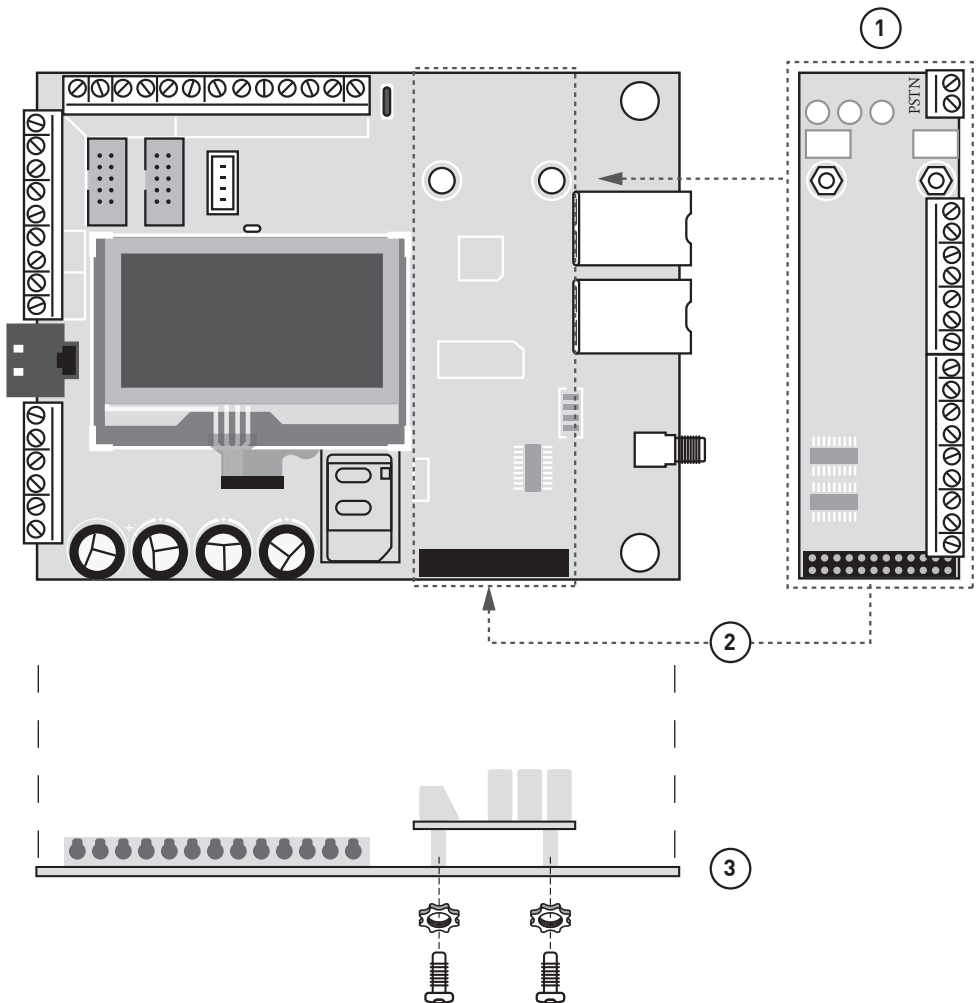# ADD:SECURE

IRIS-4
4 Series
Expansion Board

Quick Installation Guide

1. INTRODUCTION

The IRIS-4 4 Series Expansion Boards are available in two variants, EXT1 and EXT2, giving the option for additional pin inputs and the option for a standard PSTN analogue line interface (PSTN as an outbound transmission path for alarms).

- Pin inputs
- Pin inputs + PSTN Dial Out

The unit connects directly onto the IRIS dialler without any additional wiring and adds additional features configured using the integrated Touch screen.

2. PRODUCT FEATURES

FEATURES	IRIS-4 4 SERIES EXPANSION BOARD	
	EXT1	EXT2
Pin Inputs	12	12
PSTN Interface	—	•

3. INSTALLING THE IRIS-4 4 SERIES EXPANSION BOARD

Use the following procedure to install your IRIS-4 4 Series Expansion Board:

1. Power down the IRIS-4 dialler.
2. Align the Expansion board over the expansion socket and mounting holes, see front page ①.
3. Slowly, but firmly, push down the module onto the IRIS-4 until the expansion Pin header is fully inserted into the EXP header.
4. Turn over the IRIS-4 dialler and secure the 2 expansion pillars with the screws and washers supplied, see front page ② ③.
5. Now turn the IRIS-4 dialler back over and mount, or remount, the IRIS-4 and reconnect the power.
6. To confirm power is applied, look for the indicator SYS LED is flashing yellow on the dialler board.

3.1 Pin Inputs

With the IRIS-4 4 Series Expansion Board you now have 16 pin inputs that can be used for the following:

- Text messages via SMS (2/3/4G).
- SIA, Contact ID or Fast Format alarm messages over IP to the monitoring centre.

Note: These Pin alarm inputs can also be used when the dialler is 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 dialler, as shown below.
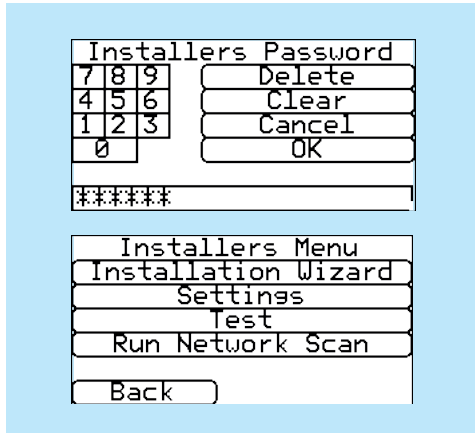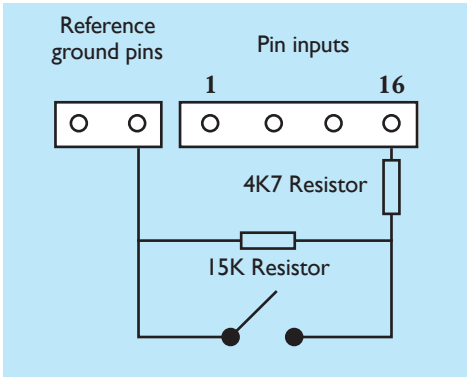
Opening the contact (i.e. loop is open circuit) generates an alarm signal. Closing the contact generates the equivalent restore signal.
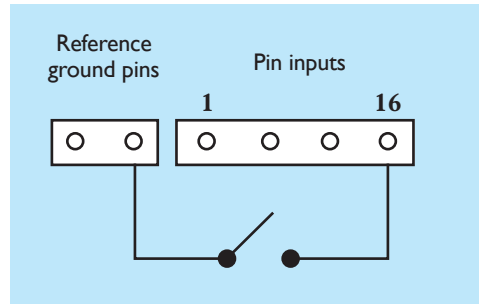

Via Sense Resistors

It is also possible to link the contacts to the IRIS dialler via sense resistors so that an open or short circuit tamper on the loop can be detected and the monitoring centre alerted, as shown opposite.

Note: For this feature to work correctly it is essential that the resistors are connected 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.

Reference ground pins **Pin inputs** **1** **16**

4K7 Resistor
15K Resistor

Installers Password
7 8 9 | Delete
4 5 6 | Clear
1 2 3 | Cancel
0 | OK
******

Installers Menu
Installation Wizard
Settings
Test
Run Network Scan
Back

3.2 PSTN

The EXT2 Expansion board also give you the option for a PSTN connection via the 2 screw terminal block. Connect the PSTN line to the PSTN screw terminals which are not polarity sensitive.

— PSTN Line
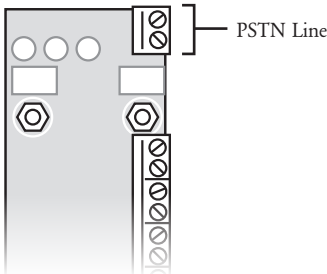
3.3 Configuration

To configure your dialler, use the following methods:

• Touch screen.
• 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

Configuration via Touch Screen

IRIS-4 can be configured directly using the on board touch screen using the supplied stylus.
Enter the installer code: Default is '111111' otherwise check installation notes for the installer code. Enter this code, then click 'OK'.
The Main Menu is displayed.

Installation Wizard

Select the Installation Wizard and follow the on screen prompts. You will now see additional option for the PSTN interface if using the EXT2, and a total 16 Pin alarm options.
Once you have completed the Installation Wizard and setup any additional panel interface configuration via the settings menu, you will need to check / configure the panel for the connection method using:
For further details on the features added to the IRIS-4 please refer to the full IRIS-4 Engineer manual, including multi-lingual versions, on our website at: http://www.addsecure.com

4. TEST ALARM PANEL ALARMS AND COMMUNICATION TO ARC

Depending on the monitoring centre (ARC) you will now be required to perform alarm test and possibly other tests to the ARC. If all is working correctly and you get confirmation from the ARC you can leave site.

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
Website: www.addsecure.com

5. SPECIFICATIONS

	Expansion Board	
Transmission paths	EXT1 (Pin Inputs only)	EXT2 (Pin Inputs + PSTN dial out)
PSTN Connection	–	Screw terminals
Connection fault detection	–	Loss of line voltage
Alarm transmission		
Interface to monitoring centre	IRIS Secure Apps or IRIS Management Suite, standard PSTN Line Receiver (E.G. SurGard)	
Pin Inputs interface to alarm panel	Maximum input voltage range 0V to +24V	
	Input 'low' (alarm) threshold < 1V	
	Input 'high' (restore) threshold > 2V	
	Internal pull-up impedance 10K to 3.3V supply	
Alarm protocols	SIA (level 1 to 3), Contact ID, Fast format (Scancom)	
Tamper detection reporting to monitoring centre	Pin inputs	
Fault reporting to monitoring centre	Transmission interface/path fault	
Environmental		
Operating temperature range	-10°C to 55°C	
Operating humidity range	95% max., non-condensing	
Weights and dimensions		
Physical dimensions	3.3 cm x 11 cm	
PCB weight	38 grams	
Fully packaged weight	73 grams	

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-4 have the following safety classifications:
• Dial capture interface: SELV suitable for connection to the TNV interface of single line telecommunications equipment such as telephones, fax machines, etc.
• Power interface: SELV for connection to a DC supply
• Inputs: SELV for connection to alarm output pin.

CONFORMANCE
European Directives
The IRIS-4 complies with the following European Directives:
• 1999/5/EC (Radio & Telecoms Terminal Equipment Directive)
• 2006/95/EC (Low Voltage Directive)
• 2004/108/EC (Electromagnetic Compatibility Directive)

EN50131, EN50136 (VdS Certified)
The dialler is compliant to the requirements of European Standards:
EN50131-1: 2006 & EN50131-10: 2014
EN50136-1: 2012 & EN50136-2: 2013
Security Grade 4
ATS-SP6 over Ethernet, ATS-SP5 over GPRS/3G, ATS-DP4 (IRIS-4 440)
When using PSTN, ATS-DP1 (IRIS-4 4 Series) – note the PSTN interface is only compliant when used in a dual or three path installation.
EN54-21 CPR (VdS Certified)
EN54-21 CPR fire approved

CE