IRIS Touch 4 Expansion Board Quick Installation Guide Version 1.0

CE | EN 50131/6 Independently certified | EN54-21 CPR | VdS

1. Introduction

Figure 1

The IRIS Touch 4 Expansion Boards are available in two variants, 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 (See Figure 1).

This manual describes the installation of the IRIS Touch 4 Expansion Boards. For further details on the features added to the IRIS Touch 4 please refer to the full IRIS Touch 4 Engineer Manual, including multi-lingual versions. Available on our website at: http://www.chironsc.com/downloads_security.html

2. Product Features

Features	IRIS Touch Expansion Board	
	Pin Inputs	Pin Inputs + PSTN Dial Out
Pin Inputs	12	12
PSTN Interface	–	●

Figure 2

3. Installing the IRIS Touch Expansion Board

Use the following procedure to install your IRIS Touch Expansion Board:

1. Power down the IRIS Touch dialler.

2. Align the expansion board over the expansion socket and mounting holes (see Figure 2).

3. Slowly, but firmly, push down the module onto the IRIS Touch until the expansion Pin header is fully inserted into the EXP header.

4. Turn over the IRIS Touch dialler and secure the 2 expansion pillars with the screws and washers supplied (see Figure 3).

5. Now turn the IRIS Touch dialler back over and mount, or remount, the IRIS Touch 4 and reconnect the power.

6. To confirm power is applied, look for the indicator SYS LED is flashing yellow ⬭ on the IRIS Touch dialler board.

Figure 3

Screws

3.1. Pin Inputs

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

- Text messages via SMS *(GPRS/3G)*.
- 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 (see Figure 4).

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 (see Figure 5).

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.
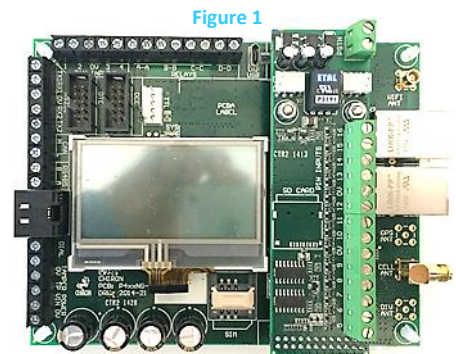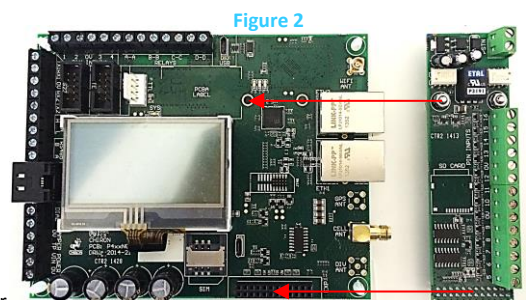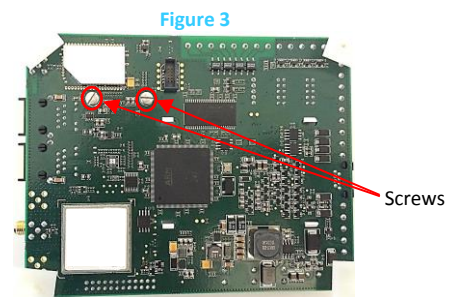
Figure 4

Reference ground pins | Pin inputs 1 ... 16

Figure 5

Reference ground pins | Pin inputs 1 ... 16

4K7 Resistor

15K Resistor

Figure 6

PSTN Line
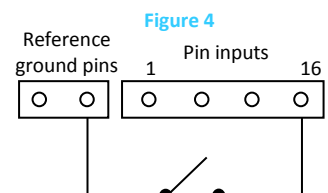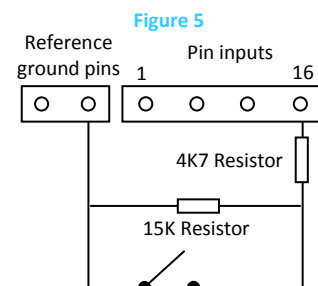
3.2. PSTN

The Pin inputs + PSTN Dial Out Expansion Board also give you the option for a PSTN connection via the 2 screw terminal block (see Figure 6).

Connect the PSTN line to the PSTN screw terminals which are not polarity sensitive.

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.chironsc.com/downloads_security.html.

Configuration via Touch Screen

IRIS Touch 4^{NG} 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.


```
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
```

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 Pin inputs + PSTN Dial Out, 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 Touch 4^{NG} please refer to the full IRIS Touch 4^{NG} Engineer manual, including multi-lingual versions, on our website at: http://www.chironsc.com/downloads_security.html

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.

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	

Conformance

European Directives

The IRIS Touch 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 Touch 440NG)

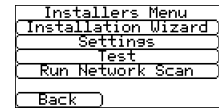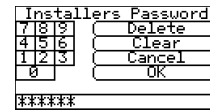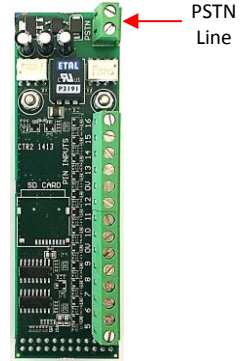When using PSTN ATS-SP2 over PSTN, ATS-DP1 (IRIS Touch 4xxNG)

Environmental Class II

EN54-21 CPR (VdS Certified)

EN54-21 CPR fire approved

The information contained is supplied without liability for any errors or omissions. No part may be reproduced or used except as authorised by contract or other written permission. The copyright and foregoing restriction on reproduction and use extend to all media in which the information may be embedded.

© 2015 Chiron Security Communications AG

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 Touch 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.