TM

Installation Instructions

Manual 6 - Alarm Input Module

PY-AIW

Use this manual in conjunction with :

- Manual 1 : Operating Instructions
- Manual 2 : Network Wiring

The manuals supplied with the separate items in your system

Please read this manual completely before installing your Alarm Input Module

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Product Safety

Please follow these instructions as you install your Pyramid module and keep them for future use. If you have any problems contact your Baxall agent.

WARNING: Installation is only to be carried out by competent, qualified and experienced personnel

WARNING: Wire in accordance with your national wiring regulations. Failure to do so can result in injury or death by electric shock

WARNING: Use a class 2 isolated power supply for the 12V DC

Glossary Definitions

Mains - this refers to the mains supply voltage labelled on your alarm input module power supply

N/O - this refers to alarm relay contacts which are normally open when not alarmed

N/C - this refers to alarm relay contacts which are normally closed when not alarmed

Product Reliability

CAUTION: Your module is susceptible to damage from Electrostatic Discharge (ESD)). Take normal ESD precautions when handling your network card. ESD prevention kits are available from most electronics distributors.

CAUTION: Do not exceed the voltage and temperature limits given in the specification.

CAUTION : Switch off the power before fitting a network card.

Electromagnetic Compatibility (EMC)

CAUTION : This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CAUTION : If you are using the PCB version of this product in way other than correctly installed in our Pyramid System weather-proof boxes, then it is your responsibility to meet EMC requirements.

This product is intended for use in general purpose CCTV applications in a residential, commercial or light industrial EMC environment, refer to Baxall Security before using the product in an industrial EMC environment.

The product must be installed in accordance with good installation practice for EMC to enable the product to function as intended and to prevent EMC problems.

Contact Baxall Security Technical Support Department to obtain a specification defining the acceptable levels of product degradation with regard to EMC immunity.

MANUFACTURER'S DECLARATION OF CONFORMANCE

CAUTION : The declaration of conformance applies only to the boxed version and PCBs which are correctly installed in our Pyramid System weatherproof box.

Baxall Security Ltd declare the Pyramid module supplied with this manual is compliant with the essential protection requirements of the EMC directive 89/336 and is tested to the requirements of standards EN 55022 for emissions and IEC801 parts 2, 3 and 4 for immunity. The product has been approved in accordance with TCF95/11/01.

Unpacking

Keep your packaging for use if your alarm input module is stored for a time or needs to be returned for whatever reason. The packaging should contain:-

- *Your PY-AIW*
- *An A4 Module Description sheet (for installation details)*
- *These Instructions*
- *Two identical bar-codes*

Check the product code on the serial number label. If you have an incorrect item or it is damaged then inform the suppliers and carriers immediately. If this is the case then do not attempt to use your alarm input module.

These Instructions

These instructions allow you to install your alarm input module, they do not contain any application information. If you are unsure of where, when or why to use your alarm input module then contact a CCTV installation company for advice.

The connection diagram is shown in figure 1. Using this follow the instructions. The instructions are listed by connector number.

Bar Coding

All the Pyramid modules are supplied with two identical bar-codes, remove one and affix it to the module description sheet, remove the other and affix it to the module.

The bar code gives the unique 48-bit module address. Make a careful note on your module description sheet of all your installation details and the location of the module. Then during subsequent installation using the Windows™ installation tool the module address can be entered (using a bar code reader) with the description.

We recommend that during a system installation you store the module description sheets in a ring-bound file, and keep them for reference after the installation is complete.

Connections

Below is a description of each of the connectors in the following order:

- 12V power,
- anti-tamper connection
- test connector
- alarm connectors
- network connections
- power connections.

Your Alarm Input Module is enclosed in an IP65 weather proof box and has a terminal block mounted on the metal base plate. This external terminal block is provided for earthing the metal base plate and connecting the mains to the power supply (mains to 12V DC, class 2).
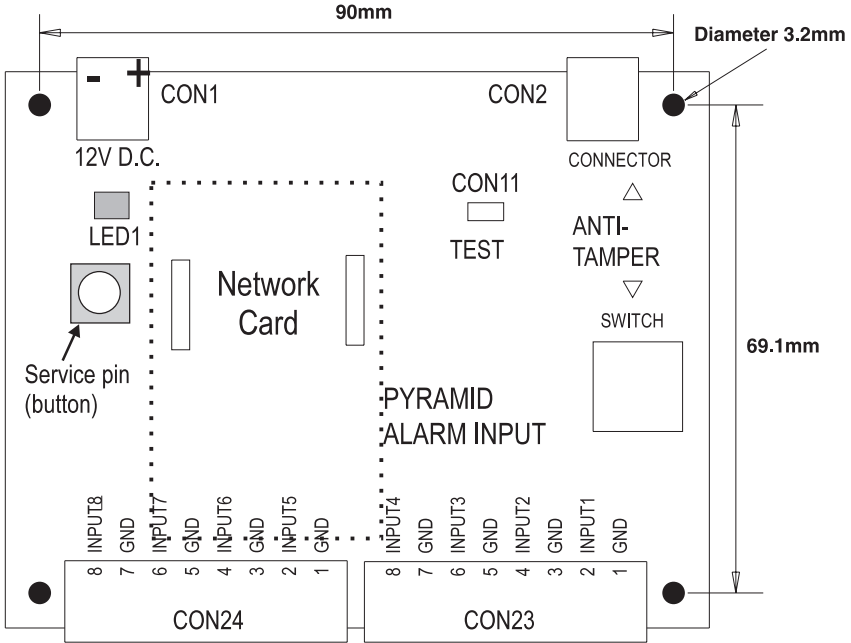

Figure 1. Alarm Input PCB connections

CON1

CON1 is for the PCB power connection, this is already connected.

The PCB requires a +12V DC, 250 mA class 2 power supply.

Referring to Figure 1 connect the +12V DC and 0V (return) to CON1.

If the polarity is correct when the power is switched on then LED1 (see Figure 1) will be green. It will appear red for an incorrect polarity.

CON2

CON2 is for an anti-tamper switch input. It is connected in parallel with the anti-tamper switch shown on figure 1. The anti-tamper switch has a spring fitted and so you cannot use CON2 (unless you first remove the spring). On the PCB version CON2 is a normally closed (N/C) anti-tamper input.

If you are not using the built in anti-tamper switch then connect CON2 on figure 1 to your anti-tamper switch in a N/C configuration.

CON11

CON11 reverses the sense of all the inputs for test purposes, it should not be linked for normal operation.

CON23

CON23 contains inputs 1 to 4 and their associated ground (GND) connections.

Connect each input in turn to either, a N/O or N/C alarm contact and connect its returning wire to a ground (GND) on CON23.

CAUTION : Do not apply any external voltages to the inputs as this can damage your alarm input module

You can adjust the status of the alarms (N/O, N/C or not connected) during the setting up of the system.

Make a note on your module description sheet of the types of your alarms, their state (N/O, N/C or not connected) and their location. For Example : PIR, N/O, Front Lobby.

CON24

CON24 contains inputs 5 to 8 and their associated ground (GND) connections.

Connect each input in turn to either, a N/O or N/C alarm contact and connect its returning wire to a ground (GND) on CON24.

CAUTION : Do not apply any external voltages to the inputs as this can damage your alarm input module

You can adjust the status of the alarms (N/O, N/C or not connected) during the setting up of the system.

Make a note on your module description sheet of the types of your alarms, their state (N/O, N/C or not connected) and their location. For Example : Door contact, N/C, Loading Bay 2.

NETWORK

CAUTION : To avoid damaging your module switch off the power before fitting the network card

Switch off the power, fit a network card in the position indicated on figure 1.

Connect the cable provided from the network card to the filter board mounted on the metal base plate.

Connect the network to the filter card. The wiring diagram is included on the sheet provided with the network cards.

MAINS POWER

WARNING : Ensure that the power is switched off before connecting the mains wires

WARNING : The module must be earthed

Connect the Live, Earth and Neutral wires from the mains supply to Live, Earth and Neutral on the external terminal block.

Check that all the wiring is correct and switch on the power.

WARNING : Your Alarm Module now contains mains voltages

LED1 (see figure 1) indicates the polarity of the 12V DC. For correct polarity it is green, incorrect it is red.

Replacing the Lid

WARNING : Refit the lid securely to prevent unauthorised access

Tighten the four securing screws with an appropriate tool until they cannot be undone by hand. Do not exceed a torque of 4 Nm.

Maintenance

Once your alarm input module is correctly installed and commissioned it requires no routine maintenance.

Specifications

Features

Bar coding for ease of installation

Automatic configure and remote setup

Anti Tamper switch detects opening of lid, also external connection provided.

All connections removable screw terminal blocks

Network

Plug in network PCB, FTT10 (Standard) also Fibre, RS485

Inputs

8 inputs configurable (over the network) for N/O, N/C or masked

Power

Board Power 12V DC ± 10%, 1A class 2

Consumption 250 mA (12V DC)

Physical

Weight 4.5 kg

PCB weight 0.2 kg

IP65 case

Size 280 x 280 x 130 mm

Board size 100 x 65 x 20 mm (excluding mounting pillars)

Temperature Specification

Operational temperature limits:-

-10ºC to +50ºC at 10% to 80% relative humidity (non-condensing)

Storage temperature limits:-

-20ºC to +60ºC at 10% to 95% relative humidity (non-condensing)

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Stockport, England

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