

# Xtralis VIS-IR™ Installation Instructions

These installation instructions provide essential information for installing Xtralis VIS-IR Failsafe Thermography detectors (FTD) in accordance with the system design. Additional installation and product documentation is listed below in the Reference Documents section.

## Prerequisites

- A completed system design.
- A 24V DC Power Supply, compliant with local codes and standards.
- Ethernet connection for initial configuration of the detector.
- 0.2 mm<sup>2</sup> to .75 mm<sup>2</sup> (24 - 20 AWG) wiring for relays.
- A PC or laptop installed with Xtralis ViSM software for initial configuration.
- SD Card formatted per instructions in Product Guide (Doc. 36218).
- Router for DHCP IP allocation to detector.
- 100/1000Mbps Ethernet Switch (if required).

## Reference Documents

Additional installation and product information is contained in the following documents, which are available for download from Xtralis website ([www.xtralis.com](http://www.xtralis.com)).

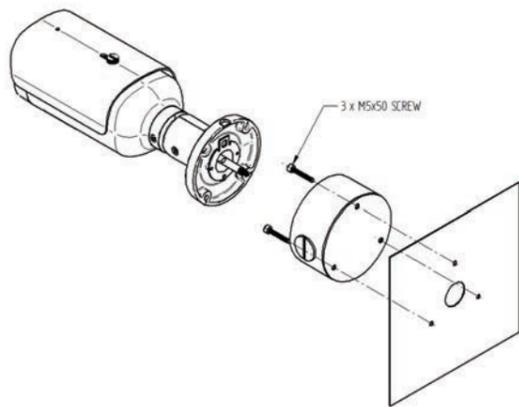
- 36218 - Xtralis VIS-IR Thermography Detector Product Guide
- 36575 - Xtralis VIS-IR Theoretical Spot Size Calculator User Guide

## Installation

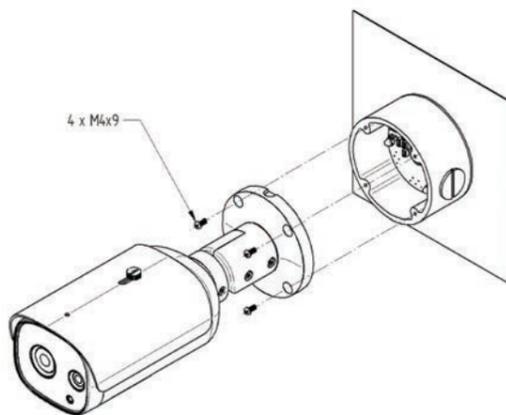
The detector comes with prefitted junction box. It would be preferable to mount the junction box prior to installing the detector.

The detector can be wall mounted as explained below:

1. Prepare the detector,
2. Unscrew the junction box,
3. Remove the wiring from the detector,
4. Screw the junction box onto the wall,



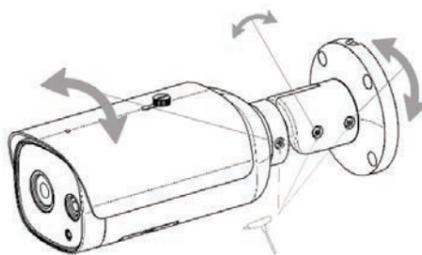
5. Perform field wiring as per the "Wiring" section,
6. Bring in the detector and connect the wires and then screw the detector housing to the junction box,



7. Power up the device after the connection to the router is complete, and ensure the router is powered up for camera to acquire IP.

## Adjusting Camera Position

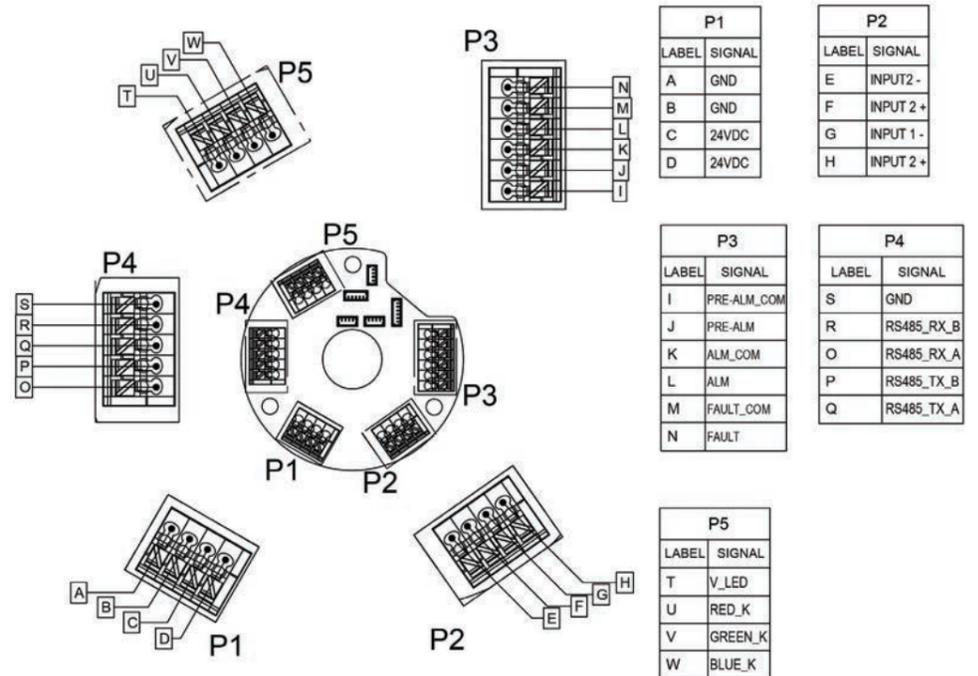
If any adjustments are required for the camera positioning, loosen the screws, adjust the position and then tighten the screws.



## Wiring

The junction box can be pre-mounted and field wiring can be done by an electrical contractor prior to the detector installation and commissioning. The connectors for the field wiring are push-in type connections, fitting 0.2~0.75 mm<sup>2</sup>/24~20 AWG wires. The cables coming from the detector are fitted with connectors that simply plug into the termination board.

The Ethernet cable is fitted with a female RJ connector.



## Power and Relay Wiring

**Power:** There are two sets of power terminals on the junction box. Connect a 24 VDC power supply which is compliant with local fire protection codes and standards to the P1 connector, and if required loop out to another detector via the P1 connector. The detector will not operate if the power supply polarity is reversed. When powering multiple detectors, the installer should ensure that the total power consumption should be less than 120W, so it is possible to connect 5X detectors.

**Relays:** Relays on junction box are used to communicate Pre-Alarm, Alarm and Fault to the Fire Alarm Control Panel (FACP). Fault relays are energised during normal operation while Pre-Alarm and Alarm relay are energised only when Pre-Alarm and Alarm conditions are met. Relay contacts are rated 1 A @ 30 VDC.

## Configuration

For initial configuration, use the Ethernet cable that is fitted with a female RJ connector and Xtralis ViSM software. Please see (36218 - Xtralis VIS-IR Thermography Detector Product Guide) for detailed instructions.

To add a new detector, click the icon (new detector,+), select a detector from the available detector list and click *Select*.

When a new detector is added, it is necessary to define the below:

**Descriptive Name:** the identification for the detector.

**Layout:** the location of the detector on the *Detector* window.

**Environmental Temperature:** the air temperature of any object or environment that the detector is analyzing.

**Atmospheric Temperature:** the temperature of the atmosphere.

**Relative Humidity:** the percentage of the ambient humidity.

**Transmissivity:** the value of transmissivity.

**Temperature range:** the temperature measurement range, which needs to be selected within the full range (-5 to +450°C).

**Detection Regions:** the detection areas for temperature analysis can be created, edited and deleted through the menu *Working Area* → *Regions*. You can create a new detection area by clicking the icon (Create region, +).

**Alarms or Pre-Alarms for Temperature Analysis:** they can be defined, edited and deleted through the menu *Working Area* → *Alarms*. To create a new alarm, click the icon (Register new alarm, +).

Once an alarm is created it remains in the *Alarm* list in *Working Area* → *Alarms*. Selecting the *Active* option, alarms can be triggered when detecting a dangerous condition already predefined. The alarms can be activated/ deactivated from the *Alarm* list.