



## A & E Specification – GJD 'D-TECT®' Detector Wireless PIR

### 1. Description

The unit shall be designed for use as an external wireless detector. The unit shall meet or exceed the following design and performance specifications.

### 2. Key Product Characteristics

Detector models shall ideally be from the D-Tect X® range. They include well-proven and unique features with innovative design elements that leverage and maximise the benefits of tried and tested technology. They are designed to keep nuisance alarms to an absolute minimum.

#### Product features and characteristics shall include:

- Advanced signal processing algorithms & unique optical systems to minimise nuisance alarms
- Quad element pyro (PIR) infra-red scanner module with electronic range adjustment
- Integral masking curtains and adjustable pan and tilt sensor to allow the field of view of the detector, camera and illumination to be matched
- Variable range selection with at least two options e.g. 10m and 20m selectable
- Units can be safely mounted up to 4m. Optimum mounting height 3m
- Covert sensor module. So the would be intruder will have no indication of where the detector is looking

### 3. General

- a) Detection distance options: range selectable including volumetric and narrow field of view alternatives
- b) Field of view: ideally adjustable up to 20 meters wide for volumetric and 4 meters for narrow beam at max range
- c) Mounting Height: 1.5 - 4m. Optimum around 3m
- d) Detection Speed: Typically 0.2 – 5m/s
- e) Sensor: pyro electric: quad element pyro with sunlight shielding.
- f) Resistance to sunlight: up to 50,000 Lux
- g) Optics: Fresnel lens with short, medium and long range beam patterns
- h) Front window: covert (concealed sensor module) offering pan and tilt functionality behind HDPE cover, IR transmissive
- i) Sensitivity adjustment: program button with LED or DIP switches to change Pulse Count 1, 2
- j) Walk test: walk test mode option to aid set up and commissioning

- k) LED disable: ability to turn off LED's after commissioning
- l) Relay timer: selectable times to reduce repeat alarms
- m) Front and rear tamper switches in compliance with BS8418
- n) Digital temperature sensitivity adjustment
- o) Options that have been designed for tropical environments
- p) Supervision transmission
- q) 868MHz or 433MHz radio frequency
- r) Line of sight communications at least 250 meters
- s) Optional repeater

### 3. Interfacing

- 3.1 Multi-channel receiver housed in a weatherproof enclosure
- 3.2 Receiver housing able to accept 20mm cable glands

### 4. Electrical

- 4.1 Receiver
  - 4.1.1 Power supply: Ideally 12-24 V AC/DC or 9-15V DC
  - 4.1.2 Power consumption: standby < 25mA @ 12VDC nominal / channel
  - 4.1.3 Alarm relay output: Selectable or fixed N/O or N/C / channel
  - 4.1.4 Low battery output / channel
  - 4.1.5 RF Loss output / channel
  - 4.1.6 Tamper output / channel
- 4.2 Detector
  - 4.2.1 Powered by integral batteries
  - 4.2.2 Battery life at least 12 months under normal operating conditions
  - 4.2.3 Power-on settling time: Typically 180 seconds from power on
  - 4.2.4 Standby current <30 uA
  - 4.2.5 Low battery warning when battery life reduced to approximately 3 months power

### 5. Physical

- 5.1 Receiver
  - 5.1.1 Mounting options: direct wall mount
  - 5.1.2 Material: heavy-duty plastic
  - 5.1.3 External Dimensions: 210mm x 180mm x 79mm
- 5.2 Detector
  - 5.2.1 Mounting options: direct wall mount or pole mount clamp and vandal guard option
  - 5.2.2 Material: heavy-duty plastic or high impact zinc alloy
  - 5.2.3 Housing colour: Silver, Chrome, White or Black
  - 5.2.4 External Dimensions: 150mm x 120mm x 120mm
  - 5.2.5 Weight: 0.9Kg Gross

### 6. Environmental

- 6.1 Operating temperature: -20° to +55°C
- 6.2 IP Rating: minimum IP55, IP65 preferred
- 7. Warranty
  - 7.1 2 Years

