GJD1030 D-TECT *Inovonics® Enabled* Wireless Installation Manual

The D-TECT Inovonics MUST be learnt to the control panel/receiver BEFORE it is mounted in its final location. Please see page 4 of this manual and the Inovonics manual for details.

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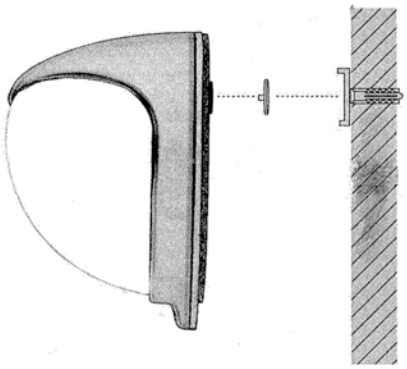

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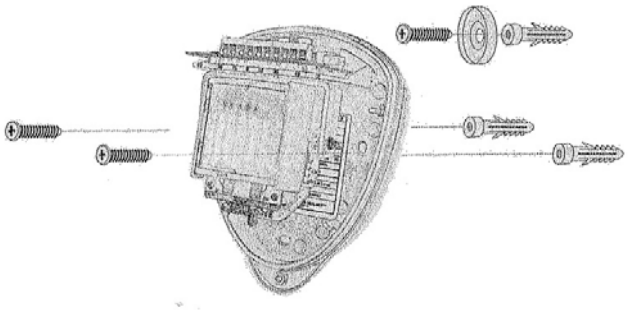

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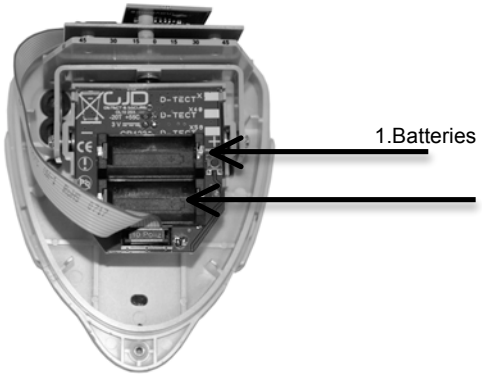

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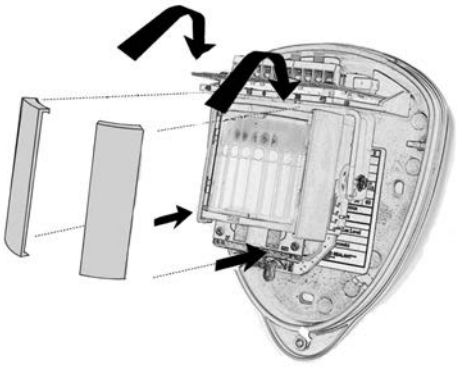

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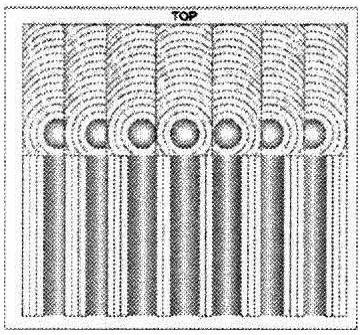

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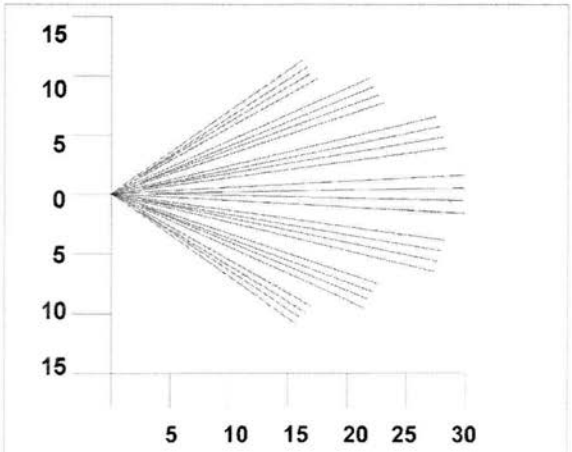
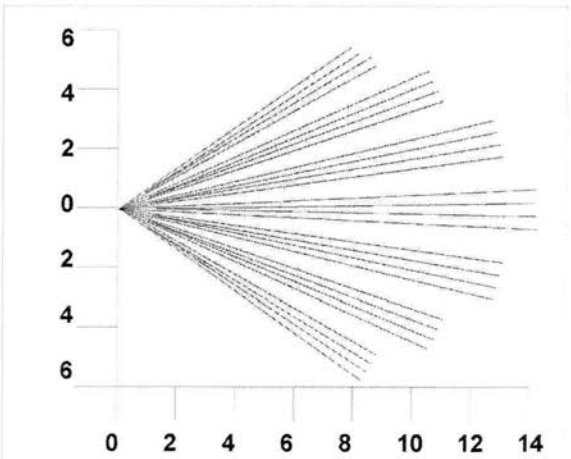


Beam Pattern set to maximum range - Masking top section of lens will reduce range to 20 metres



Beam Pattern set to minimum range. Masking top section of lens will reduce range to 6 metres

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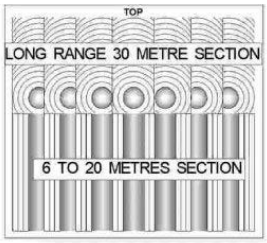

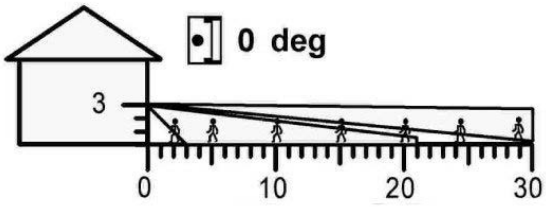

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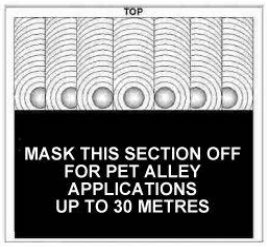

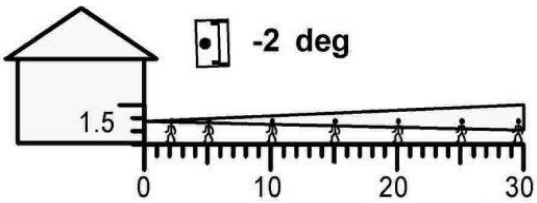

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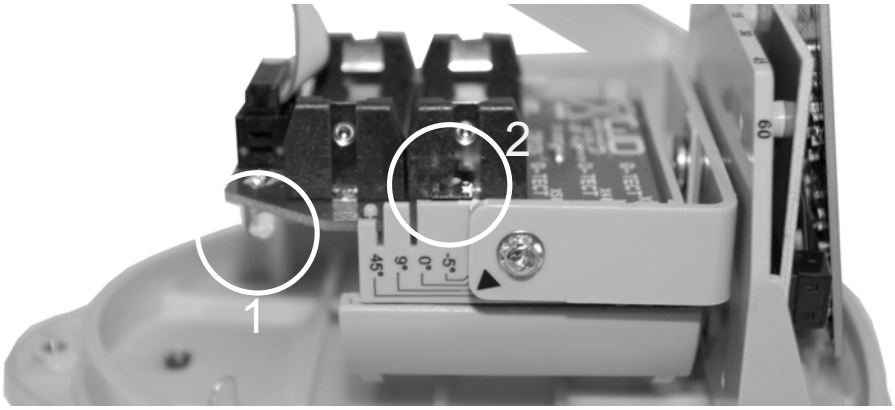

Packaging

The package contains:

- 1x wireless detector
- 3x wall plug & screw sets
- 2x additional curtain shutters
- 1x tamper cup
- 2x tamper caps (different lengths)
- 1x plastic opening tool
- 1x installation manual
- 1x drilling template for fixing holes

GJD's *Inovonics*® enabled *D-TECT*®

The wireless detector uses a quad pyro where both sensors must trigger to cause the detector to signal an alarm ensuring precise and reliable presence detection.

Programmable options include a variable pulse count and a choice of detection ranges up to 30 meters.

The dual-axis tilt sensor allows 180° of pan and 90° of tilt. This increases the speed of the outdoor installation and provides accurate aiming of the detection pattern.

Precision electronics, digital white light filtering, and double shielding eliminates false alarms from the sun.

The detector housing has a professional appearance with the sensing module hidden behind the front cover.

Quick installation

1. Place two CR123 batteries into the detector battery holders. Observe the polarity. See figure 4, item 1. The detection LED will flash 3 times.

2. Enter the learning menu on the control panel/receiver. To learn the device follow the instruction given in the Inovonics documentation.

3. Press and release the programming button once to learn the device. (Fig 10, item 2).This action also activates walk test mode. **Note: The learn process may take up to 10 seconds from pressing the programming button. Learn will be confirmed on the control panel/receiver.**

4. The detector will take approximately 3 minutes to settle. The detection LED is now enabled for five minutes.

5. Mount the detector following the instructions below.

The default settings are:

- Range: 30 meters
- Pulse count: 1

Fitting the detector

Protect the electronics against water. Trapped moisture can affect or damage the unit.

Mounting holes should be sealed from within the detector using acrylic (*non*-silicone based) sealants. **Silicone sealants must not be used as vapours may corrode the electronics and metal parts.**

Note: The Inovonics transmitter is supplied with the ES link disabled. If this is required then the transmitter module will need to be removed to enable the link then replaced.

Ensure the detector's field of view is unobstructed.

Mounting the detector:

1. Drill the wall to accept the fixing screws and the tamper cup (if used). See Figures 1 and 3.

   A hole-drilling template is provided.

   Notes

   - Use the tamper cup on uneven surfaces.
   - Optimum height for the detector is 3m. Higher mounting heights will result in reduced detection range.

2. Remove the cover assembly using the plastic opening tool and by loosening the locking screw. See Figure 2.

3. Screw the unit to the wall. Ensure the tamper pin is correctly located and the tamper switch is closed.

   Two different length tamper feet are provided for uneven surfaces. The tamper foot is a push-fit see Figure 1.

4. When the detector is aligned, powered and programmed:

   a. Fit the cover.

   b. Loosely tighten the locking screw.

   c. Push the two side plastic latches into the base.

   d. Tighten the locking screw.

Batteries

Only use CR123 3 V Lithium batteries.

Observe correct polarity when fitting.

Battery safety information

- Do not put in a fire
- Do not charge
- Do not heat
- Do not short circuit
- Do not disassemble
- Only fit batteries of the same type and voltage

To preserve battery life the detector has a 2-miniute sleep timer after detection. This is reduced to 8 seconds during walk test. See also “Walk test” section on page 4.

Beam alignment and masking

The multifunction lens fitted to the GJD1030 detector focuses seven long-range and seven medium to short-range curtain beams. The circuitry detects changes in heat and movement in the beam pattern. The presence of trees, shrubs, ponds, boiler flues, black tarmac and animals should be considered when positioning the detector.

PIR sensors are more sensitive to movement across the beams and less sensitive to movement directly towards or away.

The detector is fitted with two sliding shutters to reduce the detection angle.

The shutters are clipped to the pan and tilt module as shown in Figure 5. Each vertical section of the Fresnel lens gives a coverage pattern of approximately 10 degrees.

An additional set of shutters is provided for further adjustment.

Figures 7, 8 and 9 show typical beam patterns. A pet alley can be created my applying the lens mask as shown in Figure 9.

Programming

Figure 10 shows the position of the programming button (2) and the programming LED (1).

Table 1: Programming settings

Option		1	2	3
1.	Range (m)	10	20	30*
2.	Pulse count	1*	2	

- Default settings

Pulse count is the number of detections before signalling an alarm. Pulse count 1 is most sensitive.

Changing settings:

1. Press the programming button once for range and twice for pulse count.
2. Wait until the programming LED turns off (typically 4 seconds).
3. Count the number of times the LED flashes to determine the current value for that option.
4. Press the programming button to select the value number for the new setting. E.g. to change the range to 20m, press twice.

The LED blinks twice to indicate that the new value was set.

Programme settings are stored in non-volatile memory.

Resets

1. Remove the batteries.
2. Press and hold the programming button (See Figure 10, item 2).
3. Refit the batteries.
4. After the programming LED has flashed, release the programming button.

Learning to control panels/receivers

When the control panel/receiver is in learn mode press the detector programme button once. After about 10 seconds the wireless detector will be learnt on to the control panel.

Walk test

In walk test mode, the detection LED option is set to ‘ON’ and the detection LED will illuminate on detection.

To enter the walk test mode, press the programming button once. The unit can now be aligned.

Walk test mode ends automatically five minutes after the last detection.

Do not conduct walk tests with the cover removed.

The range of the detector increases without the protective front cover. Therefore the front cover must be fitted to establish the correct beam pattern. Adjust the range as necessary. Pan and tilt the detector module over the field of view to obtain the correct coverage.

Specifications

Detection range	Programmable: 10, 20 or 30m
Coverage	10 to 70° detection angle, 30 x 25m coverage max.
Adjustment	180° pan, 90° tilt
Fresnel lens	28 zones for each detection element, which can be masked with the curtain sliders
Optics	Double silicon shielded quad element eliminates 50,000 Lux of white light
LED	Red alarm
Batteries	2x 3 V CR123
Current	30 µA
Pulse count	1 or 2
Control	Digital micro. with non-volatile memory
Walk test	Output test mode with LED indication
Operating temperature	−25 to +65°C
Housing	High impact ABS plastic with HDPE cover, UV stabilised
Dimensions W x H x D	145 x 145 x 120mm
Weight	268g Net, 425g Gross
Mounting height	Variable up to 6m Optimum height 3m

Compliance

Manufacturer	GJD Manufacturing Limited, Unit 2, Birch Business Park, Whittle Lane, Heywood, Lancashire, OL10 2SX, UK
Certification	CE
R&TTE	This device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Environmental class	IP65
	2002/96/EC (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.

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