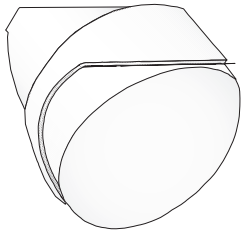


GJD OPAL XL OUTDOOR PIR DETECTOR

090399



GJD OPAL XL detectors are designed for outdoor use in conjunction with GJD indoor controllers:-
SAPPHIRE MK3 LIGHTING CONTROLLER
EMERALD MK3 LIGHTING CONTROLLER
2 AND 4 ZONE SOLITAIRE
TOUCH LIGHTING CONTROLLERS and
2 ZONE SOLITAIRE EXPANSION UNIT/s

SPECIFICATIONS:-



RANGE	(adjustable)	10/35 metre 90deg GJD Multifunction Lens With Lens Masking Beam facility (supplied)
LIGHT LEVEL	(adjustable)	3 LUX to DAYLIGHT
VOLTAGE		9 to 15V d.c. at 6mA reverse protected
BEEP OUTPUT	(A)	Switching - ve (24hour) 25mA max solid state NPN open collector
LIGHT OUTPUT	(S)	Switching - ve (Darkness) 25mA max solid state NPN open collector 1 minute longer than last detection.
ADJUSTMENT		180 deg Pan & 90 deg Tilt.
TEMPERATURE		-20 to + 55 Centigrade IP55
WARRANTY		12 months

OPAL XL OUTDOOR DETECTOR:

Ensure the detector is mounted on a vertical surface. The electronics must be protected against water during installation as trapped moisture can effect or damage the unit.

The GJD Multifunction lens fitted to the OPAL XL detector produces 9 long range beams and 9 medium to short range curtain beams. Movement across the beams produces the best response and range whilst movement towards the detector will be less responsive.

Floodlights should be positioned at the side or above the detector far enough away not to cause problems due to heat detection. A minimum of 60cm (2 feet) is recommended, provided the detector is not in direct radiated heat from the floodlight.

The unit detects a change in heat in its field of view, therefore sunshine, trees, shrubs, ponds, washing, central heating boiler flues and animals should be considered. In changing sunny or adverse windy conditions random detections can occur, this is normal.

If the detector is connected to a GJD controller a BEEP sounds for a short duration every time a detection takes place day or night, multiple beeps indicates more than one detection has taken place.

During darkness lighting is automatically controlled by outdoor OPAL XL detectors to provide movement activated lighting.

MOUNTING AND INSTALLATION:

First remove the front polythene cover by pulling forwards.

Remove the lens module by pulling it out of the forked bracket.

Drill the wall to accept both the top fixing and the lower cable entry hole. The holes should be on 16mm centres, one vertically above the other.

Feed standard 4 core alarm cable through the wall into the lower cable entry hole and remove 120mm of outer insulation and adjust the cable so that the outer insulation enters inside the case by a few millimetres. Bare the wires and connect to the terminal block (this block plugs onto the circuit board and can be removed to make connections easier).

Replace the terminal block the correct way round and clip in the lens module into the fork bracket CAREFULLY the correct way up to provide the beam coverage required.

At this stage, (weather permitting), the unit can be walk tested with the front cover fitted.* Pan and tilt the lens module to obtain correct coverage area and adjust the range (see fig 1 below) until the correct coverage is obtained.

LIGHT LEVEL:

The unit is supplied with the light level control set as shown in fig 1, which is suitable for most applications. In high artificial light levels caused by street lighting, porch lights, etc., the detector may not turn the floodlights on. In this case turn the light level control clockwise until correct operation is obtained. If the detector is positioned in a shaded location the lux level should be reduced.

The range of the unit will decrease if the difference in temperature between the moving object and the background is low.

*IMPORTANT - THE FRONT COVER MUST BE FITTED WHEN IN WALK TEST

ONCE ALIGNMENT IS COMPLETE, REPLACE THE FRONT COVER WITH THE VENT HOLE AT THE BOTTOM. PLEASE ENSURE THE FRONT COVER ENGAGES BOTH SIDES OF THE OUTER CASING BEFORE PRESSING FIRMLY HOME.

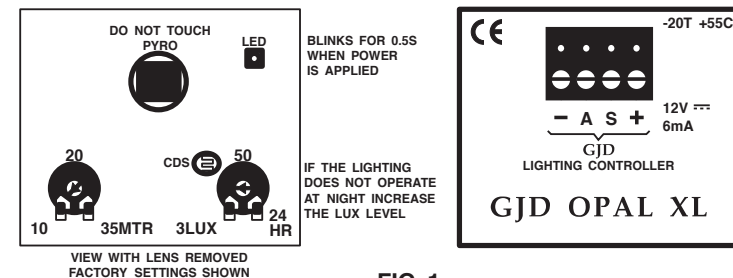


FIG 1

* ALWAYS REPLACE AS VIEW FOR CORRECT OPERATION

GJD Manufacturing Ltd reserve the right to alter the specification without notice.

Technical 01204 363998

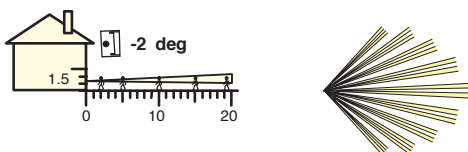
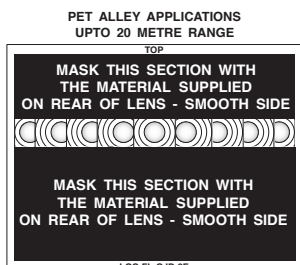
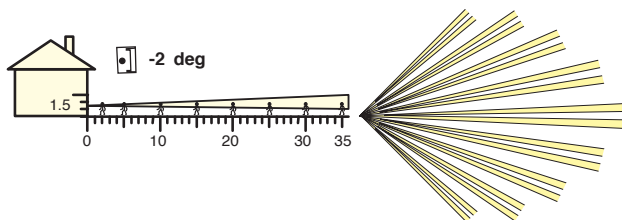
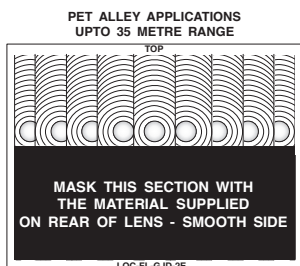
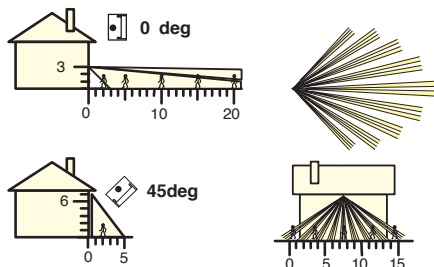
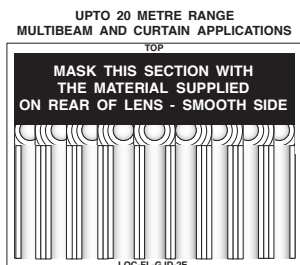
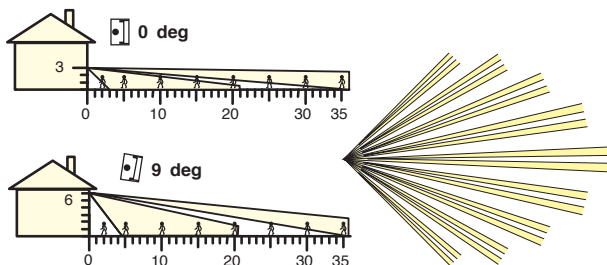
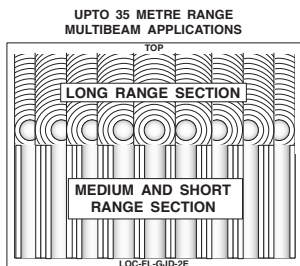
GJD MULTIFUNCTION LENS DATA

Always fit lens as shown

Angle of module



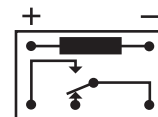
Setting for maximum range.
Reduce the setting for individual requirements for optimum stability



all dimensions in metres

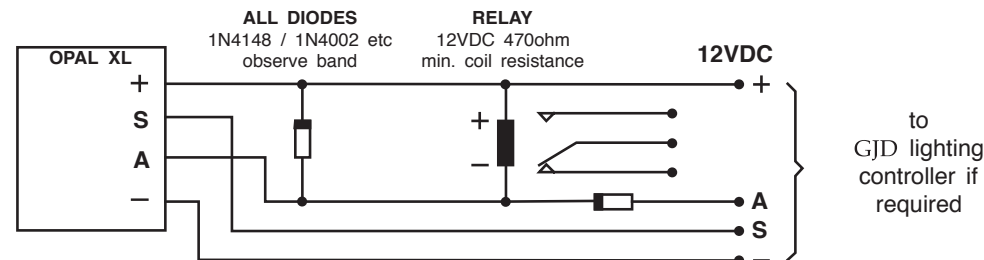
ADVANCED APPLICATIONS USING GJD OPAL XL

SUGGESTED RELAY
OMRON G6E-134P-US-12VDC
RS 376-600
FEC 176-324

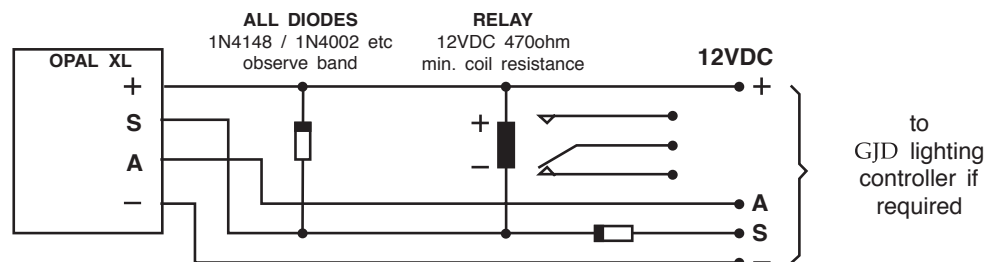


PIN VIEW
NB: COIL POLARITY

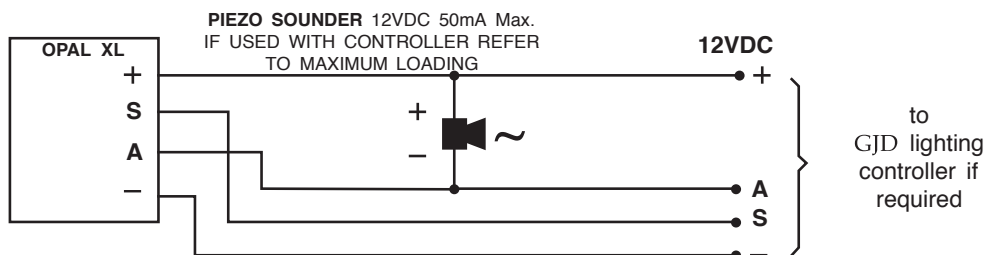
Energizing a RELAY momentarily with detection day or night providing voltage free contacts.



Energizing a RELAY with detection at night for 1 minute longer than the last detection.



DRIVING A LOW POWER PIEZO SOUNDER DIRECTLY FROM THE DETECTOR:



The PIEZO will sound briefly every time the detector gives a signal day or night.

SUGGESTED PIEZOS

SMALL INTERNAL
12VDC at 3mA
80db(A) at 1 metre
RS 245-001

WEATHERPROOF HI-OUTPUT
12VDC at 7mA
100db at 1 metre
RS 248-404