

# MX35

GJD101 PIR Detector



## INTRODUCTION

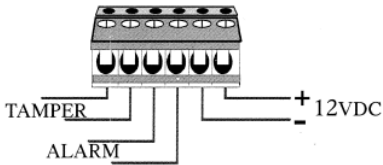
An accurate 35m low voltage outdoor passive infrared detector designed for event driven alarm and CCTV applications.

The MX35 is a highly reliable and effective sensor with tamper protection to prevent the unit being re-aligned without authority. The adjustable range and integral dual axis tilt module allows 180° of pan and 90° tilt, this increases the speed of outdoor installation and provides incredibly accurate aiming of the detection pattern. The electronics module is also acrylic coated for additional component stability. It is encased in a vandal-resistant high impact ABS housing with a UV stabilised front cover ensuring the sensor is impervious to an unaffected by adverse weather conditions. The MX35 design gives a near appearance with no visible indication of the orientation of the detector head, and totally conceals the wiring.

## INSTALLATION

During installation the electronics must be protected against water, as trapped moisture can effect or damage the unit.

1. First remove the front polythene cover by pulling forwards, then remove the lens module by pulling it out of the forked bracket.
2. Drill the wall to accept the top fixing and the lower cable entry. The holes should be on 16mm centres.
3. Feed standard 6 core alarm cable into lower cable entry; bare the wired and connect to the removable terminal block.



4. Always ensure when replacing the module that it is the right way up for the correct alignment of the beam pattern. (page 2 multi beam lens data)
5. Replace the front cover with the ventilation hole at the bottom. Ensure the cover engages both sides of the outer casing before pressing firmly to locate it securely.
6. Apply the power - the red LED flashes for 0.5 seconds.

At this stage the unit can be walk tested with the front cover fitted.

## ALIGNMENT AND TESTING

At this stage, weather permitting, the unit can be walk tested. Adjust the range as necessary and pan and tilt the lens module over the field of view to obtain the correct beam coverage ensuring that the detection beams do not exceed the area being covered.

When the SW1 is switched to 'ON' (walk test mode) the red indicator will light when the beams are crossed. This provides the facility to align the detector module ensuring that beams do not fall outside the area to be covered. (see page 2)

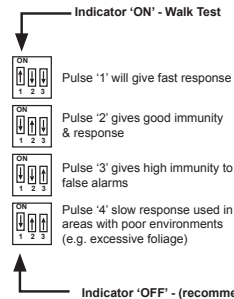


Adjust the range of the detector with a small screwdriver, behind the Fresnel lens.

The diagram indicates this is set to 20 metres.

The range of the detector increases without the front protective cover. Therefore remember the front cover must be fitted when testing the outputs.

As the unit detects the changes in heat and movement in the beam pattern area, therefore trees, shrubs, ponds, boiler flues and animals should be considered when positioning the detector. In poor environment utilise the 'pulse count' option - this is the number of beams that have to be crossed before activation of an alarm.



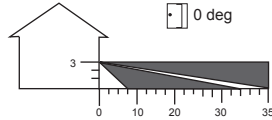
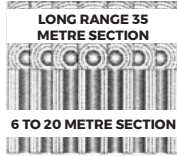
When testing is completed put the SW1 switch to 'OFF' to disable the LED.

**MULTI BEAM LENS DATA**

The GJD multifunction lens fitted to the GJD MX35 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. When mounting higher that boundary fences rotate the module and mask of any beams, either vertically or horizontally, that fall outside the area being covered. Use portions of the self-adhesive silver mask supplied to the rear, smooth side, of the lens and always replace the correct way up as shown to obtain the exact beam pattern coverage.

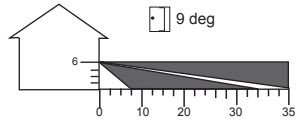
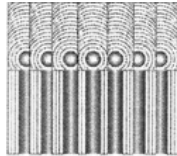
**MULTI-BEAM OPTIMUM**

HEIGHT 3 METRES  
 RANGE MAXIMUM  
 MODULE TILT 0 DEGREE



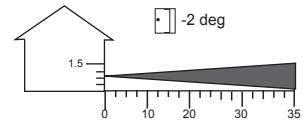
**MULTIBEAM**

HEIGHT 6 METRES  
 RANGE MAXIMUM  
 MODULE TILT 9 DEGREE



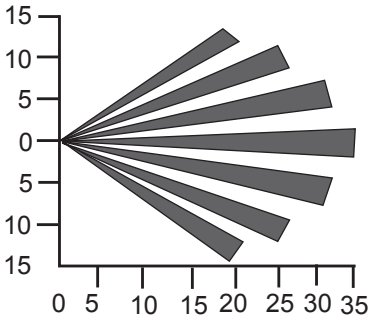
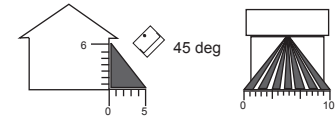
**MULTIBEAM**

HEIGHT 1.5 METRES  
 RANGE MAXIMUM  
 MODULE TILT -2 DEGREE

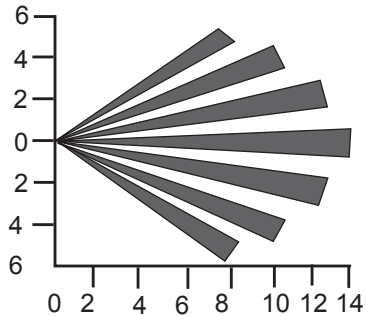


**CURTAIN COVERAGE**

HEIGHT 6 METRES  
 RANGE MAXIMUM  
 MODULE TILT 45 DEGREE



**BEAM PATTERN SET TO MAXIMUM RANGE, MASKING TOP SECTION OF LENS WILL REDUCE RANGE TO 20 METRES**



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<b>GJD MX35 Specifications</b>	
<b>Area</b>	10 to 35m (adjustable) up to 750m square metres
<b>Coverage</b>	90° 35m x 30m maximum
<b>Adjustment</b>	180° pan + 90° tilt - area reduction mask (if required)
<b>Lens</b>	Fresnel: 36 zone - White Light Filter
<b>Customised Optics</b>	Double silicon shielded dual element eliminates 50,000 + lux of white light
<b>Output - Alarm</b>	Volt free relay signal contact - 24VAC/DC @ 50mA Normally closed open on detection - alarm period two seconds (When testing with digital volt meter: set greater than 100 ohms as relay is protected by 30R series resistor)
<b>Output - Tamper</b>	Volt free output (form B) remains closed on detection The housing is pressure regulated - the output will open for two seconds if the front cover is removed or tampered with
<b>Power Input</b>	9 to 15 VDC
<b>Current</b>	9mA (12V nominal)
<b>Control</b>	Digital ASIC/microprocessor
<b>Operating Temp.</b>	-20 to +55 centigrade Conformally coated electronics for increased stability
<b>Housing</b>	Rating IP55 - High Impact ABS housing (white) Protective ultraviolet stabilized cover
<b>Dimensions</b>	104 x 104 x 94 mm Weight 140 grams
<b>Mounting</b>	Height - Variable - optimum height 3 metres
<b>Cable</b>	up to 200 metres : standard 6 core 7/0.2mm up to 500 metres : standard 6 core 16.0.2mm

# ENGINEER NOTES

**w:** [www.gjd.co.uk](http://www.gjd.co.uk)   ■   **t:** +44 (0) 1706 363 998   ■   **f:** +44 (0) 1706 363 991

Unit 2, Birch Business Park, Whittle Lane, Heywood, Greater Manchester, OL10 2SX, UK