



# IR600 Infra-red Lamp

## INSTALLATION INSTRUCTIONS

It is recommended that this unit is installed in accordance with the latest national standards:  
**NACOSS** – National Approval Council for Security Systems.  
**NACP20** – Code of practice for installation and maintenance of Closed Circuit Television Systems.  
**IEE** – Regulations for Electrical Installation.  
**BS 7671.**

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## IR600 INFRA-RED LAMP

### INSTALLATION INSTRUCTIONS

#### Introduction

The Molynx IR600 is a fully weatherproof, high power infra-red lamp, fitted with a Molynx high performance bulb.

The lamp can be used externally and internally operating via a 240V power supply unit mounted on the rear of the lamp.

The use of an integral photocell enables the lamp to switch on and off at dusk and dawn respectively, with a time delay incorporated to allow for intermittent flashes of light. The lamp can also be manually switched on and off.

#### Contents Of Box

The box in which your IR600 lamp is supplied should contain:-

- 1 x IR600 lamp/reflector and bracket assembly.
- 1 x IR600 mains plug (240V 12Amp).
- 1 x IR600 high performance bulb.
- 1 x IR600 Installation leaflet.

### INSTALLATION CAUTIONS

*The installation of the unit should be carried out in accordance with the relevant electrical installation regulations in force and with good installation practice.*

*Ensure that power is removed from the assembly before attempting installation.*

*Ensure that power cannot be reconnected by an external source while the unit is being worked on !*

*Electrical cables should be checked for signs of wear every 6 months and replaced where necessary*

*Although the unit itself is waterproof it is recommended that the initial fitting of the bulb and pre-assembly is carried out in dry conditions.*

*Care should be taken to ensure that correctly rated cables are used at all times. Refer to local and national standards for wiring and follow recommendations.*

**Installation Instructions**

**MECHANICAL**

**1. Fitting The Bulb**

The Molynx IR600 high performance bulb has been specifically designed to maximise IR output and bulb life.

**Note:-** Any replacement bulbs used must be MOLYNX IR600. (High Performance)  
Operating the unit with any other bulb will invalidate the warranty.

IMPORTANT

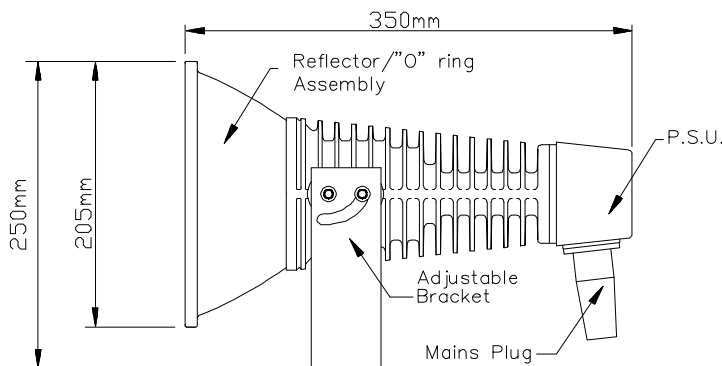
**DO NOT TOUCH THE BULB GLASS ENVELOPE WITH BARE HANDS,  
ALWAYS USE THE PLASTIC SLEEVE SUPPLIED.**

It is recommended that the bulbs are not subjected to excessive vibration as this will shorten their operational life.

1. Unscrew the reflector making sure that the "O" ring remains secure at the top of the screw threads. This will reveal the bulb holder as shown in fig's 1 and 2.

**Note:-** If the "O" ring is in any way damaged, it has to be replaced to ensure the lamp unit remains fully weatherproof.

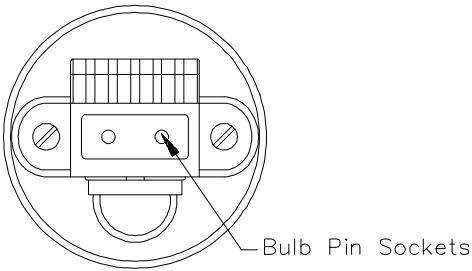
**FIG.1.**



**NOTE**

**ENSURE MAINS PLUG  
ALWAYS FACES IN THE  
DOWNWARD POSITION  
AS SHOWN**

FIG.2.



2. Open the bulb packet and using the protective sleeve provided remove the bulb.
3. Slot the bulb firmly into the bulb holder (See fig.2.).
4. Remove the protective sleeve.
5. Refit the reflector securely, ensuring that the bulb does not get damaged.

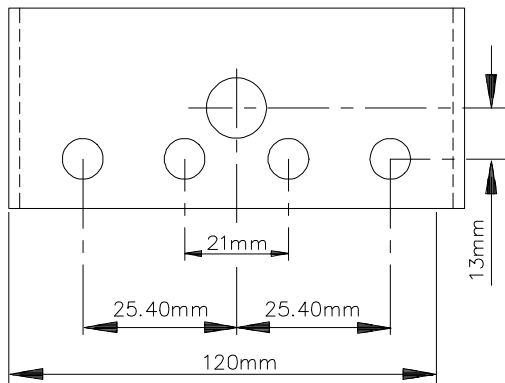
**Note:-** Bulb replacement instructions are supplied with every bulb kit from Molyntx.

### Mounting Details

The IR600 lamp is supplied with an adjustable mounting bracket. This is suitable for mounting to any molyntx wall brackets or pan and tilt units, as well as for direct mounting to a wall. (See fig.3.)

**Note:-** The IR600 lamp has to be rigidly mounted to ensure best results.

FIG.3.



### Mounting Hole specifications

- 1 x 12.70mm
- 4 x 7.00mm

### ELECTRICAL

**Mains Input (230/240V AC @ 50/60Hz 2A (Rms)):-**

- Equipment Required:-
- a) Mains Plug as supplied.
  - b) Mains cable of between 7.5mm and 9.5mm.

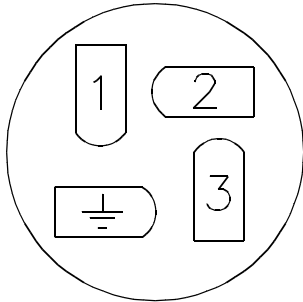
**Cables which fall outside these dimensions should not be used.**

**Note:-** Conduit **PG9** can be connected directly to the mains plug.

1. Assemble the plug supplied and the mains cable as follows. (See fig.4.)

**Note:-** Plug assembly instructions are on packet.

**FIG.4.**



**There are two wiring options as shown:-**

- 1 - To allow the lamp to work via the integral photocell  
i.e. Switch **ON** at dusk  
Switch **OFF** at dawn
- 2 - To allow continuous operation of the lamp.

**1 - Operation via the photocell**

PIN	CONNECTION
1	Live (240V) - Brown
2	Neutral - Blue
3	No Connection
⊥	Earth - Yellow/Green

**2 - Continuous Operation**

PIN	CONNECTION
1	No Connection
2	Neutral - Blue
3	Live (240V) - Brown
⊥	Earth - Yellow/Green

Once the plug has been wired as above, secure it to the socket on the IR600 back box P.S.U. ensuring the screw locking collar is firmly tightened.

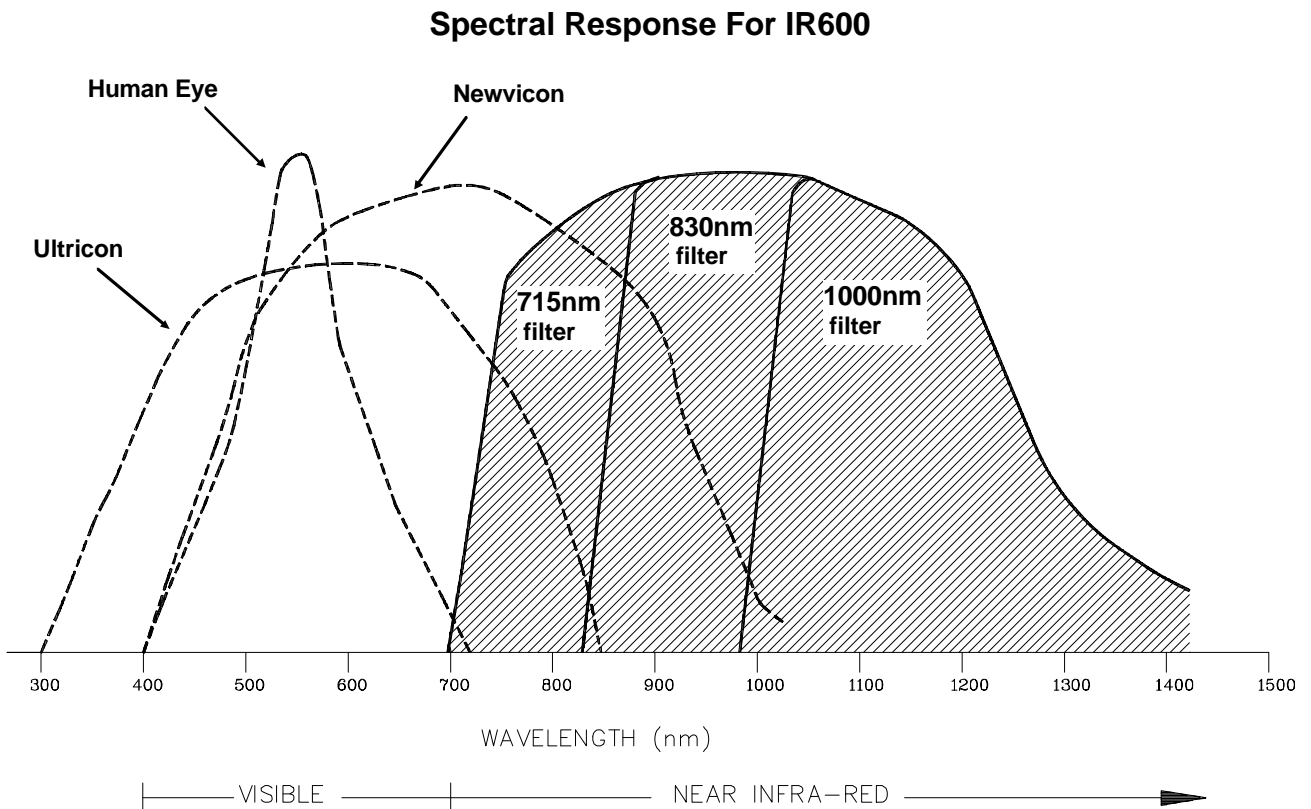
**Operation**

The IR600 is available with four different filters. For the effect that filters 1-3 have on the performance of the lamp with various cameras refer to fig.5.

1. 715nm cut-off (IRFA715)  
Suitable for all IR sensitive TV cameras.
2. 830nm cut-off (IRFA830)  
Suitable for TV cameras which are sensitive to deep infra-red radiation, ie Silicon diode, Ultricon and most image intensifier tubed cameras as well as some C.C.D. units.
3. 1000nm cut off (IRFA1000)  
Suitable for use with CCD cameras with high I/R response and where covert lighting is essential. Check camera response carefully before selecting this filter.



Fig.5.



## Lamp Specification

### Material/Finish:

Main Body - Cast Aluminium.

Finish : RAL 7032 texture.

P.S.U. Housing - Polycarbonate Lexan 163R

Finish : H210 texture, Colour : Smoked Brown, Ref 51212.

Reflector - High Purity Spun Aluminium chemically brightened and anodised parabolic reflector.

Filter - Dichroic Filter:-

715nm cut off frequency - Red glow (semi-discreet).

830nm cut off frequency - Discreet.

1000nm cut off frequency - Covert.

White light filter

**Lamp Specification (continued)****Size:**

350mm x 205mm x 250mm (L x W x H).

**Weight:**

3.5kg.

**Power Requirements:**

230/240 Volts @ 50/60Hz, 2 Amps RMS, (12Amps Peak Surge At Switch On).

**Power:**

500 Watts nominal.

**Mounting:**

“U” shaped bracket. Compatible with Molynx Pan & Tilt units and Brackets.

**Bulb:**

Bulb Life - Typically 6,000 hours.

Bulb Type - Molynx IR600 high performance bulb.

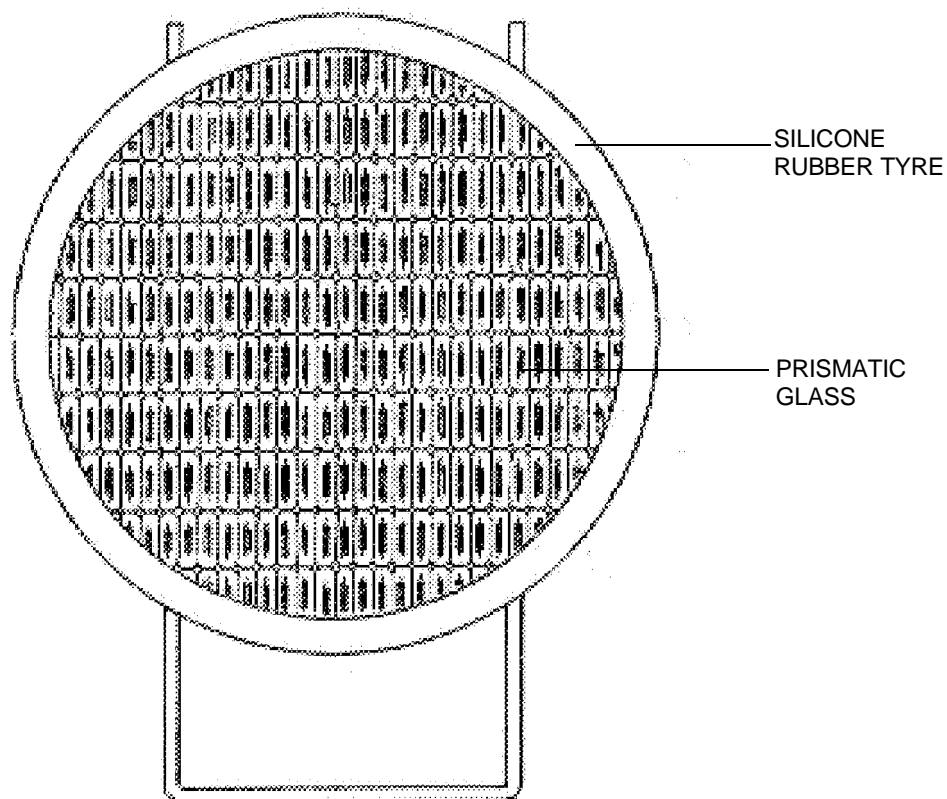
**Environmental Operating Temperature:**

0 to 50 Degrees C.

**Integral Photocell :**

On- 70 lux

Off - 140 lux

**WIDE ANGLE CONVERSION KIT (IRWIDE)****Assembly Details**

1. Screw in reflector.
2. Position prismatic glass in proper orientation as shown above using silicone rubber tyre to hold correctly. THIS GIVES APPROX. 65° HORIZONTAL BEAM ANGLE.



## REPLACING A FAULTY BULB

It is recommended that the bulbs are not subjected to excessive vibration, as this will shorten their operational life. The replacement bulb kit is supplied by **MOLYNX Ltd.**  
The bulbs used in the IR600 have an approximate life expectancy of 6,000 hours.

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### IMPORTANT

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**ONLY MOLYNX IR600 REPLACEMENT BULBS SHOULD BE USED IN THESE UNITS.**

**DO NOT TOUCH THE BULB GLASS ENVELOPE WITH BARE HANDS, AS THIS  
WILL EVENTUALLY BURN-OUT THE BULB FILAMENT.  
ALWAYS USE THE PLASTIC SLEEVE SUPPLIED.**

**ALWAYS REPLACE THE FUSE WHEN REPLACING A FAULTY BULB.**

Packing kit **IR600BULB** contains:-

1 x IR600 high performance bulb.

1 x bulb replacement leaflet.

1 x ultra rapid 8 amp fuse - **Must Be Used When Changing The Bulb.**

The exchange bulb kit is supplied by **MOLYNX Ltd.**

### Replacement Of Bulb

**Note:-** *Never replace bulb in wet conditions. Moisture inside the unit can cause serious damage.*

1. **DISCONNECT MAINS SUPPLY, PRIOR TO COMMENCEMENT OF WORK.**  
Ensure power cannot be reconnected by external source. allow the unit to cool down sufficiently.
2. Unscrew and remove the reflector. Remove old bulb.
3. Open the bulb packet and using the protective sleeve provided, remove the bulb. **Do not touch glass.**
4. Carefully slot the new bulb firmly into the bulb holder.
5. Remove the protective sleeve.
6. Refit the reflector, ensuring that the bulb does not get damaged.

**Note:-** *The reflector assembly has to be firmly tightened to ensure the unit stays fully weatherproof.*