1.0 INTRODUCTION

This installation and instruction manual describes how to install, maintain and operate the Planet Model 'ULED' examination light. Prior to installation carefully read through all the instructions enclosed in this manual.

If there are any concerns or you do not understand, please contact customer service at Planet Lighting.



WARNING

Only qualified electricians can install the Planet model 'ULED' light. It is to be direct wired only. Installation performed by unauthorised personnel could result in personal injury and or equipment damage. Under no circumstances should any modifications or adjustments, other than those detailed under section 9.0 Maintenance, be made to the Planet Model ULED.

2.0 PRODUCT INFORMATION

The Planet ULED is a state of the art examination light which utilises cutting edge Solid State Lighting technology combined with the proven Planet Model U spring arm and bracket system. Designed and manufactured in Australia by Planet Lighting (established 1911) an R&D driven, exporting designer and manufacturer with over 6 years experience in the design, manufacture and supply of Solid State Lighting devices worldwide.

The Planet ULED provides an improved working environment, significantly reducing on-going maintenance, with low operational costs and offers a "greener" alternative to similar products. The Planet model ULED allows the accurate positioning of the lamp head above any work surface. It is designed to be mounted on a wall or ceiling and be pulled down from above when required, remaining there until re - positioned. At Planet we take great pride in the design and production of our lights and we are sure you will derive satisfaction from owning and using our products. When installed and maintained in accordance with the instructions contained in this service leaflet, this product will provide many years of trouble free operation.

Should you have any enquiry, comment or special lighting need we would like to hear from you. We back our products with pride, service and a five year warranty.

- 2.1.0 Environmental Considerations
- 2.1.1 Packaging

I box containing a complete ULED lamp with Installation and users manual.

2.1.2 Transport

to be carried out by road, while maintaining the following environmental conditions.

Temperature: -15/+60 degrees Celsius

Humidity: 10/75%

Atmospheric pressure(h/Pa) 500/1060

2.1.3 Storage

The devices packaged must be stored (warehoused) in a dry place and as per the same environmental conditions mentioned above.

2.2.0 Disposal and Recycling Information

The ULED light has been designed, taking into account what the manufacturing components are made out of. This is to ensure when it reaches its end of life, the disposal method with the lowest/ least negative impact, on human health and the environment is selected. Unlike the sources of traditional light, LED's do not contain mercury, toxic gases, filaments or fragile parts. Due to the fixture being over 95% recyclable and there being no Bulbs/Globe changing during the ULED life of 50,000+ hours your environmental footprint will be significantly reduced. When your ULED light reaches its end of life, contact Planet lighting or our local agents to learn about recycling options. The ULED light must be disposed of properly according to local laws and regulations.

3.0 PLANNING

Prior to installing the Planet Model 'ULED' Ceiling and Wall mounts the following items should be checked and confirmed.

- 3.1.0 Architectural considerations
- 3.1.1 Ensure appropriate mounting structure behind the wall/ceiling
- 3.1.2 For structural loadings and appox product weights (refer Fig 8)
- 3.1.3 To confirm ceiling/wall height measurements at the appropriate nominal recommended height from the floor refer Fig 1 (back page)
- 3.2.0 Electrical considerations
- 3.2.1 The Planet Model 'ULED' wall and ceiling mount are designed to be direct wired only
- 3.2.2 240V AC supply is available at the connection points



4.0 INSTALLATION:

The Planet Model ULED arm is designed to be mounted above the immediate work area. Standard mounting fixtures for Planet Model ULED are: Ceiling Mount & Wall Mount (specialised mountings are available on application). In all cases the suggested mounting height (measured at swivel head) is two metres from floor level. (refer Fig 1)

To ensure correct balance of the Model ULED movement the lamp must be mounted with the stem, around which it rotates, vertical at all times. (refer Fig 1)



WARNING

The qualified electrician who is responsible for the installation of the ULED must include an isolation switch(all -pole disconnection) in the fixed wiring of the ULED and a cable tie near the terminal block of the primary(240V) wiring (Phase and Neutral) to secure the cables.

Figure 2 refers to wall mount options, Figure 3 refers to ceiling mount options, Figures 4 - 6 refer to maintenance procedures

5.0 WALL MOUNT:



WARNING

Ensure before commencing the installation, that the MAINS power circuit is isolated (off).

CHECK AND ENSURE THE FOLLOWING BEFORE COMMENCING INSTALLATION:

- You have the appropriate mounting template.
- You have appropriate tools for the job.
- Confirmed mains cable entry is located appropriately.
- The mounting structure is suitable.
- The structural loadings and approx product weights (refer Fig. 8)
- You have appropriate fixing attachments. e.g. Dyna bolts, large screws

5.1.0 Using appropriate wall template mark mounting holes and mains cable entry. Make sure the bottom of the template wall mount is 2000mm from the floor to maintain 2000mm clearance at the bottom of the swivel. (ref Fig. 1)

5.2.0 Drill 4 mounting holes as shown on template.



MADNING

Take care to remove any dust during the drilling and make sure not to damage any existing cabling

5.3.0	Remove cover from the wall mount	(ref Fig 2) ①	, feed mains	cable through	the larger	bottom hole (2), plac	e correct
wall mount into position and attach to wall using appropriate fixings 3.								

- 5.4.0 Electrical Connections
- 5.4.1 Connect mains cable to appropriate locations on terminal block (L and N) (ref Fig. 2) (4)
- 5.4.2 Connect the Earth (yellow/Green) cable to the Earth Lug (ref Fig. 2) (5)
- 5.4.3 Attach fitting to wall mount: Connect wall mount plug to the socket in the swivel boss 6; then insert the swivel boss into the wall bracket tube 7: and fix into position with the locking screw 8

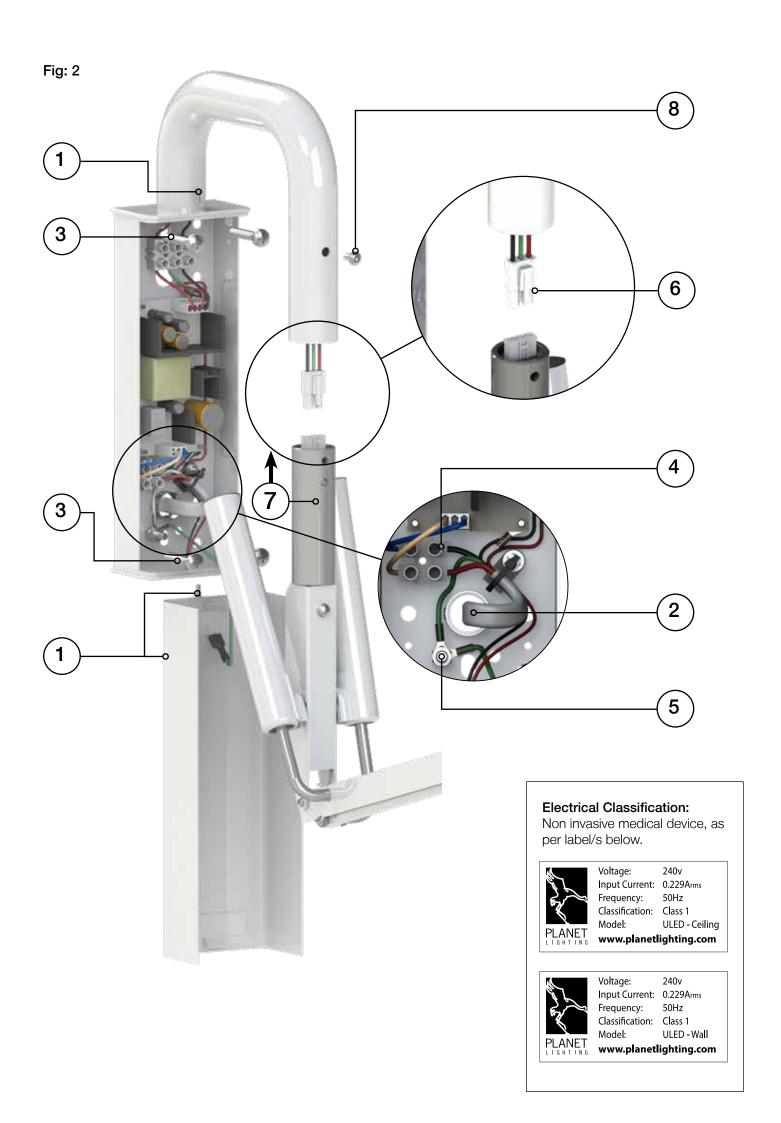


WARNING

Replace cover ensuring the cables do not get caught/pinched and attach with the screws located at the bottom and top (1) (ref Fig 2)

6.0 FINAL INSPECTION

- 6.1.0 The mount is firm, has no movement and is level (ref Fig. 1)
- 6.2.0 The light head moves through its full range of movements
- 6.3.0 The assembly of light and mount is clean and free of any marks
- 6.4.0 Energise circuit and test the light fixture for normal operation, that is the green led on the bottom of the power supply cover is working and the switch on the light head is working (ref Fig. 5).



7.0 CEILING MOUNT:



WARNING

Ensure that before commencing the installation, the MAINS power circuit is isolated (off)

CHECK AND ENSURE THE FOLLOWING BEFORE COMMENCING INSTALLATION:

- You have the appropriate mounting template
- You have appropriate tools for the job
- Confirm mains cable entry is located appropriately
- The mounting structure is suitable
- The structural loadings and appox product weights (refer Fig. 7)

Models And Existing Cailing Mounts Only (see Fig. 4)

installation process from 7.3: checking the electrical connections.

You have appropriate fixing attachments. e.g. Dyna bolts, large screws



WARNING

Take care to remove any dust during the drilling and make sure not to damage any existing cabling

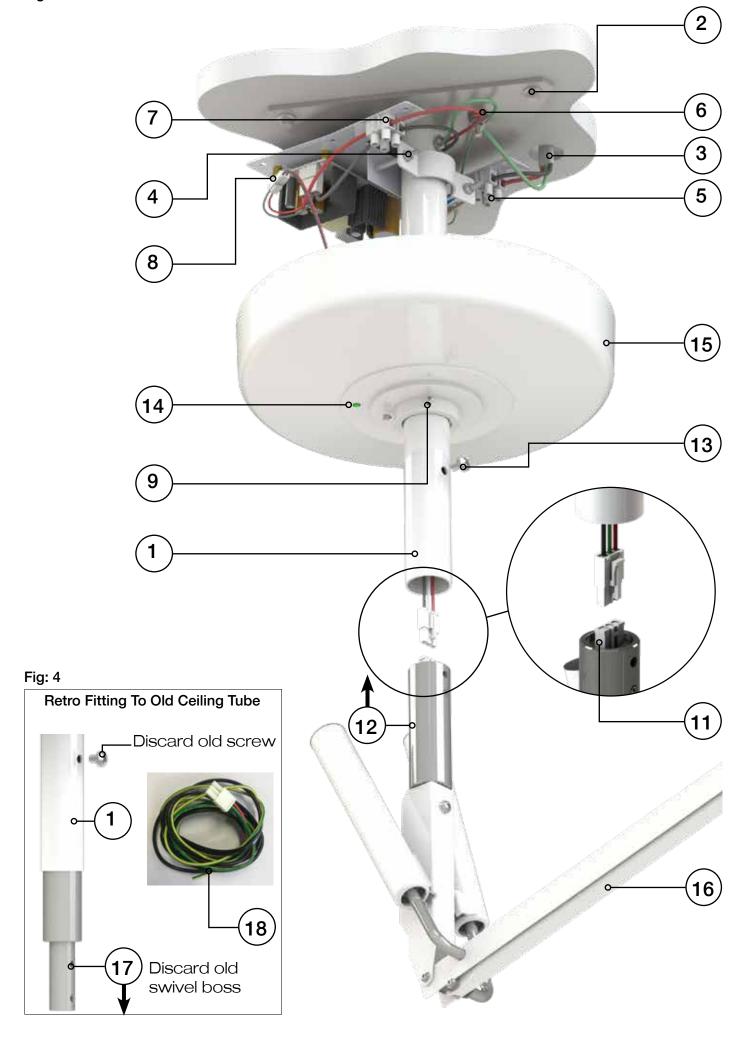
hetro woders And Existing Ceiling Wounts Only (see Fig 4)	
IF your existing ceiling tube $\textcircled{1}$ has a swivel boss see Fig 4 $\textcircled{1}$, then please remove swivel boss locking screw $\textcircled{3}$ a	and
slide out and discard the swivel boss, and locking screw from the old ceiling tube. Use existing wires in the ceiling tu	ıbe
to null through the new wiring loom supplied in plastic had (18). After rupping the new wire loom, continue the stands	arc

- 7.1 Take ceiling mount ① and using template if required mark holes, drill and attach mount to surface making sure to use appropriate fixings,② take care and feed 240V mains cables through entry hole if applicable ③.
- 7.2 Remove from the packaging the box containing the electronic power supply and ceiling cover. Take the Electronic power supply mounted on the tray and clamp to the Ceiling mount 4.
- 7.3 Electrical Connections
 - 7.3.1 Connect 240V mains cables to appropriate locations on terminal block L and N 5.
 - 7.3.2 Connect the Earth (yellow/Green) cable to the Earth Lug on ceiling mount 6.
- 7.3.3 Connect 24V cables (located in Ceiling tube) to secondary side of Electronic power supply terminal block (red to red, Black to Black)
- 7.3.4 Remove Ceiling cover from the packaging (5) carefully slide the cover up the ceiling tube, and connect the LED power indicator (3) plug to the matching connector coming from the electronic power supply. Continue to slide the ceiling cover up over the electronic power supply and associated wiring making sure the cover is pushed up against the ceiling. Tighten the two locking screws on the collar (9) to secure the ceiling cover. (15)
- 7.3.5 Remove the Light and arm from the packaging, remove the swivel boss locking screw (3). Connect the two electrical plugs together (1) and carefully slide the swivel boss up into the ceiling tube (2). Locate/line up the fixing hole (3). Tighten the locking screw securely.

8.0 FINAL INSPECTION, PLEASE ENSURE

- 8.1.0 The ceiling mount is firm and has no movement
- 8.2.0 The light head moves through its full range of movements
- 8.3.0 The assembly of light and mount is clean and free of any marks
- 8.4.0 Energise circuit and test the light fixture for normal operation, that is the green LEDs on the power supply cover ⁽¹⁾ are working, and the switch on the light head is working (refer Fig. 5).

Fig: 3





Only appropriately qualified personnel should carry out maintenance on Planet light fixtures.

MAINTENANCE: 9.0

Planet Lighting recommend that if there is a technical fault with one of our ULED lights, the product is returned to our factory to be repaired. If a qualified technician is available to repair the fixture, circuit diagrams, parts lists, and descriptions will be made available to assist in this process.

The following maintenance procedures, performed as required, should ensure your Planet Model ULED provides many years of effective service

9.1 Cleaning

Carefully remove any loose deposits with a damp sponge. Use a soft brush (non abrasive) or cloth, and/or a mild household detergent solution to remove dust and other deposits. Do not use steel wool, scrapers, scouring liquids or powders to remove deposits as these permanently scratch the coating surface. Wipe with clean damp sponge to remove detergent.

9.2 Head Removal (refer Fig. 6)

In the unlikely event that one or more of the LED's should fail, the light head has been designed to be removed without tools for return to Planet lighting for prompt service. Our LED light head does not contain user serviceable parts.

Lubrication (refer Fig. 5)

To prevent undue stiffness or joint seizure the springs of the Planet Model ULED have been pre-packed with high quality grease. The pivoting mechanisms at the main elbow joint and the link pin at the swivel head should receive regular light oiling.

Lock Nut Adjustment (refer Fig. 7)

Fine adjustment of the frictional inertia of the lamp movement is provided by tensioning the small lock nut on the link pin at the base of the swivel head. This nut should be tensioned so that the lamp firmly retains its position when adjusted but can be freely re-positioned under the pressure of one finger at the elbow joint. Do not attempt to correct an unbalanced movement by over-tightening this nut. (refer Fig. 7)



WARNING UNDER NO CIRCUMSTANCES SHOULD THE SPRING TENSION NUTS (TWO) BE COMPLETELY UNDONE . (refer Fig. 7)

Spring Tensioning (refer Fig. 7)

After extended use the main balance springs of the Model ULED arm may require tension adjustment (generally the spring on your left hand side when facing the lamp).

This may be done by carefully prising the plastic cap off the end of the spring tube to permit access to tensioning nuts. Nuts should be tightened in small increments using a 15mm hexagon tube spanner until the lamp assumes correct balance.

Do not over tighten tension springs.

Fig: 5

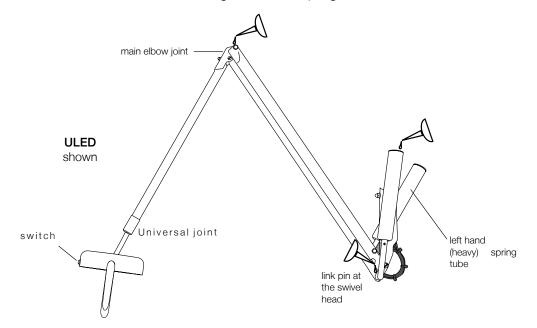
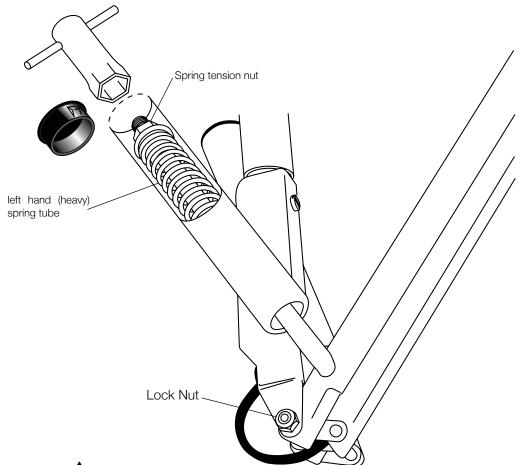


Fig: 6



Fig: 7



WARNING UNDER NO CIRCUMSTANCES SHOULD THE SPRING TENSION NUTS (TWO) BE COMPLETELY UNDONE

Static weights of complete fixture (Mount, Arm & Light Head)

Wall Mount - 5.5kg
Ceiling Mount - 6.0kg

MASS: 2.7kg
(Arm + Head only)

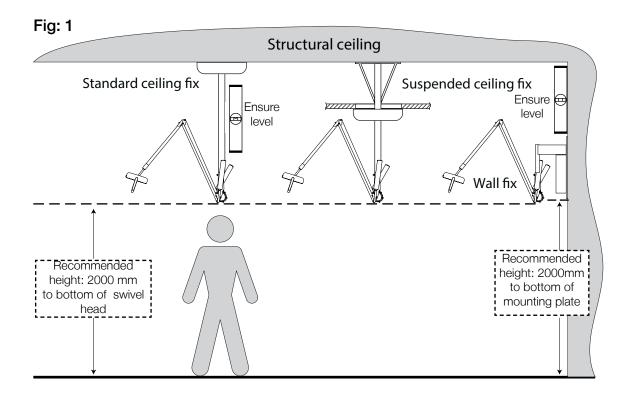
RELATIVE VERTICAL
POSITION SHOWN HERE
IS ESTIMATE ONLY

445 NOM (= ~12 Nm)

610 NOM (= ~16 Nm)

Note:

For the purposes of quoting minimum structural requirements of mountings, torque-load of 12 Newton Metres plus lever-arm effect of length of ceiling-mount tube or wall mounting must be accommodated (plus factors of safety and dynamic loads). Vertical dead load (ie. No dynamic or external loads such as operators pulling or pushing fitting are included in this value.)



Customer Service can be contacted on the phone number below Mon - Friday 9 am - 5 pm



Made in Australia Exported to the World

Tamarind Drive Bellingen NSW 2454 Australia
Phone + 61 (0)2 6659 5600 Fax + 61 (0)2 66552121
info@planetlighting.com www.planetlighting.com