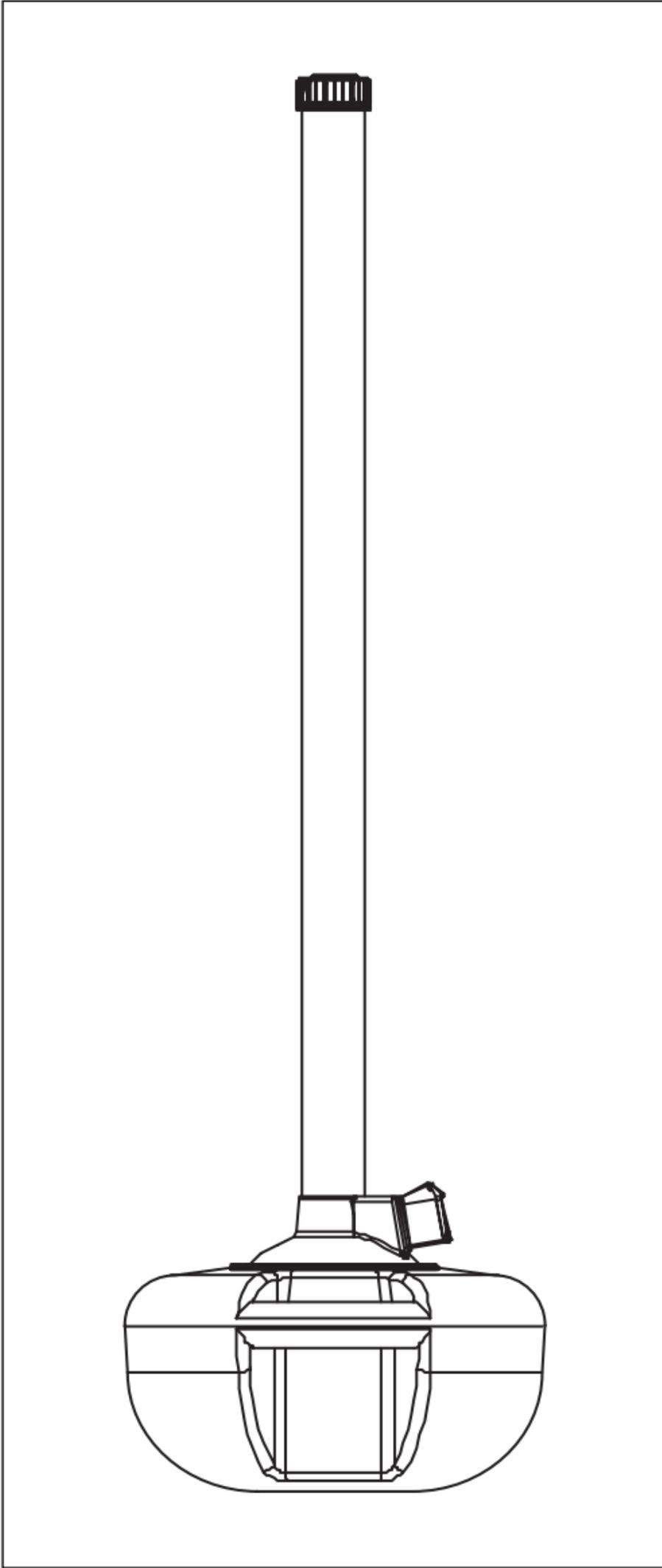


UPLIGHT – OPERATION & SAFETY GUIDE



Defender
Uplight

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THANK YOU FOR BUYING UPLIGHT

You should read the entire operator's manual before you use your Uplight and you should restrict it's use to persons who have read, understood, and who will follow all warnings and instructions contained in this manual. In addition, you should follow all warnings and instructions affixed to your Uplight.

RESIDUAL CURRENT DEVICE (RCD)

For use with 220-240v units.

The British Standard Institute recommend that an R.C.D. be used on the circuit that your Uplight is using. Check your R.C.D. every time you use it.

IMPORTANT SAFETY INFORMATION

The safety of this appliance complies with current safety regulations and conditions, and with existing directives.

Please read these instructions carefully prior to using this product. There is a **serious risk of personal injury** if you fail to follow the advice laid down in this guide.

After use, ensure that these instructions are stored in a safe place for future reference.

Essential safety points to note:

- 1. UPLIGHT should only be used by a competent person who has read and understood these instructions.** If in doubt, please refer to a suitably qualified person.
- 2. UPLIGHT must not be modified in any way.** Alterations of any description may invalidate the product warranty and technical approvals.
- 3. UPLIGHT must only be used for it's intended purpose** (refer to the 'What Uplight Can Be Used For' section).

More safety instructions to note:

1. **Never** use this equipment if you are ill, feeling tired, or under the influence of alcohol or drugs.
2. **Always** switch OFF and unplug the unit when not in use and prior to cleaning.
3. **Always** unplug the unit from the power supply before moving or repositioning it.
4. **Always** ensure that the unit has cooled down before storing it.
5. **Do not** work near flammable gases or liquids.
6. **Make sure** that you know how to switch this unit OFF before you switch it ON.
7. **Keep** cables out of harm's way and clear of the work area.
8. **Keep** the equipment dry wherever possible.
9. **Reduce the risk** of electric shock by using a suitable R.C.D. (Residual Current-Operated Device) for use with 220-240v units.
10. **Never** leave the unit in use without supervision.
11. **Do not** use the unit if the unit or the cord appears to be damaged.
12. **Do not** place the unit near a source of heat.
13. **Do not** unplug the unit by pulling on the power cord.

ELECTRICAL SAFETY GUIDELINES

Please comply with the specified electrical requirements.

Power Supply Identification

The **power supply** of this UPLIGHT unit is **shown on the identification label** and the **rating plate**, which are found on the external packaging and the base of the unit respectively.

DEFENDER POWER & LIGHT		
ILKESTON DERBYSHIRE DE7 5UD ENGLAND		
--W dual voltage Uplight		
BATCH: 02	VERSION: 02	06-2002
PART NO. E-----		
Rated voltage 110-230V		
Ballast voltage range 85-277v		
Weight: 8kg		
IP44	△ F	CE

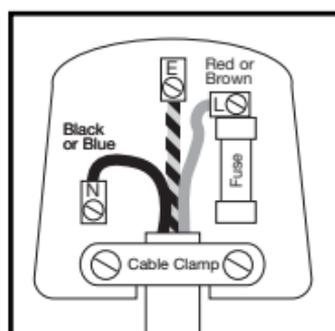
Example rating plate

The power supply is also clearly identified by the colour of the plug and the outlet socket. This will either be:

240V UPLIGHT

BLUE 3-PIN PLUG AND SOCKET identifies the unit as a **240V UPLIGHT**. This unit requires a 240V 16amp mains electricity supply. If used outdoors, the plug should only be connected to an IP44 power supply socket

For domestic indoor use only, this unit can be changed to a standard 3-pin household plug fitted with a 3amp fuse.



IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

BLUE = NEUTRAL

BROWN = LIVE

YELLOW/GREEN = EARTH

110v UPLIGHT

YELLOW 3-PIN PLUG AND SOCKET identifies this unit as a **110V UPLIGHT**. This unit requires a 110V 16amp power supply, obtainable from a 110V generator or from the mains via a suitable transformer. Under outdoor conditions, the plug should be connected to an IP44 power supply socket. **NEVER connect a 110V unit directly to a 240V mains electricity supply.**

UK Model Numbers

	<u>110-volt</u>	<u>240-volt</u>
Uplight 2ft (18-watts)	E712140	E712145
Uplight 4ft (36-watts)	E712050	E712100

International Model Numbers

All international model numbers are allocated by individual country. Please refer to the rating plate label on your product for the specific model number.

GETTING UPLIGHT STARTED

All award-winning UPLIGHT products are designed and manufactured to the highest standards. Used and maintained correctly they will provide dependable long-term operation.

Please follow these simple steps to prepare your Uplight for use:

STEP 1 – INITIAL INSPECTION

Upon unpacking the UPLIGHT it should be inspected for both damage and for contents. The product is supplied in **TWO CARTONS**. Inside, there should be:

Carton ONE

1 x UPLIGHT LENS

ASSEMBLY complete with cable and plug.

1 x RUBBER GASKET with punched holes.

1 PACK OF 5 SCREWS to attach the base to the lens assembly.

Carton TWO

1 x BASE ASSEMBLY either yellow with a black rubber bottom (UK version only) or supplied as an empty yellow shell to be filled with sand (international version only). (Please note, the sand acts as a ballast and forms a counterweight when added to the base assembly).

1 x BLACK BUNG for sand filled version.

In the event of damage being present or the absence of components, please return it immediately to the outlet from

where the UPLIGHT was purchased. Otherwise, PROCEED TO STEP 2.

STEP 2 – ASSEMBLY

Review the diagram on pages 10 and 11 to become familiar with your Uplight.

*If your Uplight unit is a UK version, proceed with instructions 1-5 below.



UK version -
Yellow with a black rubber bottom

**If your Uplight is an international 'empty shell' version, to activate the self-righting action proceed to fill the base with 5Kg of dry sand by feeding it through the hole sealed by the black bung. Once this task is complete, go on to instructions 1-5 below.



International version -
Empty yellow shell

1. **Position the base assembly** on a firm surface.
2. **Place the rubber gasket** onto the recessed surface of the base assembly and carefully line up the 5 holes to them.
3. **Place the lens assembly** onto the gasket and line up the holes. Insert the 5 screws provided and tighten the first with a posi-drive screwdriver.
We advise that the lens assembly socket is lined up between the two handles.
4. **Tighten the second screw** opposite the first, again leaving it loose. DO NOT TIGHTEN FULLY YET.
5. **Locate the remaining three screws** and tighten them fully (but do not overtighten), along with the initial two screws, to retain the gasket. Avoid creases as the gasket is designed to provide a complete seal between the two parts.

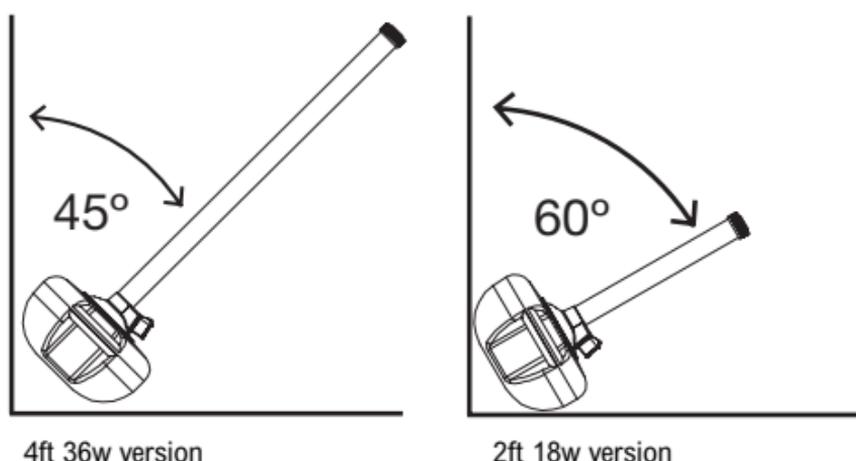
STEP 3 – TESTING

1. **Take the Uplight to the work area** and position it so that it is away from pedestrian traffic but near enough to the work site to provide sufficient light.
2. **Locate a switched supply socket** appropriate to the voltage of the Uplight unit that you have (refer to 'Electrical Safety Guidelines'). Ensure that this socket is switched OFF.
3. **Insert the plug** of the Uplight into the socket, and locate the retainer. Switch ON the power supply.

Please note that there is no ON/OFF switch on the unit – the Uplight is controlled from the power supply.

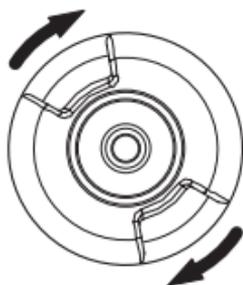
SELF-RIGHTING PROPERTIES

Uplight has a unique self-righting action of up to 45° on the 4ft - 36W version and up to 60° on the 2ft - 18W version.



PLEASE NOTE (international version only): If Uplight is stored, transported or tipped horizontally, the sand may need to be redistributed as follows:

1. Ensure that Uplight is disconnected from the mains supply.
2. Grip the two base handles and lift off the ground.
3. Rotate the base vigorously in a clockwise and anti-clockwise motion (see diagram below) until the sand feels evenly distributed.



4. Place the Uplight back on the ground and continue to use.

LINKING DIRECTIONS

Uplight is fitted with a power take-off socket, which should **ONLY BE USED** to link additional Uplights. When linking a series of Uplights the maximum quantity that can be connected together in any run is:

110V UPLIGHT – 69 units (if all 4ft-36W units) and 139 units (if all 2ft-18W units) from a 2.5kVA generator with a 5-metre spacing between them.

240V UPLIGHT – 20 units (if all 4ft-36W units) and 40 units (if all 2ft-18W units) from a standard UK 13-amp household supply.

To connect a series of UPLIGHTS this sequence **MUST BE** followed to avoid dangers presented by overloading:

1. **Place them** all in position first.
2. **Connect each together** starting with the one farthest from the power supply. Make sure that the power supply cables are out of harm's way.

3. **Once all the lights are connected** to each other, plug the host light into the power supply and switch the supply ON.

LIGHTING TUBE REPLACEMENT

Ensure that only replacement lighting tubes of the correct type are used.

Uplight is supplied with either an 18W (2ft) or a 36W (4ft) Philips 865 Colour Rendition 'Cool Daylight' T8 triphosphor tube.

1. **Disconnect the UPLIGHT** from the power supply and allow adequate time for cooling.
2. **Unscrew the lens cap** and remove the electrical fitting from the lighting tube by pulling it away gently in a vertical direction.
3. **Lift the lighting tube** out of the lens assembly.
4. **Place the new lighting tube into the lens assembly**, making sure that the two end-pins are correctly inserted into the canon. **DO NOT FORCE – CORRECT INSERTION SHOULD BE STRAIGHTFORWARD.**
5. **Replace the electrical fitting**, again making sure that the end-pins are inserted securely.
6. **Screw the lens cap back on** to make a correct seal to prevent the ingress of water or physical objects.

A daily inspection is recommended to check for any physical damage or cable abrasions, and to replace tubes and guards when necessary. Also check that UPLIGHT is positioned to maintain safe site conditions.

CLEANING

We recommend that you use only a damp cloth to clean your Uplight. Please note that the chemicals used in some cleaning products may damage the diffuser and in no circumstances should you use any such products.

SERVICE RECOMMENDATIONS

Only suitably qualified personnel should service the unit. If you have a problem with your unit please return it to the outlet from where you purchased it, ensuring that you have full details of your product as described on the product rating plate.

Should it be necessary for work to be carried out it is important to provide the suitably qualified repairer with the complete unit.

Should you require service under the terms of our guarantee you will need to present proof of purchase.

NOTE: Service repairers act on their own behalf and are not empowered to commit or legally bind Birchwood Products Ltd. in any manner whatsoever.

QUESTIONS & ANSWERS

1. How often should I replace the tube?

Uplight uses a T8 triphosphor tube with an extended life of 20,000 hours due to the in-built high-frequency technology. However, we only recommend replacement of the tube after failure.

2. Is Uplight suitable for indoor or outdoor use?

Uplight is rated to IP44 and is suitable for indoor and outdoor use (IP44 = protected against solid objects over 1mm and water sprayed from all directions - limited ingress permitted).

3. How hot does the light lens get in operation?

Low wattage means low heat. Uplight is tepid to touch even in continuous use.

4. How can I change the lighting intensity?

Uplight has a detachable aluminium reflector. With it Uplight provides 180° intense luminosity, when removed it provides 360° flooded luminosity.

5. Can Uplights be linked together?

Yes, Uplights can be linked together in series. Please refer to the 'Linking Directions' section of this guide.

6. Can I connect power tools to the power socket?

It is not advisable to use the power socket as a power outlet.

REPLACEMENT PARTS

Please refer to the parts diagram on pages 10 and 11 for a full breakdown of Uplight components.

1. Parts must only be replaced by an authorised repairer as special tools are required.
2. Only genuine UPLIGHT spares should be used.

WHAT UPLIGHT CAN BE USED FOR

Indoor Use

Plastering
Emergency lighting
Painting
Car body workshops
Domestic DIY
Internal refurbishment

Outdoor Use

Construction sites
Event hire (marquees, pathways etc.)
Patio/garden areas
Outdoor leisure

PRODUCT SPECIFICATION

Rated Voltage	120-277v 50/60Hz
Mains input range	108-304 ac/dc
Operating Frequency	28-30 kHz
Temperature range	-25°C to 50°C

- Digitally controlled fixed pre-heat time across all ambient temperatures
- Safety shutdown at end of lamp life
- Flicker free controlled warm start
- Automatic restart after lamp change

GUARANTEE

Thank you for choosing Uplight. We are sure that it will provide you with many years of excellent service. Be rest-assured that all Uplight products are engineered and manufactured to ensure the highest standards of reliability and performance during use.

If any part of this product is found to be defective due to faulty manufacture within either:

- (1) 1 year of original purchase where the product has been used for domestic use; or
- (2) 3-months of original purchase where the product has been used under hire conditions;
Birchwood Products will effect the repair or replacement to the customer free of charge providing:
 - (a) The fault is reported directly to the source from which it was bought.
 - (b) Proof of purchase is provided.
 - (c) The fault is not caused by misuse, neglect or defective adjustment by the user.
 - (d) The failure has not occurred through fair wear and tear.
 - (e) The product has not been serviced or repaired, taken apart or tampered with by any person not authorised to do so.
 - (f) The product is owned by the original purchaser
 - (g) The product has not been used outside of the country for which it was specified.

This guarantee is additional to, and in no way affects your statutory rights.

GUARANTEE POLICY

Failures due to the following are not covered. Therefore, it is important that you read the instructions contained in this operation & safety guide and understand how to operate and maintain your unit:

Failures not covered by the Guarantee

Replacing light tubes

Failures as a result of not reporting an initial fault

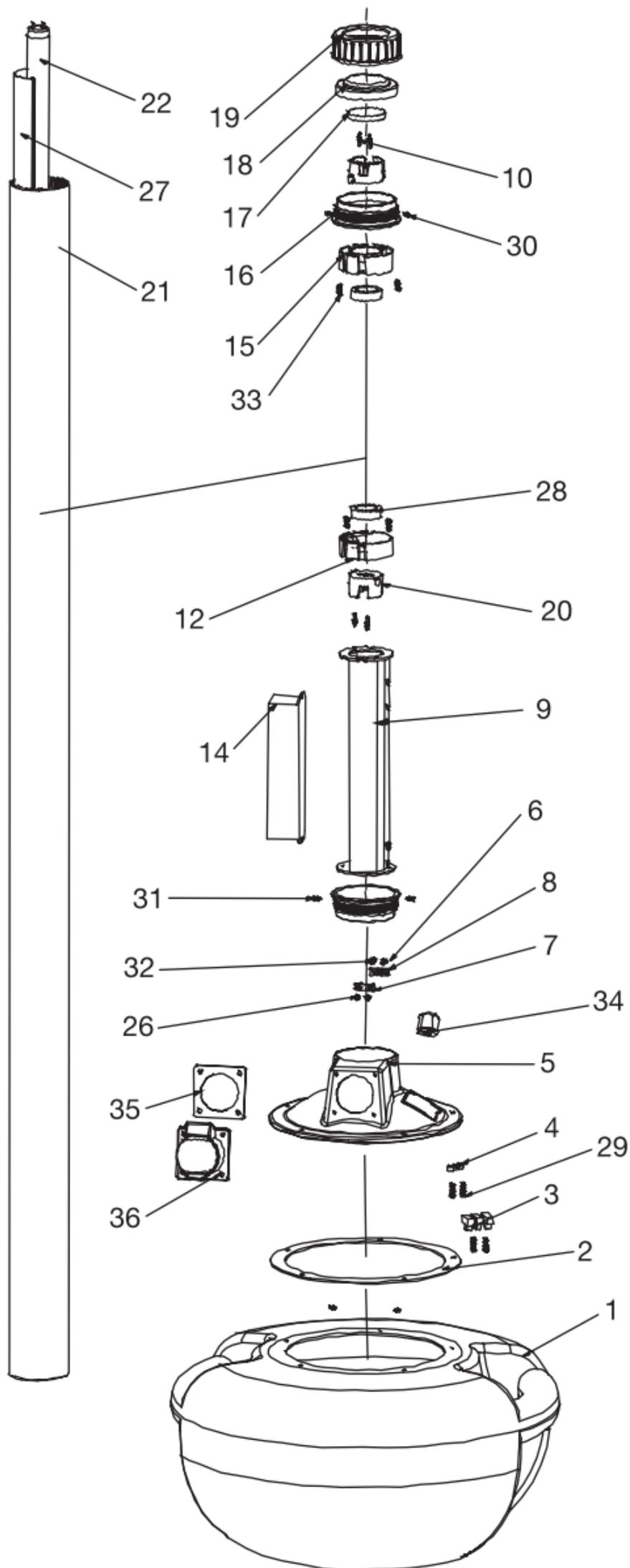
Failure as a result of not using the product in accordance with the instructions and recommendations contained in this manual.

The following items listed are considered to be wearing parts and their life is dependent on regular maintenance and are, therefore not normally subject to a valid warranty claim: light tube, electric mains cable.

In line with a policy of continuous improvement Birchwood Products reserve the right to change product specifications without prior notice.

If you have any comments or questions about products and services of Birchwood Products Ltd, please write to:
Birchwood Products Ltd, Cossall Industrial Estate, Ilkeston, Derbyshire DE7 5UD, England.

PARTS DIAGRAM



PARTS LIST

NUMBER	DESCRIPTION	QUANTITY
1	Base - complete	1
2	Base - O ring	1
3	Terminal block	1
4	Cable restraint	1
5	Fixing collar	1
6	Cable restraint fixing nut	1
7	Cable restraint (upper)	1
8	Cable restraint (lower)	1
9	Ballast tray	1
10	Lamp connectors	4
12	Lamp Holder - Lower (part 1 of 2 part assembly.)	1
14	18/36w dual voltage electronic ballast	1
15	Lamp Holder - Upper (part 1 of 2 part assembly.)	1
16	Threaded end assembly	2
17	Anti-shock buffer	1
18	Plastic end cap	1
19	End securing ring	2
20	Connector holder - lower (part 1 of 2 part assembly)	2
21	Polycarbonate diffuser	1
22	Philips T8 cool daylight fluorescent tube	1
26	Cable restraint fixing bolt	2
27	Aluminium reflector	1
28	Anti-shock tube buffer	2
29	Fixings for cable restraint	4
30	Fixing for threaded assembly - Upper	4
31	Fixing for threaded assembly - Lower	2
32	Cable restraint fixing nut	2
33	Fixings for 2 part lamp holder assembly	4
34	Cable gland	1
35	Rubber seal for panel socket	1
36	Panel socket	1

Birchwood Products Ltd., Cossall Industrial Estate, Ilkeston,
Derbyshire DE7 5UD, England.

EC CERTIFICATE OF CONFORMITY

The EU Directives covered by this Declaration:

89/336/EEC Electromagnetic Compatibility Directive, amended
by 92/31/EEC & 93/68/EEC
72/23/EEC Low Voltage Directive, amended by 93/68/EEC

The products covered by this Declaration:

Defender Uplight™

Consisting of a polycarbonate light diffuser and a polypropylene base. Defender Uplight is a 'rough service' fluorescent light, designated as 2 models - 18-watt 2ft & 36-watt 4ft versions, both with dual voltage capability and self-righting properties.

The Basis on which conformity is being Declared:

The product identified above complies with the requirements of the above EU Directives by meeting the following standards:

BS EN 55015, Measurement of radio disturbance characteristics.
BS EN 61000-3-2, Harmonics.
BS EN 61000-3-3, Voltage Fluctuations.
BS EN 61547, EMC Immunity Requirements.
EN 60598-1, General Requirements and Tests.
DIN EN 60598-1, (VDE 0711 part 1 and part 204)
German General Requirements and Tests.
EN 60598-2-4, Particular requirements.

The technical documentation required to demonstrate that the product meets the requirements of the Low Voltage Directive has been compiled by the signatory below and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in 2002.

The product described above complies with the essential requirements of the directives specified.

Signed:



Anthony Smith - Managing Director
DATE: 06/08/02

ATTENTION:

The attention of the specifier, purchaser, installer, or user is drawn to special measures and limitations to use, which must be observed when the product is taken into service to maintain compliance with the above directives. Details of these special measures and limitations to use are available on request, and are also contained in the product manuals.