



# K41<sup>360</sup>

High Power, LED Multi-Functional 360° Area Lighting System

## Operator's Manual



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**This manual covers the K41-360 with the following product codes:**

K41-S1A | K41-S1B | K41-S2A | K41-S2B | K41-S3A | K41-S3B | K41-SAS

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# IMPORTANT INFORMATION ABOUT YOUR K41-360

Use this page to record important information about your K41-360.

UNIT PRODUCT REFERENCE	
UNIT SERIAL NUMBER	

This information can be found on your K41-360's product data plate.

You will be required to supply the products serial number when contacting Ritelite (Systems) Ltd or one of Ritelite's approved dealers about parts and service.

# IMPORTANT SAFETY INSTRUCTIONS

Some versions of this product are fitted with a polarized plug (one pin is wider than the other) as a feature to reduce the risk of electric shock. This plug type will fit in a polarized outlet only in the correct orientation. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit contact a qualified electrician. Never use with an extension cord unless plug can be fully inserted. Do not alter the plug. This product must be earthed.

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# Section 1: INTRODUCTION & APPLICATIONS FOR USE

The K41-360 is designed as a simple to use but powerful portable LED lighting system. It should only be used as a device to provide light as designed and for no other purpose.

All users must read, understand and obey these safety rules and operating instructions before operating the K41-360 lighting system. Only trained operators or competent personnel should operate the K41-360.

This manual should stay with the K41-360 at all times.

## APPLICATIONS FOR USE

The K41-360 mobile lighting system is designed for use in the following applications only. It should not be used for any other purpose. If in any doubt about applications for use please contact either Ritelite (Systems) Ltd or Ritelite (Systems) Ltd's distributor for more information.

- Sports lighting indoor and outside
- Indoor area lighting
- Area lighting for construction site /scene lighting
- Area lighting for events applications
- Maintenance work
- Rescue operations
- Media and Film



### WARNING

**Failure to follow the instructions and safety rules in this manual may result in death or serious injury.**

# Section 2: SAFETY RULES

It is important that every user understands and observes the safety rules before setting up or using the K41-360 lighting system.

The Manufacturer, Ritelite (Systems) Ltd cannot anticipate every possible circumstance that might involve a hazard. The warnings in this manual and on labels affixed to the K41-360 will therefore not cover every eventuality. If using a procedure or operating method not specifically recommended by the manufacturer then the user must verify that it is safe for others and that it does not make the equipment unsafe.

Throughout this manual and on labels on the K41-360, DANGER, WARNING and CAUTION blocks are used to alert personnel to special instructions about a particular operation that may be hazardous if performed incorrectly or carelessly. Observe them carefully. Their definitions are as follows:

 <b>DANGER</b>	 <b>WARNING</b>	 <b>CAUTION</b>
Indicates a hazardous situation which, if not avoided, will result in death or serious injury.	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

These safety alerts cannot eliminate the hazards that they indicate. Common sense and strict compliance with the instructions within this manual are essential to preventing accidents.



## **WARNING**

**When using outdoor use portable luminaires, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury including the following:**

- a) Use only three-wire outdoor extension cables that have three-prong earthing plugs and earthing receptacles that accept the appliance's plug.**
- b) Residual Current Breaker with Over Current (RCBO) protection is to be provided on the circuit (s) or outlet (s) to be used for the wet location of the portable luminaire. Receptacles are available having built-in RCD / RCBO protection and are best used for this measure of safety.**
- c) Use only with a relevant IP rated extension cable for outdoor use.**

## **GENERAL SAFETY RULES & POTENTIAL HAZARDS WHEN SETTING UP AND USING THE K41-360 LIGHTING SYSTEM**

### **FALL HAZARDS**

- Do not stand on any part of the mast or light head brackets.
- Do not cling to or pull on the mast.
- Do not climb on or use any part of the K41-360 as a platform or step.

### **TIP OVER HAZARDS IF USING A MAST, TRIPOD, OR ANY DEVICE TO SUPPORT THE K41-360 AT HEIGHT**

- Do not raise the mast until the K41-360 is positioned level on a firm, flat, horizontal surface with all three support legs correctly deployed and locked.
- Do not place the K41-360 on a smooth low friction surface even if firm and level. e.g. snow/ Ice. The unit could be prone to sliding sideways in these circumstances.
- Do not set up the K41-360 in windy conditions where wind speed and gusts could exceed the wind rating of the product.
- Check area where the product has been set up on a regular basis to ensure stability has not been compromised through changing conditions, e.g. through wind or water logged ground.
- See operating manual for relevant supporting system before using with the K41-360 for safe deployment.
- Prior to setting up check the area for any possible hazardous conditions.
- Do not place ladders or scaffolding against any part of the K41-360.

- Do not use the K41-360 on a moving or mobile surface or vehicle.
- Avoid debris and uneven surfaces when rolling a K41-360 with the legs folded up.
- Do not use the K41-360 for any purpose other than that for which it is designed.

## **ELECTROCUTION HAZARDS**

- Maintain safe distances away from electrical power lines in accordance with applicable governmental regulations.
- Keep away from the K41-360 if it contacts energized power lines. No-one must touch or operate the K41-360 until power lines are shut off.
- When setting a K41-360 up in an area which does have electrical power lines in the vicinity allow enough distance for mast movement and electrical line sway or sag and be aware of strong or gusty winds which might cause the K41-360 to make contact.
- Ensure product is not being set up in a potentially explosive environment – the K41-360 is not an ATEX approved product.
- Ensure the product will be powered by an RCD / RCBO or suitably protected supply to prevent risk to operators or damage to the K41-360.
- The K41-360 is not designed to be submersed under water.

## **BODILY INJURY HAZARDS**

- It is recommended that the user wears gloves whilst operating or setting up the K41-360.
- In slippery or uneven terrain it is recommended that two people carry separate parts of the K41-360.
- The K41-360 is designed to be simple to setup and operate by one person however there may be situations where it is recommended that two people setup the product.
- Do not carry the K41-360 sections for long distances in extreme temperatures.
- Do not switch on until the K41-360 is setup correctly - to avoid close eye contact with the light.
- Do not stare directly into the lights to prevent damage to eyes.
- Set the K41-360 up so light spill cannot form a nuisance or danger to others, especially those using machinery.
- Where possible the K41-360 should be set up away from personnel or moving vehicles.
- Do not grasp or move the light heads after use until they have cooled down for at least 10 minutes.

## **CRUSHING HAZARDS**

- Ensure the K41-360 is set up on a firm and horizontal flat surface.
- Do not raise the mast until the K41-360 is positioned level on a firm horizontal flat surface with all support legs correctly deployed and locked.
- Do not stand under or allow personnel under the K41-360 when the mast is raised or lowered.
- Keep hands and fingers away from any potential pinch points.

## **COLLISION HAZARDS**

- Ensure the area around the product and above the product is clear of any possible obstructions before starting to set the K41-360 up.
- Use common sense and planning when transporting the K41-360 on any incline or slope.
- On slippery or uneven terrain it is recommended that two people setup the product at all times.
- Make sure when loading the K41-360 into a vehicle or trolley that it is securely mounted / retained so it cannot fall off or move in such a way that it could harm other items or personnel.

## **DAMAGED MACHINE HAZARDS**

- Do not use a damaged K41-360 or a one that is not working properly.
- Conduct a thorough pre-operation inspection prior to each use.
- Be sure that all labels are in place and legible.
- Do not use if there are any visible damaged parts. Contact your dealer to arrange for spares or repair options.
- Do not use any type of abrasive or strong chemicals to clean the K41-360.
- Do not attempt to defeat / modify any of the locks or catches.

## **IMPROPER USE HAZARD**

- Never leave a K41-360 unattended with the mast raised unless a full risk assessment for the application they are being used for has been undertaken by a competent person. Unauthorized personnel may attempt to operate the K41-360 without proper instruction potentially causing injury to themselves or others.
- The device is to be used only for its prescribed purpose. Any use other than that mentioned is considered to be a case of misuse.
- The user/operator, and not the manufacturer shall be liable for any damage or injury resulting from such cases of misuse.
- It is imperative to observe the local accident prevention regulations.
- The same applies for the general rules of occupational health and safety.
- The manufacturer is not liable for indirect consequential damage and financial loss.
- The manufacturer shall not be liable for any changes made to the device nor for any damage resulting from such changes.
- The K41-360 is not designed to be setup / used on a live public highway.



## Section 3: TECHNICAL SPECIFICATIONS



Weight: 13.4Kg



Dimensions (W x H x L)

360° Configuration: 561mm x 161mm x 535mm

180° Configuration: 356mm x 161mm x 980mm

### ELECTRICAL



Input 100-240V AC 50/60Hz 3.8A max

Mains input via 110V/240V plug as per customer requirements



Temperature range: -20°C to +50°C

### LED LIGHT HEADS



IP65 Integral electronic driver 100-240V Input



6500K Daylight white



Max 92,000 equivalent lumens per K41-360 (3 x light heads)



Power requirement: 380W



CRI: >70



Average life: 50,000 hours

### MODEL OPTIONS

#### K41-S1












180-360° configurable light system. Simple on / off control of the light with the light level able to be set to meet requirements via an integrated digital dimmer system from 0 -100% brightness. 5m down lead fitted. 110V or 240V input available.

#### K41-S2

As S1 model but with the additional functionality of a light head mounted Dusk To Dawn (D2D) switch and a link box at the power input to enable multiple lights to be linked or daisy chained together to run from one power source.

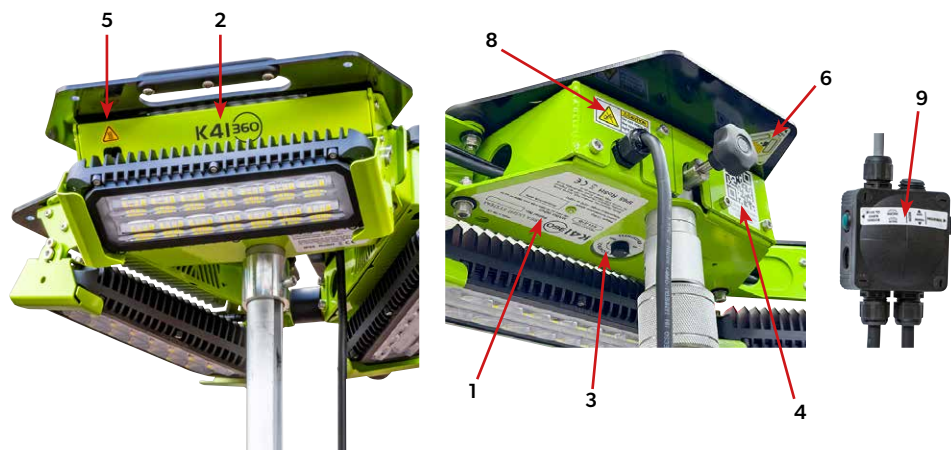
#### K41-S3

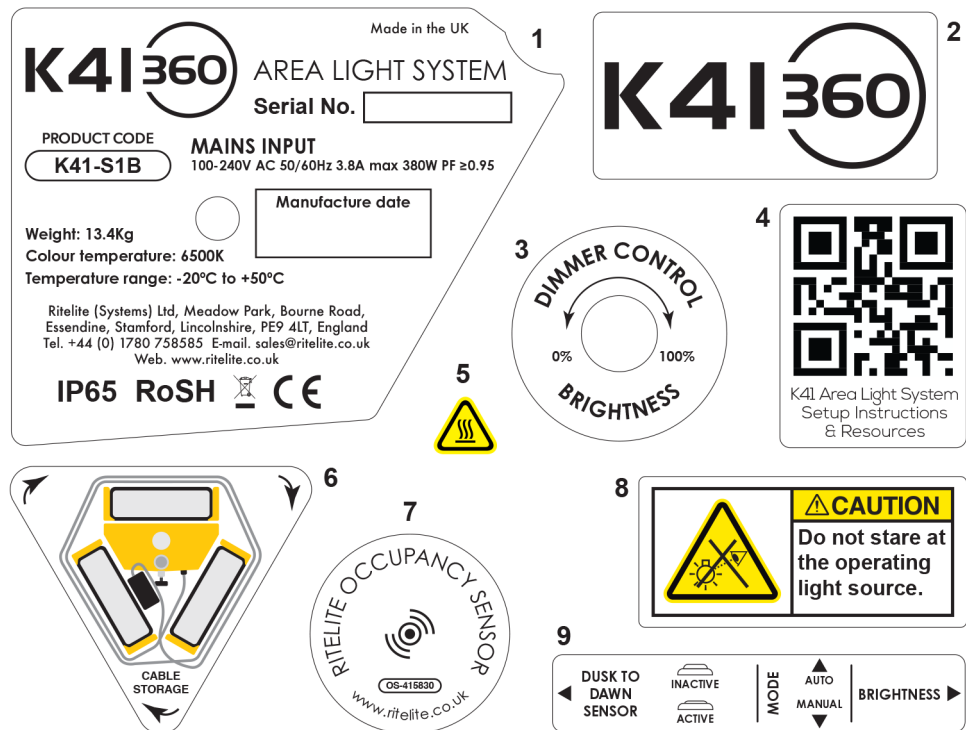
The K41-S3 model has all the functionality of the S1 & S2 models plus a ground level control box and the addition of a microwave occupancy sensor enabling the light to automatically turn on to a pre-set light level when people or vehicles approach maximising energy savings on site and duration of battery power sources.

MODEL FEATURES		K41-S1	K41-S2	K41-S3
	0-100% dimmer	✓	✓	✓
	Control method	In light head	In light head	Ground level pendant
	Linkable functionality to other lights or equipment	N/A	✓	✓
	Link position	N/A	Ground level	Ground level
	Dusk-to-dawn sensor	N/A	✓	✓
	Control position	N/A	In light head	Ground level pendant
	Occupancy sensing	✗	✗	✓
	Control position			Ground level pendant
	Detachable in-line pendant connector system	✗	✗	Optional
	Choice of 110V or 240V input	✓	✓	✓
	5m cable with 110V or 240V plug	✓	✓	✓
	Slide in diffuser set	Optional	Optional	Optional
	Folding suspension eye	Optional	Optional	Optional
	Pendant lockout box	N/A	N/A	Optional
	Find me indication light	Optional	Optional	Optional

## Section 4: SAFETY AND OPERATING LABELS

### LABEL POSITIONS





REF.	DESCRIPTION	QUANTITY
1	Serial label (varies depending on model)	1
2	K4I-360 logo labels	3
3	Dimmer control label (only for S1 units)	1
4	QR code label - link to resources on web page	1
5	Hot warning	3
6	Cable storage pictogram	1
7	Occupancy sensor	1
8	Caution do not stare at light source	1
9	Pendant controls	1

Labels will vary depending on model.

# Section 5: SETTING UP THE K41-360

Inspect the proposed area for use.

An inspection of the proposed area in which to set up the K45 360 is necessary to ensure it is suitable for safe operation. This inspection should be performed by the operator prior to moving the K41-360 into position.

The area should be firm, horizontal, level and free from obstructions and potential hazards.



**Operators should be aware of the following possible hazardous situations. The operator should also remember these hazards, watch and avoid them while moving, setting up and operating the K41-360.**

- **Uneven terrain, drop-offs or holes**
- **Bumps and floor obstructions**
- **Debris either on proposed site or on route to site**
- **Overhead obstructions and high voltage conductors**
- **Inadequate surface support to withstand the K41-360 weight**
- **Wind and weather conditions – ice, snow, gusty or strong winds being particularly hazardous to the safe use of the K41-360 at height**
- **All other possible unsafe conditions**

Arrange the angle of the light heads as far as possible to ensure that the light heads are not likely to dazzle people in the near vicinity.

Set the K41-360 up in such a way that it cannot obstruct walkways or areas that form emergency exit routes.



**The K41-360 can be used indoors or outdoors. Note recommended maximum wind speed on any supporting system.**

Wherever there is any doubt over the wind speed/conditions the K45 360 system should be lowered for safety.

If using the K41-360 for extended periods, a daily check of the unit is required to prevent against misuse or tampering whilst unattended, and to ensure that the surface is still firm, level and stability is not compromised in any way e.g. waterlogged ground.

## Section 6: OPERATING INSTRUCTIONS

Do not use the K41-360 for any purpose other than that for which it is designed – as a mobile floodlighting system.

If more than one operator is expected to set up or use a K41-360 lighting system at different times, each operator is required to follow all safety rules and instructions in the operators manual. That means every new operator should perform a pre-operation inspection and function tests before using the K41-360.

### 6a) PRE-OPERATION INSPECTION

**Always perform a pre-operation inspection.**

The pre-operation inspection is a visual inspection performed by the operator prior to each use of the K41-360. This inspection is designed to discover if anything is obviously wrong with a unit before the operator tests it prior to use.

A damaged or modified K41-360 must never be used. If any damage is discovered the K41-360 must be removed from service until it has been repaired.

Maintenance and repairs can be executed only by authorised personnel. If any person maintaining or repairing the device is in any doubt, they should contact their dealer or Ritelite (Systems) Ltd.

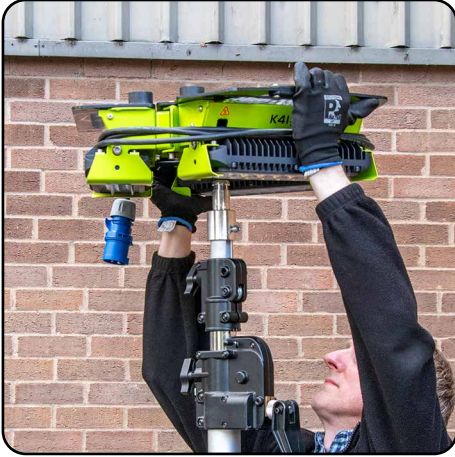
### PRE-OPERATION INSPECTION

Check the following parts or areas for any signs of damage or missing parts.

- Cables (for kinks, frays, abrasions, bare conductors showing)
- Plugs and sockets
- Handles / knobs / adjustment points
- Nuts, bolts and other fasteners
- Check to make sure that there are not dents, weld cracks in the product or signs of significant rust / corrosion.
- Make sure the light head lenses are free from cracks or areas of damage where water would enter.
- Make sure that all structural and other critical components are present and all associated fasteners and pins are in place and properly tightened.

Make sure all labels and warnings are present and readable on the product as detailed in section 4 of this manual.

## 6b) UNIT STABILITY DEPLOYMENT PROCESS



1. Setup the tripod. Place light head on top of spigot .



2. Unwind light head cable from the light head.



3. For 360° setup adjust the angle of each light head if required.

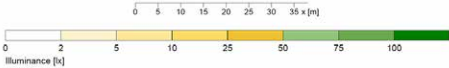
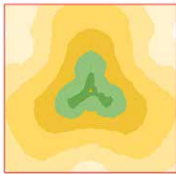


4. For 180° setup grasp the light heads and firmly pull the connector apart. Rotate the two outer heads as far as they will go.

The unique multi-functional friction supported system allows for a 360 degree even spread of light through to 180 degree single point direction with a beam control projection.

### 360 Degree Area Lighting

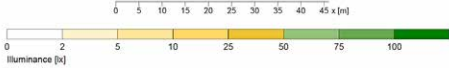
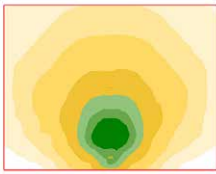
For applications where multi-directional lighting is required.



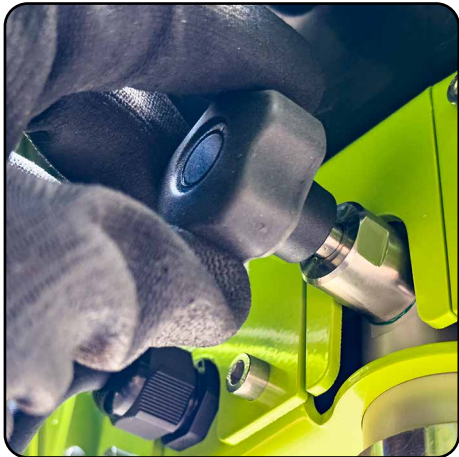
3 x 113W light heads on K41-360 average 20 lux over 2440m<sup>2</sup> based on a deployed height of 4.5m.

### Directional Area Lighting

For industrial lighting.



3 x 113W light heads on K41-360 average 20 lux over 2370m<sup>2</sup> based on a deployed height of 4.5m.



4. Once the required setup is achieved tighten the light head knob to lock light heads and prevent them from rotating. If necessary raise light head to required working height.





**6.** Connect the mains input lead to the power. Observe the local voltage is correct to match the input range of the LED driver (100-240V AC) and switch on/connect power.



**Head mounted dimmer**



**Pendant box mounted dimmer**

**7.** Adjust the brightness control knob on the light head / pendant box to vary the light output as required. Setup is now complete.



## 6c) BREAKING DOWN OPERATION

Breaking down the K41-360 to put it away is a reverse of the setting up operation.



1. Switch off power to the K41-360 and disconnect the main cable. If a tripod has been used lower fully so the light heads can be reached.



2. If used in 180° mode fold in light heads and connect by firmly pushing together.



3. Fully undo knob and lift the K41 from the tripod. Lay onto the ground with the lenses facing upwards. Wind the cable back around the light heads in a clock-wise direction. If unit has no pendant box the connector plug should sit in the centre as shown above.



4. If fitted slot the groove of pendant box onto the bolt to hold securely then tuck in the connectors.

## 6d) PACKING AWAY & TRANSPORT



**In slippery or uneven terrain it is recommended that two people manoeuvre the product at all times.**

**Take extra care handling light heads when packing the K41-360 away for transport in case housings are still hot.**

### TRANSPORT AND LIFTING INSTRUCTIONS

- The transport vehicle/trolley must be parked on a level surface.
- The transport vehicle/trolley must be secured to prevent rolling while the K41-360 components are being loaded.
- Be sure the vehicle/trolley capacity, loading surfaces/storage area and chains or straps are sufficient to withstand the K41-360 weight. See the serial plate on the K41-360 components for their exact weight.
- The K41-360 must be secured to the transport vehicles with chains or straps of ample load capacity.

## Section 7: MAINTENANCE

- It is recommended that all K41-360 products are PAT tested at least on an annual basis. Owner / manager to assess and decide frequency of PAT testing required depending on regularity or type of use.
- It is recommended that a regular inspection of the complete product is carried out to look for signs of wear and tear and identify possible maintenance required. This should be done by a competent person on at least an annual basis depending on severity and types of use.
- It is recommended that gloves are worn during operation/setting up, breaking down, cleaning and maintenance to protect the user.
- All fasteners, locking mechanisms and latches to be checked for correct operation prior to use.
- Any damaged parts that could pose a risk to the user/personnel must be replaced.
- All sliding and rotating mechanisms must be kept clean and lubricated where applicable.
- The K41-360 must be taken out of service if, during use, or repair and maintenance serious damage is discovered.
- The K41-360 can only be put back into use after it has been properly repaired and examined and signed off by authorised personnel.
- The use of spares other than original parts from Ritelite (Systems) Ltd will invalidate any warranty.






## ADVICE ON DISPOSAL OF RITELITE PRODUCTS AT END OF LIFE

For our latest advice on the disposal of Ritelite products at end of life please visit the link below.  
<https://www.ritelite.co.uk/disposal-advice>

## DISCLAIMER OF WARRANTY

For details about the warranty offered on Ritelite products please visit the link below.  
<https://www.ritelite.co.uk/warranty-information>

# Section 8: OPTIONAL EXTRAS

PRODUCT CODE	DESCRIPTION	PREVIEW
SLK45-LITE/TRP/4M	4m lightweight tripod, 9Kg weight	
K-LITE/TRP/4.5M	4.5m heavy duty tripod, 21 Kg weight	
K41-FIL	Find me indication light	
K41-FSE	Folding suspension eyelet	
K41-DS	Optional slide in diffuser set ensures unwanted direct light is softened as required. Set of 3.	

PRODUCT CODE	DESCRIPTION	PREVIEW
K41-DIP	Detachable in-line pendent connector system	
K41-PLB	Pendent tamper proof lock-out box	
K41-S/BAG	Padded carry case	
K41-S/CARRYCASE	Hard carry case	PICTURE TO FOLLOW
SE/110ELXXX *	110V extension lead	
SE/220ELXXX *	240V extension lead	

\* Various lengths and connectors available.

## ADVICE ON DISPOSAL OF RITELITE PRODUCTS AT END OF LIFE

For our latest advice on the disposal of Ritelite products at end of life please visit the link below.

**<https://www.ritelite.co.uk/disposal-advice>**

## DISCLAIMER OF WARRANTY

For details about the warranty offered on Ritelite products please visit the link below.

**<https://www.ritelite.co.uk/warranty-information>**

The contents of this manual are subject to change without prior notice.

We take no responsibility for errors or admissions.



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