



## Rapid Deployment Lightweight Mobile Lighting System

# **Operator's Manual**



This manual covers the K45-LITE with the following product codes: SLK45-LITE | SLK45-ULTRA-LITE | SLK45LED-LITE-S | SLK45LED-LITE-S-ID

The information contained in this manual is based on products manufactured up to the time of publication. Ritelite (Systems) Ltd reserves the right to change any of this information without notice.

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## **IMPORTANT INFORMATION ABOUT YOUR K45-LITE**

Use this page to record important information about your K45-LITE.

UNIT PRODUCT REFERENCE	
UNIT SERIAL NUMBER	

This information can be found on your K45-LITE's product label on the LED driver.

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 K45-LITE 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 K45-LITE lighting system. Only trained operators or competent personnel should operate the K45-LITE.

This Manual should stay with the K45-LITE at all times.

#### **APPLICATIONS FOR USE**

The K45-LITE 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

## 

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 K45-LITE 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 K45-LITE 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 K45-LITE, 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:

Indicates a hazardous	Indicates a hazardous	Indicates a hazardous
situation which, if not	situation which, if not	situation which, if not
avoided, will result in	avoided, could result in	avoided, could result in
death or serious injury.	death or serious injury.	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.

## 

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 circuits (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 K45-LITE 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 K45-LITE as a platform or step.

# TIP OVER HAZARDS IF USING A MAST, TRIPOD, OR ANY DEVICE TO SUPPORT THE K45-LITE AT HEIGHT

- Do not raise the mast until the K45-LITE is positioned level on a firm, flat, horizontal surface with all three support legs correctly deployed and locked.
- Do not place the K45-LITE on a smooth low friction surface even if firm and level. e.g. snow/ lce. The unit could be prone to sliding sideways in these circumstances.
- Do not set up the K45-LITE 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 K45-LITE 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 K45-LITE.

- Do not use the K45-LITE on a moving or mobile surface or vehicle.
- Avoid debris and uneven surfaces when rolling a K45-LITE with the legs folded up.
- Do not use the K45-LITE 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 K45-LITE if it contacts energized power lines. No-one must touch or operate the K45-LITE until power lines are shut off.
- When setting a K45-LITE 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 K45-LITE to make contact.
- Ensure product is not being set up in a potentially explosive environment the K45-LITE 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 K45-LITE.
- The K45-LITE 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 K45-LITE.
- In slippery or uneven terrain it is recommended that two people carry separate parts of the K45-LITE.
- The K45-LITE 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 K45-LITE sections for long distances in extreme temperatures.
- Do not switch on until the K45-LITE 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 K45-LITE up so light spill cannot form a nuisance or danger to others, especially those using machinery.
- Where possible the K45-LITE 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 K45-LITE is set up on a firm and horizontal flat surface.
- Do not raise the mast until the K45-LITE 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 K45-LITE 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 K45-LITE up.
- Use common sense and planning when transporting the K45-LITE 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 K45-LITE 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 K45-LITE 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 K45-LITE.
- Do not attempt to defeat / modify any of the locks or catches.

#### **IMPROPER USE HAZARD**

- Never leave a K45-LITE 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 K45-LITE 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 K45-LITE is not designed to be setup / used on a live public highway.

#### Section 3: TECHNICAL SPECIFICATIONS

K45-LITE WEIGHTS / DIMENSIONS		
SLK45LED-LITE-S	Weight: 14Kg Dimensions: 300 x 300 x 440mm	
SLK45LED-LITE-S-ID	Weight: 14Kg Dimensions: 300 x 300 x 440mm	
SLK45-ULTRA-LITE	Weight: 9Kg Dimensions: 300 x 300 x 440mm	
SLK45LED-LITE (INCLUDES EXTERNAL LED DRIVER BOX)	Light head weight: 9.44Kg Dimensions: 300 x 300 x 440mm LED driver weight: 5Kg LED driver dimensions: 340 x 110 x 230mm	

#### ELECTRICAL

Input 100-240V AC 50/60Hz 7A max

#### LED LIGHT HEADS

IP65 Integral electronic driver 100-240V Input 6500K Daylight white

#### SLK45-LITE, SLK45-LITE-S & SLK45LED-LITE-S-ID

Max 85,000 lumens per K45-LITE (6 x light heads) Power requirement: 650W

#### SLK45-ULTRA-LITE

Max 43,500 lumens per K45-Ultra-LITE (3 x light heads) Power requirement: 320W

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

### Section 4: SAFETY AND OPERATING LABELS

### LABEL POSITIONS

	External LED driver only required for SLK45LED-LITE	
1	3 <b>6</b> 4	5 VARIABLE LIGHT LEVEL CONTROL 0% 100%
HIGH POWER PORTABLE LIGHTING SYSTEM DEVICE THE ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT INFORMATION OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT OF THE ADDA STATEMENT ADDA STATEMENT OF THE ADDA STATEMENT OF	Constraints and the data is an earlier of distance may are the data and the data is a straint.     Second and the data is a straint of the data is a straint of the data and the data is a straint.	LE LIGHTING SYSTEM  Serial No.  IP66 NK-7 IMPACT RESISTANT SELV ROSH C C C C C C C C C C C C C C C C C C C
MAINS INPUT 10.3499 AC 504/081 7.0A more 450W Serial No. Mode in the UK Mode in the UK Mo	9. Consect the main spent to the driver observing the correct fixed supply voltage is suitable. 10. Use the adjustable light level control to say light deput as required. The adjustable light level control to say light deput as required. The adjustable light level control to say light deput as required. The adjustable light level control to say light deput as required. The adjustable light level control to say light deput as required. The adjustable light level control to say light deput as required. The adjustable light level control to say light deput as required. The adjustable light level control to say light deput as required. The adjustable light level light deput as required. The adjustable light deput as required. The ad	

REF.	DESCRIPTION	QUANTITY
1	Instructions, light head technical spec (for integral LED driver only)	1
2	Instructions, light head technical spec (for separate LED driver only)	1
3	Light head locking knob	1
4	Hot warning	9
5	Dimmer control label (only for units with integral driver fitted to head)	1

## Section 5: SETTING UP THE K45-LITE

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 K45-LITE 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 K45-LITE.

- 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 K45-LITE weight
- Wind and weather conditions ice, snow, gusty or strong winds being particularly hazardous to the safe use of the K45-LITE 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 K45-LITE up in such a way that it cannot obstruct walkways or areas that form emergency exit routes.

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The K45-LITE 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 K45-LITE 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 K45-LITE 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 K45-LITE 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 K45-LITE.

#### **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 K45-LITE. 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 K45-LITE must never be used. If any damage is discovered the K45-LITE 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. Place light heads on top of spigot .



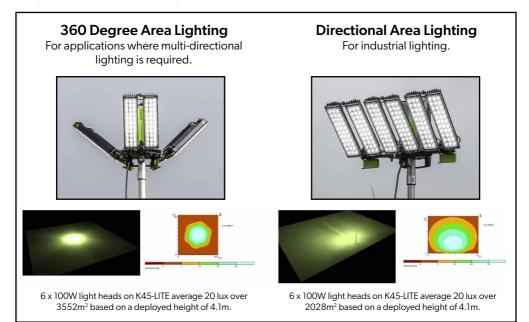
**2.** Unwind light head cable from its storage by lightly pulling on the cable which should rotate the light heads on the spigot aiding unwinding of the cable.





**3.** Adjust the light heads to point in the required direction with the angle of each light head adjustable to move the projected light accordingly.

The unique multi-functional friction supported system allows for a 360 deg even spread of light through to a single point direction with a 60 deg horizontal and vertical projection.





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

SLK45-LITE-S, SLK45-LITE-S-ID and SLK45-ULTRA-LITE models with integral LED driver, connect the cable as detailed below. For the SLK45-LITE model with separate LED driver box please continue from page 16.



**5.** If the light head has a separate in-line dimmer, connect the power adaptor to the socket by pushing in and twisting. It can then be hooked onto a suitable place on the tripod.



**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.



In-line dimmer



Head mounted dimmer

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

#### For the SLK45-LITE model with separate LED driver box, connect the cables as detailed below.



8. Connect the plug from the light heads to the LED driver and make sure it is tightened and secure. Connect the mains input lead to the LED driver. Observe the local voltage is correct to match the input range of the LED driver (100-240V AC) and switch on/connect power.



**9.** Adjust the brightness control knob on the LED driver to vary the light output as required. Setup is now complete.

#### **6c) BREAKING DOWN OPERATION**

Breaking down the K45-LITE to put it away is a reverse of the setting up operation.



**1.** Switch off power to the K45-LITE and disconnect the main cable. If a tripod has been used lower fully so the light heads can be reached.



**2.** If the light head has a separate in-line dimmer, disconnect the power adapter. This disconnects by sliding the locking button on the plug backwards and then rotating the plug anticlockwise before withdrawing.



**3.** Fold light heads back away so they form back to a closed cylinder.

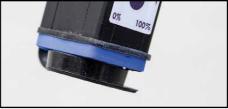


**4.** Undo knob (C) so the light heads spin on the spigot and guide the supply cable back on to their storage brackets, tuck the plug into the cable to prevent it unwinding.



**5.** Lift the light heads off and put them straight into their supplied protective storage bag with the handle end upwards. If part of the kit (SLK45-LITE) place the mains input cable from the driver into the same bag.





8. If unit has a separate LED driver (SLK45-LITE), close the rubber cover back over the mains input socket to protect it from unwanted debris ingress, close the lid on the case and make sure the two latches are securely clicked into place.

If unit has dimmer on cable, close the rubber cover on this.

#### 6d) PACKING AWAY & TRANSPORT

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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 K45-LITE 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 K45-LITE components are being loaded.
- Be sure the vehicle/trolley capacity, loading surfaces/storage area and chains or straps are sufficient to withstand the K45-LITE weight. See the serial plate on the K45-LITE components for their exact weight.
- The K45-LITE must be secured to the transport vehicles with chains or straps of ample load capacity.

#### Section 7: MAINTENANCE

- It is recommended that all K45-LITE 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 K45-LITE must be taken out of service if, during use, or repair and maintenance serious damage is discovered.
- The K45-LITE 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	All terrain tripod. Maximum height 4m	A
SLK45-LITE/TRP/IN	Indoor tripod. Maximum height 3m	
SLK45-LITE/BB	Tripod ballast bags. Sold as a pack of three, add your own ballast.	
SE/110EL142	110V 14m extension lead	
SE/220EL142	240V 14m extension lead	

### Section 9: SPARE PARTS

PRODUCT CODE	DESCRIPTION	PREVIEW
SLK45-LITE-S-SPO1	Lens array	
SLK45-LITE-S-SP02	Dimming control module	
SLK45-LITE-S-SPO3	Mains cable 110V 5.5m with 16A plug	Ó
SLK45-LITE-S-SPO4	Mounting spigot with locking pin and knob	
SLK45-LITE-S-SP05	Cable storage brackets	). 
SLK45-LITE-S-SP06	Connection box with glands	
SLK45-LITE-S-SP07	LED module interconnecting cable set	

PRODUCT CODE	DESCRIPTION	PREVIEW
SLK45-LITE-S-SP08	LED light PCB	10 10 10 10 10 10 10 10 10 10 10 10 10 1
SLK45-LITE-S-SP09	Lifting handle with driver mounting plate	
SLK45-LITE-S-SP10	600W LED driver	Joseph Contraction

#### 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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