



## Rapid Deployment Lightweight Mobile Lighting System

# **Operator's Manual**



This manual covers the K35-Lite with the following product code: SLK35-LITE/INDOOR/110V | SLK35-LITE/INDOOR/230V SLK35-LITE/OUTDOOR/110V |SLK35-LITE/OUTDOOR/230V

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## **IMPORTANT INFORMATION ABOUT YOUR K35-LITE**

Use this page to record important information about your K35-Lite.

UNIT PRODUCT REFERENCE	
UNIT SERIAL NUMBER	

This information can be found on your K35-Lite's data plate which is found as part of the main instruction label, on the lower mast section of the tripod.

RITELITE (SYSTEMS) LTD				
PRODUCT	K35/K45-LITE PORTABLE LIGHTING TOWER			
PRODUCT C	CODE SLK45-LITE/TRP/3M			
MAX LIGHT	HEAD WEIGHT	10Kg		
TRIPOD WE	IGHT	8Kg		
COMPACTE	d height	1.32m		
MAX HEIGH	IT	3.25m		
MIN LEG SP	READ AREA	0.7m		
MAX LEG SI	PREAD AREA	2.06m		
MANUFACTURE	DATE			

NOTE: Below is an example of the K35-Lite 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.

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## Section 1: INTRODUCTION & APPLICATIONS FOR USE

The K35-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 K35-Lite lighting system. Only trained operators or competent personnel should operate the K35-Lite.

This Manual should stay with the K35-Lite at all times.

## **APPLICATIONS FOR USE**

The K35-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

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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 K35-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 K35-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 K35-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.

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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 cords that have three-prong grounding plugs and grounding receptacles that accept the appliance's plug.
- Besidual Current Device (RCD) protection is to be provided on the circuits (s) or outlet (s) to be used for the wet location portable luminaire. Receptacles are available having built-in RCD protection and are able to be used for this measure of safety.
- c) Use only with a relevant IP rated extension cord for outdoor use.

## GENERAL SAFETY RULES & POTENTIAL HAZARDS WHEN SETTING UP AND USING THE K35-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 K35-Lite as a platform or step.

## TIP OVER HAZARDS

- Do not raise the mast until the K35-Lite is positioned level on a firm, flat, horizontal surface with all three support legs correctly deployed and locked.
- Do not place the K35-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 K35-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.
- Ensure the legs are locked in position before attempting to raise the mast. Use the leg adjustment clamps to raise / lower the legs.
- Do not release the leg clamps when the mast is raised or loaded with the light heads.

- Prior to setting up check the area for any possible hazardous conditions.
- Do not use blocks to level the K35-Lite.
- Do not move the K35-Lite with a raised load.
- Do not place ladders or scaffolding against any part of the K35-Lite.
- Do not use the K35-Lite on a moving or mobile surface or vehicle.
- Do not use the K35-Lite for any purpose other than that for which it is designed.
- The K35-Lite is NOT a lifting device for anything other than the K35-Lite.

## **ELECTROCUTION HAZARDS**

- Maintain safe distances away from electrical power lines in accordance with applicable governmental regulations.
- Keep away from the K35-Lite if it contacts energized power lines. No-one must touch or operate the K35-Lite until power lines are shut off.
- When setting a K35-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 K35-Lite to make contact.
- Ensure product is not being set up in a potentially explosive environment the K35-Lite is not an ATEX approved product.
- Ensure the product will be powered by an RCD or suitably protected supply to prevent risk to operators or damage to the K35-Lite.
- The K35-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 K35-Lite.
- In slippery or uneven terrain it is recommended that two people carry separate parts of the K35-Lite system.
- The K35 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 K35-Lite sections for long distances in extreme temperatures.
- Do not switch on light heads until mast is raised to avoid close eye contact with the light.
- Do not stare directly into the lights to prevent damage to eyes.
- Set the K35-Lite up so light spill cannot form a nuisance or danger to others, especially those using machinery.
- Where possible the K35-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 K35-Lite is set up on a firm and horizontal flat surface.
- Do not raise the mast until the K35-Lite is positioned level on a firm horizontal flat surface with all three support legs correctly deployed and locked.
- Do not allow personnel under the K35-Lite when the mast is raised or lowered.
- Keep hands and fingers away from any potential pinch points.
- Maintain a firm grasp on the top mast section and take the load when unlocking the twist clamp. The mast will drop downwards causing possible risk to operator or damage to equipment if the clamp is just released without taking up the load.
- Never move the K35-Lite with the mast partly or fully raised.

## **COLLISION HAZARDS**

- Ensure the area around the product and above the product is clear of any possible obstructions before starting to set the K35-Lite up.
- Use common sense and planning when transporting the K35-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 K35-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.

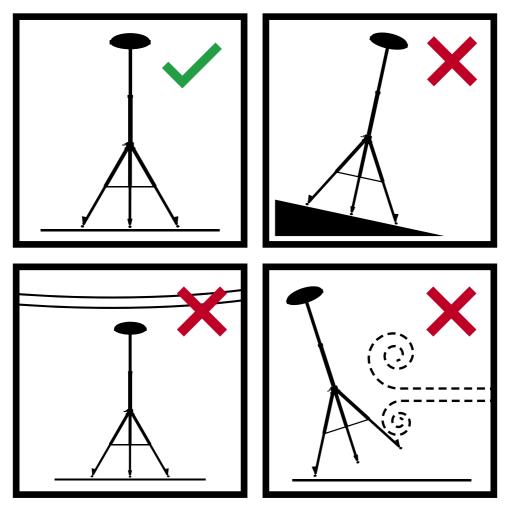
## DAMAGED MACHINE HAZARDS

- Do not use a damaged K35-Lite or one that is not working properly.
- Do not use a K35-Lite with a damaged mast.
- 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 K35-Lite.
- Do not attempt to defeat / modify any of the locks or catches.

### **IMPROPER USE HAZARD**

- Never leave a K35-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 K35-Lite without proper instruction potentially causing injury to themselves or others.
- Do not place the K35-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.
- The K35-Lite must only be operated in a vertical position.

- 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 K35-Lite is not designed to be setup / used on a live public highway.



## Section 3: TECHNICAL SPECIFICATIONS

K35 LITE WEIGHTS / DIMENSIONS			
PRODUCT CODE	SLK35-LITE		
TOTAL SYSTEM WEIGHT	16Kg (with outdoor tripod)		
LIGHT HEAD			
WEIGHT	8Kg		
DIMENSIONS	ø400mm x H 200mm (H 420mm with sky hook)		
OUTDOOR TRIPOD			
WEIGHT	8Kg		
CLOSED DIMENSIONS	1320mm x ø180mm		
OPEN DIMENSIONS	3120mm x ø2060mm		
INDOOR TRIPOD			
WEIGHT	6Kg		
CLOSED DIMENSIONS	1500mm x ø130mm		
OPEN DIMENSIONS	3055mm x ø1350mm		

#### ELECTRICAL

Input 100-277V AC 50/60Hz 3A max

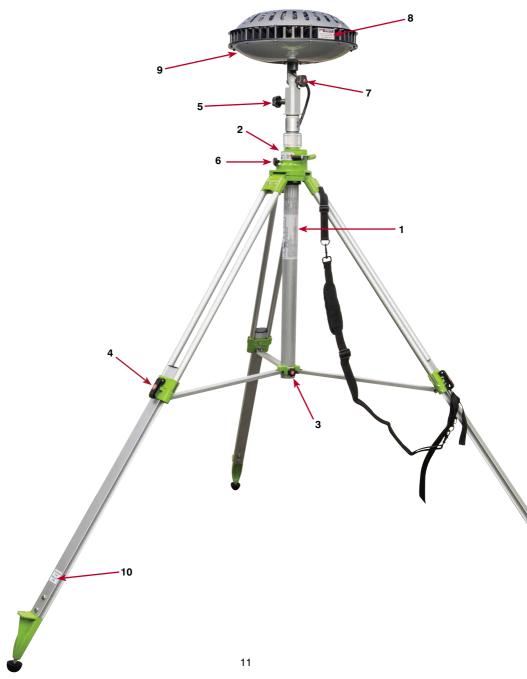
#### LED LIGHT HEAD

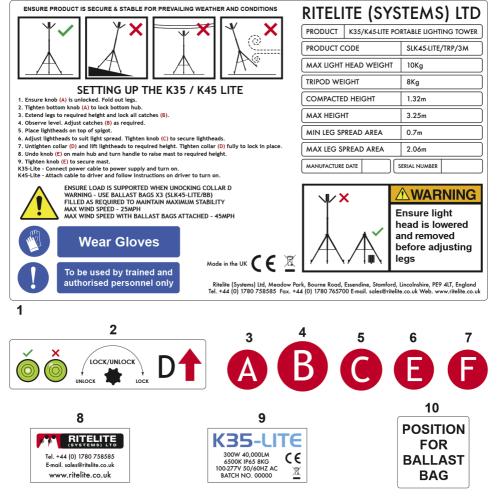
IP65 Integral electronic driver 100-277V Input 6500K Daylight white max 40,000 lumens

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

## Section 4: SAFETY AND OPERATING LABELS

## LABEL POSITIONS





REF.	DESCRIPTION	QUANTITY
1	Instructions for raising and lowering the mast, warnings and data plate	1
2	Bubble level, knob D locking	1
3	Lower centre mast locking knob	1
4	Leg locking latch	3
5	Light head locking knob	1
6	Upper centre mast locking knob	1
7	Light head angle adjustment knob	1
8	Ritelite contact details	1
9	Light head specification (not visible)	1
10	Position for ballast bag	3

## Section 5: SETTING UP THE K35-Lite

Inspect the proposed area for use.

An inspection of the proposed area in which to set up the K35-Lite is necessary to ensure it is suitable for safe operation. This inspection should be performed by the operator prior to moving the K35-Lite into position.

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

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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 K35-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 K35-Lite weight
- Wind and weather conditions ice, snow, gusty or strong winds being particularly hazardous to the safe use of the K35-Lite
- 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 K35-Lite up in such a way that it cannot obstruct walkways or areas that form emergency exit routes.

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The K35-Lite can be used indoors or outdoors. Note Recommended Maximum Wind Speed.

Wherever there is any doubt over the wind speed/conditions the K35-Lite should be lowered for safety.

#### Maximum wind speed at 100% height - 25mph without ballast bags. 45mph with ballast bags (minimum 5kg weight per bag)

If using the K35-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 K35-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 K35-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 K35-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 K35-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 K35-Lite must never be used. If any damage is discovered the K35-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.

- Leg locking clamps
- · Cables (for kinks, frays, abrasions, bare conductors showing)
- Plugs and sockets
- Legs and feet
- · Mast column and associated 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.** Undo the strap which wraps around the tripod legs. Undo the knob marked 'A' on the tripod – fold out legs evenly until the leg tie bars are horizontal to the centre hub point. Tighten knob 'A' to lock off tie bars.



**2.** Extend legs to required height by individually releasing locking lever 'B', extend leg then relock lever 'B' making sure it is secure.



**3.** Observe the in built level and if required adjust legs accordingly as per instruction (2) so the tripod is level and stable.



**4.** If conditions demand it, add sand bags to each leg in the position shown.



5. Place light heads on top of spigot.



**6.** Adjust the light heads to point in the required direction by slackening knob 'F', then re-tightening once the desired angle is set.



**7.** Once the required setup is achieved tighten knob 'C' to lock light head to the mast and prevent it from rotating.



**8.** Unlock the knurled collar (D) in an anti-clockwise direction and extend the mast upwards to the required height (have someone assist if you are unsure of the weight you can manage), then whilst supporting the load tighten the knurled collar in a clockwise direction (D) fully so it is tight and supporting the weight of the light heads safely.



**9.** Undo knob (E) then turn handle on main hub in a clockwise direction to raise the mast to the required height.



**10.** Lock off knob (E) in a clockwise direction to fully secure mast section.



11. Connect the mains input lead to the K35-Lite. Observe the local voltage is correct to match the input range of the LED driver (100-277V AC) and switch on / connect power.

### 6c) BREAKING DOWN OPERATION

Breaking down the K35-Lite to put it away is a reverse of the setting up operation.



**1.** Switch off power to the K35-lite and disconnect the power cable.





2. Undo anti-clockwise knob (E) and turn the handle anti-clockwise to lower the mast until the next section with the knurled knob (D) comes to rest on the main hub. Warning pay attention to the descending light head at all time.



4. Next grasp the aluminium section supporting the light heads and undo (D) slowly in an anticlockwise direction until you feel the weight of the light heads as they descend, continue to bear their weight and guide them downwards until they are at a rested position on top of the section below. WARNING Under no circumstances allow the light head to drop uncontrolled on to the top of the next section, this will damage the tripod and could cause injury to personnel.



5. Slacken off knob (C).



**6.** Lift the light head off the unit and place on the ground.



7. Slacken off knob (F) and set the bracket at 90 degrees to the light head to allow for compact storage. Coil up the power cable and place over the bracket.



**8.** Place the light head and cable back in the storage bag and zip-up.



9. If used remove any sand bags from the legs.



**10.** Support the tripod and then undo each leg locking lever (B) slide each leg up fully in turn and then lock the lever (B) back to retain.



**11.** Undo knob (A) then guide the bottom hub upwards to fold all three legs away together. Tighten knob (A) once legs are folded flat to the body of the centre tube.



**12.** Do the strap up that wraps around the legs to hold them in tight.



**13.** Make sure the carry strap is securely connected to the D rings for carrying.

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As you lower the mast always be conscious of other personnel and the surrounding area above and around the K35-Lite. Make sure only persons (MAX 2 people) are in the vicinity of the K35-Lite when it is being taken down.

#### 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 K35-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 K35-LITE components are being loaded.
- Be sure the vehicle/trolley capacity, loading surfaces/storage area and chains or straps are sufficient to withstand the K35-Lite weight. See the serial plate on the K35-LITE components for their exact weight.
- The K35-Lite must be secured to the transport vehicles with chains or straps of ample load capacity.

#### 6e) USING THE SKY HOOK

The K35-Lite light head can also be hung from a sturdy fixing. To do this the included 'Sky Hook' can be fitted to the top.





Screw the skyhook into the hole in the top of the light head in a clockwise direction until tight.



It is recommended that the safety chain is also used as a backup to secure the light head to the fixing you are hanging the fitting from. Attach the chain to the two brass loops and through the fixing.

## **Section 7: MAINTENANCE**

- It is recommended that all K35-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 K35-Lite must be taken out of service if, during use, or repair and maintenance serious damage is discovered.
- The K35-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: NOTES FOR USERS



The contents of this manual are subject to change without prior notice. We take no responsibility for errors or admissions.

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