

LED COMBI LIGHT

INSTALLATION & OPERATION MANUAL

MODELS:

LGAB0020 6-WAY
LGAB0040 10-WAY


ROLEC
Marina Services

Installation & Operation Manual - MCLM-001
Ver:1.00 Rev:0 July 2020



Amendments

Amendment Number	Details	Date
Ver 1, Rev 0	New Document.	July 2020
Ver 1, Rev 1	Correction to Typo, update of LED power and IP rating.	June 2021

Product:	Combi Light		
Applicable Models:	LGAB0020 6-Way	LGAB0040 10-Way	
Document Type:	Installation and Operation Manual		
Document Code:	MCLM-001		
Language:	UK English (Original)		
Date Published:	June 2021		
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Safety

This manual is specifically applicable to the Combi Light, LED Deck Lighting product and is provided as a guide to its installation and use.

**WARNING: Electrical Power**

Make sure electrical power is isolated BEFORE starting this procedure.

- Turn power OFF at the SOURCE.



IMPORTANT: Installers and End Users must **read** and **understand** the content of this manual before installation/use.

Installation must **only** be performed by someone who is properly qualified and competent to do so in accordance with the current legislation and Electrical Wiring Regulations of the geographical location of the installation.

- If the advice in this manual is not understood, contact Rolec for further advice and/or training BEFORE attempting installation/operation of the equipment.
- Rolec Services Ltd cannot accept any responsibility for improper installation or any problems arising from improper installation.

NOTE: Damage to the equipment, connected systems or to property caused by improper installation/use are the responsibility of the installer/user.

- The information provided in this manual must **ONLY** be used with the model(s) listed on page 2 of this manual.
- The information provided in this manual must **NOT** be used with any other product.
- The content of this manual may be updated as required.
- Do **NOT** use the equipment for anything other than its intended purpose.
- Do **NOT** modify the equipment unless specifically instructed to do so by the manufacturer.
- Do **NOT** attempt to repair the equipment unless specifically instructed to do so by the manufacturer.
- This product is electrically safe when in normal use.
- Damage to the product may render it unsafe. The product must be electrically isolated and **NOT** used until appropriate remedial action has been performed.

Safety Advice within this Manual

Rolec manuals use a system of warnings, cautions and notes.

- **WARNINGS** concern the safety of installers/end user and will be given before the detail/instructions in the manual.
- **CAUTIONS** concern the potential for damage to the equipment and will be given before the detail/instructions in the manual.
- **NOTES** are given to provide additional information and/or highlight information of importance. They will be given either before or after the detail/instructions as appropriate and may use different wording (such as IMPORTANT) where emphasis is required.

Warnings, Cautions and Notes may be repeated several times as appropriate and may be preceded by a hazard symbol.

Product Overview

The Combi Light, LED Deck Lighting System is specifically designed to provide ground level, illumination of decks, pontoons, access bridges and quaysides but is equally effective in both domestic and business settings where attractive, unobtrusive and robust fittings are required.

The Combi Light system comes pre-configured in 6 or 10-way looms and full looms may be linked to a central control point in the same way as other powered systems.

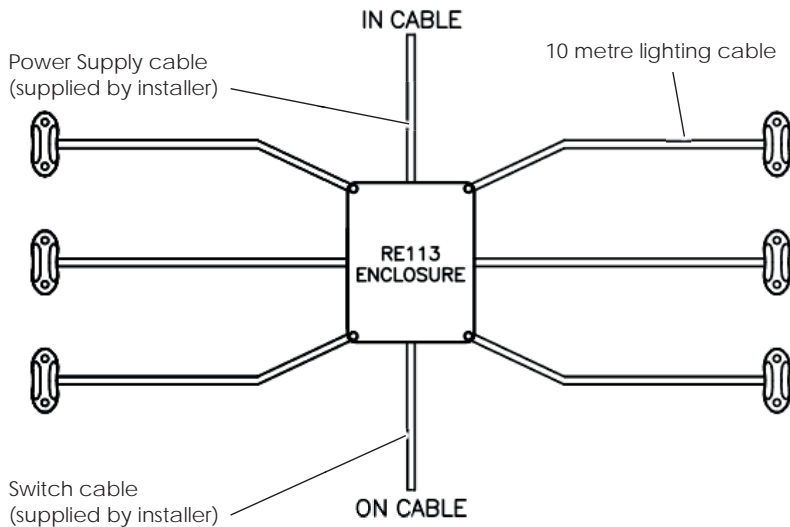


Figure 1 Example of 6-Way System

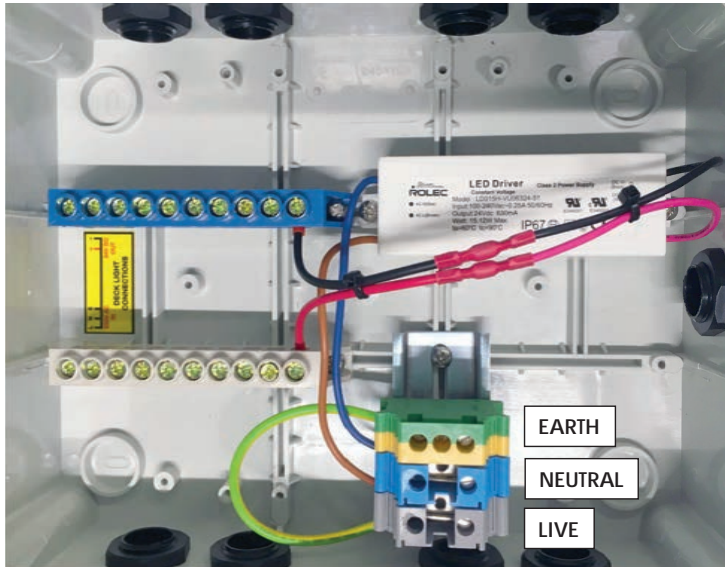


Figure 2 Junction Box Layout

Product Specification

Physical Specification

Dimensions	195 x 80 x 24mm (L x W x D)
Material	316 Stainless Steel Housing,
Mass	Avg 650g
Operating Temperature	-30°C to +60°C
IP Rating	IP67 LED Unit – fully protects against ingress of dust and low-pressure water. NOTE: NOT guaranteed to withstand pressure washing or steam cleaning.

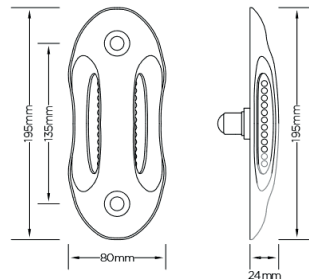


Figure 3 Combi Light Single Unit Dimensions

Package Contents

- 1 x Rolec Combi Light Junction Box
- Combi Light LED Luminaires (6 or 10 way) and attached 10 m cable
- Fasteners to secure each LED luminaire (optional purchase)
- Installation and Operation Manual.

Electrical Specification

LED Type	Low Voltage LED Two Directional
LED Rating	2.5 W
LED Light Temperature	<ul style="list-style-type: none"> • ACLG0290A - White & White (approx. 3000K – warm white) • ACLG0290 - White & White (approx. 5700K – white) • ACLG0270 - Blue & White (approx. 5700K – white) • ACLG0280 - Green & White (approx. 5700K – white)
LED Driver	24V, 0-0.63A, 15.12W max power
Cable Length	10m to each LED unit. <i>Other cables to be supplied by the installer.</i>

Certifications and Compliances

This product has been designed and built in accordance with the following standards and legislation:

Wiring Regulations	BS 7671-2018, BS EN 61439-2:2011
Low Voltage Directive	2014/35/EU
Control Gear	BS EN 61347-1:2015, BS EN 61347-2-13:2014+A1:2017
Immunity	EN61000-4-2, 3, 4, 5, 6, 11 ; EN61547 ; EN61000-3-2 class C
Conduction and Radiation	BS EN IEC 55015:2019
LED Illumination	<ul style="list-style-type: none"> • UL 8750 reference UL 1310 • IP67 Weather resistance BS EN 60529:1992+A2:2013
EMC Directive	2014/30/EU
Electrical Enclosure	<ul style="list-style-type: none"> • Impact Protection IK07 (EN62262) • IP65 Weather resistance BS EN 60529:1992+A2:2013 • EN 60670-1:2005 General Requirements • EN 60670-22:2006
Cable	BS6004
RoHS	2011/65/EU
REACH	1907/2006



Labelling

Users must observe the information given on labels to ensure safe use of the product.

Labels may be in the form of adhesive 'stickers', plates, and/or moulded into the surface of components.

Product Label

The Product Label is mounted on the central 'Junction Box', that connects the individual LED cable assemblies to the power supply cable and switch cables.



Figure 4 Typical Product Label

Electrical Warning Label



Figure 5 Electrical Warning

Deck Light Labels

Deck Lights are marked with the manufacturer's website address and with the number '316' to denote that the metal housing is 316 Stainless Steel.



Figure 6 Stamped Markings

Internal Labels

Whilst every effort is made during manufacture to make sure all cable terminations in this product are secure, there are occasions during transportation and installation, that such cable terminations could become loose. It is the responsibility of the installing engineer to satisfy themselves, that all cable terminations throughout this product are secure.

Figure 7 Cable Security Label



Figure 8 Connections Label

Installation

Before Installation

- Make sure the Combi Light model(s) to be installed is correct and fit for purpose & location.
- Make sure all components are present and appear to be in good/serviceable condition.

NOTE: Items damaged in transit must first be reported to the courier and then to the equipment supplier. Where possible, gather photographic evidence of damage to packaging and equipment to support your claim.

Install the Unit



WARNING: Electrical Power

Make sure electrical power is isolated BEFORE starting this procedure.

- Turn power OFF at the SOURCE.



IMPORTANT: Installers must **read** and **understand** the content of this manual before installation/use.

Installation must **only** be performed by someone who is properly qualified and competent to do so in accordance with the current legislation in force in the geographical location of the installation.

- The instructions below are illustrative only and do NOT override anything written in the current regulations.
- If the advice in this manual is not understood, contact Rolec for further advice and/or training BEFORE attempting installation/operation of the equipment.
- Rolec Services Ltd cannot accept any responsibility for improper installation or any problems arising from improper installation.

NOTE: Damage to the equipment, connected systems or to property caused by improper installation/use are the responsibility of the installer/user.

1. Carefully remove the combi LED lighting kit from the packaging and make sure it is undamaged.
2. Lay out the components in the required locations to make sure the system is suitable for the site.
 - Combi Lights are primarily designed to be installed to decking but if installing to a solid surface, a cable channel may need to be created between the luminaire and the junction box. Make sure buried cables are correctly marked and protected to prevent damage or personal injury at a later date.

3. Position the Junction box and secure it with suitable fasteners.
 - Remove the Junction Box cover. The cover is secured by captive fasteners that release the cover in 2 stages. Release each fastener to allow the cover to lift a short distance away from the main box. With the cover lifted, turn each of the fasteners until the cover can be fully removed.
 - If required, seal the fastening location to prevent entry of dust/water.



Figure 9 Junction Box Cover Removal

4. Position each of the deck lights in the required locations. Make sure there is sufficient cable to reach the junction box.
 - Excess cable may be removed if required.
5. If required, create a suitably sized hole in the flooring surface to accommodate the cable connector and cable attached to the underside of each LED luminaire.
6. Secure each deck light with two suitable fasteners.
 - The Combi Light housing is 316 Stainless Steel. Use of metallic, non-stainless-steel fasteners may result in dissimilar metal corrosion and premature failure of the fastener and/or housing.
7. Connect each deck light to the output terminals of the junction box, using a suitably sized gland to produce a water-resistant seal with the enclosure.
8. Connect the incoming power supply to the junction box using an appropriately sized gland for the cable to produce a water-resistant seal with the enclosure.
 - If required, a switch and switch cable may be installed.
9. Make sure you are satisfied that all connections are tight, and that the installation has been completed correctly.
10. Refit the cover to the junction box. Do NOT overtighten the fasteners.
11. Make sure it is safe to connect to electrical power.
12. Connect the power supply cable to electrical power.
13. Apply electrical power to the system and make sure each deck light illuminates correctly.
14. Switch the power supply OFF if the lights are not required for use at this time.

Maintenance

CAUTION: Equipment Damage

Do NOT:

- Use Abrasive materials, Mineral or petroleum solvents / degreasers, Jet washers or Steam cleaners.
- Attempt to repair LED light assemblies. The LED luminaire and cable must be replaced as one unit.

1. The external surface of each deck light should be cleaned with a damp cloth every 3 months.
 - It is important to make sure debris has not lodged in recesses or lettering.
 - Any metallic debris in contact with the stainless-steel housing may cause premature/accelerated corrosion. Remove all debris and remove any corrosion with a suitable stainless-steel cleaning agent.
 - Make sure to follow the manufacturers guidance.
 - Do NOT pollute water ways.
2. The lighting system should be visually inspected for damage each month.
 - If damage affects safety, isolate the equipment and prevent its use until appropriate repairs have been completed.
3. The lighting system should be electrically inspected annually.

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