

# RITE-LITE™ FLEX NECK LED Dock Light

This Installation/Owner's manual covers units shipped: **August 2013 to Date**



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## NOTICE TO USER

Thank you for purchasing a Rite-Lite™ Flex Neck LED Dock Light.

Read, understand and save this manual prior to installation or operation of this equipment.

**NOTE:** There are no serviceable parts in the fixture head.

For best results, have this product serviced by your authorized RITE-HITE® Representative.

Your local RITE-HITE® Representative provides the Planned Maintenance Program (P.M.P.) fitted to your specific operation. Call your local representative or RITE-HITE® at 1-414-355-2600 or toll free at 1-800-456-0600. In Europe, call +31-(0)571-277505.

The Rite-Hite® products in this manual are covered by one or more of the following U.S. patents: D693947, D701640, D702397, and may be covered by additional pending U.S. and foreign patent applications.

## SAFETY

### Safety Identifications

#### **DANGER**

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

Indique une situation dangereuse qui, si elle n'est pas évitée, peut entraîner la mort ou de graves blessures.

#### **WARNING / AVERTISSEMENT**

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

Indique une situation dangereuse qui, si elle n'est pas évitée, *peut entraîner la mort ou des blessures graves.*

#### **CAUTION / ATTENTION**

Indicates a hazardous situation which, if not avoided, *could result in minor or moderate injury.*

Indique une situation dangereuse qui, si elle n'est pas évitée, *peut entraîner des blessures légères à modérées.*

#### **NOTICE**

Indicates a situation which can cause damage to the equipment, personal property and/or the environment, or cause the equipment to operate improperly.

**NOTE:** A note is used to inform you of important installation, operation, or maintenance information.

## SAFETY

### General



#### WARNING / AVERTISSEMENT



Risk of electrical shock.

Risque de choc électrique.



#### WARNING / AVERTISSEMENT

Use only three wire extension cords that have three prong grounding plugs and grounding receptacles that accept the appliance's plug. Use only with a hard service extension cord of type SJ, SJO, SJT, SJTW, or equivalent.

Utiliser seulement des rallonges qui ont trois broches avec une mise en terre et des réceptacles compatibles acceptant la prise de l'appareil. Utilisez uniquement des rallonges pour usage intensif de type SJ, SJO, SJT, SJTW ou équivalent.



#### WARNING / AVERTISSEMENT

Prior to use, visually inspect cord for damage. Immediately remove unit from service if jacket or insulation appears frayed, cut, pinched, or crushed, or if grounding pin is damaged or missing.

Avant l'utilisation, inspecter visuellement le cordon pour dommages. Enlever immédiatement unité service si veste ou isolation apparaît effilochée, coupée, pincés ou écrasés, ou si la goupille de mise à la terre est endommagé ou manquant.

## INSTALLATION

1. Remove from packaging.
2. Verify you received all components before installation.
3. Notify the factory if parts are missing or damaged.

### Wall Mounting

Mount approximately 6 ft [1.8 m] from the floor, and 15 in [0.4 m] from the edge of the door opening.

Using the wall housing as a template, mark and drill four holes.

For mounting to a solid wood or poly lumber surface (1 in minimum thickness), use 3/8 in lag bolts or screws (1.5 in minimum fastener length).

For mounting to concrete or concrete block, use 3/8 in anchors (1.5 in minimum length). Follow all manufacturer instructions to install anchors.

### Electrical

The flex neck light includes a standard North American 3 prong NEMA 5-15P plug, compatible with any standard 120V receptacle.

For applications outside North America, the flex neck light is provided without a cord.

## INSTALLATION

### Impact Positioning

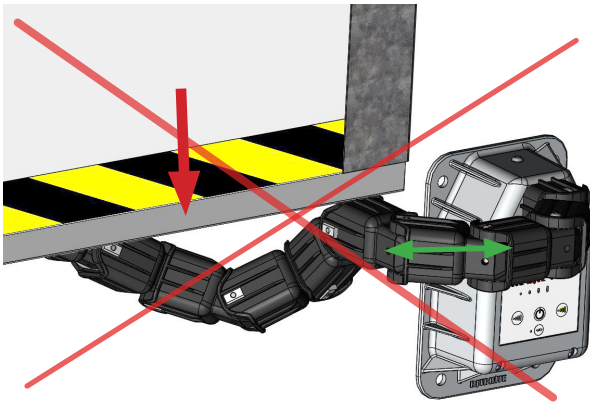
The flexible arm is designed to yield upon impact.

- The first four joints in the arm flex horizontally.
- The fifth joint allows for vertical flexing.
- The remaining joints alternate between horizontal and vertical.

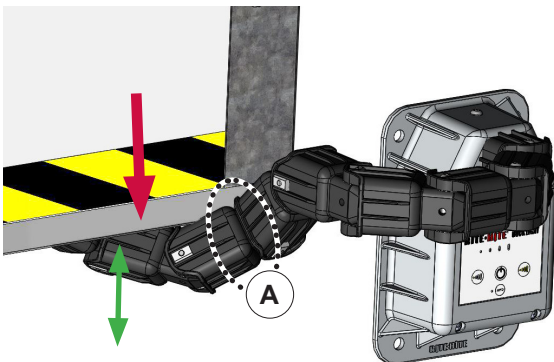
In some applications, the arm may be in the path of an overhead sectional door. The fifth joint (A) must be positioned so it cannot be moved into the door path. If necessary, mount the light farther from the door opening, rotate a horizontal flexing link to a vertical position or remove a link.

### NOTICE

**Incorrect:** Damage may result, if a door panel impacts arm links that only flex horizontally.



**Correct:** The arm assembly will bend down (out of the path of the door panel) when a door panel impacts arm links that flex vertically.



### To Rotate a Link:

1. Use a 5/32 in hex driver to remove the link bolt.
2. Disconnect the arm assembly, without damaging the cable within.
3. Rotate the arm 90°, and reconnect. Do not bend or dislodge the aluminum friction plates in the receiving portion of the link.
4. Replace the link bolt.

### To Remove a Link:

1. Disconnect power.
2. Using a 3/32 in driver, remove the four screws that secure the membrane switch plate to the front of the flex neck light enclosure.
3. The arm cable terminates at five screw terminals on the control board. Using an 1/8" screwdriver, disconnect the arm cable from the control board.
4. Using a 5/32 in hex driver, remove the main arm bolt from the top of the flex neck light enclosure.
5. Carefully feed the arm cable through the enclosure, and remove the arm/light assembly.
6. Using a 5/32 in hex driver, remove and/or rotate links as described previously.
7. To reinstall arm assembly, reverse removal procedure.
8. Verify proper wire connections:
  - (1) 24V – Red
  - (2) GND – Black (2 wires)
  - (3) SNS – Orange
  - (4) LED+ – Purple
  - (5) LED- – Yellow

### Link Adjustment:

The stiffness of each joint in the arm may be increased or decreased by adjusting the link bolt with a 5/32 in hex driver (40 in-lbs maximum). Periodically, the link bolts may need to be tightened to compensate for normal wear.

## OPERATING INSTRUCTIONS

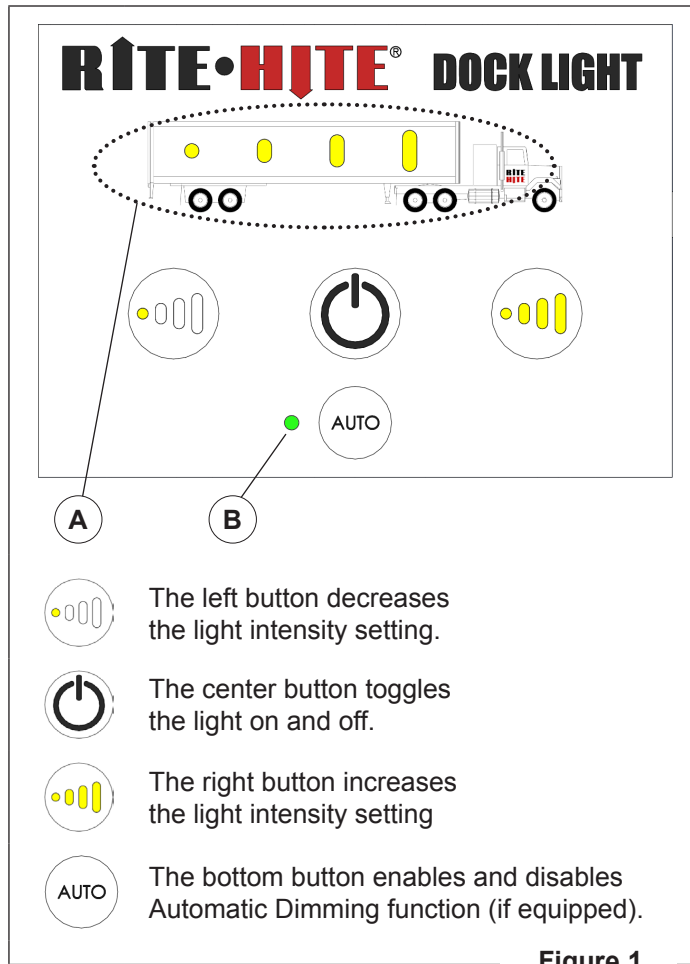



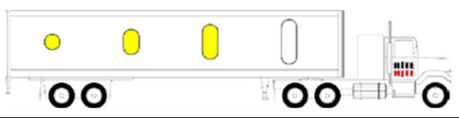


Figure 1

The flex neck light allows the user to control the intensity and function of the light from the user interface.

LEDs (A) provide a visual indication of light intensity. Intensity adjusts from 50% to 100%. See “Light Settings” chart below.

The green LED (B) left of the AUTO button indicates the automatic dimming state:

OFF	<i>Automatic Dimming</i> is disabled or light is not equipped with <i>Automatic Dimming</i> Option. Light intensity will remain constant.
ON	<i>Automatic Dimming</i> is enabled.
BLINK	<b>Power Save Mode</b> To conserve power, the light intensity decreases after 30 minutes of inactivity, to provide minimum illumination for safety. When motion is detected, normal intensity resumes.

Light Settings	Lumen Output				
	956				
	813				
	654				
	487				
<b>Automatic Dimming Mode:</b> Light output is automatically reduced when an operator is detected approaching the light source (exiting the trailer).	813				
<b>Power Save Mode:</b> After 30 minutes of inactivity light intensity reduces to provide minimum illumination for safety while conserving power. Normal operation resumes when an operator is detected.	130				
	200	400	600	800	1000

## OPERATING INSTRUCTIONS

### Microwave Sensor

The flex neck light uses a microwave sensor inside the light head to detect approaching fork truck and pedestrian traffic. When approaching traffic is detected, the light intensity is automatically dimmed to avoid blinding the operator as they exit the trailer.

### Microwave Sensitivity and Trailer Types

The performance of the microwave sensor is affected by the reflectivity of the trailer.

In a trailer with non-reflective plywood walls, some of the microwave signal reflects off the operator in the trailer, and is detected by the sensor. "Stray" microwaves are absorbed by the walls of the trailer.

In a trailer with reflective and/or metallic walls (common in refrigerated trailers), the signal may reflect randomly off the trailer walls, sending a false signal to the sensor when an operator is not approaching the sensor.

There is a sensitivity adjustment on the microwave sensor to adjust for different trailer types.

Turning the sensitivity down (dial counter clockwise):

- Reduces false detection in reflective trailers
- Reduces pedestrian sensing distance in non-reflective trailers. Pedestrians must approach closer before the light dims.
- Has little effect on fork truck detection

### Installation and Positioning

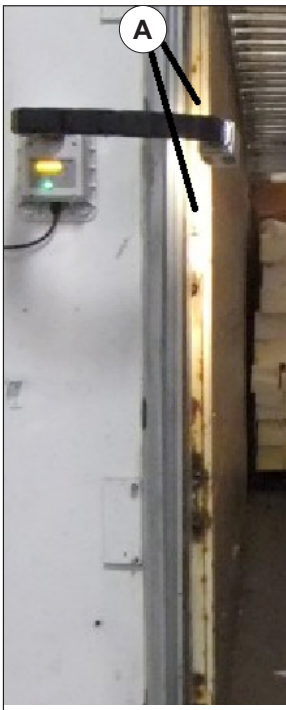


Figure 2

The flex neck light must be placed so the sensor does not face the metal edge of the trailer where the doors hinge. If the light is visibly reflecting off this steel surface (A), the microwaves are also reflecting off the surface, which can send a false signal to the sensor.

**NOTE:** If a trailer is off center on the dock opening confirm that the flex neck light can reach around the edge of the trailer.

### Sensitivity Adjustment

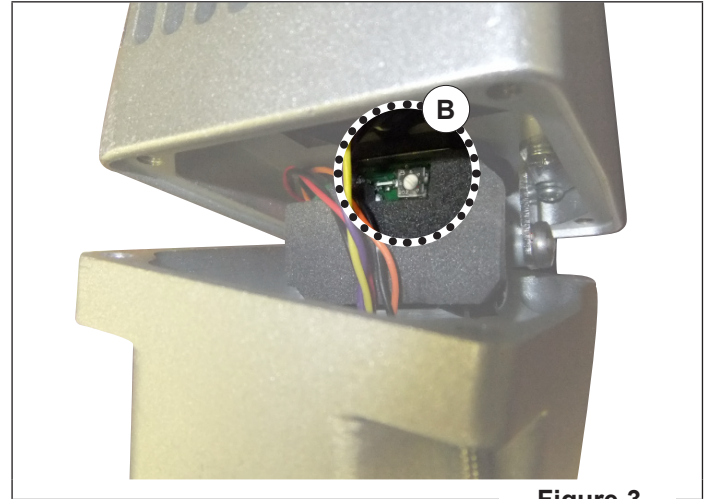
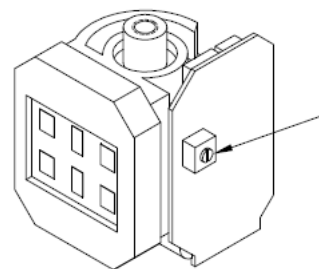


Figure 3

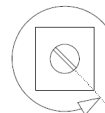
1. Use a 3/32 in hex Allen tool to remove the four screws on the back of the light head. This may be done while the light is mounted on the wall.
2. Open the light head, being careful to support the small wires inside the housing. Use a 1/16 in flat blade screw driver to turn the white sensitivity potentiometer (B) on the sensor.
  - a. Turn clockwise to increase sensitivity  
Greater pedestrian sensing distance
  - b. Turn counterclockwise to decrease sensitivity  
Fewer false trips in reflective trailers
3. Reattach the light housing. Do not pinch the wires.

### Restore Factory Settings

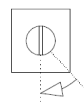
1. Locate sensitivity adjustment Potentiometer (pot) (B)



2. Turn pot fully counter clockwise



3. Turn pot clockwise 45° (1/8 of a turn)





OPERATING INSTRUCTIONS

Dok-Commander Interface (OPTIONAL)

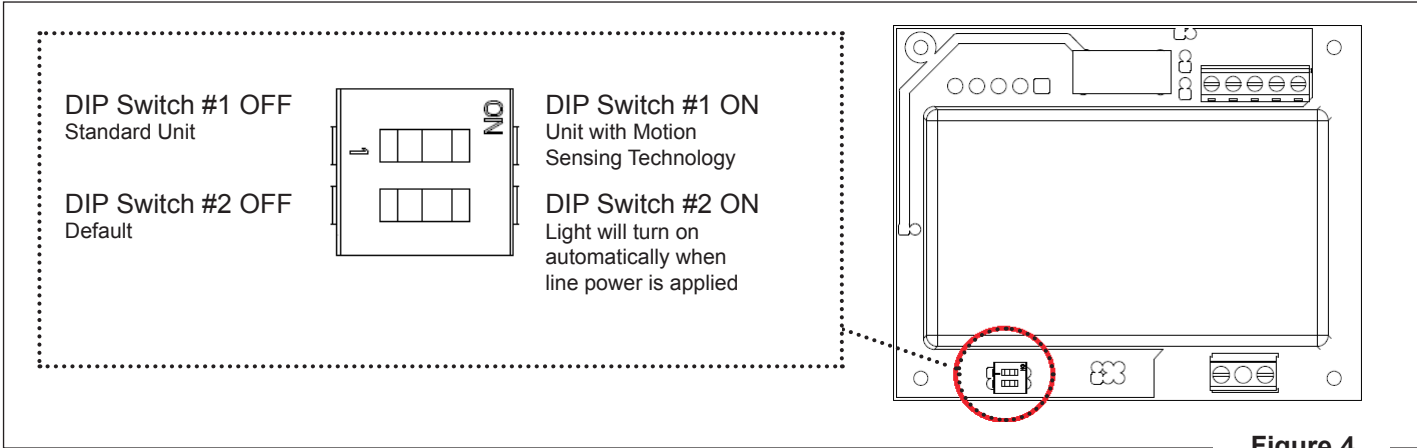


Figure 4

In some applications (including interconnection with Dok-Commander) it is desirable to control a flex neck light by switching on and off line power.

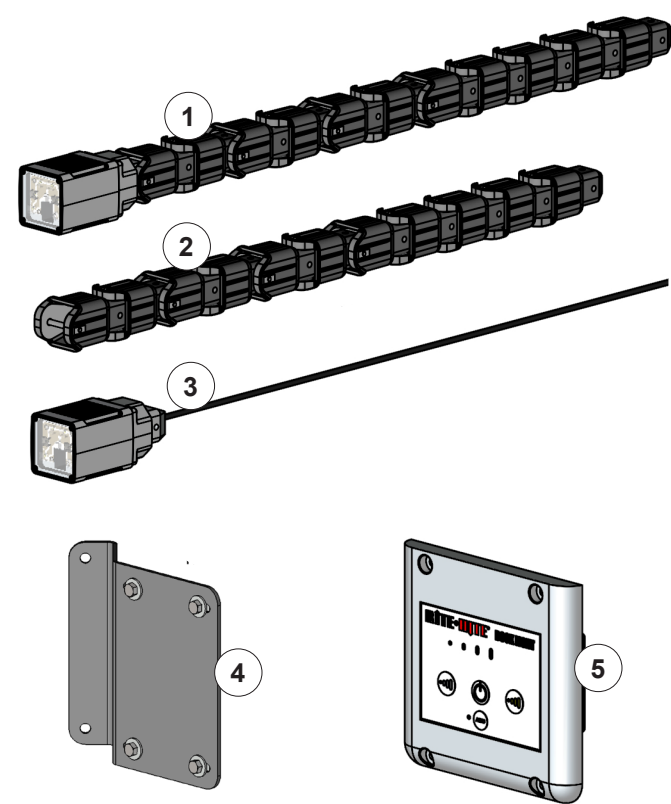
By default, the flex neck light is configured operate with the power button on the light assembly. The light does not turn on automatically when line power is applied.

Lights manufactured on or after 3/13/14 (date stamped on side of wall mount housing), may be reconfigured to turn on automatically when line power is applied.

To enable this feature:

1. Disconnect from power.
2. Remove the back cover (or front cover if already mounted) of the wall mount housing.
3. Locate the DIP switch on the circuit board, and move switch #2 (bottom) to the ON position (right).

PARTS



#	DESCRIPTION	PART #
*	Dock Light, Auto Dimming (MST), North America (cUL)	54270045
*	Dock Light, Standard, North America (cUL))	54270046
*	Dock light, auto dimming (MST), international (CE)	54270047
*	Dock Light, Standard, International (CE)	54270048
1	Kit, Head & Link ASSY, LED Flex, MST	53760099
	Kit, Head & Link ASSY, LED Flex	53760100
2	Link, ASY, Arm, 11 Long	54400035
3	Light, Dock, LED, Head, Assy w/MST	54270050
	Light, Dock, LED, Head, ASSY	54270049
4	Kit, Mntg, Extn, Flex Neck	53760082
5	Ctrlr, Assy, Docklight, PCB & Switch	17500024

\*Not Shown

RITE-HITE Company, LLC and its affiliates (collectively "RITE-HITE") warrant that the Product sold to the Owner will be free of defects in design, materials and workmanship (ordinary wear and tear excepted) for the periods set forth below ("Limited Warranty").

Five (5) Years on all mechanical and electrical parts.  
One (1) Year labor, based on approved travel and labor repair times.

## REMEDIES

**PARTS-** RITE-HITE's obligations under this Limited Warranty are limited to repairing or replacing, at RITE-HITE's option, any part which is determined by RITE-HITE to be defective during the applicable warranty period. Such repair or replacement shall be RITE-HITE's sole obligation and the Owner's exclusive remedy under this Limited Warranty.

**LABOR-** RITE-HITE will provide warranty service without charge for labor per the specified warranty period. Thereafter, a charge will apply to any repair or replacement under this Limited Warranty.

**CLAIMS** Claims under this Limited Warranty must be made (i) within 30 (thirty) days after discovery and (ii) prior to expiration of the applicable warranty period. Claims shall be made in writing or by contacting the representative from whom the Product was purchased directly. Owner must allow RITE-HITE or its agent, a reasonable opportunity to inspect any Product claimed to be defective and shall, at RITE-HITE's option, either (x) grant RITE-HITE or its agent access to Owner's premises for the purpose of repairing or replacing the Product or (y) return of the Product to the RITE-HITE, f.o.b. RITE-HITE's factory.

**NOT WARRANTED** RITE-HITE does not warrant against and is not responsible for wear items such as fuses, batteries, bulbs, vision and seals. No implied warranty shall be deemed to cover damages that result directly or indirectly from: (i) the unauthorized modification or repair of the Product, (ii) damage due to misuse, neglect, accident, failure to provide necessary maintenance, or normal wear and tear of the Product, (iii) failure to follow RITE-HITE's instructions for installation, failure to operate the Product within the Product's rated capacities and/or specified design parameters, or failure to properly maintain the Product, (iv) use of the Product in a manner that is inconsistent with RITE-HITE's guidelines or local building codes, (v) movement, settling, distortion, or collapse of the ground, or of improvements to which the Products are affixed, (vi) fire, flood, earthquake, elements of nature or acts of God, riots, civil disorder, war, or any other cause beyond the reasonable control of RITE-HITE, (vii) improper handling, storage, abuse, or neglect of the Product by Owner or by any third party.

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