INSTALLATION INSTRUCTIONS

Relay Light Curtain

MODEL: RLC-K36, RLC-K72

WARNING

Read and understand all instructions before beginning installation. Disconnect power to motor and test upon completion. Photo optics should be installed by qualified personnel to ensure the requirements herein have been met. Keep these instructions with the installation. Always abide by local and national electrical code specifications when wiring accessories to motor controls.

The Miller Edge **Relay Light Curtain** (RLC-K36, RLC-K72) is a non-monitored, fail-safe photo optic solution that has a normally open and a normally closed dry contact output. It provides additional protection for the area above the floor, protecting people and vehicles more effectively than a single-beam photo eye. Consult the manufacturer manual for detailed instructions about connecting RLC to the door operator.

CONTENTS

- Model **RLC-K36**: 3 ft., 8 elements
  - (1) 36”Emitter
  - (1) 36” Receiver
  - (4) Mounting brackets
  - (4) Wall brackets
  - (1) Hardware bag
- Model **RLC-K72**: 6 ft., 16 elements
  - (1) 36”Emitter
  - (1) 36” Receiver
  - (6) Mounting brackets
  - (6) Wall brackets
  - (1) Hardware bag

REQUIRED

- Hand tools for installing brackets

OPTIONAL

- Alternative hardware, as required

SUGGESTED

- Operator manual

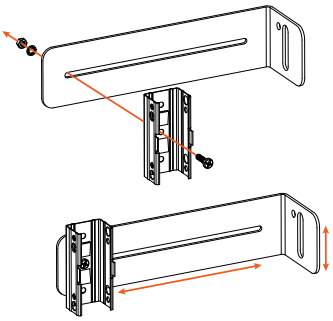


FIGURE 1
Connecting the Mounting Bracket to the Wall BracketVertical and Depth Adjustments Shown

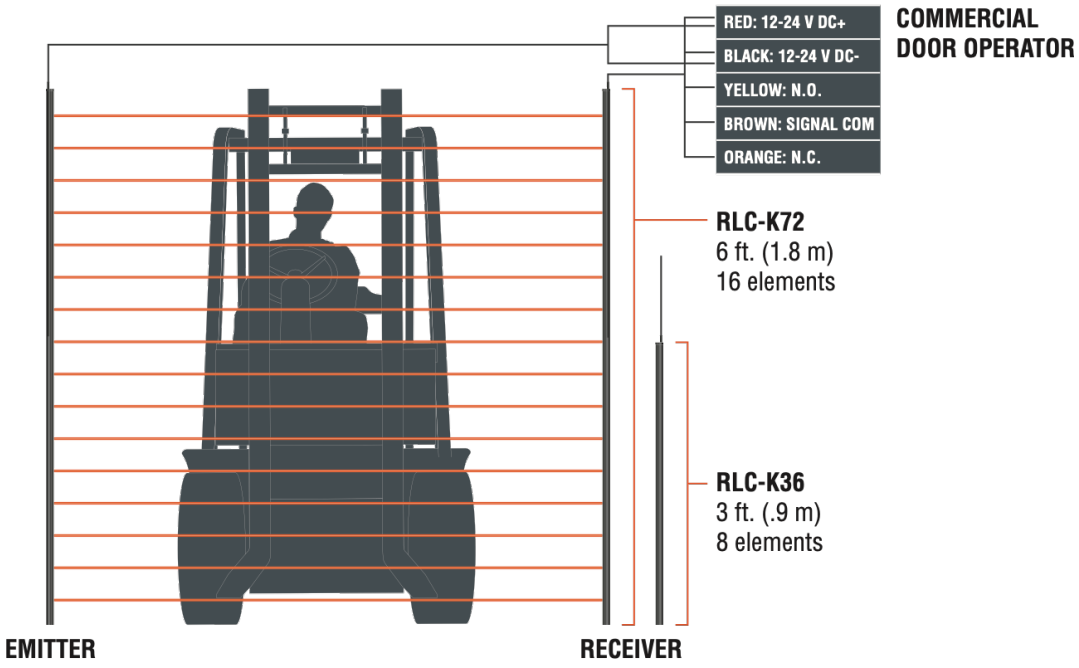


FIGURE 2
Wiring Diagram

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I. INSTRUCTIONS

1. Identify the emitter (2 wires) and the receiver (5 wires).

2. Identify the locations you will install the RLC, usually close to the door tracks on the inside of the door opening. Be certain no part of the moving door will obstruct the infrared beams.

3. Install the mounting brackets (FIGURE 2) onto the mounting points, using the hardware provided or other appropriate hardware. The brackets should be installed approximately 6 inches from the top and bottom ends of the emitter and receiver. For RLC-K72, a third bracket should be installed centered in between the top and bottom brackets. Make sure the brackets are all in-line. **FIGURE 1**

4. Install the emitter and receiver by clipping them into the mounting brackets. The flat surfaces of the emitter and receiver, where the optics are located, should point at each other, across the door opening. The bottom of the RLC should be 6 inches above the floor or directly above the existing single-beam photo eye.

5. Connect the emitter and receiver to the operator. A total of six (6) wires need to connect to the operator; two (2) wires from the emitter and four (4) wires from the receiver. Refer also to the wiring chart (below). **FIGURE 2**

WIRE	DESCRIPTION	OPTERATOR INPUT
Black and Red (emitter/receiver)	Power	Accessory power (12-24 volts DC)
Brown and Yellow (receiver)	For a normally open input	Reversing input or along with photo eye input
Brown and Orange (receiver)	For a normally closed input or to connect in a series with a photo eye	Normally closed reversing input

6. Confirm the green LEDs at the bottom of both the emitter and receiver are on, indicating power. The light curtains have a wide acceptance angle and should align easily upon powering. The red receiver LED indicates either an obstruction or a misalignment. To test proper operation, step in and out of the door opening, observing the red LED turning on and off.

EMITTER LED	RECEIVER LED
Green: Power	Green: Power
	Red: Obstruction or misalignment

7. Consult the operator manufacture's manual for proper operation with the door.

II. TECH SUPPORT

For additional assistance, contact Miller Edge Tech Support: 800-220-3343

III. GENERAL SPECIFICATIONS

	RLC-K36	RLC-K72
PERFORMANCE		
Operating Range	8-32 ft. (2-10 m)	8-32 ft. (2-10 m)
Number of Elements	8 elements	16 elements
Maximum Ambient Light	>100,000 lux	>100,000 lux
Aperture Angle	EM: ±8° RX: ±15°	EM: ±8° RX: ±15°
Operating Temperature	-40°F to +140°F (-40°C to +60°C)	-40°F to +140°F (-40°C to +60°C)
ELECTRICAL		
Power Source	12-24 volts DC	12-24 volts DC
Current Consumption	<150 mA @ 24 volts DC	<150 mA @ 24 volts DC
Relay Rating	1A current switching at 24 volts DC	1A current switching at 24 volts DC
Output	N.O. and N.C.	N.O. and N.C.
PHYSICAL		
Max. Protection Height	36 in. (~1 m)	72 in. (~2 m)
Dimensions	1 W x 38 H x 1.1 D in. (25 mm x ~1 m x 28 mm)	1 W x 74 H x 1.1 D in. (25 mm x ~2 m x 28 mm)

	RLC-K36		RLC-K72	
Weight	EM: 32 oz.	RX: 32 oz.	EM: 64 oz.	RX: 64 oz.
Housing Material	PVC over aluminum		PVC over aluminum	
LED Indicators	EM: Power	RX: Power, obstruction	EM: Power	RX: Power, obstruction
Cable Length	EM: 50 ft. (~15 m)	RX: 50 ft. (~15 m)	EM: 50 ft. (~15 m)	RX: 50 ft. (~15 m)
Mounting	(4) Universal mounting brackets		(6) Universal mounting brackets	
Degree of Protection	IP67		IP67	

IV. FCC COMPLIANCE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which may be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Re-orient or relocate the receiver antenna
2. Increase the separation between the equipment and the receiver
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

Changes or Modifications Not Expressly Approved By The Party Responsible For Compliance Could Void The User's Authority To Operate The Equipment.

V. MAINTENANCE

It is strongly recommended that users check photo optics at least once per month for low batteries alerts (where applicable) and damage to housings and mountings. Also check for signs of damage to cables or connection points. Refer to your operator manual for detailed instructions about motor connections.

VI. REPLACEMENT

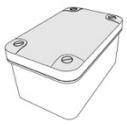
To replace your Miller Edge photo optic, contact your sales representative. Attempting to repair your Miller Edge photo optic is not recommended and will void the manufacturer warranty.

VII. WARRANTY

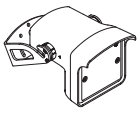
The **Relay Light Curtain** (RLC-K36, RLC-K72) carries a **2-year warranty** from date of shipment from Miller Edge for credit or replacement. This warranty applies to normal use, which is found to have defective materials or workmanship, as determined solely by an authorized factory representative. This warranty is void where evidence of misuse or abuse is present. This warranty covers repair or replacement of the purchased product only; product installation/labor charges are not covered. Miller Edge manufactures its products to meet stringent specifications and cannot assume responsibility for those consequences arising from improper installation or misuse. Installation instructions and testing procedures provided by Miller Edge must be followed for proper operation and maintenance.

VIII. ACCESSORIES

Contact your Miller Edge sales representative for photo optics accessories:



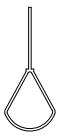
JUNCTION BOXES



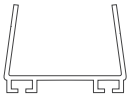
MOTION SENSORS



MODULES



WEATHER SEALS



MOUNTING CHANNELS



WARNING LABELS