CEDES

Mini-32-NA-UPS
Quick Start Guide

Thank you for purchasing this CEDES cegard/Mini series light curtain for elevator door protection. This "Quick Start" guide provides basic mounting and installation information for the light curtain system. This document does not replace the installation and operating instructions for the components included in this kit.

You must consult the installation and operation instructions relevant to the devices included in this kit for additional information regarding this system, including additional warnings, require-ments and specifications:

- **cegard/Mini-2000-32-NA Installation and Operation Manual** (PN: 111 239); and

- **Universal Power Supply** (PN: 113 834)

Download these documents at: **www.cedes.com**.

Important Notes:

- This light curtain system must only be installed and commissioned by qualified elevator installation personnel.

- Before beginning installation of this light curtain system, you must be sure that the elevator has been properly placed "Out of Service" to ensure that the elevator and related components will not be allowed to move during the installation. You must follow all applicable safety protocols, rules and regulations that apply.

- Upon completion of the installation and commissioning of this system, qualified elevator installation personnel must ensure that the installation complies with all applicable local, regional and national regulatory requirements, and that the operation of the elevator control system, including this light curtain, perform in accordance with the application and regulatory requirements.

System Description:

This light curtain system is designed for use as part of an elevator door protection system. The transmitter (**Tx**) and receiver (**Rx**) form an invisible field of criss-cross beams that detect the presence of persons or objects when one or more of the beams are interrupted. When an interruption occurs, the output from the light curtain changes state to indicate that the doors should be reopened since a person or object is present in the detection field.
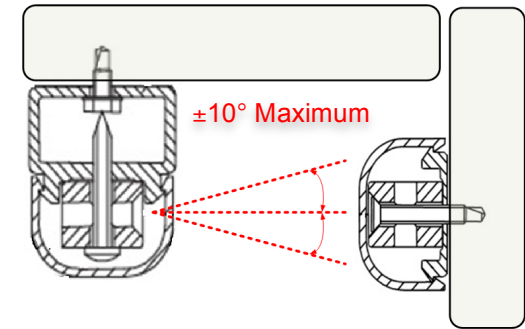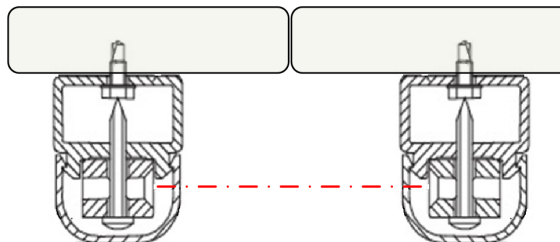
This light curtain kit includes the following items:

Qty	Description
1	cegard/Mini-2000-32 Transmitter
1	cegard/Mini-2000-32-NB Receiver
1	cegard/Mini Transmitter Cable, 5m (16 ft)
1	cegard/Mini Receiver Cable, 5m (16 ft)
2	Spacer Profiles
1	Mounting Profile
2	Vision Shields
1	Hardware Bag
1	Universal Power Supply
2	Cable Guide Wires

Mounting of the Edges:

Important Note:

- Before you begin, ensure that the transmitter and receiver are mounted at least 2 inches (50 mm) apart when the door is in the fully closed position. This allows the criss-cross beams to remain active at all times. **Failure to meet this requirement will likely result in nuisance reopen conditions.**

Potential mounting configurations include:

±10° Maximum

Use the following step-by-step approach to mount the light curtain system:

1. Mount the spacer or mounting profiles to the door wing(s) or slam post. Make sure that the base of the spacer or mounting profile is no more than ¼ inch (6 mm) from the sill plate and that the label indicates "Bottom" nearest to the sill plate.
2. For mounting profiles, use three #6 x 1¼ self-drilling Phillips pan head screws to secure the transmitter / receiver and the mounting profile to the slam post.
3. For spacer profiles, mount the spacer profile to the door wing(s) using four #10 x ½ hex washer Phillips self-drilling screws. Then use three #6 x 1¼ self-drilling Phillips pan head screws to secure the transmitter / receiver to the spacer profile using the pre-drilled holes.
4. Make sure that the round circles on the transmitter and receiver face one another.
5. Snap the vision shield on to the spacer profile or mounting profile. Make sure that the cable pigtails on both the transmitter and receiver extend out the top of the vision shield.
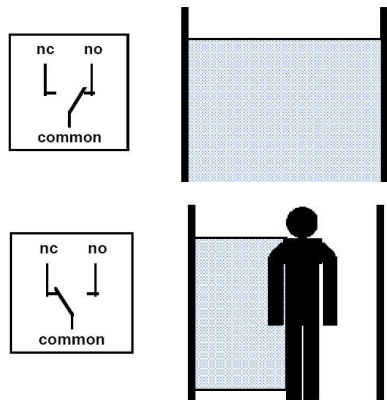
Connect the power supply:

Once the transmitter and receiver are mounted, the next step is to connect the cables. The cables are color-coded – white for transmitter and blue for receiver. Connect the cables together at the M8x4 appropriate connectors. Then route the cables back to the controller. Secure the cables in place, allowing enough slack so that they can bend freely, without becoming snagged on any moving parts. Mount the cable guide wires to prevent excessive sway of the cables.

Connect the Wago connectors from the transmitter and receiver cables to corresponding receptacle on the controller.

Connect 20… 265 V AC/DC incoming power to the orange plug as per the wiring diagram shown on the controller.

N   AC Neutral or DC (plus or minus)
P   AC Line or DC (minus or plus)
⏚   Protective ground

Then connect the source signal from the elevator control to the COM terminal. Connect the return signal to the elevator control to either the normally open (NO) or normally closed (NC) contact as required for your application.

This completes the electrical connection and mounting. The next step is to verify that the system operates correctly.

Power-up and Test:

Turn on power after the light curtain has been correctly installed. Verify that the system operates in accordance with your application requirements. There is an optical indicator (LED) in both the transmitter and receiver that provides light curtain status information. The same colored LEDs are also present in the UPS.

Edge	LED Color	LED ON	LED OFF
Rx / UPS	Orange	Power OK, Object detected or not aligned	No power or No object
Tx / UPS	Green	Power OK	No power

Troubleshooting:

If the light curtain does not operate as required for your application, use the following troubleshooting steps:

1. Switch off the Universal Power Supply and then switch it on again (i.e. cycle power).
2. Make sure you have connected the correct relay output for your application (i.e. NO / NC).
3. Is the green indicator LED in the transmitter edge ON? If not, verify the cable connection between the UPS and the transmitter is secure.
4. Is the orange LED in the receiver edge ON? If yes, make sure there are no obstacles between the transmitter and the receiver. If there are no objects, but the LED remains on, verify the cable connection between the UPS and the receiver is secure. If the output signal of the receiver is not stable during door closing, make sure that:
   a. The cables have not been routed near sources of electrical noise generated by a door drive or other device.
   b. No obstacles are entering the detection field during door closure.
   c. The edges are properly installed so that they cannot swing or vibrate, thus causing misalignment.
   d. The optical elements of the edges are clean and not covered by dust or dirt.

Technical Specifications:

Universal Power Supply (UPS) Specifications:

Description	Value
UPS supply voltage U_{SP}	20 - 265 V AC/DC
Max. UPS output current	300 mA at 24 V DC
UPS output type	Relay, NO/NC
UPS relay current ratings	AC: 250 V AC / 5 A max. DC: 125 V DC / 0.5 A max. 30 V DC / 5 A max. 5 V DC / 10 mA min.

cegard/Mini-2000-32-NA Specifications:

Number optical elements	32
Number of optical beams	154
Typ. response time	145 ms (including relay)
Operating range	2 in ... 9.84 ft (0.05 … 3 m)
Dimensions	0.47 x 0.63 x 78.74 inches
Protection height	6 ft (1,800 mm)
First beam	0.78 in (20 mm)
Weight (light curtain)	0.3 kg
Max. ambient light	100,000 Lux
Protection class	IP 65 / NEMA 12
Temperature range	-40 …+140 °F
Cable length	5 m, detachable
Cable lifetime	20 million movements

CEDES AG / Switzerland
Telephone: +41 81 307 2323

CEDES Corporation of America / United States
Telephone: +1 612.424.8400

www.cedes.com
This document is preliminary and, as such, is subject to change without notice

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