

Description

The Code-Master™ light is an inrush current limited strobe light that is UL Listed as a signaling appliance for the hearing impaired and is intended for indoor use in UL Listed compatible fire alarm systems and other applications requiring electrical supervision of signaling circuit field wiring. The strobe flashes a 360-degree beam of light approximately 65 times per minute. The strobe is UL Listed for use in Class I, Division 1, Group C and D; Class I, Division 2, Group A, B, C and D; Class II, Division 1, Group E, F, and G; Class II, Division 2, Group F and G; and Class III Division 1 and 2 hazardous locations with Operating Temperature Codes per the following chart.

Temperature Codes

Ambient Temp.	Class I, Div. 2 Groups A, B, C & D	Class I, Div. 1 Groups C & D	Class II, Div. 1 Class III, Div. 1 & 2
40°C	260°C (T2B)	85°C (T6)	120°C (T4A)
55°C	260°C (T2B)	85°C (T6)	120°C (T4A)
65°C	280°C (T2A)	85°C (T6)	135°C (T4)

These devices are also UL 1971 Listed for visual signaling use for the hearing impaired with a 75 cd light output per Table 3.

Installation

 **WARNING**

To reduce the risk of ignition of hazardous atmospheres and shock, do not apply power to the unit until installation has been completed and unit is tightly assembled and secured.

Install this unit in accordance with the applicable requirements in the latest edition of the National Electrical Code.

NOTE: This unit **must** be mounted vertically with the globe assembly vertically facing down in Hearing Impaired Applications.

1. Mount using the following applicable method.

a. Pendant Mounting (Figures 1 and 4): Install explosion-proof hanger box (not supplied). Secure 3/4" (19 mm) NPT threaded conduit (not supplied) to the box. Install the mounting assembly, catalog number CAP75, on the conduit. Proceed to step 2.

b. Ceiling Mounting (Figures 2 and 4): Mount the ceiling box, catalog number CAC75, using appropriate hardware (not supplied) suitable for the mounting surface. Proceed to step 2.

c. Bracket Mounting (Figures 3 and 4): Install the mounting bracket, catalog number CALB75, using appropriate hardware (not supplied) for the mounting surface. Pull the field wiring through the mounting bracket. Proceed to step 2.


2. Extend the required power source wiring down through the mounting assembly. See Table 4 for required supply wire temperature ratings.

3. Refer to Figure 4. Loosen the (2) screws holding the circuit block in place. Rotate and remove the circuit block.

4. A ground screw is provided in the wiring compartment for attachment of field earth ground wire.

5. Connect the two red positive (+) and two black negative (-) wire leads to the supervised circuit in accordance with Figure 4.

6. Install the fixture on the mounting assembly.

 **WARNING**

To reduce the risk of ignition of hazardous atmospheres and shock, keep assembly tightly closed when circuits are energized.

7. Apply power to the unit and ensure proper function.

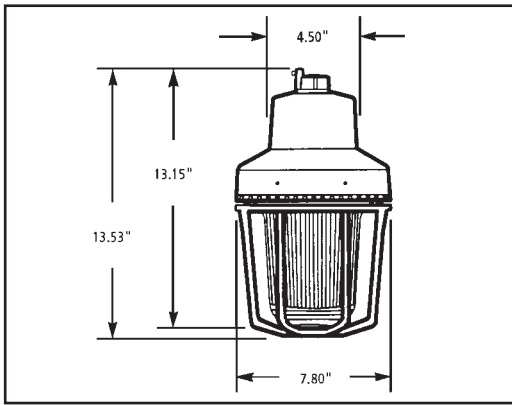


Figure 1. Detail of Pendant mounting.

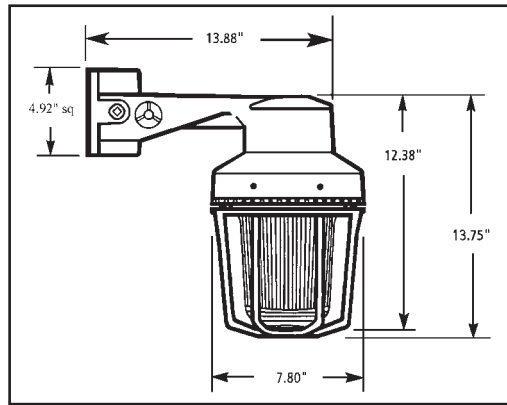


Figure 3. Detail of Bracket Mounting.

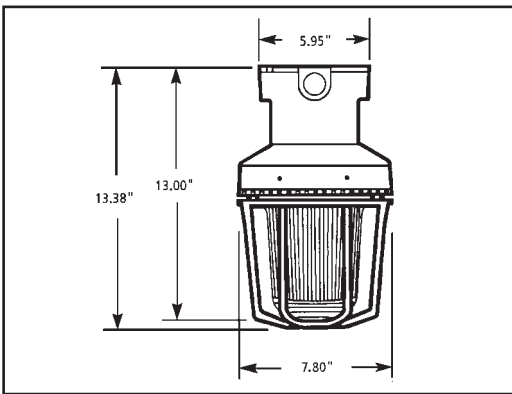


Figure 2. Detail of Ceiling Mounting.

Maintenance

1. Loosen the (3) guard screws and remove the guard.
2. Loosen the globe and ring assembly set screw. Insert a suitable tool into the notches in the globe and ring assembly and loosen the assembly by prying in a counterclockwise direction. Remove the ring and globe assembly.



WARNING

When replacing the strobe tube, do not handle the tube. Hold the strobe tube only by its base to prevent damage to the tube.



WARNING

To reduce the risk of ignition of hazardous atmospheres and shock, keep assembly tightly closed when circuits are energized.

To reduce the risk of ignition of hazardous atmospheres and shock, disconnect from the supply and circuit and allow five (5) minutes for stored energy to dissipate before disassembling the unit.

For strobe tube replacement, disconnect from the supply circuit and allow five minutes for stored energy to dissipate before starting work or disassembly.

3. Refer to Table 2 for the correct replacement catalog number and replace the necessary part.
4. To replace, simply screw the unit on until it seats firmly onto its gasket. Tighten the unit another 1/8 to 1/4 turn. Tighten the setscrew.
5. Reinstall the guard, where applicable, and secure using the three supplied screws.
6. After the unit is assembled, apply power and make sure the unit functions properly.

Table 1. Code-Master™ Strobe Light Specifications

Cat. No.	Method	Mounting Voltage	Operating Current* (Continuous RMS, after Init. surge)	Park Current* (outgoing after init. surge)	Surge* (Initial)	conduit Size	Flash Rated	Rated Light Output
CSST2030PDCCL and CAP75	Pendant	20V DC	1.08A	3A	10A for 0.7 ms	3/4Ø	360° beam of light at	75cd per
	Figure 1	24V DC	0.95A	2.8A	12A for 0.7 ms	NPT		
CSST2030PDCCL and CAC75	Ceiling	30V DC	0.83A	2.6A	15A for 0.7 ms		-65 fpm	Table 3
	Figure 2							
CSST2030PDCCL and CALB75	Bracket							
	Figure 3							

*Use the operating current to establish the wire gauge and standby power requirements. Consult the control unit manufacturer to determine surge and peak current effects and maximum number of strobes on the system.

Table 2. Code-Master™ Strobe Light Replacement Parts

Cat. No.	Mounting Method	Replacement Strobe
CSST2030PDCCL and CAP75	Pendant	Cat. No. S865
	Figure 1	
CSST2030PDCCL and CAC75	Ceiling	
	Figure 2	
CSST2030PDCCL and CALB5	Bracket	
	Figure 3	

Table 3. Light output dispersion when mounted with the assembly vertically facing down.

Degrees*	Percent of 75 cd Rating
0, Pointing Down	100
5 - 25	90
30 - 45	75
50	55
55	45
60	40
65	35
70	35
75	30
80	30
85	25
90	25

*Tolerance of ±degree is permitted.

Table 4 Supply Wire Temperature Markings

Ambient Temperature	Supply Wire Temperature Marking
40°C	75°C
55°C	85°C
65°C	110°C

Figure 4. Wiring Diagram

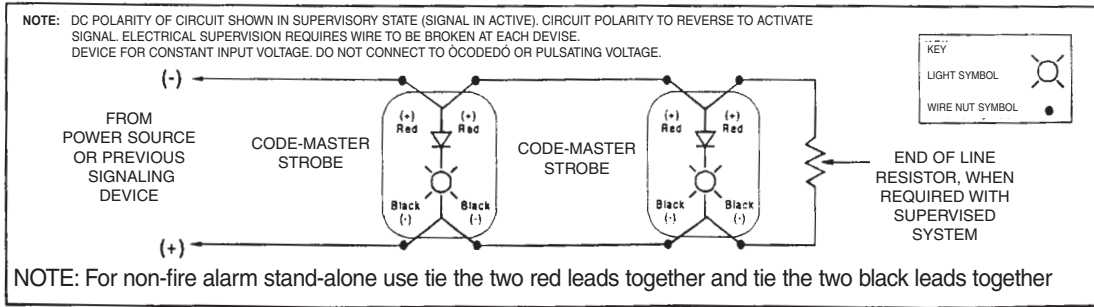


Figure 5. Operating Current vs. Operating Input Voltage Range.

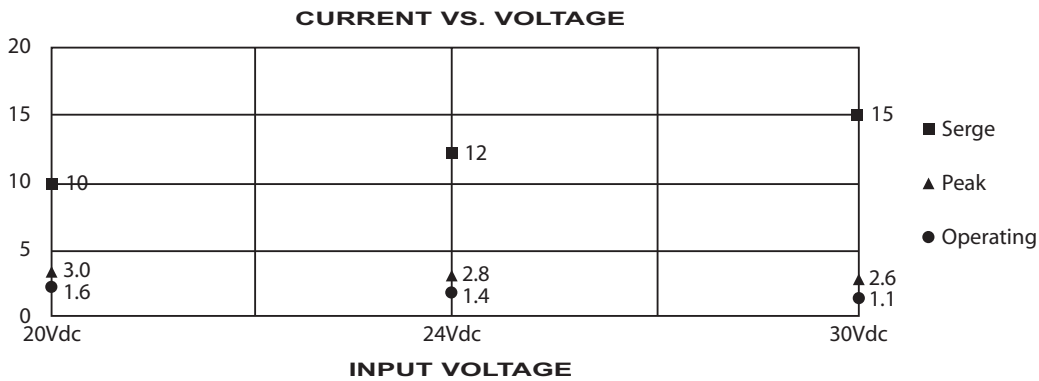


Figure 6. Disassembly of the Code-Master^a Strobe.

