

INSTALLATION INSTRUCTIONS

Models:



Use this product according to this instruction manual. Please keep this instruction manual for future reference.

General

The LED Horn Strobe is designed for easy installation. The model is for 24VDC operation.

WARNING:

Please read these instructions carefully before using this product. Failure to comply with any of the following instruction, cautions and warnings could result in improper application, candela setting, installation and/or operation of this product in an emergency situation, which could result in property damage and serious injury or death to you and/or others.

- ⚠ **NOTE:** These appliances were tested to the regulated voltage limits of 16.0-33.0 Volts. Do not apply voltage outside of this range.
- ⚠ **NOTE:** Check the minimum and maximum output of the power supply and standby battery and subtract the voltage drop from the circuit wiring resistance to determine the applied voltage to the strobes. The maximum wire impedance between strobes shall not exceed 35 ohms.
- ⚠ **NOTE:** Strobe and horns are not designed to be used on coded systems in which the applied voltage is cycled on and off.
- ⚠ **NOTE:** Make sure that the total rms (RMS) current required by all appliances that are connected to the system's primary and secondary power sources, notification appliance circuits does not exceed the power sources' rated capacity or the current ratings of any fuses on the circuits to which these appliances are wired. Overloading power sources or exceeding fuse ratings could result in loss of power and failure to alert occupants during an emergency, which could result in property damage and serious injury or death to you and/or others.
- ⚠ **NOTE:** The Temporal 4 pattern (0.1 second on, 0.1 second off, 0.1 second on, 0.1 second off, 0.1 second on, 0.1 second off, 0.1 second on, 5 secs off and repeat) is specified by ANSI and NFPA 72 for standard emergency evacuation signaling.

LIGHT OUTPUT:

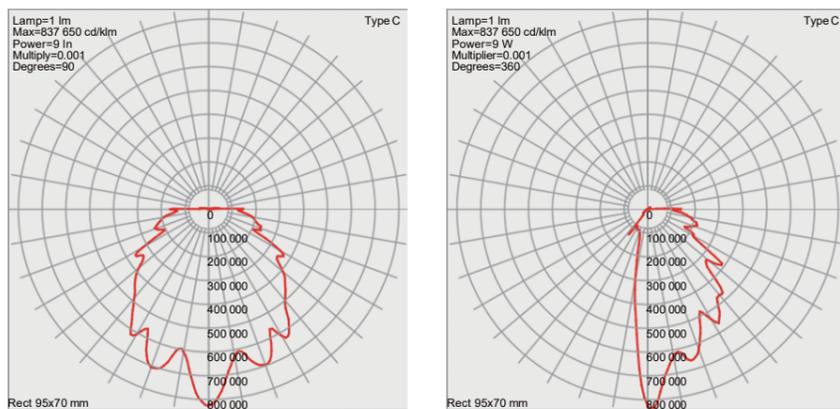


Figure 1: Horizontal and Vertical and Light Output

SPECIFICATIONS

CURRENT DRAW:

- ⚠ **NOTE:** Candela will determine the current draw of the product. When calculating the total currents, use Table 2 to determine the highest value of RMS current for an individual appliance, then multiply these values by the total number of appliances. Be sure to add the currents for any other appliances, including audible signaling appliances powered by the same source, and to include any required safety factors.

Table 1: Specification	
Approvals	UL 1638A, ULC C22.2 No.205
Environmental	Indoor Use Only. 0°C – 49°C (32°F – 120°F) 93% R.H.
Input Power	DC or FWR, 24V Regulated, 16 to 33V
Strobe Candela	15 cd, 30 cd, 75 cd, 110 cd (field selectable)
Horn Patterns	Temporal 4 high, Temporal 4 low, Continuous high, Continuous low (field selectable)

Table 2: Horn/Strobe Current Draw (mA RMS)	
Strobe Candela Setting (cd)	
16-33 Volts	

Horn Strobe Current draw		15 cd	30 cd	75 cd	110 cd
		DC	High Cont.	87mA	94mA
DC	High T4	80mA	83mA	108mA	126mA
	Low Cont.	74mA	80mA	110mA	125mA
	Low T4	75mA	80mA	106mA	124mA
	FWR	High Cont.	115mA	137mA	165mA
FWR	High T4	113mA	122mA	154mA	179mA
	Low Cont.	113mA	117mA	160mA	175mA
	Low T4	94mA	117mA	132mA	160mA

WIRING, SETTINGS AND MOUNTING

- The LED Horn Strobe and Horn appliance has 2 wiring terminals that accept two #12 to #18 American Wire Gauge (AWG) wires at each screw terminal. Strip leads 3/8 inches and connect to screw terminals.
- Break all 2 wire runs on supervised circuits to ensure integrity of circuit supervision as shown in Figure 2. The polarity shown in Figure 2, the wiring diagram, is for the operation of the appliances. The polarity is reversed by the FACP during supervision.
- ⚠ **NOTE:** Wiring method shall be in accordance with CSA C22.1, Canadian Electrical Code, Part 1, Safety Standard for Electrical Installations, Section 32.
- ⚠ **NOTE:** Do not fully back out terminal screws.
- ⚠ **NOTE:** Horn setting Tone Selector switch is shown in Figure 3; settings are T4 H, T4 L, CONT H, CONT L for Temporal 4 High, Temporal 4 Low, Continuous High, Continuous Low, respectively.
- ⚠ **NOTE:** Refer Figure 4 to connect horn/strobe with standalone detector and figure 5 for Macurco control panels and synchronization module.

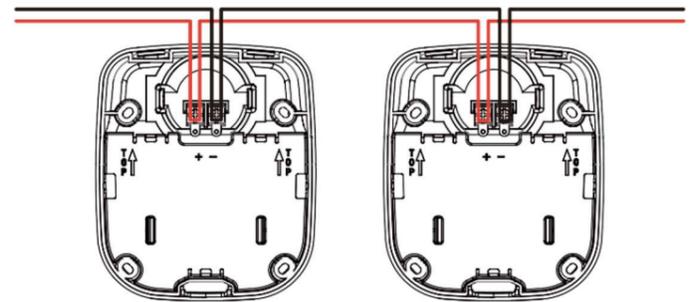


Figure 2: LED Strobe and Horn Wiring

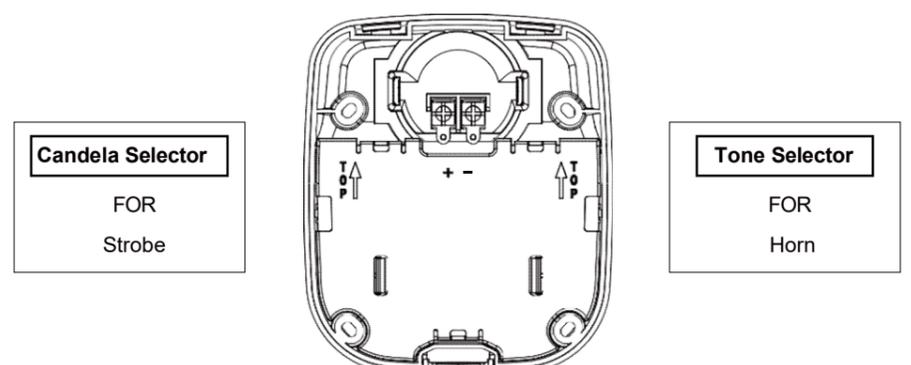


Figure 3: Candela and Tone Selector

CAUTION: Check that the installed product will have sufficient clearance and wiring room prior to installing back boxes and conduit.

CAUTION: Do not over tighten mounting screws. Excessive torque can distort the base and may affect operation.

CAUTION: When using power tools to screw down the mounting plate to the electrical back box, ensure the torque is set to the lowest setting available.

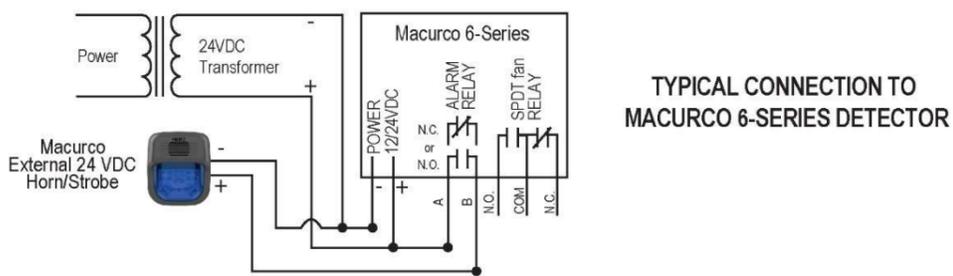


Figure 4: Standalone Detector

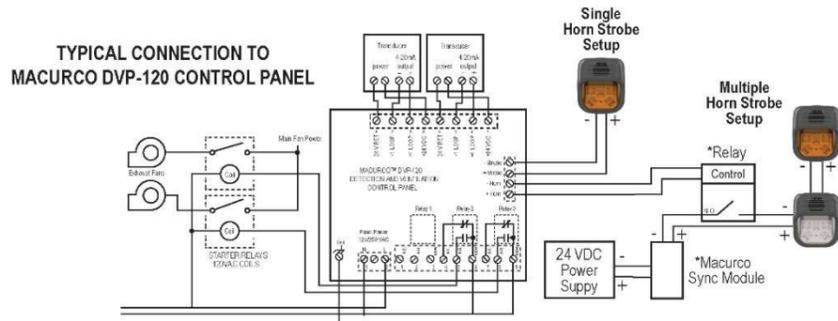


Figure 5: System Diagram with Sync Module

MOUNTING OPTIONS

NOTE:

1. Connect field wiring to contacts on back of device.
 2. Dress wires back into back box.
 3. Install device as shown in Figure 6 to a standard 4" x 4" x 1 1/2" back box with the provided pan head screws.
 4. Snap warning cover over device.
- NOTE: Back box must be recessed flush with the wall surface.
 IMPORTANT: Device only has one mounting orientation. LED light element should be pointed towards ground.
5. To remove the appliance, insert a small flat-bladed screwdriver into the bottom opening 1/2" as shown in Figure 7. Then pry off cover with the screwdriver and then unscrew device.
- WARNING: DO NOT paint this device.

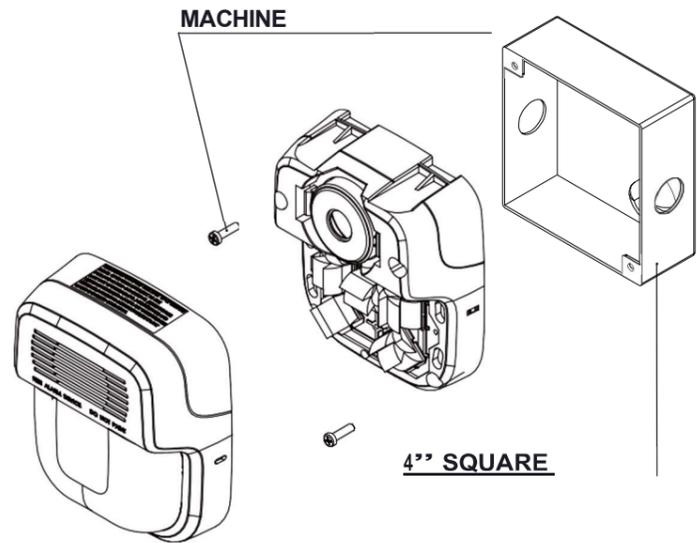


Figure 6: 4-Inch Square Back Box Installation

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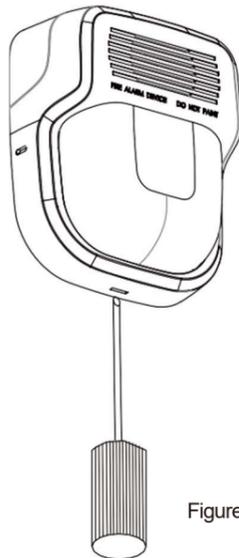


Figure 7: Cover Removal

NOTE: Back box must be recessed flush with the wall surface.

IMPORTANT: Device only has one mounting orientation. LED light element should be pointed towards ground.

WARNING: When installing strobes in an open office or other areas containing partitions or other viewing obstructions, special attention should be given to the location of the strobes so that their operating effect can be seen by all intended viewers, with the intensity, number, and type of strobes being sufficient to make sure that the intended viewer is alerted by proper illumination, regardless of the viewer's orientation.

WARNING: A small possibility exists that the use of multiple strobes within a person's field of view, under certain circumstances, might induce a photo-sensitive response in persons with epilepsy. Strobe reflections in a glass or mirrored surface might also induce such a response. To minimize this possible hazard, it is strongly recommended that the strobes installed should not present a composite flash rate in the field of view which exceeds five (5) Hz at the operating voltage of the strobes.

It is also strongly recommended that the intensity and composite flash rate of installed strobe and horn comply with levels established by applicable laws, standards, regulations, codes and guidelines.

Macurco Gas Detection

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REV – 1.0.0
 Issue Date: 03-15-2023
 Document No: 34-1221-4100-3
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