OAX2-24V2 LED Sign Listing Document

P/N LS10208-051NF-E:A 1/7/2019 19-0551

1. Installation

1.1 Standards

■ **Compliance** - This product has been investigated to, and found to be in compliance with, the following standards:

National Fire Protection Association

- NFPA 72 National Fire Alarm and Signaling Code

Underwriters Laboratories

- UL 1638 Visual Signaling Appliances - Private Mode Emergency and General Utility Signaling, Third Edition

Underwriters Laboratories Canada

- CSA C22.2 No. 205-M1983 Signal Equipment

■ **Installation** - This product is intended to be installed in accordance with the following:

Local

AHJ Authority Having Jurisdiction

National Fire Protection Association

- NFPA 70 National Electrical Code
- NFPA 72 National Fire Alarm and Signaling Code
- NFPA 101 Life Safety Code

Underwriters Laboratories Canada

- CAN/ULC S524 Installation of Fire Alarm Systems

Canada

- CSA C22.1 Canadian Electrical Code, Part I, Safety Standard for Electrical Installations

1.2 Environmental Requirements

This product meets the following requirements for operation:

- Temperature - 0°C to 49°C (32°F - 120°F)
- Relative Humidity - 93 ±2% non-condensing at 32 ±2°C (90 ±3°F)

However, it is recommended that this product be installed in an environment with a normal room temperature of 15-27º C (60-80º F).

1.3 Installation

Install the LED Sign as follows:

1. Install the mounting bracket as follows:
   a. Find the bracket in the VESA mounting kit and mark the location on the wall where it is to be mounted ensuring that the top of the bracket is level and is aligned with the Ethernet jack as shown in Figure 1. The tab on the Ethernet jack must be oriented facing upward.
   b. Drill appropriately sized holes in the wall and attach the bracket to the wall using the hardware provided in the mounting kit.
   c. Install the upper screw into the wall leaving it 5 to 8 mm (0.2 to 0.3 inch) from the wall and slip the bracket's keyhole over it such that the screw is seated in the upper area of the keyhole.
   d. Ensure the bracket is level and install the second screw.
   e. Tighten both screws.
   f. Pull down on the top of the outer bracket plate to verify that it will swivel. If not, loosen the nuts on the sides of the bracket slightly until it can swivel. Return the outer bracket to its vertical position.

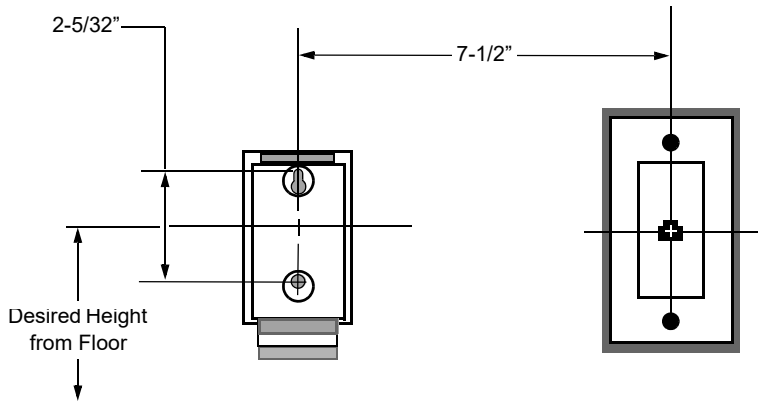


Figure 1. Installing the Wall Bracket

2. Attach the mounting bracket to the back of the LED Sign as shown in Figure 2 using the hardware provided in the mounting kit. Attach the screws loosely at first and then tighten them after all screws are in place.

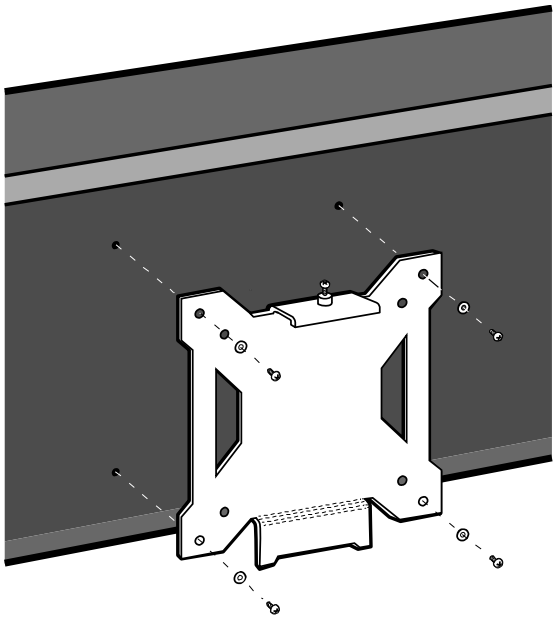


Figure 2. Installing the Sign Mounting Bracket

3. Hook the VESA plate attached to the LED sign onto the wall bracket as shown in Figure 3 and tighten the top screw to secure it.

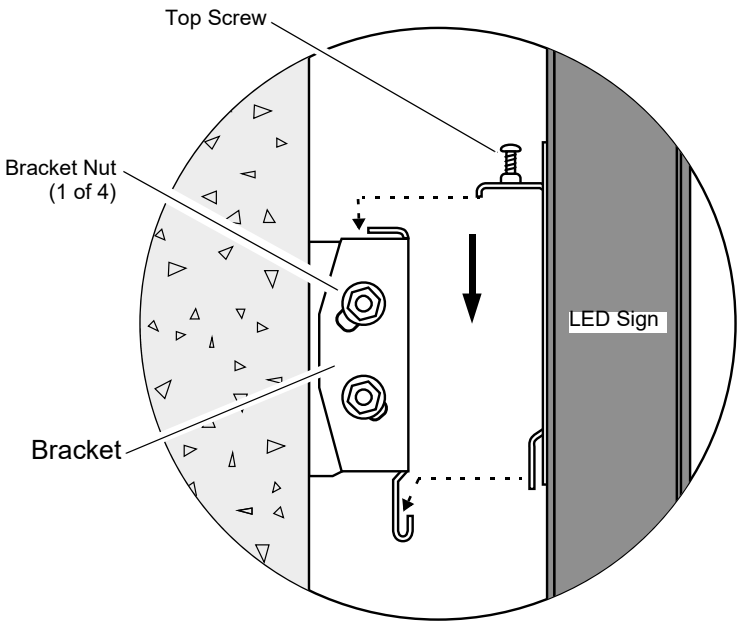


Figure 3. Mounting the LED Sign

4. Tilt the top of the LED sign downward to the desired angle. If the nuts on the sides of the wall bracket were loosened earlier, tighten the nuts.

1.4 Connections

Connect the LED sign as shown in Figure 4.

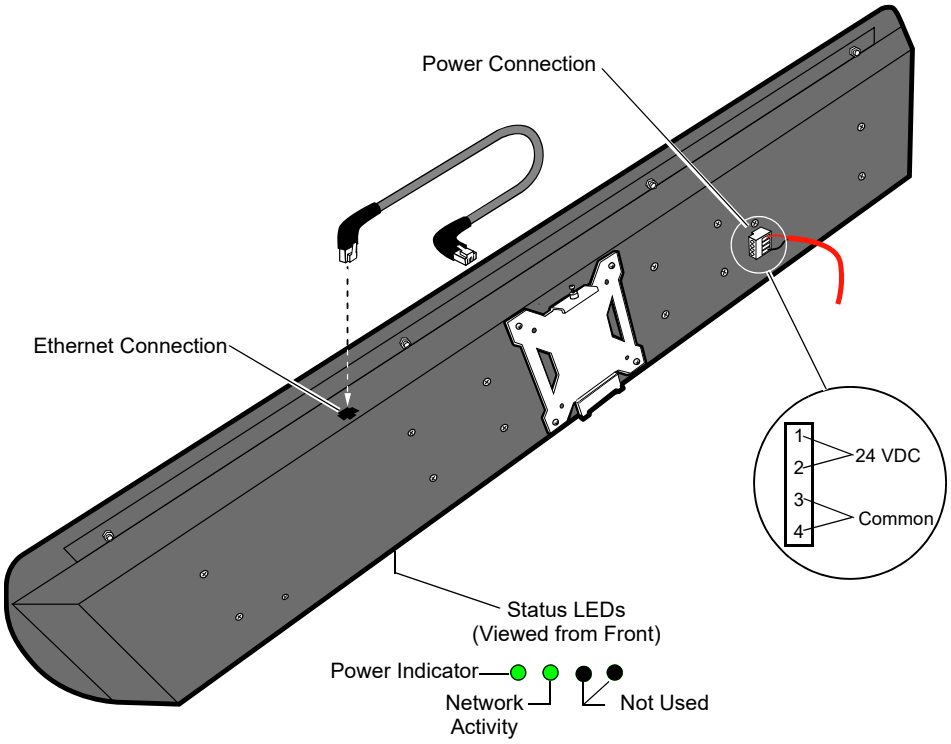


Figure 4. Power and Communication Connections

Table 1. Connection Specifications

Terminal Block/ Connector	Description	Specifications
Terminal	Power	Nominal Voltage: 24 VDC Current Draw 500 mA
RJ45 Connector	Ethernet Connection	• Line Impedance 100 ohm • Max Distance 328 ft. (100 m)

2. Operation

The OAX2-24V2 LED Sign displays messages it receives from a LED sign gateway.

3. Functionality

The OAX2-24V2 LED Sign displays one or two line static or scrolling messages based upon formatting of a message that is received from the sign gateway.

4. Programming Options

Not applicable to this product.

5. Testing/Maintenance

Testing and maintenance shall be performed according to the *Testing and Maintenance* section of NFPA-72.

6. Compatibilities

The OAX2-24V2 LED Sign is compatible with the following equipment.

Table 2. Compatible Equipment

Type	Equipment
Gateways:	• LED Sign Gateways: – LEDSIGN-GW – JLEDSIGN-GW – XLS-LEDSIGN-GW

7. System Configurations

The following table describes the required and optional configurations needed to meet the OAX2-24V2's intended applications.

Table 3. System Configuration

Accessory/Subassembly	Part Number	Description	Network Configuration
LED Sign Gateways	**Refer to Table 2.**	Current UL-listed LED Sign Gateways	R
Notes: **R** - Required component for minimally functional system. **O** - Optional			

8. System Power

Table 4. Power Requirements

Power	Requirement
Input (Power Supply) (Nominal)	24 VDC
Current Draw @ 24 VDC	500 mA
The LED Sign requires 24 VDC @ 500 mA nominal and supervised battery backup in accordance with local code requirements. The LED Sign can be powered by any, UL 1481-listed, regulated, power-limited, battery-backed, 24 VDC power supply. For Canadian installation, the LED Sign must be powered by a ULC-listed Fire Alarm Control Unit or a ULC-listed, regulated, power-limited power supply for fire application.	