

Mounting the sign

Because every installation site is unique, there is no single Adaptive-approved procedure for mounting AlphaEclipse signs.

However, follow these guidelines when installing a sign:

- Consult with a professional sign installer to determine the proper mounting system and to comply with all applicable building codes.
- Only use the sign’s mounting support bars to mount the sign. *Mounting to any other parts of the sign will void the warranty.*
- Both mounting support bars should be used to mount the sign.
- Drill holes as needed in the sign’s mounting support bars for fasteners. *Drilling holes in any other place on the sign will void the warranty.* Follow these guidelines when drilling holes in the mounting support bars:
 - Drill the minimum number of holes necessary.
 - The distance from the center line of a mounting bolt to the outside edge of a mounting support bar should NOT be less than two times the diameter of the fasteners.
 - To prevent bi-metal corrosion, dissimilar material should be isolated when mounting the sign.
- Allow fan clearance as shown below.

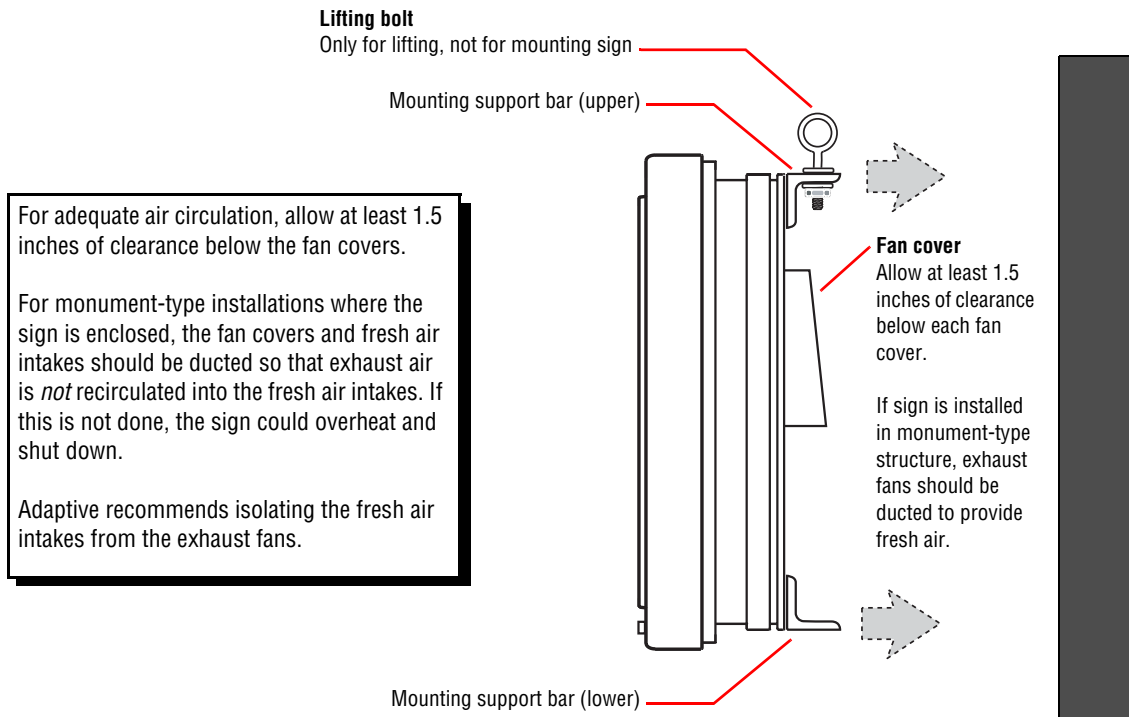


Figure 1: Mounting an AlphaEclipse sign

Mounting a temperature probe

See “Appendix E: Sign options” on page 39.

Model Number Explanation:	ASSEMBLY MODEL NO	WEIGHT (lbs)	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "E"	DIM "F"	DIM "G"	DIM "H"
35 _ _ - 64 x 8 R/A	AlphaEclipse 35 _ -32x8 R/A	90	53.80	18.38	15.00	22.47	47.80	12.31	2.00	0.25
	AlphaEclipse 35 _ -64x8 R/A	140	97.60	18.38	15.00	22.47	91.80	12.31	2.00	0.25
	AlphaEclipse 35 _ -80x8 R/A	160	119.80	18.38	15.00	22.47	113.80	12.31	2.00	0.25
	AlphaEclipse 35 _ -96x8 R/A	190	141.80	18.38	15.00	22.47	135.80	12.31	2.00	0.25
	AlphaEclipse 35 _ -112x8 R/A	220	163.80	18.38	15.00	22.47	157.80	12.31	2.00	0.25
	AlphaEclipse 35 _ -128x8 R/A	240	185.80	18.38	15.00	22.47	179.80	12.31	2.00	0.25
	AlphaEclipse 35 _ -144x8 R/A	260	207.80	18.38	15.00	22.47	201.80	12.31	2.00	0.25
	AlphaEclipse 35 _ -64x16 R/A	185	97.80	29.57	26.00	33.62	91.80	23.31	2.00	0.25
	AlphaEclipse 35 _ -80x16 R/A	220	119.80	29.57	26.00	33.62	113.80	23.31	2.00	0.25
	AlphaEclipse 35 _ -96x16 R/A	250	141.80	29.57	26.00	33.62	135.80	23.31	2.00	0.25
	AlphaEclipse 35 _ -112x16 R/A	285	163.80	29.57	26.00	33.62	157.80	23.31	2.00	0.25
	AlphaEclipse 35 _ -128x16 R/A	320	185.80	29.57	26.00	33.62	179.80	23.31	2.00	0.25
	AlphaEclipse 35 _ -144x16 R/A	355	207.80	29.57	26.00	33.62	201.80	23.31	2.00	0.25
	AlphaEclipse 35 _ -48x24 R/A	415	76.50	40.15	37.00	45.22	70.50	34.00	3.00	0.38
	AlphaEclipse 35 _ -64x24 R/A	440	98.50	40.15	37.00	45.22	92.50	34.00	3.00	0.38
	AlphaEclipse 35 _ -80x24 R/A	465	120.50	40.15	37.00	45.22	114.50	34.00	3.00	0.38
	AlphaEclipse 35 _ -96x24 R/A	485	142.50	40.15	37.00	45.22	136.50	34.00	3.00	0.38
	AlphaEclipse 35 _ -112x24 R/A	515	164.50	40.15	37.00	45.22	158.50	34.00	3.00	0.38
	AlphaEclipse 35 _ -128x24 R/A	535	186.50	40.15	37.00	45.22	180.50	34.00	3.00	0.38
	AlphaEclipse 35 _ -144x24 R/A	575	208.50	40.15	37.00	45.22	202.50	34.00	3.00	0.38
	AlphaEclipse 35 _ -64x32 R/A	480	98.50	51.15	48.00	56.18	92.50	45.00	3.00	0.38
	AlphaEclipse 35 _ -80x32 R/A	505	120.50	51.15	48.00	56.18	114.50	45.00	3.00	0.38
	AlphaEclipse 35 _ -96x32 R/A	535	142.50	51.15	48.00	56.18	136.50	45.00	3.00	0.38
	AlphaEclipse 35 _ -112x32 R/A	560	164.50	51.15	48.00	56.18	158.50	45.00	3.00	0.38
	AlphaEclipse 35 _ -128x32 R/A	580	186.50	51.15	48.00	56.18	180.50	45.00	3.00	0.38
	AlphaEclipse 35 _ -144x32 R/A	635	208.50	51.15	48.00	56.18	202.50	45.00	3.00	0.38

Figure 3: AlphaEclipse installation diagram - Part 2

Open the sign

1. Open the sign according to “Appendix D: Opening and closing the sign” on page 35.

Connect power to the sign

2. Connect the sign to an appropriate power source as shown:

AlphaEclipse sign
(internal view, right side)

Terminal block	120V	240V
1	LINE	LINE 1
2	NEUTRAL	LINE 2
3	GROUND	GROUND

Signal wire conduit opening

Power line conduit opening
Connect power lines to a 20-amp dedicated service breaker.

Figure 15: Power wiring

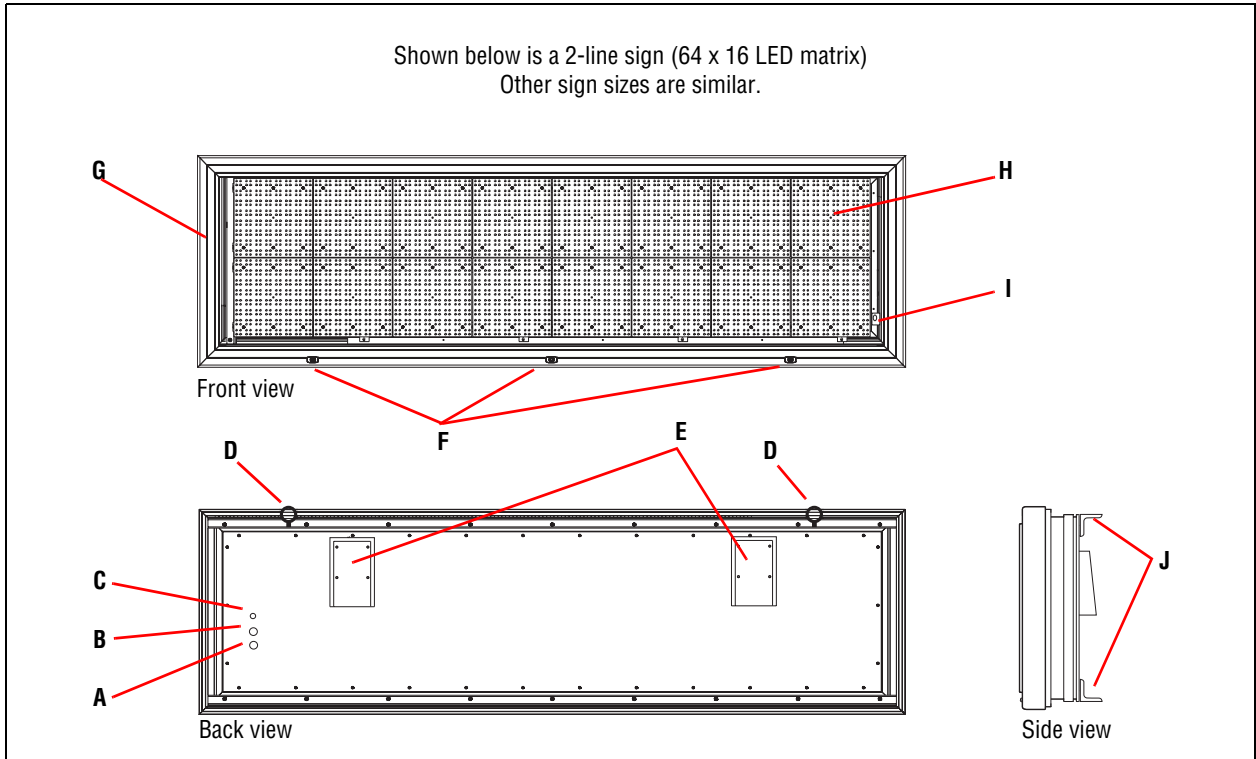
Ground the sign

3. The sign must be properly earth grounded. *The sign’s support structure should NOT be used as ground.*

Appendix

Appendix A: Sign description

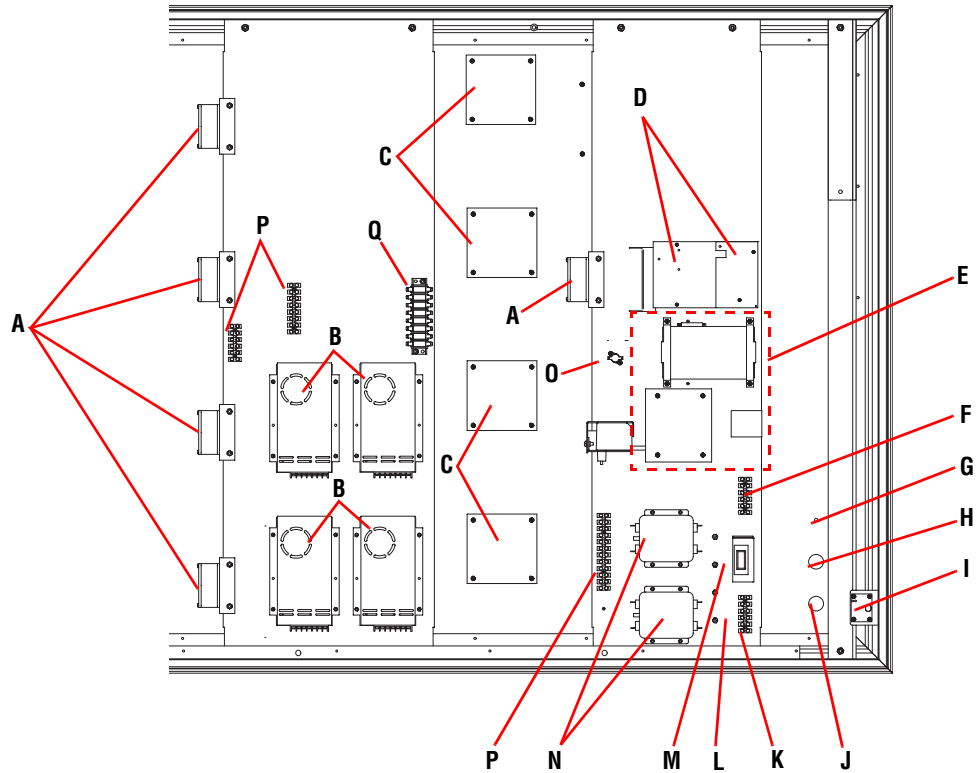
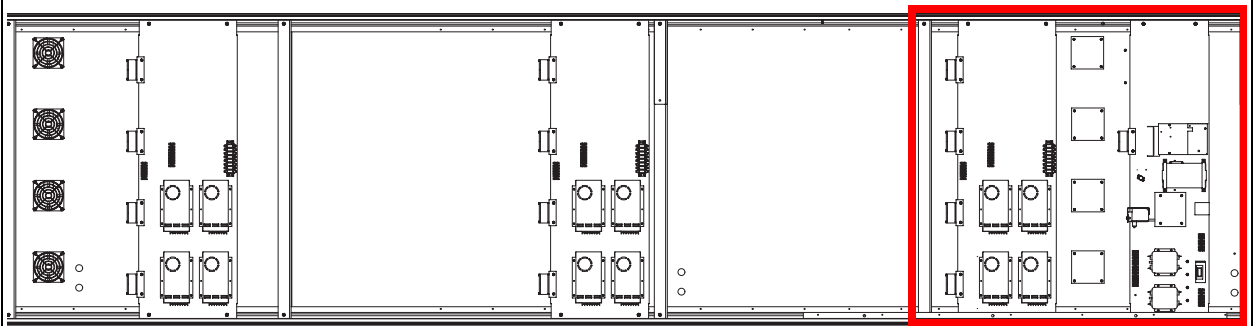
Outside view




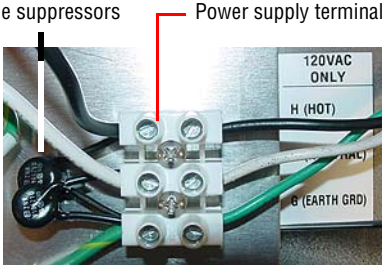
Item	Name	Description
A	Power conduit	Access for electrical power. Must be sealed with weather-proof conduit during installation.
B	Signal and temperature probe conduit	Access for communication signals and temperature probe. Must be sealed with weather-proof conduit during installation.
C	Wireless transceiver antenna conduit	Access for antenna for optional wireless transceiver.
D	Lifting eyebolt	Used to lift the sign. Should NOT be used to mount the sign.
E	Fan covers	Weather-resistant louvers allow air movement through the sign. The fan nearest the conduit openings is the intake fan. The other fan is the exhaust fan.
F	Locking latch	Locks the sign closed. Requires key (included). Number of latches depends on the width of the sign.
G	Door	Opens for access to internal sign components. Gas cylinders hold the open door in place.
H	LED lens cover	Polycarbonate lens cover in the front access cover.
I	Photocell	Senses available light and dims the LEDs at sunset. The LEDs are dimmed by 50% (default setting).
J	Mounting brackets	Used to attach the sign to a structure.

Inside view

Shown below is a 4-line sign.
Other sign sizes are similar.



Item	Name	Description
A	Internal fan, 120V	Circulates air in the sign.
	Internal fan, 240V	
B	Power supply	Supplies power to fans, Controller board, and LED boards.
C	Exhaust fan, 120V	Dissipates heat from sign.
	Exhaust fan, 240V	
D	Controller board	Controls sign operation.
	Turbo Extender board	Plugs into the Controller board.

E	Modem kit, 120V	Allows sending messages to sign via a modem (optional).
	Modem kit, 240V	
	Transceiver kit, 120V	Allows sending messages to sign via wireless transmitter (optional).
	Transceiver kit, 240V	
F	Signal I/O terminal block	<p>Used for RS232 or RS485 communication with sign:</p>  <p>RS485 + RS485 - SHIELD RS232 TXD RS232 RXD SGL GND</p>
G	Wireless transceiver antenna conduit opening	Used to connect antenna to the optional wireless transceiver.
H	Signal wire conduit opening	Used to run a RS232 or RS485 signal wire or fiber optic cable to sign
I	Photocell	Contains light-sensitive photocell used to dim the sign's LEDs.
J	Power line conduit opening	Wires from power supply terminal block are run through this opening to a suitable power source.
K	Power supply terminal block	Used to connect the sign to an appropriate power supply.
L	Surge suppressors	<p>Protects the sign from electrical surges. Two surge suppressors (circled below) are used per sign.</p>  <p>Surge suppressors Power supply terminal block</p>
M	Power switch	Used to disconnect sign from power source.
N	Line filter	Removes electrical noise (EMI) from power supply connection.
O	Exhaust fan thermostat	Turns on exhaust fans when inside of unit gets too hot.
P	5V connection terminal	Provides power to LED boards.
Q	120/240V connection terminal	An all-plastic terminal strip that provides power to the power supplies and fans.