

## Model X2-LED System Installation

This document provides instructions for installing the Polara X2-LED Push Button Station.

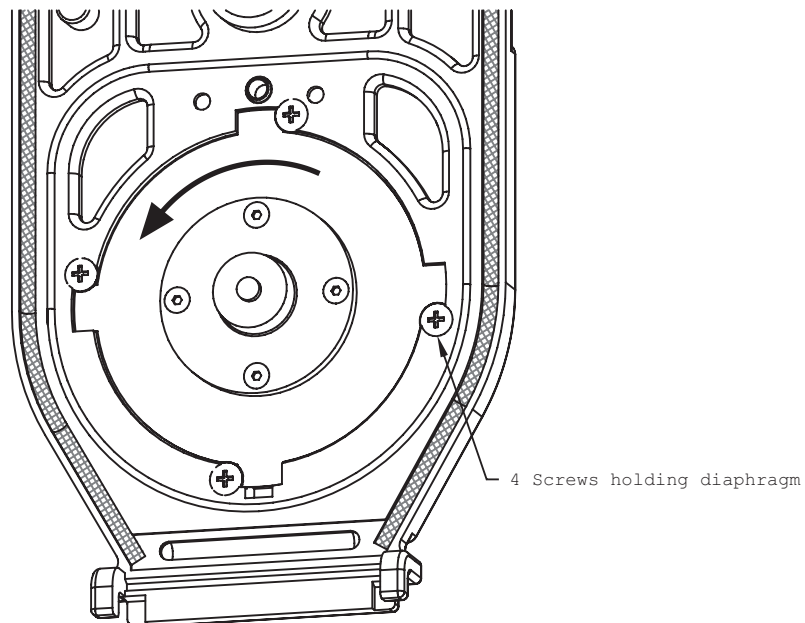
### Mounting the Push Button Stations

Use the provided mounting hole diagram on page 4 to drill and tap the pole for the PBS. The maximum recommended distance from the ground to the center of the push button is 39 inches. Less than 39 inches is acceptable.

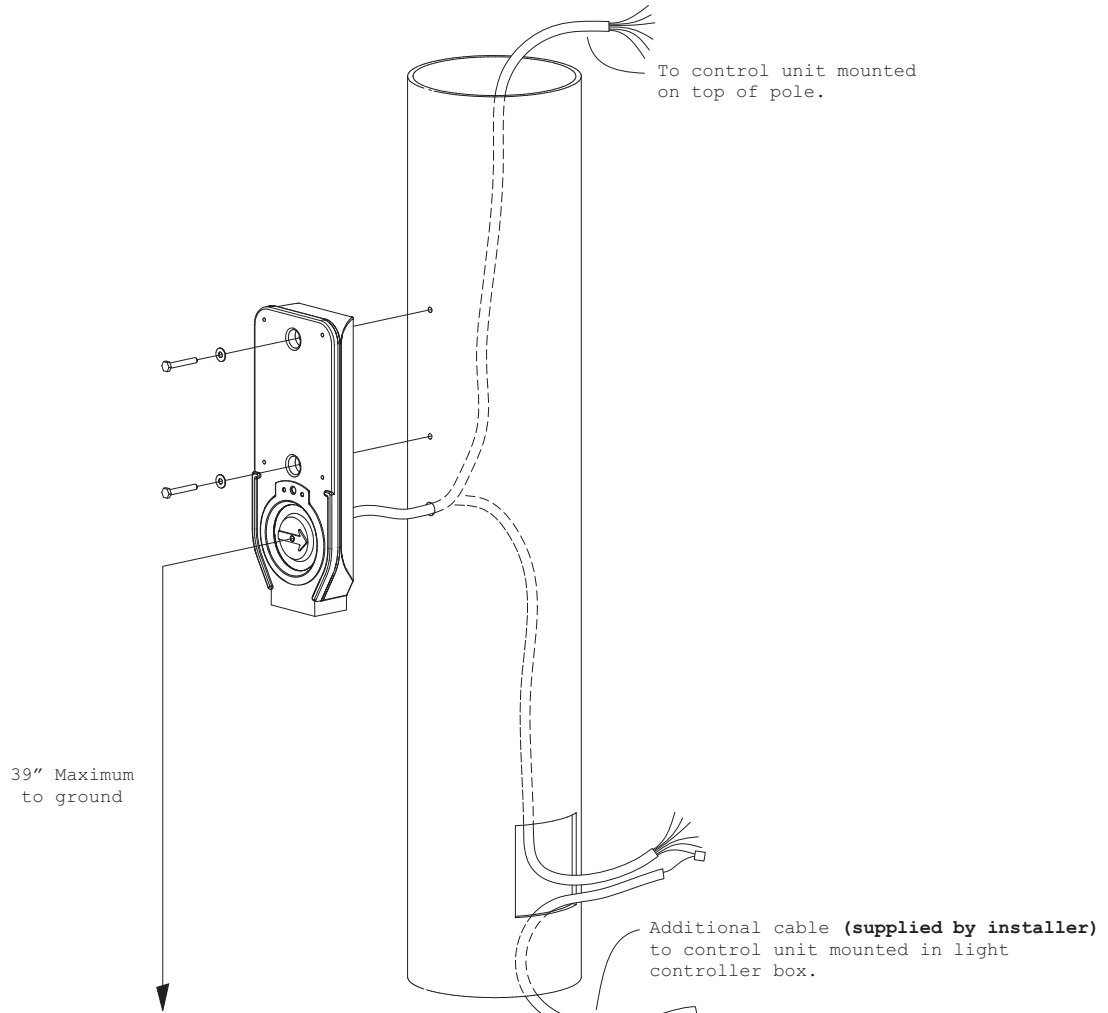
The PBS comes with the button arrow pointing in a certain direction. The button arrow can be made to point left, right, or up, depending on the location of the PBS on the pole. The arrow should always point through the crosswalk. For example, if you stand facing the button and the crosswalk is on your left, the arrow should point to the left. If the crosswalk is directly in front of you, the arrow should point up. If the crosswalk is on the right, the arrow should point to the right.

Remove the sign from the PBS by removing the four attachment screws. If the arrow direction is correct, there is no need to open the unit. If the arrow needs to be changed, remove the 6 cover screws and carefully bring the cover to approximately 60° which frees the bottom hinge, then remove the cover. Place the cover on a flat surface with the backside facing you (see the sketch below). To change the arrow direction, loosen the 4 screws holding the diaphragm 1-2 turns each. Press on the front of the button and turn it counter-clockwise until it pops out. Orient the arrow in the desired direction then replace the diaphragm so each tab sits in its pocket with a corner under each screw head. Tighten each screw making sure the diaphragm is not pinched between the screw and cover. The screw head is intended to keep each tab in its pocket. The screw must not bind the tab preventing it from moving freely. Reinstall cover and six screws. **Be careful not to drop the cover and break the hinge.**

Turn while lightly pressing on button from other side to remove.

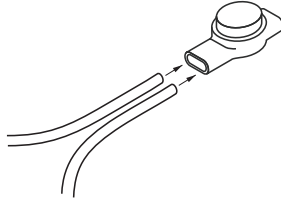


Route the cable into the pole either downward to an access hole, or upward and out the top of the pole. Attach the PBS to the pole using the supplied ¼-20 bolts and washers. Re-attach the sign as shown in the sketch.



Wiring (Refer to wiring diagram)

The Model X2-LED system uses 5 conductor cabling between the PBS and control unit. If the PBS and controller are mounted on the same pole, then the PBS cable may attach directly to the controller. Otherwise additional cable is required. We suggest Belden 27335A (5 conductor) or \*27326A (4 conductor) (see below). These are suitable for installation underground. If additional cable is used, then splicing is necessary. Polara provides 3M Part No. UAL cable splicing connectors for this purpose. These connectors are compatible with the PBS cable wires and AWG 18-24 conductors.

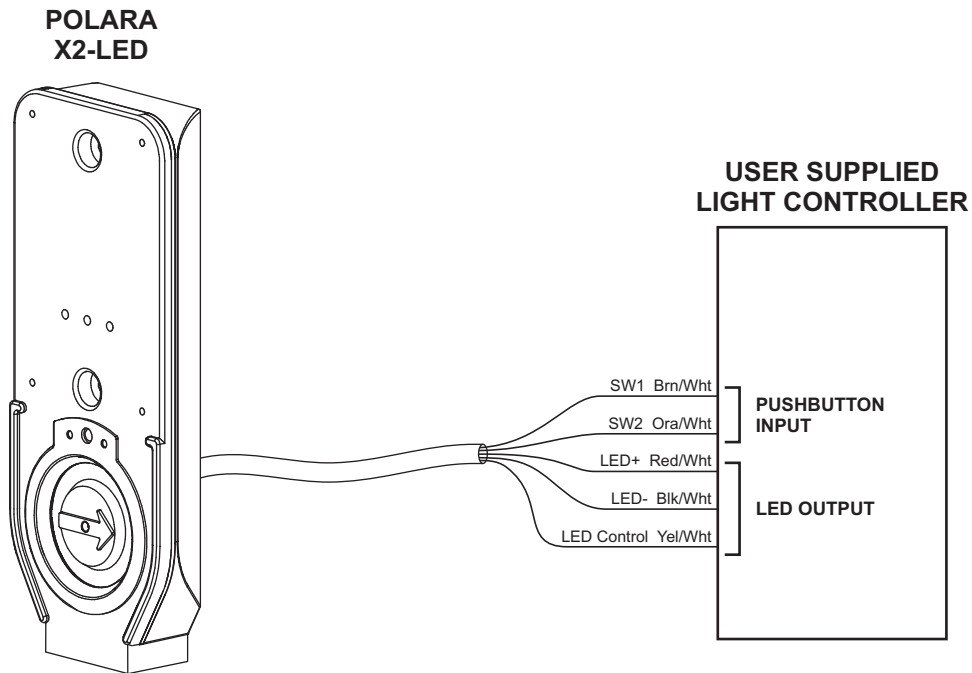


To make the splice, insert the unstripped ends into the connector as far as they will go. Then use pliers to compress the button down approximately flush with the connector body.

The push button wires provide a contact closure for triggering the light controller. The controller push button input must comply with the voltage and current limits listed in the Polara X2-LED specification.

The light controller must provide an output capable of flashing the LEDs and must meet the requirements listed in the Polara X2-LED specification. \*If the LED output does not include a control wire connection, then the LED Control wire is not used and only the LED+ and LED- wires should be connected.

## WIRING DIAGRAM



**MOUNTING HOLE DIAGRAM  
FOR PUSH BUTTON STATION**

When printing document in Adobe Acrobat, be sure that "None" is selected in Print Scaling in the printing dialog box to ensure that document is printed to the correct scale. Otherwise, recreate template using dimensions shown.

