



## 350-1004- Installation Instructions for Latching LED Pushbutton System

Required materials: Qty 11 2-4 ft lengths of 14-18 AWG wire. Optional wire markers.

1. If there is any pedestrian traffic, place the intersection in PED Recall to allow pedestrian movement during the installation process.
2. Inside the cabinet, ensure the PED button wires are marked with the identifying phase. Disconnect the PED button wires from the PED input terminals in the cabinet.
3. Remove the PED buttons from the poles and replace with Polara's BDL3 pushbuttons. No polarity on the connection must be observed.
4. Refer to the wiring document on the next page and connect the PED button field wires to the "TO BUTTONS" terminals on the LPBCU2 control unit. For each PED phase, use one connection on the control unit. A maximum of 5 buttons may be used on one phase.
5. Using additional wires, connect the "TO PED CALL IN" terminals on the LPBCU2 to the traffic controller PED button inputs (where the buttons were initially connected). Connect the 120 VAC walk signals from the load switch output terminals to the "TO PED WALK OUT" terminals on the LBPCU2 and the 120 VAC neutral signal to the ACN terminal. Match the phases by using the letters (ABCD) on the control unit and refer to the wiring diagram.
6. If the LBPCU2 is not mounted to the metal of the cabinet, connect the CGND terminal on the LBPCU2 to the CGND (chassis ground) of the cabinet.
7. The included power adapter's cable must be wired to a source of 120 VAC that loses power during cabinet flash, such as the load switch bus bar.
8. Test the system by pressing each button during "Don't Walk" and check that:
  1. The LED on the button turns on and stays on until the next "Walk" interval.
  2. The button beeps at each press and release.
  3. The corresponding red phase light in the PBCU-2 turns on while the button is pressed.
  4. PED call is received by the traffic controller on the correct phase.The button's LEDs should turn off and the buttons should not operate while "Walk" is on for the particular phase.
9. If the system tests correctly, turn off the PED recall on the traffic controller.
10. Troubleshooting: For technical support, call Polara at (888)340-4872.
  - If a "TO PED CALL IN" LED is blinking rapidly, there is a short in that button's system. The LED will continue to blink for 15 seconds after the short is cleared.
  - If the system is completely inoperative, check that 120 VAC are being supplied to the receptacle. A green LED (D10) should light up and a heartbeat LED (D11) should blink if the unit is powered.

Note: The latching pushbutton control unit and buttons are designed to work together as a system. Failed buttons should be replaced with a BDL3 style button.

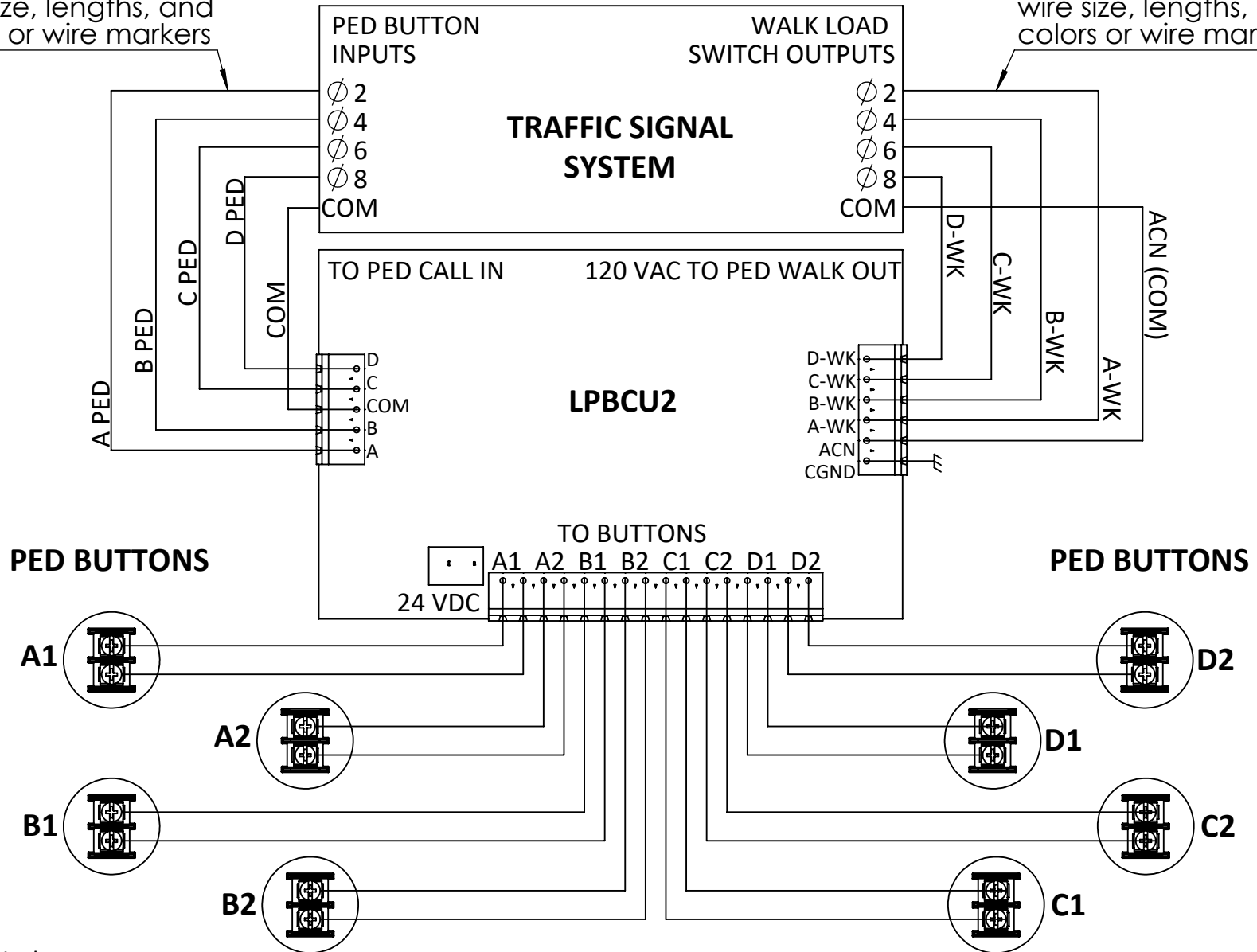
In an emergency where a BDL3 replacement button is not available, a microswitch button may be installed instead. A 180 ohm resistor must first be installed between one of the button terminals and the wire that would normally connect to that terminal. This will keep the LEDs on any other buttons on the same phase working properly.

Dimensions are in inches.

# LPBCU2 Wiring Diagram

Installer determines wire size, lengths, and colors or wire markers

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Dimensions are in inches.