

Model XAV2E-LED Push Button Station



The XAV2E-LED push button station is designed for use at a pedestrian crosswalk with in-pavement or overhead flashing yellow lights. It works in conjunction with the XAVCU2 control unit. Within this system, the XAV2E-LED provides a 9X12 instructional sign, a push button with directional arrow for activating the flashing lights, a voice message, and a group of three yellow LEDs above the push button which flash in sync with the street lighting.

The XAV2E-LED uses the same rugged and reliable push button and housing as Polara's EZ Comm Navigator series. In addition to the push button, the XAV2E-LED contains a speaker, a 10 watt RMS audio amplifier, a noise monitoring microphone for auto volume control, and LEDs.

The XAV2E-LED contains an 8 position terminal block ready for connection to an XAVCU2 or XAVCU2-DC series unit. The installer must supply an 8 conductor cable (Belden #27601A recommended).

The unit is supplied with mounting hardware and installation instructions. Terminal screws on each XAV2E-LED include washers (clamping plates) intended for bare wire. Crimp Terminals are not recommended.

Note: This unit is not compatible with older XAVCU controllers.

XAV2E-LED (Standard Yellow)

XAV2E-LED-B (Black)

XAV2E-LED-G (Green)

See page 3 for additional ordering options.



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Function

Push button station for use on crosswalks with flashing yellow lights. Connects to XAVCU2 or XAVCU2-DC series units to enable triggering of crosswalk lights and can provide a locate tone and a voice message.

Features

- Instructional 9X12" retro-reflective sign with tamper resistant mounting screws
- Provides yellow LEDs above the button that flash in sync with street lighting
- ADA compliant push button with directional arrow field adjustable direction: left, right, up or down
- 10 watt audio amplifier
- Weather resistant speaker
- Volumes controlled by potentiometers on the XAVCU2

Electrical Properties

| Power Requirements | | |
|---------------------------------------|--|--|
| DC In | 10-24 V DC from XAVCU2 | |
| Idle Current Draw | ~1.2mA | |
| Peak Current Draw (15VDC input power) | ~500mA with voice message at maximum | |
| LED Current | 22mA typical | |
| Outputs | | |
| BTN | Driven low to ground when the push button is pressed | |
| MIC (Microphone) | 0-1.5 Volts (ambient noise feedback) | |
| Inputs | | |
| PWR+ | 10-24 Volts DC referenced to PWR- | |
| PWR- | DC Ground | |
| LED | Connect to ground to drive LEDs (typically 22mA) | |
| MUTE | Connect to ground to enable audio amplifier | |
| AUD1 | One half of balanced audio input | |
| AUD2 | Other half of balanced audio input | |

Mechanical Properties

| Physical | | |
|-------------------------|---|--|
| Enclosure Type | Cast aluminum housing with yellow powder coat finish, watertight o-ring seals | |
| Installation | 2 holes on 6.0" centers, tapped 1/4-20 plus 1/2" or larger hole for wire access | |
| Dimensions | | |
| Width | 9" | |
| Length | 19.2" | |
| Maximum Height | 2.60" | |
| Environmental | | |
| Operating/Storage Temp. | -34°C to +60°C | |

Operating Specifications

| Parameter | Rating |
|-----------------------------|------------------------------------|
| Operating Temperature Range | -34°C to +74°C (-30°F to +165°F) |
| Storage Temperature Range | -45°C to +85°C (-50°F to +185°F) |
| Operating Force | 3.0 lbs Maximum |
| MTBF | 3,000,000 hours |
| Switch Operating Life | Greater than 20 Million Operations |
| Maximum Volume | 100 dB @ 1 meter |

Design Compliance

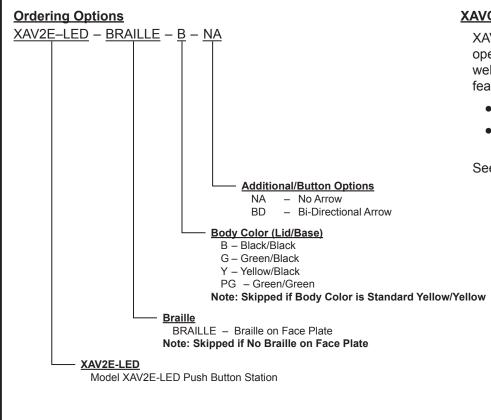
| Test Type | Compliance |
|--------------------------------|--------------------|
| Functionality | MUTCD 2009 - 4E |
| Temperature and Humidity | NEMA TS 2 |
| Mechanical Shock and Vibration | NEMA TS 2 |
| EN4 PBS Enclosure | NEMA 250 - Type 4X |

Notes

- 1. Applicable sections only of reference standards.
- 2. All specifications are subject to change without notice.
- 3. All specifications are Typical unless otherwise specified.



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XAVCU2

XAV2E-LED units require an XAVCU2 or XAVCU2-DC series unit for operation. The XAVCU2 provides power, audio and LED control, as well as button I/O features. The XAVCU2 comes with a Locate Tone feature and the following messages included by default:

- Standard English Message: "Yellow lights are flashing"
- Standard Spanish Message: "Las luces amarillas estan relampaqueando"

See the XAVCU2 series data sheets for additional information.