

Ocean State Signal Co.

27 Thurber Blvd • Smithfield, RI 02917
 (401) 231-6780 • Fax: (401) 231-4390



SPECIFICATION SHEET

TITLE: Pedestrian Signal LED Modules

PART NO.: see below

LED Color/Type: Portland Orange ● /AllInGaP, Lunar White ○ /InGaN

Operating Temperature: -40°F to 165°F (-40°C to 74°C)

Total Harmonic Distortion (THD): < 20%

Operating Voltage: 80 - 135Vac

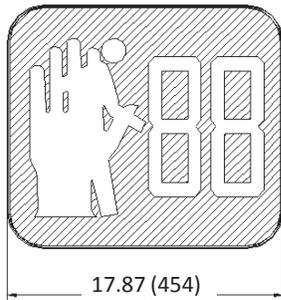
Turn-On/Turn-Off Time: < 75msec

Power Factor: > 0.90

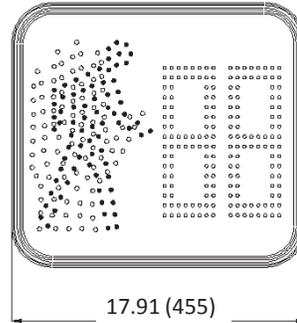
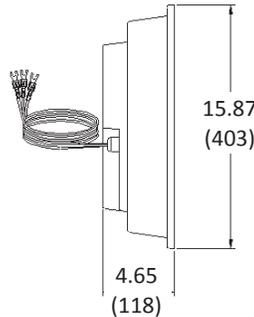
Turn-Off Voltage: > 35Vac

Mechanical Dimensions [in(mm)]

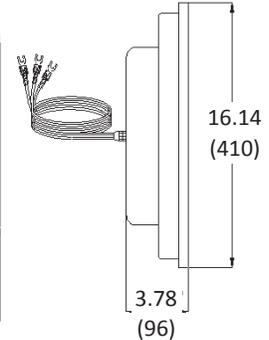
CIL, CD Digit Height - 9"



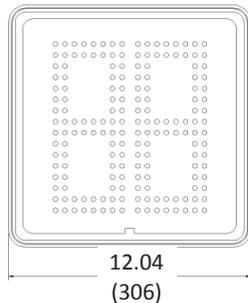
CIL Series



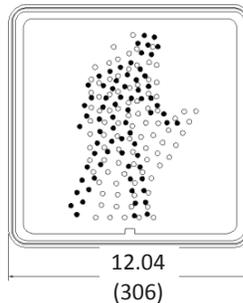
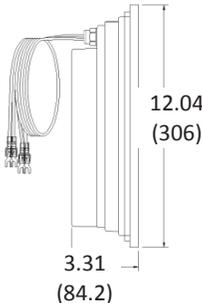
CD Series



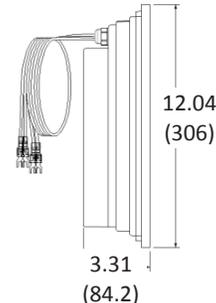
CD, WM, EH, HM Digit Height - 9"



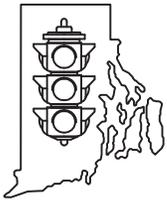
CD Series



HM Series



Model Number	Description	Wattage Drawn	Standard
12 inch Countdown Pedestrian			
TP12N-CD	Countdown Digits - Portland Orange Countdown	7.5W	ITE PTC SI-LED Signal Modules - Aug 4, 2010 / ETL ¹
12 inch Pedestrian			
TP12B-EH	Full Symbol – Portland Orange Hand	6W	ITE PTC SI-LED Signal Modules - Aug 4, 2010 / ETL ¹
TP12H-HM	Overlay Full Symbol – Portland Orange Hand / Lunar White Man	Hand – 7W Man – 7W	ITE PTC SI-LED Signal Modules - Aug 4, 2010 / ETL ¹
16 inch Incandescent Look Dual Pedestrian Countdown			
TSL-PED-16-CIL-P1*	Full Symbol	Portland Orange Hand – 7.9W Lunar White Man – 6W Portland Orange Countdown – 5.3W	ITE PTC SI-LED Signal Modules - Aug 4, 2010/ETL ¹



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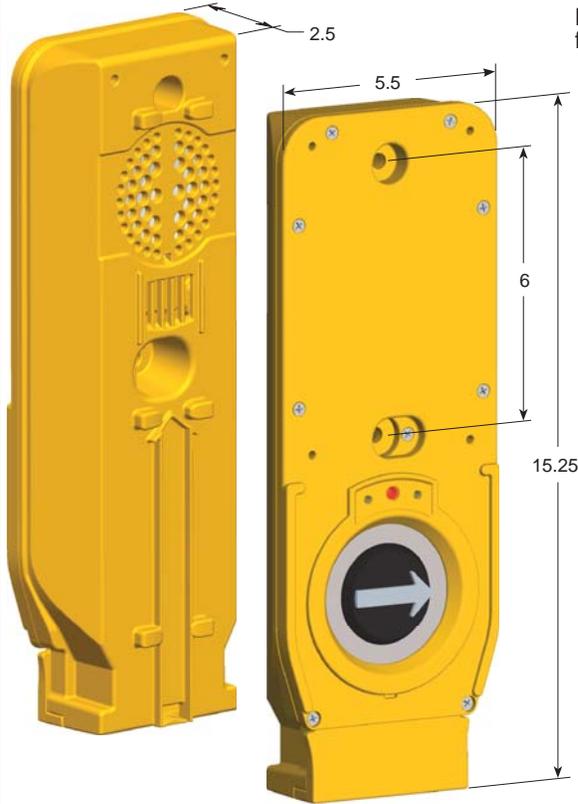
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SPECIFICATION SHEET

TITLE: EN4 - EZ Communicator Navigator
4-Wire Push Button Station

PART NO.:
see below



By interfacing with the PHCU4W that installs in the Ped Head, the EN4 PBS can provide the following standard features:

- Confirmation of button push via latching LED, sound, and tactile bounce.
- Direction of travel (with extended button push)
- Standard locating tone during Don't Walk (and Clearance if desired)
- Cuckoo, Chirp, Rapid Tick, Verbal, or user customized voice messages
- Vibrating button during walk
- Choice of 4 locating tones, custom sound, or verbal countdown during
- All sounds automatically adjust to ambient over 60dB range
- Most sounds have a minimum and maximum volume independently set
- Extended button push can turn on, boost volumes, and/or mute all sounds except those on the activated crosswalk
- Firmware updates provided through USB port
- Independent ambient adjustment setting for the locate tone which allows fine adjustments for low ambient conditions

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
Minimum Ambient Sound	37 dBA
Audio Quality	3% THD plus Noise @ 1 kHz

EN4 5 A N 0 - B - BD-ES

Additional Available Options

Button Options

- NA - No Arrow
- BD - Bi-Directional Arrow

Other Options

- WPC - with Pole Cap
- ES - External Speaker Option

Body Color

(Base is always black)

- B - Black Front
- G - Green Front
- Y - Yellow Front

Audio Message Options

- 0 - Standard Messages
- 1 - Custom Messages

Braille

- N - No Braille on Face Plate
- B - Braille on Face Plate

Face Plate

MUTCD Compliant

- V - 9x12 R10-3
- U - 9x12 R10-3b
- T - 9x15 R10-3e

Non-MUTCD Compliant

- A - 5x7 - International
- B - 5x7 - Informational
- C - 9x12 - Countdown
- D - 5x7 or 9x12 - International Sign
- O - (Letter O) - No Sign

Size of Face Plate

- 5 - 5" x 7 1/4"
- 9 - 9" x 12"
- 3 - 9" x 15"

Navigator Family

EN4 - EZCommunicator Navigator 4 Wire Push Button Station

Design Compliance

Test Type	Compliance
Functionality	MUTCD 2009 - 4E
Temperature and Humidity	NEMA TS 2
Transient Voltage Protection	NEMA TS 2
Transient Suppression	IEC 61000-4-4, IEC 61000-4-5
Electronic Noise	FCC Title 47, Part 15, Class A
Mechanical Shock and Vibration	NEMA TS 2
EN4 PBS Enclosure	NEMA 250 - Type 4X
Electrical Reliability	NEMA TS 4

Notes:

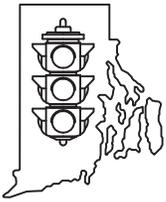
1. Applicable sections only of reference standards.
2. All specifications are subject to change without notice.
3. All specifications are Typical unless otherwise specified.

EN4 PBS CABLE	
P/N	Length
850-288-12	12 feet
850-288-25	25 feet

A 4 Wire Cable (Belden 8489 or equivalent) must be routed between each EN4 PBS. This cable is not supplied with the EN4 PBS, but is available separately in pre-cut 12 ft. and 25 ft. lengths with the both ends stripped:

Terminal screws on each EN4 PBS include washers (clamping plates) intended for bare wire. Crimp Terminals are not recommended.

For more information, visit our website at www.oceanstatesignal.com



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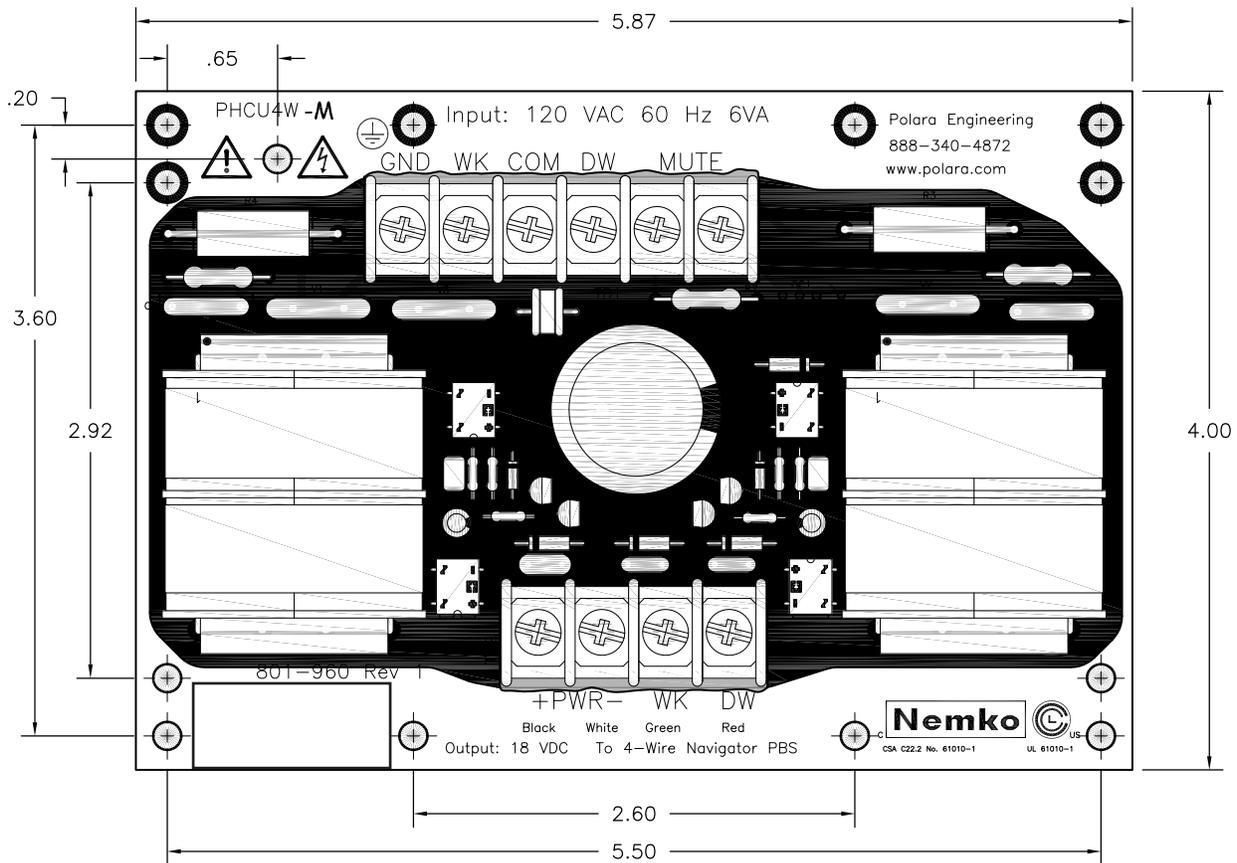
SPECIFICATION SHEET

TITLE: EN4 - EZ Communicator Navigator
 4-Wire Ped Head Control Unit

PART NO.:
 see below

PHCU4W: PED HEAD CONTROL UNIT FOR 4 WIRE NAVIGATOR & E-NAVIGATOR (WITHOUT MUTE) PHCU4W-M: PED HEAD CONTROL UNIT FOR 4 WIRE NAVIGATOR & E-NAVIGATOR (WITH MUTE)

Polara's 4-Wire Navigator and 4-Wire EZ Communicator Push Button Stations require a control unit in the pedestrian signal head to convert the 120VAC WALK and DON'T WALK signals to isolated low voltage DC signals and DC power. The PHCU4W-M has a separate set of isolated inputs (MUTE) which are used to silence all sounds from the Push Button Station. A PHCU4W-M may be used as a direct replacement for a PHCU4W, leaving the MUTE inputs unconnected. The PHCU4W (without Mute) does not have the terminals at the MUTE position, and is not capable of performing the Mute function. Terminal screws include washers (clamping plates) intended for bare wire. Crimp terminals are not recommended.



INPUT CONNECTIONS:

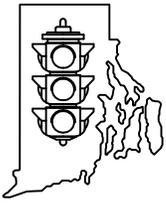
120VAC at 6VA, Walk, Don't Walk, AC Common, and Protective Ground, to the wiring inside a pedestrian signal head (i.e. Ped Head).

For PHCU4W-M only: Electrically isolated and surge protected two terminal Normally Open relay contact inputs are used for muting the user attached 4-Wire Navigator or 4-Wire EZ Communicator Push Button Station. Closing the relay inputs will mute all sounds from the Push Button Station.

OUTPUT CONNECTIONS:

Approximately 18-20 Volts DC, Positive and Negative Power, Walk and Don't Walk, to a 4 Wire Push Button Station. Both PHCU4W versions are provided with 2 mounting brackets and hardware which allow easy mounting inside all common types of pedestrian signs. It has built in surge protection, self resetting fuses and is epoxy coated for moisture protection. There are no settings or adjustments.

Test Type	Compliance
Temperature and Humidity	NEMA TS 2
Transient Voltage Protection	NEMA TS 2
Transient Suppression	IEC 61000-4-4, IEC 6100-4-5
Electronic Noise	FCC Title 47, Part 15, Class A
Mechanical Shock and Vibration	NEMA TS 2
Electrical Reliability	NEMA TS 4



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SPECIFICATION SHEET

TITLE: POLARA 800-85 & 800-90 R10-3e MUTCD Sign
9" x 12" Countdown Ped Button Sign w/Arrow

PART NO.: see below

800-85

9" x 12" Countdown Ped Button Sign
with Right/Left Arrow

800-90

9" x 12" Countdown Ped Button Sign
with Double Arrow

