

PDA-LH Series

Light / Horn Accessory for PROVu, Helios, ConsoliDator+, and Trident X2



FEATURES

- Single Lights Available in Red, Green, Yellow, Blue, or White
- Units with One of Five User Selectable Lights Available
- Units with Three Layered Lights Available
- Light / Horn Powered Directly from Meter
- PROVu Meter Can Have up to 8 Relays to Drive Variety of Light & Horn Configurations
- ConsoliDator+ Can Have up to 10 Relays to Drive Variety of Light & Horn Configurations
- Light / Horn Programmable for Variety of Reset Functions, Including:
 - Silence Horn at Any Time
 - Light Stays on Until Alarm Clears
- Light Can Be Wired to Flash (Not Available on PDA-LH5C) or Stay Steady On
- IP 65 Rated
- 85 dB Horn
- Operates from -40 to 40°C (-40 to 104°F)

PDA-LH Series Light / Horn Accessory



OVERVIEW

Precision Digital offers three different light configurations in its line of Light / Horn devices. The first option is a factory ordered Light / Horn with a color of either red, green, yellow, blue, or white. The second option is a Light / Horn the user determines the light color (red, green, yellow, blue or white) by connecting the appropriate wire. The third option is a Light / Horn with red, yellow, and green layers the user can turn on independently. The light on the Light / Horn can be wired to flash (not available on PDA-LH5C) or stay steady on and the horn is rated at 85 dB. The light and horn can be controlled independently of each other via separate relays on the Precision Digital meter; and since the meter's relays can be reset in a variety of ways, there are several ways the Light / Horn can operate. For instance, the horn can be programmed to silence at any time via the Reset Button or F3 front panel button (on PROVU models), and light to turn off automatically when the alarm clears.

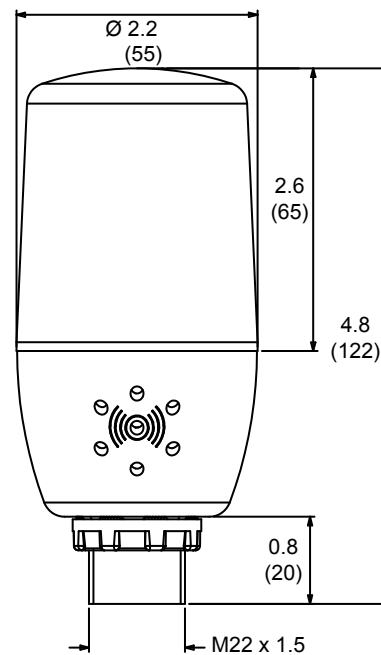
PDA-BUTTON1R RESET BUTTON



Use the PDA-BUTTON1R reset button to silence the horn or turn off the light (9 labels provided).

DIMENSIONS

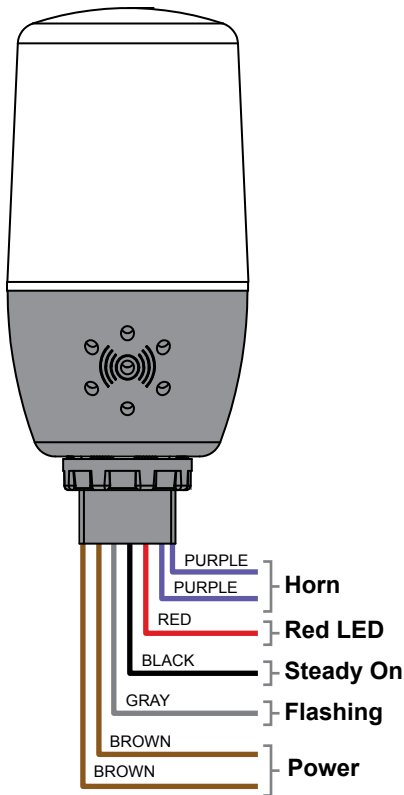
Units: Inches (mm)



Click here to watch the Light / Horn Video

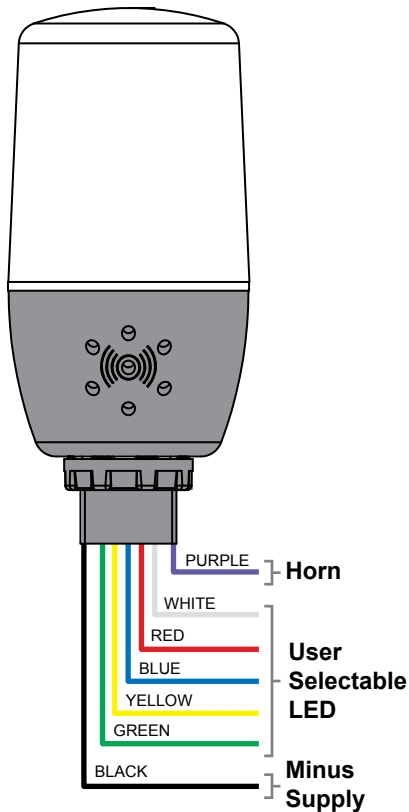
PDA-LH Series Light / Horn Accessory

CONNECTIONS



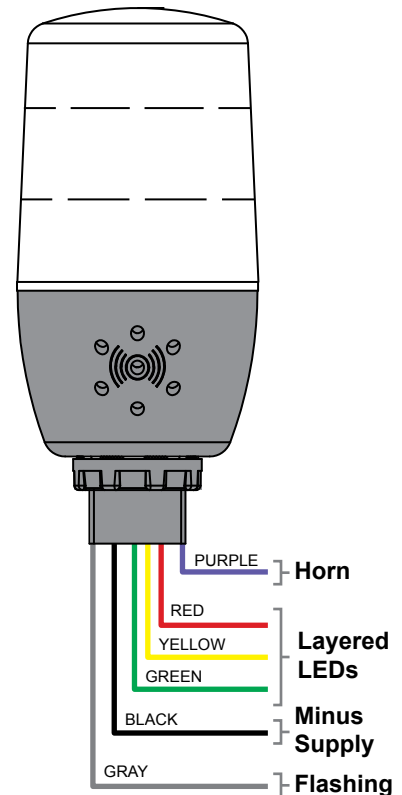
PDA-LH Models

Connections shown for a red light model. For other PDA-LH models, the red wire is the color of the light. Connect the red and black wires for a *Steady On* light and red and gray wires for *Flashing* light.



PDA-LH5C

Connect the LED color to the plus supply and the black wire to the minus supply to turn the LED on. Be aware of limitations for applications requiring different color lights for different alarm conditions.



PDA-LH3LC-RYG

Connect the LED color to the plus supply for a *Steady On* light and LED color and gray wires to the plus supply for *Flashing* light. The black wire should be connected to the minus supply.

CONTROL STATIONS FOR REMOTE OPERATION OF LIGHT / HORN

The PDA2360 series of plastic control stations provide a convenient way to remotely control the Light / Horn. The control stations can mimic the button on the front of MOD-LHX2 for remote control of the Light / Horn. The PDA2361-R is used to reset an alarm, the PDA2361-A is used to acknowledge an alarm, and the PDA2361-Q is used to silence an alarm.

- Complete Pre-Assembled Stations
- Normally Open (NO) Spring Return Plastic Bezel Pushbuttons
- IP65 / NEMA 4, 4X and 13 Rated
- Control Station for Remote Operation of Light / Horn Reset Button
- Wall Mountable



PDA2361-R



PDA2361-A



PDA2361-Q

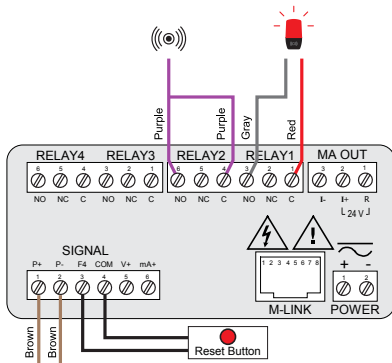
Ordering Information

| PDA2360 Series Control Stations | |
|---------------------------------|------------------------|
| Model | Description |
| PDA2361-R | 1 Black Reset Button |
| PDA2361-A | 1 Black Ack Button |
| PDA2361-Q | 1 Black Silence Button |

PDA-LH Series Light / Horn Accessory

PROVU AND HELIOS APPLICATIONS

There are a wide variety of ways these Light / Horn devices can be controlled by the PROVU's or Helios's two or four relays to satisfy visual and audible alarm applications. Up to 8 relays are available on PROVU meters for even more versatility. Please feel free to contact tech support to discuss your particular application. The following examples illustrate some typical applications.



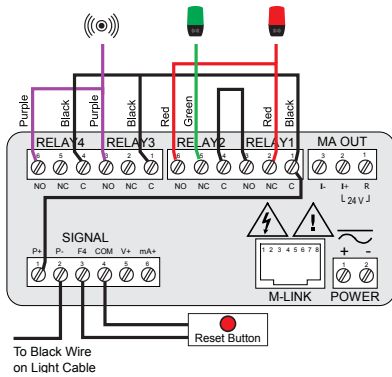
PDA-LH Models

The PDA-LH models are the simplest devices in the Series and are made up of a single-color light and horn. A typical way to use the PDA-LH is to program the PROVU so the horn can be silenced at any time via the Reset Button or F3 front panel button, and light to reset automatically when the alarm clears:

| Relay | Connected to | Default Reset Mode |
|-------|-------------------------------|---------------------------------------|
| 1 | Flashing Light ⁽¹⁾ | Auto reset |
| 2 | Horn | Silence with Reset Button at any time |
| 3 | User Device | As user desires |
| 4 | User Device | As user desires |



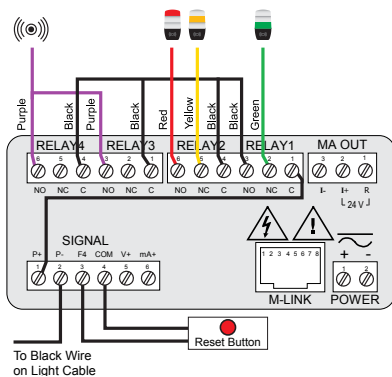
1. Light can be wired to flash or stay steady on.



PDA-LH5C

The PDA-LH5C shows one color at a time and the light color (red, green, yellow, blue or white) is determined by which wires are connected to power through the meter's relays. A typical application for the PDA-LH5C might involve lighting up the red light to indicate high and low alarms and the green light to indicate everything is OK using the meter's four internal relays:

| Relay | Purpose | Range | Light/Horn | Action |
|-------|------------|------------|-------------|--------|
| 1 | Low alarm | < 199 | Red light | Auto |
| 3 | Low alarm | < 199 | Horn | Latch |
| 2 | All OK | 200 to 500 | Green light | Auto |
| 2 | High alarm | > 500 | Red light | Auto |
| 4 | High alarm | > 500 | Horn | Latch |



PDA-LH3LC-RYG

The PDA-LH3LC-RYG can light up red, yellow or green bands as determined by which wires are connected to power through the meter's relays. A typical application for the PDA-LH3LC-RYG (and the default factory setting) might involve lighting up the green light to indicate everything is OK, the yellow light to indicate a High warning, and the red light to indicate a High alarm. The Horn will also sound at both the Warning and High alarms and can be manually reset at any time with the front panel reset button:

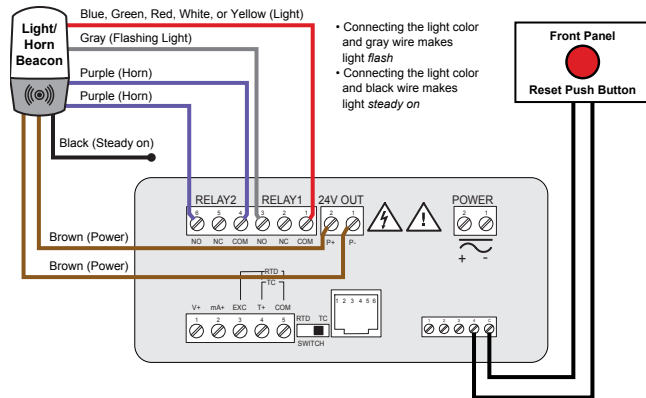
| Relay | Purpose | Range | Light/Horn | Action |
|-------|------------|------------|--------------|--------|
| 1 | All OK | < 199 | Green light | Auto |
| 2 | Warning | 200 to 500 | Yellow light | Auto |
| 3 | Warning | 200 to 500 | Horn | Latch |
| 2 | High alarm | > 500 | Red light | Auto |
| 4 | High alarm | > 500 | Horn | Latch |



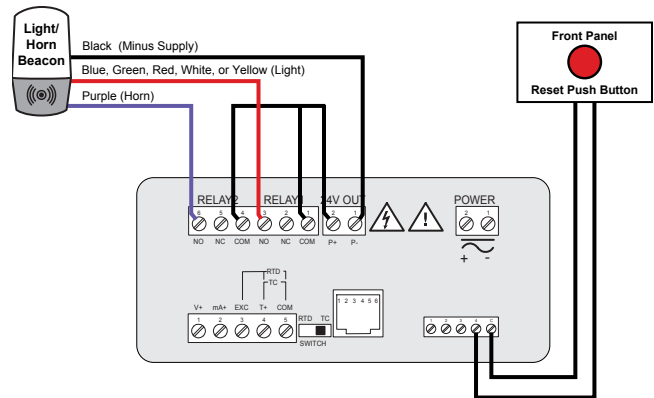
PDA-LH Series Light / Horn Accessory

WIRING CONNECTIONS FOR TRIDENT X2 METERS

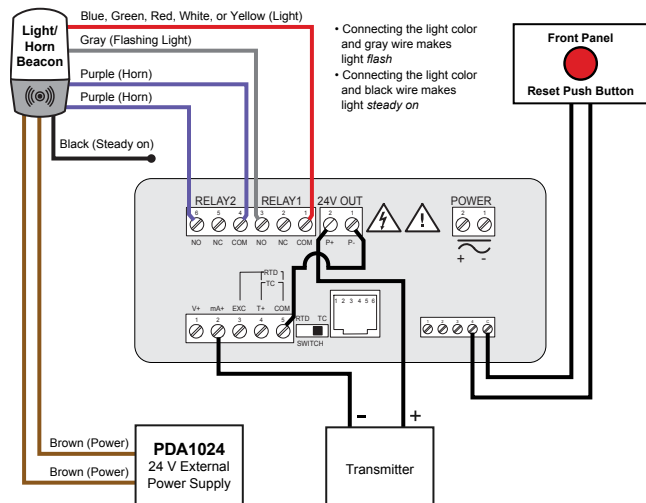
PDA-LH Using Trident X2's Internal Power Supply



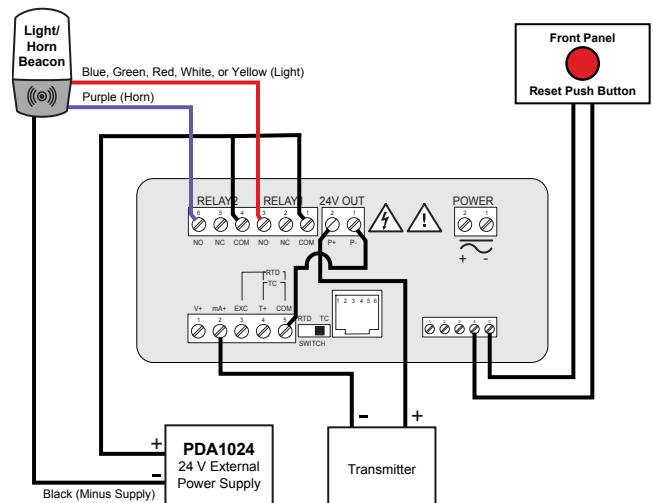
PDA-LH5C Using Trident X2's Internal Power Supply



PDA-LH Using External Power Supply (PDA1024-01)



PDA-LH5C Using External Power Supply (PDA1024-01)



PDA-LH Series Light / Horn Accessory

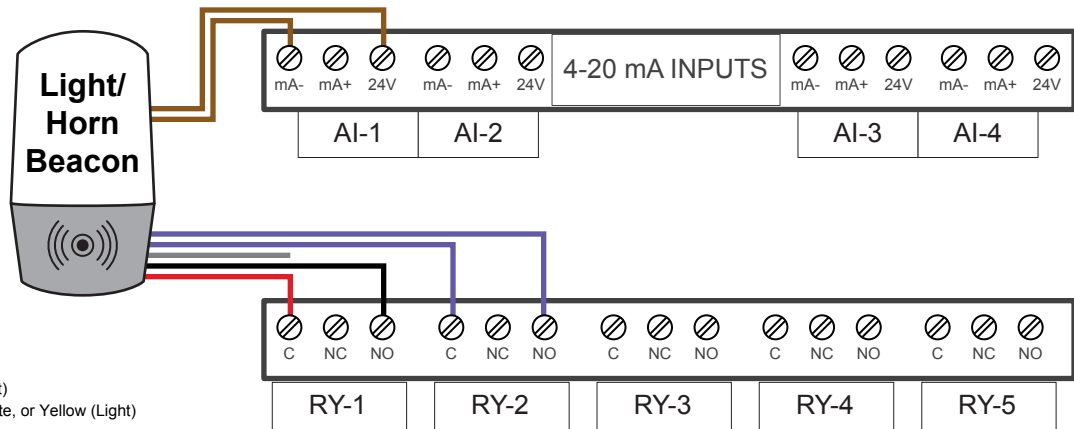
WIRING CONNECTIONS FOR CONSOLIDATOR+

PDA-LH Using ConsoliDator+ Internal Power Supply

- Connecting the light color and gray wire makes light *flash*
- Connecting the light color and black wire makes light *steady on*

Light/Horn Wires

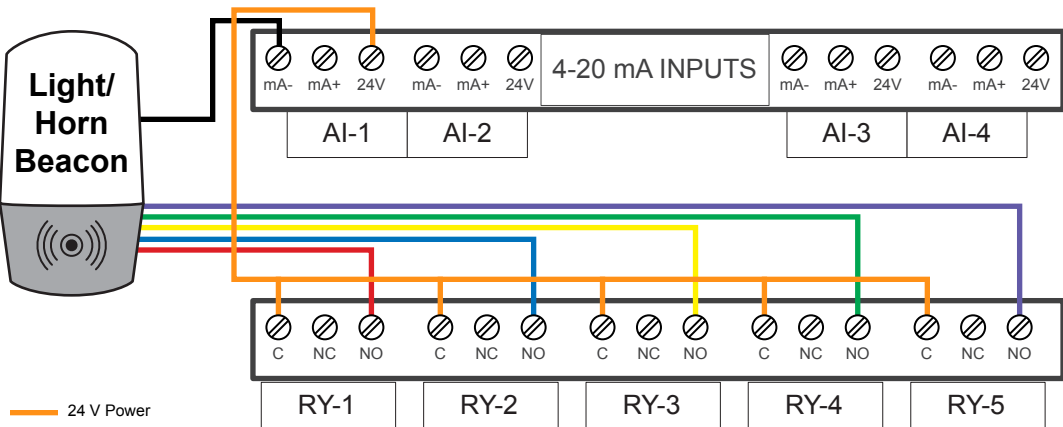
- Brown (Power)
- Purple (Horn)
- Gray (Flashing Light)
- Black (Steady On Light)
- Blue, Green, Red, White, or Yellow (Light)



PDA-LH5C Using ConsoliDator+ Internal Power Supply

Light/Horn Wires

- Black (Minus Supply)
- Purple (Horn)
- Green (Light)
- Yellow (Light)
- Blue (Light)
- Red (Light)

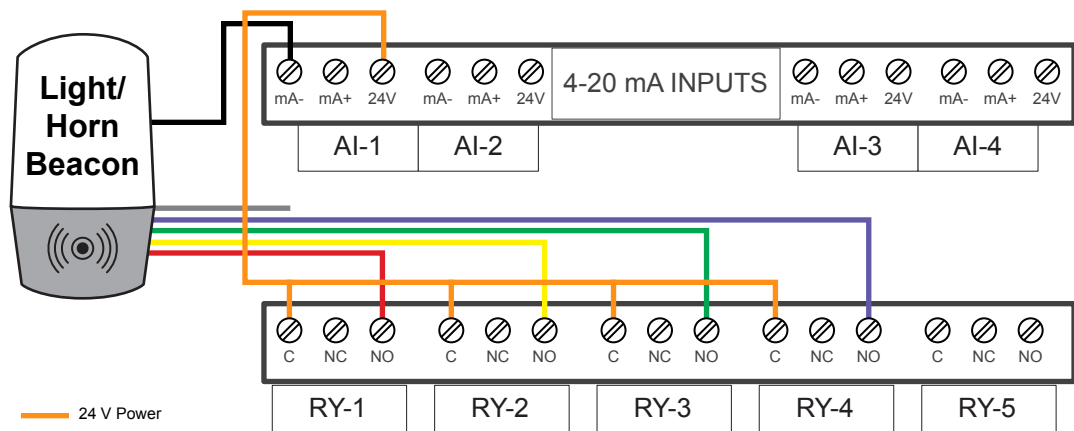


PDA-LH3LC-RYG Using ConsoliDator+ Internal Power Supply

- Connecting the light color and gray wire makes light *flash*

Light/Horn Wires

- Black (Minus Supply)
- Gray (Flashing Light)
- Purple (Horn)
- Green (Light)
- Yellow (Light)
- Red (Light)



PDA-LH Series Light / Horn Accessory

AVAILABLE FOR THESE ENCLOSURES



PDA2300 Economical Plastic NEMA 4X Enclosures

The PDA-LH Series is available on all PDA2300 Series Enclosures.



PDA2500 Rugged Plastic NEMA 4X Enclosures

The PDA-LH Series is available on all PDA2500 Series Enclosures.



PDA2600 Stainless Steel NEMA 4X Enclosures

The PDA-LH Series is available on all PDA2600 Series Enclosures.



PDA2700 Steel NEMA 4 Enclosures

The PDA-LH Series is available on all PDA2700 Series Enclosures.



PDA2800 Smallest Footprint Plastic NEMA 4X Enclosures

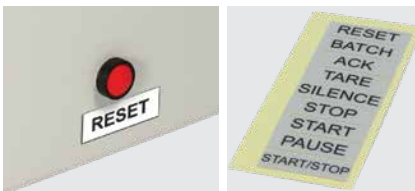
The PDA-LH Series is available on all PDA2800 Series Enclosures except PDA2801 and PDA2812.



PDA3400 Internally Mounted Plastic NEMA 4X Enclosures

The PDA-LH Series is available on all PDA3400 Series Enclosures except the PDA3411, PDA3412, PDA3414.

Enclosures shown with a ProVu Meter and MOD-LHRB1 Red Light / Horn and Reset Button.
Meter, Enclosure, and MOD-LHRB1 are Sold Separately. Assembly Required.



RESET BUTTON LABELS

The Light / Horn accessory comes with 9 pre-printed message labels the user can affix under the red button: RESET, BATCH, ACK, TARE, SILENCE, STOP, START, PAUSE, START/STOP

PDA-LH Series Light / Horn Accessory

SPECIFICATIONS

General

Light Colors: PDA-LHR: Red, PDA-LHG: Green, PDA-LHY: Yellow, PDA-LHB: Blue, PDA-LHW: White
PDA-LH5C: User selectable: red, green, yellow, blue, white
PDA-LH3LC-RYG: 1 layer each of red, yellow, green (consult factory for other colors available).

Light Action: Can be wired to flash (not available on PDA-LH5C) or stay steady on

Horn: 85 dB

Rating: IP 65

Light / Horn Independence: Light and horn can be controlled via separate relays.

Power Requirement: No additional power required when wired to a meter. When mounted remote: 24 VDC

Transmitter Power Supply*: The PROVu's, Helios's, and Trident X2's internal transmitter power supply is capable of supplying 200 mA to power the transmitter and other devices such as the Light / Horn. The following table illustrates how much of this power is required to drive various Light / Horns. If more power is needed, then consider the PDA1024-01.

PDA-LH and PDA-LH5C Models:

| Color | Power Required | Color | Power Required |
|--------|----------------|-------|----------------|
| Red | 17 mA | Blue | 15 mA |
| Green | 15 mA | White | 42 mA |
| Yellow | 23 mA | Horn | 20 mA |

Example: 17 mA (Red Light) + 20 mA (Horn) = 37 mA total current needed from the 200 mA supply. Available current = 163 mA

PDA-LH3LC-RYG:

Power Requirement for the horn and each color that is turned on:

| Color | Power Required | Color | Power Required |
|-------|----------------|--------|----------------|
| Red | 34 mA | Yellow | 33 mA |
| Green | 29 mA | Horn | 38 mA |

Example: 33 mA (Yellow Light) + 38 mA (Horn) = 71 mA total current needed from the 200 mA supply. Available current = 139 mA

Reset / Silence Button: NEMA 4X; may be wired to F4 terminal on PROVu or Helios. F3 front panel button can also be used to reset relays on PROVu or Helios. Reset button can also be used to reset relays on Trident X2.

Reset Button Labels: The Light / Horn accessory comes with 9 pre-printed message labels the user can affix under the red button: RESET, BATCH, ACK, TARE, SILENCE, STOP, START, PAUSE, START/STOP

Light / Horn Mounting Connection: M22

Hole Sizes: Light / Horn: 0.875" (22 mm)

Cable Length: 3.28 feet (1 meter)

Operating Temperature Range: -40 to 40°C (-40 to 104°F)

* See ConsoliDator+ data sheet for specifications for its internal 24 VDC transmitter power supply capabilities.

Compatibility

PDA-LH & PDA-LH5C Models: PROVu, Helios, Trident X2, ConsoliDator+

PDA-LH3LC-RYG: PROVu, Helios, ConsoliDator+

OPTIONAL 24 VDC POWER SUPPLY

PDA1024-01: DIN rail mounted 24 VDC, 1.5 A power supply.

Output Voltage: 21.6 ~ 26.4 VDC; ±10% 1.5A rated current.

Dimensions: 3.07" x 3.66" x 2.20"

(78 mm x 93 mm x 56 mm) (W x H x D)

ORDERING INFORMATION

| Model | Description |
|---------------|--|
| PDA-LHR | Red Light / Horn |
| PDA-LHG | Green Light / Horn |
| PDA-LHY | Yellow Light / Horn |
| PDA-LHB | Blue Light / Horn |
| PDA-LHW | White Light / Horn |
| PDA-LH5C | Light / Horn with User Choice of Red, Green, Yellow, Blue or White Light |
| PDA-LH3LC-RYG | Light / Horn with Red, Yellow, Green Light Layers |
| PDA-BUTTON1R | Reset Button |
| PDA1024-01 | 24 VDC Power Supply for DIN Rail |

Your Local Distributor is:

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⚠ WARNING

Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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