PDA-LH Series
Light / Horn Accessory for ProVu & Helios Meters

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 ProVu or Helios
• ProVu Meter Can be Equipped with up to 8 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 -5 to 40°C (23 to 104°F)
PDA-LH Series Light / Horn Accessory for ProVu & Helios Meters

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 for PROVU & Helios Meters

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.

APPLICATIONS
A typical way to use the PDA-LH is to program the meter so the horn can be silenced via the Reset Button at any time and the light to reset automatically after alarm clears:

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

<table>
<thead>
<tr>
<th>Relay</th>
<th>Connected to</th>
<th>Default Reset Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flashing Light(1)</td>
<td>Auto reset</td>
</tr>
<tr>
<td>2</td>
<td>Horn</td>
<td>Silence with Reset Button</td>
</tr>
<tr>
<td>3</td>
<td>User Device</td>
<td>As user desires</td>
</tr>
<tr>
<td>4</td>
<td>User Device</td>
<td>As user desires</td>
</tr>
</tbody>
</table>

The PDA-LH5C shows one of five possible colors at a time. A typical application might use the green light to indicate everything is OK and the red light to indicate high and low alarms:

<table>
<thead>
<tr>
<th>Relay</th>
<th>Purpose</th>
<th>Light/Horn</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low alarm</td>
<td>Red light</td>
<td>Auto</td>
</tr>
<tr>
<td>2</td>
<td>All OK</td>
<td>Green light</td>
<td>Auto</td>
</tr>
<tr>
<td>3</td>
<td>High alarm</td>
<td>Red light</td>
<td>Auto</td>
</tr>
<tr>
<td>4</td>
<td>Low alarm</td>
<td>Horn</td>
<td>Latch</td>
</tr>
<tr>
<td>4</td>
<td>High alarm</td>
<td>Horn</td>
<td>Latch</td>
</tr>
</tbody>
</table>

Indicate everything is OK with the green light, a High warning with the yellow light, and a High alarm with the red light. The Horn would also sound at both High warning and High alarms and can be manually reset at any time.

<table>
<thead>
<tr>
<th>Relay</th>
<th>Purpose</th>
<th>Light/Horn</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All OK</td>
<td>Green light</td>
<td>Auto</td>
</tr>
<tr>
<td>2</td>
<td>Warning</td>
<td>Yellow light</td>
<td>Auto</td>
</tr>
<tr>
<td>3</td>
<td>High alarm</td>
<td>Red light</td>
<td>Auto</td>
</tr>
<tr>
<td>4</td>
<td>Warning</td>
<td>Horn</td>
<td>Latch</td>
</tr>
</tbody>
</table>

www.predig.com
PDA-LH Series Light / Horn Accessory for ProVu & Helios Meters

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
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SPECIFICATIONS

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: 900mW or 40mA @ 24 V

Transmitter Power Supply: The ProVu's or Helios's internal transmitter power supply is downgraded from 200 mA when it powers the Light / Horn. To determine the total downgrade, add the currents for the light(s) being used and the horn if used. If more power is needed, then consider the PDA1024-01.

PDA-LH and PDA-LH5C Models:

<table>
<thead>
<tr>
<th>Color</th>
<th>Downgraded by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>17 mA</td>
</tr>
<tr>
<td>Green</td>
<td>15 mA</td>
</tr>
<tr>
<td>Yellow</td>
<td>23 mA</td>
</tr>
</tbody>
</table>

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

PDA-LH3LC-RYG:
Downgraded by each color that is turned on and the horn

<table>
<thead>
<tr>
<th>Color</th>
<th>Downgraded by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>34 mA</td>
</tr>
<tr>
<td>Green</td>
<td>29 mA</td>
</tr>
<tr>
<td>Yellow</td>
<td>38 mA</td>
</tr>
</tbody>
</table>

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

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

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: -5 to 40°C (23 to 104°F)

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDA-LHR</td>
<td>Red Light / Horn</td>
</tr>
<tr>
<td>PDA-LHG</td>
<td>Green Light / Horn</td>
</tr>
<tr>
<td>PDA-LHY</td>
<td>Yellow Light / Horn</td>
</tr>
<tr>
<td>PDA-LHB</td>
<td>Blue Light / Horn</td>
</tr>
<tr>
<td>PDA-LHW</td>
<td>White Light / Horn</td>
</tr>
<tr>
<td>PDA-LH5C</td>
<td>Light / Horn with User Choice of Red, Green, Blue or White Light</td>
</tr>
<tr>
<td>PDA-LH3LC-RYG</td>
<td>Light / Horn with User Choice of Red, Green, Blue or White Light</td>
</tr>
<tr>
<td>PDA-BUTTON1R</td>
<td>Reset Button</td>
</tr>
<tr>
<td>PDA1024-01</td>
<td>24 VDC Power Supply for DIN Rail</td>
</tr>
</tbody>
</table>

Your Local Distributor is:

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

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