

# MOD-PD2LH Series

Light / Horn Accessory for Helios Meters



Helios Meter Shown with MOD-PD2LHRB1  
Red Light / Horn and Reset Button.  
*Meter Sold Separately.*

## FEATURES

- Light with Horn Mounted & Wired to Helios
- 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 Helios
- Light / Horn / Reset Button Mounted and Pre-Wired to Helios
- 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 MOD-PD2LH5CB1) or Stay Steady On
- IP 65 Rated
- 85 dB Horn
- Operates from -5 to 40°C (23 to 104°F)

**PRECISION  
DIGITAL**

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Helios Meter Shown with  
MOD-PD2LHRB1  
Red Light / Horn and  
Reset Button.  
*Meter Sold Separately.*



## OVERVIEW

The Helios can be provided with an optional light(s) with built-in 85 dB horn that comes mounted and wired to the instrument or as separate items to be mounted as the user desires. Meter is sold separately. The MOD-PD2LH Series is available in three different light configurations. 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 MOD-PD2LH can be powered from the Helios's 200 mA transmitter power supply with enough power left over to drive most transmitters.

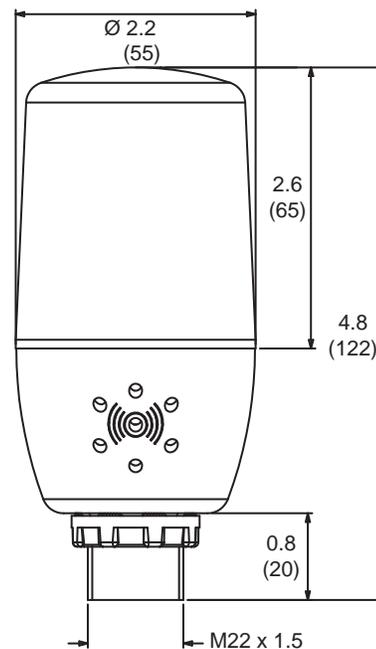
The light(s) and horn can be controlled independently of each other via separate relays on the Helios. These relays can be programmed for automatic or manual reset action to satisfy a wide variety of audible and visual alarm applications. The light can be programmed to flash (not available on MOD-PD2LH5CB1) or stay steady-on.

The Light / Horn and Reset Button do not affect the Helios's NEMA 4X rating, but do void its UL approval.

**Note:** The Light / Horn accessory is powered from the 200 mA transmitter power supply, so when this is installed, the meter's transmitter power is downgraded from 200 mA. See Transmitter Power Supply specification on page 6 for details.

## DIMENSIONS

Units: Inches (mm)

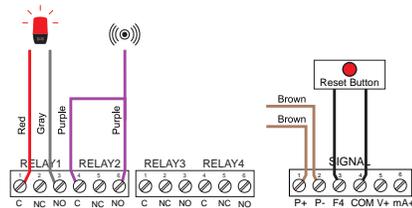


Click here to watch the  
Light / Horn Video

# MOD-PD2LH Series Light / Horn Accessory for Helios Meters

## APPLICATIONS

There are a wide variety of ways these Light / Horn devices can be controlled by the Helios's four relays to satisfy visual and audible alarm applications. Please feel free to contact tech support to discuss your particular application. The following examples illustrate some typical applications.



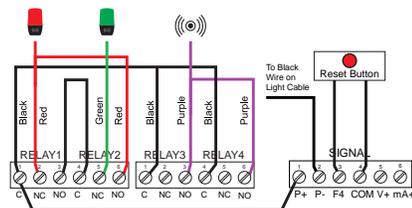
**Note:** Unless otherwise specified, this MOD is shipped wired in the above fashion.

## MOD-PD2LH Models

The MOD-PD2LH 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 MOD-PD2LH is to program the Helios so the horn can be silenced at any time via the Reset Button or F3 front panel button on the Helios, and light to reset automatically when the alarm clears:

Relay	Connected to	Default Reset Mode
1	Flashing Light <sup>(1)</sup>	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.

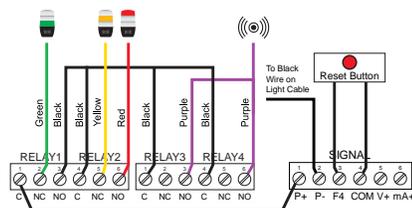


**Note:** Unless otherwise specified, this MOD is shipped wired in the above fashion.

## MOD-PD2LH5CB1

The MOD-PD2LH5CB1 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 Helios's relays. A typical application for the MOD-PD2LH5CB1 might involve lighting up the red light to indicate low and high alarms using the Helios'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



**Note:** Unless otherwise specified, this MOD is shipped wired in the above fashion.

## MOD-PD2LH3LCB1-RYG

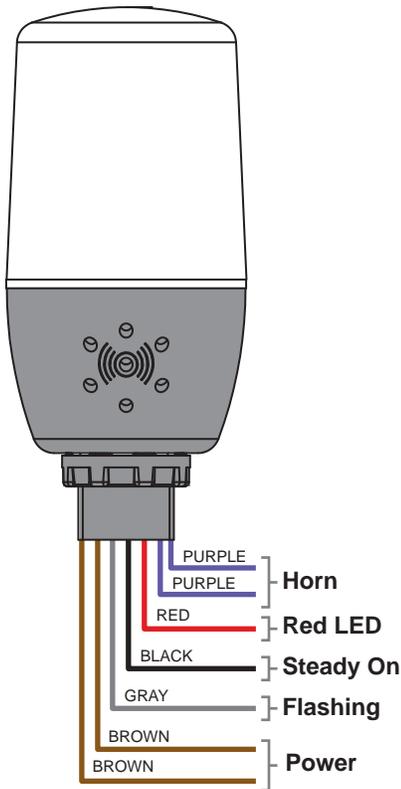
The MOD-PD2LH3LCB1-RYG can light up red, yellow or green bands as determined by which wires are connected to power through the Helios's relays. A typical application for the MOD-PD2LH3LCB1-RYG (and the default factory setting) might involve lighting up the green light to indicate everything is OK, the 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



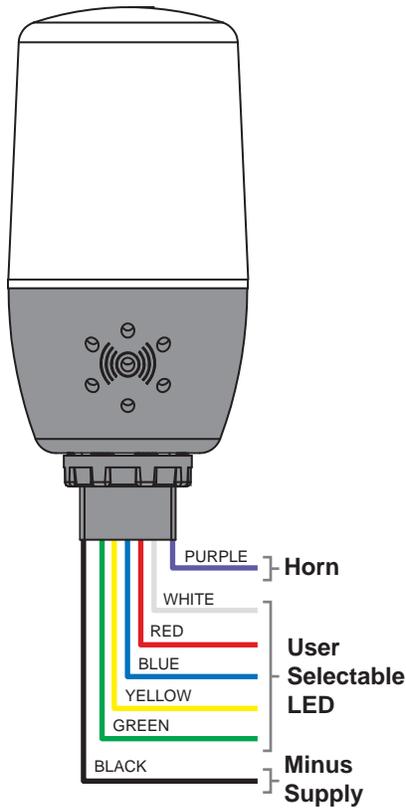
# MOD-PD2LH Series Light / Horn Accessory for Helios Meters

## CONNECTIONS



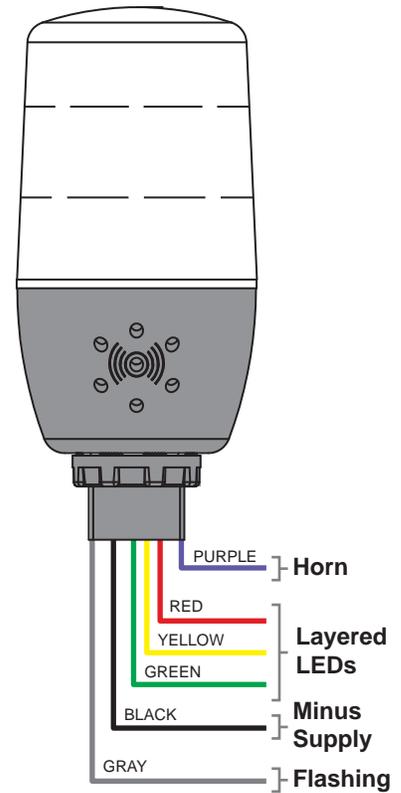
### MOD-PD2LH Models

Connections shown for a red light model. For other MOD-PD2LH 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.



### MOD-PD2LH5CB1

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.



### MOD-PD2LH3LCB1-RYG

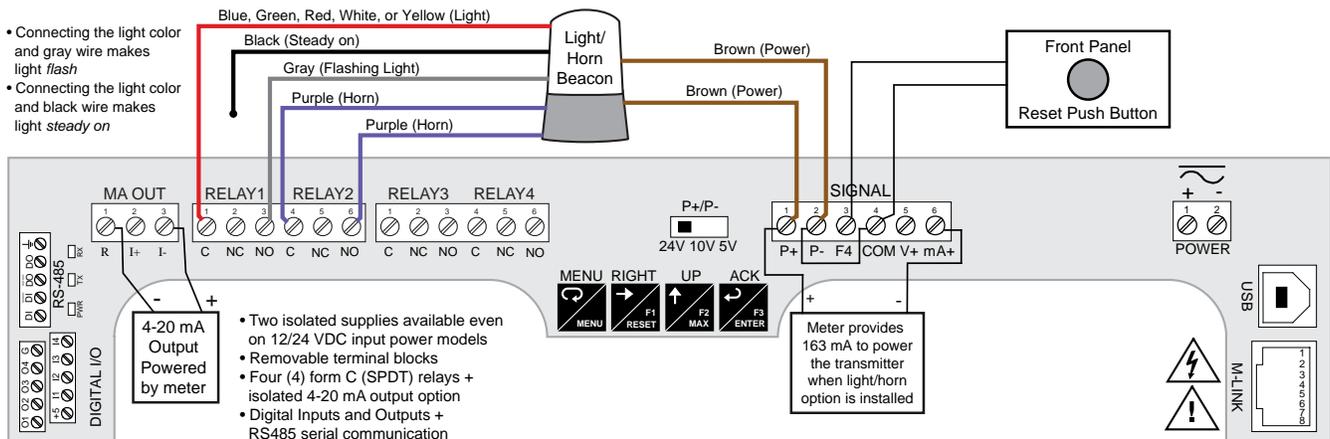
Connect the LED color to the plus supply for a *Steady On* light and LED color and gray wires to the plus supply for *Flashing* light. The black wire should be connected to the minus supply.

# MOD-PD2LH Series Light / Horn Accessory for Helios Meters

## WIRING CONNECTIONS FOR MOD-PD2LH MODELS

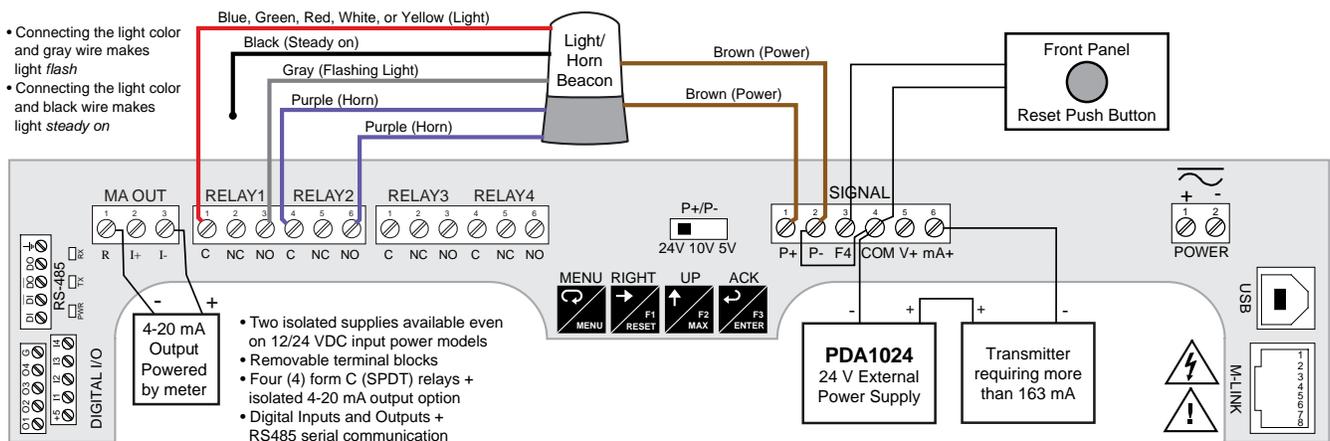
### Wiring Connections for Transmitter Powered by Helios

The Helios can be wired to power both the Light / Horn accessory as well as the transmitter input and isolated 4-20 mA output as the following diagram illustrates.



### Wiring Connections for Transmitter Powered by External Source

Transmitters and sensors that require more than 163 mA must be powered by an external power source, such as the PDA1024 as the following diagram illustrates.



## 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

# MOD-PD2LH Series Light / Horn Accessory for Helios Meters

## SPECIFICATIONS

**Recommended for these Helios Models:** PD2-6000, PD2-6001, PD2-6100, PD2-6200, PD2-6300, PD2-6400, PD2-7000. When ordered on other Helios Models user may need to re-wire Light and Horn accessory.

**Light Colors:** MOD-PD2LH Models: Red, green, yellow, blue, or white. MOD-PD2LH5CB1: User selectable: red, green, yellow, blue, white. MOD-PD2LH3LCB1-RYG: 1 layer each of red, yellow, green (consult factory for other colors)

**Light Action:** Can be wired to flash (not available on MOD-PD2LH5CB1) or stay steady on

**Horn:** 85 dB

**Rating:** IP 65

**Light / Horn Independence:** Light and horn can be controlled via separate inputs

**Power Requirement:** No additional power required when installed in Helios. When mounted remote: 24 VDC

**Transmitter Power Supply:** The 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.

*MOD-PD2LH and MOD-PD2LH5CB1 Models:*

Color	Downgraded by	Color	Downgraded by
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 downgrade from the 200 mA supply. Left over current = 163 mA

*MOD-PD2LH3LCB1-RYG:*

Downgraded by each color that is turned on and the horn

Color	Downgraded by	Color	Downgraded by
Red	34 mA	Yellow	33 mA
Green	29 mA	Horn	38 mA

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; mounted and wired to F4 terminal on Helios

**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);

Reset Button: 0.630" (16 mm)

**Cable Length:** 3.28 feet (1 meter)

**Approvals:** Installation of the Light / Horn accessory voids the Helios's UL approval. Helios's NEMA 4X rating is not affected.

**Operating Temperature Range:** -5 to 40°C (23 to 104°F)

**⚠ WARNING**

Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## ORDERING EXAMPLE

Order meter and MOD-PD2LH as separate items:

Item	Description
1	Helios Meter with 2 or 4 Relays
2	MOD-PD2LH Light / Horn and Reset Button Mounted and Wired to Helios

## ORDERING INFORMATION

Model	Description
MOD-PD2LHRB1	Red Light / Horn / 1 Reset Button Mounted and Wired to Helios
MOD-PD2LHGB1	Green Light / Horn / 1 Reset Button Mounted and Wired to Helios
MOD-PD2LHYB1	Yellow Light / Horn / 1 Reset Button Mounted and Wired to Helios
MOD-PD2LHBB1	Blue Light / Horn / 1 Reset Button Mounted and Wired to Helios
MOD-PD2LHWB1	White Light / Horn / 1 Reset Button Mounted and Wired to Helios
MOD-PD2LH5CB1	Light / Horn with User Choice of Red, Green, Yellow, Blue or White Light, Reset Button, Mounted and Wired to Helios
MOD-PD2LH3LCB1-RYG	Light / Horn with Red, Yellow, Green Light Layers, Reset Button, Mounted and Wired to Helios
PDA-BUTTON1R	Reset Button
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
PDA1024-01	24 VDC Power Supply for DIN Rail

### Notes

- Specify MOD-PD2LH model as a separate item on the order for the Helios to order the Light / Horn accessory installed and wired. Meter is sold separately.
- Specify PDA-LH model to order the Light / Horn to be mounted by the user.
- Specify PDA-BUTTON1R to order Reset Button to be mounted by the user.

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