# Lightalarms

# Phantom<sup>™</sup> Series

The unseen solution

12V up to 100w capacities - generator capable



#### Housing

- Galvanized steel back-box
- Easy access to internal components
- Head assembly door and trim plate powder coated in a white finish
- Finish can be customized on site with paint or wallpaper
- Choice of various 12 volt MR16 LED lamp wattages
- Complete 360° head assembly door rotation
- Slip gear mechanism protects unit and objects against forcible stops

#### Mounting

- Recessed mount into ceiling or wall with cavities
- Hanger bars included for lay-in installation in T-bar grid
- Can be installed on the wall stud or ceiling beam with simple,
   U-shape bracket
- Head assembly includes keyhole slot and quick-connect plugs for easy installation

#### **Electronics**

- Pulse plus charger
- Low voltage disconnect
- Automatic brownout protection
- Battery lock-out
- Fused output circuit
- Optional: Improved Diagnostics
- 120/277 60Hz

#### **Choice of Sealed Maintenance-Free Battery**

- 12V Lead-Calcium battery
- 12V Nickel-Cadmium battery

### **Approval**

- CSA-US (To UL 924 standards)
- New York City Approved
- BC California Energy Commission Title 20

Warranty (subject to proper installation and maintenance)

Unit: five-year limited warranty

Detailed warranty terms located on page 197 or online at: www.lightalarms.com



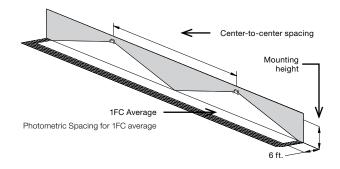




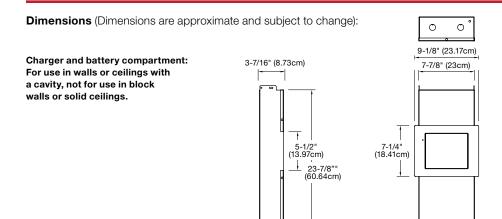


#### Photometric performance

	Spacing center-to-center					
Lamp	7 feet mounting height	15 feet mounting height				
LD7	49'	39'				
LD9	68'	54'				
LD10	89'	80'				







# Power consumption chart - Non-CEC models

					D	C Specs				AC Specs
				Battery	capacity (i	n watts)			Maximum	Stand by
Series	Battery	Voltage	90 Mins	2 Hrs	3 Hrs	4 Hrs	AC Input	Input current	Input power	Input Power
PHN40	Nickel-Cadmium	12V	40	30	24	12	1001/	0.054		
PHN70	Nickel-Cadmium	12V	70	50	40	24	120V 277V	0.25A 0.12A	30W	0.79W
PHN100	Nickel-Cadmium	12\/	100	70	50	40	2110	0.12A		

<sup>&</sup>lt;sup>1</sup> Stand-by power consumption is 50% lower for Lead-Calcium Batteries

## Power consumption chart - CEC models

				D	C Specs	AG				AC Specs	
				Battery	capacity (i	n watts)	Units dual _		Current		Power
Series	Battery	Voltage	90 Mins	2 Hrs	3 Hrs	4 Hrs	voltage <sup>1</sup>	Maximum	Stand by	Maximum	Stand by
PHM40	Lead-Calcium	12V	40	30	24	12					
PHM70	Lead-Calcium	12V	70	50	40	24	120VAC 277VAC	0.25A 0.12A	0.10A 0.05A	30W 30W	11W 11W
PHM100	Lead-Calcium	12V	100	70	50	40	2.7770	0.127	3.00/(	00**	1100

#### Accessories (Order as a separate item)

Description	Product code
Remote Test Switch (Metal Faceplate)	PSW
Remote Test Switch (Plastic Faceplate)	PSW-1

# **Ordering format**

Series	Battery	Capacity	Number of heads	Lamp type	Options	Approval	
PH= Battery	M= Lead-Calcium	<b>40</b> = 12V-40W	-2= Two lamps	MR16 LED	Blank= No Options	-CEC= CEC Title	
unit	N= Nickel-	<b>70</b> = 12V-70W		(LD7)= 12V-4W	ID= Improved Diagnostics (audible)1	20 for California <sup>3</sup>	
Cadmium <b>100</b> = 12V-100W		<b>100</b> = 12V-100W		(LD9)= 12V-5W	IDNA= Improved Diagnostics (non audible) <sup>1</sup>		
				(LD10)= 12V-6W	DL= Damp location <sup>2</sup>		
Example: F	PHM100-2LD7				X= Back box shipped separate		

- <sup>1</sup> -ID & -IDNA include a time delay feature that can be enabled/ disabled in the field or set by the factory by including -ID-TD\* or -IDNA-TD\* <sup>2</sup> -DL option not available with PHN100 unit <sup>3</sup> Available with lead-calcium models only

Series	Input voltage	Number of heads	Lamp type	Options
PHG= Generator unit	<b>1</b> = 120VAC, 60Hz <b>2</b> = 277VAC, 60Hz	-2= Two lamps	MR16 LED (LD7)= 12V-4W	<b>DL</b> = Damp location <b>X</b> = Back box shipped seperately
Example: PHG1-2LD7			(LD9)= 12V-5W (LD10)= 12V-6W	