



## RD SERIES

Recessed Steel Housing  
6V up to 36W, 12V up to 36W Capacities  
Lead-Calcium or Nickel-Cadmium battery



shown with ELF3 heads

### FEATURES

#### Housing

- 20 gauge steel housing designed for easy access to internal components
- Corrosion-resistant baked enamel mist white finish standard, black optional
- Provision for mounting up to 2 lighting heads
- Various choices of lighting head styles and lamp types

#### Mounting

- Ceiling or Wall Mount; Mounting Brackets included for lay-in installation in T-Bar grid ceiling as well as dry wall

#### Electronics

- Automatic, temperature-compensated, pulse-type charger
- High capacity, automatic, dust-tight instantaneous transfer relay
- Low voltage disconnect prevents over discharge of battery
- Automatic brownout protection is provided
- Battery lock-out prevents battery discharge during installation
- Fused output circuit

#### Improved Diagnostics option

- Units equipped with Improved Diagnostics shall self-test, by simulating a power failure, in accordance with NFPA101, Life Safety Code one minute monthly, 30 minutes every six months and 90 minutes annually. For complete information refer to page 8.

#### Controls

- Red charger monitor LED indicates charging of the battery
- Amber AC-ON LED indicates AC power is on
- Momentary test switch allows for quick operational check of entire system

#### Choice of Sealed Maintenance-Free Battery

- 6V or 12V Lead-Calcium battery
- 6V or 12V Nickel-Cadmium battery

#### Approvals

- UL 924 Standard

#### Warranty (subject to proper installation and maintenance)

- Unit has a three year full warranty (excluding lamps and fuses)<sup>1</sup>
- Lead-Calcium battery has a three year full, plus three year pro-rata warranty
- Nickel-Cadmium battery has a five year full, plus five year pro-rata warranty

<sup>1</sup> For LED lamps warranty, refer to page 168 paragraph 3.2

### HEAD STYLE WITH LAMP TYPE CHOICES

LAMP TYPE	HEAD STYLE			
	ELF645 (pg.108)	ELF2 (pg.105)	ELF3 (pg.106)	DR1130 (pg.104)
Wedge Based Incandescent	X	X		
Bi-Pin Halogen	X	X		
PAR36 Sealed Beam Incandescent	X			
PAR36 Sealed Beam Halogen	X			
MR16 Halogen			X	X
MR16 LED			X	X

### ACCESSORIES (Order as a separate item)

Wire Guard (DR1130, ELF2, ELF3 or ELF645 heads)	<b>WG6-L</b>
Remote Test Switch (Metal Faceplate)	<b>PSW</b>
Remote Test Switch (Plastic Faceplate)	<b>PSW1</b>

### SPECIFICATIONS

Supply and install **Lightalarms® RD Series**.

The emergency lighting unit shall be a self-contained fixture including a sealed maintenance-free Lead-Calcium or Nickel-Cadmium battery of 6V or 12V of wattage as specified on the unit rating chart. The unit shall supply the rated wattage load for a minimum of 90 minutes to 87-1/2% of rated battery voltage. The unit shall be rated 120/277VAC, 60Hz and be UL924 listed.

The unit charger shall utilize an integrated circuit which samples the battery in relation to temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit protected and reverse polarity protected. The unit shall be furnished with an electronic lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brownout circuit which will activate the unit when utility power dips below 80-85% of nominal voltage. A low voltage battery protection circuit shall be provided and will disconnect the load and circuitry from the battery when it reaches 87-1/2% of its nominal voltage. The unit shall be capable of full recharge in compliance with UL924 specifications. The unit shall be furnished with sealed dust-tight relay, a test switch and dual diagnostic LED indicator lights (hi-charge and AC pilot). The cabinet shall be 20 gauge steel designed with mounting brackets included for lay-in installation in T-Bar grid ceiling as well as sheet rock. Unit has provision for mounting up to 2 heads on cabinet.

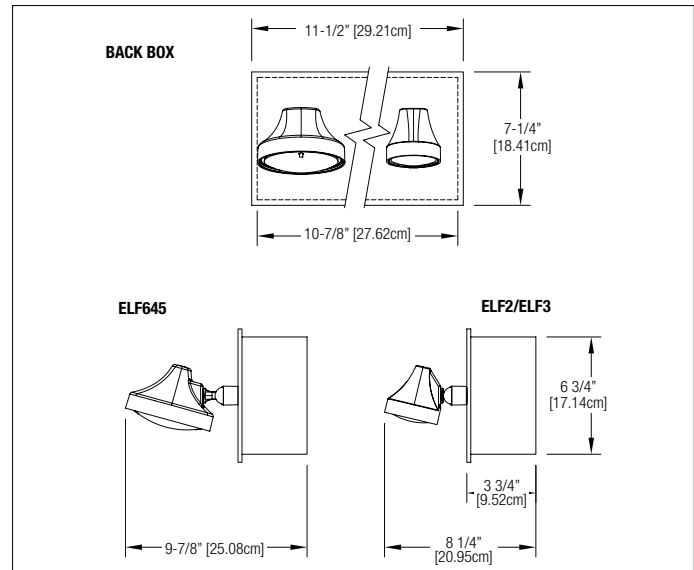
Units specified with Improved Diagnostics (audible or non-audible) will continuously monitor every critical function of the unit, attached remote lighting heads and/or attached AC/DC Exit Signs. Operational status of the battery, charger and lamps are indicated by individual LED status indicators. Once a malfunction is detected, if audible, a high-pitch audible alarm will sound, and the appropriate LED status indicator will illuminate alerting of the unit malfunction. If non-audible, only the LED status indicator will illuminate alerting of the unit malfunction. The microcontroller shall automatically self-test, by simulating a power failure, in accordance with NFPA101 Life Safety Code for one minute monthly, 30 minutes every six months and 90 minutes annually.

Every RD Series unit shall be fully warranted for three years, subject to proper installation and maintenance.

Unit shall be **Lightalarms®** catalog number \_\_\_\_\_.

### DIMENSIONS

Dimensions are approximate and subject to change.





TYPE \_\_\_\_\_

CATALOG # \_\_\_\_\_

\_\_\_\_\_

NOTES \_\_\_\_\_

\_\_\_\_\_

Designed for fully recessed installation  
in walls or ceilings



shown with ELF3 heads and LED lamps



Available Head Style Choices: ELF645 /Blank, ELF2 /ELF2, ELF3 /E3, DR1130 /D1

**POWER CONSUMPTION / UNIT RATING CHART**

SERIES	DC SPECS						AC SPECS			
	BATTERY TYPE	DC VOLTAGE	87.5% BATTERY CAPACITY (IN WATTS) <sup>1</sup>				UNITS DUAL VOLTAGE <sup>2</sup>	CURRENT		
			90 MIN.	2 HRS.	3 HRS.	4 HRS.				
RD6M1	Lead Calcium	6V	18	12	0	0	120VAC 277VAC	0.3A 0.15A		
RD6M2		6V	27	18	14	10				
RD6M3		6V	36	25	20	14				
RD12M3		12V	36	25	20	14				
RD6C1	Nickel Cadmium	6V	18	12	0	0			120VAC 277VAC	0.3A 0.15A
RD6C2		6V	25	18	12	9				
RD12C3		12V	36	21	15	12				
RD12C4		12V	50	36	25	18				

<sup>1</sup> National Electrical Code Specification

<sup>2</sup> All units 120/277 dual voltage, information based on wiring to specific voltage type

**ORDERING FORMAT**

# OF HEADS	SERIES/CAPACITY	HEAD STYLE	LAMP TYPE	OPTIONS
0= No heads 1= One head 2= Two heads	<b>Lead-Calcium Battery</b> RD6M1= 6V-18W RD6M2= 6V-27W RD6M3= 6V-36W RD12M3= 12V-36W  <b>Nickel-Cadmium Battery</b> RD6C1= 6V-18W RD6C2= 6V-25W RD12C3= 12V-36W RD12C4= 12V-50W	/Blank= ELF645 (PAR36, Plastic) /ELF2= ELF2 (PAR18, Plastic) /E3= ELF3 (MR16, Plastic) /D1= DR1130 (MR16, Metal)	<b>Add lamp suffix to indicate lamp type, voltage and wattage.</b>  For available Lamp Types within a specified Head Style refer to that Head Style page for proper lamp suffix with <b>Blank (ELF645)</b> , page 108 with <b>ELF2</b> , page 105 with <b>ELF3</b> , page 106 with <b>DR1130</b> , page 104  <b>Lamp Type MUST:</b> 1) Match battery voltage 2) Total of all lamps wattage must not exceed battery watt capacity for 90 min 3) Sealed Beams not compatible with Nickel-Cadmium battery	<b>Blank</b> = Mist White housing, No Options <b>B</b> = Black Housing <b>ID</b> = Improved Diagnostics (audible) <sup>1</sup> <b>IDNA</b> = Improved Diagnostics (non audible) <sup>1</sup> <b>T1</b> = Time Delay (5 minutes) <b>T2</b> = Time Delay (10 minutes) <b>T3</b> = Time Delay (15 minutes) <b>A</b> = Ammeter <sup>2</sup> <b>V</b> = Voltmeter <sup>2</sup> <b>TBH</b> = Suspended grid ceiling mounting kit <sup>3</sup>

<sup>1</sup> Voltmeter and Ammeter not available with diagnostic ID, IDNA option

<sup>2</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>3</sup> Sold as separate item

EXAMPLE: RD12M3/DR130M12-IDNA