



24LS & 24LC Series



24V Emergency Lighting Unit

Listed to UL924 Standard

Sealed Maintenance-Free Batteries

- Lead Calcium (Immobilized Electrolyte)
- Lead Calcium
- Nickel-Cadmium
- Long Life Lead



General Information

The **24 LS & 24 LC Series** are offered where an attractive conventional emergency lighting unit is required. These series offer a wide selection of battery capacities for use when larger numbers of remote fixtures are desired.

Standard Features

Reliability

The 24 LS & 24 LC Series carries a 3-year full warranty. Each unit is fully computer tested.

Unit Data

All steel construction with an off-white, baked enamel finish. Removable front panel. Furnished standard with two EF-18 heads with one 9 watt lamp per head.

PulsePlus Charger

PulsePlus circuitry offers 120/277 Vac input 60 Hz., 0.3/0.15 Amp (other inputs available), fused output circuit(s), dual diagnostic indicator lights, temperature compensation, sealed relay, low voltage battery disconnect, brownout protection and lockout (automatic battery connect).

Optional Features

Description	Add Suffix
Advanced Diagnostics	-AD
Advanced Diagnostics Non Audible	-ADNA
Ammeter	-A*
Voltmeter	-V*
Lamp Disconnect Switch	-K
Time Delay (Specify 5, 10 or 15 minutes)	-D1, D2 or D3**
Non-standard input voltage	Specify
Cord Set - 120 Volt	-C***
Special-voltage CP (Specify plug type)	-E***

*Not available with AD/ADNA option. **Not required when using AD/ADNA option.

**Standard 15 minutes with AD/ADNA option.

***Standard cord is 3 ft., custom lengths available.

NOTE: Certain option combinations may affect the listing.
Please contact the factory for specifics.

Accessories (order as a separate item)

Mounting Bracket (Cabinet B)	B2
Mounting Shelves (Cabinet B)	MP3
Mounting Shelves (Cabinet C)	MP6
Mounting Shelves (Cabinet D)	MP12
Wire Guard (Cabinet B and C)	WG3
Wire Guard (Cabinet D)	WG4

Unit Data

Housing: Heavy duty code gauge steel construction, off-white baked enamel cabinet with a removable front panel for ease of installation and servicing. B cabinet has a universal mounting cluster. All cabinets are furnished with 7/8" conduit knockouts, rear keyhole mounting slots, and provisions for mounting up to 3 heads on cabinet. **Light Source:** two EF18 heads furnished standard with 9 watt lamps

Self-testing in accordance with NFPA 101, Life Safety Code. Unit tests itself every thirty days for one minute, thirty minutes on the sixth month and ninety minutes annually.

Electrical

Power Requirements: Power Requirements: 120/277 Vac, 60 Hz., 0.3/0.15 Amp (other inputs available). **Output:** 24 Vdc, 2 fused output circuits. **Transfer:** dust-tight sealed relay automatically and instantly energizes lamp load upon failure of A.C. supply. **LVD:** low voltage battery disconnect circuit automatically shuts down lamp load and circuitry when battery reaches 87 1/2% of its nominal voltage, preventing deep discharge and permanent damage to the battery. **Lockout:** labor saving electronic circuit automatically connects battery when A.C. circuit is activated. **Brownout:** close tolerance electronic circuit activates emergency unit when utility power dips below 80-85% of nominal voltage.

Charger: The Pulse-Plus charging circuit utilizes a micro-processor which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger is current limited, temperature compensated, short-circuit protected and reverse polarity protected. The equipment is capable of full recharge in compliance with UL924 specifications.

Transformer: 120/277 Vac. **Controls:** test switch, dual diagnostic LED indicator lights (hi-charging, AC pilot).

How To Order (example)

For standard units without options
only order Series, Battery, Watts, Heads

Options are added to units by listing suffix at end of model #

24LS C 72 - 2 - ZN - D1

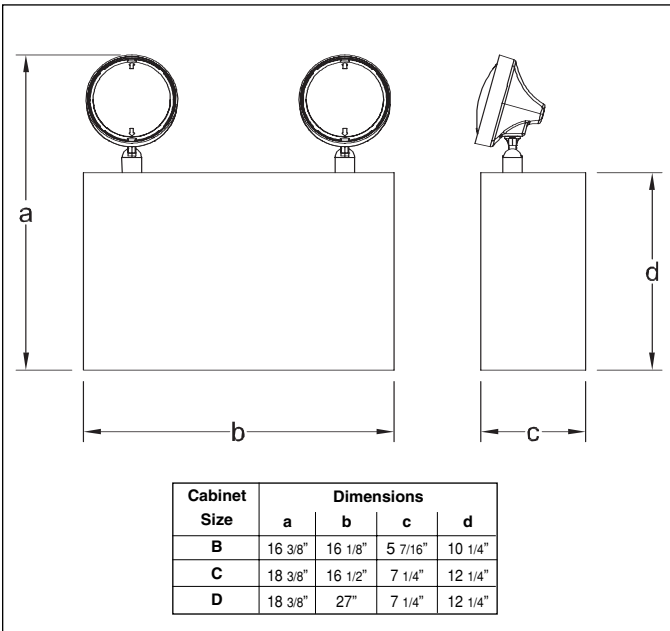
Series	Battery Type	Watts	# of	Lamp Option	Option
	Nickel-Cadmium	for 90 min.	Heads	24V 9W Incandescent	Time Delay

Includes Standard Lamp

*see lamp data sheet in lighting fixture section for other lamp wattages.

Outline and Dimensions

Dimensions are approximate and subject to change.



Unit Rating Chart

Furnished standard with two 9 watt High Intensity Incandescent lamps.

UNIT EQUIPMENT - WITH REMOTE CAPABILITY								
Sealed Maintenance-Free Battery Types	D.C. Volt	Model Number	*Watts to 87 1/2% of rated battery voltage				# of Load Fuses	Cabinet Size
			1 1/2 hrs.	2 hrs.	4 hrs.	8 hrs.		
Nickel-Cadmium	24	24LSC72-2	72	42	24	12	2	B
	24	24LSC100-2	100	73	37	20	2	B
Long Life Lead	24	24LSE72-2	72	48	26	14	2	B
	24	24LSE110-2	110	74	43	21	2	B
	24	24LSE320-2	320	300	148	76	2	D
Lead Calcium (Immobilized Electrolyte)	Δ 24	24LC300-2	300	240	132	72	2	D
	Δ 24	24LC350-2	350	280	168	96	2	C
	Δ 24	24LC400-2	400	336	192	96	2	D
Lead Calcium	Δ 24	24LSM110-2	110	72	40	24	2	B
	Δ 24	24LSM220-2	220	144	80	48	2	C

*National Electrical Code Specification Δ = Advanced Diagnostics Available

*Unit Warranty

Entire unit (excluding lamps and fuses) carries a 3-year Full Warranty. For complete warranty information, see Data Sheet ELW.

*Battery Warranty

Unit batteries are warranted as follows:

Sealed Nickel-Cadmium: 24LSC— 10 year life expectancy

5-year Full Warranty, plus 5-year prorata warranty

Sealed Long Life Lead: 24LSE— 12 year life expectancy

5-year Full Warranty, plus 5-year prorata warranty

Sealed Lead Calcium: 24LSM— 8 year life expectancy

3-year Full Warranty, plus 3-year prorata warranty

Sealed Lead Calcium (Immobilized Electrolyte): 24LC—12-

year life expectancy. 5-year full warranty, plus 5-year pro rata warranty.

*Subject to proper installation and maintenance.

Suggested Specification

Supply and install **EMERGI-LITE Series 24 LSC** _____, **24 LSE** _____, **24 LC** _____ or **24 LSM** _____ in 24volt, double heads, with electrically compatible remote. exit signs as indicated on the plans.

The emergency lighting unit shall be an architecturally designed, self-contained fixture including sealed, maintenance-free battery.

TYPE 24LSC to be supplied with long life Nickel-Cadmium battery.

TYPE 24LSE to be supplied with long life pure lead battery.

TYPE 24LSM to be supplied with lead calcium battery.

TYPE 24LC to be supplied with lead calcium (free electrolyte) battery.

The unit shall supply the rated load for a minimum of 1 1/2 hours or to 87 1/2% of rated battery voltage. The unit shall be rated 120/277 Vac, 60 Hz and be UL924 listed.

The unit charger shall utilize a solid-state circuit which samples the battery in relation to its 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 disconnect 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 a sealed dust-tight relay, a test switch and dual diagnostic LED indicator lights (hi-charge and AC pilot).

The cabinet shall be constructed of _____*gauge steel in off-white enamel color. A removable front panel shall be furnished to provide full access for ease of installation and servicing. B cabinet units shall have a universal mounting cluster. All cabinets shall be furnished with 7/8" conduit knockouts, rear keyhole mounting slots (bracket or shelf available as an option) and provisions for mounting up to 3 heads on cabinet. Unit will be furnished with two EF18 lighting heads constructed of impact resistant, flame retardant thermoplastic material complete with 9 watt lamps. Fused output terminals shall be provided for ease of remote lamp connections.

Every **24 LS & 24 LC Series** unit shall complete three full cycles of discharge and recharge before shipment and will be certified that this testing has been done. Every **24 LS & 24 LC Series** unit shall be fully warranted for three years, subject to proper installation and maintenance.

Unit shall be EMERGI-LITE catalog number _____.

*Refer to cabinet dimensional chart.