

The LL90HW combines either 6 or 12 volts with capabilities of up to 100 watts into a low-profile, contemporary housing design. Built for dependability, this economical unit offers solid-state electronics and fully adjustable designer heads to complement any environment.

FEATURES

- Completely self-contained
- Enclosure constructed of rugged 20 gauge steel or rugged, injection-molded UL94 V-0 flame retardant, high-temperature thermoplastic
- Each fully-adjustable lamp head contains 6 volt or 12 volt, 9 watt tungsten lamp - alternate heads are available
- Available in 6 or 12 volt with wattages ranging from 18-100 watts
- AC lockout for ease of installation and installer protection
- Low voltage disconnect eliminates deep discharge
- Brown-out, short circuit and voltage surge protection
- Charge rate/power "ON" LED indicator light with test button
- Maintenance-free lead acid battery
- Optional NiMH battery available
- UL listed 90 minute emergency run time
- Universal J-Box mounting system
- Optional Guardian Self-Test/Self-Diagnostics (G2) available
- Optional time delay (TD) feature available
- Standard finishes: Black or White
- 120/277V dual primary, 60Hz input
- Assembled in the U.S.A.

Model: _____ Date: _____
 Accessories: _____
 Job Name: _____ Type: _____



WARRANTY

Any component that fails due to manufacturers defect is guaranteed for 5 years with a separate 5 year pro-rated warranty on the battery. The warranty does not cover physical damage, abuse or acts of God. See the full Exitronix warranty document for detailed information.

ORDERING INFORMATION Example: LL90HW-6-27-S-W-G2

Series	Battery Voltage	Wattage	Housing Type	Finish	Options (Factory Installed)
LL90HW	6 = 6V Lead Acid Battery	6V Lead Acid	S = Steel	W = White	220 = 220VAC, 50Hz Input
	6NM = 6V NiMH Battery	27 = 27 Watts	P = Plastic	B = Black	G2 = Self-Test/Self-Diagnostics
	12 = 12V Lead Acid Battery	36 = 36 Watts			TD = Time Delay
	12NM = 12V NiMH Battery	54 = 54 Watts			REN1 = (2) Renegade Par 18 3.6W LED Lamps
		6V NiMH			REN2 = (2) Renegade Par 36 3.6W LED Lamps
		18 = 18 Watts			XX ² = Alternate Lamp Heads
		27 = 27 Watts			
		12V Lead Acid			
		54 = 54 Watts			
		100 ¹ = 100 Watts			
		12V NiMH			
	Notes		54 = 54 Watts		

¹ 100 watt only available with steel housing	Accessories³ (Field Installed)
² Alternate lamp heads are available, see Remote Lamp Heads specification sheet or consult factory	WG-A = Wire Guard (Back Mount)
³ Order as separate line item	XG-PS = Poly Guard (Back Mount)

CONSTRUCTION

Plastic

Precision molded unit with lamp housings constructed of UV stable UL 924 V-0 flame retardant, corrosion proof thermoplastic. Units resist denting, peeling, scratching and corrosion. Not recommended for outdoor use. Tool-less access provided for easy maintenance, universal J-box mounting pattern and keyhole slots provided for simple installation.

Steel

Die-formed 20 gauge steel housing with epoxy powder coat finish. White finish is standard. Universal J-box mounting pattern and keyhole slots provided for simple installation. Knockouts are provided on top, back, and sides for easy wire entry. Can also be shelf mounted, ordered separately.

ILLUMINATION

Two fully adjustable, attractive, square shaped lamp heads with rounded corners and vacuum metalized reflectors allow for maximum light to be delivered to the path of egress.

Emergency lights consist of two 9 watt wedge based tungsten lamps as standard. The LL90HW series is also RENEGADE compatible using 3.6W LED per head (Option: REN-2)

ELECTRICAL

Input

Dual-voltage input 120 or 277VAC @ 60Hz.

Sealed Lead Acid Battery – SLA

Extronix sealed lead acid batteries are maintenance-free with a life expectancy of 5 years. Sealed lead acid batteries provide a relatively large power-to-weight ratio making them ideal for emergency applications. Lead Acid batteries are constructed of a series of plates stacked with separators designed to optimize the efficiency and prolong the life of the battery. Lead Acid batteries perform optimally in temperatures ranging from 15-40 degrees C.

Sealed Nickel Metal Hydride – NiMH

Extronix nickel metal hydride batteries are maintenance-free with a life expectancy of 15 years. NiMH batteries perform optimally in temperatures ranging from 32°F - 104°F (0°C - 40°C). NiMH batteries are more environmentally-friendly than traditional NiCad or lead acid alternatives as they contain no cadmium or lead.

Emergency

The LL90HW series exit will operate for a minimum of 90 minutes during a loss of power with a 24 hour maximum recharge time for the battery.

Brownout Circuit

The brownout circuit monitors the flow of AC current to the unit and triggers the emergency lighting system once a set reduction of AC power occurs. This dip in the voltage will cause many fixtures to extinguish causing loss of normal lighting even though a total power failure has not occurred.

Low Voltage Disconnect

When the battery's terminal voltage falls below predetermined levels, the low-voltage circuit disconnects the emergency lighting load. The disconnect remains in effect until normal power is restored, preventing deep battery discharge and improving the life of the battery. The disconnect will also automatically reconnect the load circuit once the battery voltage returns to a normal value after charging.

Solid-State Transfer

The unit features a solid-state switching transistor which eliminates damaged contacts or mechanical failures associated with relays. The switching circuit is designed to detect a loss of AC power and automatically energizes the lamps. Upon restoration of the AC voltage, the emergency lamps will switch off and the charger will automatically recharge the battery.

Overload and Short-Circuit Protection

The solid-state overload monitoring system in the DC circuit disconnects the lamp load from the battery should excessive wattage demands be made and automatically resets when the overload or short-circuit is removed. This overload current protective characteristic eliminates the need for fuses or circuit breakers for the DC load.

Test Button

Our easily located test button allows for manual verification of proper operation of the transfer circuit and emergency lamps.

INSTALLATION

A universal mounting pattern and rear keyhole slots are provided for wall mounting.

Damp Location Rated

Damp location rating ensures the fixture is designed to operate safely in outdoor locations that are protected from the direct elements. Damp location rated fixtures may be installed indoors. Products with damp location ratings are not designed to withstand constant or significant moisture or direct contact with water or steam.

Made in the USA (STANDARD)

Many of our products can be produced or transformed to comply with the American Recovery and Reinvestment Act of 2009 (ARRA) requirements and Buy American provisions. These fixtures meet LEVEL 1 compliance when option is requested – please call factory for details with questions.

Guardian Self-Test/Self-Diagnostics (Option: G2)

The Guardian circuit continuously monitors the operating condition of the AC power, battery supply voltage, emergency lamp continuity and charging circuit.

The purpose of this option is to provide visual signaling in response to a fault at the EXIT sign battery and/or battery charger. If a failure is detected, visual status will occur immediately via the CHARGER LED and/or the BATTERY FAULT LED. The LEDs will stay illuminated until the fault is corrected.

The Guardian circuit also monitors the transfer circuit as well as performing automatic code compliant testing. The Guardian circuit will perform a 30 second discharge and self-test every 28-30 days. A 90 minute discharge and self-test is performed every 6 months.

Time Delay (Option: TD)

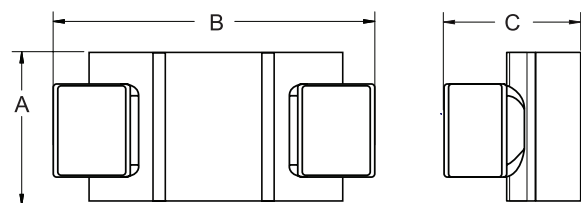
The purpose of this feature is to allow additional time for “normally on” fixtures to return to full brightness prior to extinguishing the supplemental light from the emergency fixtures.

CONFORMANCE TO CODES & STANDARDS

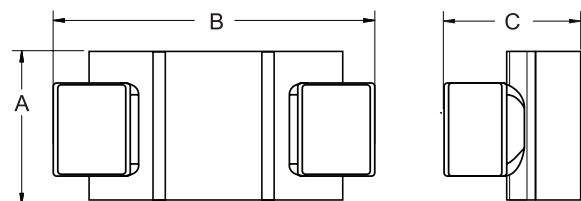
The LL90HW Series is UL listed and meets or exceeds the following: UL 924, NEC requirements and NFPA 101.

DIMENSIONS

LL90HW Plastic



LL90HW Steel



	Plastic 18-100W	Steel 18-36W	Steel 54W	Steel 72-100W
A	7.5"	5.25"	8.0"	8.0"
B	14.75"	14.87"	16.72"	16.72"
C	6.75"	8.70"	8.80"	10.41"