

CHLORIDE SYSTEMS

TYPE: _____

CATALOG NO.: _____

GENERAL DESCRIPTION

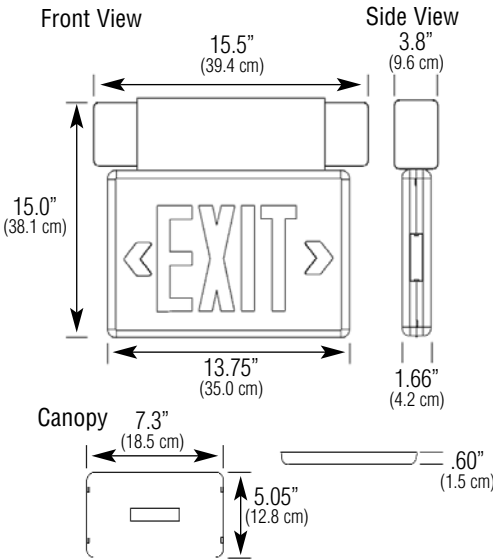
The Symmetry Series is a reliable, economical, exit and decorative emergency lighting product suitable for wall or ceiling mounting. Integral, adjustable lamps provide efficient emergency lighting, while the LED exit face provides even, highly visible illumination and direction toward egress areas. The Symmetry Series will enhance the aesthetics of all retail, office, or commercial spaces, and is specifically designed to ensure ease of installation as well as provide years of low cost, efficient service.

ILLUMINATION

Emergency illumination is provided by two high performance lamp reflector systems integral to the product housing. Each lamp reflector system can be adjusted 180° vertically and 180° horizontally. The standard lamp reflector system incorporates a high intensity 5.4 watt, T-5 wedge base tungsten lamp. A high impact polycarbonate diffuser utilizes linear frosted sections to control sight-line glare, and maximize reflector efficiency. 7 and 12 watt high performance halogen lamps are also available.

Illumination of the exit face is accomplished with long lasting, high output Light Emitting Diodes (LEDs). Hot spots and striations are eliminated by the internal "light chamber" especially designed around the high performance LED array.

DIMENSIONS



Dimensions are approximate and subject to change.

Symmetry I Series

Thermoplastic Combination Emergency Exits High Performance, Adjustable Lamp Reflector Systems LED Illumination



HOUSING

Impact resistant, UL 94 V-0, 5 VA thermoplastic housing with NFPA-type field selectable chevrons. Chevrons can be installed/removed from outside the exit housing.

White and black housing finish is available.

Thermoplastic backplate is provided with mounting knockouts for easy installation to standard junction boxes.

Installation is further simplified by the use of snap-together backplate and housing. A modular plug-in wiring harness will allow line voltage connections in either the junction box or product housing.

Utility supply connection is completed by snapping the housing and backplate together forming a secure mechanical and electrical connection.

Product can also be ceiling mounted to a standard junction box by using the mounting canopy supplied with the product.



SHOWN: S12LT61RW

ELECTRONICS

120/277 VAC dual voltage input with surge-protected, solid-state circuitry provides for a reliable charging system.

Charging system is complete with low voltage disconnect, AC lockout, brownout protection, AC indicator lamp and test switch.

The ACCU-TEST option includes a fault indicator LED and microprocessor circuitry that automatically indicates battery and charger status. An automatic monthly test assists user in meeting requirements of NFPA section 31-1.

ELECTRICAL SPECIFICATIONS

Input power requirements:

12 watt unit: 0.114 amps (120 VAC), 0.054 amps (277 VAC)

14 - 25 watt units: 0.118 amps (120 VAC), 0.056 amps (277 VAC)

BATTERY

Maintenance free, sealed lead calcium battery provides 90 minutes of emergency power, and has an estimated service life of 5 years when operated at an ambient temperature of 65°F (19°C) to 85°F (30°C).

An optional maintenance free, sealed nickel cadmium battery is available and has an estimated service life of 10 years when operated at an ambient temperature of 20°F (-7°C) to 95°F (35°C).

Batteries are factory installed and do not require connection prior to energizing the input.

CODE COMPLIANCE

UL 924 listed

UL damp location listing optional

NFPA 101, NEC, BOCA, OSHA and IBC illumination standards

WARRANTY

Three year full electronics warranty

One year full plus four year prorated lead calcium battery warranty

Five year full plus five year prorated nickel cadmium battery warranty

ORDERING INFORMATION (EXAMPLE: S12LT61RW)

S							
SERIES	WATTAGE CAPACITY	LAMP TYPE ¹	STENCIL FACES	LETTER COLOR	STENCIL FACE/ HOUSING COLOR	FACTORY INSTALLED OPTIONS ²	
S = Symmetry Series Thermoplastic Combination Emergency LED Exit	Lead Calcium 12L = 12 Watts 18L = 18 Watts 25L = 25 Watts Nickel Cadmium 14N = 14 Watts 18N = 18 Watts	T6 = Tungsten 5.4W T7 = Tungsten 7W T9 = Tungsten 9W H7 = Halogen 7W H12 = Halogen 12W	1 = Single 2 = Double U = Universal Single/Double Face	R = Red G = Green	W = White B = Black	AD = ACCU-TEST Self-Diagnostics BF = Buzzer/Flasher (Emergency Operation Only) ³ BZ = DC Buzzer (Emergency Operation Only) ³ DL = Damp Location Listing ⁵ EX = Special Input Transformer (220/240 VAC 50 Hz) FA = 24 VDC Fire Alarm Interface (Reg. constant DC voltage) FL = Flasher (Emergency Operation Only) ³ LL = Low Level Institutional Frame Surface Mount Remote Exit ^{3,4} LP = Low Level Matching Thermoplastic Remote Exit ^{3,4} TP = Tamperproof (Requires T15TPT00L) VRS = Vandal Resistant Lens with Tamperproof Hardware	

NOTES:

1) Selected lamp wattage cannot exceed unit output rating. Standard lamp configuration utilizes T-5 wedge base 5.4 watt 6 volt lamp. 2) Some option combinations may impact UL listing. Consult factory for specifics. 3) Not available with ACCU-TEST option. 4) LL and LP options are only available with 18 or 25 watt models. 5) 12L and 18L models are not available with DL option.

Specification Data for Symmetry Series Thermoplastic LED Combination Emergency Exit

HOUSING

Constructed of impact resistant UL 94 V-0, 5 VA thermoplastic. White housing is standard, with an optional black housing available.

Provisions are available for utility supply via 1/2" surface conduit, and are located on the top, left portion of product housing.

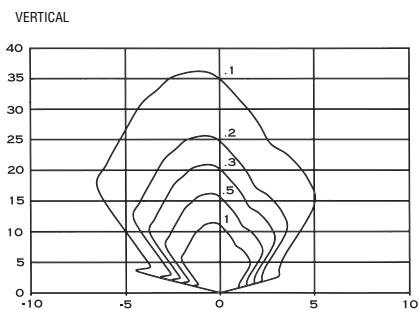
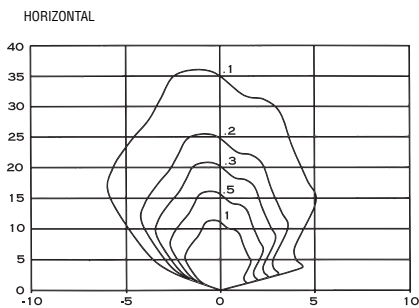
Space is available inside the product housing to contain and isolate line voltage terminations.

When product is back mounted to a standard junction box, flying leads connected to the backplate are connected to the line voltage supply inside the junction box.

Final electrical connection is made by snapping the housing and backplate together, which allows a modular plug set to complete the supply power connection. Ceiling mounting is accomplished by mounting the canopy access plate to a recessed junction box, routing the wiring harness through the top of product housing, snapping unit housing to the canopy, and then snapping the completed assembly to the access plate.

LAMP HEAD PHOTOMETRICS

T6 Lamp



ELECTRONICS

Dual voltage 120/277 VAC input with surge protected solid-state charging circuitry provides for a reliable charging system. The charging system is furnished with low voltage disconnect (LVD), AC lockout, brownout protection, AC indicator LED and test switch.

The low voltage disconnect (LVD) feature will disconnect the battery prior to an unacceptable deep discharge, but not before the required 90 minute emergency operation.

The AC lockout feature prevents battery drain prior to the initial energizing of utility power, and allows the installer to complete all wiring, battery, and electrical connections without energizing the emergency circuit.

The brownout protection circuitry will automatically switch the unit into the emergency mode if the utility voltage sags below 20% of nominal.

Battery charging circuitry is entirely solid-state, and utilizes a fully automatic, voltage regulated charger for lead calcium batteries, and an automatic constant current charger for nickel cadmium batteries. Battery recharge time after a complete discharge is less than the required UL 924 standard.

Line sensitive electronics cause an instantaneous transfer to battery power if either the loss of AC utility, or a brownout condition is detected. When line voltage is present and stabilized, the transfer circuitry switches back to normal operation and begins recharging the battery. The transfer circuitry can be tested via a momentary test switch located on the bottom of the housing.

CODE COMPLIANCE

The Symmetry Series meets or exceeds all performance standards as required by UL 924, NFPA 101, NEC, BOCA, OSHA and IBC.

SELF-DIAGNOSTICS

The ACCU-TEST Self-Diagnostics option conducts automatic and manual tests, and indicates real time status of the lamp, battery and charger via LED indicator lamps. Automatic tests include: Systems analysis every 10 seconds, with actual load tests performed for a 3 minute duration every 30 days. A manual test is available from 1 to 90 minutes.

BATTERY

Maintenance free, sealed lead calcium or nickel cadmium batteries are available. Standard sustained emergency operation is for 90 minutes, with the illumination source providing full light output. Remote capacity and extended run times are available with selected models. Periodic testing of the unit (3 minutes every 30 days) is encouraged to ensure compliance with most local fire codes, and will not adversely affect service life of the battery. Batteries are installed and connected to the charger system at the factory. The batteries are isolated from the charger system, and will not discharge until initially energized.

The suggested operating temperature range for sealed lead calcium batteries is 65°F (19°C) to 85°F (30°C), and the battery has an expected service life of 5 years. The suggested operating temperature range for sealed nickel cadmium batteries is 20°F (-7°C) to 95°F (35°C), and the battery has an expected service life of 10 years.

ELECTRICAL SPECIFICATIONS

Input power requirements

12 watt unit: 0.114 amps (120 VAC), 0.054 amps (277 VAC)

14 - 25 watt units: 0.118 amps (120 VAC), 0.056 amps (277 VAC)

OPERATION

DC Voltage	Unit	Watts to 87½ of Rated Voltage*		
		1½ hrs.	2 hrs.	4 hrs.
6	S12LT6	12.0	—	—
6	S18LT6	18.0	13.5	7.0
6	S25LT6	25.0	19.0	9.5
6	S14NT6	14.0	10.5	5.5
6	S18NT6	18.0	13.5	7.0

* Per NEC Specifications

SUGGESTED SPECIFICATION

Furnish and install Chloride's LED combination emergency exit sign model _____. The exit shall be constructed to meet Underwriter's Laboratories, Inc. Standard #924 and the National Electrical Code (NEC).

INSTALLATION AND OPERATION - Exit shall be easily field connected to a 120 or 277 VAC, 60 hertz, unswitched power source. Installation must comply with the NEC as well as other applicable codes. (Emergency Operation Only) - Upon utility power failure or brownout, the unit shall automatically transfer to battery power and maintain the required illumination level for a minimum period of 90 minutes. Upon restoration of utility power, the charger shall restore the battery to full charge within UL 924 requirements following a rated discharge of not more than 90 minutes.

CHARGER (Emergency Operation Only) - Product shall utilize a fully automatic, voltage regulated (lead calcium) or constant current (nickel cadmium) charging system which will maintain the battery at full capacity without the need for periodic exercising or equalization. The following features shall be standard: Low voltage disconnect (LVD), brownout protection and AC lockout. Optional self-diagnostics shall monitor and indicate a fault occurring in either the charger, battery, lamp circuit, or input supply.

BATTERY (Emergency Operation Only) - The battery shall be either a maintenance free, sealed lead calcium or sealed nickel cadmium. Sealed lead calcium batteries shall provide trouble-free operation in temperatures up to 85° (30°C) and are supplied with a one year full warranty. Nickel cadmium batteries shall provide trouble-free operation in temperatures up to 95°F (35°C) and are supplied with a five year full warranty. The battery shall be factory installed, and will not require internal connection prior to energizing the product.

ILLUMINATION - Illumination shall be provided by two internally mounted, fully adjustable reflector systems utilizing either a high output tungsten, or tungsten halogen lamp source. Lamp reflectors shall be constructed of a high efficiency parabolic lamp chamber which can utilize lamp wattages up to 12 watts. When mounted on 20' centers, at 9.0' AFF the product shall provide an average of one footcandle along a linear path of egress. Exit sign illumination shall be indirect, and accomplished by utilizing high intensity LEDs. The LEDs shall be designed so that the unlikely failure of one LED will not affect the integrity of the total sign while in the emergency mode.

HOUSING - Housing construction shall be impact resistant UL 94 V-0, 5 VA rated thermoplastic. Product shall be furnished with the standard white or black finish. Units shall be designed to back mount or canopy mount to 3-1/2", 4" octagon, or 4" square junction boxes and will be supplied with a knockout pattern to facilitate mounting. Modular utility supply connectors integral to the backplate and housing shall eliminate hardwire line voltage terminations inside of the product housing. The housing and backplate, or housing, canopy and mounting plate (ceiling mounting) shall snap together without the use of tools.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



CHLORIDE
SYSTEMS

272 West Stag Park Service Road • Burgaw NC 28425
Telephone: (910) 259 1000 • Facsimile: (800) 258 8803
www.chloridesys.com

C1158R14
6/09 IH