Notification Appliances

# **L-Series, Emergency Communication Devices**

#### Description

The L-Series Emergency Communications devices and accessories combine application versatility with all of the same time-saving and cost-effective benefits of the L-Series product line. The L-Series devices are the broadest and most versatile product line of notification devices available and include a wide range of devices to meet the emergency communications application requirements.

The model's visual signaling text labeled, ALERT, is printed on the white housing's amber lens strobes and speaker strobes. This visual signaling label is used to identify the emergency communications in compliance with ANSI/ UL 1638 - Standard for General Signaling Visible Appliances. Other Plain or ALERT-printed models provide clear lenses for use with the following color lens strobe attachments:

• amber • green blue red

These models can easily connect to a strobe and speaker strobe devices without a candela derating.In addition, the L-Series Emergency Communications devices include plain (non-printed) strobes, horn strobes, and speaker strobes. These devices, along with the ALERT-printed devices and L-Series accessories, can meet a wide range of requirements for indoor applications, including the following.

- emergency communications emergency response
- general signaling severe weather

All L-Series Emergency Communications and general signaling devices are compatible with the entire L-Series product line and they include the same time-saving and cost-effective innovations. For example, the devices provide the following added benefits.

The plug-in design simplifies the installation and reduces costly ground faults.

The universal mounting plates with on-board shorting springs test wiring continuity to reduce the installation time-frame and protect the devices from damage. The field-selectable settings provide versatility and enable Installers to quickly set each device to comply with the application requirements.

### FEATURES & BENEFITS

Emergency Communications Features:

- Designed with Plain or ALERT-printed white housings.
- Includes either Clear or Amber lens strobes and speaker strobes
- Contains color lens attachments for use with clear lens wall or ceiling strobes.
- Complies with DoD specification requirements.
- L-Series Features: • Offers a plug-in design for simplified installation and

troubleshooting.

- Built with a mounting plate shorting spring to easily test the wiring continuity.
- Provides an automatic selection of 12- or 24-

volt operation at 15 and 30 candela.

- Supports the following field-selectable candela settings
- Wall:15, 30, 75, 95, , 110, 135, 185
- Ceiling: 15, 30, 75, 95, 115, 150, 177
- Rated from 32°F to 120°F (indoor devices); -40°F to 151°F (NEMA 4X, IP56 weatherproof devices)
- Includes an optional tamper-resistant Torx head screw.
- Compatible with the synchronization protocol.





#### **L-Series Specifications**

#### Architect/Engineer Specifications, General

The L-Series strobes and horn strobes shall mount to any of the following:

- standard 4 x 4 x 1 1/2 inch backbox
- 4-inch octagon backbox
- double-gang backbox

The L-Series compact mounts to a single-gang  $2 \times 4 \times 17/8$ -inch backbox. The L-Series speaker strobes shall mount to a  $4 \times 4 \times 21/8$ -inch backbox. A universal mounting plate shall be used for mounting ceiling and wall products. The notification appliance circuit wiring and amplifier wiring shall terminate at the universal mounting plate.

Strobe (Continued)

- The L-Series products, when used with the Sync•Circuit Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal
- 12 or 24 volts. When the L-Series products are used with the Sync•Circuit Module, the outputs will operate as follows:
- 12-volt-rated notification appliance circuit outputs shall operate with between 8.5 and 17.5 volts.
- 24-volt-rated notification appliance circuit outputs shall operate between 16.5 and 33 volts.

The indoor L-Series products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply.

Strobes, horn strobes, and speaker strobes shall have the following field-selectable candela settings:

•	15	• 30	• 75	• 95	• 110
•	115	• 135	• 159	• 177	• 185

The clear strobe shall be an L-Series Model \_\_\_\_\_\_ listed to UL Standard 1971 and shall be approved for fire protective service. Colored lens strobes shall be listed to ANSI/UL Standard 1638 and shall be approved for Private Mode Emergency. The strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system.

#### Horn Strobe Combination

The horn strobe shall be an L-Series Model \_\_\_\_\_\_ listed to UL Standard 1971 and UL Standard 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The horn shall have three audible options and an option to switch between a temporal three-pattern and a non-temporal (continuous) pattern. These options shall be set by a multiple position switch. The horn and horn strobe models shall operate on a coded or non-coded power supply.

#### Speaker Strobe Combination

The speaker strobe shall be an L-Series Model \_\_\_\_\_\_ listed to UL Standard 1480 and UL Standard 1971 and be approved for fire protective signaling systems. Speaker shall be capable of operating at 25.0 or 70.7 nominal  $V_{\rm RMS}$  selected via rotary switch, and shall have a frequency range of 400 to 4,000 Hz. Speaker shall have power taps that are selected by rotary switch. The strobe shall comply with the NFPA 72 requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon fl ash tube and associated lens/reflector system.

#### Synchronization Module

The module shall be a Sync•Circuit model MDL3 listed to UL Standard 464 and shall be approved for fire protective service. The module shall synchronize L-Series strobes at 1 Hz and horns at temporal three. While operating the strobes, the module shall silence the horns on horn strobe models over a single pair of wires. The module shall mount to a 4 11/16 x 4 11/16 x 2 1/8" back box. The module shall also control two Style Y (Class B) circuits or one Style Z (Class A) circuit.

The module shall synchronize multiple zones. Daisychaining two or more synchronization modules together will synchronize all the zones they control. The module do not operate on a coded power supply.

#### **Color Lens Strobe Attachment**

The L-Series color lens attachments shall be approved for fire protective service as listed in UL Standard 1638. The lens attachments shall only be used with (plain, non-fire-printed) strobe devices. They shall mount to any wall or ceiling strobe and shall be rated from minus 35 degrees to 151 degrees Fahrenheit. Table 1 lists the Speaker Sound output.

Speaker Sound Ouput							
UL Reverberant (dBA @ 10 ft.):	2 W	1 W	1/2 W	1/4 W			
Wall-Mount SPS Series	88	85	82	79			
Ceiling-Mount SPC Series	88	85	82	79			

Table 1: Speaker Sound Output

#### **UL Current Draw**

Table 2 lists the UL maximum strobe current draw (mA pms).

	8-17.5 Volts	16-33 Volts	
Candela	DC	DC	FWR
15	87	41	60
30	153	63	86
75	N/A	111	142
95	N/A	134	164
110	N/A	148	179
115	N/A	158	191
135	N/A	172	209
150	N/A	189	228
177	N/A	226	264
185	N/A	222	257
Wall Cande	la Settings: 15, 3	0, 75, 95, 115	, 150, 177
Ceiling Can 185	dela Settings: 15	, 30, 75, 95, 1	10, 135,

#### Table 2: UL Max. Strobe Current Draw (mA RMS)

#### UL Current Draw Data

Table 3 lists the maximum UL current draw (mA RMS) allowed for 2-Wire Horn Strobes.

	8 VDC		16 VDC									
Candela	15	30	15	30	75	95	110	115	135	150	175	185
EM Temp Hi	98	158	54	74	121	142	162	187	196	217	254	245
EM Temp Low	93	154	44	65	111	133	157	185	184	211	249	235
EM Cont Hi	106	166	73	94	139	160	182	187	211	230	273	262
EM Cont Low	93	156	51	71	119	139	162	170	190	216	258	239
3.1K Temp Hi	93	156	53	73	119	140	164	184	190	229	257	242
3.1K Temp Low	91	154	45	66	112	133	160	185	185	212	252	235
3.1K Cont Hi	99	162	69	90	135	157	175	202	208	229	271	261
3.1k Cont Low	93	156	52	72	119	138	162	187	192	217	259	242
	16V FW	/R										
Candela	15	30	75		95	110	115	135		150	175	185
EM Temp Hi	83	107	156		177	198	223	234		254	286	287
EM Temp Low	68	91	145		165	185	199	223		229	262	271
EM Cont Hi	108	135	181		207	230	223	264		254	286	315
EM Cont Low	79	104	157		175	197	199	235		229	262	281
3.1K Temp Hi	81	105	155		177	196	225	234		255	289	284
3.1K Temp Low	68	90	145		166	186	196	222		229	260	276
3.1K Cont Hi	101	131	176		204	230	225	264		255	289	326
3.1k Cont Low	77	102	156		177	199	196	234		229	260	291
Wall Candela Settings: 15, 30, 75, 95, 115, 150, 177												
Ceiling Candela	Ceiling Candela Settings: 15, 30, 75, 95, 110, 135, 185											

Table 3: UL Max. Current Draw (mA RMA), 2-Wire Horn Strobe

#### **L-Series Ordering Information**

#### Alert Devices:

**SWL-CLR-ALERT:** Strobe ,White,Wall,Clear Lens, Alert

SWL-ALERT: Strobe, White, Wall, Amber Lens, Alert

**SCWL-CLR-ALERT :** Strobe, White, Ceiling, Clear Lens, Alert

**SPSWL-ALERT:** Speaker Strobe, White, Wall, Amber Lens, Alert

**SPSWL-CLR-ALERT:** Speaker Strobe, White, Wall, Clear Lens, Alert

**SPSCWL-CLR-ALERT:** Speaker Strobe, White, Ceiling,

Clear Lens, Alert:

#### **Plain Wall Strobes:**

SRL-P: Strobe, Red, Wall, Plain

SWL-P: Strobe, White, Wall, Plain

#### Plain Wall Horn Strobes:

P2RL-P: Horn Strobe, Red, Wall, Plain

P2WL-P: Horn Strobe, White, Wall, Plain

**Notes:** All -P models have a plain housing (there is no marking labeld, "FIRE" on cover).

#### Horn Tones and Sound Output Data

Table 4 lists the horn and horn strobe output.

Switch	Sound		8-17.5 Volts	16-33 Volts	
			Volts	VO	แร
Position	Pattern	dB	DC	DC	FWR
1	Temporal	High	84	89	89
2	Temporal	Low	75	83	83
3	Non-Temporal	High	85	90	90
4	Non-Temporal	Low	76	84	84
5	3.1 KHz Temporal	High	83	88	88
6	3.1 KHz Temporal	Low	76	82	82
7	3.1 KHz Non-Temporal	High	84	89	89
8	3.1 KHz Non-Temporal	Low	77	83	83
9	Coded	High	85	90	90
10	3.1 KHz Coded	High	84	89	89

Table 4: Horn and Horn Strobe Output (dBA)

## L-Series, Emergency Communication Devices Technical Specifications

#### SYSTEM

Operating Temperature Range: Standard Operating Temperature: 32°F to 120°F (0°C to 49°C) Humidity Range: 10 to 93% non-condensing

Physical Dimensions:

Dimensions Wall-Mount Strobe and Horn Strobe (including lens):  $5.6 L \times 4.7 W \times 1.25 D$ 

SPS Speaker Strobe:  $6.5"~L \times 5.0"~W \times 2.3"~D$  (including lens and speaker)

**Dimensions Ceiling-Mount Strobe (including lens):** 6.8" diameter x 2.8" D

Electrical/Operating Specifications:

Nominal Voltage (strobes and horn strobes): Regulated 12 VDC or Regulated 24 DC/FWR

Nominal Voltage (speakers): 25 V or 70.7 V (nominal) Maximum Supervisory Voltage (speakers): 50 VDC

**Operating Voltage Range:** 8 to 17.5 V (12 V nominal) or 17 to 33 V (24 V nominal)

**Operating Voltage Range with MDL3:** 8.5 to 17.5 (12V nominal) or 16.5 to 33V (24V nominal)

Strobe Flash Rate: 1 flash per second Speaker Frequency Range: 400 to 4,000 Hz Speaker Power: 1/4, 1/2, 1, 2 watts

#### **TEMPERATURE AND HUMIDITY RANGES**

This system meets NFPA requirements for operation at 0  $-49^{\circ}$ C/32  $-120^{\circ}$ F and at a relative humidity  $93\% \pm 2\%$  RH (noncondensing) at  $32^{\circ}$ C  $\pm 2^{\circ}$ C ( $90^{\circ}$ F  $\pm 3^{\circ}$ F). However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room temperature of  $15 - 27^{\circ}$ C/60  $- 80^{\circ}$ F.

#### STANDARDS

The L-Series, Ceiling Strobes and Horn Strobes are designed to comply with the following standard: **UL Standard:** UL 1971 and UL 464

#### AGENCY LISTINGS AND APPROVALS

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

UL: S5512, S4011 CSFM: 7135-1653:0503 7125-1653:0504 7320-1653:0505 ISO 9001 Certification For a complete listing of all compliance approvals and certifications, please visit: http://www.gamewellfci.com/en-US/ documentation/Pages/ Listings.aspx

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#### For more information

Learn more about Gamewell-FCI's L-Series, Emergency Communication Devices and other products available by visiting www.Gamewell-FCI.com

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