

# LOW PROFILE SPEAKERS & STROBE SPEAKERS E SERIES



E-70 Series + LS



E-90 Series + LS

## Description

The E Series Speakers and Speaker Strobes are designed to meet the critical needs of the life safety industry for effective emergency voice communications and tone signaling. Series E speakers provide high audio output with clear audibility at minimum wattage. They offer system designers the high quality, high performance and low installed cost required for fire protection systems. All models flush mount to electrical backboxes and are equipped with a blocking capacitor for DC supervision of audio lines and IN/OUT wiring terminals for fast installation using #12 to #18 AWG wiring. Series E Speaker Strobes are ULC Listed for indoor use, ceiling and wall mount, and use a Xenon flashtube with solid state circuitry enclosed in a rugged Lexan® lens to provide maximum reliability for effective visible signaling.

## Features

- Approvals include: CAN/ULC-S541-99 for speaker appliances and CAN/ULC-S526-02 for visual appliances.
- High efficiency speakers designed for maximum output at minimum wattage across a frequency range of 400 to 4000 Hz
- 25 or 70 VRMS models with field selectable taps for operation from 1/8 watt up to 2 watts in 3 dB steps
- Series E Low Profile Speaker Strobe models are available with 15 candela strobe featuring a wide Listed Voltage range of 20-31 VDC with low current draw and low temperature compensation to reduce power consumption and wiring costs
- All audio and strobe inputs may be supervised with standard reverse polarity supervision from a Fire Alarm Control Panel (FACP)
- Attractive, compact grille styles for flush mounting to low cost electrical backboxes or surface mounting to SBB backbox
- Sealed back speaker construction for extra protection and improved audibility
- Fast installation with IN/OUT screw terminals using #12 to #18 AWG wiring

## Engineering Specifications

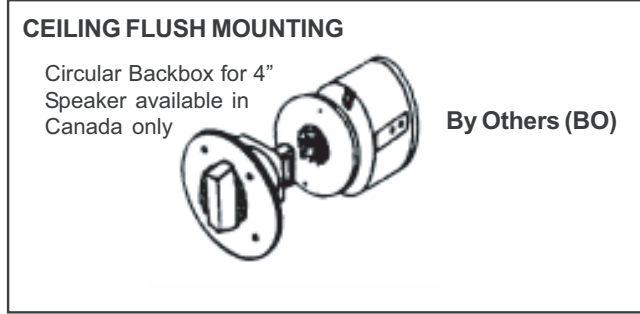
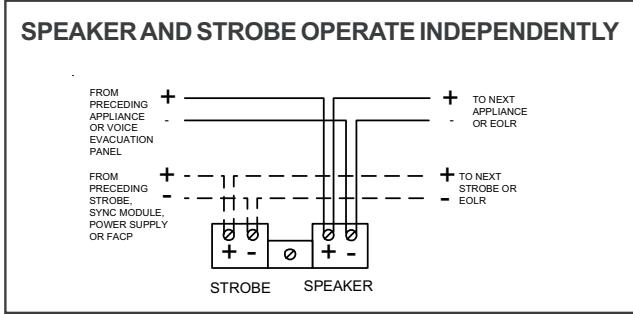
The speaker appliance shall be a E Series low profile speaker and speaker strobe appliance or equivalent. The speaker and strobes shall be ULC Listed under CAN/ULC-S541-99 and CAN/ULC-S526-02 for Fire Protective Service. All speakers shall be either 25 or 70 VRMS inputs with field selectable power taps from 1/8 to 2 watts with Listed sound output up to 90 dBA at 10 feet, and a listed frequency response of 400 to 4000 Hz. Strobes shall use filtered power or unfiltered power supply (full-wave-rectified). All models shall have provisions for standard reverse polarity type supervision and IN/OUT field wiring using terminals that accept #12 to #18 AWG wiring. Combination speaker strobe appliances signals shall incorporate a Xenon flashtube enclosed in a rugged Lexan lens or equivalent with solid state circuitry. Strobe shall meet ULC and produce a flash rate of one (1) flash per second minimum over the Listed input voltage range (20-31 VDC). The strobe intensity shall be rated per ULC for 15 candela. The strobe shall be certified to meet FCC Part 15 Class B and shall incorporate low temperature compensation to insure lowest possible current consumption. The combination speaker strobe appliances shall be installed indoors and surface or flush mounted. They shall mount to standard electrical hardware requiring no additional trimplate or adapter. The appliance shall be finished in a textured red or white color.



CATALOG NUMBER **5708**

NOT TO BE USED FOR INSTALLATION PURPOSES.

## Wiring



## Specifications

Model Number	Speaker dB @ 10 ft*** (Rated Watts)*						Strobe Voltage (VDC)	Strobe Candela
	1/8	1/4	1/2	1	2	4*		
E-7070-LS-24	70	78.1	80.8	83.8	86.0	88.8	-	-
E-9070-LS-24	70	78.1	80.8	83.8	86.0	88.8	-	-
E-7025-LS-24	25	77.5	80.4	83.2	87.8	87.8	24	15
E-9025-LS-24	25	77.5	80.4	83.2	87.8	87.8	24	15

\*dBA ratings are based on UL testing under Standard UL 1480

### General Notes:

- Strobes are designed to flash at 1 flash per second minimum
- Series E Speaker Strobes are Listed for indoor use with a temperature range of 0°C to 49°C (32°F to 120°F) and maximum humidity of 95% RH.

WARNING: USE STROBES ONLY ON NAC CIRCUITS WITH CONTINUOUSLY APPLIED OPERATING VOLTAGE. DO NOT USE STROBES ON CODED OR INTERRUPTED NAC CIRCUITS IN WHICH THE APPLIED VOLTAGE IS CYCLED ON AND OFF, AS THE STROBE MAY NOT FLASH.

## Ordering Information

Series	Model Number	Strobe Candela	dBA @ 10 ft	Strobe Average Current @ 24 VDC
E Speaker Strobes 25 VRMS	E-7025-LS-24-VFR-ULC	15	81-90	0.74
	E-9025-LS-24-CFW-ULC	15		0.74
E Speaker Strobes 70 VRMS	E-9070-LS-24-CFW-ULC	15		0.74
	E-7070-LS-24-VFR-ULC	15		0.74

\*Average Current per actual Production Testing @ 24 VDC nominal. For rated average, peak and inrush across the listed voltage range for both filtered DC and full-wave-rectified (FWR), see installation instructions.

\*\*Refer to Data Sheet #S7000 for mounting options. WARNING: SERIES E SPEAKERS DO NOT FIT ALL CANADIAN EXTENSION RINGS. Call factory for assistance. (Example if Extension Ring Manufacturer that fits is TEMCO).

**Speaker Notes:** 1. Series E speakers have separate 25 VRMS and 70 VRMS models. All Series E models have field selectable taps for 1/8, 1/4, 1/2, 1, or 2 watt operation. 2. Models code suffix V= vertical lens; C= ceiling lens; F= fire lettering; R= red plate; W= white plate. 3. Approval codes: ULC=Underwriter Laboratories of Canada.

Voltage	Rated Average Current LS	Rated Peak Current LS	Rated Inrush Current LS
24 VDC	0.080	0.190	0.250
24 VFWR	0.081	0.216	0.380

**Note:** All VFWR voltages in table are measured with DC volt meter. Multiply VFWR voltage by 1.11 to convert to VRMS.

WARNING: ALTHOUGH ULC TESTING HAS VERIFIED THAT THESE STROBES FUNCTION EVEN AT 80% OF THEIR MINIMUM RATING AND 110% OF THEIR MAXIMUM RATING, MIRCOM STRONGLY RECOMMENDS THAT THE VOLTAGE APPLIED TO THESE PRODUCTS BE WITHIN THEIR RATED INPUT VOLTAGE RANGE. THE APPLICATION OF IMPROPER VOLTAGE MAY RESULT IN DEGRADED OPERATION OR DAMAGE TO THESE PRODUCTS. The ULC "Listed Rated Input Voltage" uses either filtered (DC) or unfiltered full-wave-rectified (FWR) voltage. Check the minimum and maximum output of the power supply and stand by battery and subtract the voltage drop from the circuit wiring resistance to determine the applied voltage to the strobes.

Use the highest value of rated average current to determine the maximum number of strobes and to establish power supplies and wire gauge requirements. Use the rated peak current or rated inrush current (whichever is higher) to verify fuse requirements. Make sure that the average, peak and inrush currents do not exceed system power supplies or fusing limits. See "Installation Instructions".

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