# **Notification Appliances**

**SET –** Mass Notification Speaker-Strobes Appliances | **Applications**: Indoor/Outdoor



Clear-Lens Speaker Strobe – Wall Mount, Red (SET-CMC-R-MNS-ALERT)



Amber-Lens Speaker Strobe -**Wall Mount** (SET-AMC-W-MNS-ALERT)

Clear-Lens Speaker Strobe – **Ceiling Mount** 



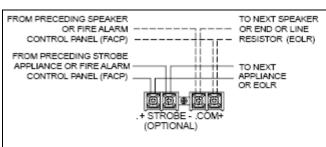
## **Product Overview**

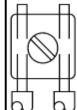
- The Model SET-series of speaker-strobes is optionally compatible with a non-synchronized strobe appliance - when connected directly to a @UL2572 Listed mass-notification system. or can function with a synchronized strobe appliance - when connected to a notification-appliance circuit running the Siemens sync protocol.
  - SET-series of speaker-strobes are @UL Listed for use with @UL2572 Listed mass-notification systems
  - SET-series speaker-strobes are designed for multiple power requirements with high dBA output at each power tap
  - The design incorporates a high-efficiency speaker for maximum output at minimum power across a frequency range of 400Hz to 4000Hz, and features a sealed-back construction for extra protection and improved audibility
  - Speaker-strobes offer a choice of field-selectable taps for 25 or 70 VRMS operation from 1/8 Watt to 8 Watts
  - Available with a CLEAR lens or AMBER-lens option:
    - Ceiling models are available with field-selectable, CLEAR-lens Candela settings of 15 / 30 / 75 / 95cd
    - Wall-mount models are available with field-selectable, CLEAR-lens Candela settings of 15 / 30 / 75 / 110cd
    - Wall-mount weatherproof models are available with field-selectable, CLEAR-lens Candela settings of 135 / 185cd
    - Ceiling models are available with field-selectable, AMBER-lens Candela settings of 11 / 22 / 56 / 71cd
    - Wall-mount models are available with field-selectable, AMBER-lens Candela settings of 11 / 22 / 56 / 82cd
  - Strobes, which can be synchronized using the Siemens DSC sync controls, are compatible with:
    - Siemens 50-point, 252-point and 504-point addressable fire-alarm control panels (FACPs)
    - FireFinder XLS® panel
    - PAD-series NAC extenders with built-in sync protocol
  - Only available with 'ALERT' text on the outside of each device
  - A speaker mounting plate is attached to the speaker for easier installation
  - Complies with Occupational Safety and Health Administration (OSHA) 29 Part 1910.165: Americans With Disabilities Act (ADA), and National Fire Protection Agency (NFPA 72)
  - Meets the requirements of the new NFPA 72 Chapter 24 (v2010) requirements for MNS applications of notification appliances

# **Specifications**

- Speaker-strobe appliances are Siemens Series `SET' Speaker Strobes or approved equals to be used with ®UL 2572 Listed mass-notification systems.
  - Speakers equipped with strobes are listed under ®UL Standard 1971 for Emergency Devices for the hearing impaired
  - All models shall have listed sound output of up to 93dB at 10 feet and a listed frequency response of 400 to 4000 Hz
  - Speakers are designed for a field-selectable input of either 25 or 70 VRMS, with selectable power taps from 1/8 Watt to 8 Watts
  - Speaker shall incorporate a sealed-back construction
  - All inputs shall employ terminals that accept #12 to #18 American Wire Gauge (AWG) wire sizes
  - Strobe portion of the appliance shall produce a flash rate of one (1) flash per second, and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens
  - Strobe is of low-current design
  - Selector switch for selecting the candela is tamper resistant
  - Strobes can be synchronized using the Siemens DSC sync controls, and are utilized as
     ©UL 2572 Listed mass-notification devices with the following:
    - Siemens 50-point, 252-point and 504-point addressable fire-alarm control panels (FACPs)
    - FireFinder XLS® panel
    - PAD-series NAC extenders with built-in, sync protocol
  - The strobes shall not drift out of synchronization at any time during operation
  - Strobes are available in AMBER and CLEAR lens, and devices for mass notification will have the word 'ALERT' appear on its cover in red text
  - Strobes shall revert to a non-synchronized flash-rate, if the sync module or power supply should fail to operate (i.e. – contacts remain closed)
  - Speaker-strobe appliances are designed for indoor / outdoor surfaces
  - Speaker-strobe shall incorporate a speaker-mounting plate with a grille cover, which is secured with two (2) screws for a level finish:
    - Grille cover shall mount to standard electrical hardware requiring no additional trim plate or adapter
  - All speaker-strobe appliances are listed for Special Applications:
    - Strobes are designed to flash at 1-flash-per-second minimum over their "Regulated Input Voltage Range"
    - ➤ Note: NFPA-72 specifies a flash rate of 1-to-2 flashes per second, and ADA Guidelines specify a flash rate of 1-to-3 flashes per second:
      - All candela ratings represent minimum-effective Strobe intensity, based on ®UL Standard 1971

# **Wiring Diagram**





- This model has in-out wiring terminals that accept two (2) #12 to #18 American Wire Gauge (AWG) wires at each screw terminal. Strip leads 3/8" and connect to screw terminals.
- Break all in-out wire runs on supervised circuits to assure integrity of circuit supervision as shown in Figure 2.
   The polarity shown in the wiring diagrams is for operation of the appliances.

#### Important Wiring Note

## [For Speaker/Strobes with Strobe being used for Sync Operation]

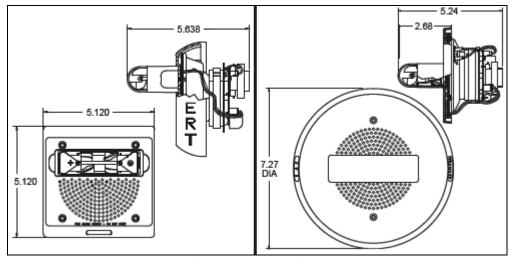
Do not connect speaker part to a source of Siemens Sync Protocol.

Strobe part must be connected to a source of Siemens Sync Protocol. The sync strobe lights must be connected to a compatible signal circuit with appropriate voltage, with a source of Siemens Sync Protocol wired electrically before the sync strobes. See the Installation Instructions provided with the source of Siemens Sync Protocol for additional wiring information for the strobe section.

#### Important Wiring Note

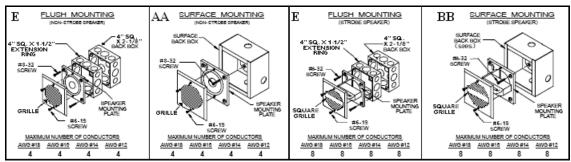
Individual wires (especially heavy gauge wire) should be bent at 90 deg before attaching to screw. Wiring should then carefully be pushed back into back box to minimize stress on the terminal blocks.

# **Mounting Diagram**



(Shown In Inches)

# **Mounting Options**



Notes: Back box is compatible with wiremold and conduit mountings.

Knockout holes are for single-gang; double-gang; four-inch-square, 3-1/2" and 4" octagon or round backboxes.

## **Technical Data**

## **SET-CMC Series: Clear Strobe, Ceiling Mount**

Current Ratings (AMPs)  MAXIMUM RMS Current						
]	Input Voltage	15cd	30cd	75cd	95cd	
DC	16.0 - 33.0VDC	0.069	0.111	0.200	0.264	
FWR	16.0 - 33.0VRMS	0.117	0.180	0.297	0.398	

## **SET-CMC Series: Clear Strobe, Wall Mount**

Current Ratings (AMPs)  MAXIMUM RMS Current						
]	nput Voltage	15cd	30cd	75cd	110cd	
DC	16.0 - 33.0VDC	0.064	0.098	0.175	0.233	
FWR	16.0 - 33.0VRMS	0.108	0.164	0.268	0.368	

### **SET-AMC Series: Amber Strobe, Ceiling Mount**

Current Ratings (AMPs)  MAXIMUM RMS Current						
Input Voltage		11cd	22cd	56cd	71cd	
DC	16.0 – 33.0VDC	0.069	0.111	0.200	0.264	
FWR	16.0 – 33.0VRMS	0.117	0.180	0.297	0.398	

#### SET-AMC Series: Amber Strobe, Wall Mount

Current Ratings (AMPs)  MAXIMUM RMS Current						
Input Voltage		11cd	22cd	56cd	82cd	
DC	16.0 - 33.0VDC	0.064	0.098	0.175	0.233	
FWR	16.0 – 33.0VRMS	0.108	0.164	0.268	0.368	

NOTE: Candela is measured on axis; Multi-Candela settings have been derated approximately 25% for Amber lens.

### **SET Series: Speakers**

Models and Ratings per ®UL464								
Model*	Operating Voltage (VRMS)	dBA at 10 Feet (Rated Watts)						
illoudi		1/8	1/4	1/2	1	2	4	8
SET	25/70	75	78	81	84	87	90	93
SET-C	25/70	75	78	81	84	87	90	93

<sup>\*</sup>Available in red and white

Speaker	Speaker Voltage & Wattage Connection Chart						
Position	25V	70V					
Α	8						
В	4						
С	2						
D	1	8					
E	1/2	4					
F	1/4	2					
G	1/8	1					
Н		1/2					
I		1/4					
J		1/8					

#### NOTES:

- 1. Models are @UL Listed for indoor / outdoor use with a temperature range of +32°F to +120°F (0°C to +49°C) and maximum humidity of 93% RH, non-condensing. The effect of shipping and storage temperatures shall not adversely affect the performance of the appliance when it is stored in the original cartons, and is not subjected to misuse or abuse.
- 2. The maximum supervision voltage is 33 Volts DC
- 3. Frequency range of speakers is 400 400Hz



 $\bigwedge$  **CAUTION**: Always operate audio amplifiers and speakers within their specified ratings.

Excessive input may distort sound quality and may damage audio equipment.

Do not exceed 100% of speaker input voltage per ®UL 1480.

Improper input voltage can damage speaker. If distortion is heard, check for clipping of the audio appliance with an oscilloscope and reduce the amplifier input level or gain level to eliminate any clipping.



**WARNING:** Candela setting will determine the current draw of the product.

# **Details for Ordering**

Model	Part Number	Description	
SET-AMC-W-MNS-ALERT	S54301-Z75-A1	MNS Amber Speaker Strobe, multi Candela:	Wall Mount, White – 'ALERT'
SET-AMC-CW-MNS-ALERT	S54301-Z76-A1	MNS Amber Speaker Strobe, multi Candela:	Ceiling Mount, White – 'ALERT'
SET-AMC-R-MNS-ALERT	S54301-Z85-A1	MNS Amber Speaker Strobe, multi Candela:	Wall Mount, Red – 'ALERT'
SET-AMC-CR-MNS-ALERT	S54301-Z86-A1	MNS Amber Speaker Strobe, multi Candela:	Ceiling Mount, Red – 'ALERT'
SET-CMC-W-MNS-ALERT	S54301-Z95-A1	MNS Clear Speaker Strobe, multi Candela:	Wall Mount, White – 'ALERT'
SET-CMC-CW-MNS-ALERT	S54301-Z96-A1	MNS Clear Speaker Strobe, multi Candela:	Ceiling Mount, White – 'ALERT'
SET-CMC-R-MNS-ALERT	S54301-Z105-A1	MNS Clear Speaker Strobe, multi Candela:	Wall Mount, Red – 'ALERT'
SET-CMC-CR-MNS-ALERT	S54301-Z106-A1	MNS Clear Speaker Strobe, multi Candela:	Ceiling Mount, Red – 'ALERT'

**Notice:** This marketing data sheet is not intended to be used for system design or installation purposes. For the most up-to-date information, refer to each product's installation instructions.

URL: www.Siemens.CA