



# E50 Series Multi-candela Speaker Strobes



- ▶ **25 VRMS or 70 VRMS operation up to 2 W**
- ▶ **Compatible with SM and DSM Synchronization Modules**
- ▶ **Easy wiring with screw terminals**
- ▶ **Mounts on standard electrical boxes**
- ▶ **Snap-on cover hides mounting screws for an attractive appearance**

The Wheelock E50 Multi-candela Speaker Strobes meet the critical needs of the life safety industry for voice and tone signaling. They have high-efficiency sound output with dual voltage (25 VRMS or 70 VRMS) capability and field-selectable taps from 0.125 W to 2 W.

They have a sleek, aesthetic appearance and are used for emergency voice or alarm communication systems. They mount directly on standard electrical boxes using a speaker mounting plate for faster installation. The cover snaps on so no mounting screws are visible. Attractive surface boxes are also available.

When used with the SM (single) or DSM (dual) synchronization modules, the strobe produces a synchronized strobe flash for compliance with ADA guidelines concerning photosensitive epilepsy. All strobe input is compatible with standard reverse polarity supervision of circuit wiring by a fire alarm control panel (FACP).

## Certifications and Approvals

Cooper Wheelock, Inc. holds these Listings and Approvals:

| Region | Certification |  |
|--------|---------------|--|
| USA    | UL            | UEAY: Speakers (UL464), UUKC: Signaling Appliances and Equipment for the Hearing Impaired (UL1971), UUMW: Speakers and Amplifiers for Fire Protective Signaling Systems (UL1480, UL1711, and UL2043) |
|        | CSFM          | 7125-0785: 165   |
|        | ADA           | Complies with Americans with Disabilities Act  |
|        | ANSI          | Complies with American National Standards Institute ANSI 117.1   |
|        | NFPA          | Complies with National Fire Protection Association NFPA 72   |
|        | OSHA          | Complies with Occupational Safety and Health Administration OSHA 29 Part 1910.165  |

## Installation/Configuration Notes

### Compatible Products

The E50 Speaker Strobes are compatible with Bosch (EVAX) Voice Evacuation Systems (25 W, 50 W, 100 W, 150 W, and 200 W amplifier systems) and the following products:

| Category       | Product ID           | Product Description               |
|----------------|----------------------|-----------------------------------|
| Control Panels | D7022 <sup>1</sup>   | Conventional FACP                 |
|                | D7024 <sup>2</sup>   | Addressable FACP                  |
|                | D7024                | Conventional FACP                 |
|                | D8024 <sup>1</sup>   | Analog FACP                       |
|                | D9124 <sup>1</sup>   | Addressable FACP                  |
| Modules        | D10024A <sup>1</sup> | Analog FACP                       |
|                | SM-12/24-R           | Synchronization module (red)      |
|                | DSM-12/24-R          | Dual synchronization module (red) |

These speakers are compatible with Wheelock SAFEPATH4 Facility Communication Systems and Bosch Voice Evacuation Systems.

<sup>1</sup> For synchronization, use the SM or DSM modules with these control panels. The synchronization module must be set for 24 V operation. When used, the D7022 must be set for 24 VDC operation.

<sup>2</sup> When used with a D7039 Multiplex Expansion Module, the D7024 becomes an addressable fire alarm control panel (FACP).

### Mounting

These speaker strobes mount on the indicated back boxes for the indicated applications:

|                                   | Conduit Applications | Surface Mounted | Flush Mounted |
|-----------------------------------|----------------------|-----------------|---------------|
| Four-inch square*<br>SBB Back Box |                      |                 | •             |

\* Standard four-inch square (2.125 in. deep) electrical box without an extension ring.

### Wiring

**Note** Do not use the strobe unit in coded or pulsed signaling circuits.

The input terminals accept wires with diameters between 18 AWG (1.2 mm) and 12 AWG (2.3 mm).

### Parts Included

| Quant. | Component       |
|--------|-----------------|
| 1      | Speaker strobe  |
| 1      | Hardware pack   |
| 1      | Literature pack |

### Technical Specifications

#### Environmental Considerations

|                          |                                |
|--------------------------|--------------------------------|
| Relative Humidity:       | Up to 85%, non-condensing      |
| Temperature (Operating): | +32°F to +120°F (0°C to +49°C) |

#### Mechanical Properties

|                                       |   |
|---------------------------------------|---|
| Candela Rating:                       | 15 cd, 30 cd, 75 cd, or 110 cd  |
| Dimensions (H x W x D) <sup>1</sup> : | 5.0 in. x 5.75 in. x 4.0 in.<br>(13.8 cm x 14.6 cm x 10.2 cm)             |
| Material:                             | Molded plastic enclosure incorporating a Xenon flash-tube and Lexan lens. |

<sup>1</sup> When used in flush-mount installations, the unit extends 2.6 in. (6.5 cm) from the mounting surface.

#### Power Requirements

##### Stroke Current (RMS)

|       |  |
|-------|--|
| VDC:  | 15 cd: 60 mA, 30 cd: 92 mA, 75 cd: 165 mA,<br>110 cd: 220 mA   |
| VFWR: | 15 cd: 102 mA, 30 cd: 155 mA, 75 cd: 253 mA,<br>110 cd: 347 mA |

##### Voltage (Input)

|          |  |
|----------|--|
| Nominal: | 24 V regulated                         |
| Range:   | 16 VDC to 33 VDC or 16 VFWR to 33 VFWR |

#### Speakers

##### dB at 10 ft (3 m) at 25 VRMS or 70 VRMS

|       |         |
|-------|---------|
| 1/8 W | 77 dB   |
| 1/4 W | 79.5 dB |
| 1/2 W | 82.5 dB |
| 1 W   | 85 dB   |
| 2 W   | 88 dB   |

**Frequency Range:** 400 Hz to 4 kHz

#### Trademarks

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### Ordering Information

|  |                     |
|--|---------------------|
| <b>E50-24MCW-FR Speaker Strobe (red)</b><br>Red, 24 VDC device with high-efficiency sound output, dual voltage capability (25 VRMS or 70 VRMS), field-selectable taps from 1/8 W to 2 W, and field-selectable strobe intensities of 15 cd, 30 cd, 75 cd, or 110 cd             | <b>E50-24MCW-FR</b> |
| <b>E50-24MCW-FW Speaker Strobe (off-white)</b><br>Off-white, 24 VDC device with high-efficiency sound output, dual voltage capability (25 VRMS or 70 VRMS), field-selectable taps from 1/8 W to 2 W, and field-selectable strobe intensities of 15 cd, 30 cd, 75 cd, or 110 cd | <b>E50-24MCW-FW</b> |
| <b>Accessories</b>   |                     |
| <b>E50SSB-R Surface Back Box (red)</b><br>17.2 cm x 12.8 cm x 4.75 cm (6.77 in. x 5.03 in. x 1.87 in.)   | <b>E50SSB-R</b>     |
| <b>E50SSB-W Surface Back Box (white)</b><br>17.2 cm x 12.8 cm x 4.75 cm (6.77 in. x 5.03 in. x 1.87 in.)   | <b>E50SSB-W</b>     |
| <b>SBB-R Surface-mount Back Box (red)</b><br>14 cm (5.5 in.) x 14.2 cm (5.6 in.) x 9.1 cm (3.6 in.)  | <b>SBB-R</b>        |
| <b>SBB-W Surface-mount Back Box (white)</b><br>14 cm (5.5 in.) x 14.2 cm (5.6 in.) x 9.1 cm (3.6 in.)  | <b>SBB-W</b>        |

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