

# Wheelock colored lens strobe appliances



## Description

Wheelock colored lens strobe notification appliances—strobes, horn strobes<sup>①</sup>, speaker strobes, and multi-tone strobes—are built with the same high quality circuits and parts used in the Wheelock life safety strobes and speakers. These are available with clear, amber or blue lenses, with other colors available through special order. The colored lens strobe products are listed under UL Standard 1638 for general signaling and the amber lenses have been tested to meet UL 1971 light distribution. These appliances are suitable for indoor applications, with specific models available for outdoor and weatherproof applications. The indoor models can be wall or ceiling mounted (model dependent) to standard electrical boxes or to Wheelock’s surface mount boxes. The outdoor models can be wall mounted to standard electrical boxes using the WFP adapter or to Wheelock’s surface mount boxes. The RSS models have an integrated strobe mounting plate that can be mounted to standard electrical boxes or to Wheelock’s surface mount boxes.

Audible strobe appliances can be field set to provide either High (HI) dBA, Medium (MED) dBA or Low (LO) dBA sound output. Speaker strobes have field-selectable input voltage of 25/70 VRMS and field selectable taps of 1/8, 1/4, 1/2, 1 and 2 watts. The E70-24MCC and E90-24MCC multi-candela provides four selectable light output intensities in one unit and incorporates a speaker mounting plate attached to the speaker for ease of installation. Weatherproof speaker strobes have field-selectable taps of 1/8, 1/4, 1/2, 1, 2, 4, and 8 watts.

All inputs are compatible with standard supervision of circuit wiring by an FACP and provide a synchronized strobe appliance when used in conjunction with Dual Sync Module (DSM) or Wheelock power supplies with patented sync protocol.

Other Wheelock signaling products can be provided with colored lens strobes; contact Customer Service for availability.

| Model type         | Intensity options  |
|--------------------|--|
| Colored lens       | Multi-candela models with four field selectable settings:<br>15/30/75/95cd |
| Amber lens         | Multi-candela models with four field selectable settings:<br>11/22/56/82cd |
| High ceiling mount | Field selectable for 115 or 177 cd   |

## Applications

The Wheelock colored lens strobe products are designed for effective alerting of employees or personnel in industrial, military or government applications. They are ideal for complying with the UFC (United Facilities Criteria) for mass notification systems and for emergency, warning or trouble notification in many industrial operations.

<sup>①</sup> Horn strobes incorporate a temporal pattern (specified by ANSI/NFPA for standard emergency evacuation signaling.) The temporal pattern should be used only for fire evacuation signaling and not for any other purpose.

**Features & benefits**

- Amber lenses have been tested to meet UL 1971 light distribution
- Choice of strobe lens colors—amber, blue, green, red (some models are by special order)
- Field-selectable candela settings of 15/30/75/95cd or high intensity models with 115/177cd settings
- Indoor 24VDC models with UL “Regulated Voltage” at 16–33 VDC using filtered DC or unfiltered FWR input voltage
- Multitone appliance
- Weatherproof models
- Compatibility with reverse polarity supervision circuits
- Strobes can be synchronized with Wheelock’s DSM sync module or power supplies
- Combination speaker/strobes available for voice messages with visual alerting
- Mount to standard electrical boxes
- High quality designs from the leader in fire notification alarms

**Note:** Please read these specifications and associated installation instructions before using, specifying, or installing this product. Visit Eaton.com/massnotification for current installation instructions.

**General notes**

- Strobes are designed to flash at 1 flash per second minimum over the Regulated Voltage Range
- Products are listed for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%)
- Weatherproof products are listed for use with a temperature range of –31°F to 150°F (–35°C to 66°C) and maximum humidity of 95% RH
- For details using the DSM sync module, refer to Data Sheet TD450081EN or Installation Instructions P83177
- For wiring information on the power supply, refer to Installation Instructions P84905 for PS-8-LP

**Drawings**

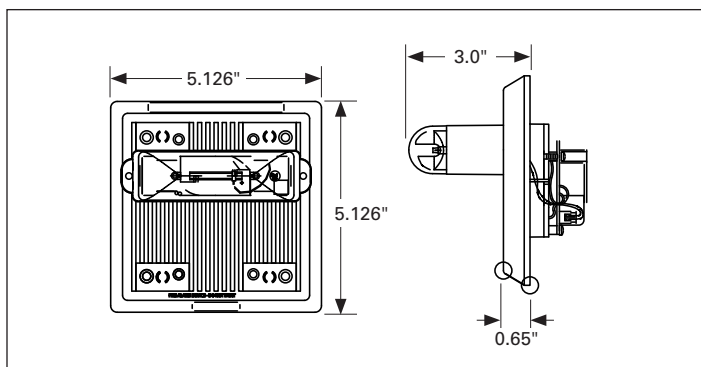


Figure 1. MTWP front and side views

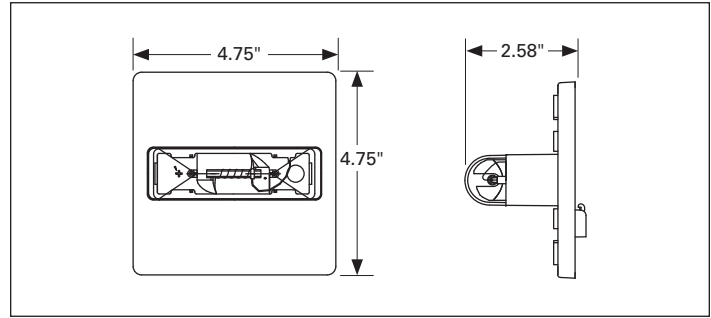


Figure 2. RSS front and side views

**Mounting options**

Table 1. Indoor mounting options

| Series  | Flush Mount                       | Surface Mount |
|---------|-----------------------------------|---------------|
| RSS     | 4" x 1-1/2", 1-gang or 2-gang box | SHBB          |
| AS      | 4" x 1-1/2", 1-gang or 2-gang box | SHBB          |
| MT      | 4" x 1-1/2", 2-gang box           | IOB           |
| E50/E60 | 4" x 2-1/8" (with extension ring) | E50SB, E50SSB |
| E70     | 4" x 2 1/8" (with extension ring) | SBB, SBB-W    |
| E90     | 4" x 2 1/8" (with extension ring) | SBB, SBB-W    |
| RSSP    | 4" x 1-1/2", 4" x 2 1/8"          | SBL-2         |

Table 2. Weatherproof appliance mounting options

| Series | Surface Mount   |                   | Flush Mount |
|--------|-----------------|-------------------|-------------|
|        | Exposed Conduit | Concealed Conduit |             |
| MT     | IOB             | IOB + WP-KIT      | WFP         |
| ET70WP | IOB             | IOB + WP-KIT      | WFP         |
| MTWP   | IOB             | IOB + WP-KIT      | WFP         |
| RSSWP  | WPSBB           | WPSBB + WP-KIT    | WFP         |

Table 3. MT-24 Sound output

|             | HI/LO Volume | MT-24 VDC dBA Sound Output<br>Anechoic Ratings at 10 feet |     |     |
|-------------|--------------|---|-----|-----|
|             |              | 20V   | 24V | 31V |
| Horn        | HI           | 97  | 99  | 100 |
|             | STD          | 91  | 93  | 94  |
| Bell        | HI           | 90  | 92  | 93  |
|             | STD          | 85  | 87  | 88  |
| March Time  | HI           | 97  | 99  | 100 |
|             | STD          | 91  | 93  | 94  |
| Code 3 Horn | HI           | 97  | 99  | 100 |
|             | STD          | 91  | 93  | 94  |
| Code 3 Tone | HI           | 93  | 95  | 96  |
|             | STD          | 88  | 90  | 91  |
| Slow Whoop  | HI           | 97  | 99  | 100 |
|             | STD          | 92  | 94  | 95  |
| Siren       | HI           | 96  | 98  | 99  |
|             | STD          | 91  | 93  | 94  |
| Hi/Lo       | HI           | 91  | 93  | 94  |
|             | STD          | 86  | 88  | 89  |

**Table 4. ASX-24MCC Sound output**

|            | Volume | ASX-24MCC dBA Sound Output<br>Anechoic Ratings at 10 feet |         |         |
|------------|--------|---|---------|---------|
|            |        | 16.0VDC   | 24.0VDC | 33.0VDC |
| Continuous | Low    | 86  | 90      | 92      |
|            | Medium | 91  | 95      | 98      |
|            | High   | 95  | 99      | 101     |
| Code 3     | Low    | 86  | 90      | 92      |
|            | Medium | 91  | 95      | 98      |
|            | High   | 95  | 99      | 101     |

**Table 5. UL max current ratings (maximum RMS current draw)**

| Model   | Voltage  | 15cd         | 30cd         | 75cd         | 95cd         | 110cd | 1575cd | 115cd | 177cd | 135cd | 185cd |
|---|----------|--------------|--------------|--------------|--------------|-------|--------|-------|-------|-------|-------|
| RSSX-24MCC<br>E70X-24MCC<br>E90X-24MCC                | 16–33VDC | 0.065        | 0.105        | 0.189        | 0.249        | –     | –      | –     | –     | –     | –     |
| ASX-24MCC   | 16–33VDC | High = 0.095 | High = 0.138 | High = 0.221 | High = 0.285 | –     | –      | –     | –     | –     | –     |
|   |          | Med = 0.080  | Med = 0.122  | Med = 0.201  | Med = 0.269  | –     | –      | –     | –     | –     | –     |
|   |          | Low = 0.074  | Low = 0.113  | Low = 0.198  | Low = 0.263  | –     | –      | –     | –     | –     | –     |
| RSSPX-24MCC   | 16–33VDC | 0.065        | 0.105        | 0.189        | 0.249        | –     | –      | –     | –     | –     | –     |
| RSSWPX-2475W<br>MTWPX-2475W                           | 16–33VDC | –            | –            | 0.138        | –            | –     | –      | –     | –     | –     | –     |
| RSSWPX-24MCCH<br>MTWPX-24MCCH                         | 16–33VDC | –            | –            | –            | –            | –     | –      | 0.300 | 0.420 | –     | –     |
| RSSX-24MCW<br>E50X-24MCW<br>E70X-24MCW<br>ET70X-24MCW | 16–33VDC | 0.060        | 0.092        | 0.165        | –            | 0.220 | –      | –     | –     | –     | –     |
| ET70X-24MCWH  | 16–33VDC | –            | –            | –            | –            | –     | –      | –     | –     | 0.300 | 0.420 |
| MTA-121575W <sup>Ⓢ</sup>                              | 8.0–17.5 | –            | –            | –            | –            | –     | 0.255  | –     | –     | –     | –     |

<sup>Ⓢ</sup> 15 Candela models provide 15cd per UL 1971 and 75cd on axis per UL 1638.

**Table 6. Sound output for E50, E70, E90, ET70, ET90**

| Model        | Voltage (VRMS) | Reverberant dBA at 10 ft. per UL 1480 (Rated Watts) |      |      |    |    |    |    |
|--------------|----------------|---|------|------|----|----|----|----|
|              |                | 1/8W  | 1/4W | 1/2W | 1W | 2W | 4W | 8W |
| E50X-24MCC   | 25/70          | 77  | 79.5 | 82.5 | 85 | 88 | –  | –  |
| E70X-24MCC   | 25/70          | 75  | 78   | 81   | 84 | 87 | –  | –  |
| E90X-24MCC   | 25/70          | 75  | 78   | 81   | 84 | 87 | –  | –  |
| ET70WPA-2475 | 25/70          | 77  | 80   | 83   | 86 | 88 | 91 | 93 |
| ET70         | 25/70          | 77  | 80   | 83   | 86 | 88 | 91 | 93 |
| ET90         | 25/70          | 77  | 80   | 83   | 86 | 88 | 91 | 93 |

Table 7. Specification and ordering information<sup>①</sup>

| Model Number                    | Order Code | Lens Color | Base Color <sup>②</sup> | Lettering Color <sup>③</sup> | Strobe Candela <sup>④</sup> | Mounting | Indoor or Weatherproof | Agency Approval |
|---------------------------------|------------|------------|-------------------------|------------------------------|-----------------------------|----------|------------------------|-----------------|
| RSSWPR-24MCCH-NW                | CN106161   | Red        | White                   | —                            | 115/177 <sup>⑤</sup>        | Ceiling  | Weatherproof           | UL              |
| RSSWPR-2475W-NR                 | CN125215   | Red        | Red                     | —                            | 30 <sup>⑤</sup>             | Wall     | Weatherproof           | UL              |
| RSSWPB-24MCCH-NW                | CN106159   | Blue       | White                   | —                            | 115/177 <sup>⑤</sup>        | Ceiling  | Weatherproof           | UL              |
| RSSWPA-24MCCH-NW                | CN106158   | Amber      | White                   | —                            | 115/177 <sup>⑤</sup>        | Ceiling  | Weatherproof           | UL              |
| RSSWPA-2475W-NW                 | CN120240   | Amber      | White                   | —                            | 30 <sup>⑤</sup>             | Wall     | Weatherproof           | UL              |
| RSSWPA-2475W-ALW                | CN125214   | Amber      | White                   | Red                          | 56                          | Wall     | Weatherproof           | UL, FM          |
| RSSWPA-2475C-ALW                | CN124800   | Amber      | White                   | Red                          | 56                          | Ceiling  | Weatherproof           | UL, FM          |
| RSSR-24MCC-NW                   | CN125917   | Red        | White                   | —                            | 15/30/75/95                 | Ceiling  | Indoor                 | UL              |
| RSSPA-24MCW-ALW                 | CN106093   | Amber      | White                   | Red                          | 15/30/75/110                | Wall     | Indoor                 | UL, FM          |
| RSSPA-24MCC-NW                  | CN103308   | Amber      | White                   | —                            | 15/30/75/95                 | Ceiling  | Indoor                 | UL              |
| RSSG-24110W-NW                  | CN120099   | Green      | White                   | —                            | 110                         | Wall     | Indoor                 | UL              |
| RSSB-24MCW-NW                   | CN122401   | Blue       | White                   | —                            | 15/30/75/110                | Wall     | Indoor                 | UL              |
| RSSB-24MCC-NW                   | CN120203   | Blue       | White                   | —                            | 15/30/75/95                 | Ceiling  | Indoor                 | UL              |
| RSSB-24MCCH-NW                  | CN106154   | Blue       | White                   | —                            | 115/177                     | Ceiling  | Indoor                 | UL              |
| RSSB-24110W-NW                  | CN120100   | Blue       | White                   | —                            | 15/30/75/110                | Wall     | Indoor                 | UL              |
| RSSA-24MCW-NW                   | CN124829   | Amber      | White                   | —                            | 15/30/75/110                | Wall     | Indoor                 | UL              |
| RSSA-24MCW-ALW                  | CN124019   | Amber      | White                   | Black                        | 15/30/75/110                | Wall     | Indoor                 | UL, FM          |
| RSSA-24MCW-ALW                  | CN102971   | Amber      | White                   | Red                          | 15/30/75/110                | Wall     | Indoor                 | UL              |
| RSSA-24MCC-NW                   | CN120202   | Amber      | White                   | —                            | 15/30/75/95                 | Wall     | Indoor                 | UL              |
| RSSA-24MCC-ALW                  | CN128013   | Amber      | White                   | Red                          | 15/30/75/95                 | Ceiling  | Indoor                 | UL              |
| MTWPR-24MCCH-NW                 | CN106174   | Red        | White                   | —                            | 115/177 <sup>⑤</sup>        | Ceiling  | Weatherproof           | UL              |
| MTWPB-24MCCH-NW                 | CN106172   | Blue       | White                   | —                            | 115/177 <sup>⑤</sup>        | Ceiling  | Weatherproof           | UL              |
| MTWPB-2475W-NW                  | CN121652   | Blue       | White                   | —                            | 30 <sup>⑤</sup>             | Wall     | Weatherproof           | UL              |
| MTWPB-2475W-NW KIT <sup>⑦</sup> | CN119085   |            |                         |                              |                             |          |                        |                 |
| MTWPA-2475W-NW                  | CN121649   | Amber      | White                   | —                            | 30 <sup>⑤</sup>             | Wall     | Weatherproof           | UL              |
| MTB-24MCW-NW                    | CN124731   | Blue       | White                   | —                            | 15/30/75/110                | Wall     | Indoor                 | UL              |
| MTB-24MCCH-NW                   | CN106168   | Blue       | White                   | —                            | 115/177                     | Ceiling  | Indoor                 | UL              |
| MTA-24MCCH-NW                   | CN106167   | Amber      | White                   | —                            | 115/177                     | Ceiling  | Indoor                 | UL              |
| ET70WPA-2475W-ALW               | CN110275   | Amber      | White                   | Red                          | 56                          | Ceiling  | Weatherproof           | UL, FM          |
| E90B-24MCC-NW                   | CN110214   | Blue       | White                   | —                            | 15/30/75/95                 | Wall     | Indoor                 | UL              |
| E90A-24MCC-ALW                  | CN115900   | Amber      | White                   | Black                        | 15/30/75/95                 | Ceiling  | Indoor                 | UL, FM          |
| E70A-24MCW-ALW                  | CN117203   | Amber      | White                   | Red                          | 15/30/75/110                | Wall     | Indoor                 | UL, FM          |
| E60A-24MCC-ALW                  | CN112967   | Amber      | White                   | Red                          | 15/30/75/95                 | Ceiling  | Indoor                 | UL              |
| E50A-24MCW-ALW                  | CN113782   | Amber      | White                   | Red                          | 15/30/75/95                 | Wall     | Indoor                 | UL              |
| ASB-24MCC-NW                    | CN106164   | Blue       | White                   | —                            | 15/30/75/95                 | Ceiling  | Indoor                 | UL              |
| ASA-24MCC-NW                    | CN106162   | Amber      | White                   | —                            | 15/30/75/95                 | Ceiling  | Indoor                 | UL              |

① The list of model numbers is not all inclusive. If you are interested in a specific model number that is not listed, please contact customer service.

② Models available with red base; may be subject to minimum quantity order.

③ Models available with no lettering; may be subject to minimum quantity order.

④ Candela ratings in the above table are per UL 1971 and are based on clear lenses. Models with 15/30/75/95 have 4 field-selectable candela settings, and models with 115/177 have 2 field-selectable candela settings. Intensity ratings are for clear lens—derate approximately 25% for amber, 55% for green, 70% for blue lenses, and 80% for red lenses.

⑤ 30 Candela weatherproof models provide 30cd per UL 1971, 75 candela on axis at -31°F and 185 candela on axis at 77°F per UL 1638.

⑥ 115/177 candela weatherproof models provide 115/177cd per UL 1971 and 50/75cd at -31°F per UL 1638 (with UL 1971 light dispersion).

⑦ MTWPB-2475W-NW KIT includes the IOB backbox.

## Architects and engineers specifications

The audible/visual notification appliances shall be Wheelock colored lens strobe products or approved equals. These appliances shall be listed under UL Standard 1638. The amber lens shall be tested to meet UL 1971 light distribution.

The strobe appliances shall produce a minimum flash rate of 60 flashes per minute (1 flash per second) over the Regulated Voltage Range of 16 to 33 VDC and shall incorporate a Xenon flash tube enclosed in a rugged lexan lens. Strobe intensity shall be 75 candela minimum or shall be field selectable for 4 intensity levels. The strobes shall operate over an extended temperature range of 32°F to 120°F (0°C to 49°C) and shall be listed for maximum humidity of 93%RH. Weatherproof strobe appliances shall operate over an extended temperature range of -31°F to +150°F (-35°C to +66°C) and maximum humidity of 95% RH.

Horn strobes shall be able to produce a continuous output or a temporal code-3 output that can be synchronized. The horns shall have 3 sound level settings of 90, 95, and 99 dBA

Speaker strobes shall be able to have field selectable input voltage of 25/70 VRMS and field-selectable taps of 1/8, 1/4, 1/2, 1 and 2 watts. Weatherproof speakers shall have field-selectable taps of 1/8, 1/4, 1/2, 1, 2, 4, and 8 watts.

Speaker strobes shall be capable of supervision through industry standard technique of reverse polarity voltage to ensure wiring integrity of the circuits.

When synchronization of strobes or temporal Code 3 audibles is required, the appliances shall be compatible with Wheelock DSM sync module or the Wheelock PS power supplies with built-in patented sync protocol. The strobes shall not drift out of synchronization at any time during operation. Audibles and strobes shall be able to be synchronized on a 2-wire circuit with the capability to silence the audible if required. If the sync module or power supply fails to operate (i.e., contacts remain closed), the strobes shall revert to a non-synchronized flash rate.



WE ENCOURAGE AND SUPPORT NICET CERTIFICATION  
3-YEAR WARRANTY

**Note:** Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock, Inc. dba Eaton standard terms and conditions.

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