

MTWP Weatherproof Multitone Electronic Appliances

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- ▶ Field-selectable choice of eight nationally and internationally recognized alerting signals
- ▶ Two installer-selectable sound output levels
- ▶ Strobe rated at 75 cd at -31°F (-35°C) and 180 cd at +77°F (+25°C)
- ▶ NFPA and ANSI compliant
- ▶ UL Listed for indoor or outdoor use

The Wheelock MTWP Weatherproof Appliances are four-wire appliances listed for indoor or outdoor use. They provide eight tone patterns, two sound output levels, and a strobe rated at 75 cd at -31°F (-35°C) and 180 cd at +77°F (+25°C). The temporal (Code 3) horn and tone patterns meet ANSI/NFPA/ISO requirements for standard emergency evacuation signaling. The extended temperature range satisfies all severe-weather outdoor applications. The strobe portion can be synchronized using the SM (single) or DSM (dual) Synchronization modules or a compatible control panel. The audible portion cannot be synchronized, but it can be connected to a coded fire alarm system.

Notice
These products are **not** suitable for hearing-impaired applications.

Certifications and approvals

Cooper Wheelock, Inc. holds these Listings and Approvals:

| Region | Certification | |
|--------|---------------|---|
| USA | UL | ULSZ: Audible-signal Appliances (ANSI/UL 464) and UVAV: Visual-signal Appliances for Fire-protective Signaling Systems (ANSI/UL 1638) |
| | CSFM | see our website |

Installation/configuration notes

Compatible Products

The following products are compatible with the MTWP Weatherproof Electronic Appliances:

| Category | Product ID | Product Description |
|----------------|----------------------|---------------------|
| Control Panels | D7022 ¹ | Conventional FACP |
| | D7024 ² | Addressable FACP |
| | D7024 | Conventional FACP |
| | D8024 ¹ | Analog FACP |
| | D9124 ¹ | Addressable FACP |
| | D10024A ¹ | Analog FACP |

| | | |
|---------|-----------------------|-----------------------------------|
| | FPD-7024 ² | Addressable FACP |
| | FPD-7024 | Conventional FACP |
| | FPA-1000 | Analog Addressable FACP |
| Modules | SM-12/24-R | Synchronization module (red) |
| | DSM-12/24-R | Dual synchronization module (red) |

¹ 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.

² When used with a D7039 Multiplex Expansion Module, the FPD-7024 and D7024 become addressable fire alarm control panels (FACPs).

Mounting Considerations Outdoor or Severe Environment Applications

Notice

Mount the 2475C models only on flat ceilings and mount the 2475W models only on flat walls.

For an outdoor application or a severe environment (NEMA 3R) application, mount these multitone appliances with an IOB Indoor or Outdoor Back Box on a flat wall or ceiling so the entire rear surface of the back box is covered. The drain holes in the back box must point toward the ground. The knockouts on the rear surface of the back box must remain intact. The knockout hole on top of the back box is sized for a half-inch conduit and matching connector. Use a proper watertight conduit fitting.

Indoor Applications

For inside applications, mount these multitone appliances on the indicated back boxes for the indicated applications:

| | Conduit Applications | Surface Mounted | Semi-Flush or Flush Mount |
|------------------|----------------------|-----------------|---------------------------|
| Double-gang | | • | •* |
| Four-inch square | | • | •* |
| DBB | | • | •* |
| IOB | • | • | |
| SBB | | • | • |

* For semi-flush applications use an ISP2 Surface Adapter.

All models have an attractive cover plate for a clean, finished appearance.

Indoor Retrofit Applications

Where an oversize electrical box is already installed, these multitone appliances can be installed with the RP-R Retrofit Plate that measures 8 in. (20.3 cm) high by 5.875 in. (14.9 cm) wide.

Wiring



Notice

These strobe units are not recommended for use in coded or pulsed signaling circuits.

The input terminals accept wires with diameters between 18 AWG and 12 AWG (ISO 0.75 mm² and 4 mm²).

Parts included

| Quant. | Component |
|--------|-----------------------------------|
| 1 | Weatherproof electronic appliance |
| 1 | Cover plate |
| 1 | Hardware pack |
| 1 | Literature pack |

Technical specifications

Audible Alarm Patterns and Ratings

Horn (continuous)

| | |
|-------------------------------|---|
| Current (maximum) at 24 V: | High output: 108 mA VDC, 87 mA FWR Standard output: 44 mA VDC, 45 mA FWR |
| Pattern Description: | Broadband continuous horn |
| Sound output* at 10 ft (3 m): | High output: 92 dBA Standard output: 87 dBA |

Bell

| | |
|-------------------------------|---|
| Current (maximum) at 24 V: | High output: 53 mA VDC and 51 mA FWR Standard output: 24 mA VDC, 28 mA FWR |
| Pattern Description: | 1560 Hz modulated (0.7 sec on, repeat) |
| Sound output* at 10 ft (3 m): | High output: 86 dBA Standard output: 80 dBA |

Horn (march-time)

| | |
|-------------------------------|---|
| Current (maximum) at 24 V: | High output: 104 mA VDC, 87 mA FWR Standard output: 38 mA VDC, 45 mA FWR |
| Pattern Description: | Horn (0.25 sec on, 0.25 sec off, repeat) |
| Sound output* at 10 ft (3 m): | High output: 89 dBA Standard output: 84 dBA |

Horn (Code 3)

| | |
|-------------------------------|--|
| Current (maximum) at 24 V: | High output: 91 mA VDC, 87 mA FWR Standard output: 35 mA VDC, 45 mA FWR |
| Pattern Description: | Horn (ANSI S3.41 temporal pattern) |
| Sound output* at 10 ft (3 m): | High output: 88 dBA Standard output: 83 dBA |

Tone (Code 3)

| | |
|----------------------------|--|
| Current (maximum) at 24 V: | High output: 75 mA VDC, 60 mA FWR Standard output: 35 mA VDC, 36 mA FWR |
| Pattern Description: | 500 Hz (ANSI S3.41 temporal pattern) |

| | |
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| Sound output* at 10 ft (3 m): | High output: 85 dBA Standard output: 80 dBA |
|-------------------------------|--|

Slow Whoop:

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|-------------------------------|--|
| Current (maximum) at 24 V: | High output: 98 mA VDC, 92 mA FWR Standard output: 37 mA VDC, 42 mA FWR |
| Pattern Description: | 500 Hz to 1200 Hz sweep (4 sec on, 0.5 sec off, repeat) |
| Sound output* at 10 ft (3 m): | High output: 90 Standard output: 85 dBA |

Siren

| | |
|-------------------------------|---|
| Current (maximum) at 24 V: | High output: 104 mA VDC, 92 mA FWR Standard output: 36 mA VDC, 40 mA FWR |
| Pattern Description: | 600 Hz to 1200 Hz sweep (1.0 sec on, repeat) |
| Sound output* at 10 ft (3 m): | High output: 89 dBA Standard output: 84 dBA |

High-Low

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|-------------------------------|--|
| Current (maximum) at 24 V: | High output: 57 mA VDC; 58 mA FWR Standard output: 26 mA VDC, 32 mA FWR |
| Pattern Description: | 1000 Hz and 800 Hz (0.25 sec on, alternate) |
| Sound output* at 10 ft (3 m): | High output: 86 dBA Standard output: 81 dBA |

* Sound output is a minimum UL rating based on sound power measurements in a reverberant test room per UL464 and applies to both 12 V and 24 V filtered or unfiltered input voltages.

**Notice**

The sound output for the Temporal Code 3 mode is rated lower than in Continuous mode because the time that the horn is off is averaged into the sound output rating. While the horn is producing a tone in Temporal Code 3 mode, its sound pressure is the same as the Continuous mode.

Electrical**Current (maximum) strobe only at 75 cd**

| | |
|-------|--------|
| VDC: | 138 mA |
| VFWR: | 222 mA |

Voltage (input)

| | |
|----------|------------------------------------|
| Nominal: | 24 VDC or FWR |
| Range: | 16.0 VDC or FWR to 33.0 VDC or FWR |

Environmental

| | |
|--------------------------|----------------------------------|
| Relative Humidity: | Up to 95%, non-condensing |
| Temperature (Operating): | -31°F to +150°F (-35°C to +66°C) |

Mechanical

| | |
|-------------------------|--|
| Dimensions (H x W x D): | 5-1/8 in. x 5-1/8 in. x 4-3/8 in. (13 cm x 13 cm x 11.1 cm) |
| Material: | High-impact thermoplastic |

Strobe Rating (on axis)¹:

| | |
|-------------------|--------|
| At -31°F (-35°C): | 75 cd |
| At +77°F (+25°C): | 180 cd |

¹ Strobe Ratings (on axis) are per UL 1971 and are for clear lenses; derate approximately 25% for amber lens and 70% for blue lens.

Ordering information**MTWP-2475W-FR Wall-mount Weatherproof Multitone Electronic Appliance (red)**

Red, 24 VDC wall-mount, four-wire device with eight tone patterns, two sound output levels, and a strobe rated at 75 cd at -31°F (-35°C) and 180 cd at +77°F (+25°C)

Order number **MTWP-2475W-FR**

MTWP-2475C-FR Weatherproof Ceiling-mount Multitone Electronic Appliance (red)

Red, 24 VDC ceiling-mount, four-wire device with eight tone patterns, two sound output levels, and a strobe rated at 75 cd at -31°F (-35°C) and 180 cd at +77°F (+25°C)

Order number **MTWP-2475C-FR**

MTWPA-2475W-NW Weatherproof Strobe with Amber Lens

The MTWPA-2475W-NW is a 24 VDC nominal, 30 cd weatherproof strobe with an amber lens. Use the Wheelock DSM-12/24 Synch Module to synchronize these strobes. Use the Wheelock IOB Back Box with exposed conduit to surface-mount the strobe to an outside wall.

Order number **MTWPA-2475W-NW**

MTWPB-2475W-NW Weatherproof Strobe with Blue Lens

The MTWPB-2475W-NW is a 24 VDC nominal, 30 cd weatherproof strobe with a blue lens. Use the Wheelock DSM-12/24 Synch Module to synchronize these strobes. Use the Wheelock IOB Back Box with exposed conduit to surface-mount the strobe to an outside wall.

Order number **MTWPB-2475W-NW**

Accessories**DSM-12/24-R Dual Synchronization Module (red)**

A 12/24 VDC Cooper Wheelock module that synchronizes notification appliances on a single Class A or two Class B circuits.

Order number **DSM-12/24-R**

DBB-R Steel Back Box (red)

8.6 cm (3.375 in.) square, 5.6 cm (2.1875 in.) deep
Order number **DBB-R**

IOB-R Indoor or Outdoor Back Box (red)

13.3 cm (5.25 in.) square, 6.7 cm (2.625 in.) deep
Order number **IOB-R**

ISP2-R Surface Adapter (red)

13.3 cm (5.25 in.) square, 3 cm (1.1875 in.) deep
Order number **ISP2-R**

ISP2-W Surface Adapter (white)

13.3 cm (5.25 in.) square, 3 cm (1.1875 in.) deep
Order number **ISP2-W**

RP-R Retrofit Plate (red)

20.3 cm (8 in.) high, 14.9 cm (5.875 in.) wide.
Not Available.
Order number **RP-R**

SBB-R Surface-mount Back Box (red)

14 cm (5.5 in.) x 14.2 cm (5.6 in.) x 9.1 cm (3.6 in.)
Order number **SBB-R**

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