

MT Multi-candela Multitone Electronic Appliances

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Invented for life



- ▶ Field-selectable choice of eight nationally and internationally recognized alerting signals
- ▶ Two installer-selectable sound output levels
- ▶ Strobe selections of 15 cd, 30 cd, 75 cd, or 110 cd
- ▶ ADA, NFPA, and ANSI compliant
- ▶ Low average current draw

The Wheelock MT Multi-candela Electronic Appliances are audible and visual alarm-indicating devices engineered to comply with temporal pattern specifications without requiring an additional code mechanism. They have a selection of eight tone patterns, two sound output levels, and four light intensities (15 cd, 30 cd, 75 cd, or 110 cd). 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 option to silence the audible signal allows emergency personnel to communicate while maintaining the visual alarm condition, a requirement in some jurisdictions.

Certifications and approvals

Cooper Wheelock, Inc. holds these Listings and Approvals:

Region	Certification	
USA	UL	UCST: Audible Signal Appliances, General Signal (UL464), ULSZ: Audible Signal Appliances (UL464), UUKC: Signaling Appliances and Equipment for the Hearing Impaired (UL1971)
	CSFM	see our website

Installation/configuration notes

Compatible Products

The following products are compatible with the MT Multi-Candela 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

	FPA-1000	Analog Addressable FACPs
	FPD-7024 ²	Addressable FACP
	FPD-7024	Conventional 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 D7024 and FPD-7024 become addressable fire alarm control panels (FACPs).

Mounting Considerations

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.

Retrofit Applications

Where an oversize electrical box is already installed, the MT Series 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	Electronic appliance
1	Hardware pack
1	Literature pack

Technical specifications

Electrical

Current (maximum) strobe only

• VDC	15 cd: 60 mA; 30 cd: 92 mA; 75 cd: 165 mA; 110 cd: 220 mA
• VFWR	15 cd: 102 mA; 30 cd: 155 mA; 75 cd: 253 mA; 110 cd: 347 mA

Voltage (input)

• Nominal	24 VDC or FWR
• Range	16.0 V to 33.0 V

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):	5.125 in. x 5.125 in. x 4.125 in. (13 cm x 13 cm x 10.5 cm)
Material:	High-impact thermoplastic

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
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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
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Slow Whoop:

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

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

Current (maximum) at 24 V:	High output: 57 mA VDC; 58 mA FWR Standard output: 26 mA VDC, 32 mA FWR
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Pattern Description:	1000 Hz and 800 Hz (0.25 sec on, alternate)
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Sound output* at 10 ft (3 m):	High output: 86 dBA Standard output: 81 dBA
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* Sound output is a minimum UL rating based on sound power measurements in a reverberant test room per UL464.

**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.

Ordering information**MT-24MCW-FR 24 VDC, Multi-candela Multitone Electronic Appliance (red)**

Red, 24 VDC audible and visual alarm-indicating device has eight tone patterns, two sound output levels, four light intensities (15, 30, 75, or 110 cd), and an extended temperature range for severe weather outdoor applications.

Order number **MT-24MCW-FR**

MT-24MCW-FW 24 VDC Multi-candela Multitone Electronic Appliance (white)

White, 24 VDC audible and visual alarm indicating device has eight tone patterns, two sound output levels, four light intensities (15, 30, 75, or 110 cd), and an extended temperature range for severe weather outdoor applications

Order number **MT-24MCW-FW**

Accessories**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**

SBB-W Surface-mount Back Box (white)

14 cm (5.5 in.) x 14.2 cm (5.6 in.) x 9.1 cm (3.6 in.)

Order number **SBB-W**

SFP-R Semi-flush Plate (red)

15.2 cm (6 in.) square by 0.8 cm (0.3125 in.) thick

Order number **SFP-R**

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