

# MT Fixed-candela Multitone Electronic Appliances

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- ▶ Field-selectable choice of eight nationally and internationally recognized alerting signals
- ▶ Two install-selectable sound output levels
- ▶ Strobe listed at 15 cd provides 75 cd on axis
- ▶ ADA, NFPA, and ANSI compliant
- ▶ Low average current draw

The Wheelock MT Fixed-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 a strobe listed at 15 cd that provides 75 cd of light intensity on axis. 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	ULSZ: Audible Signal Appliances (UL464), UUKC: Signaling Appliances and Equipment for the Hearing Impaired (UL1971) (-FR models only)
	CSFM	see our website

## Installation/configuration notes

### Compatible Products

The following products are compatible with the MT Fixed-candela Electronic Appliances:

Category	Product ID	Product Description
Control Panels	Compatible with all Bosch G Series, 6000 Series, 2000 Series, DS7400Xi and DS7400XiV4, DS7080iP-32, DS7200 Series, and DS7060 Series Control Panels <sup>1</sup>	
	D7022 <sup>2</sup>	Conventional FACP
	D7024 <sup>3</sup>	Addressable FACP
	D7024	Conventional FACP
	D8024 <sup>4</sup>	Analog FACP

	D9124 <sup>4</sup>	Addressable FACP
	D10024A <sup>4</sup>	Analog FACP
	FPD-7024 <sup>3</sup>	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)

<sup>1</sup> For synchronization, use the SM or DSM modules with these control panels and set the synchronization module for 12 VDC operation. Use the MT-121575W appliances.

<sup>2</sup> The D7022 can be used in either 12 VDC or 24 VDC mode, but the synchronization module must be set for the same operating voltage as the control panel. Use the appliances with the same voltage as the control panel setting.

<sup>3</sup> When used with a D7039 Multiplex Expansion Module, the FPD-7024 and D7024 become addressable fire alarm control panels (FACPs).

<sup>4</sup> For synchronization, use the SM or DSM modules with these control panels and set synchronization module for 24 VDC operation. Use the MT-241575W appliances.

### 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, 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 mm<sup>2</sup> to 4 mm<sup>2</sup>).

### Parts included

Quant.	Component
1	Electronic appliance
1	Hardware pack
1	Literature pack

### Technical specifications

#### Audible Alarm Patterns and Ratings

##### Horn (continuous)

Current (maximum) at 12 V:	High output: 176 mA VDC, 172 mA FWR Standard output: 34 mA VDC, 39 mA FWR
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 12 V:	High output: 95 mA VDC, 98 mA FWR Standard output: 20 mA VDC, 23 mA FWR
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 12 V:	High output: 142 mA VDC, 172 mA FWR Standard output: 34 mA VDC, 39 mA FWR
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 12 V:	High output: 142 mA VDC, 172 mA FWR Standard output: 34 mA VDC, 39 mA FWR
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 12 V:	High output: 105 mA VDC, 103 mA FWR Standard output: 21 mA VDC, 23 mA FWR
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)
Sound output* at 10 ft (3 m):	High output: 85 dBA Standard output: 80 dBA

**Slow Whoop:**

Current (maximum) at 12 V:	High output: 142 mA VDC and FWR Standard output: 35 mA VDC, 38 mA FWR
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 dBA Standard output: 85 dBA

**Siren**

Current (maximum) at 12 V:	High output: 152 mA VDC, 153 mA FWR Standard output: 30 mA VDC, 34 mA FWR
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**

Current (maximum) at 12 V:	High output: 114 mA VDC, 116 mA FWR Standard output: 26 mA VDC, 29 mA FWR
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**

VDC:	90 mA
VFWR:	145 mA

**Voltage (input)**

Nominal:	12 VDC or FWR or 24 VDC or FWR
Range:	12 V: 8.0 V to 17.5 V 24 V: 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 2.0 in. (13 cm x 13 cm x 5.1 cm)
Material:	High-impact thermoplastic

**Ordering information****MT-121575W-FR 12 VDC, 15/75 cd Multitone Electronic Appliance (red)**

Red, 12 VDC audible and visual alarm-indicating device with eight tone patterns, two sound output levels, and a strobe listed at 15 cd that provides 75 cd of light intensity on axis

Order number **MT-121575W-FR**

**MT-121575W-NW 12 VDC, 15/75 cd Multitone Electronic Appliance (white, no lettering)**

White (no lettering), 12 VDC audible and visual alarm-indicating device with eight tone patterns, two sound output levels, and a strobe listed at 15 cd that provides 75 cd of light intensity on axis

Order number **MT-121575W-NW**

**MT-241575W-FR 24 VDC, 15/75 cd Multitone Electronic Appliance (red)**

Red, 24 VDC audible and visual alarm-indicating device with eight tone patterns, two sound output levels, and a strobe listed at 15 cd that provides 75 cd of light intensity on axis

Order number **MT-241575W-FR**

**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**

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**RP-R Retrofit Plate (red)**

20.3 cm (8 in.) high, 14.9 cm (5.875 in.) wide

Order number **RP-R**

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**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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**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**

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**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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