

# W-HSxC Ceiling-mount Multi-candela Horn Strobes

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Invented for life



- ▶ Sleek modern aesthetics
- ▶ Multiple voltages (12 VDC or 24 VDC)
- ▶ Voltage test points
- ▶ Eight strobe candela options and three horn volume options
- ▶ Universal mounting base

The Cooper Wheelock Exceder Series Horn Strobes feature a sleek modern design that incorporates high reliability and high-efficiency optics to minimize current draw. The reduced current draw allows for a greater number of devices on the two-wire notification appliance circuit. This, in combination with eight candela options in one appliance, no tools needed for changing settings, voltage test points, 12 V or 24 V DC operation, the universal mounting base, and multiple mounting options results in a reduced cost of ownership.

These horn strobes provide eight candela settings and three sound settings on each appliance. All the switches to change these settings can be set without a tool and are located behind the appliance to prevent tampering.

The separate universal mounting base can be easily mounted to five industry-standard back box types. They can also be pre-wired to allow full testing of the circuit wiring before the appliance is installed and the surface finished. These wall-mounting horn strobes also feature voltage test points for taking readings with a volt meter for troubleshooting or AHJ inspection.

## Certifications and approvals

Cooper Wheelock holds these Listings and Approvals:

Region	Certification	
USA	UL	ULSZ: Audible-signal Appliances (ANSI/UL 464), UUKC: Signaling Appliances and Equipment for the Hearing Impaired (ANSI/UL 1971)
	FM	see the FM Approval Guide
	CSFM	see our website
Canada	ULC	Visual and Visual-audible Signal Appliances, Fire Alarm (CAN/ULC-S525, CAN/ULC-S541, CAN/ULC-S526, ULC-S527), ULSZC: Audible Signal Appliances and Accessories, Fire Alarm (CAN/ULC-S525, ULC-S527)

## Installation/configuration notes

### Compatibility

#### Horn:

These horns provide a selectable Continuous or Code 3 horn tone when connected directly to the Fire Alarm Control Panel (FACP). They can also provide a

synchronized Code 3 Horn tone when used in conjunction with an FACP that incorporates the Cooper Notification sync protocol, a Cooper Notification Sync Module, or the Cooper Notification Power Supply. The Horn Appliances can be field set for High (HI), Medium (MED), or Low (LO) dBA sound output.

**Strobe:**

These strobes provide a non-synchronized strobe appliance when connected directly to a Fire Alarm Control Panel (FACP), or provide a synchronized strobe appliance when used in conjunction with an FACP that incorporates the Cooper Notification sync protocol, a Cooper Notification Sync Module, or the Cooper Notification Power Supply. They are designed to flash at 1 flash per second minimum over their Regulated Voltage Range.



**Notice**

Strobes are not designed to be used on coded systems in which the applied voltage is cycled on and off.

**Compatible Products**

The following Bosch Security Systems, Inc. products are compatible with the Cooper Wheelock Exceder Series Horn Strobes:

Category	Product ID	Product Description
Control Panels	FPA-1000 <sup>1</sup>	Analog Addressable Fire Panels
	FPD-7024 <sup>1</sup>	Conventional or Addressable <sup>2</sup> FACP
	D10024A <sup>3</sup>	Analog FACP
	D8024 <sup>3</sup>	Analog FACP
	D9124 <sup>3</sup>	Addressable FACP
	D7024 <sup>3</sup>	Conventional or Addressable <sup>2</sup> FACP
Modules	SM-12/24-R	Synchronization module (red)
	DSM-12/24-R	Dual synchronization module (red)
Power Supplies	FPP-RNAC-8A-4C <sup>1</sup>	Remote Notification Appliance Circuit (RNAC) Power Supply
	PS-24-8MC <sup>1</sup>	Power supply with built-in synchronization protocol

<sup>1</sup> These products have built-in Cooper Notification synch protocol.

<sup>2</sup> When used with a D7039 Multiplex Expansion Module, the FPD-7024 and the D7024 become addressable FACPs.

<sup>3</sup> For synchronization, use the SM or DSM modules with these control panels.

**Mounting Considerations**

The Universal Mounting Base supplied with each horn strobe can be pre-wired. With the supplied Contact Cover in place, the pre-wired circuit can be checked for continuity before the horn strobes are mounted. The horn strobes snap onto the pre-installed Universal Mounting Bases with the Contact Covers removed and can be secured to the base with an optional securing screw. The Universal Mounting Base flush mounts on single-gang, double-gang, 4 in. square, 4 in. octal, 3.5 in. octal, and 100 mm European-type back boxes.

**Wiring Considerations**

The wiring terminals on the Universal Mounting Base accept two appliance wires with diameters between 12 AWG and 18 AWG (ISO 4 mm<sup>2</sup> and 0.75 mm<sup>2</sup>) at each terminal.

**Parts included**

Quant.	Component
1	Horn Strobe appliance
1	Universal mounting base
1	Contact cover
1	Hardware pack <ul style="list-style-type: none"> <li>• Two pan head mounting screws</li> <li>• One securing screw</li> </ul>
1	Literature – Installation Instructions

**Technical specifications**

**Electrical**

**Horn and Strobe Current Draw<sup>4</sup>**

**24 V nominal (16.0 V to 33.0 V range)**

Voltage Type	Volume Setting	Current Draw
DC:	High:	15 cd: 82 mA, 30 cd: 102 mA, 60 cd: 141 mA, 75 cd: 148 mA, 95 cd: 176 mA, 115 cd: 197 mA, 150 cd: 242 mA, 177 cd: 282 mA
	Medium:	15 cd: 73 mA, 30 cd: 87 mA, 60 cd: 128 mA, 75 cd: 139 mA, 95 cd: 163 mA, 115 cd: 186 mA, 150 cd: 230 mA, 177 cd: 272 mA
	Low:	15 cd: 65 mA, 30 cd: 84 mA, 60 cd: 120 mA, 75 cd: 136 mA, 95 cd: 157 mA, 115 cd: 184 mA, 150 cd: 226 mA, 177 cd: 267 mA

FWR:	High:	15 cd: 131 mA, 30 cd: 138 mA, 60 cd: 220 mA, 75 cd: 216 mA, 95 cd: 258 mA, 115 cd: 289 mA, 150 cd: 357 mA, 177 cd: 384 mA
	Medium:	15 cd: 112 mA, 30 cd: 126 mA, 60 cd: 202 mA, 75 cd: 201 mA, 95 cd: 247 mA, 115 cd: 272 mA, 150 cd: 340 mA, 177 cd: 378 mA
	Low:	15 cd: 106 mA, 30 cd: 120 mA, 60 cd: 186 mA, 75 cd: 196 mA, 95 cd: 235 mA, 115 cd: 265 mA, 150 cd: 331 mA, 177 cd: 375 mA

**12 V nominal (8.0 V to 17.5 V range)**

Voltage Type	Volume Setting	Current Draw
DC:	High:	15 cd: 125 mA
	Medium:	15 cd: 122 mA
	Low:	15 cd: 120 mA

**Voltage (input)**

Regulated	Range
12 VDC	8.0 V to 17.5 V
24 VDC or Vrms	16.0 V to 33.0 V

<sup>4</sup> Current Draw is the same for the Continuous Horn and Code 3 Horn Settings.

**Environmental**

Environment:	Indoor, dry
Relative Humidity:	93±2% maximum, non-condensing
Temperature (operating):	+32°F to +120°F (0°C to +49°C)

**Mechanical**

Candela Ratings <sup>3</sup> :	15 cd, , 30 cd, 60 cd, 75 cd, 95 cd, 115 cd, 150 cd, or 177 cd
Dimensions:	6.68 in. diameter x 2.63 in. depth (170 mm diameter x 67 mm depth)
Material:	Molded plastic enclosure incorporating a Xenon flashtube and Lexan lens.
Volume Settings:	90 db, 95 db, or 99 db

<sup>3</sup> When set for 12 V operation, strobe devices are only approved by UL to be set at 15cd and only to be powered by DC not FWR.

**Audible Patterns and Ratings**

Pattern	Volume Setting	Sound Output <sup>1</sup>		
		8.0V	12.0V	17.5V

Continuous:	High:	83 dBa	88 dBa	91 dBa
	Medium :	79 dBa	82 dBa	86 dBa
	Low:	72 dBa	76 dBa	79 dBa
Code 3 <sup>2</sup> :	High:	80 dBa	84 dBa	86 dBa
	Medium	74 dBa	78 dBa	81 dBa
	Low:	67 dBa	71 dBa	74 dBa
		<b>16.0V</b>	<b>24.0V</b>	<b>30.0V</b>
Continuous:	High:	91 dBa	93 dBa	96 dBa
	Medium :	86 dBa	89 dBa	92 dBa
	Low:	78 dBa	82 dBa	85 dBa
Code 3 <sup>2</sup> :	High:	86 dBa	89 dBa	91 dBa
	Medium	81 dBa	85 dBa	84 dBa
	Low:	74 dBa	78 dBa	80 dBa

<sup>1</sup> Sound output is a minimum UL rating based on sound power measurements at a distance of 10 ft (3 m) in a reverberant test room per UL464.

<sup>2</sup> The Code 3 temporal pattern (1/2 second on, 1/2 second off, 1/2 second on, 1/2 second off, 1/2 second on, 1-1/2 second off and repeat) is specified by ANSI and NFPA 72 for standard emergency evacuation signaling.



**Notice**

The Code 3 temporal pattern should be used only for fire evacuation signaling and not for any other purpose.

**Trademarks**

All hardware and software product names used in this document are likely to be registered trademarks and must be treated accordingly.

**Ordering information**

**W-HSRC Ceiling-mount Multi-candela Horn Strobe (two-wire, 12/24 V, red)**

Circular red two-wire horn strobe that is field-selectable for three volume options and eight candela options.  
Order number **W-HSRC**

**W-HSWC Ceiling-mount Multi-candela Horn Strobe (two-wire, 12/24 V, white)**

Circular white two-wire horn strobe that is field-selectable for three volume options and eight candela options.  
Order number **W-HSWC**

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**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**

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**SM-12/24-R Single Synchronization Module (red)**

A 12/24 VDC Cooper Wheelock module that synchronizes notification appliances on Class B alarm circuits.

**Not Available.**

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

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