

W-HN Wall-mount Horns



- ▶ Sleek modern aesthetics
- ▶ Multiple voltages (12 VDC or 24 VDC)
- ▶ Voltage test points
- ▶ Three horn volume options
- ▶ Universal mounting base

The Cooper Wheelock Exceder Series Horns feature a sleek modern design that incorporates high reliability 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 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 horns provide 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 horns also feature voltage test points for taking readings with a volt meter for troubleshooting or AHJ inspection.

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.

Compatible Products

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

Category	Product ID	Product Description
Control Panels	AVENAR panel 8000	Addressable Fire Panels
	AVENAR panel 2000	Addressable Fire Panels
	FPA-5000	Addressable Fire Panels
	FPA-1200	Addressable Fire Panels
	FPA-1000 ¹	Analog Addressable Fire Panels
	FPD-7024 ¹	Conventional or Addressable ² FACP

Regulatory information

Region	Regulatory compliance/quality marks	
USA	CSFM	California State Fire Marshal
	FM	see the FM Approval Guide
	UL	ULSZ: Audible-signal Appliances (ANSI/UL 464)
Canada	ULC	ULSZC: Audible Signal Appliances and Accessories, Fire Alarm (CAN/ULC-S525, ULC-S527)

	D10024A ³	Analog FACP
	D8024 ³	Analog FACP
	D9124 ³	Addressable FACP
	D7024 ³	Conventional or Addressable ² FACP
	D7022 ³	Conventional FACP
Modules	SM-12/24-R	Synchronization module (red)
	DSM-12/24-R	Dual synchronization module (red)
Power Supplies	FPP-RNAC-8A-4C ¹	Remote Notification Appliance Circuit (RNAC) Power Supply
	PS-24-8MC ¹	Power supply with built-in synchronization protocol

¹ These products have built-in Cooper Notification synch protocol.

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

³ For synchronization, use the SM or DSM modules with these control panels.

Mounting Considerations

The Universal Mounting Base supplied with each horn can be pre-wired. With the supplied Contact Cover in place, the pre-wired circuit can be checked for continuity before the horns are mounted. The horns 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 mm² and 0.75 mm²) at each terminal.

Technical specifications

Electrical

Horn Current Draw ³			
Voltage Type	Volume Setting	8.0 V to 17.5 V	16.0 V to 33.0 V
DC:	High:	47 mA	64 mA
	Medium:	26 mA	44 mA

	Low:	17 mA	22 ma
FWR:	High:	73 mA	86 mA
	Medium:	48 mA	74 mA
	Low:	36 mA	54 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

³ 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

Dimensions:	5.24 in. x 4.58 in. x 1.6 in. (133.1 mm x 116.4 mm x 40.7 mm)
Material:	Molded plastic enclosure
Volume Settings:	90 db, 95 db, or 99 db

Audible Patterns and Ratings

Pattern	Volume Setting	Sound Output ¹		
		8.0 V	12.0 V	17.5 V
Continuous:	High:	83 dBa	88 dBa	91 dBa
	Medium:	79 dBa	82 dBa	86 dBa
	Low:	72 dBa	76 dBa	79 dBa
Code 3 ² :	High:	80 dBa	84 dBa	86 dBa
	Medium:	74 dBa	78 dBa	82 dBa
	Low:	68 dBa	72 dBa	76 dBa
		16.0 V	24.0 V	30.0 V
Continuous:	High:	91 dBa	93 dBa	96 dBa
	Medium:	86 dBa	89 dBa	92 dBa

	Low:	78 dBa	82 dBa	85 dBa
Code 3 ² :	High:	86 dBa	89 dBa	91 dBa
	Medium	81 dBa	85 dBa	84 dBa
	Low:	74 dBa	78 dBa	80 dBa

¹ 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.

² 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.

i 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-HNR Wall horn, 2-wire, 12/24V, red

Rectangular red two-wire horn field-selectable for three volume options.

Order number **W-HNR**

W-HNW Wall horn, 2-wire, 12/24V, white

Rectangular white two-wire horn field-selectable for three volume options.

Order number **W-HNW**

Accessories

DSM-12/24-R Synchronization module, Wheelock

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 | F.01U.001.789**

SM-12/24-R SYNC MOD 1 CLASS B 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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