

W-HN Series Wall-mount Horns



- ► Sleek modern aesthetics
- ► Multiple voltages (12 VDC or 24 VDC)
- ► Voltage test points
- ► Three horn volume options
- ► Universal mounting base
- ► Environment-friendly low current draw

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.

Certifications and Approvals

| Region | Certification | on |
|----------------|----------------|--|
| USA | UL | ULSZ: Audible-signal Appliances (ANSI/UL 464) |
| | CSFM | 7125-0785:168 |
| Canada | ULC | ULSZC: Audible Signal Appliances and Accessories, Fire Alarm (CAN/ULC-S525, ULC-S527) |
| Cooper Wheeloo | k has also des | signed these horn strobes to comply with: |
| US | FCC | Tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. |
| | NEC | National Electrical Code |
| | NFPA | NFPA 72 |

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 | FPA-1000-UL ¹ | Compact Fire Panel |
| | FPD-7024 ¹ | Conventional or Addressable 2 FACP |
| | 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.

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 singlegang, 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 (2.3 mm) and 18 AWG (1.2 mm) at each terminal.

Parts Included

| Quant. | Component |
|--------|---|
| 1 | Horn appliance |
| 1 | Universal mounting base |
| 1 | Contact cover |
| 1 | Hardware packTwo pan head mounting screwsOne securing screw |
| 1 | Literature - Installation Instructions |

Technical Specifications

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.

Note

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

Environmental Considerations

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

² When used with a D7039 Multiplex Expansion Module, the FPD-7024 or the D7024 becomes an addressable FACP.

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

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.

Mechanical Properties

 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

Power Requirements

Horn Current Draw³

| 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.

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Ordering Information

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|--|-------|--|
| W-HNR Wall-mount Horn (two-wire, | W-HNR | |
| 12/24 V, red) | | |
| Rectangular red two-wire horn field-selectable | | |
| for three volume options. | | |

W-HNW

W-HNW Wall-mount Horn (two-wire, 12/24 V, white)

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

Americas:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
security,sales@us.bosch.com
www.boschsecurity.us

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific: Represented by
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6258 5511
Fax: +65 6571 2698
apr.securitysystems@bosch.com
www.boschsecurity.com