

# **Mini-Horns**

The SpectrAlert<sup>®</sup> Advance series of mini-horn sounders are designed to simplify installations to provide primary and secondary signaling for fire and security applications.





#### **Features**

- 12 and 24V operation
- High and low volume settings
- Temporal and non-temporal tones
- Mounts to single gang back box
- Low current draw
- Accelerated silence test feature on silencable models
- $\bullet$  Mechanically and electrically compatible with PA400 series Mini-Alert  $\tilde{\ }$  sounders

The MHR and MHW mini-horns are ideal for residential, hotel or motel fire system applications, where a smaller notification device is desired. The mini-horns come in versions that offer high and low volume settings, temporal or non-temporal tones, synchronization and silencing to meet the intent of the National Building Code Section 3.2.4.18.9. The mini-horns can be mounted to single gang back boxes for aesthetically sensitive applications. Synchronization is provided on certain models when using the MDLA module. Minihorns with silencing have an accelerated silence test feature which allows testing of the silence operation without waiting for the entire time-out period.

The MHR and MHW mini-horns can operate between 0 to 49C (32 to 120F) from a regulated DC or full-wave rectified, unfiltered power supply. They are listed to Underwriter's Laboratories of Canada CAN/ULC S525.

## **Agency Listings**





## SpectrAlert<sup>®</sup> Advance Mini-Horn Specifications

Architectural/Engineering Specifications

#### MHRZA/MHWZA

Mini-horns shall be a System Sensor Model MHRZA or MHWZA capable of operating at nominal 12 or 24VDC and shall mount to a single gang back box. Mini-horn shall be listed to Underwriter's Laboratories of Canada CAN/ULC S525. Mini-horns shall operate between 0 and 49 degrees Celsius (32 and 120 degrees Fahrenheit) from a regulated DC, or full-wave rectified, unfiltered power supply. When used with the Sync•Circuit<sup>™</sup> Module Model MDLA, 12-volt rated notification appliance circuit outputs shall operate between 9 and 17.5 volts; 24-volt rated notification appliance circuit outputs shall operate between 9 and 17.5 volts; 24-volt rated notification appliance shall operate between 16 and 33 volts. Mini-horns shall have settings for Hi/Low volume and temporal/continuous tones. A Silence feature shall be included to allow silencing of the mini-horn to meet the intent of the National Building Code Section 3.2.4.18.9. Mini-horns shall have the ability of an accelerated silence test feature and shall be able to operate from either continuous or coded NAC circuits.

#### MHRA/MHWA

Mini-horns shall be a System Sensor Model MHRA or MHWA capable of operating at nominal 12 or 24VDC and shall mount to a single gang back box. Mini-horn shall be listed to Underwriter's Laboratories of Canada CAN/ ULC S525. Mini-horns shall operate between 0 and 49 degrees Celsius (32 and 120 degrees Fahrenheit) from a regulated DC, or full-wave rectified, unfiltered power supply. When used with the Sync•Circuit™ Module Model MDLA, 12-volt rated notification appliance circuit outputs shall operate between 9 and 17.5 volts; 24-volt rated notification appliance circuit outputs shall operate between 16 and 33 volts. Mini-horns shall have settings for Hi/Low volume and temporal/continuous tones. Mini-horns shall be able to operate from either continuous or coded NAC circuits.

#### MHW1A

Mini-horns shall be a System Sensor Model MHW1A capable of operating at nominal 12 or 24VDC and shall mount to a single gang back box. Mini-horn shall be listed to Underwriter's Laboratories of Canada CAN/ULC S525. Mini-horns shall operate between 0 and 49 degrees Celsius (32 and 120 degrees Fahrenheit) from a regulated DC, or full-wave rectified, unfiltered power supply. Mini-horns shall be able to operate from either continuous or coded NAC circuits.

| Physical Specifications                           |   |
|---|---|
| Dimensions  | See Mechanical Drawing  |
| Weight  | 2.67 oz.  |
| <b>Operating Temperature Range</b>                | 0°C to 49°C (32°F to 120°F)                                     |
| Mounting  | Single-gang   |
| Electrical Specifications                         |   |
| Input Terminals                                   | 12 to 18 AWG  |
| Nominal Voltage                                   | Regulated 12VFWR, special application 12VDC, regulated 24DC/FWR |
| Operating Voltage                                 | 8–33VFWR, 9.5-33VDC (MHRZA/MHWZA 16-33VFWR/DC)                  |
| <b>Operating Voltage with MDLA</b>                | 9-33VFWR, 9.5-33VDC   |
| Sounder Frequency                                 | 3 KHZ(nominal)  |
| Silence Time<br>(MHRZA/MHWZA)                     | 10 minutes max.   |
| Silence Reset<br>Power down Time<br>(MHRZA/MHWZA) | 4 seconds TYP.  |

# Sound Output (dBA) in Anechoic Room

## MHW1A

| Tone       | Power Supply | 12V  | 24V  |
|------------|--------------|------|------|
| Continuous | DC           | 87.9 | 92.9 |
|            | FWR          | 90.5 | 91.9 |

#### MHRA/MHWA

| Switch   | Sound Pattern | Volume | Power  | Voltage |      |
|----------|---------------|--------|--------|---------|------|
| Position |               |        | Supply | 12      | 24   |
| 1        | Temporal      | High   | DC     | 87.1    | 91.8 |
|          |               |        | FWR    | 90.8    | 91.7 |
| 2        | Temporal      | Low    | DC     | 86      | 90   |
|          |               |        | FWR    | 90      | 90   |
| 3        | Non-Temporal  | High   | DC     | 87      | 91   |
|          |               |        | FWR    | 89      | 91   |
| 4        | Non-Temporal  | Low    | DC     | 86      | 90   |
|          |               |        | FWR    | 88      | 90   |

# Current Draw (mA RMS)

#### MHW1A

| Tone       | Power Supply | 12V  | 24V  |
|------------|--------------|------|------|
| Continuous | DC           | 11.5 | 19.8 |
|            | FWR          | 11.4 | 17.6 |

#### MHRA/MHWA

| Switch   | Sound Pattern | Volume | Power  | Voltage |      |
|----------|---------------|--------|--------|---------|------|
| Position |               |        | Supply | 12      | 24   |
| 1        | Temporal      | High   | DC     | 12.6    | 22.1 |
|          |               |        | FWR    | 15.0    | 23.0 |
| 2        | Temporal      | Low    | DC     | 10.3    | 16.6 |
|          |               |        | FWR    | 12.1    | 18.8 |
| 3        | Non-Temporal  | High   | DC     | 13.6    | 23.0 |
|          |               |        | FWR    | 14.6    | 21.8 |
| 4        | Non-Temporal  | Low    | DC     | 10.2    | 16.6 |
|          |               |        | FWR    | 12.1    | 18.8 |

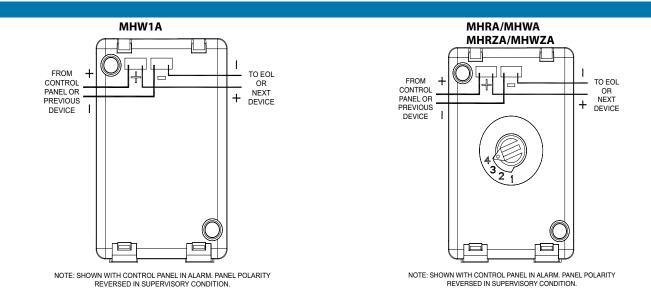
#### MHRZA/MHWZA

| Switch   | Sound Pattern | Volume | Power  | Voltage |
|----------|---------------|--------|--------|---------|
| Position |               |        | Supply | 24      |
| 1        | Temporal      | High   | DC     | 91.8    |
|          |               |        | FWR    | 92      |
| 2        | Temporal      | Low    | DC     | 89      |
|          |               |        | FWR    | 89      |
| 3        | Non-Temporal  | High   | DC     | 90      |
|          |               |        | FWR    | 89      |
| 4        | Non-Temporal  | Low    | DC     | 87      |
|          |               |        | FWR    | 86      |

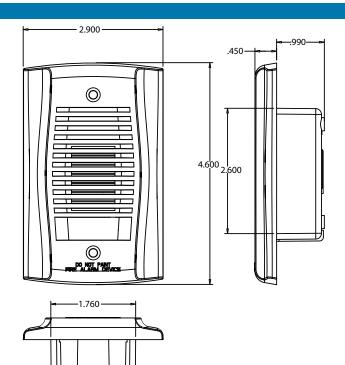
#### MHRZA/MHWZA

| Switch   | Sound Pattern | Volume | Power<br>Supply | Voltage |
|----------|---------------|--------|-----------------|---------|
| Position |               |        |                 | 24      |
| 1        | Temporal      | High   | DC              | 24.1    |
|          |               |        | FWR             | 24.3    |
| 2        | Temporal      | Low    | DC              | 18.2    |
|          |               |        | FWR             | 20.8    |
| 3        | Non-Temporal  | High   | DC              | 24.4    |
|          |               |        | FWR             | 23.8    |
| 4        | Non-Temporal  | Low    | DC              | 18.2    |
|          |               |        | FWR             | 20.5    |

# **Wiring Diagrams**



# **Mechanical Drawing**



# **Ordering Information**

| Part No. | Description  |
|----------|--|
| MHW1A    | Mini-Horn, White   |
| MHRA     | Mini-Horn, Red, Selectable Tone and Volume, Synchronizable               |
| MHWA     | Mini-Horn, White, Selectable Tone and Volume, Synchronizable             |
| MHRZA    | Mini-Horn, Red, Silencable, Selectable Tone and Volume, Synchronizable   |
| MHWZA    | Mini-Horn, White, Silencable, Selectable Tone and Volume, Synchronizable |



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