



The CSH-1224W Strobe/Horn Series provides a wide range of candela light output options in a single device. The candela settings include a 12 or 24 volt DC operation for the 1-3 settings candela settings and 24 volt DC operation for the 1-6 candela settings. The candela setting is displayed through the front window and is selectable using a drum wheel.

The horn settings include Temporal, Non-Temporal, March Time and a Chime sound. The horn also has Low, Mid and High volume settings for each pattern and tone. The tones include 2400 Hz, Electro-Mechanical, Broadband and Chime.

The voltage input can be either regulated DC or full wave rectified (FWR) 12 volt or 24 volt operation with an operating range of 8 to

#### Installation

*Note*: Installation must comply in accordance with applicable standards.

### • 3 settings at 12 VDC

- 6 settings at 24 VDC
- Strobe output selection view window
- Pre-wire back plate
- Universal back plate mounting (single gang, double gang, octagon, or 4" square)
- Single screw mounting
- 33 sound output settingsIndoor or outdoor
- Indoor or outdoor
  Anodized reflector for true light output
- UL and cUL listed

Patents pending

\* Outdoor installation requires the BBK-1 #1500001, BBX-5R #4270048, or BBX-5W #4270049

33V DC. The strobes can by synchronized using a control panel with the Potter (Amseco) sync protocol or SMD10-3A sync module.

The CSH-1224W utilizes a universal mounting plate that will mount on a single gang, double gang, octagon and 4" square electrical boxes. The back plate allows the installer to mount the plate and terminate the wire connections. The strobe/horn attaches in a hinge fashion from the top and is secured by a single mounting screw. The strobe/horn completely covers the mounting back plate, therefore it can be mounted before other trades work is completed and not affect the final look.

The Potter mass notification strobe/horn is listed for indoor and outdoor installations. For outdoor installations, the device must be mounted on a matching BBX-5 or BBK-1 outdoor bell back box.



#### **Ordering Information**

| Stock Number | Model Number | Body Color | Lens Color |
|--------------|--------------|------------|------------|
| 4800051      | CSH-1224W-AR | Red        | Amber      |
| 4800052      | CSH-1224W-AW | White      | Amber      |
| 4800053      | CSH-1224W-BR | Red        | Blue       |
| 4800054      | CSH-1224W-BW | White      | Blue       |
| 4800055      | CSH-1224W-GR | Red        | Green      |
| 4800056      | CSH-1224W-GW | White      | Green      |
| 4800057      | CSH-1224W-RR | Red        | Red        |
| 4800058      | CSH-1224W-RW | White      | Red        |

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#### **Dimensions: inches (mm)**







8

## **WARNING**

High voltage may be present inside the light assembly even though power is not connected. If access to the component board is required (removal or replacement), the capacitor must be discarged by touching a wire to both ends of the flashtube.

DO NOT attempt to touch or move the assembly until the capacitor has been discharged.

### Specifications

Strobe Current

| Set- | Light   | Max. RMS Operating Current (mA RMS) |                |                |                |  |  |  |
|------|---------|-------------------------------------|----------------|----------------|----------------|--|--|--|
| ting | Output  | Reg. 12<br>VDC                      | Reg. 12<br>FWR | Reg. 24<br>VDC | Reg. 24<br>FWR |  |  |  |
| 1    | 15cd    | 129                                 | 185            | 100            | 102            |  |  |  |
| 2    | 35cd    | 160                                 | 214            | 135            | 161            |  |  |  |
| 3    | 60/75cd | 193                                 | 239            | 171            | 202            |  |  |  |
| 4    | 75cd    | NA                                  | NA             | 190            | 228            |  |  |  |
| 5    | 95cd    | NA                                  | NA             | 211            | 255            |  |  |  |
| 6    | 110cd   | NA                                  | NA             | 225            | 284            |  |  |  |

| Voltage                        | 12/24V   |                     |  |  |  |
|--------------------------------|--|---------------------|--|--|--|
| UL Designation                 | Regulated 12 DC/<br>FWR  | Regulated 24 DC/FWR |  |  |  |
| Operating Voltage<br>Range     | 8 - 17.5V  | 16 - 33V            |  |  |  |
| Flash Rate                     | 60 times/min.  |                     |  |  |  |
| Sync Module (SMD10-<br>3A)     | NA Available   |                     |  |  |  |
| Operating Temperature<br>Range | Indoor model: 32°F to 120°F (0°C to 49°C)<br>Outdoor model: -40°F to 151°F (-40°C to 66°C) |                     |  |  |  |

Note: To determine total current draw, add desired strobe setting and horn selection. Refer to the installation instructions for further information.

| Horn Dipswitch<br>Pattern |   |   |   |  |
|---------------------------|---|---|---|--|
| 1 ON Non temporal         | 1 | 2 | 3 |  |

3  $\Delta$ 5 6 7

ON

1 ON - Non-temporal 1 OFF - Temporal Both 2 = OFF

1 and 2 ON = March Time

Tone 3 and 4 ON = 2400Hz 3 ON and 4 OFF = Electromechanical 3 and 4 OFF = Chime3 OFF and 4 ON = Broadband

Volume 5 and 6 ON = High5 ON and 6 OFF = Mid 5 and 6 OFF = Low 7 and 8 ON = Horn/strobe on 2 wires 7 and 8 OFF = Horn/strobe on 4 wires

| Candela C | Output |
|-----------|--------|
|-----------|--------|

| Select-A- | Light Output on Axis (cd) |            |     |     |  |  |  |  |
|-----------|---------------------------|------------|-----|-----|--|--|--|--|
| Switch    | Amber                     | Amber Blue |     | Red |  |  |  |  |
| 1         | 14                        | 10         | 13  | 7   |  |  |  |  |
| 2         | 37                        | 20         | 39  | 17  |  |  |  |  |
| 3         | 49                        | 28         | 50  | 18  |  |  |  |  |
| 4         | 69                        | 41         | 77  | 28  |  |  |  |  |
| 5         | 83                        | 51         | 94  | 35  |  |  |  |  |
| 6         | 99                        | 58         | 109 | 38  |  |  |  |  |



### **Non-Temporal Horn Current**

| Pattern            | Volume   | Max. RMS Current<br>(mA RMS Current) |            | dBA Reverberant Ratings per<br>UL464 (dBA @ 10 ft.) |            | dBA Anechoic Ratings per<br>CAN/ULC S525 (dBA @ 10 ft.) |            |
|--------------------|----------|--------------------------------------|------------|---|------------|---|------------|
|                    | , oranie | Reg 12 VDC                           | Reg 24 VDC | Reg 12 VDC  | Reg 24 VDC | Reg 12 VDC  | Reg 24 VDC |
| 2400 Hz            | High     | 119                                  | 87         | 87  | 87         | 99  | 100        |
| 2400 HZ            | Mid      | 44                                   | 28         | 82  | 82         | 94  | 96         |
|                    | Low      | 30                                   | 18         | 79  | 80         | 92  | 92         |
|                    | High     | 118                                  | 81         | 86  | 87         | 100   | 100        |
| Electro-Mechanical | Mid      | 43                                   | 26         | 82  | 84         | 96  | 97         |
|                    | Low      | 27                                   | 16         | 79  | 80         | 93  | 93         |
|                    | High     | 146                                  | 78         | 86  | 86         | 101   | 102        |
| Broadband          | Mid      | 41                                   | 26         | 81  | 82         | 96  | 98         |
|                    | Low      | 28                                   | 16         | 77  | 79         | 94  | 95         |
|                    | High     | 27                                   | 21         | 70  | 70         | 86  | 86         |
| Chime              | Mid      | 11                                   | 8          | 62  | 62         | 79  | 80         |
|                    | Low      | 9                                    | 7          | 58  | 57         | 75  | 75         |

### **Temporal Horn Current**

| Pattern            | Volume | Max. RMS Current<br>(mA RMS Current) |            | dBA Reverberant Ratings per<br>UL464 (dBA @ 10 ft.) |            | dBA Anechoic Ratings per<br>CAN/ULC S525 (dBA @ 10 ft.) |            |
|--------------------|--------|--------------------------------------|------------|---|------------|---|------------|
| T uttern           | volume | Reg 12 VDC                           | Reg 24 VDC | Reg 12 VDC  | Reg 24 VDC | Reg 12 VDC  | Reg 24 VDC |
| 2400 H             | High   | 124                                  | 87         | 82  | 82         | 100   | 100        |
| 2400 Hz            | Mid    | 46                                   | 30         | 77  | 79         | 95  | 96         |
|                    | Low    | 30                                   | 18         | 74  | 75         | 92  | 92         |
|                    | High   | 114                                  | 80         | 83  | 82         | 100   | 101        |
| Electro-Mechanical | Mid    | 42                                   | 27         | 78  | 80         | 95  | 96         |
|                    | Low    | 28                                   | 16         | 75  | 76         | 93  | 93         |
|                    | High   | 151                                  | 80         | 82  | 82         | 101   | 102        |
| Broadband          | Mid    | 45                                   | 26         | 77  | 78         | 97  | 98         |
|                    | Low    | 30                                   | 16         | 75  | 76         | 94  | 95         |
|                    | High   | 29                                   | 21         | 68  | 70         | 86  | 86         |
| Chime              | Mid    | 10                                   | 9          | 61  | 61         | 79  | 79         |
|                    | Low    | 9                                    | 8          | 55  | 55         | 75  | 76         |

### March Time Horn Current

| Pattern            | Volume | Max. RMS Current<br>(mA RMS Current) |            | dBA Reverberant Ratings per<br>UL464 (dBA @ 10 ft.) |            | dBA Anechoic Ratings per<br>CAN/ULC S525 (dBA @ 10 ft.) |            |
|--------------------|--------|--------------------------------------|------------|---|------------|---|------------|
| Tuttom             | volume | Reg 12 VDC                           | Reg 24 VDC | Reg 12 VDC  | Reg 24 VDC | Reg 12 VDC  | Reg 24 VDC |
| 2400 II-           | High   | 121                                  | 92         | 83  | 84         | 99  | 100        |
| 2400 Hz            | Mid    | 47                                   | 31         | 79  | 81         | 95  | 96         |
|                    | Low    | 36                                   | 19         | 76  | 77         | 92  | 92         |
|                    | High   | 114                                  | 86         | 83  | 83         | 100   | 100        |
| Electro-Mechanical | Mid    | 42                                   | 27         | 80  | 81         | 95  | 96         |
|                    | Low    | 30                                   | 19         | 77  | 77         | 92  | 93         |
|                    | High   | 153                                  | 77         | 83  | 84         | 101   | 102        |
| Broadband          | Mid    | 42                                   | 28         | 79  | 80         | 97  | 98         |
|                    | Low    | 29                                   | 16         | 76  | 77         | 94  | 95         |



#### Wiring Diagram

Wiring Observe Polarity Use both terminals (or Lead) for connection. Break wire run to provide electrical supervision.



### **Engineering Specifications**

The installer shall provide and install the Potter CSH-1224W selectable strobe/horn. The strobe shall have six (6) selectable settings. The selectable settings shall be selectable using a drum roller and shall display the setting on the front of the device. The strobe shall have a colored lens and anodized reflector. A colored lens on a standard reflector shall not be acceptable. The horn shall have 33 selectable settings configurable by dip switches. The sounder shall be capable of ANSI Temporal Code 3, March Time and produce a chime output. The horn shall have three distinct volume levels. The strobe/horn shall operate at 12 or 24 VDC regulated or full wave rectified. The strobe/horn shall utilize a mounting plate that allows the installer to pre-wire the mounting plate. The mounting plate shall be

universal and mount on a single gang, double gang, octagon or 4 inch square box. The mounting plate shall be completely covered by the strobe/horn and shall be secured by a single screw. The device shall be listed for indoor and outdoor applications. Outdoor installations shall require a matching BBX-5 or BBK-1 weatherproof bell back box. The operating range shall be 32°F to 120°F (0°C to 49°C) for the indoor installations. The strobe/horn shall be UL listed to standard 1638, General Signaling, and standard 1971, Signaling Devices for the Hearing Impaired. In addition, the strobe/horns shall be cUL listed to Standard 464, Audible Signaling Devices.

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