

Non Addressable Chime & Multi-Candela (Strobe) NAC

Cautions



ELECTRICAL HAZARD: Disconnect power from equipment prior to making any internal adjustments. Service should only be performed by qualified personnel.



FRAGILE: Inspect the equipment prior to installation. Do not install the equipment if damage is apparent. Do not attempt to disassemble this equipment. If damaged, return to the supplier.



ELECTROSTATIC HAZARD: This is sensitive electronic equipment. Apply safe ant-static practices when handling this equipment.



CIRCUIT LIMITATIONS: The maximum number of detectors connected to a single detection zone is limited by the control and indicating equipment, and may be limited by local regulations.

General Description

The Multi-Candela notification appliances are strobe and chime products which are non-addressable and powered by 2-wired DC24V and wall or ceiling mounted indoor use only notification appliances. That could provide 15cd, 30cd, 75cd, 110cd level strobe and chime tone sound alarm. The appliances could be activated by SFM (synchronize Functional Module) or control panel of a UL/JLC Listed. The product can be separated from the control panel or SFM to work independently, When multiple products are connected to control panel or SFM, the sound and light between products in the same circuit area can be synchronized.

When an alarm signal is emitted, it means there may be an emergency, and should be pay attention immediately.

Note: In self running mode, the flash and sound maybe out of sync, so this mode does not suit for special place, i.e., irregular flashes or sounds may cause seizures in patients with epilepsy VL-W-CS, VL-C-CS.

Product Specifications

| | |
|---------------------------|---|
| Nominal Voltage | Regulated 24 VDC |
| Operating Frequency Range | 750~1250Hz |
| Operating Voltage Range | Regulated 16 VDC to 33 VDC |
| Strobe Flash Rate | 1 flash per second |
| Operating Temperature | 32° to 120° F (0° to 49°C) |
| Humidity Range | 10% to 93%, non-condensing at 100° F (38°C) |
| Dimensions | 130.5mm×130.5mm×89mm |
| Connections | Terminal for 18 AWG to 12 AWG (0.82 mm ² to 3.31 mm ²) |
| Mounting Box | 4 × 4 inch Double Gang Box |
| Model: VL-W-CS-W | White / Wall Mounting |
| Model: VL-C-CS-W | White / Ceiling Mounting |
| Model: VL-W-S-W | White / Wall Mounting |
| Model: VL-C-S-W | White / Ceiling Mounting |
| Model: VL-W-CS-R | Red / Wall Mounting |
| Model: VL-C-CS-R | Red / Ceiling Mounting |
| Model: VL-W-S-R | Red / Wall Mounting |
| Model: VL-C-S-R | Red / Ceiling Mounting |

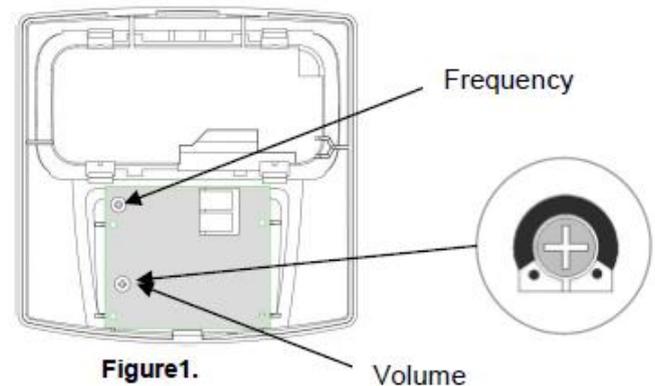
Sound Level and Electrical Characters

| Candela Rating | Input Voltage Regulated DC | Maximum Operating Current RMS* |
|----------------|----------------------------|--------------------------------|
| 15 | 16 VDC | 131 mA |
| 30 | 16 VDC | 182 mA |
| 75 | 16 VDC | 286 mA |
| 110 | 16 VDC | 368 mA |

* AV Strobe current is measured with horn circuit steady ON.

| Max Volume Sound Level | Maximum Reverberant sound pressure |
|------------------------|------------------------------------|
| 750Hz | 58.2 dB |
| 1000Hz | 58.2 dB |
| 1250Hz | 58.2 dB |

* Audible signal appliance for private mode only.



The Minimum sound pressure is measured in UL reverberant test chamber.

The alarm sound frequency adjust potentiometer is located in the back of the product, as shown in Figure1,

To adjust the chime frequency or volume, clockwise rotation the potentiometer by a tiny phillips screwdriver will increased the frequency or volume,

Note: Chime tone factory setting has been adjusted to the frequency point with maximum sound pressure.

Strobe Light Output

There are four grades in the S/V appliance strobe strength: 15cd (factory preset), 30cd, 75cd, 110cd, adjust the slide switch to the required brightness which is placed in the back of the product, the reflector has a small window to observe the strength grade (See Figure 7). The strobe dispersion ratings of the product follows the standard UL 1971, the relationship between the angle and the strength is as following tables:

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| Wall Mount Strobe Vertical and Horizontal Light Dispersion Ratings (Room Temperature) | | | | | |
|---|-------------------|----------------|-----------------------|-------------------|----------------|
| Vertical Dispersion(wall to floor) | | | Horizontal Dispersion | | |
| X-Plane Degrees* | Percent of rating | Typical Output | Y-Plane Degrees* | Percent of rating | Typical Output |
| 0 | 100 | | 0 | 100 | |
| 5 - 30 | 90 | | ± 5 - 25 | 90 | |
| 35 | 65 | | ± 30 - 45 | 75 | |
| 40 | 46 | | ± 50 | 55 | |
| 45 | 34 | | ± 55 | 45 | |
| 50 | 27 | | ± 60 | 40 | |
| 55 | 22 | | ± 65 - 70 | 35 | |
| 60 | 18 | | ± 75 - 80 | 30 | |
| 65 | 16 | | ± 85 - 90 | 25 | |
| 70 | 15 | | Compound ± 45 right | 24 | |
| 75 | 13 | | Compound ± 45 left | 24 | |
| 80 - 90 | 12 | | | | |

*Tolerance of ± 1 degree is permitted.

| Ceiling Mount Strobe Vertical and Horizontal Light Dispersion Ratings (Room Temperature) | | | | | |
|--|-------------------|----------------|-----------------------|-------------------|----------------|
| Vertical Dispersion | | | Horizontal Dispersion | | |
| X-Plane Degrees* | Percent of rating | Typical Output | Y-Plane Degrees* | Percent of rating | Typical Output |
| 0 | 100 | | 0 | 100 | |
| ± 5 - 25 | 90 | | ± 5 - 25 | 90 | |
| ± 30-45 | 75 | | ± 30 - 45 | 75 | |
| ± 50 | 55 | | ± 50 | 55 | |
| ± 55 | 45 | | ± 55 | 45 | |
| ± 60 | 40 | | ± 60 | 40 | |
| ± 65-70 | 35 | | ± 65 - 70 | 35 | |
| ± 75-80 | 30 | | ± 75 - 80 | 30 | |
| ± 85-90 | 25 | | ± 85 - 90 | 25 | |
| Compound ± 45 right | 24 | | Compound ± 45 left | 24 | |

*Tolerance of ± 1 degree is permitted.

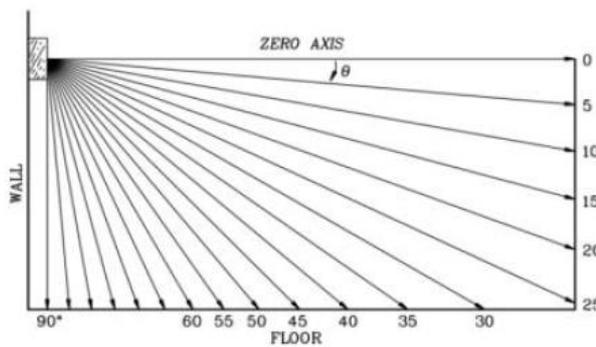


Figure 2.

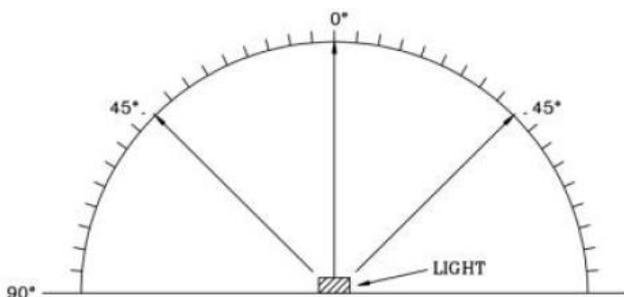


Figure 3.

Wiring

In order to ensure that the total current consumption of the circuit does not exceed the maximum load current of the FACP or SFM module, the device quantity must be considered in the design of the loop system.

Number of circuit is connected with the maximum number of notification products must calculate the loop line loss of voltage to ensure loop notification products work in rated voltage range, please refer to the corresponding FACP or NAC SFM and other equipment installation instructions.

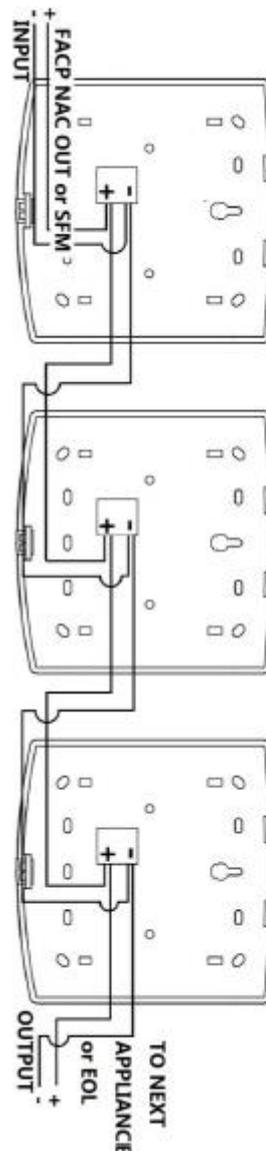


Figure 5

Non Addressable Chime & Multi-Candela (Strobe) NAC

Mounting Appliance Device

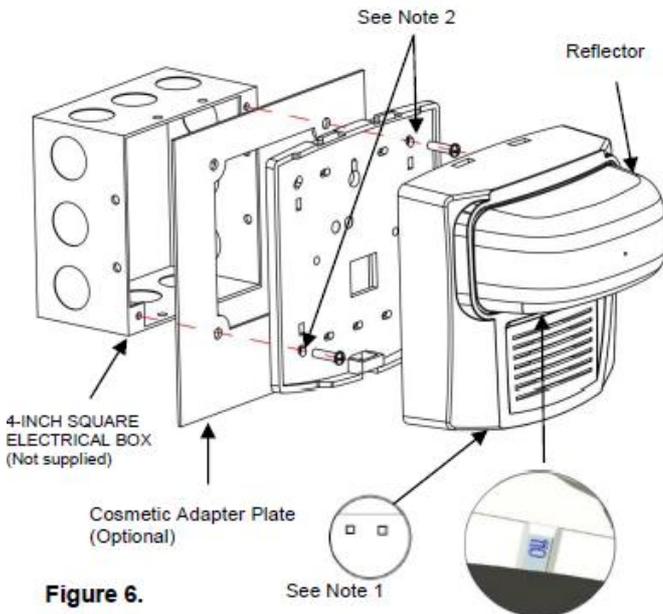


Figure 6.

Figure 7.

Products could be installed in standard square 4-inch double gang box.
Before installing and wiring, the power of the loop circuit must be power off,
After the completion of the terminal to ensure that the terminal lock,

It is recommended to install a Cosmetic Adapter Plate before install the Notification devices products.
Please check the cosmetic adapter plate installation instructions for details.
Product installation diagram shown in Figure 6

Note:

Note 1: To remove the cover, Depress the snap at the bottom of the product with a key(or flat tip screwdriver) while pulling the cover up with the other hand.
Note 2: The product attaches directly to a standard 4-inch square electrical box(not supplied) flush mounted or surface mounted. Attach the product to the back cover using two screws (supplied) mounted.

The Cosmetic Adapter Plate is not included in products packaging box.
Wire type: 18-12AWG,
Maximum tightening torque: 0.5Nm (4.4Lb.in).

Limited Warranty

Velocity Detection over Time Zeta Alarms Ltd declares that this product is free from defects in material and workmanship and it will repair or replace any product or part thereof which proves to be defective in workmanship or material for a period of twelve (12) months from the date of purchase but not to exceed eighteen (18) months from the date of manufacture. Please contact Velocity Detection over Time Zeta Alarms Ltd directly for a return merchandise authorization (RMA) number before returning goods under warranty. Shipment must be prepaid and Velocity Detection over Time Zeta Alarms Ltd will repair or replace the product if the failure was caused by a manufacturing defect.