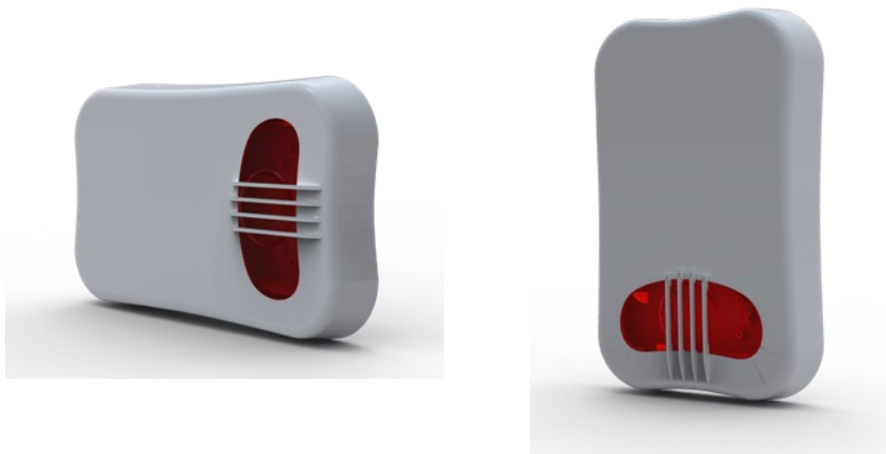


User's Manual

Version 2.1

SIREN ALARM

THUNDER ARC



THUNDER DOT



Design and Versatility for you!

The Sounder Alarm THUNDER ARC / DOT where designed combining **design** with **functionality**, to provide you with the greatest **flexibility** and **convenience** possible.

Compliant to **EN54-3** and **EN50131**, these sirens offer high standards of quality.

These models feature the **innovative Early Detection** function that triggers the siren to the slightest attempt to sabotage. And the **automatic recognition of 12 or 24 VDC power supply**.

There are 2 available models at your disposal (that can be mounted horizontally or vertically!):

- THUNDER ARC
- THUNDER DOT

Besides these 4 possible configurations you have yet the chance to combine the enclosure color with the strobe lens color.

As standard colors, you have at your disposal (enclosure/strobe lens):

- White / Blue
- White / Red
- Red / Red

It is possible, if you wish, to consult your regular reseller to obtain supply conditions to a different color combination (subject to availability and minimum order quantity).

1. Jumper configuration:

1.1. Connect battery (BAT)

Place the jumper in the **on** position to establish connection to the battery. When the jumper is in the **off** position the battery is not connected, this may be useful for some maintenance operations.

1.2. Sound level (LEVEL)

In order to attenuate the alarm sound level place the jumper in the **l** (low) position.

*Placing the jumper in the **h** (high) position will provide maximum sound level output.*

1.3. Changing the tone type (TONE)

Place the jumper in the position **1** or **2** according to your preference.

1.4. Sound alarm duration (TIME)

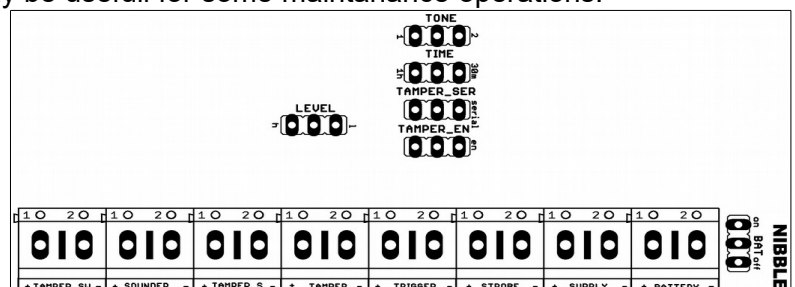
The maximum alarm time can be set to **1h** or **30m**. This insures the siren will auto silence itself after a period of time.

1.5. Serial tamper detection (TAMPER_SER)

Whenever you need to install more than one siren, the group must be protected against tampering. To achieve this a circuit loop is established in the tamper circuit so that any unauthorized opening/disassemble of any siren will raise the tamper alarm. If the siren is part of a loop place this jumper in the **serial** position, otherwise (if this is the only siren or the last siren in the loop) place the jumper in the other position.

1.6. Tamper protection (TAMPER_EN)

The siren is able to detect an unauthorized opening. To enable this feature, place the jumper in the **en** position.

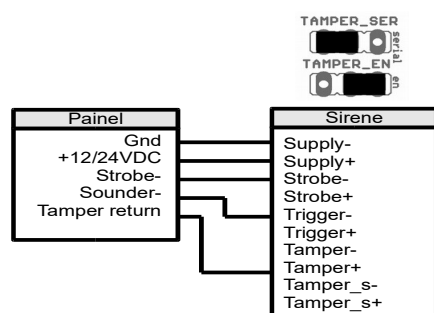


2. Connections:

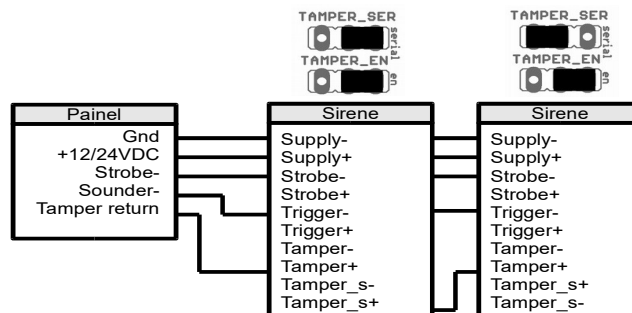
| | | |
|----|------------|--|
| 1 | BATTERY- | Battery ground terminal |
| 2 | BATTERY+ | Battery positive terminal |
| 3 | SUPPLY- | External supply ground terminal (12/24 VDC automatic selection*) |
| 4 | SUPPLY+ | External supply positive terminal (12/24 VDC automatic selection*) |
| 5 | STROBE- | Enables strobe when connected to ground |
| 6 | STROBE+ | Enables strobe when connected to positive terminal. |
| 7 | TRIGGER- | Enables sound alarm when connected to ground |
| 8 | TRIGGER+ | Enables sound alarm when connected to positive terminal. |
| 9 | TAMPER- | Ground connection to control panel tamper signal. |
| 10 | TAMPER+ | Tamper signal return connection to control panel. |
| 11 | TAMPER_S- | Ground connection for other sirens in loop |
| 12 | TAMPER_S+ | Tamper signal return from other sirens in loop |
| 13 | TAMPER_SW- | Reserved to internal buzzer |
| 14 | TAMPER_SW+ | Reserved to internal buzzer |
| 15 | SOUNDER- | Reserved to internal tamper switch |
| 16 | SOUNDER+ | Reserved to internal tamper switch |

* No further action is needed to select 12 or 24 VDC

2.1. Typical connection:



2.2. Serial loop connection:



3. Failure Indicator

The siren continuously monitors its operating conditions and reports anomalies by the lights (LEDs) that quickly flash in case of failure:

| | |
|---------------------------|--------|
| Main Power Supply Failure | 1 LED |
| Battery Discharge | 2 LEDs |
| Battery Failure | 3 LEDs |
| Trigger Circuit Failure | 4 LEDs |
| Tamper Failure | |

4. Installation and maintenance

Once powered, the siren will only begin normal behaviour after the tamper switch is actuated.

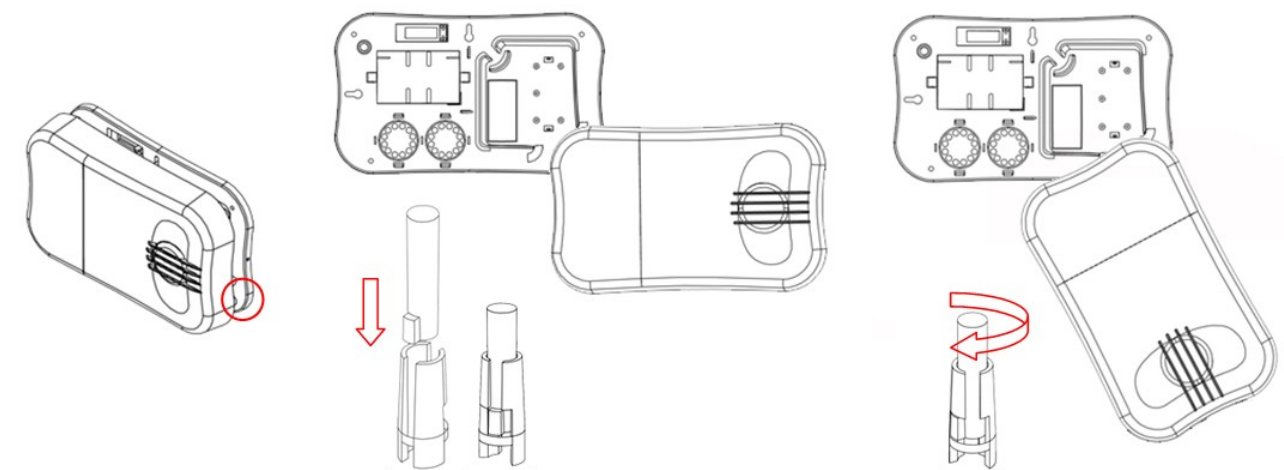
The siren may be installed **horizontally** or **vertically** as displayed in the following pictures:

Valid installation orientations



To perform installation and maintenance operations, a mechanism was devised that allows to hold the top of the enclosure together with the base while granting the installer access to the interior of the siren.

The following picture illustrates that feature in the horizontal installation case (equivalent method for vertical installations).



5. Recomendations:

To ensure full functionality of the equipment it is recommended to perform a test at least once per year. The test to be performed must check that alarm is generated when actuated and that the sound level remains within the specification. Also, the strobe mode must be verified. Special attention to the battery that must be able to supply the siren in case of main power failure.

The battery's life time is limited, therefore it is recommended that it is replaced within 3 years of use. The old battery must be disposed of properly in an appropriate place.

Attention: Mind the polarity upon battery replacement. Risk of explosion with inverted polarity.

Install the siren in a place protected against severe weather conditions in order to minimize the effects of external natural events. Make sure the siren is secured tightly in order to prevent the tamper switch from being actuated due to strong winds.

6. Especificações:

| | |
|----------------------------|--|
| Main power supply | 12 VDC até 24 VDC |
| Standby current | 25 mA |
| Maximum current | 300 mA |
| Maximum sound level output | 115 dBA |
| Autonomy | 48 h |
| Strobe frequency | 0,5 Hz |
| Dimensions (LxWxH) | 325 x 225 x 46 mm |
| Weight | 910 g (c/ bateria); 600 g (s/ bateria) |