# INSTALLATION INSTRUCTIONS

# Self Powered External Alarm Siren

**SIREX2**

Made in France

***Compliant with European standards***

EN50131-4 grade III

Actual products may differ from the picture

The SIREX2 is authorised to display the NF and A2P "3 shields" marks in compliance with the standard NF EN 50131-4 grade 3, the complementary technical standard RTC 50131-4, the technical standard RT48-266, and the certification standard NF324-H58
under the number: 3230100003 -- Production Unit: No. 122 P2

**Cert. CNPP (*centre national de prévention et de protection* - National Centre for Prevention and Protection)**
http://www.cnpp.com

**AFNOR Certification**
http://www.marque-nf.com

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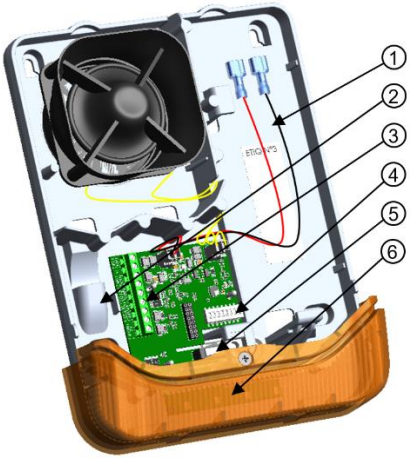
# PRESENTATION




Designed to last, the SIREX2 comes in a die-cast aluminum housing with a durable polyester paint finish.
The **SIREX2** integrates an alarm light that uses ultra-high luminosity LED technology, which, in addition to greater resistance to vibrations and extreme temperatures, has a significantly longer lifespan than that of traditional solutions.

**1-** 12V – 2Ah backup battery slot
**2-** Cable path
**3-** Connection terminal
**4-** Configuration switches
**5-** Tamper opening and removal sensor.
**6-** Led strobe***!!! WARNING!!!*** Ultra high luminosity LEDs are used. Do not look directly at these leds.

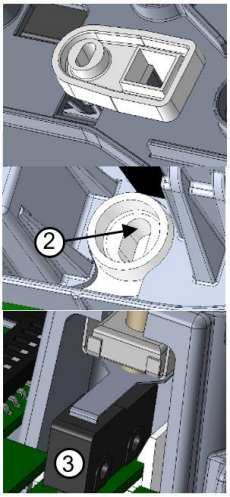
The SIREX2 has double charge regulation for the internal battery:
**- Charge current regulated at 200 mA**, which is sufficient to normally charge the internal battery. In alarm mode, the SIREX2 mainly takes its power from the backup battery. This efficiently protects the charger from the central alarm station when it powers several alarms.
**- Charge voltage regulated at 13.8 VDC:** The **SBMS** (Smart Battery Management System) function automatically adjusts the charging voltage of the battery to 13.8 V, the SIREX2 guarantees its full power even when external power supplies barely 12V.

**- Two default outputs** provide information in case of a remote power failure or battery failure.

# *SAFETY PRECAUTIONS*

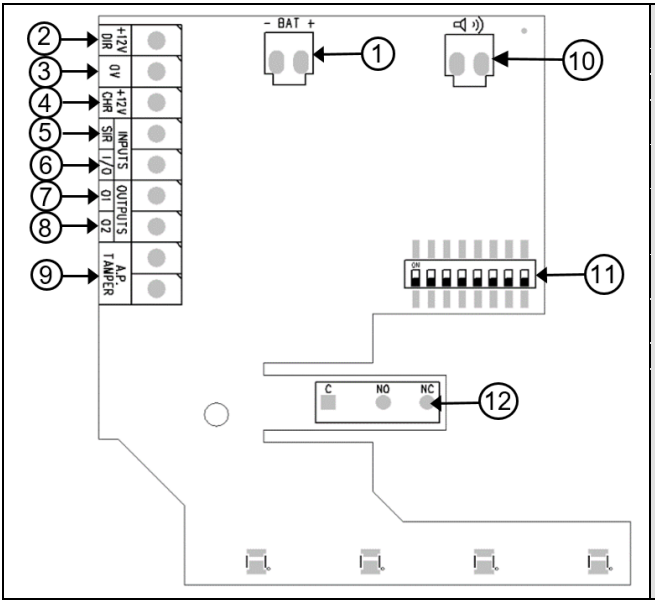
- Do not look directly at the LEDs when they are on.
- Wear ear protection during the tests or stand at a reasonable distance from the SIREX2.
- Avoid working on the SIREX2 during stormy weather.
- Only use the type of battery indicated in the table of characteristics.

## *INSTALLATION*




- The SIREX2 is an external alarm siren. It can be fixed to a flat, vertical wall surface larger than the housing, leaving at least 2 cm on each side.
- Drill the fixing holes using the drilling guide.
- Then position the SIREX2 chassis, taking care to fix the chassis fixing screws and the self-protection fixing screw against tearing (figure 2). This system does not require any adjustment. If the wall is removed, the plastic self-protection part brings the flexible part of the circuit towards the bottom of the chassis to release the contact (figure 3)Tests must be carried out to ensure that the sounder, strobe and tamper protection are working correctly, once the unit has been installed.
- It is strongly recommended to use stainless steel screws to fix the siren in order to avoid possible traces of rust which could dirty the mounting surface.
- It is imperative to carry out tests and verify the correct operation of the audible, visual alarm and self-protection after installation.
- It is strongly recommended to periodically check the tightness of the connections as well as the condition of the backup battery and replace it if necessary.

## *WIRING*




| | |
|---|---|
| **1** | Backup Battery connection |
| **2** | Direct Power Supply |
| **3** | Power Supply OV |
| **4** | Power supply with battery charge current limiter |
| **5** | Configurable alarm blocking input |
| **6** | Configurable alarm blocking input for Arm/disarm signalling |
| **7** | Output 1 for remote power failure |
| **8** | Output 2 for battery failure |
| **9** | Tamper Protection Circuit |
| **10** | Sounder connection |
| **11** | Configuration switches |
| **12** | Opening and removal protection |

- Ensure that the circuit does not exceed 60VDC/0.1A before wiring the **protection mechanism**.
- The **+12V DIR** power supply terminal may be used to provide the current required for the SIREX2 to operate without a backup battery. A high capacity power supply that is protected against overcurrents should however be provided. Warning! Operating without a backup battery is not authorised under NF & A2P.
- Supplying the power to the SIREX2 via the **+12V CHR** terminal is the recommended method, since the backup battery benefits from a constant charge with the current limited to 200mA and the voltage set to 13.8Vdc. When the alarm is sounding, the power comes mainly from the backup battery thus efficiently protecting the charger on the central alarm station.
- If the SIREX2 control equipment does not supply the power, the **0V** terminal should be connected to this equipment in order to provide a common reference.
- The blocking or resetting of the SIREX2 is driven by a control voltage that can be configured using dipswitches on the **SIR input** (see next paragraph)
- The signalling of the alarm installation arming and disarming is driven by a configurable control voltage on the **1/0 input**. (see next paragraph).
- the SIREX2 thus has two transistorised default outputs (see next paragraph).

# *OPERATION*

## *Configuration switches*

| Position | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Function | SIR Input | | I/O Input | | I/O Signalling | | Outputs | Strobe control |
| Option | *Polarity* | *Mode* | *Polarity* | *Mode* | *Beep Volume* | *Beep On* | *Polarities* | *I/O Input* |
| ON | Negative | NO appearance *1 | Negative | NO appearance *1 | MIN | Flash + beeps | NO *1 | Separate strobe control |
| OFF | Positive | NC Disappearance | Positive | NC Disappearance | MAX | Strobe alone | NF | 1/0 signalling input |

***1 configuration not authorised under the NF&A2P certification***

## *SIR INPUT*

When the control voltage is triggered on the SIR input, the sound alarm is activated for 3 minutes, whereas the unit continues to flash until the control voltage is reset.
It should be noted that the SIREX2 will not trigger when it is powered up, even if the blocking voltage is not present. The SIR input should be set first with its command signal for at least one second.
The triggering and resetting mode of the SIR input can be configured using dipswitches 1 and 2 (see table below).

| **Polarity** | **Positive** | | **Negative** | |
|---|---|---|---|---|
| Mode |  NC Disappearance |  NO Appearance |  NC Disappearance |  NO Appearance |
| Rest | +12VDC | 0V or nothing | 0V | +12VDC or nothing |
| Alarm | 0V or nothing | +12VDC | 12VDC or nothing | 0V |

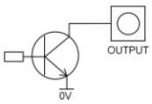
### *I/O Input*

The signalling of the alarm installation arming and disarming triggers a series of short beeps and the flashing of the LED when the I/O control voltage is switched. When the control voltage returns, the SIREX2 emits another series of longer beeps and flashes the LED to differentiate between the two states.
The triggering and resetting mode of the I/O input can be configured using dipswitches 3 and 4 (see table below).

| **Polarity** | **Positive** | | **Negative** | |
|---|---|---|---|---|
| Mode |  NC Disappearance |  NO Appearance |  NC Disappearance |  NO Appearance |
| STOP (Rest) | +12VDC | 0V or nothing | 0V | +12VDC or nothing |
| ON (alarm) | 0V or nothing | +12VDC | 12VDC or nothing | 0V |

For Arming/disarming signalling, the SIREX2 adds beeps in addition to the strobe (dipswitch No. 6). The volume of the beeps can also be lowered (dipswitch No. 5).
It is also possible to configure this input to control the strobe separately (dipswitch No. 8).

### *OUTPUTS O1 and O2*




- The transistorised default output **"O1"** is enabled (disappearance of the 0V) 5 seconds after the remote power disappears.
- The transistorised default output "**O2**" is enabled (disappearance of the 0V) when the backup battery fails (battery flat or absent). The failure test is carried out every 24 hours. This output is also enabled if the battery is low following a remote power cut. When replacing the battery, all power must be removed from the siren to ensure the default output is reset before its daily test.

To simplify wiring, outputs can be configured to be normally open by raising configuration switch No. 7 (not authorised under NF & A2P).

## *Battery Disposal*

The backup battery for the SIREX2 is not supplied by ATLS. Do not, however, throw used batteries into your bin, they may not be incinerated, buried or thrown in public dumps. Dispose of the batteries in compliance with the pertinent laws and regulations in force. Please get in contact with the relevant authorities for more information on the procedures in place in your region for the collection, recycling and disposal of used batteries.

## *Disposal of the Product*

In compliance with the requirements of the WEEE Directive (Waste Electrical and Electronic Equipment), used electrical and electronic products must be disposed of separately to normal household waste so as to promote re-use, recycling and other types of recovery and also limit the volume of waste to be eliminated and thus reduce waste. When you dispose of such products, please follow the instructions of your local authorities and/or ask for information from your retailer when you purchase a new product.

## *TECHNICAL CHARACTERISTICS*

| | |
|---|---|
| Direct Power Supply Voltage: | 9 to 15 VDC |
| Power supply voltage to +12V CHR: | 12.0 to 14.5 VDC |
| Output voltage on +BAT: | 13.8 VDC (+/-0.2 VDC) |
| Permitted Residual ripple: | 250mV |
| Power consumption during standby: | 7 mA max. |
| Standalone autonomy on internal battery: | 60 hours |
| Alarm duration: | 180 seconds |
| Power consumption when alarm is sounding & acoustic power: | MAX: 1.0A 110 dB (+/-2dB) at 1 m |
| Power consumption when only the strobe is flashing: | 25 mA max. |
| Maximum SIR and I/O control voltage: | 16 VDC (0.1 mA) |
| Negative SIR and I/O control voltage: | Less than 1 VDC |
| Positive SIR and I/O control voltage: | Greater than 3 VDC |
| Remote power failure trigger level: | 10.5 VDC (+/- 0.3VDC) |
| Low battery failure trigger level: | 11 VDC (+/- 0.3VDC) |
| Maximum current for transistorised outputs: | 50 mA |
| Voltage of switched transistorised outputs: | 0.3 - 0.5V |
| Output timeout: | 5 seconds (+/- 1s.) |
| Strobe colour and frequency: | Translucent orange - 0.67Hz |
| Housing: | Aluminium |
| Level of protection: | IP 44 IK 08 |
| Environment: | Class IV – General Exterior Use |
| Temperature for use / relative humidity: | -25°C to +70°C / 75% |
| Dimensions: | 183 X 245 X 78 mm |
| Net weight: | 1.9 kg. |
| Type of connection cable: | Rigid 4 pair cable: Ø >= 0.5 mm<br>Flexible: Ø >= 0.2mm |
| Types of backup batteries: | 12V 2.1Ah *YUASA* NP2.1-12FR<br>12V 2.1Ah *YUCELL* Y2.1-12FR<br>12V 2.0Ah *POWERSONIC* PS 1220 V0<br>12V 2.1Ah SUNLIGHT SP 12-2.1V0<br>12V 2.0Ah SEPTAM SPO20<br>12V 2.2Ah ENERGY POWER EPW12V2.2FR |

Electromagnetic compatibility: compliant with the NF EN 50130-4 (08/11) + A1 and NF EN 55022 standards
Electrical security: compliant with standard IEC 62368-1 éd. 2020

## *WARRANTY*


ATLS provides a 5-year warranty as of the date of production. The year and the month of production can be found on the serial number label inside the device. The guarantee does not cover non-operational damage, such as scratches or breakage caused by falling or shock or damage caused by abnormal use. The guarantee only applies to the electronic boards and assemblies and does not cover damage caused by natural or artificial over currents. The guarantee only applies if the electronics have not been dismounted, maladjusted or transformed. The guarantee is strictly limited to the repair or exchange of the parts that we acknowledge to be defective. The return costs are always to be borne by the sender. The immobilisation of the equipment within the framework of the guarantee cannot give rise to any compensation for any reason whatsoever. The responsibility of A.T.L.S. is limited to the repair of the products and does not cover the consequences that result from the use of same, their implementation or the non-operation of same.