

DIONE OUTDOOR SELF POWERED SIRENS



Description

Self-powered and self-protective electronic siren with built-in FLASH, for easy detection of the area from which the alarm comes. It is an ideal combination of stylish design and quality construction and is manufactured under the strictest safety standards. The outer casing is made of high-strength polycarbonate, suitable for outdoor use. Inside it is protected by a metal cap made of galvanized sheet metal and it has protection against opening the outer lid or detaching the siren from the wall. Produced in two versions: with red or blue FLASH.

General specifications

- The siren installation and the wiring can be completed without applying power from the control panel and remain so for a long time. It is activated by applying the supply voltage powered from the control panel. This feature is particularly useful in cases of a building under construction, because the installation of the siren can be completed, all the cable connections can be made and the siren battery and the panel can be connected later.
- The activation of the siren can be done with a positive or negative voltage interruption.
- The siren follows the alarm duration of the control panel. However, the siren will also give an alarm, if the cables that connecting the siren to the panel, are cut-off or shorted.
- Prealarm /Test Mode: The siren, when started, has a low volume for 10 seconds, which then rises to normal. This function is useful in case of delay in disarming the alarm as well as in system tests, because the low volume does not bother much.
- The siren battery voltage is checked every 10 minutes and, when it drops below 11.0V (Low Battery), the "FLT OUT" (FAULT OUT) output is activated. Also, the "FLT OUT" output is activated when the battery is disconnected from the siren or when its voltage drops below 10.0 V (Battery Fail).
- When the battery voltage exceeds 13.8 V, the charging is stopped to protect the battery from overcharging.
- It has protection against short circuit of the battery charging cables (over current) or from short circuit of a battery component, with simultaneous activation of the "FLT OUT" output.
- It has protection against incorrect connection of the battery terminals.
- When the siren is not supplied by the panel with 12 V and its battery voltage is below 10.0 V, it will not sound if it is activated, to protect its battery from damage. Also, when the siren is in standby mode and its battery voltage drops below 10.0 V, the flash stops flashing
- Built-in FLASH with two LEDs, high brightness and low consumption, which flash alternately when the siren is in standby mode.
- The FLASH continues to operate for an additional 15 minutes after the alarm, for easy
 detection of the area from which the alarm was given, with alternating lighting of the LEDs
 once and both together. This function stops when the battery voltage is less than 10.0 V DC.
- Protection of the siren from short circuit of FLASH LEDs.
- It has an input for visual or acoustic confirmation of the arming or disarming of the panel, in the event that a remote control is used to arm or disarm the system. This input is selectable and activates the flash or loudspeaker and the flash at the same time.
- TAMPER to protect the siren from opening the outer casing or to detach it from the wall, with free contacts, which are connected to a 24-hour zone of the alarm panel.

Siren Alarm Duration

In normal operation, the siren follows the alarm duration of the panel, but also gives an alarm in case the cables that connect it to the panel are cut or shorted.

- gives an alarm lasting five (5) minutes, if only the power cable is cut from the panel (+12V).
- gives an alarm lasting fifteen (15) minutes, if only the cable that gives the alarm command (TRIGGER) is cut.
- gives an alarm lasting five (5) minutes, if the power cables and the cable that gives the alarm command are cut at the same time.

Technical Specifications	DIONE
Power Supply	13.2-14.5 V DC
Operational Voltage	13.8 V DC
Consumption (Standby MODE)	8mA (when powered for the first time only by the battery and is not fed by the control panel)
	13.0mA when the LEDs turn on at standby mode
	9.5mA when the LEDs do not light up in standby mode
Consumption (Alarm MODE)	1.2A max only sound, 1.35A max when the FLASH turns on
Consumption LED FLASH	150 mA max
Low battery voltage output	When the battery voltage is bellow 11.5 V DC
Activation from Trigger +IN	Balances with permanent + 12V DC at the input. Gives an alarm when the voltage stops (or when the input volt- age is <5.8 V DC)
Activation from Trigger-IN	It balances when the input is connected with its $-$
Operation Frequency	900-2700 Hz
Acoustic pawer	122dB at 1 meter
Maximum Alarm Duration	15 minutes
TAMPER contacts (NC-NO)	On the cover and on the wall
TAMPER contact (NC-NO)	600mA / 125 V DC
Protection Rate	IP 44
Battery	12 V /1.3 Ah (not included)
Siren housing and Flash material	Polycarbonate
Weight (without battery)	1280 gr

Terminals Description



TAMPER	TAMPER SWITCH CONTACTS
12V - +	POWER SUPPLY INPUT (12V) FOR SIREN AND FOR BATTERY CHARGING
TRIGGER - +	ALARM INPUT CONTROLLED BY THE PANEL
SIGN	INPUT FOR VISUAL AND / OR AUDIBLE SIGNALING OF THE SYSTEM STATE
FLT OUT	LOW BATTERY VOLTAGE OUTPUT
SPEAKER	INPUT FOR CONNECTING THE SPEAKER CABLES

"TAMPER" Output

The Tamper of the siren is connected to the "TAMPER" contacts. When the siren is screwed to the wall and the lid is closed, this output is NC and becomes NO when the lid is opened or the siren is detached from the wall.

Input "- 12V +" for the power supply of the siren

The + 12V inputs are for powering the siren and charging the battery.

.• Connect the power supply contacts of the siren to the corresponding power outputs of the panel, paying attention to the correct polarity.



Caution!

For safety reasons and for the correct operation of the siren, a battery must be used. However, if you want the siren to work without a battery, you need to connect the red battery cable to the + 12V of the siren.

"- TRIGGER +" inputs for the siren activation

The inputs TRIGGER (+ or -) used to activate the siren from the alarm panel.

Activation can be done in two modes:

A. By positive voltage interruption or

B. By negative voltage interruption

"SIGN" input for visual and / or audible signaling

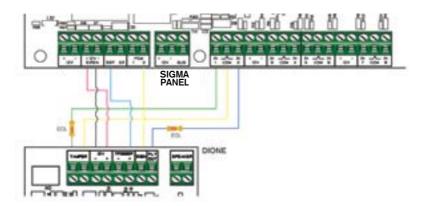
The "SIGN" input is used when we want to have visual and / or audible signaling of the arming or disarming of the panel through the siren, especially when we arm or disarm the system with remote control. The function of visual and / or audio signaling is selected by JP2. Factory default setting is the Signal to have only optical signaling. To have visual and audible signaling at the same time, cut off JP2.

"FLT OUT" output for low voltage or battery failure

The siren automatically checks the status of the battery (Battery Self-Test), making a dynamic check of the battery every hour, when there is voltage at the power input of the siren (+ 12V-) or every five minutes, when there is no voltage. If, during the test, the battery voltage is lower than 11.5V, we have an indication of low battery voltage while, if the battery voltage is lower than 10.0V, we have an indication of battery failure. In both cases, the "FLT OUT" (Fault Output) output is activated).

The "FLT OUT" output is at zero at 0 and becomes Open Collector (OC) when there is low voltage or battery failure. Returns to idle mode at the next test and as long as the battery voltage rises above 11.5V or the battery is replaced with a new one. Used to inform the user and / or the Signal Reception Center about the system battery status.

Installation - Connections



To install the siren, please follow the sequence of tasks as described below:

- 1. Select the point where you will place the siren, which should be as high as possible so that the siren is easily visible and safe.
- 2. Align the siren base on the wall with the built-in spirit level.
- 3. Mark the mounting holes and drill them.
- 4. Attach the siren to the wall with the existing brackets.
- 5. Pass the cable that connects the siren to the panel through the hole in the back of the siren base. For greater safety, prefer to run the cable inside the siren just behind this hole.



Caution!

To power the siren from the alarm panel, you must, anyway, use cable 0,5-0,75mm2. A 2x0.50 + 4x0.22 mm2 cable is recommended.

- 6. Connect the siren to the panel according to the wiring diagram and connection limit explanation. Specifically:
 - Connect Tamper contacts to an instant or 24-hour panel zone (NC or EOL). If you use an EOL belt, then, for added safety, place the terminal resistor inside the siren, on one terminal of the TAMPER and in line with the cable, as shown in the wiring diagram.



Caution!

The siren protection TAMPER does not activate the siren but the alarm panel.

• Connect the power supply contacts of the siren (- 12V +), to the corresponding power outputs of the panel, paying attention to the correct polarity.



Caution!

For safety reasons and for the correct operation of the siren, a battery must be used. However, if you want the siren to work without a battery, you need to connect the red battery cable to the + 12V of the siren.

 Connect the "+ TRIGGER" or "- TRIGGER" input of the siren to the corresponding panel output or to a programmable output (PGM). If you use the positive input, the PGM output of the panel should be 12.0 V at rest and cut off or go to 0 when an alarm is given. If you use the negative input, the PGM output of the panel should be at 0 at rest and become Open Collector or go to 12.0 V when an alarm is given.



Caution!

You should use only one of the two "TRIGGER" inputs, not both.

• Connect the "SIGN" input to a programmable output (PGM) of the panel, programmed accordingly.



Caution!

The signaling is activated for as long as the "SIGN" input receives a voltage of +12 V.

- Connect the "FLT OUT" output to an LED indicator or an area of the panel, as shown in the figure with the siren wiring. For greater safety, program the panel zone as a 24-hour EOL and place the zone terminal resistor inside the siren.
- 7. When you have completed the cable connections, connect the battery to the siren. You can complete the installation of the siren without powering it from the panel. The siren can remain in this state until the installation is complete. It will only start operating normally when it is first supplied with voltage from the board. This feature is especially useful in the case of buildings, because the installation of the siren can be completed, all the connections of the cables and the battery of the siren can be made, and the panel can be connected later.
- 8. Power the siren from the panel. By applying the supply voltage, the LEDs will start flashing, which means that the siren has been activated.
- 9. Install the inner cover and screw it in with the four corresponding screws.
- 10. Close siren's external cover and fasten it with the corresponding screws

Maintenance

You will need to check the proper functioning of the siren at regular intervals to make sure that the siren is not damaged and that it will work normally when needed.

The following functions should be checked in every maintenance:

- 1. Check the proper operation of the siren's speaker as well as the LED Flash by simulating an alarm from the Control Panel.
- 2. Check the proper functioning of Tamper switch that protect the siren from opening or detachment from the wall.
- 3. Check whether the siren's battery voltage is 13.2-13,8 V. If the battery voltage is less than this, replace the battery and plug new, ensuring the correct polarity.
- 4. Check for water or insect influx signs inside the siren and clean them if necessary.
- 5. When you have completed the Service, close the lids and secure them with the corresponding screws.

Warranty

Thank you for selecting our products which have been designed and manufactured to offer you security and safety for many years. They have been thoroughly tested before reaching your hands, and have passed all necessary performance tests.

The siren is covered by a 6 (SIX) years warranty, for good operation, from the date of purchase and covers the products that are accompanied by invoice or receipt of purchase. It should be clarified that the warranty covers the free repair of the device (labor and spare parts), in case the damage is due to a defect of the device and not to the damages, losses or injuries that will occur in the protected area, in case of non- operation of the device. The warranty does not cover the costs of transport and packaging of the device, to and from the service of our company, the damages caused to the device by incorrect connection, mishandling, floods, network surges, lightning and, in general, by external factors. Also, the warranty expires if the device has been operated by an unauthorized technician.

Also, this warranty does not cover the losses, failures or injuries that might happen to the secured area, in case of miss operation of the device. Finally, our company is not responsible for the correct installation and use of the security system, for which solely responsible is the installer.

Finally, the company bears no responsibility for the proper installation and operation of the security system and is solely responsible for the technician who performed the installation.



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