



STARK

# OPERATING MANUAL

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## **Solar Outdoor Wireless Acousto-optic Siren** ST-6107S

\* This product is a networking accessory that needs to be used with the company's gateway

# Solar Outdoor Wireless Acousto-optic Siren User's Manual

## 1. Brief Introduction

The solar outdoor wireless acousto-optic siren (hereafter called siren) adopts 8 bit MCU technology, built-in 8 LED lights, 2 105dB buzzers and 1 built-in lithium battery. Using solar energy to charge, without external power supply. It is an entire wireless system. The siren not only can connect with the alarm host via wireless transmission, but also can be used as an alarm host and a repeater. It is widely used in banks, shops and villas etc.

When the siren works with wireless alarm host by wireless transmission, alarm host can input the siren's address, or directly learning with the siren. The siren's tamper alarm, AC information, battery voltage information are all transmitted to the alarm host via wireless signal. Then the alarm host notifies the user about the alarm information via SMS, center and voice. The siren also can indicate alarm host arm / disarm status.

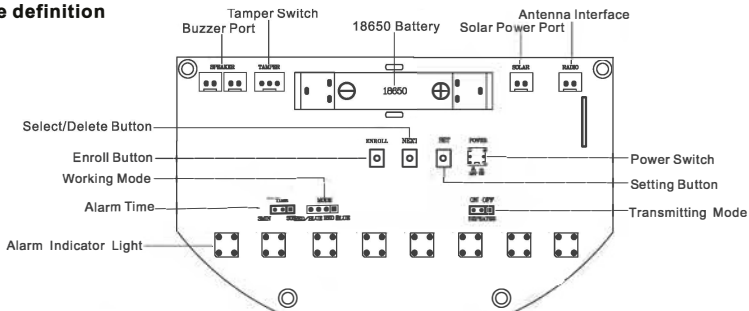
Users can buy the relative remote controls and detectors according to their demand when the siren is used as the alarm host. It can connect with these wireless accessories and become a powerful independent alarm system.

The siren can also be used as a repeater, which can increase the wireless launch distance effectively.

## 2. Main Features

- ◆Used as a repeater, it can transmit 16 wireless accessories.
- ◆3 colors of indicator lights flashing modes. ( Red/ Blue/ Red+Blue )
- ◆Design for preventing the siren being removed maliciously .
- ◆Acousto-optic notice when operating Arm /Disarm.
- ◆Status reports including the alarm from siren itself, tamper alarm
- ◆Support 8 remote controls, 16 detectors. The last 4 wireless zones for 24 hours defend.
- ◆Two optional ways to enroll: by trigger button or inputting siren address code.
- ◆105dB alarm sound, flashing lights, a strong deterrent.
- ◆Built-in 2600mAh 3.7V 18650 lithium battery, up to 60days of stand-by time.
- ◆Built-in balance device, convenient to install in horizontal direction.

## 3. Interface definition



### 3.1 Transmitting Mode

ON: Turn on transmitting mode

OFF: Turn off transmitting mode

### 3.2 Alarm output time

30S: 30 seconds of alarm sound

3MIN: 3 minutes of alarm sound

### 3.3 Status Light

Flashes once every 5 seconds: The siren / the alarm host is at arm status

Light bright 1 second: The siren is transmitting

Light OFF: The siren/ the alarm host is at disarm or unknown status

### 3.4 Working Mode

Blue: The indicator light is blue

Red: The indicator light is red

Red+Blue: The indicator light is red+blue

Attention: After the alarm time, if you don't disarm, the indicator light will flashes once every 2s to remind you that the system has been triggered. The reminding time will be last for 1 hour.

## 4. Operation Instruction

### 4.1.Remote Control

#### 4.1.1. Enroll Remote Control

Step1: Under the normal status without alarm event, long press "SET" button with 3s until heard a short "Di" and red indicator light bright, it means the siren is in enrolling status, then user can start to enroll remote control, press any button of remote control to enroll.

Step2: If user wants to enroll the next remote control, please press "NEXT" button to the next one.

Attention: If the red indicator light is flashing, it means the current remote control has not been enrolled and user can press any button of remote control to enroll. If enrollment succeeded, the siren will prompt a short "Di", meanwhile red indicator light will turn flashing into long bright, it means remote control enrollment succeed. If the red indicator light is long bright, it means the current address has been already enrolled. User should delete previous one to re-enrolling. If heard 5 short "Di", it means the remote control has already been enrolled.

#### 4.1.2. Delete Remote Control

In remote control enrolling status, press "NEXT" button with 3s to delete the existing remote control. After user heard 2 short

"Di" from siren and the indicator turned long bright into flashing, deletion is successful.

### 4.1.3. Exit Remote Control Enrollment

In remote control enrolling status, short press "SET" button twice to exit.

## 4.2. Detector

### 4.2.1. Enroll Detector

Step1: Under remote controller enrolling status, short press "SET" button once, blue indicator light bright, it means the siren is in enrolling status, then user can start to enroll detectors.

Step2: If user wants to enroll the next detector, please short press "NEXT" button to the 2<sup>nd</sup> detector.

Attention: If the current blue indicator light is flashing, it means the current detector has not yet been enrolled and user can enable detector to transmit alarm signal to be enrolled. If enrollment succeeded, siren will prompt a short "Di", meanwhile blue indicator light will turn flashing into long bright, it means successful enrollment of detector. If the current blue indicator light is long bright, it means the current detector has been already enrolled. User should delete previous one before re-enrolling. If heard 5 short "Di", it means the detector has already been enrolled.

### 4.2.2. Delete Detector

In detector enrolling status, press "NEXT" button with 3s to delete the existing detector. After user heard 2 short "Di" and the blue indicator light turned long bright into flashing, deletion is successful.

### 4.2.3. Exit Detector Enrollment

In detector enrolling status, short press "SET" button once to exit.

## 4.3. Enroll Siren

Under siren standby status, short press "ENROLL" button once, siren will emit wireless enrolled signal to host, then alarm host enter siren enrolled status, when user hear a short "Di" from alarm host, it means siren enrollment succeed.

## 4.4. Repeater

### 4.4.1. Enroll Repeater

Step1: Long pressing "SET" and "NEXT" buttons for 3 seconds at the same time, after hearing a short "Di", the siren enters the repeater enrollment. The red and blue indicator light bright refers to the current repeater which need be transmitted is enrolled.

Step2: If user wants to enroll the next one, please short press "NEXT" button to the 2<sup>nd</sup> repeater.

Attention: If the current red and blue indicator light is flashing, it means the current repeater has not yet been enrolled and user can trigger the repeater. If enrollment succeeded, siren will prompt a short "Di", meanwhile red and blue indicator light will turn flashing into long bright, it means successful enrollment of repeater. If the red and blue indicator light is long bright, it means the current repeater has been already enrolled. User should delete previous one before re-enrolling. If heard 5 short "Di", it means the repeater has already been enrolled.

### 4.4.2. Delete Repeater

In repeater enrolling status, press "NEXT" button with 3s to delete the existing repeater. After user heard 2 short "Di" and the blue indicator light turned long bright into flashing, deletion is successful.

### 4.4.3. Exit Repeater Enrollment

In repeater enrolling status, short press "SET" button once to exit.

## 5. Copy the siren address

### 5.1. Copy the siren address

Press the "ENROLL" and "NEXT" keys for 3 seconds at the same time, hear the one short "beep", enter the copy alarm address status, and red and blue light of siren is on. If the red and blue indicator is flashing, it means the factory address. Then long press the "ENROLL" button, short press "ENROLL" button of the siren which you want to copy; if the copy is successful, the alarm will prompt one short "Beep", while the alarm red and blue indicator will stop flashing into a long light, suggesting that the transponder replication is successful; if the alarm red and blue indicator is long bright, indicating that the current address of the siren has been copied, the user must deleting first and then you can re-copy.

### 5.2. Delete the copy siren address

Press the "NEXT" key for 3 seconds to clear the copy address of siren and return to the factory address, and will prompt the two short "beep" and the siren red and blue indicator changes from long bright to Flash, indicate delete success.

### 5.3. Exit the copy siren address

In the copy siren address state, short press "SET" key, will exit the copy siren address state.

## 6. Recovery Factory Default

In stand-by status, long press "SET" and "ENROLL", until hear 2 short "Di", It means that the siren has been back to factory default.

## 7. Technical parameter

Size specification: 320mm \* 213mm \* 94mm \* (length \* width \* thickness)

Battery: 2600mAh 3.7V 18650 lithium battery

Alarm current: ≤400mA Stand-by time: ≤60 days (without sunlight) Siren alarm sound: 105dB

Wireless Working Frequency: 433.92MHz Wireless Emitting Distance: ≤400 (in the open area)

Wireless Receiving Distance: ≤400 (in the open area)

Use environment: working temperature -20°C~ +55°C relative humidity 40 ~ 80%