



# dahua ARA13-W2 Wireless External Siren User Manual

[Home](#) » [Dahua](#) » dahua ARA13-W2 Wireless External Siren User Manual 

## Contents

- 1 dahua ARA13-W2 Wireless External Siren
- 2 General
- 3 Safety Instructions
- 4 Revision History
- 5 Privacy Protection Notice
- 6 About the Manual
- 7 Important Safeguards and Warnings
- 8 Operation Requirements
- 9 Installation Requirements
- 10 Introduction
- 11 Checklist
- 12 Design
- 13 Dimensions
- 14 Power On
- 15 Connecting to the Hub
- 16 Installation
- 17 Configuration
- 18 Configuring the Siren
- 19 Legal and Regulatory Information
- 20 USA Regulatory Compliance
- 21 Documents / Resources
  - 21.1 References
- 22 Related Posts





## General

This manual introduces the functions and operations of the wireless outdoor siren (hereinafter referred to as “the siren”).

## Safety Instructions

The following signal words might appear in the manual.

Signal Words	Meaning
<b>DANGER</b>	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
<b>WARNING</b>	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
<b>CAUTION</b>	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results.
<b>TIPS</b>	Provides methods to help you solve a problem or save time.
<b>NOTE</b>	Provides additional information as a supplement to the text.

## Revision History

Version	Revision Content	Release Time
V1.0.0	First release	December 2021

## Privacy Protection Notice

As the device user or data controller, you might collect the personal data of others such as their face, fingerprints,

and license plate number. You need to be in compliance with your local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures which include but are not limited: Providing clear and visible identification to inform people of the existence of the surveillance area and provide required contact information.

## **About the Manual**

- The manual is for reference only. Slight differences might be found between the manual and the product.
- We are not liable for losses incurred due to operating the product in ways that are not in compliance with the manual.
- The manual will be updated according to the latest laws and regulations of related jurisdictions. For detailed information, see the paper user's manual, use our CD-ROM, scan the QR code or visit our official website. The manual is for reference only. Slight differences might be found between the electronic version and the paper version.
- All designs and software are subject to change without prior written notice. Product updates might result in some differences appearing between the actual product and the manual. Please contact customer service for the latest program and supplementary documentation.
- There might be errors in the print or deviations in the description of the functions, operations and technical data. If there is any doubt or dispute, we reserve the right of final explanation.
- Upgrade the reader software or try other mainstream reader software if the manual (in PDF format) cannot be opened.
- All trademarks, registered trademarks and company names in the manual are properties of their respective owners.
- Please visit our website, contact the supplier or customer service if any problems occur while using the device.
- If there is any uncertainty or controversy, we reserve the right of final explanation.

## **Important Safeguards and Warnings**

This section introduces content covering the proper handling of the Device, hazard prevention, and prevention of property damage. Read carefully before using the Device, comply with the guidelines when using it, and keep the manual safe for future reference.

## **Operation Requirements**

- Make sure that the power supply of the device works properly before use.
- Do not pull out the power cable of the device while it is powered on.
- Only use the device within the rated power range.
- Transport, use and store the device under allowed humidity and temperature conditions.
- Prevent liquids from splashing or dripping on the device. Make sure that there are no objects filled with liquid on top of the device to avoid liquids flowing into it.
- Do not disassemble the device.

## **Installation Requirements**

- Connect the device to the adapter before power on.
- Strictly abide by local electrical safety standards, and make sure that the voltage in the area is steady and

conforms to the power requirements of the device.

- Do not connect the device to more than one power supply. Otherwise, the device might become damaged.
- Observe all safety procedures and wear required protective equipment provided for your use while working at heights.
- Do not expose the device to direct sunlight or heat sources.
- Do not install the device in humid, dusty or smoky places.
- Install the device in a well-ventilated place, and do not block the ventilator of the device.
- Use the power adapter or case power supply provided by the device manufacturer.
- The power supply must conform to the requirements of ES1 in IEC 62368-1 standard and be no higher than PS2. Note that the power supply requirements are subject to the device label.
- Connect class I electrical appliances to a power socket with protective earthing.

## **Introduction**

### **Overview**

Wireless outdoor siren is an outdoor siren that alarms loudly when an alarm event occurs, attracting the attention of everyone within its vicinity. It features danger warning, intrusion deterrent, and is used in outdoor scenes such as in villas, homes, and on streets.

### **Technical Specification**

Please refer to the corresponding technical specifications according to the corresponding models.

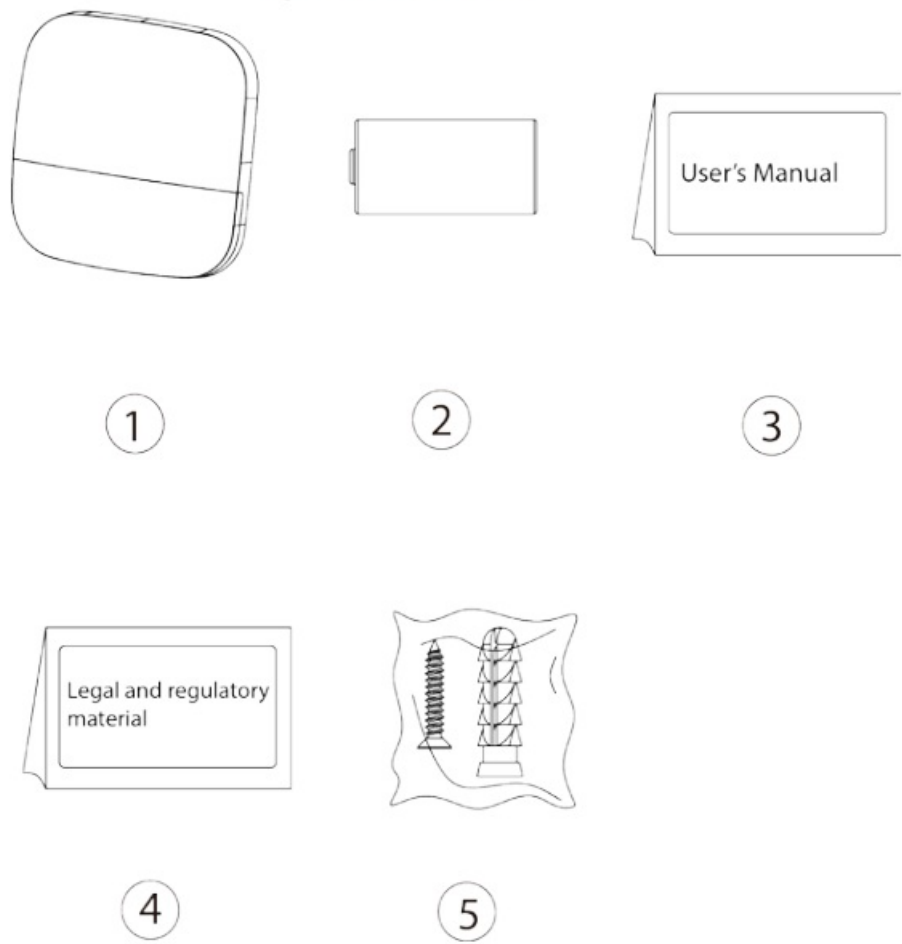
Type	Parameter	Description	
Function	Remote Update	Cloud update	
	Low Battery Alarm	Yes	
	Battery Level Display	Yes	
	Tamper	Yes	
	Signal Strength	Signal strength detection	
	Temperature Measurement	−30 °C to + 70°C (−22 °F to + 158 °F) (outdoor)	
Wireless	Carrier Frequency	868.0 MHz–868.6 MHz (DHI-ARA13-W2 (868))	433.1 MHz–434.6 MHz (DHI-ARA13-W2)
	Transmission Power	Limit 25 mW (DHI-ARA13-W2 (868))	Limit 10 mW (DHI-ARA13-W2)
	Communication Distance	Up to 1,600 m (5,249.34 ft) in an open space (DHI-ARA13-W2 (868))	Up to 1,200 m (3,937.01 ft) in an open space (DHI-ARA13-W2)
	Communication Mechanism	Two-way	
	Frequency Hopping	Yes	
	Encryption Mode	AES128	
General	Power Supply Mode	Battery (default), 12 VDC	
	Battery Model	4 × CR123A	
	Battery Voltage	3 VDC	
	Min. Voltage	2.6 VDC	
	Battery Low Threshold	2.8 VDC	

Type	Parameter	Description
	Consumption	<ul style="list-style-type: none"> <li>Quiescent current: 92 <math>\mu</math>A</li> <li>Max. current: 420 mA</li> </ul>
	PS Type	Type B
	Battery Life	4 CR123A batteries can be used for 3.4 years (if triggered fortnightly and the alarm sounds for 120 s each time with a battery efficiency of 80%)
	Operating Temperature	−20 °C to +65 °C (−4 °F to +149 °F)
	Operating Humidity	10%–90% (RH)
	Product Dimensions	200 mm × 200 mm × 52.5 mm (7.87" × 7.87" × 2.07") (L × W × H)
	Packaging Dimensions	255 mm × 239 mm × 64 mm (10.04" × 9.41" × 2.52") (L × W × H)
	Net Weight	610 g (1.34 lb)
	Gross Weight	920 g (2.03 lb)
	Installation	Wall mount
	Casing	PC + ABS
	Protection	IP65
Technical	Indicator Light	<ul style="list-style-type: none"> <li>1 × green pairing indicator</li> <li>12 × alarm LED group</li> </ul>
	Button	1 × power switch
	Scenario	Outdoor
	Sound and Light Alarm	Light alarm and multiple alarm sounds, including fire, medical, intrusion, panic, and more.
	Sound Pressure	110 dB
Certifications	CE DHI-ARA13-W2 (868) FCC DHI-ARA13-W2	

## Checklist

Check the package according to the following checklist. If you find device damage or any loss, contact the after-sales service.

Figure 2-1 Checklist

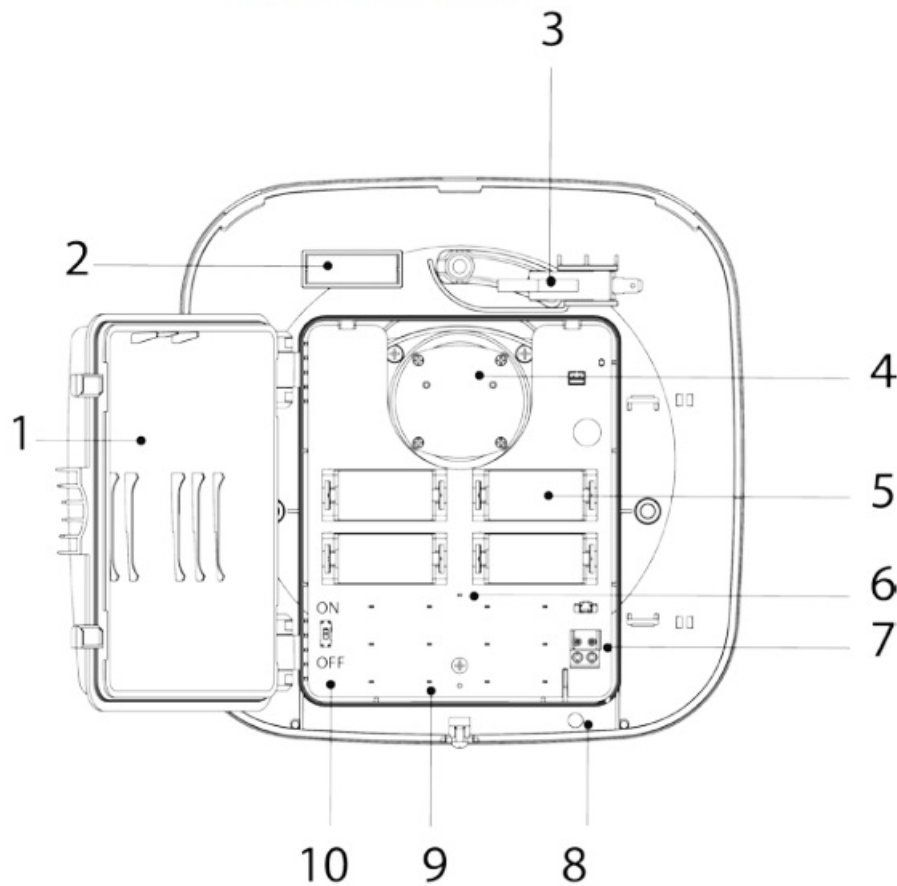


No.	Item	No.	Item
1	Wireless outdoor siren	4	Legal and regulatory information
2	CR123A battery × 4	5	Screw package
3	User's manual	—	—

Design

Appearance

Figure 3-1 Appearance

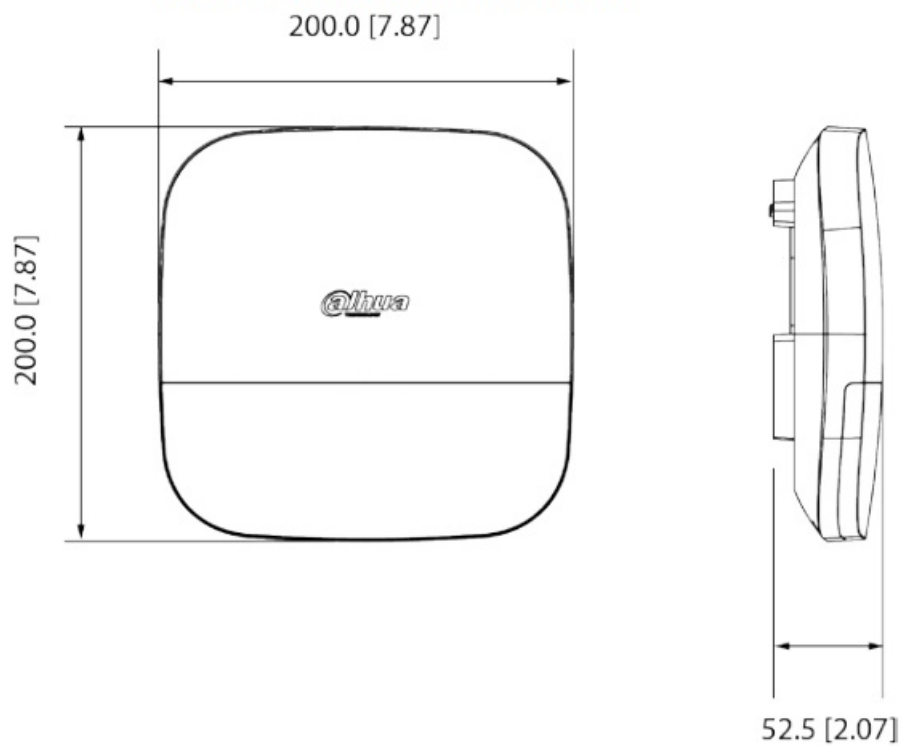


No.	Name	Description
1	Waterproof cover	Protects the siren from water and dust.
2	Spirit level	Indicates whether the siren is horizontal and level.
3	Tamper switch	When the tamper switch is released, the tamper alarm will be triggered.
4	Buzzer	Alarms loudly when an alarm event occurs.
5	Battery	Install CR123A batteries according to the polarity mark.
6	Pairing indicator	<ul style="list-style-type: none"> <li>Flashes green quickly: Pairing.</li> <li>Solid green for 2 seconds: Pairing successful.</li> <li>Slowly flashes green for 3 seconds: Pairing failed.</li> </ul>
7	12 VDC power terminal	<p>Insert the 12 VDC power cable.</p> <p>The cable is not included in the package.</p>
8	Power cable knockout	The entry for wiring the power cable.
9	Alarm indicator	Flashes quickly when an alarm event occurs.
10	On/Off switch	Turn on or turn off the siren.



## Dimensions

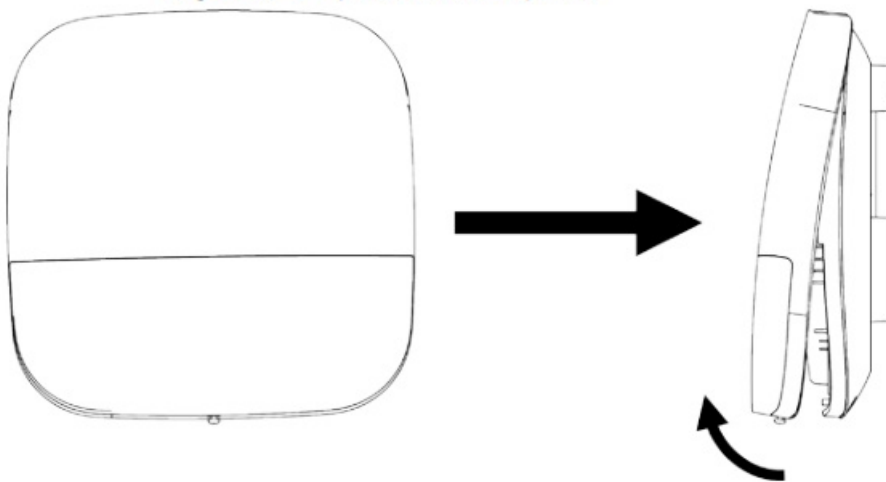
Figure 3-2 Dimensions (mm [inch])



## Power On

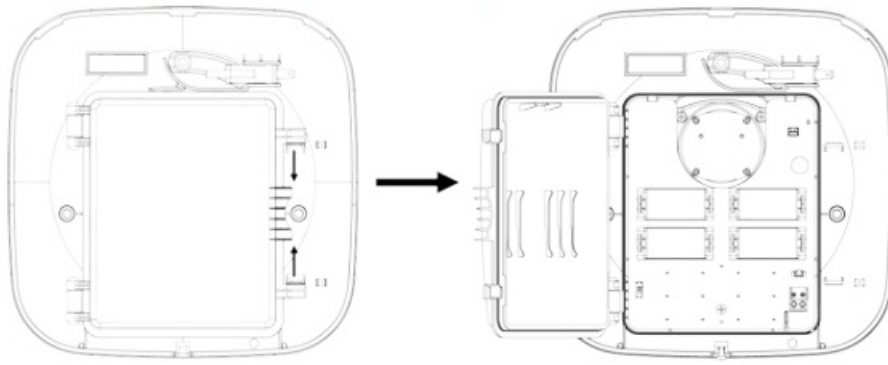
Step 1 Open the front panel of the siren.

Figure 4-1 Open the front panel



Step 2 Open the waterproof cover.

**Figure 4-2 Open the waterproof cover**



Step 3 Power on.

- Battery power: Install four CR123A batteries according to the polarity mark.
- 12 VDC power (Optional): Feed the 12 VDC power cable into the case through the power cable knockout.


Step 4 Push the power switch to ON.

## Connecting to the Hub

Before you connect the siren to the hub, install the DMSS app to your phone. This manual uses iOS as an example.

- Make sure the version of the DMSS app is 1.96 or later, and the hub is V1.001.R.211209 or later.
- Make sure that you have already created an account, and added the hub to DMSS.
- Make sure that the hub has a stable internet connection.
- Make sure that the hub is disarmed.

Step 1: Go to the hub screen, and then tap  to add the siren.

Step 2: Tap  to scan the QR code at the bottom of the siren, and then tap Next.

Step 3: Tap Next after the siren has been found.

Step 4: Follow the on-screen instructions and switch the siren to on, and then tap Next.

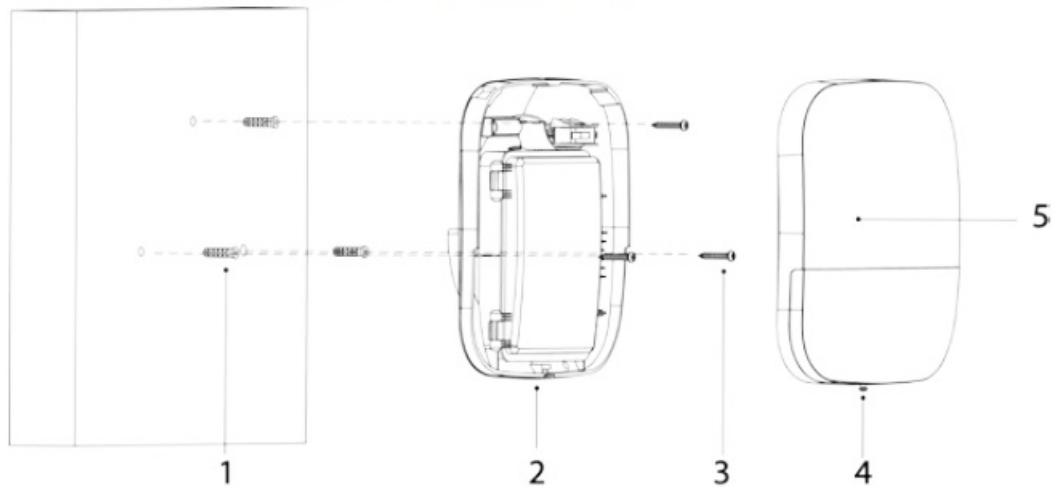
Step 5: Wait for the pairing.

Step 6: Customize the name of the siren, and select the area, and then tap Completed.

## Installation

Prior to installation, power on the siren, connect it to the hub, and then check the signal strength of the installation location. We recommend installing the siren in a place with a signal strength of at least 2 bars.

Figure 6-1 Installation



















No.	Item Name	No.	Item Name
1	Expansion bolt	4	Screw
2	Rear panel	5	Front panel
3	ST4 × 25 mm self-tapping screw	—	—

- Step 1: Loosen the screw at the bottom of the siren to remove the front panel.
- Step 2: Set the siren into a horizontal position. Use the spirit level to make sure the siren is horizontal and level.
- Step 3: Put the expansion bolts into the holes.
- Step 4: Align the screw holes on the rear panel with the expansion bolts.
- Step 5: Secure the rear panel with three ST4 × 25 mm self-tapping screws.
- Step 6: Tighten the screw at the bottom of the front panel to secure the siren.

## Configuration

### Viewing Status

On the Hub screen, select a siren from the accessory list, and then you can view the status of the siren.

Parameter	Description
Temporary Deactivate	<p>The status for whether the functions of the siren are enabled or disabled.</p> <ul style="list-style-type: none"> <li>•  : Enable.</li> <li>•  : Only disable tamper alarm.</li> <li>•  : Disable.</li> </ul>
Temperature	The temperature of the environment.
Signal Strength	<p>The signal strength between the hub and the siren.</p> <ul style="list-style-type: none"> <li>•  : Low.</li> <li>•  : Weak.</li> <li>•  : Good.</li> <li>•  : Excellent.</li> <li>•  : No.</li> </ul>
External Power Status	<p>Whether there is a 12 VDC power failure alarm.</p> <ul style="list-style-type: none"> <li>•  : No.</li> <li>•  : Yes.</li> </ul>
Battery Level	<p>The battery level of the siren.</p> <ul style="list-style-type: none"> <li>•  : Fully charged.</li> <li>•  : Sufficient.</li> <li>•  : Moderate.</li> <li>•  : Insufficient.</li> </ul>
Anti-tampering Status	The tamper mode of the accessory, which reacts to the detachment of the body.
Online Status	<p>Online and offline status of the siren.</p> <ul style="list-style-type: none"> <li>•  : Online.</li> <li>•  : Offline.</li> </ul>
Volume	Alarm volume level.
Alarm Duration	Duration of the alarm sound.
Enter/Exit Arming and Disarming Ringtone	The ringtone when entering or exiting arming mode.
Beep Volume	High, medium and low.

Parameter	Description
Relay Status	The status of whether the siren forwards accessory messages to the hub through the repeater.
Program Version	The program version of the siren.

## Configuring the Siren

On the Hub screen, select a siren from the accessory list, and then tap to configure the parameters of the siren.

Parameter	Description
Device Configuration	<ul style="list-style-type: none"> <li>● View device name, type, SN and device model.</li> <li>● Edit device name, and then tap <b>Save</b> to save your configurations.</li> </ul>
Area	Select the area to which the siren is assigned.
Temporary Deactivate	<ul style="list-style-type: none"> <li>● Tap <b>Enable</b>, and then the function of the siren will be enabled.</li> </ul> <p><b>Enable</b> is set by default.</p> <ul style="list-style-type: none"> <li>● Tap <b>Only Disable Tamper Alarm</b>, and then the system will only ignore tamper alarm messages.</li> <li>● Tap <b>Disable</b>, and then the function of the siren will be disabled.</li> </ul>
Control Permissions	Select areas to which the siren will be linked when an alarm is triggered.
External Power Detection	If <b>External Power Detection</b> is enabled, power failure alarm messages will be pushed to the DMSS.
LED Indicator	<p><b>LED Indicator</b> is enabled by default. For details on indicator behavior, see <a href="#">“3.1 Appearance”</a>.</p> <p>If <b>LED Indicator</b> is disabled, the LED indicator will remain off regardless of whether the siren is functioning normally or not.</p>
Sound Settings	<ul style="list-style-type: none"> <li>● Configure volume level of the alarm sound.</li> </ul> <p>Select from low, medium, and high.</p> <ul style="list-style-type: none"> <li>● Enable or disable the function of beep during arming and disarming, and enter and exit delay.</li> </ul>
Alarm Duration	<ul style="list-style-type: none"> <li>● Configure the duration of the alarm sound.</li> <li>● Select from 3 s through 80 s.</li> </ul>
Alarm Status Indication	<p>If <b>Alarm Status Indication</b> is enabled, the LED indicator will turn on when an alarm is triggered in an armed area.</p> <p>The LED indicator will flash twice every minute if an area has not been disarmed, and an alarm event ended 30 seconds before.</p>

Parameter	Description
Beep Volume	Set beep volume during arming and disarming, and enter and exit delay. Select from <b>High</b> , <b>Medium</b> and <b>Low</b> .
Signal Strength Detection	Check the current signal strength.
Speaker Test	Tap <b>Start Detection</b> to test the volume level of the alarm.
Transmit Power	<ul style="list-style-type: none"> <li>● Select from high, low, and automatic.</li> <li>● The higher transmission power levels are, the further transmissions can travel, but power consumption increases.</li> </ul>
Cloud Update	Update online.

## Legal and Regulatory Information

### Legal Considerations

Video surveillance can be regulated by laws that vary from country to country. Check the laws in your local region before using this product for surveillance purposes.

### Intellectual Property Rights

Dahua Technology retains all intellectual property rights relating to technology embodied in the product described in this document.

### Equipment Modifications

This equipment must be installed and used in strict accordance with the instructions even in the user documentation. This equipment contains no user-serviceable components. Unauthorized equipment changes or modifications will invalidate all applicable regulatory certifications and approvals.

### Trademark Acknowledgments

Trademark applications of Dahua Technology in various jurisdictions. All other company names and products are trademarks or registered trademarks of their respective companies.

### Regulatory Information

#### European Directives Compliance

This product complies with the applicable CE marking directives and standards.

- Low Voltage (LVD) Directive 2014/35/EU
- Electromagnetic Compatibility (EMC) Directive 2014/30/EU
- Restrictions of Hazardous Substances (RoHS) Directive 2011/65/EU and its amending Directive (EU) 2015/863

A copy of the original declaration of conformity may be obtained from Dahua Technology.

The most up to date copy of the signed EU Declaration of Conformity (DoC) can be downloaded from:  
[www.dahuasecurity.com/support/notice/](http://www.dahuasecurity.com/support/notice/)

### **CE-Electromagnetic Compatibility (EMC)**

This digital equipment is compliant with Class B according to EN 55032

### **CE-Safety**

This product complies with IEC/EN/UL 60950-1 or IEC/EN/UL 62368-1, Safety of Information Technology Equipment

**Declaration of Conformity CE** (Only for the product has RF function)

Hereby, Dahua Technology declares that the radio equipment is compliant with Radio Equipment Directive (RED) 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address  
[www.dahuasecurity.com/support/notice/](http://www.dahuasecurity.com/support/notice/)

## **USA Regulatory Compliance**

### **FCC**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions

1. This device may not cause harmful interference
2. This device must accept any interference received, including interference that may cause undesired operation

The attention that changes or modifications not expressly proved by the party responsible for compliance could void the user's authority to operate the equipment.

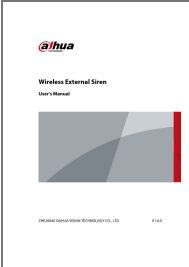
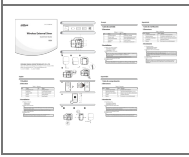
**Note:** This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This product generates uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio or TV technician for help

FCC SDOC Statement can be downloaded from <https://us.dahuasecurity.com/support/notices/>

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- Website: [www.dahuasecurity.com](http://www.dahuasecurity.com)

## **Documents / Resources**

	<p><a href="#">dahua ARA13-W2 Wireless External Siren</a> [pdf] User Manual ARA13-W2, ARA13W2, SVN-ARA13-W2, SVNARA13W2, ARA13-W2 Wireless External Siren, Wireless External Siren</p>
	<p><a href="#">dahua ARA13-W2 Wireless External Siren</a> [pdf] User Guide ARA13-W2, Wireless External Siren, ARA13-W2 Wireless External Siren</p>

References

- [nty.com/](#)
- [RITY.COM](#)
- [Dahua Technology USA Inc - Dahua Technology USA Inc](#)