

**dahua**  
TECHNOLOGY  
ARD2251E-W2 Wireless  
Triple Tech Detector



# dahua ARD2251E-W2 Wireless Triple Tech Detector User Manual

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**dahua ARD2251E-W2 Wireless Triple Tech Detector**



## Product Information

### Specifications

Type	General Technical
Communication Distance	868 Series: RF: Up to 1,600 m (5,249.34 ft) in an open space RF-HD: Up to 1,400 m (4593.18 ft) in an open space 433 Series: RF: Up to 1,200 m (3,937.01 ft) in an open space RF-HD: Up to 1,000 m in an open space
Communication Mechanism	Two-way
Transmitter Power (EIRP)	Limit 25 mW (868 Series) Limit 10 mW (433 Series)
Battery Life	Without Camera: 5 years (triggers 10 alarms a day) With Camera: 3.5 years (triggers alarms twice a week)
Operating Temperature	Not specified
Operating Humidity	Not specified
Product Dimensions	Net Weight: Without Camera: 651 g (1.44 lb) With Camera: 763 g (1.68 lb) Gross Weight: Not specified Installation Height: Not specified Casing Protection: Not specified Certifications: Not specified Detection Mode: Not specified

### Product Usage Instructions

## Installation

Follow the installation guidelines provided in the manual for proper setup and mounting of the wireless triple-tech detector.

## Functions

The device offers various functions including video monitoring, low battery detection, tamper alarm, signal strength testing, remote updates, and more.

## Operations

To operate the detector, ensure it is powered on and properly connected to the network. Follow the instructions for setting up communication parameters and adjusting detection settings as needed.

## Frequently Asked Questions (FAQ)

- **How do I update the detector remotely?**

To update the detector remotely, refer to the instructions provided in the manual regarding cloud updates or remote update procedures.

- **What is the battery life of the detector?**

The battery life varies depending on the model and usage frequency. Without a camera, it can last up to 5 years triggering 10 alarms a day; with a camera, it lasts about 3.5 years triggering alarms twice a week.






## Foreword

### General

This manual introduces the installation, functions and operations of the wireless triple-tech detector (hereinafter referred to as the “triple-tech detector”). Read carefully before using the device, and keep the manual safe for future reference.

### Safety Instructions

The following signal words might appear in the manual.

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

### Privacy Protection Notice

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

## Introduction

### Overview

Wireless Triple-tech Detector performs high precision detection using PIR, microwave detection technology, optical technology and intelligent algorithms. It also eliminates interference caused by small animals, the ambient temperature and changes in the light to ensure that the detector can recognize objects accurately even when people move, or in complex environments. When combined with the camera module, its expanded capabilities allow you to both monitor your scene through videos and images, and check alarms in real time. You also receive alarm notifications when alarms are triggered, so that you can stay up to date on the situation of your site.

### Technical Specifications

This section contains technical specifications of the triple-tech detector. Please refer to the ones that correspond with your model.

Type	Parameter	Description	
Video	Field of View	110° (H); 60° (V)	
	Image Type	JPEG	
	Resolution	1280 × 960; 640 × 480; 320 × 240; 160 × 120	
	Frame Rate	2	
	Illumination Mode	Infrared Light	
	Illumination Range	15 m (49.21 ft)	
	Day/Night Switch	Color/Black & White	
Function	Indicator Light	1 × green alarm indicator	
	Button	1 × power switch	
		1 × detection range adjustment switch	
	Remote Update	Cloud update	
	Low Battery Detection	Yes	
	Battery Level Display	Yes	
	Tamper	Tamper alarm	
	Signal Strength	RF Signal test RF-HD signal test	
Wireless	Carrier Frequency	868 Series: 868.0 MHz–868.6 MHz	443 Series: 433.1 MHz–434.6 MHz

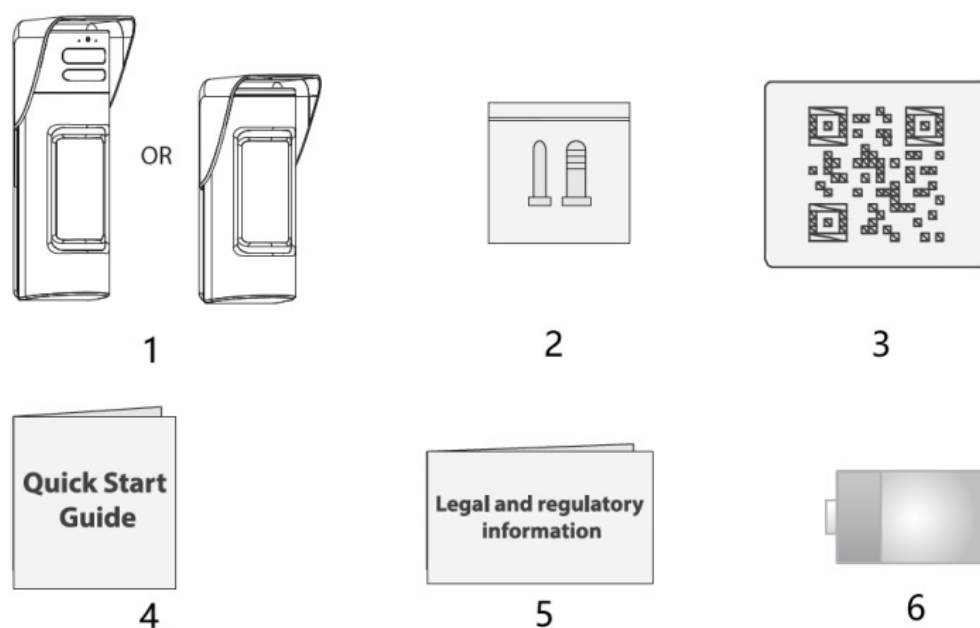
	Communication Distance	868 Series: RF: Up to 1,600 m (5,249.34 ft) in an open space RF-HD: Up to 1,400 m (4593.18 ft) in an open space	433 Series: RF: Up to 1,200 m (3,937.01 ft) in an open space RF-HD: Up to 1,000 m in an open space
	Communication Mechanism	Two-way	
	Transmitter Power (EIRP)	Limit 25 mW	Limit 10 mW
	Frequency Hopping	Yes	
	Encryption Mode	AES128	
	Power Supply	CR123A × 4	

General	Battery Life	Without Camera: 5 years (triggers 10 alarms a day) With Camera: 3.5 years (triggers alarms twice a week)
	Operating Temperature	–25 °C to +60 °C (–13 °F to +140 °F)
	Operating Humidity	10%–90% (RH)
	Product Dimensions	Without Camera: 211 mm × 106 mm × 94 mm (8.31" × 4.17" × 3.7") With Camera: 263 mm × 106 mm × 94 mm (10.35" × 4.17" × 3.70")
	Packaging Dimensions	Without Camera: 251 mm × 116 mm × 119 mm (9.88" × 4.57" × 4.69") With Camera: 297 mm × 146 mm × 120 mm (11.69" × 5.75" × 4.72")
	Net Weight	Without Camera: 651 g (1.44 lb) With Camera: 763 g (1.68 lb)
	Gross Weight	Without Camera: 890 g (1.96 lb) With Camera: 1.06 kg (2.34 lb)
	Installation	Wall mount, pole mount
	Installation Height	0.8 to 1.3 m
	Casing	PC + GF
	Protection	IP65
	Certifications	CE
Technical	Detection Mode	PIR + Microwave

	Sensitivity	PIR:3 levels adjustable
	Detection Range	15 m (49.21 ft), the installation height is 1 m (3.28 ft)
	Detection Speed	0.3 m/s–2 m/s
	Pet Immunity Level	<80 cm (2.62 ft), about 40 kg (88.19 ft)
	White Light Resistance Level	10000 lux
	Two-way Digital Temperature Compensation	Yes
	Scenario	Outdoor, indoor
	Operating Current	20 uA
	Alarm Current	Without Camera: 26mA (Avg); 250 mA (Max) With Camera in Night: 380 mA (Avg); 1.5 A (Max)

## Checklist

Figure 2-1 Checklist

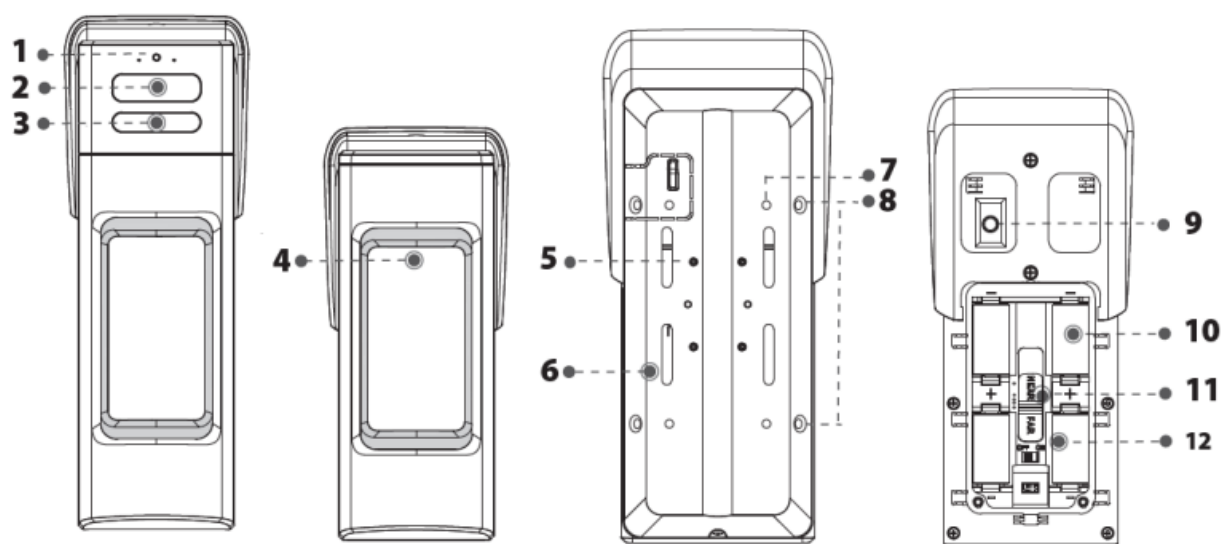


No.	Item Name	Quantity	No.	Item Name	Quantity
1	Wireless triple-tech detector(with/without camera)	1	4	Quick start guide	1
2	Package of screws	1	5	Legal and regulatory information	1
3	QR code	1	6	Battery	4

## Design

## Appearance

Figure 3-1 Appearance





No.	Name	Description
1	Photosensitive sensor	Used for detecting the ambient brightness and intensity of the environment.
2	Camera	Captures images when an intrusion alarm is triggered.
3	IR light	Provides IR light for dark environments.
4	Indicator	<ul style="list-style-type: none"> <li>● Flashes green quickly: Pairing mode or reduced sensitivity mode.</li> <li>● Solid green: An alarm event was triggered.</li> <li>● Solid green for 2 seconds: Pairing successful or the self-detection of camera successful.</li> <li>● Slowly flashes green for 3 seconds: Pairing failed or self-detection of camera failed.</li> </ul>
5	Rotation bracket hole	Used to install the rotation bracket.
6	Pole mount bracket hole	Used to install the pole mount bracket.
7	Wall mount screw hole	Used to install the wall mount bracket.
8	Corner mount screw hole	Used to install the corner mount bracket.
9	Tamper switch	When the tamper switch is released, the tamper alarm will be triggered.
10	Battery compartment	The battery receptacle cover on the detector to place batteries.
11	Detection range adjustment switch	Adjust the detecting range of the detector.
12	Power switch	Turn on or off the detector.

## Dimensions

Figure 3-2 Dimensions (mm [inch])

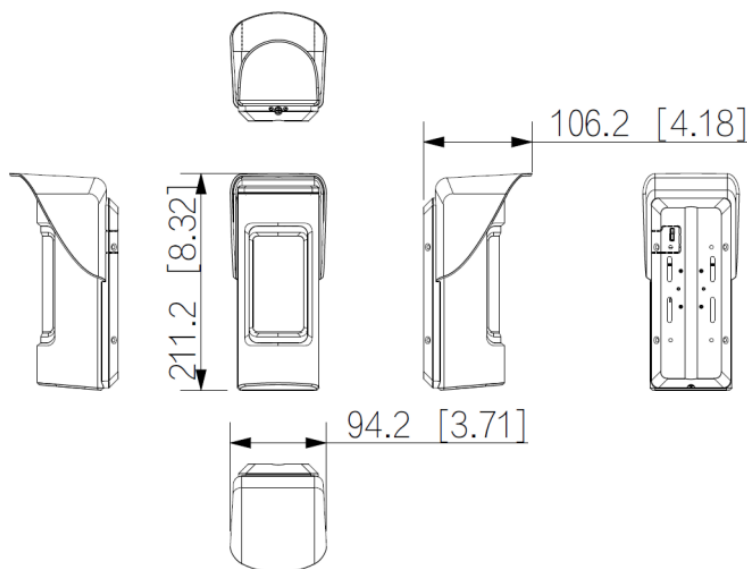
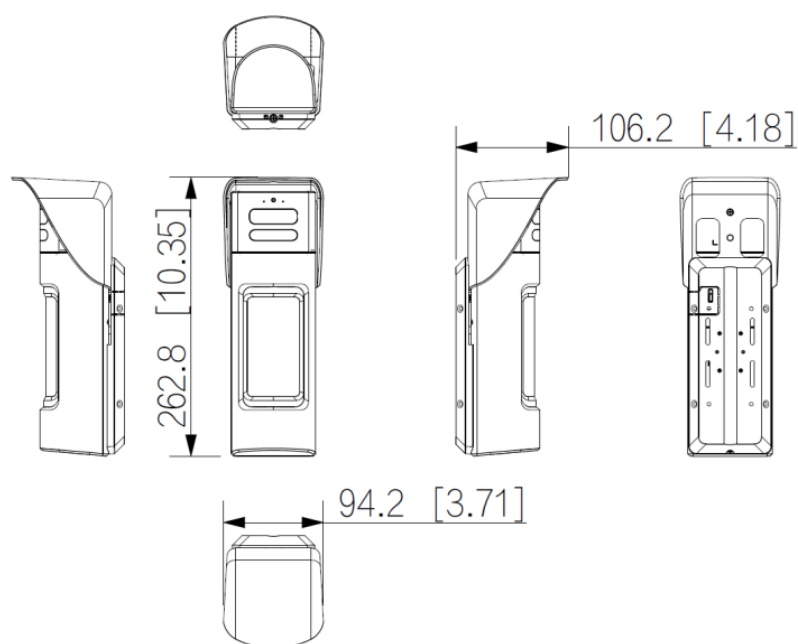


Figure 3-3 Dimensions (mm [inch])

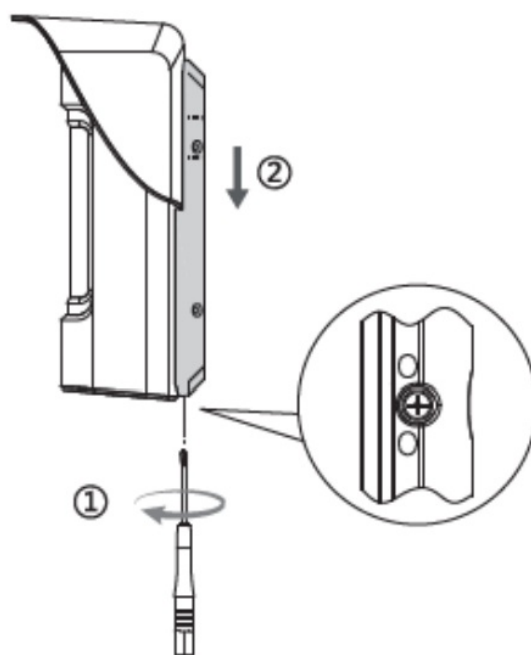


## Powering On

### Procedure

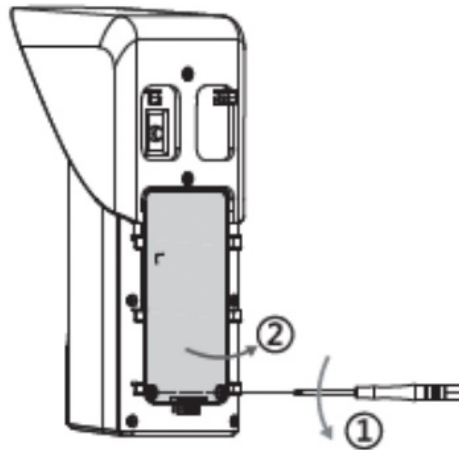
- **Step 1** Loosen the screw to open the detector.

Figure 4-1 Loosen screw



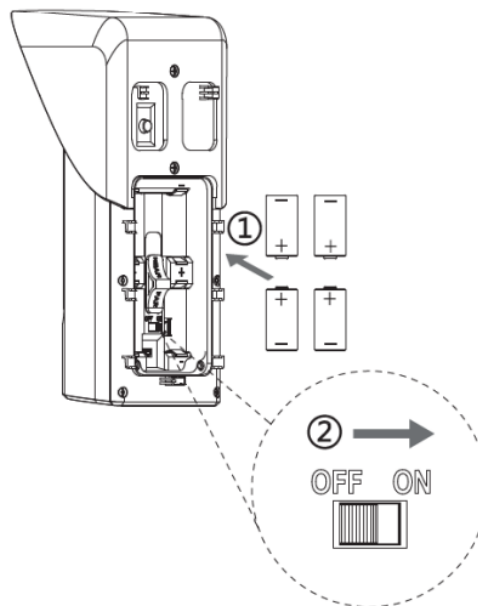
- **Step 2** Open the battery compartment.

Figure 4-2 Open compartment



- **Step 3** Insert batteries into the detector, and then turn on the detector.
  - When inserting the batteries, make sure that they are all charged to the same level.
  - When inserting the batteries, align the “+” symbols on the batteries to those on the detector.

Figure 4-3 Turn on the detector



## Adding the Wireless Triple-Tech Detector to the Hub

### Background Information

Before you connect the triple-tech detector to the hub, install the DMSS app on your phone. This manual uses iOS as an example.

- Make sure that the version of the DMSS app is 1.99.620 or later, and the hub is 2.000.0000000.0.R.20231220 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.

## Procedure

- **Step 1** Go to the hub screen, and then tap Peripheral to add the triple-tech detector.
- **Step 2** Tap + to scan the QR code at the bottom of the triple-tech detector, and then tap Next.
- **Step 3** Tap Next after the triple-tech detector has been found.
- **Step 4** Follow the on-screen instructions and switch the triple-tech detector to on, and then tap Next.
- **Step 5** Wait for the pairing.
- **Step 6** Customize the name of the triple-tech detector, select the area, and then tap Completed.

## Installation

### Field of Detection

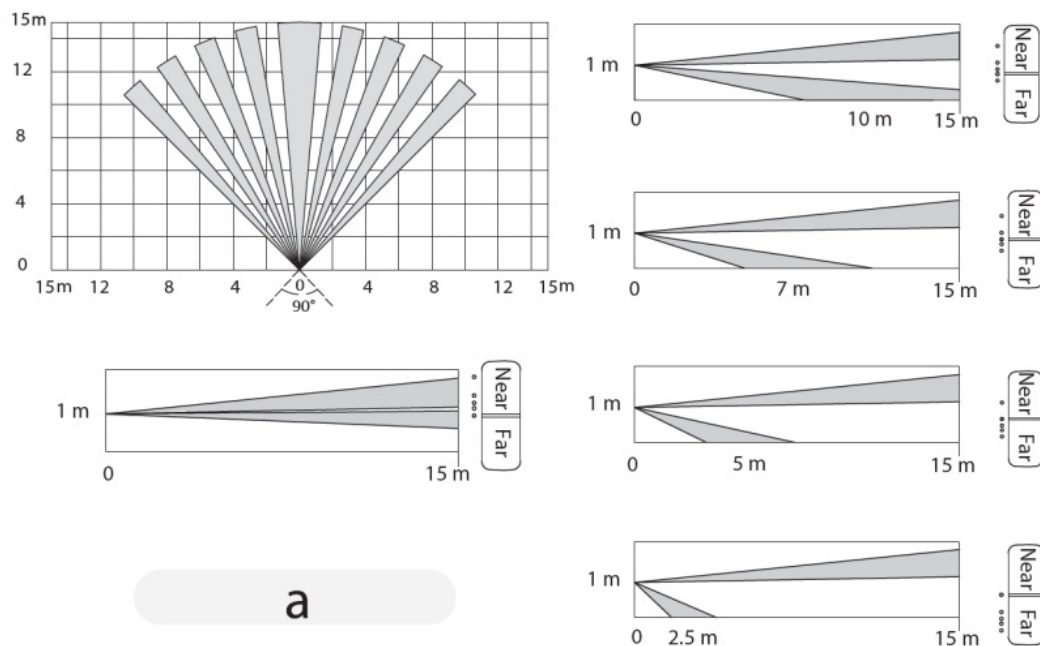
When installing and using the detector, make sure there are no objects partially or fully obscuring the detector's field of view.

### Detection Range

The detection ranges of the detector.

This data is the result of room temperature environmental testing. The actual detection distance might vary due to environmental factors, such as temperature and light exposure.

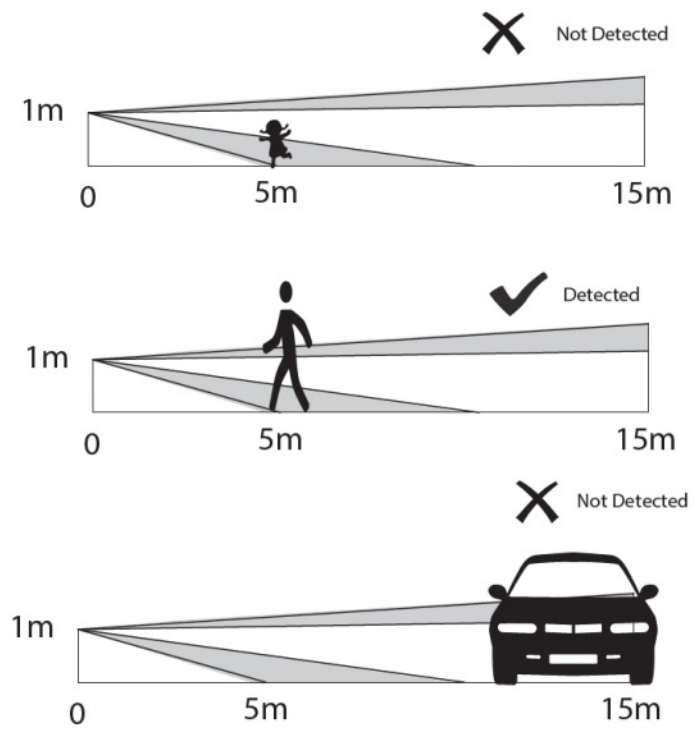
Figure 6-1 Detection range



### Effective Detection Trigger

The detection trigger that can effectively trigger the detector. Here are some recommended ones and not recommend objects.

Figure 6-2 Trigger

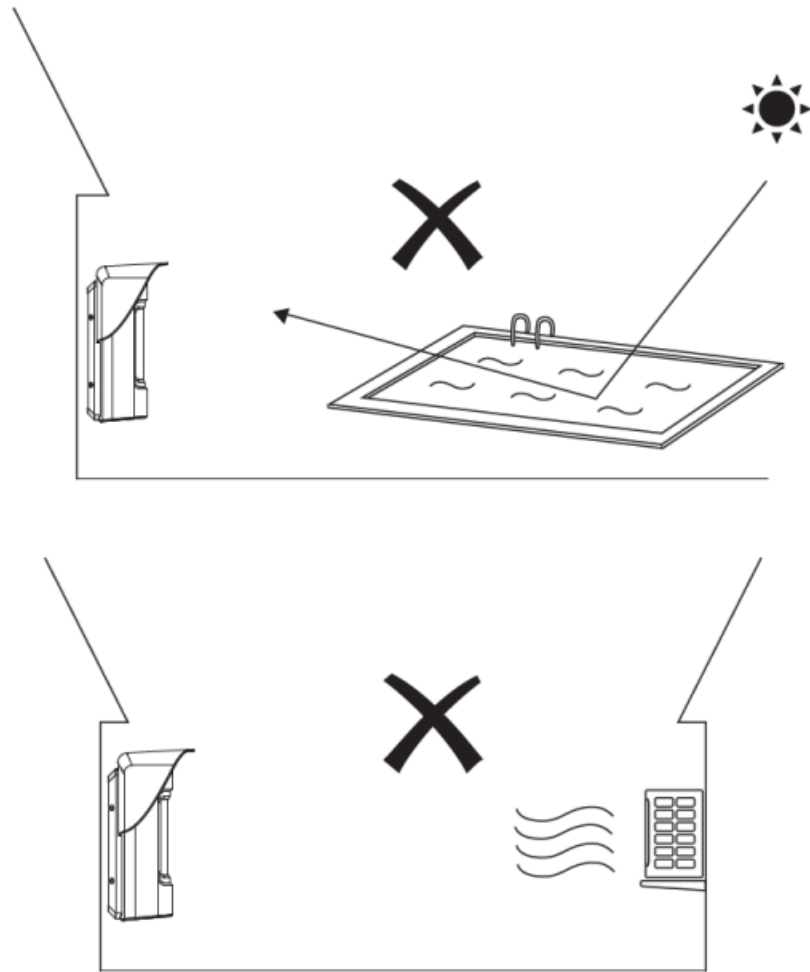


#### Installation Position

Position not recommended:

- Direct sunlight or reflection.
- Direct heat exposure.

Figure 6-3 Installation position(not recommended)



## Wall Mount

- **Prerequisites**

Prior to installation, add the detector to the hub and test the signal strength and RF-HD test (for detectors with camera modules). We recommend that you install the detector in a place with a signal strength of at least 2 bars.

- **Procedure**

- **Step 1** Drill 4 holes into the wall according to the hole positions of the detector, and then put the expansion bolts into the holes.
- **Step 2** Attach the triple-tech detector to the back cover.

Figure 6-4 Wall mount

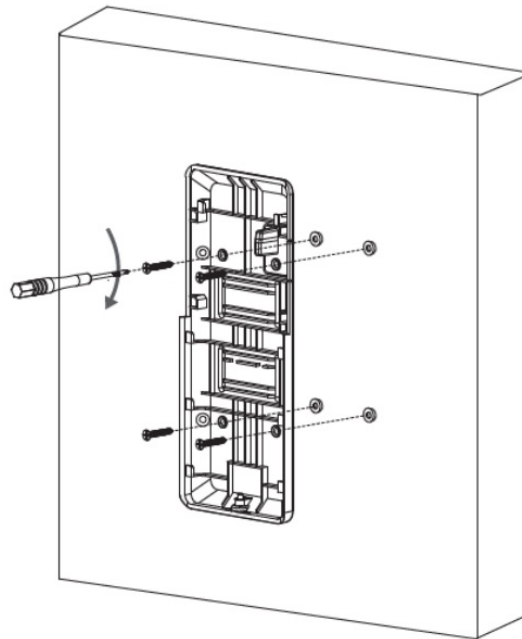
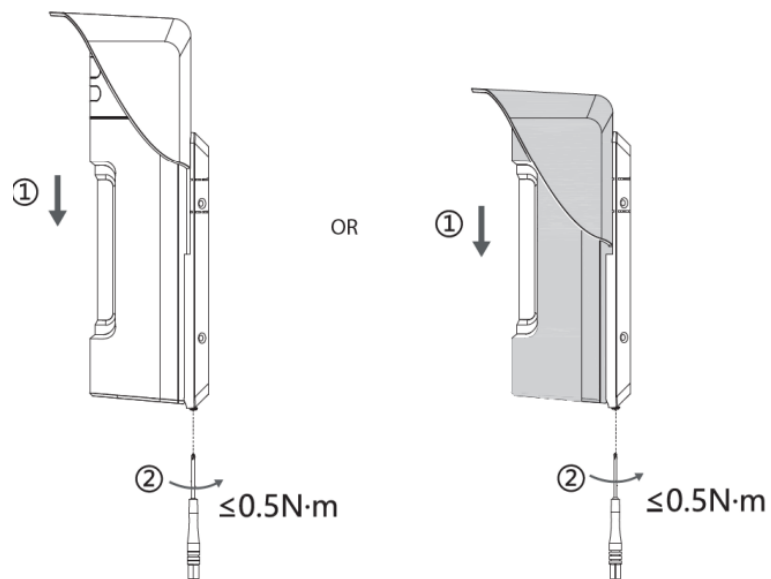


Figure 6-5 Attach the detector to the back cover

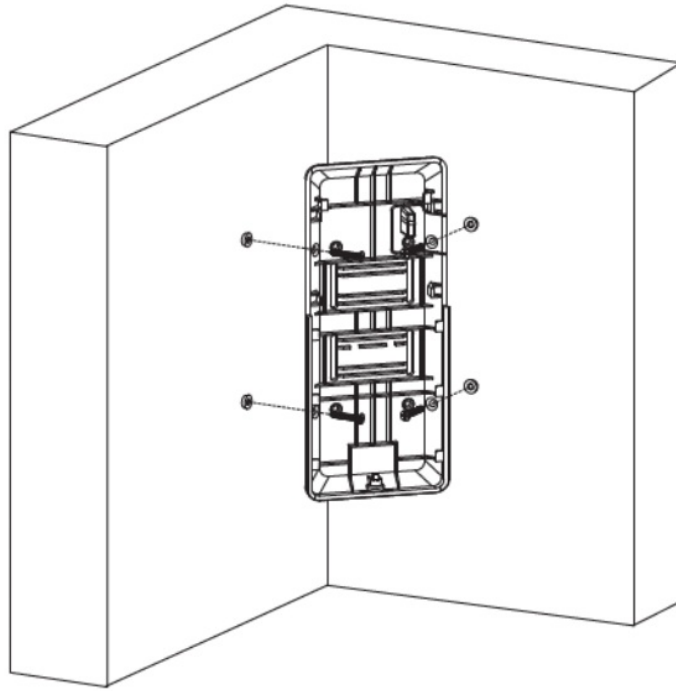


## Corner Mount

### • Procedure

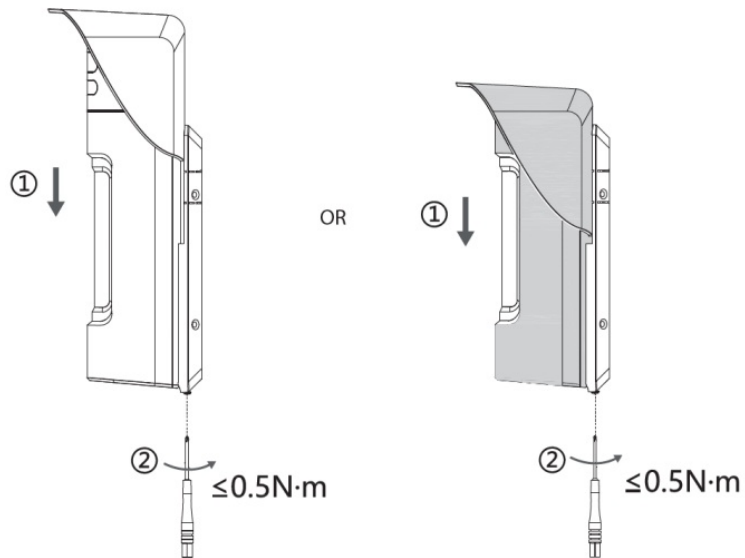
- **Step 1** Drill 4 holes into the wall according to the hole positions of the detector, and then put the expansion bolts into the holes.

Figure 6-6 Drill holes



- **Step 2** Attach the detector to the back cover.

Figure 6-7 Attach the detector to the back cover



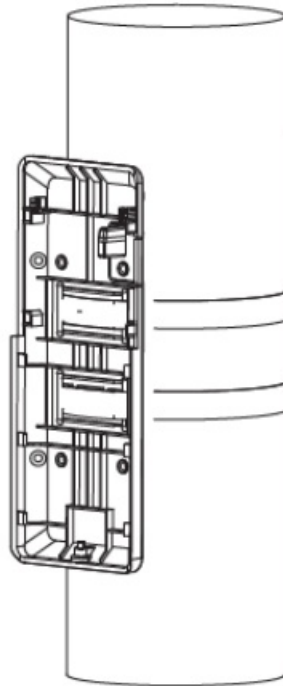
## Pole Mount

- **Procedure**

- **Step 1** Place the bracket on the pipes, cables, or other equipment.  
Make sure that the bracket is securely installed.

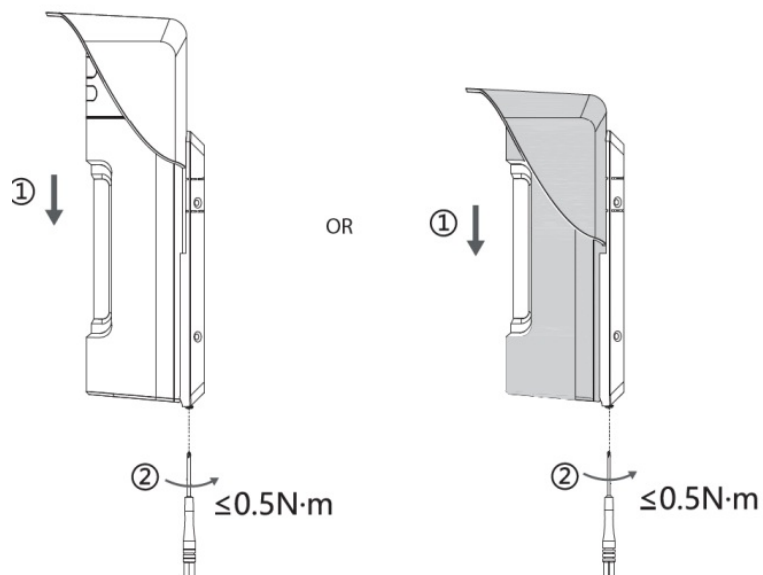


Figure 6-8 Pole mount



- **Step 2** Attach the detector to the back cover.

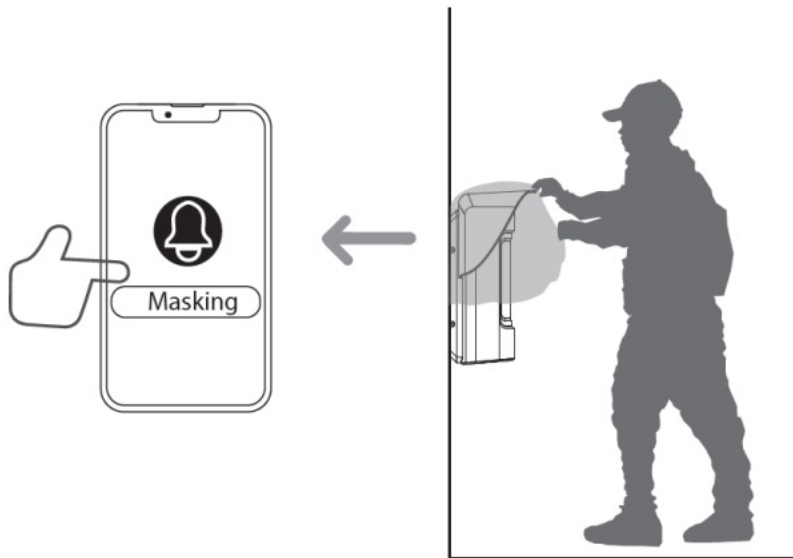
Figure 6-9 Attach the detector to the back cover



### Anti-Masking Test

Before using the detector, perform anti-masking test. Once the detector is masked by other objects, a masking alarm message would be sent to DMSS.

Figure 6-10 Anti-mask test























## Configuration

You can view and edit general information of the triple-tech detector.


### Viewing Status

On the hub screen, select a triple-tech detector from the peripheral list, and then you can view the status of the detector.

Parameter	Value
Snapshot Test	<p>Tap <b>Snapshot Test</b> to take the snapshots. You can view the snapshots in the <b>Message</b> list after you tap <b>Exit</b>.</p>  <p>This function is only available on detectors with camera modules.</p>
Add Camera	<p>Tap <b>Add Camera</b> , and then add the camera to the detector within 60 seconds. Tap <b>Cancel</b> to quit the adding process.</p>  <p>This function is only available on detectors without camera modules.</p>
Always Disabled	<p>The status for whether the functions of the triple-tech detector 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 triple-tech detector.</p> <ul style="list-style-type: none"> <li>●  : Low.</li> <li>●  : Weak.</li> <li>●  : Good.</li> <li>●  : Excellent.</li> <li>●  : No.</li> </ul>

Battery Level	<p>The battery level of the triple-tech detector.</p> <ul style="list-style-type: none"> <li> : Fully charged.</li> <li> : Sufficient.</li> <li> : Moderate.</li> <li> : Insufficient.</li> <li> : Low.</li> </ul>
Tamper Status	The tamper status of the triple-tech detector, which reacts to the detachment of the body.
Online Status	<p>Online and offline status of the triple-tech detector.</p> <ul style="list-style-type: none"> <li> : Online.</li> <li> : Offline.</li> </ul>
Entering Delay Time	Entrance delay time.
Exiting Delay Time	Exit delay time.
24 H Protection Zone Status	<p>Active status of the 24 h protection zone.</p> <ul style="list-style-type: none"> <li> : Enable.</li> <li> : Disable.</li> </ul>
Sensitivity	Adjust the sensitivity level of motion detection. The higher the value, the easier the motion is detected.
Transmit through Repeater	The status of whether the triple-tech detector forwards its messages to the hub through the repeater.
Program Version	The program version of the triple-tech detector.
Camera Program Version	<p>The program version of the camera.</p>  <p>Only when you install the camera onto the triple-tech detector, the camera program version is displayed.</p>

## Configuring the Triple-tech Detector

On the hub screen, select a triple-tech detector from the peripheral list, and then tap  to configure the parameters of the detector.

Parameter	Description
Device Configuration	<ul style="list-style-type: none"> <li>View detector name, type, SN and device model.</li> <li>Edit detector name, and then tap <b>Save</b> to save configuration.</li> </ul>
Area	Select the area to which the detector is assigned.
Zone No.	The zone number assigned to the door detector alarm, which cannot be configured.

Always Disabled	<p>Whether send commands to the alarm hub.</p> <ul style="list-style-type: none"> <li>● Tap <b>Enable</b> , and then the detector will send commands to the hub. <b>Enable</b> is set by default.</li> <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 detector will not send commands to the hub.</li> </ul>
Image Config	<p>Only when you add the camera on to the detector can you modify image configuration.</p> <ul style="list-style-type: none"> <li>● <b>Image Transmission Speed</b> : Select from <b>Fast</b> and <b>Normal</b>.</li> </ul> <p>The faster the image transmission speed, the shorter the transmission distance. Select the image transmission rate based on the actual installation scenario.</p> <ul style="list-style-type: none"> <li>● <b>Image Resolution</b> : Select from <b>1280 × 960</b>, <b>640 × 480</b>, <b>320 × 240</b> and <b>160 × 120</b>.</li> </ul> <p>When <b>Image Transmission Speed</b> is selected as <b>Normal</b>, <b>1280 × 960</b> is not supported.</p> <ul style="list-style-type: none"> <li>● <b>Number of Images</b> : Select the number of images captured based on your needs.</li> <li>● <b>Trigger Interval</b> : Select the trigger interval.</li> </ul>
Microwave Settings	<ul style="list-style-type: none"> <li>● <b>Microwave Detection</b>: After being enabled, the detector can start microwave detection.</li> <li>● <b>Microwave Detection Distance</b>: Select the detection range.</li> </ul>
Mask	<ul style="list-style-type: none"> <li>● <b>Mask Function</b>: Once the detector is masked by other objects, alarms will be sent to the hub.</li> </ul> <p>Tap <b>enable in arming status</b>, and then the mask function is enabled in arming status.</p> <p>Tap <b>Always On</b>, and then the mask function will always stay enabled.</p> <p>Tap <b>Disabled</b>, and then the mask function is disabled.</p> <ul style="list-style-type: none"> <li>● <b>Enable Link Mask Alarm to Siren</b>: The mask alarm will be synchronized to the siren.</li> </ul>

Movement Alarm	<ul style="list-style-type: none"> <li>● <b>Movement Alarm</b> : Enable the function, and then alarms will be sent to the hub once movement is detected.</li> <li>● <b>Link Movement Alarm to Siren</b> : The movement alarm will be synchronized to the siren.</li> <li>● Enabling the movement alarm results in aging of battery life.</li> <li>● We recommend that you enable movement alarm when the detector is pole mounted or installed with extended bracket.</li> </ul>
Alarms Triggered	Select the number of alarms that can be triggered within arming/disarming period. The default value is 3.
LED Indicator	<p><b>LED Indicator</b> is enabled by default.</p> <p>If <b>LED Indicator</b> is disabled, the LED indicator will remain off regardless of whether the detector is functioning normally or not.</p>
24 H Protection Zone	<ul style="list-style-type: none"> <li>● If <b>24 H Protection Zone</b> is enabled, even the system is disarmed, the detector can be armed to detect motion.</li> <li>● If <b>24 H Protection Zone</b> is disabled, only when the system is armed, the detector can be armed to detect motion. The detector will not be armed immediately, and it will begin before the end of the ping interval of the hub-detector (60 seconds by default).</li> </ul> <p>You can go to the hub's screen to configure the ping interval of the hub-detector. For details, see the user's manual of the hub.</p>
Home Mode	Enable the <b>Home Mode</b> , and then the selected peripherals under the hub will be armed.
Delay Mode under Home Mode	<p>Enable the <b>Delay Mode under Home Mode</b>, the selected peripheral under the hub will be armed and the alarm will not be triggered until the end of customized delay time.</p> <p>Only enable <b>Home Mode</b> first can <b>Delay Mode under Home Mode</b> take effect.</p>

Delay Time	<p>The system provides you with time to leave or enter the protection zone without alarm.</p> <ul style="list-style-type: none"> <li>● <b>Delay Time for Entering Arming Mode</b> : When you enter the zone, if you do not disarm the system before the delay ends, an alarm will be triggered.</li> </ul> <p>Make sure that the delay time for entering arming mode is no longer than 45 seconds in order to comply with EN50131-1.</p> <ul style="list-style-type: none"> <li>● <b>Delay Time for Exiting Arming Mode</b> : When you are in the zone and arm the system, if you do not leave the zone before the delay ends, an alarm will be triggered. You can select from 0 seconds to 120 seconds.</li> </ul> <p>The arming mode will be effective after the delay time.</p>
Sensitivity	<ul style="list-style-type: none"> <li>● Adjust sensitivity level of motion detection.</li> <li>● Select from low, medium and high.</li> </ul>
Siren Linkage	When an alarm is triggered, the peripherals will report the alarm events to the hub and alert with siren.
Alarm-video Linkage	<p>When an alarm is triggered, the peripherals will report the alarm events to the hub and then will link alarm events.</p> <p>This function is only available on detector without camera modules.</p>
Video Channel	<p>Select the video channel.</p> <p>This function is only available on detector without camera modules.</p>
Over-temperature Alarm	<p>Enable the <b>Over-temperature Alarm</b> function, and then the alarm will be triggered when the temperature of the area where the water leak detector is installed is higher or lower than the defined one. Tap next to <b>Over-temperature Alarm</b> to enable this function.</p> <p>Scroll left and right on the temperature bar to set the lowest temperature or highest temperature, or tap + or – to set the temperature ranges.</p>
Signal Strength Detection	Test the signal strength of the detector.

RF-HD Test	<p>Tap <b>Start Detection</b> to perform RF-HD test.</p> <ul style="list-style-type: none"> <li>● Be advised that you perform RF-HD test when the detector has camera modules. Make sure that the signal has at least 2 bars.</li> <li>● This function is only available when the detector has camera modules.</li> </ul>
Detector Test	<p>Select the window (bottom window or upper window), and then tap <b>Start Detection</b> for zone test. Make sure that the detector is installed in area with great signal strength.</p> <ul style="list-style-type: none"> <li>● The detector test will not begin immediately. It will begin before the end of the heartbeat interval of the hub-detector (60 seconds by default).</li> <li>● You can configure the heartbeat interval on the hub.</li> </ul>
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> <p>If you select <b>Low</b>, the detector will enter into reduced sensitivity mode.</p>
Cloud Update	Update online.
User's Manual	View the user's manual.
Delete	<p>Delete the triple-tech detector.</p> <p>Go to the hub screen, select the triple-tech detector from the peripheral list, and then swipe left to delete it.</p>

## Appendix 1 Cybersecurity Recommendations

Cybersecurity is more than just a buzzword: it's something that pertains to every device that is connected to the internet. IP video surveillance is not immune to cyber risks, but taking basic steps toward protecting and strengthening networks and networked appliances will make them less susceptible to attacks. Below are some tips and recommendations from Dahua on how to create a more secured security system.

- **Mandatory actions to be taken for basic device network security:**

1. **Use Strong Passwords**

Please refer to the following suggestions to set passwords:

- The length should not be less than 8 characters.
- Include at least two types of characters; character types include upper and lower case letters, numbers and symbols.
- Do not contain the account name or the account name in reverse order.
- Do not use continuous characters, such as 123, abc, etc.
- Do not use overlapped characters, such as 111, aaa, etc.

2. **Update Firmware and Client Software in Time**



- According to the standard procedure in Tech-industry, we recommend to keep your device (such as NVR, DVR, IP camera, etc.) firmware up-to-date to ensure the system is equipped with the latest security patches and fixes. When the device is connected to the public network, it is recommended to enable the “auto-check for updates” function to obtain timely information of firmware updates released by the manufacturer.
- We suggest that you download and use the latest version of client software.

- **“Nice to have” recommendations to improve your device network security:**

- 1. Physical Protection**

We suggest that you perform physical protection to device, especially storage devices. For example, place the device in a special computer room and cabinet, and implement well-done access control permission and key management to prevent unauthorized personnel from carrying out physical contacts such as damaging hardware, unauthorized connection of removable device (such as USB flash disk, serial port), etc.

- 2. Change Passwords Regularly**

We suggest that you change passwords regularly to reduce the risk of being guessed or cracked.

- 3. Set and Update Passwords Reset Information Timely**

The device supports password reset function. Please set up related information for password reset in time, including the end user’s mailbox and password protection questions. If the information changes, please modify it in time. When setting password protection questions, it is suggested not to use those that can be easily guessed.

- 4. Enable Account Lock**

The account lock feature is enabled by default, and we recommend you to keep it on to guarantee the account security. If an attacker attempts to log in with the wrong password several times, the corresponding account and the source IP address will be locked.

- 5. Change Default HTTP and Other Service Ports**

We suggest you to change default HTTP and other service ports into any set of numbers between 1024–65535, reducing the risk of outsiders being able to guess which ports you are using.

- 6. Enable HTTPS**

We suggest you to enable HTTPS, so that you visit Web service through a secure communication channel.

- 7. MAC Address Binding**

We recommend you to bind the IP and MAC address of the gateway to the device, thus reducing the risk of ARP spoofing.

- 8. Assign Accounts and Privileges Reasonably**

According to business and management requirements, reasonably add users and assign a minimum set of permissions to them.

- 9. Disable Unnecessary Services and Choose Secure Modes**

If not needed, it is recommended to turn off some services such as SNMP, SMTP, UPnP, etc., to reduce risks.

If necessary, it is highly recommended that you use safe modes, including but not limited to the following services:

- **SNMP:** Choose SNMP v3, and set up strong encryption passwords and authentication passwords.
- **SMTP:** Choose TLS to access mailbox server.

- **FTP:** Choose SFTP, and set up strong passwords.
- **AP hotspot:** Choose WPA2-PSK encryption mode, and set up strong passwords.

#### 10. Audio and Video Encrypted Transmission

- If your audio and video data contents are very important or sensitive, we recommend that you use encrypted transmission function, to reduce the risk of audio and video data being stolen during transmission.
- Reminder: encrypted transmission will cause some loss in transmission efficiency.

#### 11. Secure Auditing

1. Check online users: we suggest that you check online users regularly to see if the device is logged in without authorization.
2. Check device log: By viewing the logs, you can know the IP addresses that were used to log in to your devices and their key operations.

#### 12. Network Log

Due to the limited storage capacity of the device, the stored log is limited. If you need to save the log for a long time, it is recommended that you enable the network log function to ensure that the critical logs are synchronized to the network log server for tracing.

#### 13. Construct a Safe Network Environment

In order to better ensure the safety of device and reduce potential cyber risks, we recommend:

- Disable the port mapping function of the router to avoid direct access to the intranet devices from external network.
- The network should be partitioned and isolated according to the actual network needs. If there are no communication requirements between two sub networks, it is suggested to use VLAN, network GAP and other technologies to partition the network, so as to achieve the network isolation effect.
- Establish the 802.1x access authentication system to reduce the risk of unauthorized access to private networks.
- Enable IP/MAC address filtering function to limit the range of hosts allowed to access the device.



#### More information

Please visit Dahua official website security emergency response center for security announcements and the latest security recommendations.

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#### Documents / Resources

  Wireless Triple-tech Detector User's Manual   <small>© 2016 DAHUA TECHNOLOGY CO., LTD. P.1/21</small>	<a href="#">dahua ARD2251E-W2 Wireless Triple Tech Detector</a> [pdf] User Manual ARD2251E-W2 868V, ARD2251E-W2 868V, ARD2251E-W2 Wireless Triple Tech Detector, AR D2251E-W2, Wireless Triple Tech Detector, Triple Tech Detector, Tech Detector
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References

- [User Manual](#)

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