



# Wireless Keyfob

## User's Manual








# Foreword

## General

This manual introduces the installation, functions and operations of the wireless keyfob (hereinafter referred to as the "keyfob"). 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, lower performance, or unpredictable result.
 TIPS	Provides methods to help you solve a problem or save you time.
 NOTE	Provides additional information as the emphasis and supplement to the text.

## Revision History

Version	Revision Content	Release Time
V1.1.2	Added battery description.	August 2023
V1.1.1	Revised battery life.	June 2023
V1.1.0	<ul style="list-style-type: none"><li>Added technical specifications and field of view.</li><li>Updated descriptions of parameters.</li><li>Updated images.</li></ul>	January 2022
V1.0.0	First release.	October 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 keyfob, hazard prevention, and prevention of property damage. Read carefully before using the keyfob, and comply with the guidelines when using it.

## 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



### WARNING

- 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.

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# Table of Contents

<b>Foreword.....</b>	<b>I</b>
<b>Important Safeguards and Warnings.....</b>	<b>III</b>
<b>1 Introduction.....</b>	<b>1</b>
<b>1.1 Overview.....</b>	<b>1</b>
<b>1.2 Technical Specifications.....</b>	<b>1</b>
<b>2 Checklist.....</b>	<b>3</b>
<b>3 Design.....</b>	<b>4</b>
<b>3.1 Appearance.....</b>	<b>4</b>
<b>3.2 Function Key.....</b>	<b>4</b>
<b>4 Adding the Keyfob to the Hub.....</b>	<b>6</b>
<b>5 Keyfob Configuration.....</b>	<b>7</b>
<b>5.1 Viewing Status.....</b>	<b>7</b>
<b>5.2 Configuring the Keyfob.....</b>	<b>8</b>
<b>6 Using the Keyfob.....</b>	<b>10</b>
<b>Appendix 1 Cybersecurity Recommendations.....</b>	<b>11</b>

# 1 Introduction

## 1.1 Overview

Wireless keyfob is a miniature remote that connects to the hub and controls the alarm system in your home. It works by sending wireless communication signals to the alarm system, which will recognize the signal and then perform the function that is assigned to the area.

## 1.2 Technical Specifications

This section contains technical specifications of the keyfob. Please refer to the ones that correspond with your model.

Table 1-1 Technical specifications

Type	Parameter	Description	
Port	Indicator Light	1 × two-color status indicator (green: normal, red: abnormal)	
	Button	4 (Home, Away, Disarm, and SOS)	
Function	Remote Update	Cloud update	
	Low Battery Alarm	Yes	
Wireless Parameters	Carrier Frequency	DHI-ARA24-W2(868): 868.0 MHz–868.6 MHz	DHI-ARA24-W2: 433.1 MHz–434.6 MHz
	Communication Distance	DHI-ARA24-W2(868): Up to 900 m (2,952.76 ft) in an open space	DHI-ARA24-W2: Up to 500 m (1,640.42 ft) in an open space
	Communication Mechanism	Two-way	
	Encryption Mode	AES128	
	Frequency Hopping	Yes	
General	Power Supply	CR2032 battery	
	Battery Voltage	3 VDC	
	Min. Voltage	1.8 VDC	
	Battery Low Threshold	2.6 VDC	
	Battery Restore Threshold	2.65 VDC	
	Consumption	Quiescent current 3 uA Max current 50 mA	
	PS Type	Type C	
	Battery Life	3 years	

Type	Parameter	Description	
	Power Consumption	DHI-ARA24-W2(868): Max. 100 mW	DHI-ARA24-W2: Max. 85 mW
	Operating Environment	Indoor: -10 °C to +55 °C (+14 °F to +131 °F) Certified temperature: -10°C to +40°C (+14°F to +104 °F)	
	Operating Humidity	10%–90% (RH)	
	Product Dimensions	60.0 mm × 39.5 mm × 15.0 mm (2.36" × 1.56" × 0.59") (L × W × H)	
	Packaging Dimensions	135.0 mm × 98.5 mm × 27.8 mm (5.31" × 3.88" × 1.09")	
	Net Weight	20 g (0.04 lb)	
	Gross Weight	65 g (0.14 lb)	
	Casing	PC + ABS	
	ACE Type	Type B	
Certifications	DHI-ARA24-W2(868): EN 50131-1:2006+A1: 2009+A2:2017+A3:2020 EN 50131-5-3: 2017 EN 50131-6:2017 EN 50131-3: 2009 Security Grade 2 Environmental Class II CE		DHI-ARA24-W2: CE FCC

## 2 Checklist

Figure 2-1 Checklist

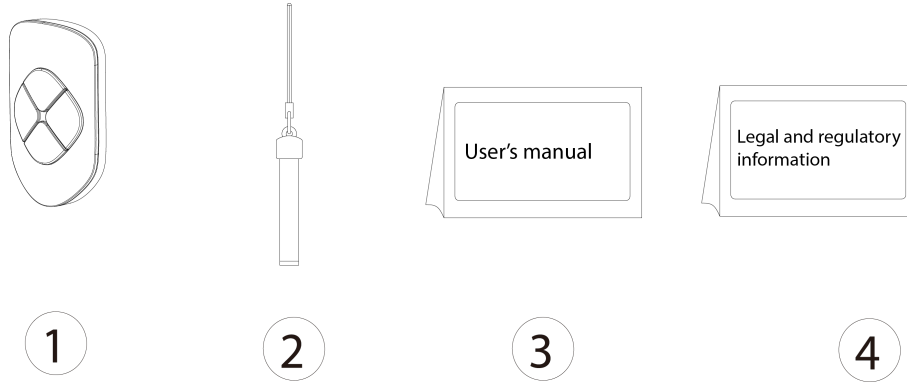


Table 2-1 Checklist

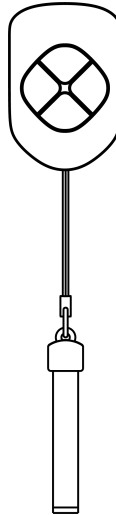
No.	Item Name	Quantity
1	Wireless keyfob	1
2	String	1
3	User's manual	1
4	Legal and regulatory information	1



## 3 Design

### 3.1 Appearance

Figure 3-1 Appearance



### 3.2 Function Key

Figure 3-2 Function key

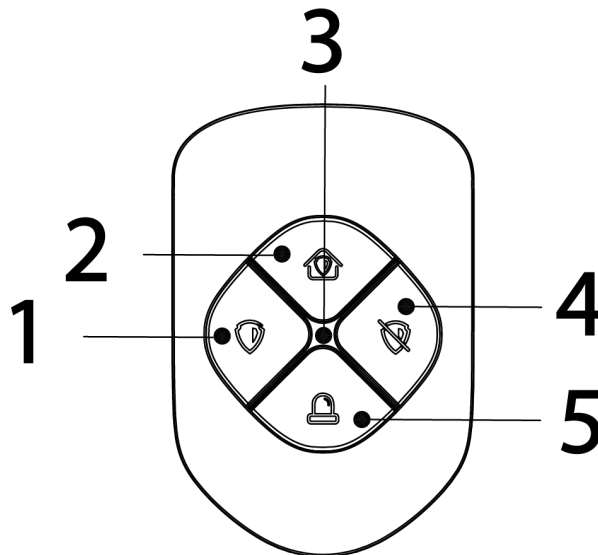


Table 3-1 Description of function button

No.	Name	Description
1	Arming button	Press the home mode, and then the selected peripherals will be armed.
2	Home mode	Press the home mode, and then the selected peripherals will be armed.

No.	Name	Description
3	Indicator	<ul style="list-style-type: none"><li>● Flashes green quickly: Pairing mode.</li><li>● Solid green: Normal.</li><li>● Solid red: The keyfob is offline.</li><li>● Flashes green first, and then turns to red: Connection with the hub failed.</li></ul>
4	Disarming button	Press the button once to disarm the system.
5	SOS	Press the panic button, and then the keyfob will send alarm signal to the alarm system.

## 4 Adding the Keyfob to the Hub

### Prerequisites

Device configurations are performed on the DMSS app. Make sure that you have installed the DMSS app, created an account, and added the hub to the app. For details on adding the hub, see the user's manual of the corresponding hub.





- Make sure that the hub has a stable internet connection.
- Make sure that the hub is disarmed.

### Background Information

You can add the keyfob to the hub. This user's manual uses the operations on iOS as an example.

### Procedure

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











## 5 Keyfob Configuration

You can view and edit general information of the keyfob.

### 5.1 Viewing Status

On the hub screen, select a keyfob from the peripheral list, and then you can view the status of the keyfob.

Table 5-1 Status

Parameter	Value
Temporary Deactivate	<p>The status for whether the functions of the keyfobs are enabled or disabled.</p> <ul style="list-style-type: none"> <li>●  : Enable.</li> <li>●  : Only disable tamper alarm.</li> <li>●  : Disable.</li> </ul> <p></p> <p>The function is only available when the version of the DMSS app is 1.96 or later, the hub is V1.001.0000000.6.R.211215 or later, and the PIR is V1.000.0000001.0.R.20211203 or later.</p>
Battery Level	<p>The battery level of the keyfob.</p> <ul style="list-style-type: none"> <li>●  : Fully charged.</li> <li>●  : Sufficient.</li> <li>●  : Moderate.</li> <li>●  : Insufficient.</li> <li>●  : Low.</li> </ul>
SOS Status	The status of the SOS alarm.
Relay Status	<p>The status of whether the keyfob forwards peripheral messages to the hub through the repeater.</p> <p></p> <p>The function is only available when the version of the DMSS app is 1.96 or later, the hub is V1.001.0000000.6.R.211215 or later, and the keyfob is V1.000.0000001.0.R.20211203 or later.</p>

Parameter	Value
Program Version	The program version of the keyfob.

## 5.2 Configuring the Keyfob




On the hub screen, select a keyfob from the peripheral list, and then tap  to configure the parameters of the keyfob.

Table 5-2 Keyfob parameter description




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 configuration.</li> </ul>
Area	<ul style="list-style-type: none"> <li>View the existing area.</li> <li>Add the area that you want to arm, and then tap <b>Save</b> to save configuration.</li> </ul>
Temporary Deactivate	<ul style="list-style-type: none"> <li>Tap <b>Enable</b>, and then the keyfob will send alarm messages 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 keyfob will not send alarm messages to the hub.</li> </ul>
LED Indicator	<p><b>LED Indicator</b> is enabled by default on the app. You also need to press any button on the keyfob to enable the function.</p>  <ul style="list-style-type: none"> <li>If <b>LED Indicator</b> is disabled, the LED indicator will remain off regardless of whether the keyfob is functioning normally or not.</li> <li>The function is only available when the version of the DMSS app is 1.96 or later, the hub is V1.001.0000000.4.R.211014 or later, and the keyfob is V1.000.0000001.0.R.20210818 or later.</li> </ul>
Control Permissions	Select the area over which the keyfob has control permissions.
SOS Alarm	If enabled, the SOS alarm messages will be pushed when an alarm event is detected.
Siren Linkage	When an alarm is triggered, the peripherals will report the alarm events to the hub and alert with siren.
Alarm-video Linkage	When an alarm is triggered, the peripherals will report the alarm events to the hub and then will be linked with videos.
Video Channel	Select the video channel as needed.
Cloud Update	<p>Update online.</p> <p>If the latest version is detected, you need to tap <b>Update</b> on the app, and then press any button on the keyfob to update the keyfob.</p>

Parameter	Description
Delete	<p data-bbox="699 282 1034 315">Delete the online peripheral.</p>  <p data-bbox="699 371 1406 439">Go to the hub screen, select the peripheral from the list, and then swipe left to delete it.</p>

## 6 Using the Keyfob




Maximum connection distance between the keyfob and the hub is 1,500 meters. This distance is reduced by walls, inserted floors and any objects hindering the signal transmission.

After the accessories have been added on the hub, you can operate on the keyfob.

- Press  and  once at the same time to connect with the hub.
- Press  once to enable the away mode, and then all the accessories in the area will be armed.



Press  twice if the **System Integrity Check** is enabled in the hub.

- Press  once to enable the home mode, and then the selected accessories in the area will be armed.
- Press  once to enable the disarm mode, and then all the accessories in the area will be disarmed.
- Press  once to enable SOS.



- If the battery is dead, you need to replace the battery.
- Please manually use downward and outward force to open the shell at the buckle position to avoid using tools to open and cause damage to the shell.
- Before you insert the new battery, make sure to press the buttons first, or wait 30 seconds after you take out the old one.

# Appendix 1 Cybersecurity Recommendations



ENABLING A SAFER SOCIETY AND SMARTER LIVING

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