

# DS-PDMCK-EG2-WB Wireless Magnet Shock Detector

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About this Manual

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the Hikvision website (<https://www.hikvision.com/>).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

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In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, RE Directive 2014/53/EU, the RoHS Directive 2011/65/EU.



## BATTERY CAUTION

- Risk of explosion if the battery is replaced by an incorrect type.
- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).
- Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.
- Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.
- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.
- Dispose of used batteries according to the instructions.
- +identifies the positive terminal(s) of equipment which is used with, or generates direct current. - identifies the negative terminal(s) of equipment which is used with, or generates direct current.



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: [www.recyclethis.info](http://www.recyclethis.info)



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: [www.recycle-this.info](http://www.recycle-this.info)



## INSTALLATION CAUTION

- Install the equipment according to the instructions in this manual.
- To prevent injury, this equipment must be securely attached to the floor/wall in accordance with the installation instructions.
- The additional force shall be equal to three times the weight of the equipment but not less than 50N. The equipment and its associated mounting means shall remain secure during the installation. After the installation, the equipment, including any associated mounting plate, shall not be damaged.
- No naked flame sources, such as lighted candles, should be placed on the equipment.

## FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC compliance: This equipment 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 equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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/TV technician for help.
- This equipment should be installed and operated with a minimum distance 20cm between the radiator and your body.
- FCC Conditions  
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

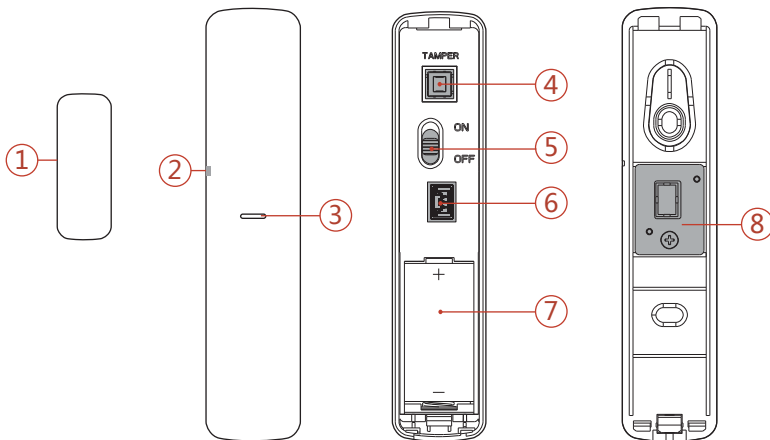
## 1 Introduction

The sensor can detect the door or window opening. When the door or window is open, an alarm will be triggered and it will be sent to the alarm center or mobile client via security control panel.

Door Magnetic Sensor Alarm: When the distance between the sensor and the magnet is longer than 3 cm, an alarm will be triggered. The indicator will flash once.

Tamper Alarm: When removing the sensor, an alarm will be triggered.

## 2 Appearance



① **Magnet**

② **Positioning Line**

③ **Indicator**

Alarm Detection: Red LED flashes.  
Detector Formatted: Red LED flashes 3 times.

④ **TAMPER Button**

- Tampering Alarm: If the detector is disassembled, an alarm will be triggered.
- Formatting: Restore the device to default settings.

⑤ **Power Switch**

⑥ **External Input**

⑦ **Battery**

⑧ **Shock Sensor**

### CAUTION

CHEMICAL BURNING DANGER  
DO NOT SWALLOW THE BATTERY  
KEEP NEW AND USED BATTERIES AWAY FROM THE CHILDREN.

IF YOU THINK BATTERIES MIGHT HAVE BEEN SWALLOWED OR PLACED INSIDE ANY PART OF THE BODY, SEEK IMMEDIATE MEDICAL ATTENTION.

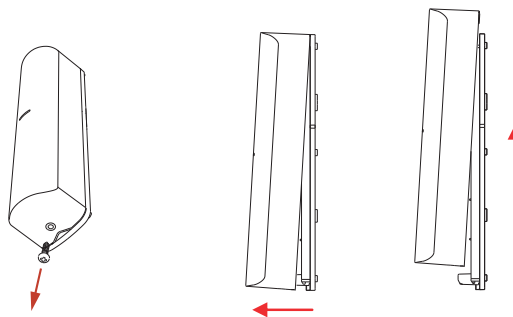
### CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.  
REPLACEMENT OF A BATTERY WITH AN INCORRECT TYPE THAT CAN DEFEAT A SAFEGUARD.

### CAUTION

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS AND LOCAL REGULATION.

### 3 Power On



**CAUTION**  
IF THE BATTERY COMPARTMENT DOES NOT CLOSE SECURELY, STOP USING THE PRODUCT AND KEEP IT AWAY FROM CHILDREN.

Dig the groove to disassemble the device. Remove the front and rear panel. Turn the power switch to ON to power on the device.  
**Note: Do not disassemble the device with sharps.**

### 4 Enrollment

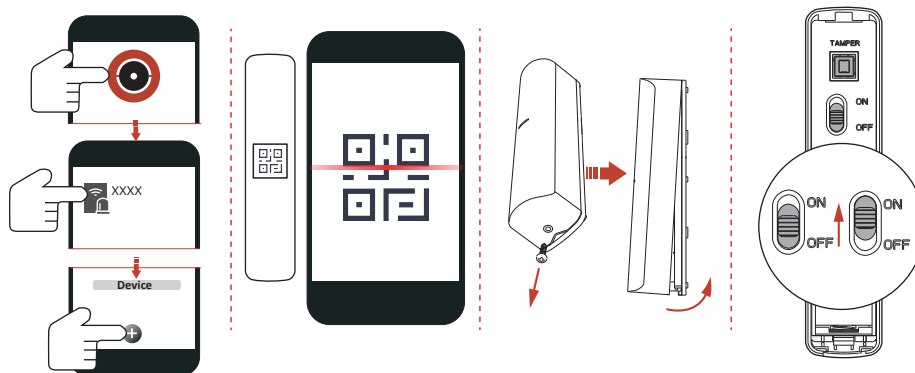
1. Log in to the APP Store, download and install the App.
2. Power on the security control panel.
3. Log in the APP and tap the icon "+". Scan the QR code or input the control panel serial No. to add the control panel.

#### 1 Enroll the Peripheral Locally

1. In the APP, tap the "Enrollment Mode" button on the control panel page to make the control panel enter the enrollment status.
2. Power on the peripheral, and it will be automatically enrolled to the control panel.

#### 2 Enroll the Peripheral with QR and serial No.

1. In the APP, tap the icon "+" and scan the QR code or serial No. on the peripheral.
2. Power on the peripheral, and it will be automatically enrolled to the control panel.



### 5 Test

The contact starts test automatically after being enrolled to the AX PRO. The LED turn red.

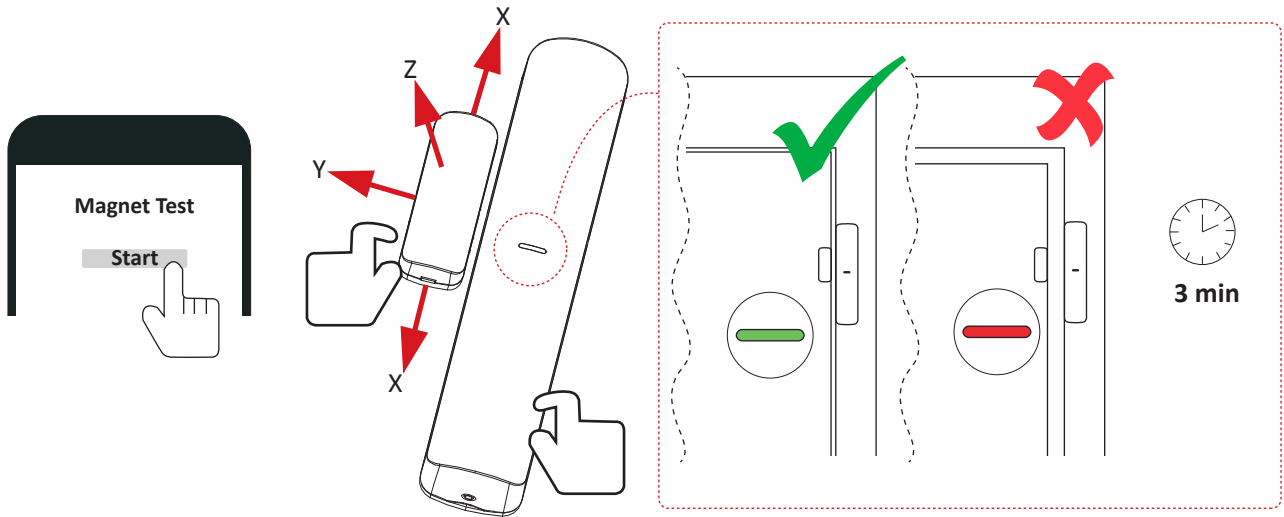
#### 1 Magnet Test

Separate the contact, and make a gap between the sensor and magnet. while the LED turns green, the alarm is triggered by this gap. Adjust the installation position of the contact to get a satisfied alarm gap.

The alarm will be triggered while the gap between the sensor and magnet is bigger than that shows in the table. The LED keeps blue for 2 s.

Magnet Detection Performance Table

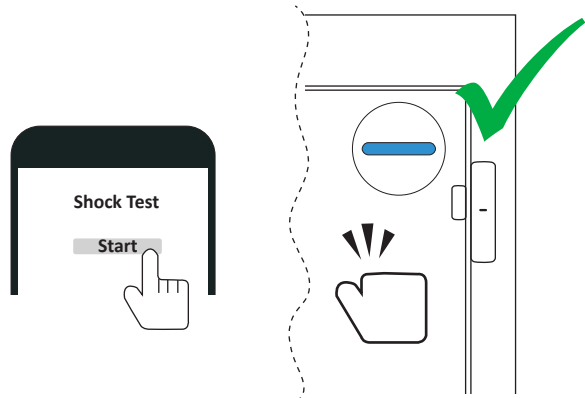
Axes of Operation	Event	Without Nominal Distance	With Nominal Distance 5mm
		Distance in Air	Distance in Air
X+	Remove	11	13
	Approach	15	17
X-	Remove	11	13
	Approach	15	19
Y	Remove	33	28
	Approach	28	23
Z+	Remove	43	42
	Approach	40	38
Z-	Remove	37	35
	Approach	32	30



## 2 Shock Test

Knock the door. Adjust the sensitivity of the detector until the blue LED keeps blue for 2 s.

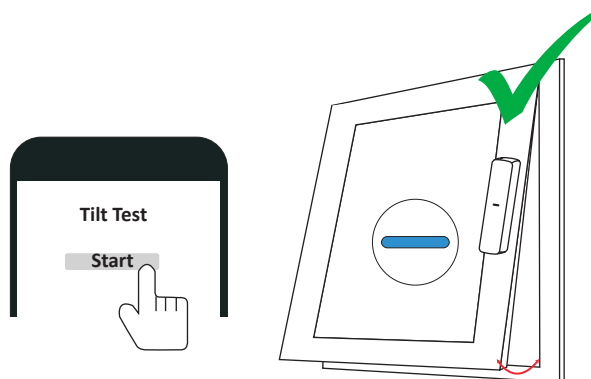
Sensitivity	Suggested scenarios
High	Concrete
Normal	Wood
Low	Window



## 3 Tilt Test

Tilt the detector more than the set angle, until the LED keeps blue for 2 s. You can set the tilt angle (5° to 25°) in the mobile client software.

**Note:** The tilt detection is only applicable to horizontal or vertical scenes. The tilt angle is perpendicular to the geocentric direction as the reference standard.



## 6 Installation

### 1. Check Signal Strength

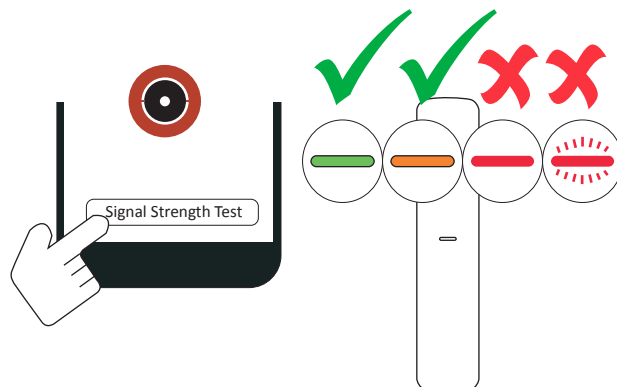
Enter the signal checking mode by operating on the control panel. Trigger the detector.

Solid Green for 3 s - Strong Signal

Solid Orange for 3 s - Medium Signal

Solid Red for 3 s - Weak Signal

Red light flashes for 3S - Lost Signal



### 2. Install the Detector

Dig the groove to disassemble the device.

Method 1: Secure the rear panel to the wall with two screws.

Method 2: Paste rear panel on the wall with the sponge tape.

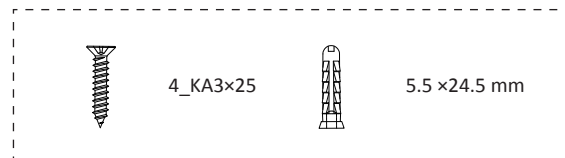
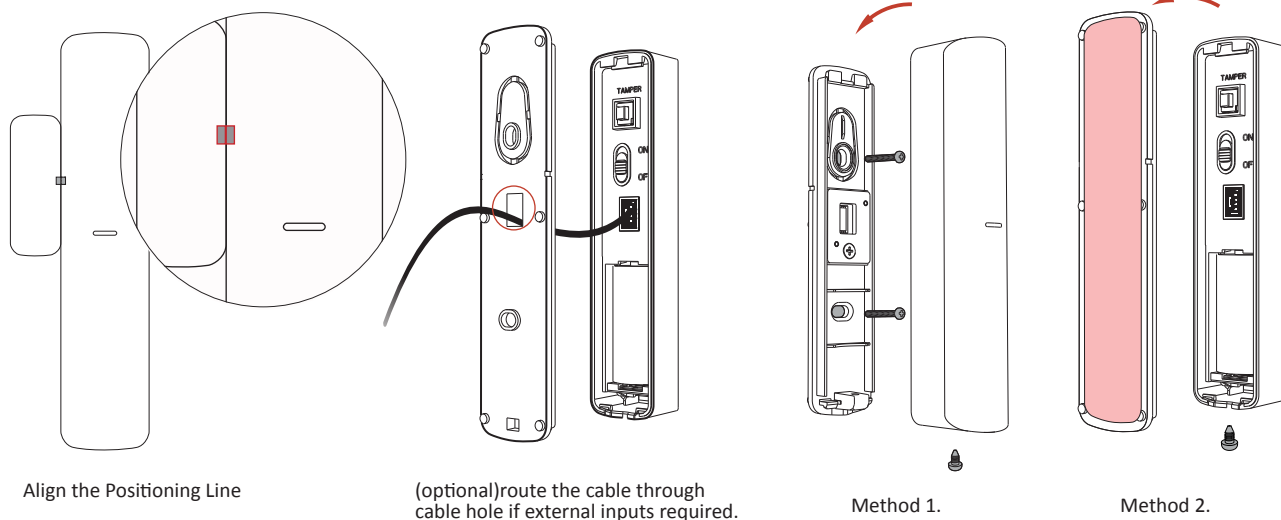
**Note:** To make the TAMPER work properly, the thickness of the sponge tape should be no more than 1mm.

**Note:** Installing with sponge tape is non EN compliant, and is not recommended if shock detection enabled.

Secure the front and the rear panel.

**Note:** Secure the front and rear panel with screw for EN compliance.

**Note:** You should install the sensor and the magnetic stick at the door or window's edge. Make sure they are aligned with the door or window's edge.




## 7 Functions

You can add two external inputs (each input can be set as NO\NC\TAMPER\Pulse) via the AX PRO client. While Any of the two inputs generates an alarm event, the contact reports the alarm to the AX PRO. The LED keeps blue for 2 s.

## 8 Formatting

1. Remove the battery.
2. Hold the TAMPER button and power the detector on at the same time. The red LED flashes 3 time when the formatting is completed.

## 9 Set Up with App

You can view the device status including temperature, signal intensity, battery level, lid, magnetic contact, external contact, etc., on the device page. Tap the  button to enter the settings page.

Disallowed field adjustable settings: None

Function	Description
Zone Type	Select the zone type of the detector.
Stay Arm Bypass	Slide to green to bypass the zone from stay arming.
Chime	Slide to green to enable the chime.
Enable Silent Zone	Slide to green to make the zone keep silent while alarm is triggered.
Double Knock	Slide to green to make the zone alarm with double knock.
Cross Zone	If the alarm triggered in both of the linked zones within the set time, two alarm messages will be reported.
Link Camera	Link with a camera for intruder verification.
Magnetic Contact	Slide to green to enable magnetic contact(Not allowed under EN).
External Contact1	Slide to green to enable the wired external contact 1.
External Contact2	Slide to green to enable the wired external contact 2.
LED	Turn On/Off the LED.
Polling Rate	Set the interval of heartbeat.
Signal Strength Test	Enter the test mode, and view the LED indication.
Detection Zone Test	Enter the test mode, separate the contact, and start the test with Magnet Detection Performance Table.
Zone Bypass	By pass the zone.

## 10 Operation Caution and Device Maintenance

- All the electronic operation should be strictly compliance with the electrical safety regulations, fire prevention regulations and other related regulations in your local region.
  - Do not drop the device or subject it to physical shock, and do not expose it to high electromagnetism radiation. Avoid the equipment installation on vibrations surface or places subject to shock (ignorance can cause equipment damage).
  - Please make sure that the power has been disconnected before you wire, install or dismantle the device.
  - If smoke, odors or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.
  - Do not drop the device or subject it to physical shock, and do not expose it to high electromagnetism radiation. Avoid the equipment installation on vibrations surface or places subject to shock (ignorance can cause equipment damage).
  - Do not place the device in extremely hot (refer to the specification of the device for the detailed operation temperature), cold, dusty or damp locations, and do not expose it to high electromagnetic radiation.
  - The device for indoor use shall be kept from rain and moisture.
- Exposing the equipment to direct sun light, low ventilation or heat source such as heater or radiator is forbidden (ignorance can cause fire danger).
- Do not aim the device at the sun or extra bright places. A blooming or smear may occur otherwise (which is not a malfunction however), and affecting the endurance of sensor at the same time.
  - Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.
  - Do not expose the device to the corrosive gas. Otherwise the equipment damage may occur.
  - Do not expose the device to the explosive situation.

## 11 Specification

Detection gap	According to the magnet detection performance table
One reed switch	Yes
External inputs	2
Shock detection	Yes
Tilt detection	Up to 25°
Tamper protection	Front & Back
LED indicator	Green(MC), Orange(tilt), Red(shock), Blue(alarm)
Encapsulated plastic	Yes
Input options	Normal and Fast Sensitivity with Pulse Count
Programmable pulse count	Yes
Fast input sensitivity	1ms
Normal input sensitivity	300ms
Operating temperature	-10 °C to 55 °C (14 °F to 131 °F) -10 °C to 40 °C (14 °F to 104 °F) Certified
Storage temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Operating humidity	10% to 90%
Dimension (H × W × D)	Sensor: 22.5mm × 103mm × 23.2mm Magnet: 13mm × 34.4mm × 11.4mm
Weight	60 g
Wireless technology	Tri-X Wireless Technology
Programming method	Advanced Wireless Link
LED indicator	On/Off
Shock sensitivity adjustment	High/Normal/Low
Tilt	5° to 25°
External Input 1	NC/NO, Roller Shutter (RS), Tamper
External Input 2	NC/NO, Roller Shutter (RS), Tamper
RS Pulse Count	2 to 30 Pulses
RS Pulse Count Timeout	10 to 60s
Environment temperature indicator	Yes
2-way wireless communication	Yes
Transmission frequency	433MHz
Frequency hopping	Multichannel transmissioin
Transmission encryption	AES-128 encryption
Signal strength indicators	Yes
RF range	1 km (open area)
Enrolling methods	Power up, Remote ID, QR code
Battery	CR123A x 1 (included)
Standard battery life	3 years