

WISeNeT

SMARTCAM D1

User Manual

SNH-V6435DN

CE 0678 !

Smartcam D1

User Manual

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SPECIFY SERVICE INSTRUCTIONS AND WARRANTY TERMS

FCC Compliance Statement

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Interference Statement

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 correct the interference by one 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 which the receiver is connected. Consult the dealer or an experienced radio/TV technician for help.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Industry Canada Statement

This device complies with RSS-247 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Radiation Exposure Statement

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

Instructions & Warranty

The manufacturer is not responsible for any loss or radio/TV interference caused by unauthorized modification of the product.

Such modification will void the warranty of the product as well as the user's right of use.

WARNING

- The product must be assembled and installed by an adult.
 - Before using, read all instructions on this manual thoroughly and follow operational instructions, warnings on this manual and printed on the product.
 - To avoid entangled power cord, do not place it around the baby bed or other infant furniture. Keep this product and its power cord out of children's reach.
 - Especially, the power cord should be installed carefully while keeping it out of children's reach.
 - Never use the product near bath tub, sink, washing machine and in wet basement to avoid moisture.
 - The product is not designed for medical monitoring, and requires a grown-up's protective supervision on its use.
 - To avoid overheating of the product, do not expose the product to direct sunlight; do not install or use near a heat source such as heater, radiator, cooking devices (ex: electric stove or oven) and other warming devices (ex: audio amplifier, TV, etc.).
 - Make sure to keep ventilated while using the product.
Avoid pillar or furniture that may block ventilation, when installing the product.
 - Make sure to use the power adaptor provided. If used with unidentified adaptor, it may damage the product. The power adaptor must be used with regular household electric supply.
 - Avoid sharp, pointed objects around the adaptor's cable, not to damage the cable.
 - Be warned and never hold the cable's stripped part when connecting / disconnecting the adaptor to/from the wall outlet.
 - To avoid entangled cable lines, avoid using cable extension for adaptor's power cord.
 - The product's servicing is allowed only to authorized Hanwha Techwin service personnel.
- Accessories and small parts of the product should be stored keeping out of children's reach.
 - The product is not designed to replace responsibility of human supervision on children.
 - The product is not equipped with device of immediate notification to adult with accidental/sudden children's move; it requires periodic checks and human supervision.
 - This appliance and its antenna must not be collocated or operation in conjunction with any other antenna or transmitter. A minimum separation distance of 20 cm must be maintained between the antenna and the person for this appliance to satisfy the RF exposure requirements.

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GETTING STARTED

Features

- **Easy to install**
 - The Wi-Fi Direct button allows easy connection to a wireless router.
- **Remote monitoring**
 - You can monitor your SmartCam D1 remotely, at any time and from any location, using your smartphone.
- **Real-time alarm**
 - When the bell rings, a push alarm is sent to the smartphone.
- **Face recognition**
 - You can set the person who wants to receive the alarm.
- **Downloading a recorded video**
 - You can download motion detection/audio detection/manually recorded video to the user's smartphone (Android).

Features

5

What's Included

6

Part Names and Functions

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Front

7

Rear

7

Side

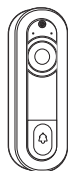
8

Components

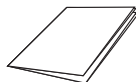
8

What's Included

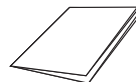
Check for components when opening the product package.



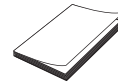
SmartCam D1



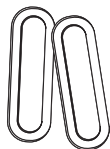
Quick Start Guide (Option by region)



Warranty Card



GPL Licence



Faceplate (Gold/Silver/Black)



Faceplate Screws



Security Screws / Plastic Anchors



Drill bit



Screw Driver



Power Stabilizer



Power Stabilizer Cable



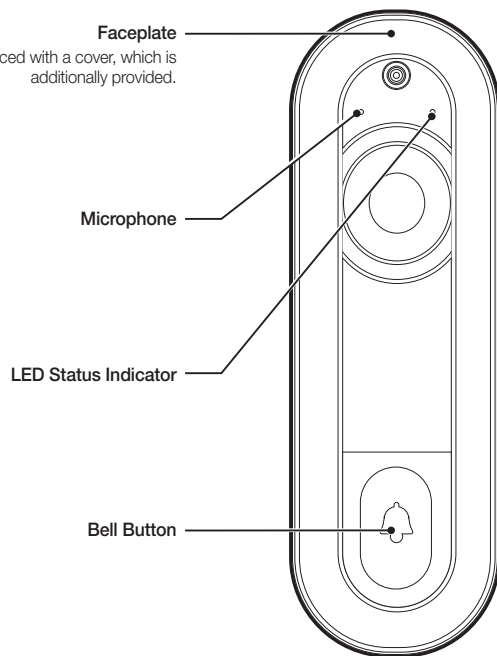
Power Extender Cables



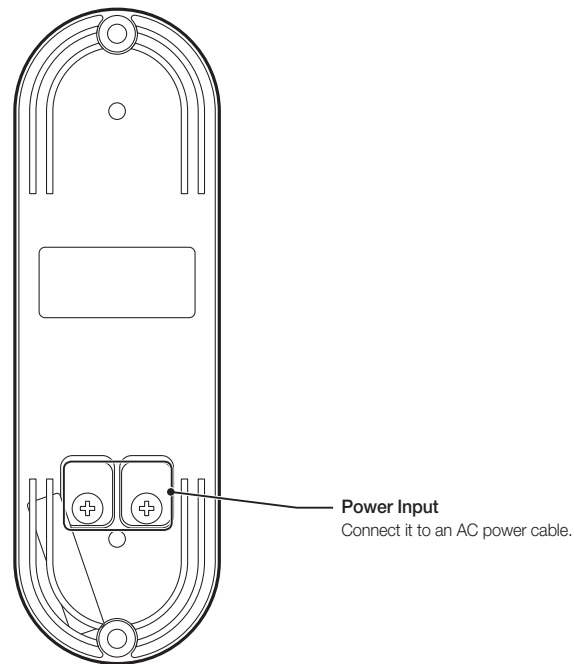
Connector

Part Names and Functions

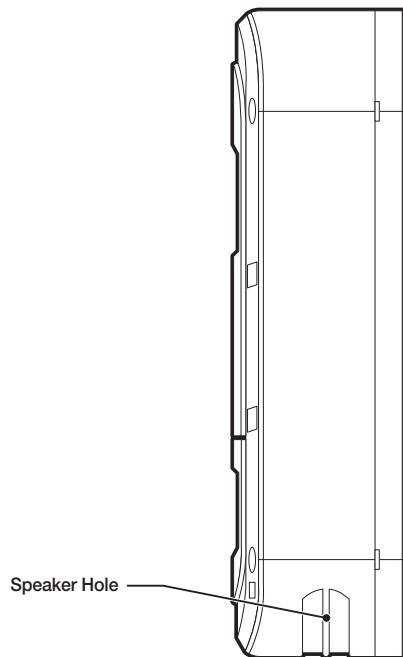
Front



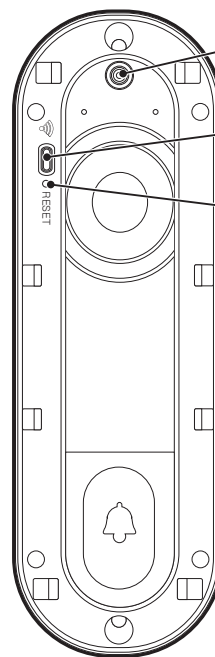
Rear



Side



Components



Illumination Sensor

WiFi Direct Button

Wi-Fi is used for wireless communication between product and smartphone.

Reset Button

Resets the product settings to the factory default. The system restarts if you press the button for 10 seconds using a pointed object such as a needle.



■ If you press too strongly, the button can break.

INSTALLATION & NETWORK CONNECTION

Installation

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Installation

Precautions

1. As this product works on a Wi-Fi network, video receiving may be unstable if there is an obstacle (metal, wall, door) in the use environment, or if the product is receiving interference from another Wi-Fi device nearby. Install the station hub and the camera at a position that ensures good video reception, considering the Wi-Fi network environment.
2. Do not install the device under direct sunlight or other strong light sources. Place it where there is good visibility.
3. Do not install it in a place where there are a lot of obstacles.
4. Do not install the product in places where there are or may be chemicals or traces of oil. Cooking oils like soybean oil can cause damage or deformation of the product, so please do not install the product near the kitchen or the kitchen counter. This may cause damage to the product.
5. Please be careful not to get chemical substances on the surface of the product when installing the product. Some detergents or chemical solvents like adhesives can cause serious damage to the surface of the product.
6. The function and performance of the product may not be guaranteed if the product is not installed/uninstalled by the recommended procedure.

Items to check before installation

Question	Answer
What types of walls are appropriate for the Installation?	Wood, Brick, Concrete, and Stucco walls are appropriate. The drill bit, driver, screw and anchor needed for installation work will be provided. For brick and concrete walls, you will have to prepare tools to drill into the wall.
How can I determine whether the chime is mechanical or electronic?	Mechanical: there is a sound board (similar to the metal stick of xylophone) Electronic: there is a speaker
Cautions when installing SmartCam D1 with the Wired Home Chime	<ul style="list-style-type: none"> - The Power Stabilizer is an electrical accessory installed with a Home-Chime. It helps ensure the camera with SmartCam D1 is receiving enough power in normal conditions. - Please see page 12 for details regarding the connection. - When using the chime, be sure to also install the Power Stabilizer. - If you do not install the Power Stabilizer, the product may not operate properly.
What kinds of Home Chimes are compatible?	<ul style="list-style-type: none"> - Check the compatibility list before installation. <p>Most mechanical chimes share the same composition except for chimes with special functions. Please see page 20, "Home Chime Compatibility List" for details.</p>
Can I use the product without a chime bell?	<p>This can be done by connecting directly to an AC adapter. Please check which power specification is supported. Only a 16-24V transformer can be supported.</p> <ul style="list-style-type: none"> - Use an AWG 19~23 Cable. - An extension power cable up to 30m in length can be used. <p>When directly connecting a camera to a 16 -24V AC adapter transformer, make sure that chime bell type is No. Chime(Default). ※ Path : [Setting][General]</p>
Chime Bell Setting (App)	After launching the App, select [General]-[Chime type] and set up the bell. For an electric chime, the bell can be set to persist for 2 to 10 seconds.

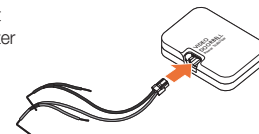
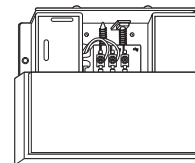
Cautions before installation

- Before you start, you must turn off the circuit breaker for safety purposes.
- It only can be installed at 16-24V AC power with the existing chime bell.
- Check your in-home chime whether it is a mechanical or electrical one.
- It is expected most of current mechanical chimes work properly except for one with a special feature, etc.
- Check out the compatible chime list on the website which is updated on monthly basis.

Installing Power Stabilizer

Connecting the Power Stabilizer to the Chime

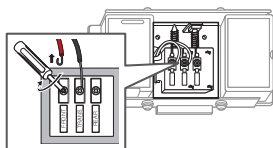
1. Find a breaker to cut off the electricity.
2. Open the cover on your existing chime.
3. Open the "Power Stabilizer Kit" and insert the wire connector into the Power Stabilizer Box.



4. Use a screwdriver to loosen the screws on the [FRONT] and [TRANS] terminals and then remove the cables.



- Make sure to label the terminal cables before disconnecting them. You will need to connect them to the terminal blocks later.



5. Connect Power Stabilizer to Chime

5-1 Pull up the orange levers on the terminal block.

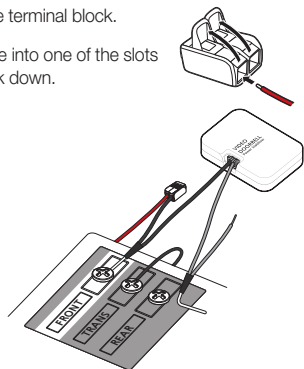
5-2 Insert the Power Stabilizer cable into one of the slots and push the orange lever back down.

5-3 Insert the wire labeled "Front" into the remaining opening of the terminal block.

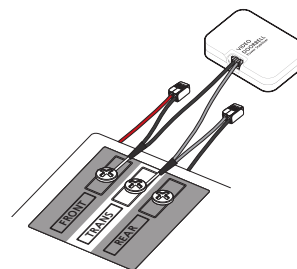
5-4 Insert the Power Stabilizer cable into one of the slots and push the orange lever back down.



- Make sure the end of the wire is properly aligned to the metal strip before closing the orange lever.



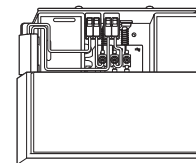
6. Repeat Step 5 for the [Trans] cable.



7. Put the chime cover back on once you are finished.



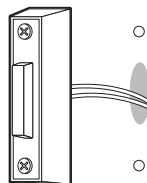
- Make sure to tuck the cables and Power Stabilizer box into an open space within the chime before putting the cover back on.



Mounting the SmartCam D1

Disassembling

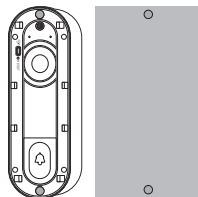
1. Use a screwdriver to remove your existing doorbell. Disconnect the wires from behind the doorbell carefully.



Install on the wall

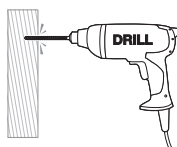
- ! Check whether or not the camera installation position is suitable for good video reception.

1. Mark the position of the mounting holes for your new doorbell.



2. Drill the holes about 1.2 inches deep into the wall. (Recommended Drill Bit size is 0.2 inches)

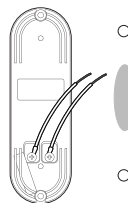
- ! It is recommended to use a drill bit (Ø5) that is suitable for the wall material.
- Be careful not to get injured while drilling.



3. Unscrew one of the power terminals on the back of your SmartCam D1, and wrap the existing wiring from your doorbell around the terminal, and then tighten the screw.



- It doesn't matter which cable you use on which side of the terminal back.



4. Optional Step for Extending Power Supply (Requires Power Extension Kit):

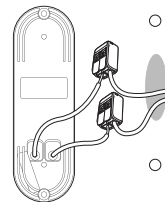
- 4-1 If existing wire is too short, use the Power Cable Extender and connect the flat circular end of it to the terminal, then screw the terminal back on.

- 4-2 Pull the orange levers on the terminal blocks up.

- 4-3 Insert the existing cable from the wall to one of the slots and push the orange lever back down.

- 4-4 Insert the new power cable from the doorbell to the other slot and pull the lever back down in place.

- 4-5 Repeat this process for the other side.

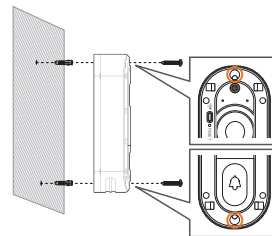


5. Mount the SmartCam D1 on the wall.

- 5-1 Insert the anchors into the holes completely.

- 5-2 Tuck the wires attached to the doorbell back into the wall and align the two holes on the doorbell with the holes in the wall.

- 5-3 Screw the SmartCam D1 tightly into the wall.

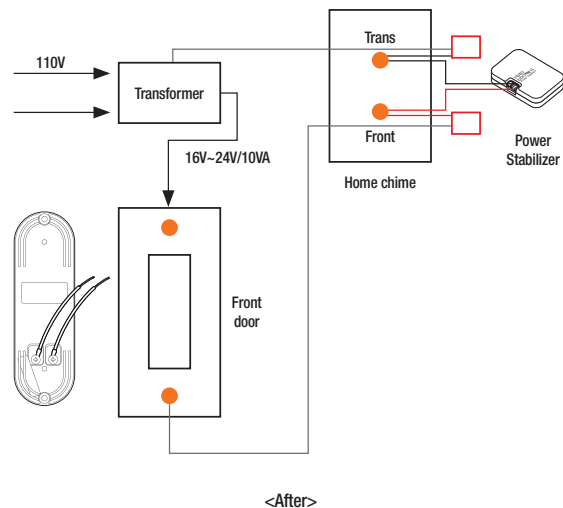
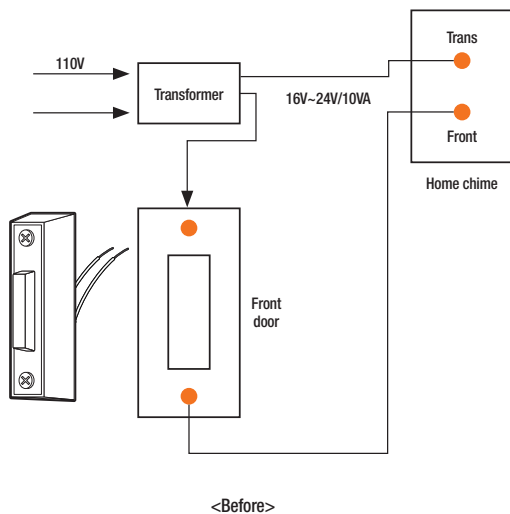


- Make sure to remove the faceplate attached to your SmartCam D1 to access the mounting holes.

6. Check the Diagrams below to make sure the Power Stabilizer and SmartCam D1 are properly installed.

❖ **Power connection structure**

- In the existing installation structure, a power stabilizer is removed from the figure.
- Connect two cables (black/white) with two terminals of the Chime Bell, as shown in the figure.
- If not connected, the camera and/or some features of Chime Bell may not work normally.



Web Install

With the Wisenet SmartCam+ app, users can monitor the SmartCam D1 from a mobile device.

1. Go to Google Play/App Store and search for "**Wisenet SmartCam+**".
2. Download the application and install it on your mobile device.
3. Run the downloaded application.
4. After completing member registration, register the SmartCam D1 as instructed on the screen.



■ For more details, refer to Wisenet SmartCam+ mobile guide.



Network connection

In a location with a strong Wi-Fi signal and no interference, use Wi-Fi communication.

❖ LED status

LED indicator shows operational status with colors.

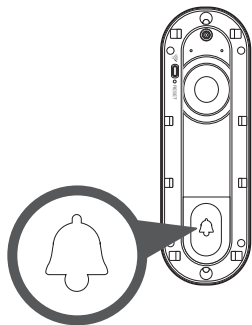
Refer to table below for detailed meaning of the LED indicator.

Color	Status
Red	Booting up
Red Blinking	Booting completed
Yellow	Enabling Wi-Fi Direct
Blue Blinking	Searching for available Wi-Fi network
Blue	Connected to Wi-Fi network
Green	Connected to Server / Setup Completed
Purple	Download firmware
Purple Blinking	Updating firmware

❖ Bell LED Status

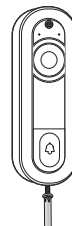
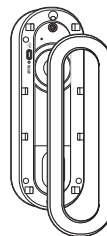
Bell LED indicator shows operational status with blinks.
Refer to table below for detailed meaning of the LED indicator.

Bell LED	Status
ON	Normal Status
Blink	Blinks 3-4 times with the chime when pressed
Dim	Slowly dims up & down repeatedly for 10-sec when a person is detected.
Blink	Blinks every 10 seconds to notify users of power supply issue.



Assemble

1. Once you are finished with the in-app setup for the SmartCam D1, attached the faceplate back on.
2. Tighten the screw on the bottom of the SmartCam D1 body to secure the faceplate.



Network Connection and Settings

Precautions

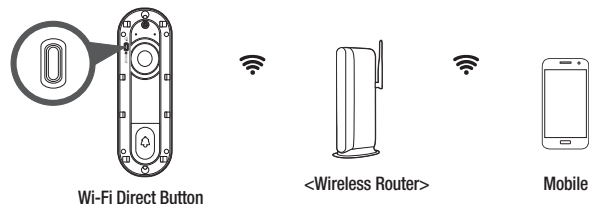
- The wireless network access may fail, depending on the communications environment.
- For details about the network settings and password, contact your network administrator or service provider.
- For a specific Internet service requiring user authentication, you may not access the service. If this is the case, contact the service provider.
- Do not access the unauthorized network.
- The farther the distance from the Wireless Access Point, the longer time the network connection may take.
- If you fail to access the selected wireless network, try a different Wireless Access Point to make access.
- For more information about the router or the wireless connection, refer to the documentation of the router or contact the router manufacturer.
- If the product is connected to a multiple-Wireless Access Point network environment, some video packets may be lost, depending on the network traffic load.
- According to the network policy of the Internet service provider (UDP blocking), video reception may be limited to 7 minutes.
- In addition to the above situations, you may encounter a network delay or interruption due to the network conditions.
- Some hubs can have compatibility issues.

Connection using the Wi-Fi Direct function

What is Wi-Fi Direct?

If you use Wi-Fi Direct, the product can be connected to the router without using wires.

1. Connect the power adapter to the product.
2. When the power is connected, the power status LED lights up in red and starts blinking when boot-up is complete.
3. If you press and hold the Wi-Fi Direct button for 5 seconds, the LED will illuminate in yellow.



4. Register the product following the instructions in the mobile guide.
5. When the product is connected to the server, the LED will illuminate in green.



- You can connect in relay mode if the router doesn't have UPnP. Configuration may differ depending on the router model. Please refer to the router manual.
- Please contact the service provider if you have difficulty connecting to the Internet.

APPENDIX

03

Specifications

- Specifications
- Product Appearance
- Home Chime Compatibility List

Troubleshooting

Specifications

Specifications

Item	Description
Video	
Imaging Device	1/2.8" CMOS
Min. Illumination	B/W : 0 Lux with IR
Lens	
Angular Field of View(H / V / D)	H : 125° / V : 94.8° / D : 150°
Lens Distortion Correction	Support
Operational	
IR LED	850nm
Viewable Length	16ft (5m)
Time display	Off / On
Day & Night	True D/N
Wide Dynamic Range	HDR
Digital Noise Reduction	Support (2D+3D Noise Filter)

17

17

19

20

21

03

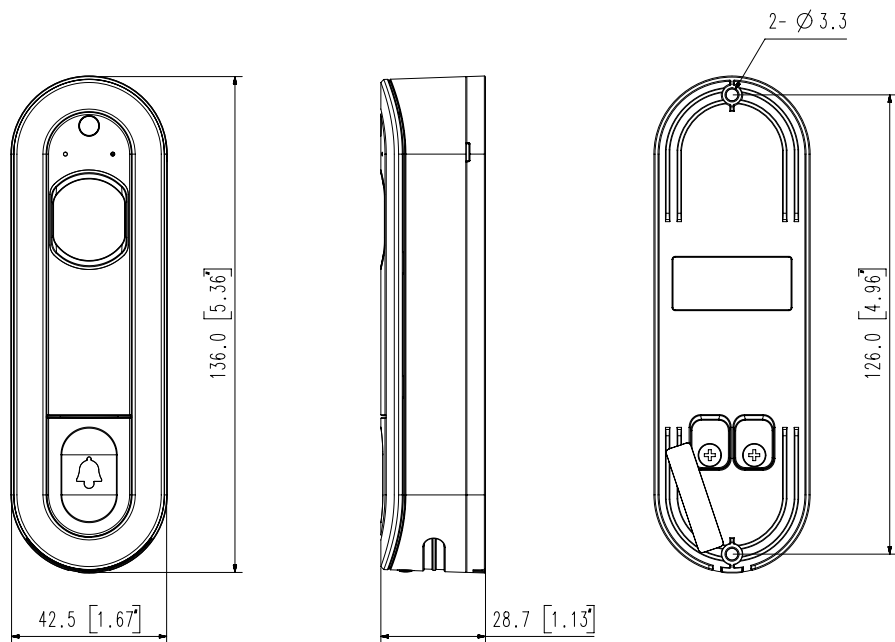
Appendix

Item	Description
Digital Zoom	4x(Mobile)
Flip / Mirror	Off / On
Intelligent Video Analytics	Face Recognition, Human Detection, Motion Zone Selection
Abnormal sound detection	Siren, Glass breaking, Screaming
Alarm Events	Push Alert (Mobile Device) Notification via e-mail
Network	
Wireless	WiFi 802.11a/b/g/n/ac (Dual Band)
Video Delay(Latency)	Max. 1000ms(Internet, Mobile, not relay mode)
Video Compression Format	H.264
Resolution	1600×1200 / 1024×768 / 640×480
Max. Framerate	1600x1200@30fps
Audio Communication	2-way Audio with Echo Cancellation
Streaming Method	Unicast
Max. User Access	5 Users (Live)
Web / App viewer	Web viewer : not supported Supported OS : iOS, Android

Item	Description
Environmental	
Operating Temperature / Humidity	-20°C ~ 40°C / Less than 90% RH
Storage Temperature / Humidity	-30°C ~ +50°C / Less than 90% RH
Ingress Protection	Weather Resistant
Electrical	
Input Voltage / Current	Wired AC 16~24V, 10VA
Power Consumption	7W

Product Appearance

unit: mm (inch)



Home Chime Compatibility List

❖ Compatible chime

Chime type	Manufacturer	Model	Description
Mechanical	Heath-Zenith	SL-2796	
	Carlton	DH506 DH120	
	Craftmade	C102X2L	
	Edwards	C212W-2L	
	Honeywell	RCW100N RCW110N	(for RCW110N) Common : AC16(1), Smartcam D1(1) Transformer : AC16(3), Power stabilizer(3) Front : Smartcam D1(0), Power stabilizer(0)
	NuTone	LA11WH LA14WH BK125LWH-1 BK115LWH BK131LPB LA70MA	(for LA70MA) Common : AC16(1), Smartcam D1(1) Transformer : AC16(3), Power stabilizer(3) Front : Smartcam D1(0), Power stabilizer(0)
	Atlantic	AI BCK1-PWH	
Electrical	Heath-Zenith	DC-3338	
	Honeywell	RCW3501N RCW3505N	(for RCW3501N) C3 : C2 : C1 : Smartcam D1(2) / Power stabilizer(2) V/AC : Smartcam D1(1) / AC16(2) AC : Power stabilizer(1) / AC16(1)
	IQ America	DW1402A	
	Nutone	LA600WH	

❖ Incompatible chime

Chime type	Manufacturer	Model	Description
Mechanical	Edwards	C210 C210-W	
	Nicor	18888	
Electrical	NuTone	LA174WH	

Troubleshooting

If you encounter a problem with your system, see the table below to solve the problem as quickly and easily as possible. Please follow the instruction below:

Problem	Action
I forgot my user ID/ password.	<ul style="list-style-type: none"> - Move to "Log-in page → Forgot your ID/Password?", and enter the registered e-mail address to which we will send you the user ID and/or a new password. - It can be spammed out depending on the policy of the email server. - After logged in, it is advisable to change the temporary password provided.
Product is not connected to the wireless hub.	<ul style="list-style-type: none"> - If the green light on the product state LED turns off frequently, it may be because the product is installed in an environment with a poor wireless Internet connection. - Check the password for the wireless hub and try again.
After logged in, I failed to register the product.	<ul style="list-style-type: none"> - Check whether the serial number entered matches the label on the product. - Enter the correct password for the product registered again and try to register the product again. - Check whether the LED light of the product is yellow. - If this fails to resolve the problem, factory reset the product and repeat the procedure from the beginning. <p>(To factory reset the product, press and hold the RESET button on the product for 5 seconds. The product will be restarted when the product is factory reset.)</p>

Problem	Action
The video from the camera is temporarily lost.	<ul style="list-style-type: none"> - The video from the camera can be delayed according to a network delay. Check if the product and the camera are far apart.
No sound is output from the video.	<ul style="list-style-type: none"> - Some internet service providers do not support audio outputs in relay mode.
I want to change my password and/or email address.	<ul style="list-style-type: none"> - Change the account information after logging into Wisenet SmartCam+. - For more details, refer to the mobile guide.
Product will be connected in a relay mode.	<ul style="list-style-type: none"> - Check the UPnP setting of the router. - A network upload speed of at least 2.5Mbps is recommended. - Depending on the policy of your service provider, you can access in relay mode.



Hanwha Techwin cares for the environment at all product manufacturing stages, and is taking measures to provide customers with more environmentally friendly products. The Eco mark represents Hanwha Techwin's devotion to creating environmentally friendly products, and indicates that the product satisfies the EU RoHS Directive.



Correct Disposal of This Product

(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

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