SAMSUNG

SAMSUNG SMARTCAM

User Manual

SNH-V6430BN/
SNH-V6430BNH

CE

Samsung SmartCam
User Manual

Copyright

©2016 Hanwha Techwin Co., Ltd. All rights reserved.

Trademark

Each of trademarks herein is registered. The name of this product and other trademarks mentioned in this manual are the registered trademark of their respective company.

Restriction

Copyright of this document is reserved. Under no circumstances, this document shall be reproduced, distributed or changed, partially or wholly, without formal authorization.

Disclaimer

Hanwha Techwin makes the best to verify the integrity and correctness of the contents in this document, but no formal guarantee shall be provided. Use of this document and the subsequent results shall be entirely on the user's own responsibility. Hanwha Techwin reserves the right to change the contents of this document without prior notice.

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:
NOTE: 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.

SPECIFY SERVICE INSTRUCTIONS AND WARRANTY TERMS

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 CAUTION:

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC NOTE:

The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications to this equipment.
Such modifications could void the user's authority to operate the equipment.

Operational Description

The operational description shall fulfil the requirements of Rule Part 2.1033(b)(4). The rule part requires, "A brief description of the circuit functions of the device along with a statement describing how the device operates. This statement should contain a description of the ground system and antenna, if any, used with the device".

The above requirement has been further interpreted by the FCC to mean that the description shall:

a. be an operational or technical description of how the device operates, is modulated and meets requirements;

b. describe the EUT completely. What is it (in plain English as well as technical terms)? Give a clear, concise functional description of device operation.

c. always describe the signal, such as modulation type, pulse repetition rate, signal type and information being sent. Describe all modulation types and all data rates.

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.

To comply with FCC RF exposurre compliance requirements, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons. This device must not be co-located or operation in conjunction with any otheer antenna or transmitter.

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.
- When using the product for children's care, be careful to keep the product out of children's reach.
- The product partially contains component which might cause respiration difficulty. 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.
- Please note that the content of a micro SD card used for other purposes may be deleted when it is mounted in the camera.

Contents

GETTING STARTED

5 Features (SNH-V6430BN)
6 Features (SNH-V6430BNH)
7 What's Included (SNH-V6430BN)
8 What's Included (SNH-V6430BNH)
9 Part names and functions (SNH-V6430BN)
11 Part names and functions (SNH-V6430BNH)

INSTALLATION & NETWORK CONNECTION

13 Indoor/Outdoor bracket switching
14 Installation (SNH-V6430BN)
16 Installation (SNH-V6430BNH)
18 Network Connection and Settings (SNH-V6430BN)
19 Network Connection and Settings (SNH-V6430BNH)

MONITORING

21 Registration
26 Live Video
29 Setup
36 Event Alarm
36 Playback
38 Information

APPENDIX

39 Specifications
44 Troubleshooting

01 GETTING STARTED

5 Features (SNH-V6430BN)

6 Features (SNH-V6430BNH)

7 What's Included (SNH-V6430BN)

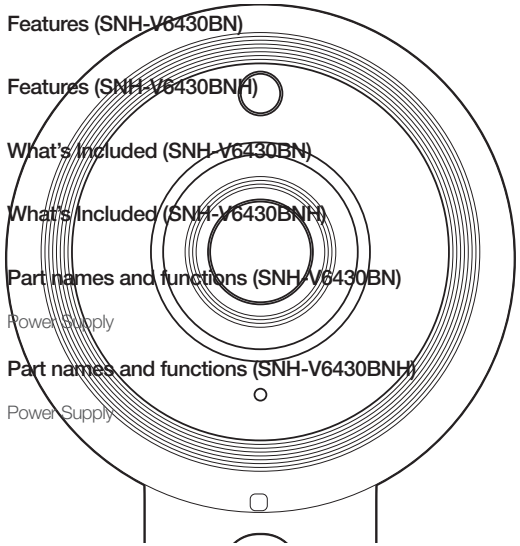
8 What's Included (SNH-V6430BNH)

9 Part names and functions (SNH-V6430BN)

10 Power Supply

11 Part names and functions (SNH-V6430BNH)

12 Power Supply



Features (SNH-V6430BN)

- **Dedicated Wi-Fi Product**
  - The camera is registered through the Wi-Fi connection.
- **Easy to install**
  - The Wi-Fi Direct button allows easy connection to a wireless router.
  - Simply visit the home page (www.samsungsmartcam.com) and download and install the program without a separate installer program.
- **Remote monitoring**
  - Whenever and wherever if you are in the Internet enabled environment, remote monitoring is ready for you.
  - PC, laptop or smart phone can be used for monitoring.
- **Real-time alarm**
  - When a motion and sound are detected, your smartphone will generate real time alarms.
- **Saving in SD card**
  - When an event occurs, the user can save the video in their SD card.
- **Downloading a recorded video**
  - You can download a motion detection triggered/audio detection triggered/ manually recorded video saved on the SD card to your PC or smartphone (Android-powered smartphone).
- **Two-way Audio**
  - With the built-in speakers and microphone, you can make Two-way communications.
    However, it is available only with the smart phone. (Not applicable to the PC or laptop computer.)
- **Used for outdoor purposes**
  - You can easily install an indoor camera in an outdoor space using the housing for outdoor use.

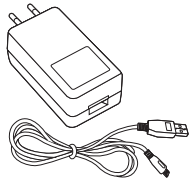
Features (SNH-V6430BNH)

- **Easy to install**
  - The Wi-Fi Direct button allows easy connection to a wireless router.
  - Simply visit the home page (www.samsungsmartcam.com) and download and install the program without a separate installer program.
- **Remote monitoring**
  - Whenever and wherever if you are in the Internet enabled environment, remote monitoring is ready for you.
  - PC, laptop or smart phone can be used for monitoring.
- **Real-time alarm**
  - When a motion and sound are detected, your smartphone will generate real time alarms.
- **Saving in SD card**
  - When an event occurs, the user can save the video in their SD card.
- **Downloading a recorded video**
  - You can download a motion detection triggered/audio detection triggered/ manually recorded video saved on the SD card to your PC or smartphone (Android-powered smartphone).
- **Dustproof/Waterproof (weather resistant)**
  - The dustproof and waterproof design enables it to be installed in outdoor spaces that are exposed to dust and rain.
- **PoE connection**
  - You can easily connect the camera to the power supply and network using a PoE adapter, even in a demanding installation environment.

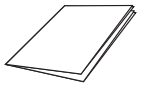
What's Included (SNH-V6430BN)

Check for components when opening the product package.

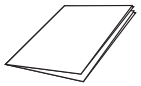
Camera



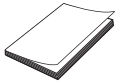
Power adapter and cable



Quick Start Guide



Warranty Card



GPL Lisence

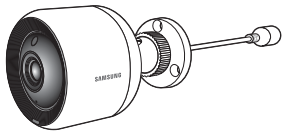
Tapping screw

Plastic anchor

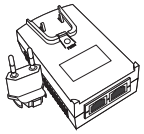
■ Keep the packing container. You will need the serial number later to register the camera.

What’s Included (SNH-V6430BNH)

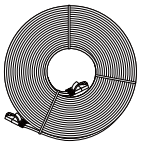
Check for components when opening the product package.



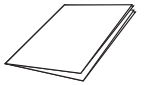
Camera



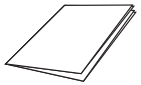
PoE adapter & power plug



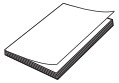
LAN cable (10M)



Quick Start Guide



Warranty Card



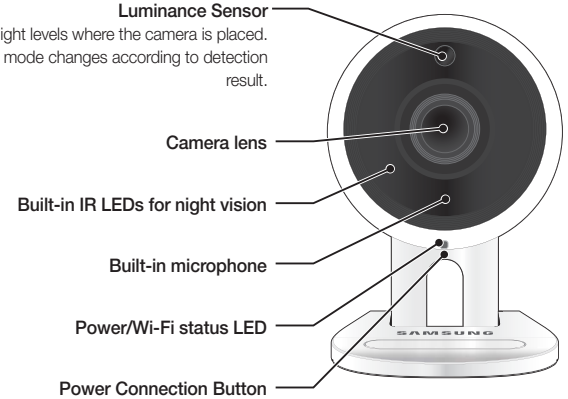
GPL Lisence

Tapping screw

Plastic anchor

■ Keep the packing container. You will need the serial number later to register the camera.

Part names and functions (SNH-V6430BN)



Luminance Sensor
Detects light levels where the camera is placed. Night vision mode changes according to detection result.

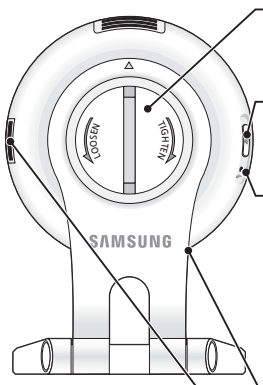
Camera lens

Built-in IR LEDs for night vision

Built-in microphone

Power/Wi-Fi status LED

Power Connection Button
It connects with a power adapter.



Bracket knob
Connect the camera and bracket.

Wi-Fi Direct button
Wi-Fi is used for wireless communication between camera and smartphone.

Reset button
Resets the camera settings to the 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.

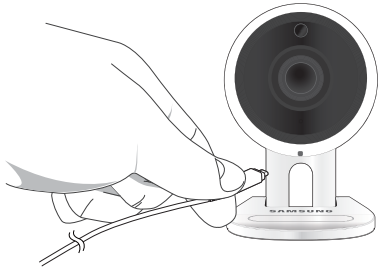
Speakers
Generate audio output from your smart phone.

Micro card insertion hole

Power Supply

Plug-in the camera power adapter to the wall outlet and connect the camera as shown.

- Make sure to use the provided power adaptor. If you use an adaptor other than the power supply adaptor provided in our package, the product may not operate properly.
- It takes about 30 seconds to reboot the camera completely.
- When the camera is turned on, the LED blinks red.



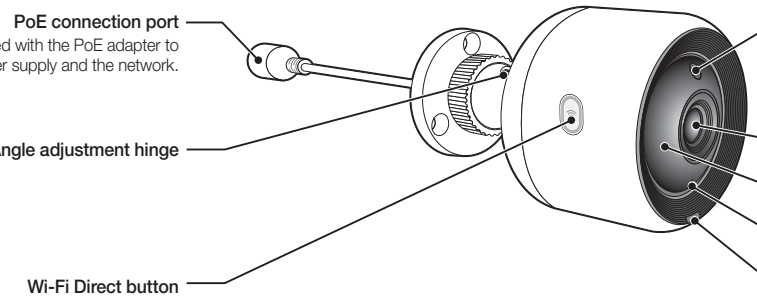
❖ LED status

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 / Establishing network connection
Blue Blinking	Connecting to the network.
Blue	Local connection established
Green	Connection to server completed / Normal operation
Yellow/Orange	Waiting to connect with a wireless router
Purple	Updating firmware

Part names and functions (SNH-V6430BNH)



PoE connection port
The camera is connected with the PoE adapter to connect with the power supply and the network.

Angle adjustment hinge

Wi-Fi Direct button
Wi-Fi is used for wireless communication between camera and smartphone.

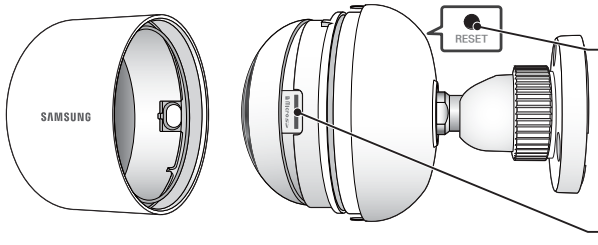
Luminance Sensor
Detects light levels where the camera is placed. Night vision mode changes according to detection result.

Camera lens

Built-in IR LEDs for night vision

Built-in microphone

Power/Network status LED



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

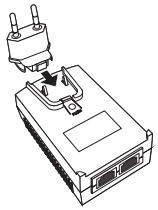
- If you press too strongly, the button can break.

Micro card insertion hole

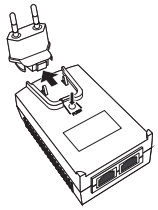
Power Supply

Using the PoE adapter

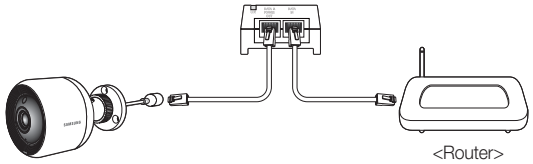
1. Push to insert the included PoE adapter in the power plug, as shown in the figure below.



2. To remove the power plug from the PoE adapter, press the [**PUSH**] section as shown in the figure below, and push up the power plug.



3. Connect the LAN cable from the PoE adapter [**DATA & POWER OUT**] socket to the PoE socket.



<Router>

4. Connect the LAN cable from the PoE adapter [**DATA IN**] socket to the LAN port of the router.

- When connecting the camera wirelessly via Wi-Fi Direct, remove the LAN cable connecting the PoE adapter and the router.

5. Plug the PoE adapter into an electrical outlet.

- Use the PoE adapter and power plug that have been included with the camera. Using an incompatible adapter may cause the camera to malfunction.
- It takes about 30 seconds to reboot the camera completely.
- When the camera is turned on, the LED blinks red.

❖ **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 / Establishing network connection
Blue Blinking	Connecting to the network.
Blue	Local connection established
Green	Connection to server completed / Normal operation
Yellow/Orange	Waiting to connect with a wireless router
Purple	Updating firmware

INSTALLATION & NETWORK CONNECTION

02

13 Indoor/Outdoor bracket switching

13 Precautions
13 Separating the indoor bracket
14 Installing the outdoor bracket

14 Installation (SNH-V6430BN)

14 Precautions
14 Installing on the wall and ceiling using screws
15 Adjusting the camera angle

16 Installation (SNH-V6430BNH)

16 Precautions
16 Installing on the wall and ceiling using screws
17 Adjusting the camera angle

18 Network Connection and Settings (SNH-V6430BN)

18 Precautions
18 Connection using the Wi-Fi Direct function

19 Network Connection and Settings (SNH-V6430BNH)

19 Precautions
19 Connecting via network cable
20 Connection using the Wi-Fi Direct function

Indoor/Outdoor bracket switching

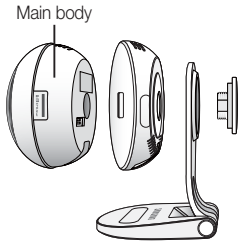
Precautions

1. Outdoor bracket is available separately.

Separating the indoor bracket

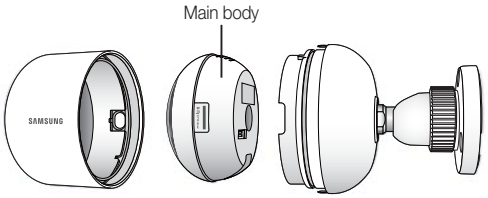
1. Turn the knob on the back of the camera in the [**LOOSEN**] direction.

2. Remove the bracket from the main body of the camera, as shown in the figure below.

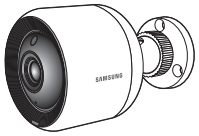


Installing the outdoor bracket

1. Install the outdoor bracket into the groove on the main body of the camera, as shown in the figure below.



2. Turn the housing to the LOCK [🔒] direction.



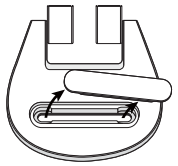
Installation (SNH-V6430BN)

Precautions

1. Install the camera in a location with a good Wi-Fi signal and no interference.
2. Keep it away from humidity such as around the humidifier.
3. Keep it away from direct sunlight, strong light or dust; install it in a place with clear view.
4. Do not install it in a place where there are a lot of obstacles.
5. Keep the lens clean at all times.
   Wipe off the dust with a soft cloth.

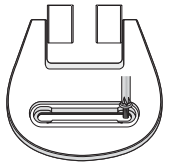
Installing on the wall and ceiling using screws

1. Remove the rubber packing attached to the camera stand.
2. Take out the screws (M3xL20) and anchors (Φ5x25mm).



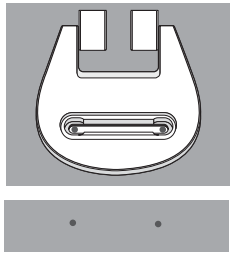
When installing on a wooden wall

3. Fix the bracket to the wall using screws, as shown in the next image. Using a Phillips screwdriver, fasten screws in 2 screw holes on the wall on which the camera is to be installed.



When installing on a concrete wall

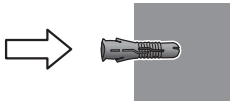
3. Fix the bracket on the wall using screws and anchors. First, mark the wall on which the camera is to be installed as shown in the figure.



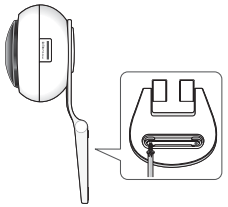
4. On the mark, drill a hole to a depth of about 3cm in the wall using a drill bit and drill with a 5mm diameter for concrete. Remove any debris remaining in the hole after drilling.

- Use caution when drilling to avoid injury.

5. Insert an anchor in each of the 2 holes for the screws, then hit the back of the anchor with a hammer or a rubber mallet until it is completely inserted.



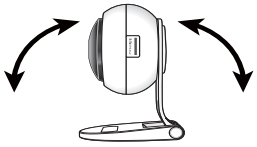
6. Insert a screw in each of the 2 holes in the wall, and tighten the screws using a Phillips screwdriver.
7. Connect the adapter plug to the power terminal of the camera.



8. If the bracket hinge becomes loose, remove the rubber cover and tighten the screw using a screwdriver.

Adjusting the camera angle

1. Place the camera stand on a flat surface.
2. Adjust the camera's shooting angle as appropriate.



- If the bracket hinge becomes loose, remove the rubber cover and tighten the screw using a screwdriver, then adjust the direction of the camera.

Installation (SNH-V6430BNH)

Precautions

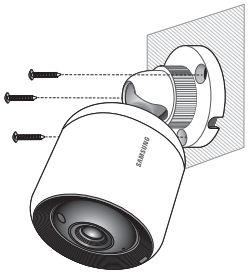
1. To facilitate monitoring, connect between the PoE adapter [**DATA IN**] port and the router.
2. In a location with a good Wi-Fi signal and no interference, use Wi-Fi communication.
3. As the front of the lens may become dirty due to rainwater, avoid installing under the eaves or in a moist space.
4. Keep it away from direct sunlight, strong light or dust; install it in a place with clear view.
5. Do not install it in a place where there are a lot of obstacles.
6. Keep the lens clean at all times.
   Wipe off the dust with a soft cloth.

Installing on the wall and ceiling using screws

1. Take out the screws (M3xL20) and anchors (Φ5x25mm).

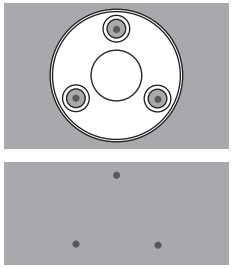
When installing on a wooden wall

2. Fix the bracket to the wall using screws, as shown in the next image. Using a Phillips screwdriver, fasten screws in 3 screw holes on the wall on which the camera is to be installed.



When installing on a concrete wall

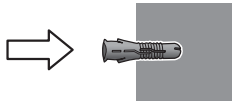
2. Fix the bracket on the wall using screws and anchors. First, mark the wall on which the camera is to be installed as shown in the figure.



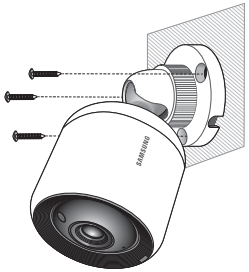
3. On the mark, drill a hole to a depth of about 3cm in the wall using a drill bit and drill with a 5mm diameter for concrete. Remove any debris remaining in the hole after drilling.

- Use caution when drilling to avoid injury.

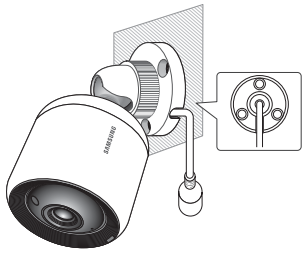
4. Insert an anchor in each of the 3 holes for the screws, then hit the back of the anchor with a hammer or a rubber mallet until it is completely inserted.



5. Insert a screw in each of the 3 holes in the wall, and tighten the screws using a Phillips screwdriver.
6. Connect the PoE adapter to the camera.

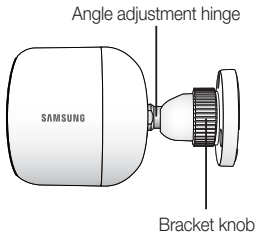


- Insert the cable through the hole at the bottom of the bracket to prevent the cable from being pressed when installing the camera.



Adjusting the camera angle

1. Turn the bracket knob counter-clockwise.
2. Adjust the angle adjustment hinge to set the desired camera angle.
3. Turn the bracket knob clockwise to fasten.



Network Connection and Settings (SNH-V6430BN)

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 camera 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 (blocking UDP) of the service provider, the video transmission can be limited to 7 minutes.
  For more details, refer to the descriptions on page 28, <**Relay Mode**>.
- In addition to the above two 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?

Using Wi-Fi Direct, you can easily connect your camera to a router without a cable.

1. When the power is connected, the power status LED lights up in red and starts blinking when boot-up is complete.
2. Press and hold the Wi-Fi Direct button on the camera for 5 seconds, and the color of the LED will change to yellow/orange.

3. Register and select a camera, referring to the instructions in the mobile guide.
4. When the camera connects the server, the LED turns green.
5. Set up the wireless network environment in accordance with the <**Wireless Network**> guidance on page. 31.

- The camera can only be registered via mobile.
- 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.

Network Connection and Settings (SNH-V6430BNH)

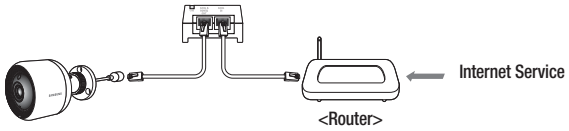
Precautions

- The cable connecting the router to the camera should have a length of 70m or less (based on CAT5e LAN cable)
- The wireless network access may fail, depending on the communications environment.
  In this case, a wired connection is recommended.
- 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 camera 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 (blocking UDP) of the service provider, the video transmission can be limited to 7 minutes.
  For more details, refer to the descriptions on page 28, <**Relay Mode**>.
- In addition to the above two situations, you may encounter a network delay or interruption due to the network conditions.
- Some hubs can have compatibility issues.

Connecting via network cable

If a wireless router is not available, connect a home router directly to the PoE adapter to which the camera is connected using a LAN cable.

1. Turn the power on and the LED will turn red. The red light will flicker when bootup is complete.
2. As shown in the figure below, LAN



3. When the camera is connected to the router, the LED turns blue.
   (Connection standby time: 30 seconds maximum)
   If the LED does not turn blue, return to Step 2 and confirm that all steps were performed correctly.
4. The status LED will became steady green once the camera is connected to server.

- It is recommended to set the router to DHCP(Dynamic Host Configuration Protocol) server.
  If you want to use static IP address, please refer to <**Wired Network**> on page 30.
- If the router's UPnP is not set, then you might be connected in relay mode.
  The settings may differ depending on the connected Broadband Router model.
  For more information, refer to the user manual of the applicable router.

Connection using the Wi-Fi Direct function

What is Wi-Fi Direct?

Using Wi-Fi Direct, you can easily connect your camera to a router without a cable.

1. When the power is connected, the power status LED lights up in red and starts blinking when boot-up is complete.
2. Press and hold the Wi-Fi Direct button on the camera for 5 seconds, and the color of the LED will change to yellow/orange.

3. Register and select a camera, referring to the instructions in the mobile guide.
4. When the camera connects the server, the LED turns green.
5. Set up the wireless network environment in accordance with the <**Wireless Network**> guidance on page. 31.

- The camera can only be registered via mobile.
- 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.

MONITORING 03

21 Registration

21 Web browser requirements
21 Starting SmartCam

26 Live Video

27 Monitoring options

29 Setup

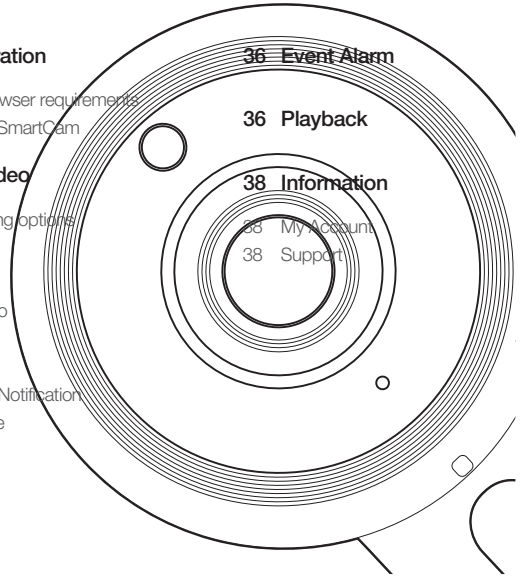
29 Basic Info
30 Network
32 Time
33 Alarm & Notification
34 Schedule
35 SD card

36 Event Alarm

36 Playback

38 Information

38 My Account
38 Support



Registration

For the SNH-V6430BN model, camera registration can only be performed using a smartphone.
For more information about camera registration, please see the mobile manual.

For the SNH-V6430BNH model, camera registration can be performed not only from a smartphone through wired/wireless connection, but also though a PC or laptop computer.

Web browser requirements

Windows	Mac
Windows 7/8 or higher is supported - Internet Explorer 9.0 or higher (The 64-bit is not supported.) - Firefox	Mac OSX or higher is supported - Firefox - Safari

Starting SmartCam

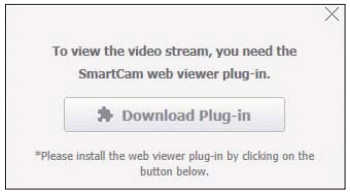
1. From your PC, launch your web browser.
2. Go to http://www.samsungsmartcam.com.
3. Select preferred language.
4. Click <**Sign up**> or <**Starting SmartCam**>.

❖ Plug in installation

You can only see the camera image after installing a plug-in.

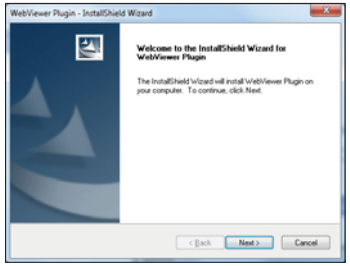
- If you login or click <**Starting SmartCam**> in a PC where the plug in is not installed, the installation message window will pop up.
- When you install the plug in, the web browser will be terminated and you need to launch it again.

1) Click <**Download Plug-in**>, run the setup file.

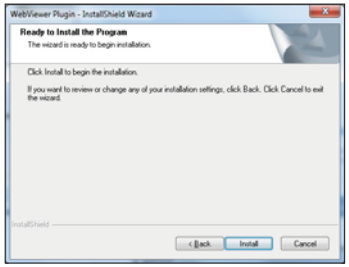


For Windows

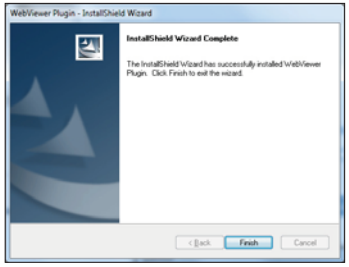
2) Click <**Next**>.



3) Click <**Install**> to begin the installation.



4) Installation has completed.



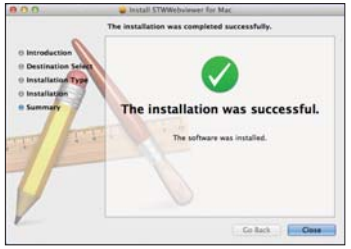
For Mac

2) Click <**Continue**>.

3) Click <**Install**>.

4) Enter MAC PC password and click <**Install Software**>.

5) Installation has completed.



5. Enter the requested information, and click <**Sign Up**>.

- ID : Using alphabetical characters and numbers, make a combination using 8 to 14 letters.
- Password : To strengthen security, create a password with a combination of special characters, numerals and English letters.

■ Length and other restrictions of password.

- A combination of English letters/numerals: 10 digits or more
- The password must not be identical to your ID.
- No simple repetitive pattern must be used.
  e.g., 1212abab, azxsazxs
- You cannot use 4 or more consecutive letters.
  e.g., 1234, abcd
- You cannot use 4 or more consecutive qwerty keyboard letters.
  e.g., asdf, 7890
- You cannot use any letter 4 consecutive times.
  e.g., !!!!, 1111, aaaa

- Confirm Password : Please enter the password again for confirmation.
- Name : Enter the user name.
- E-mail : Please make sure you enter correct email address as you will have to use the email address to receive temporary ID/password when you lost your user ID or password.

6. According to the network connection and setting, click <**Next**> when the camera LED turns into green.

7. Select the serial number of the camera to be added from the camera search list. If the camera is not found, enter the serial number manually.
8. Click <**Next**>.

■ Serial number can be found the label on the side of the packaging or on the rear of the product.

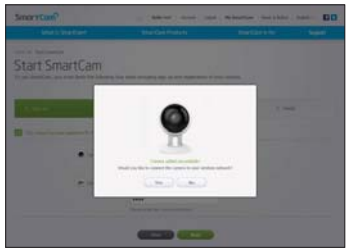
■ The computer and the camera has to be on the same network router to auto detect the cameras.

9. Create <**Camera Name**> and <**Camera password**>.

10. Click <**Next**>.

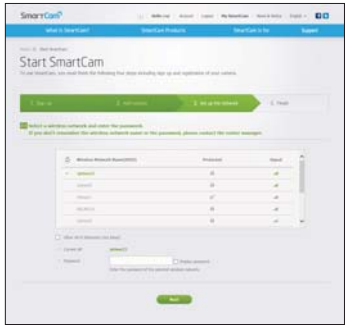
- The camera password is used to block the unauthorized access to your camera.
- Create camera password using alphanumeric characters between 1 to 8 without any space.

11. After adding the camera, click <**Yes**> in the wireless network setup pop-up window.



12. Select your Wireless Network from the list.

13. Enter the password of your Wireless Network and click <**Next**>.



- If your Wireless Network is hidden, select <**Other Wi-Fi Networks (not listed)**>.
- Select <**Display password**> to display the password.

14. Click <**OK**>.

15. Unplug the network cable from the camera and the router.
16. Click <**Finish**> if the <**Finish**> button is activated.

17. Once the camera is successfully registered, you can check the camera in the camera list.

Live Video

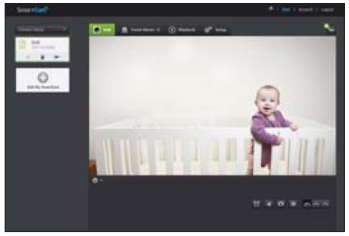
1. Select a camera from the camera list at the upper left hand of the screen.

- The gray icon indicates the camera is inactive so you cannot monitor it right now.

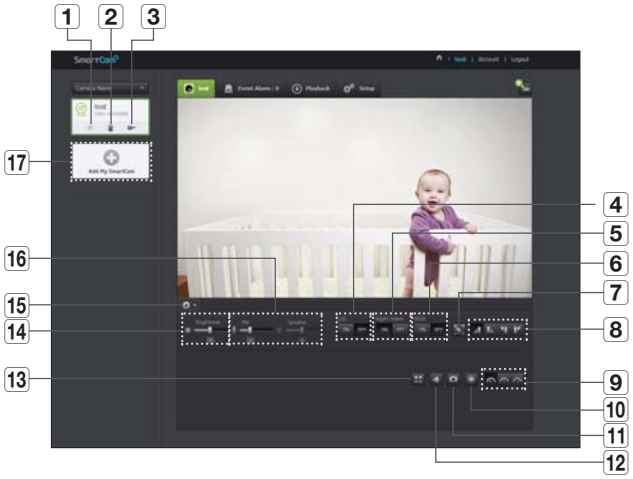
2. Enter the camera password and click <**OK**>.

- Check on <**Remember**> to access your camera without entering the password next time.
- If you want to change the Camera password, please refer to <**Basic Info**> on page 29.

3. Live video will be displayed on the screen.



Monitoring options



Item		Description
1	Default Camera	Set the default camera to monitor in the camera list.
2	Delete Camera	Delete the registered camera.
3	Cancel remembering camera password	Cancel remembering the camera password.
4	LDC	To determine whether or not to use the image distortion correction.

Item		Description
5	Night Vision	If Night Vision is set <**ON**>, it will automatically switch to black and white mode in the dark condition and then the IR lamp will automatically operate. If Night Vision is set <**OFF**>, it does not switch to night vision mode and it will operate in color mode.
6	WDR	Compensate the backlight by brightening any dark areas and darkening any bright areas.
7	Motion zone setting	It detects motion within the range set by a user.
8	Flip/Mirror	You can flip/mirror the video image.
9	Network Speed	Set the network speed (low/mid/high). ■ If the bandwidth provided by your internet service provider is smaller than the recommended value, then the video might get fuzzy or temporary disconnections or delays in the live video may be caused.
10	Manual recording	A user can directly save videos in their SD card. ■ If there is an ongoing event now or overwrite to SD card is not checked, and there is storage space of 10% remaining, you cannot perform manual recording. ■ If you move the page or turn off the browser without turning off the manual recording button, it will be saved for a max of 30 seconds and manual recording will be finished.
11	Capture Image	Live video is saved as one image.
12	Sound	When enabled, you can hear what's happening around the camera. ■ Some internet service providers do not support audio outputs in relay mode.

Item		Description
13	Full screen	Converts the current image to full screen size. ■ The system supports Internet Explorer only. ■ If you double-click the screen, the full screen mode is terminated.
14	Brightness	You can adjust the brightness of the screen image.
15	Hide/unhide detailed menu	Click on the [ ] icon to unhide or hide detailed setting menu.
16	Audio	Adjust the volume of the built-in microphone and speaker of the camera as appropriate. If you set the mic setting to '0', you will not hear the live audio, and it will not be recorded in your SD card. Note that the Two-way audio transfer function is available only with the smart phone application. ■ The SNH-V6430BNH model does not support a speaker or the interactive audio function.
17	Add a camera	Click the [ ] icon to register an additional camera.

❖ Wireless Network Speed

Profile Name	Resolution	Frame rate	Recommended bandwidth
Low Speed Network	VGA	10 fps	0.7Mbps
Mid Speed Network	HD(720P)	15 fps	1.5Mbps
High Speed Network	Full HD(1080P)	30 fps	3.5Mbps

■ What is relay mode?
If the network condition is unstable, the camera cannot make a normal connection (P2P), so it will set up a connection in relay mode. In this case, you will see the video for the first seven minutes only.

■ Relay mode is added feature where the video from the camera is transmitted to Samsung server then retransmitted to the user's computer.

■ If you have trouble connection to the camera, visit "http://www.samsungsmartcam.com", go to support page, and refer to “Troubleshooting” on it.

■ It is recommended to use one browser at one time.

■ The Night Vision video produces a different visibility according to the distance between camera and subject.

■ The number of available concurrent users for a single camera may vary depending on the speed of your Wi-Fi router.

❖ Motion Zone Setting

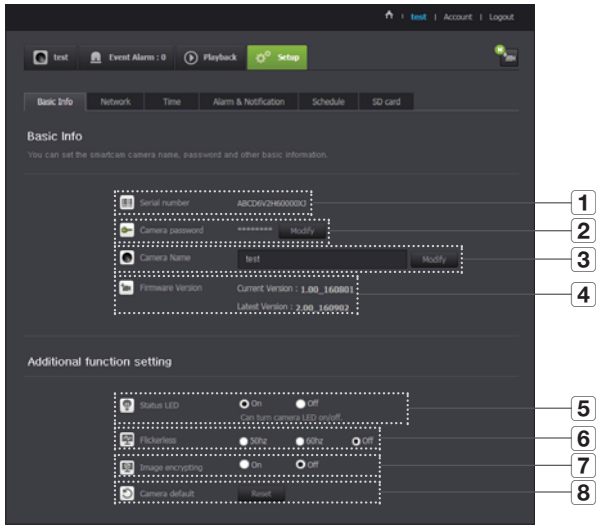
1) Click the < > icon.
2) Drag it to the screen to set the detection area.
3) Click on <**OK**>.
If you want to delete the set area, click on <**Delete All**>.

■ The <**Motion Detection**> function needs to be activated in order to use the motion zone function.

■ You can set up to 3 motion zones.

Setup

Basic Info



Item		Description
1	Serial number	You can confirm the serial number.
2	Camera password	Click the <**Modify**>, you can change the Camera password. Enter the current camera password, and type a new Camera password.
3	Camera Name	Click the <**Modify**>, you can change the camera name.
4	Firmware Version	You can check the current version and the latest version of your camera S/W.
5	Status LED	You can turn on/off the LED in your camera. ■ The LED will illuminate when the power supply is reconnected.
6	Flickerless	You can reduce the occurrence of screen shaking due to the frequency mismatches with the neighboring lighting. ■ If you use the flickerless function outdoors (in a bright environment), image saturation may occur.
7	Image encrypting	Encrypts the transmitted image. ■ If Encrypt Image is activated, the image transmission performance may be affected.
8	Camera default	Press the <**Reset**> button to initialize all camera settings other than the network settings. ■ To reset the camera to its factory default settings, press the [**RESET**] button on the camera.

■ If you change the camera password, you will be logged out and return to the camera password input page.

■ Keep the camera password in a safe place as it is used for viewing the live screen of the camera or for changing the display settings.

❖ Firmware update

If the currently used S/W is not of the latest version, update it.
If you are using the latest version, then the firmware will not be activated.

1) Click <**Firmware**>.

2) Click the < > icon to update the firmware.

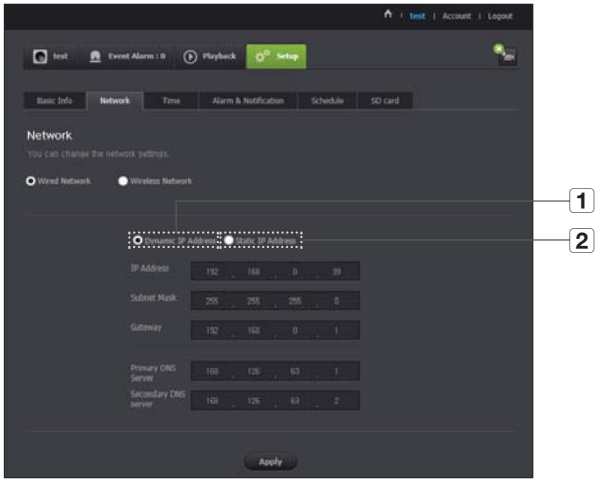
3) When the firmware update is finished, the camera will reboot.

- The duration of the firmware update depends on the size of the firmware file and the network connection speed.
- When executing the firmware update, the camera LED turns purple.

- Please do not cut off the camera power or Internet connection during a firmware update. The system may be damaged.

Network

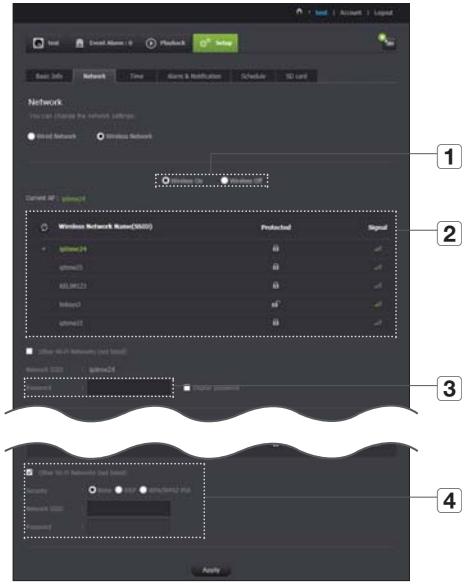
<Wired Network>



Item	Description
1 **Dynamic IP Address**	If you select <**Dynamic IP Address**>, the IP address will be obtained automatically.
2 **Static IP Address**	You must manually provide the information of: IP address, subnet mask, gateway, DNS server address. ■ Check the information of the router to connect.

- SNH-V6430BNH supports wired network setup.
- If any of the manual settings is wrong, the network settings will not be applied.
- If you have both cable and wireless network connections simultaneously, the cable network connection is prioritized.
- If you switch from the current wireless connection to the cable connection, the network will switch to cable connection accordingly.
- For more information about the router or the wireless connection, refer to the documentation of the router or contact the router manufacturer.

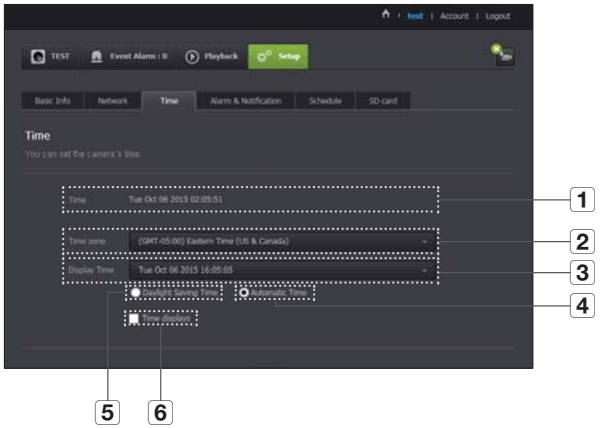
<Wireless Network>



Item		Description
1	Wireless On/ Wireless Off	You can select to activate or deactivate the wireless network connection.
2	AP (Access Point) list	You will see a list of APs (Access Point) available. Select a desired one from the list of APs (Access Point).
3	AP (Access Point) password	You can access the network by entering the password set for the wireless router. For the password, contact your network administrator.
4	Hidden SSID	Select a different WiFi network, entering its SSID, the type of security that it uses, and the wireless password configured in the router's settings.

- If you select a non-secured AP (Access Point), you just can access the network without providing a specific password.
- If you cannot connect to the wireless network, check that you entered the wireless router password correctly.
- When the wireless network settings are completed, remove the LAN cable. If you do not remove the LAN cable, the wireless network will not be available.

Time

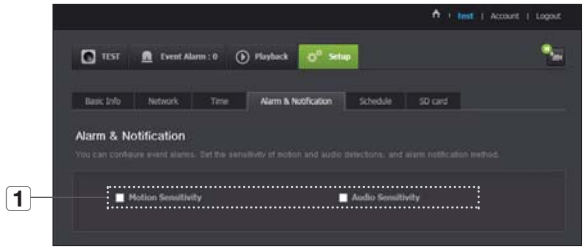


Item		Description
1	**Time**	Confirm the camera's time.
2	**Time Zone**	Select your region.
3	**Display Time**	Select the time format displayed in time setting.
4	**Automatic Time**	It sets camera's time automatically.
5	**Daylight Saving Time**	Check this option if you live in a country or region where DST(Daylight Saving Time) is applied.
6	**Time to show**	Live screen displays the time.

- The time will synchronize with the NTP(Network Time Protocol) server automatically. For this, Internet connection is required.
- You need to set the timezone correctly to obtain the exact time setting.
- The time displayed without Internet connection may not be accurate.

Alarm & Notification

Camera has ability to send event notifications when motion or audio is detected.



Item	Description
1 Alarm notification	You can set motion or audio alerts. Sensitivity level can also be set. The higher the sensitivity, the more accurate motion and audio events can be detected. ■ When an event occurs, if you want to send alerts to Gmail, first log into your google account.

■ In the following case, it may fail to derive the proper results for basic events and motion detection.
- The object color or brightness is similar to the background.
- Multiple movements continue occurring at random due to a scene change or other reasons.
- A fixed object continues moving in the same position.
- An object hides other objects behind.
- Two or more objects overlap or one object divides in multiple portions.
- A moving object comes close to the camera.

<Gmail> Notification

The event alarm is sent through Gmail.

1. Select the Google.
2. Enter your Gmail address and password.
3. Select <**Use**> of “Send alarms”.
4. Enter your email address to receive the notification e-mail and click <**Add**>. Now, the receiver full email address will be shown in the List Box. If you want to register more than one email address, you can just repeat the same procedure.
5. Click <**Save**>.

■ If your Google email ID/password are saved, only check “Send alarms”.
■ If the email address for the recipient entered is incorrect, event alerts will not be sent.
■ Even if you entered a correct google account ID, if the ID/password confirmation pop up window appears, click on <**Go to the google page.**> and check the google account.

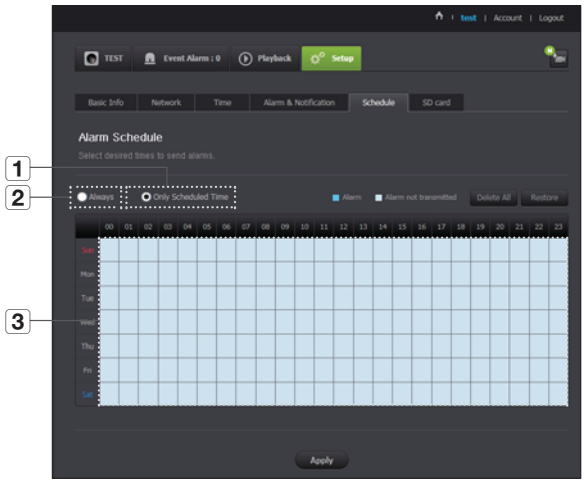
Push alarm Notification

For users whose cameras are registered, a push alarm is provided via the Web app and the mobile app.

- Push alert list shows the list of IDs of users who registered cameras.
  When an alarm occurs, the web site will send push alerts to each smart phone.

Schedule

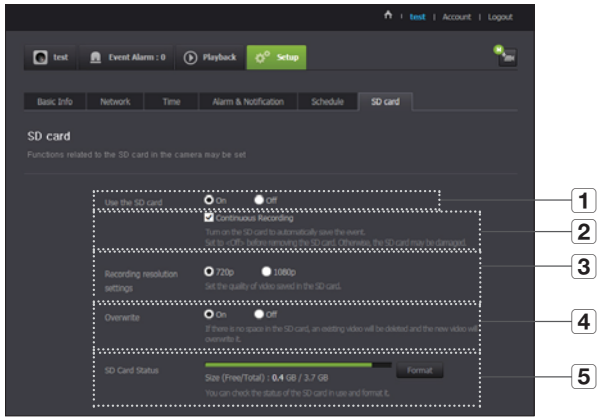
When the user designates a desired day and time, the alarm works only at the designated time.



Item		Description
1	**Only Scheduled Time**	Alarm function will only operate for the time/day designated by the user.
2	**Always**	Alarm function always operates.
3	**Motion time settings**	You can click and drag to set the motion time in hours. Example) When you select 00, an event will occur and remain from 00 to 00:59

SD card

When an event occurs, it is saved in an SD card.

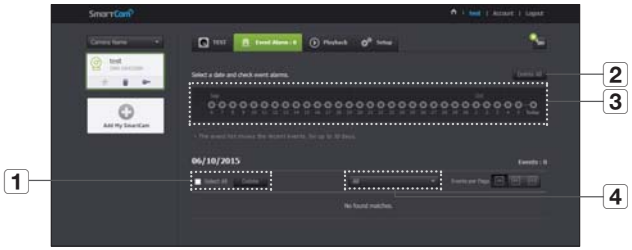


Item		Description
1	Use the SD card	If you set motion/audio, video will be automatically saved in your SD card.
2	Continuous Recording	Saves the video without being interrupted by events that may occur.
3	Recording resolution settings	Sets the resolution of the image stored on the SD card.
4	Overwrite	If the SD card capacity is insufficient, it will start overwriting the oldest data. ■ When there is storage capacity of 10% remaining, the top notification window will show an alarm.
5	SD Card Status	Check the remaining capacity of your SD card and delete all the data.

- Turn off the camera power or set it to <**Off**> before removing the micro SD card. If you fail to do this, the data in the micro SD camera may be damaged.
- Please note that the content of a micro SD card used for other purposes may be deleted when it is mounted in the camera.
- The following micro SD cards are recommended for this camera.
  Manufacturer : Sandisk, Transcend
  Class 6 or higher, MLC type
- Micro SD card of max 128GB is supported and a FAT32 file system is supported.
- It is recommended to use the micro SD card after formatting it. Regularly formatting the memory card will help extend its life.

Event Alarm

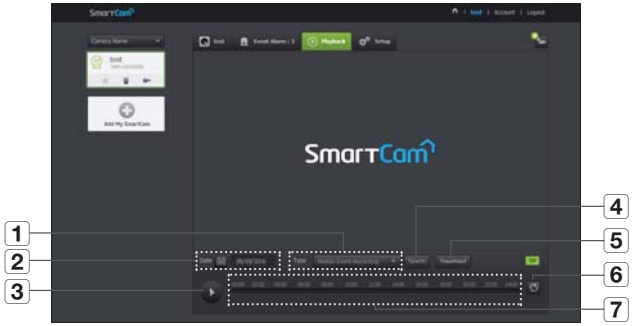
You can check the event alarm that occurred.



Item	Description
1 **Delete by dates**	Delete all the event alarms on the date.
2 **Delete All**	Delete all the event alarms for thirty days.
3 **Display Events**	Displays the number of events occurred in the 30 day list.
4 **Arrange by types**	Arrange the event list by event types.

Playback

You can play a video saved on the SD card and download it to the PC.

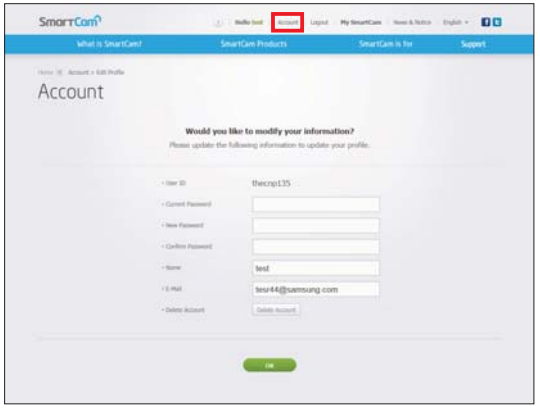


Item	Description
1 **Type**	Set the event type to search for during the search period.
2 **Date**	Set the search date for the data saved in your SD card.
3 **Play/pause**	Play and pause video.
4 **Search**	Perform event searches.

Item		Description
5	Downloading a recorded video	Downloads a manually recorded video/motion/audio event saved on the SD card to the PC. ■ Downloading is only available when the computer and the camera are connected to the same network router. ■ Downloading may be unavailable if the network is unstable or there is access by multiple users. ■ The function to download a recorded video is supported by the Smart Cam mobile app for Android smartphones (not supported in the iOS app).
6	Refresh	Renew the events displayed in timeline.
7	Timeline	Use the timeline to play the video in the desired time.

Information

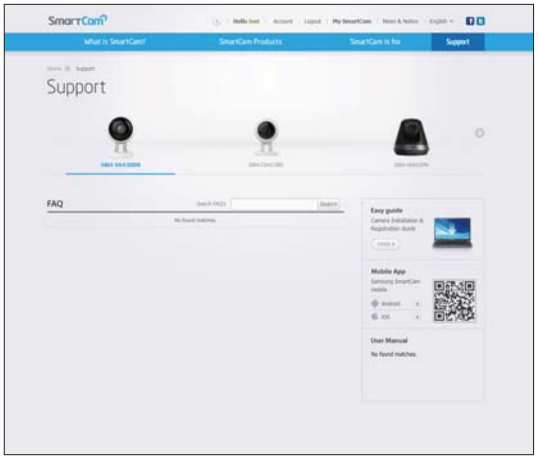
My Account



■ If you want to change the member information, click on <**Account**>. Select the item (password, or email address) and enter your information.

Support

You can download the Smart Cam mobile app and its user manual.

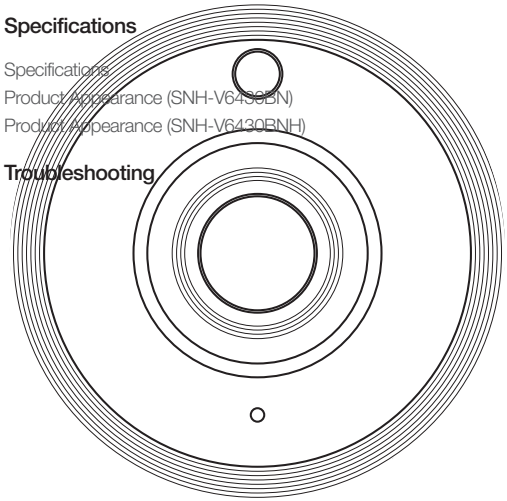


APPENDIX 04

39 Specifications

39 Specifications
42 Product Appearance (SNH-V6430BN)
43 Product Appearance (SNH-V6430BNH)

44 Troubleshooting



Specifications

Specifications

Item	Description	
	SNH-V6430BN	SNH-V6430BNH
Video		
Imaging Device	1/3" CMOS	
Effective Pixels	1944(H) x 1092(V)	
Low Light Performance	Color : 0.3 Lux, B/W : 0 Lux with IR	
Lens		
Angular Field of View(H / V / D)	113° / 63° / 130°	
Focus Control	Fixed Focus	
Lens Distortion Correction	supported (camera level)	
Operational		
IR LED	850nm	
Viewable Length	15m	
Wide Dynamic Range	HDR	
Gain Control	Auto	
White Balance	Auto	

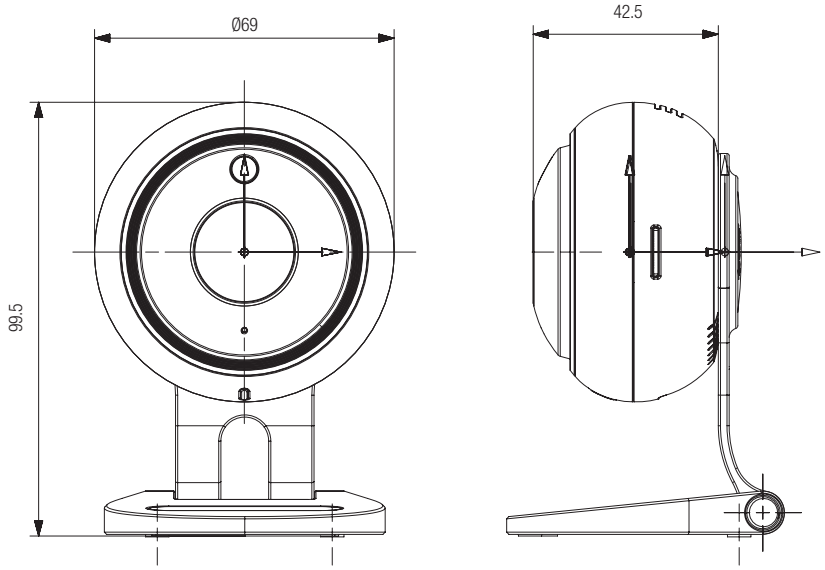
Item	Description	
	SNH-V6430BN	SNH-V6430BNH
Digital Zoom	4x(mobile), 10x(Web)	
Flip / Mirror	Off / On	
Motion detection	Supported	
Audio detection	Supported	
Alarm trigger	Motion Detection, Audio Detection, Motion Zone Selection, Sound Alert (police siren, alarm Siren, dog barking)	Motion Detection, Audio Detection, Motion Zone Selection
Event responsive motion	Push alarm (PC and mobile terminal) Notification via email	
Memory slot	SDXC memory slot (up to 128GB)	
Network		
Ethernet	-	RJ-45
Wireless	WiFi 802.11 a/b/g/n/ac, 2.4G/5G Dual-band	
Video Compression Format	H.264	
Resolution	1920x1080 / 1280x720 / 640x360	
Streaming Capability	Multiple Streaming (Up to 4 Profiles)	
Audio I/O	Built-in microphone/speaker	Built-in microphone
Audio Compression Format	G.711 u-law	
Audio Communication	Interactive audio Half Duplex	-
IP	IPv4	

Item	Description	
	SNH-V6430BN	SNH-V6430BNH
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, SMTP, ICMP, ARP, DNS, UPnP	
Security	HTTPS(SSL) authentication method Digest authentication method	
Streaming Method	Unicast	
Webviewer/App viewer	Supported OS - PC : Windows 7, 8 or higher, MAC OS X or higher - Mobile : iOS 7 or higher, Android Jelly Bean or higher (Not all Android phones are compatible). Supported Browser - Internet Explorer 9.0 or higher, Firefox 9.0 or higher, Safari 5.1 or higher	
Environmental		
Operating Temperature / Humidity	-20°C ~ +55°C (+32°F ~ +104°F) / 90% RH or below	-20°C ~ +55°C (-22°F ~ +104°F) / 90% RH or below
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / 90% RH or below	
Ingress Protection	N/A	Weather Resistant
Electrical		
Input Voltage / Current	DC 5V/2A	PoE(802.3af, Class3)
Power Consumption	4.2W	4.7W
Power Connector	micro USB	RJ45(PoE)

Item	Description	
	SNH-V6430BN	SNH-V6430BNH
Mechanical		
Color / Material	White / Plastic	
Dimension (ØxH)	Ø69mm × 42.5mm (Ø69mm × 48.4mm × 99.5mm with bracket)	Ø78mm × 72mm (Ø78mm × 118.5mm with bracket)
Weight	163g	271g
Adaptor		
Operating temperature	0°C ~ +40°C (+32°F ~ +104°F)	
Color / Material	White / Plastic	
Dimensions	68mm × 38mm × 27mm	60mm × 96.6mm × 36mm
Cable Length	2.5m	Distance between the router and the camera: 70m max. (based on CAT5e, at a room temperature of 25°C)
Plug Type	micro USB	RJ45

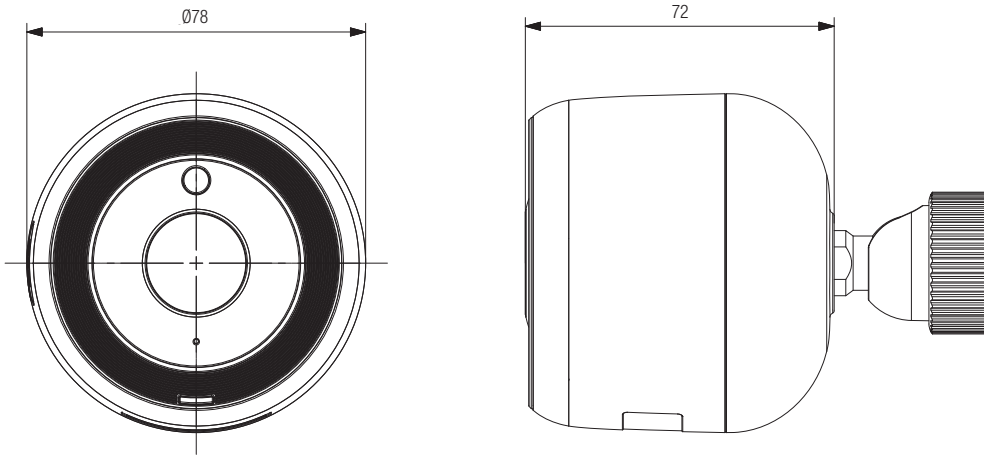
Product Appearance (SNH-V6430BN)

unit: mm (inch)



Product Appearance (SNH-V6430BNH)

unit: mm (inch)



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.	- 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.
Camera is not connected to the wireless hub.	- The cable connecting the router to the camera should have a length of 70m or less (based on CAT5e LAN cable) - If the green light on the camera state LED turns off frequently, it may be because the camera 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 camera.	- Check whether the serial number entered matches the label on the camera. - Enter the correct password for the camera registered again and try to register the camera again. - Check whether the LED light of the camera is yellow or orange. - If this fails to resolve the problem, factory reset the camera and repeat the procedure from the beginning. (To factory reset the camera, press and hold the RESET button on the camera for 10 seconds. The camera will be restarted when the camera is factory reset.)
The video from the camera is temporarily lost.	- The video from the camera can be delayed according to a network delay. Please check if the camera is installed in a place of proper wireless Internet communications.
No sound is output from the video.	- Click the Voice icon in the video playback page, or check if the voice is turned On in your smart phone app. - Some internet service providers do not support audio outputs in relay mode.
I forgot my Camera password.	- You must create a new camera password. - Press and hold the camera reset button for 10 seconds to factory reset the camera, and then register the camera again.
I want to change my password and/or email address.	- After logging in, click on the <**Account**>. Select the item (password, or email address) and enter your information.
Camera will be connected in a relay mode.	- Check the UPnP setting of the router. - A network upload speed of at least 3.5Mbps (1080p) 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.

Head Office
86 Cheonggyecheon-ro Jung-gu Seoul 04541 Korea
Tel +82.2.729.5277, 5254 Fax +82.2.729.5489
www.hanwha-security.com

Hanwha Techwin America
100 Challenger Rd. Suite 700 Ridgefield Park, NJ 07660
Tel +1.877.349.3149

Hanwha Techwin Europe
2nd Floor, No. 5 The Heights, Brooklands, Weybridge, Surrey,
KT13 0NY, UK
Tel#1 00800.8010.8022
Tel#2 +31.77.326.1580

Hanwha
Techwin