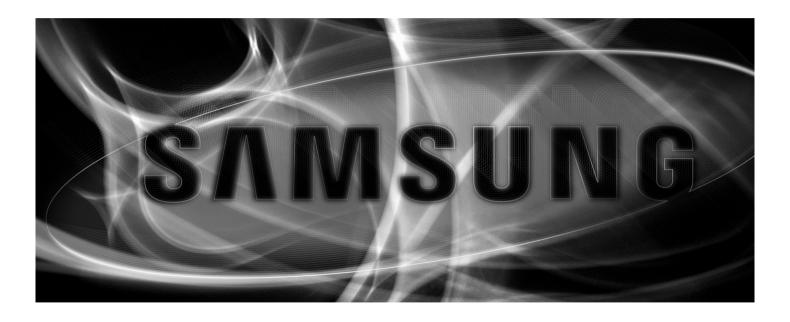
SAMSUNG SMARTCAM

User Manual SNH-V6410PN







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

Samsung 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. Samsung reserves the right to change the contents of this document without prior notice.

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 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 FOI IPMENT

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.

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.

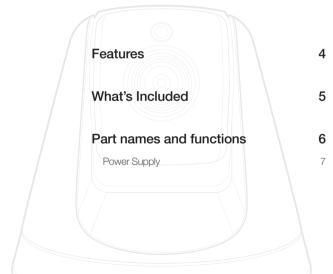
- Especially, the power cord should be installed carefully while keeping it out of children's reach.
- Never use the product near bath tub, sink, washing machine and in wet basement to avoid moisture.
- The product is designed for indoor use.
- The product is not designed for medical monitoring, and 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 Samsung 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

Features 4 What's Included 5
Part names and functions
INSTALLATION & NETWORK CONNECTION
Installation
MONITORING
Registration
Live Video14
Setup
Event Alarm
Playback
Information
APPENDIX
Specifications
Troubleshooting





Features

· 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.
- You can monitor using your PC, laptop or mobile device.

· 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.

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.)

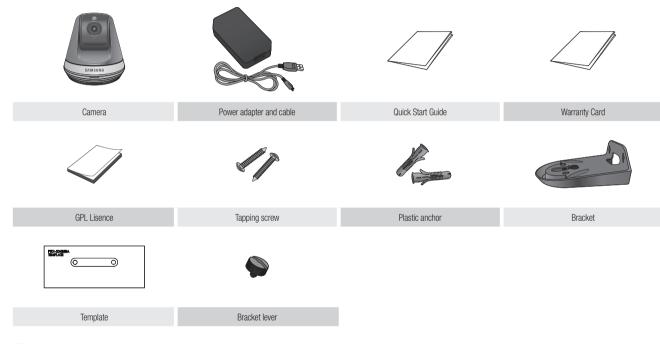
· Camera Pan, Tilt

 You can monitor a wider area by moving the camera up, down, left and right according to your needs.

4 · English

What's Included

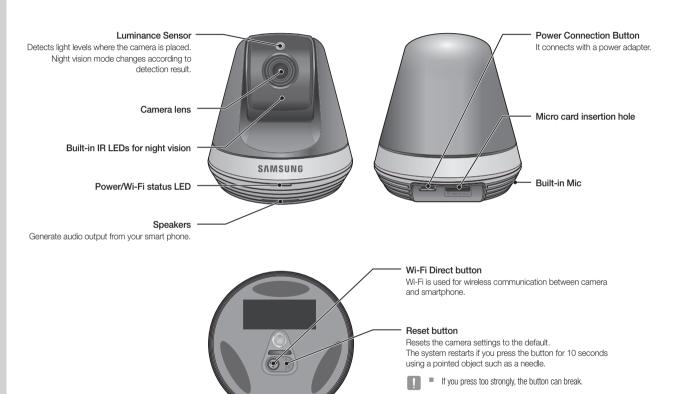
Check for components when opening the product package.





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

Part names and functions



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/Light Green	Waiting to connect with a wireless router
Purple	Updating firmware

Installation & Network Connection

Installation	8
Precautions Installing on a wall using a bracket	8
Network Connection and Settings	10
Precautions Connection using the Wi-Fi Direct function	10

Installation

Precautions

- Install the camera in a place where the Wi-Fi signal can be reached and without interference.
- 2. Keep it away from humidity such as around the humidifier.
- 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 a wall using a bracket

Assembly

- Attach the template to the wall to which you want to attach the camera.
- 2. Prepare screws (M3xL20) and anchors (Φ5x25mm).



 Insert the bracket lever into the bracket hole at the bottom of the bracket and turn it clockwise to assemble it.



4. If you are installing on a wood wall, leave 3mm of space between the wall's surface and the mark on the screw hole when fixing the screw.



Hang the bracket using the screw and lower it to the direction in which you intend to install.



<When installing it in the normal direction>



<When installing it by turning it upside down>

6. Turn the screw to fix the bracket additionally.



- For a concrete wall, drill holes into the wall that are 3cm deep using a drill bit with a diameter of 5mm and a drill for concrete.
 Remove any debris from the hole.
- Take care when drilling the hole to avoid injury.
- 8. Insert anchors in 2 holes for screws and tap the end of the anchor slightly with a hammer or rubber mallet to insert it completely.



 Leave 3mm of space between the wall's surface and the mark on the screw hole when fixing the screw.



10. Hang the bracket using the screw and lower it to the direction in which you intend to install.



<When installing it in the normal direction>

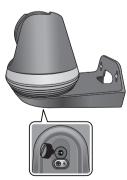


<When installing it by turning it upside down>





- 12. Place the camera on the bracket and turn the bracket lever clockwise to fix the camera to the bracket.
- 13. Connect the adapter plug to the power terminal.



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 camera is connected to a multiple-Wireless Access Point network environment, some video packets may be lost, depending on the network traffic load.
- 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.

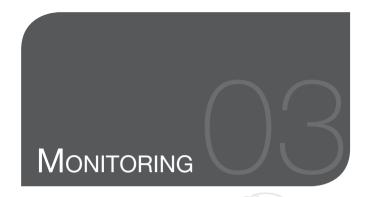
- When the power is connected, the power status LED lights up in red and starts blinking when boot-up is complete.
- When you press the Wi-Fi Direct button on the rear side of the camera, the LED color changes to yellow/light green.



- 3. Register and select a camera, referring to the instructions in the mobile guide.
- 4. While the camera is connected to the server, status LED remains green.
- Set up the wireless network environment in accordance with the <Network> guidance on page. 19.



- 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.



Registration	11	Schedule	22
Web browser requirements	11	SD card	24
Starting SmartCam	11	Event Alarm	25
Live Video	14		
Monitoring options	15	Playback	25
Setup	17	Information	26
Basic Info	17	My Account	26
Network	19	Support	27
Time	20		
Alarm & Notification	21		

Registration

This product allows camera registration via a smartphone only. Please refer to the mobile guide for a detailed description of camera registration.

Web browser requirements

Windows	Mac
Windows 7 or higher is supported - Internet Explorer 9 or higher (The 64-bit is not supported.)	Mac OSX 10.7 Lion or higher is supported - Firefox
- Firefox	- Safari

Starting SmartCam

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

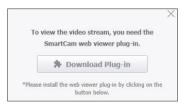


Plug in installation

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

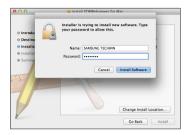
2) Click < Continue >.



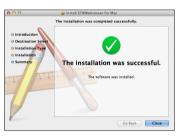
3) Click < Install>.



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 gwerty 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.

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.
- Enter the camera password and click < OK>.



- Check on <Remember> to access your camera without entering the password next
- If you want to change the Camera password, please refer to **Basic Info** on page 17.
- 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 < 0N >, 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 < 0FF >, 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. You can set the motion zone only at the home position.			
8 Flip/Mirror	You can flip/mirror the video image.			
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.			
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.			
Move the screen	Click the arrow key, and the screen will move in the arrow's direction.			

Item		Description		
15	Preset setup	Adds and modifies a preset, and sets the Home/Out of Sight position. The preset name should be up to 12 alphanumeric characters with no spaces.		
16	Auto Tracking	Automatically tracks an object moving on the screen. When auto tracking is enabled, the audio detection is automatically disabled, and the motion detection by auto tracking is activated. When auto tracking is enabled, if no motion is detected for a certain period of time, the camera will automatically move back to the position where the auto tracking started.		
17	Out of Sight	When Out of Sight [
18	Home	When the Home button [] is clicked, the camera moves to the Home position that has been set.		
19	Brightness	You can adjust the brightness of the screen image.		
20	Hide/unhide detailed menu	Click on the [o] icon to unhide or hide detailed setting menu.		
21	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.		
22	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.
 - 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 < \$\infty\$ > 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.

Preset setup



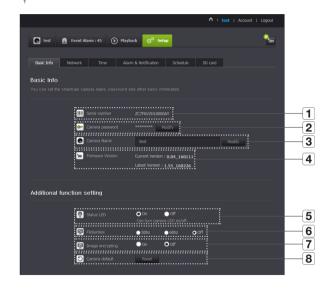
- 1) Click the < > icon.
- Click the Move Screen arrow key and adjust the camera in the intended direction to move to a desired screen.
- Enter the name of the preset and click < OK>.
 The position currently shown is saved as a preset.
- Select the Home/Out of Sight item, click the Move Screen arrow key and adjust the camera's direction to move to a desired screen.
- Click < OK>.
 The position currently shown is saved as a Home/Out of Sight.
 Click < Cancel> to maintain the previous settings.



■ To delete the saved preset, click the < ■ > icon on the preset list.

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.</modify>		
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.</reset>		



- 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



	Item	Description
1	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).
2	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.
3	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.
- Please refer to the router manual or contact the router manufacturer if you need more information concerning the router or wireless connection.





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
	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.
1 Alarm notification	When an event occurs, if you want to send alerts to Gmail, first log into your google account.
	Click the Detect Motion/Audio checkbox, and Auto Tracking will be disabled.

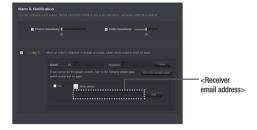


- In the following case, it may fail to derive the proper results for basic events and motion detection.
 - The object color or brightness is similar to the background.
- Multiple movements continue occurring at random due to a scene change or other reasons.
- A fixed object continues moving in the same 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.
- 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.

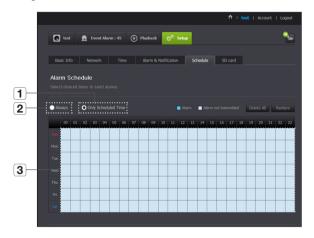


- Push alert list shows the list of IDs of users who registered cameras.
 When an alarm occurs, the web site will send push alerts to each smart phone.
- If [] is disabled, no push alarm is provided, even if a camera alarm is generated.
- If SD Card and Alarm are enabled, an alarm generated is stored in the SD card.



Alarm Schedule

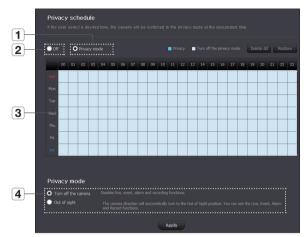
When the user designates a desired day and time, the alarm will send only at the designated time.



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	Click and drag or click Day/Time to set the time to activate in hours. Example) When 00 is selected, events are generated in the period from 00:00 to 00:59

Privacy schedule

When the user selects a day and time, the camera switches to privacy mode at the set time only.



	Item	Description
1	Privacy mode	Privacy mode is activated only at the set time on the set day.
2	Off	Disables the privacy schedule.
3	Activation Time Settings	Click and drag or click the Day/Time to set the time to activate the privacy schedule in hours. Example) When 00 is selected, any privacy schedule in a period from 00:00 to 00:59 is activated.

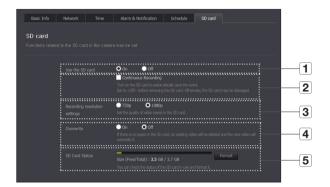
Item		Description
	Turn off the camera	When the camera is in privacy mode, the monitoring and recording functions do not work.
4 Select Privacy Mode	Out of sight	The camera turns to the set direction. You can use the live monitoring, event detection and recording functions. When Out of Sight is enabled, auto tracking is disabled.



- When you access the live screen and disable the privacy mode temporarily, the privacy schedule is automatically activated at the next hour.
- In a time zone other than the time zone that is set for the privacy mode, the camera moves to the home position and all settings work properly.



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. If the storage space remaining is less than 10% of the total
		storage space or the overwrite option is turned < Off >, a warning message will be displayed at the top of the alarm window.
5	SD Card Status	Check the remaining capacity of your SD card and delete all the data.

24 · English



- Turn off the camera power or set it to <0ff> 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 the video recorded in your SD card.

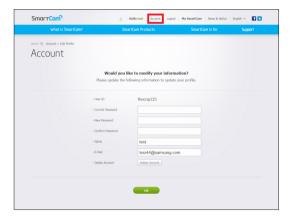


Item	Description
1 Type	Set the type of recording to search in the search period.
2 Date	Set the search date for the data saved in your SD card.
3 Play/pause	Play and pause video.
4 Search	Perform a search of the recorded video.
5 Refresh	Update the recorded video displayed on the timeline.
6 Timeline	Move the timeline to play the video at a desired time. If there is an empty space in the timeline, videos will not be played continuously.

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 Samsung SmartCam mobile app and user guide.





Specifications

Specifications
Product Appearance (Camera)
Product Appearance (Bracket)

Troubleshooting

Specifications

Specifications

28

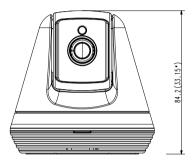
30

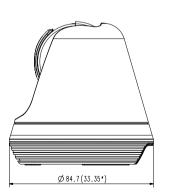
31

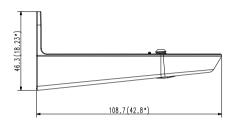
Item	Description
OS	Linux
Resolution	1920x1080, 1280x720, 640x360
Max. Framerate	1920x1080 30FPS
Video Compression Format	H.264
Streaming Capability	Multiple Streaming (Up to 4 Profiles)
Angular Field of View (D/V/H)	96.1° / 43.4° / 80.9°
Low Light Performance	0.3Lux(Color), 0Lux(Black/White)
Pan range	350° (-175°~175°)
Tilt range	100°(-25°~75°)
Preset	5ea
Auto Tracking	Off/On
WDR	HDR
Day & Night	True D/N (Auto)
Night vision	IR-LED, 5M

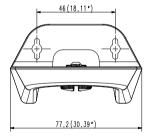
Item	Description
Digital Zoom	4x(Mobile)
Digital 20011	10x(web)
Flip / Mirror	Support
Motion Detection	Support
Audio Detection	Support
Audio I/O	Built-in microphone and speaker
Audio Compression Format	G.711 u-law
Audio Communication	2-Way Audio (Built-in Microphone & Speaker), Half Duplex
Memory Slot	SDXC memory slot (up to 128GB)
Recording & Playback	Event recording, Manual recording, Continuous recording, Remote playback
Ethernet	-
Wireless	Wi-Fi 802.11 b/g/n (Single-band)
WiFi Direct	Support (Push button)
Security	HTTPS(SSL) Login Authentication
Security	Digest Login Authentication
Max. User Access	2 users at Unicast Mode
Operating Temperature / Humidity	DC 5V, 0°C \sim 40°C (+32°F \sim +104°F) / Less than 90% RH
Ingress Protection	Indoor
Input Voltage / Current	5V/1.4A
Power Consumption	Max. 7W
Indication	1 LED (Power, Status, Link)

Item	Description
Color	Black (dark gray)
Dimension (ØxH)	85 x 84 mm
Weight	155g









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.	If the camera's wireless internet indication LED goes off too often, then it means that the camera installation location is not optimal for the wireless internet environment, so in this case, locate the camera close to the wireless hub and try to connect 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 the camera LED to see if it is yellow or light green If you are still unable to register the camera after this, then reset the camera to factory settings and begin again. (To reset the camera to its factory default settings, press and hold the reset button on the camera for 10 seconds. When the camera has been reset to the factory settings, the camera will be restarted.)

Problem	Action
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 reset button on the camera for over 10 seconds to reset the camera to its factory default settings. After factory initialization, when you access the camera, you can reset the password for the camera.
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. Using a network upload speed of 700Kbps or higher is recommended. Depending on the policy of your service provider, you can access in relay mode.



Samsung 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 Samsung 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.



SALES NETWORK

HEAD OFFICE

6, Pangyo-ro 319beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, 463-400 Rep. of KOREA Tel: +82-70-7147-8753, 8764 Fax: +82-31-8018-3740 www.samsungsecurity.com

SAMSUNG TECHWIN AMERICA Inc.

100 Challenger Rd. Suite 700 Ridgefield Park, NJ 07660 Customer support : +1-877-349-3149

www.samsungsv.com

SAMSUNG TECHWIN EUROPE LTD.

Samsung House, 1000 Hillswood Drive, Hillswood Business Park Chertsey, Surrey, UNITED KINGDOM KT16 OPS Customer support: 00800-8010-8022 www.samsungsecurehome.eu