User Manual

What's in the Box

Wire Free Camera
with Built-in Batteries

Magnetic Base
x1

Reset Needle
x1

User Manual
x1

Screwdriver
x1

Stick
x1

USB Charge
Cable
x1

Wall Screws
Wall Anchors
x4

Outdoor USB
jack protector
x1

Tree Strap
(optional)
x1

Wall Mount
(optional)
x1

Solar Panel
(optional)
x1

What you need to get started

Mobile Device
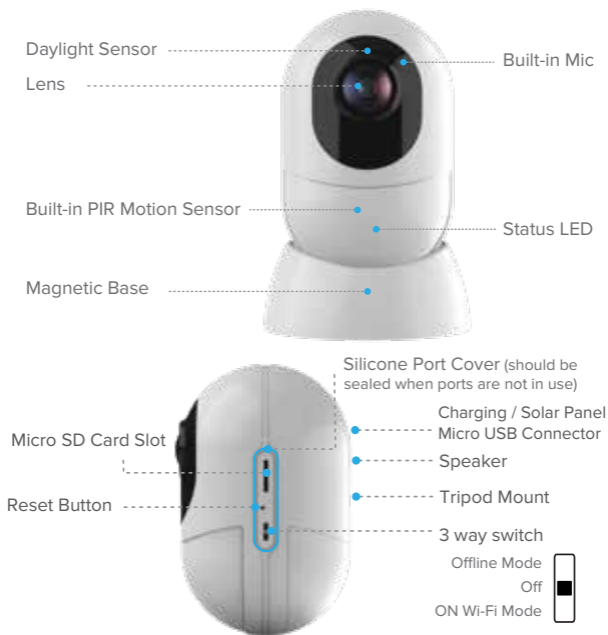iOS / Android
with Bluetooth

2.4G Wifi Router

High Speed Internet
0.5Mbps upload

Micro SD / TF Card
(Optional)

General Introduction

Daylight Sensor

Lens

Built-in Mic

Built-in PIR Motion Sensor

Status LED

Magnetic Base

Silicone Port Cover (should be sealed when ports are not in use)

Charging / Solar Panel
Micro USB Connector

Micro SD Card Slot

Speaker

Reset Button

Tripod Mount

3 way switch

Offline Mode

Off

ON Wi-Fi Mode

Wi-Fi Mode - This mode connects to a Wi-Fi network to send push notifications when motion is detected, save motion snapshots to the cloud and lets you know when the device is offline or running low on battery.

Offline Mode - This mode keeps the camera in standby and records motion video clips to an SD card inserted into the camera.

Getting Started

1. Charge the camera before use

Charge the batteries for 12 hours before first use.
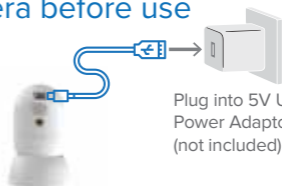
Plug into 5V USB Power Adaptor. (not included)

2. Insert micro SD Card (optional)

3. Turn on Bluetooth on your smartphone

4. Install HDSmartCam App

There are two ways to get the HDSmartCam App:

Search "HDSmartCam" in App Store (for iOS), or Google Play (for Android), download and install the app.

Scan the QR code below to download and install the app.

Run HDSmartCam App and register an account.

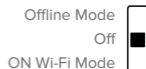Allow the app to send push notifications. Login.

Available on the
App Store

Get it on
Google play

Pairing with Wi-Fi Network

Step 1

Turn ON the Camera

Power on the camera by putting the 3 way switch to the downward position. This switches the camera into **ON Wifi Mode.**

Offline Mode
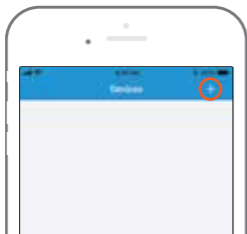Off
ON Wi-Fi Mode

Step 2

Using the Reset needle, **hold down the reset button for 3 seconds to put it into network connection mode.**
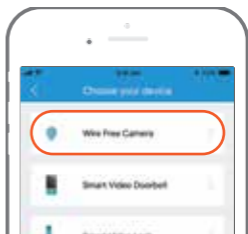Camera will make a 'Beep Beep' sound to indicate the camera is in network connection mode.

3...2...1...Beep Beep

Continue Setup with HDSmartCam App

1. Click the + sign to add new device

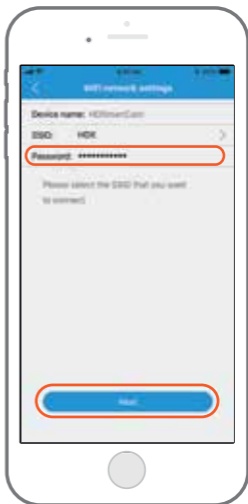2. Choose 'Wire Free Camera'

3. Click "CAM-xxxxxx" to continue.

4. Choose the Wi-Fi to connect to.
Enter the Wi-Fi password.
Click Next.
To choose a different Wi-Fi network tap >
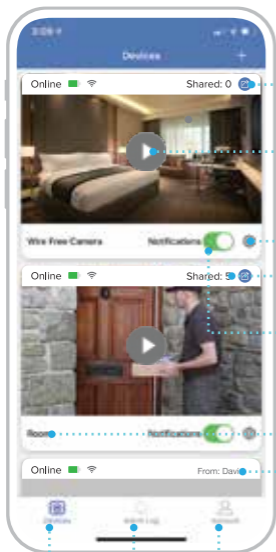*Note: Does not support 5GHz Wi-Fi*

❝❝ Device Binding Successful ❞❞

If Wi-Fi connection fails, please check
the Wi-Fi settings and try again.

Home Screen

Tap to view camera, pull down to refresh

Camera access sharing settings

Tap display image to view live.
The display image is automatically
updated with the last motion
snapshot taken by the camera.

> Device Settings

Number of shared users.

Enable/Disable receiving
Push Notification on this device.

Camera Name

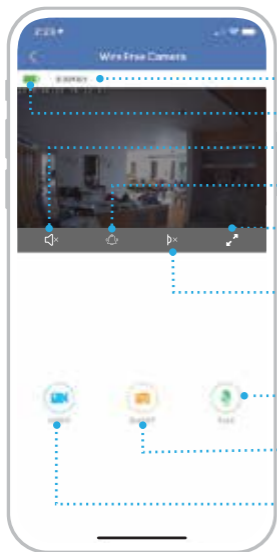Cameras shared with you, displays
who they are shared by.

User account, camera sharing and
account password modification.

Access the Alarm log of motion
detected snapshots. Up to 7 days.

Device List

Refresh updates the thumbnail to the latest activity detected
image. It also checks for new cameras shared with your account.

Live View

- Video and Audio Bandwidth
- Battery Status
- Speaker ON / OFF
- Alarm Siren
- Full screen landscape view

Nightvision Lights
OFF (starlight mode) / ON / Auto

Enables microphone (speak to those around the camera)

Take a Snapshot

Record a video from the live view to your mobile device.

Adjust Brightness by sliding finger up or down on the screen. Works in portrait and landscape modes.

Rotate device to landscape mode for full screen view. (make sure Portrait Orientation lock is disabled)

Brightness
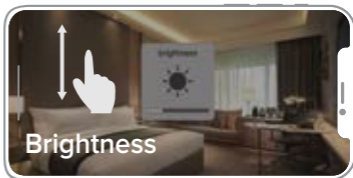
Alarm Log
Pull to refresh

Select a date

Alarm Log | Album

June

15 16 17 18 19 20 21

23:29:55 Activity Alarm
From: SS0005IAAL2Q30IRWPY2Q4

23:24:93 Activity Alarm
From: SS0005IAAL2Q30IRWPY2Q4

23:23:17 Activity Alarm
From: SS0005IAAL2Q30IRWPY2Q4

23:21:12 Activity Alarm
From: SS0005IAAL2Q30IRWPY2Q4
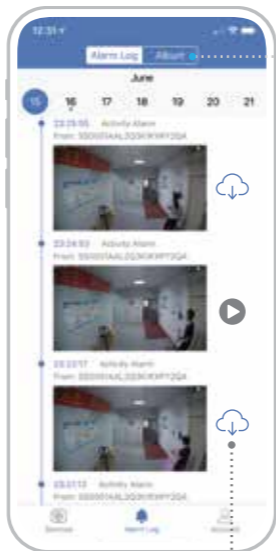
Pull up to load more.

Download related video
(only displayed if SD card is installed)
Once downloaded, it will change to playback icon ▶

Album View Displays all videos downloaded from SD card and those recorded during live view

Tap the picture to see it in full screen.
In full screen view, tap and hold or click the 3 dots in the top right hand corner to share or save the image.

Camera Settings

3. Alarm Setting

Enable this setting to receive a push notification on cell phone when motion is detected.

Set the sensitivity of the motion detection by selecting a position between Long and Short.

Short = Any quick motion will trigger the camera's motion sensor.

Long = Longer activity around the camera will trigger the camera's motion sensor.

Adjust this value according to the placement and use of the camera.

We recommend a setting of 10 for average home use, and 30 - 50 for outdoor.

Set the detection schedule, to avoid receiving unnecessary notifications and save battery life.

1. Device

Edit device name

2. Network Connection

Make sure the camera is in network connection mode to connect it to Wi-Fi

4. Record Settings

To record motion clips to an SD card, enable Video Recording.

Choose the duration of each recorded clip.
(longer recording time per clip will increase battery usage)

5. Offline Alarm

Get push notifications when the device goes offline and is not connected to the internet.

6. Remove Device

Unbinds this camera from the account.
It can then be registered by another account.
Our server allows one camera linked with only one master account.

7. Firmware Update

Update the firmware over the air. Just takes a couple of minutes to keep your camera updated.

8. Time Zone

Set the time zone automatically or manually.

Password modification

To modify your app login account password:
On the app main screen -
Account >
Tap on your name >
Change password

Sharing (available only in Wi-Fi Mode)

One camera links with only 1 master account.

First, add Friends

Each shared user needs to sign up for a login account separately. Each user has a unique QR code.

Add friends by account ID, email, phone number or Scan their QR Code
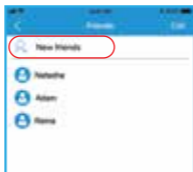
Share
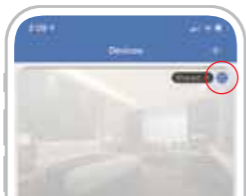
Click the sharing icon of the camera to start sharing.
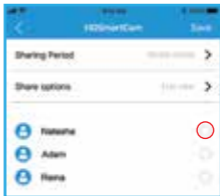
Choose sharing schedule, permissions and friends.
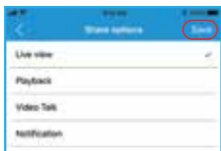
Available permissions. By default only live view is permitted.
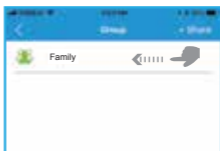
Manage Groups by swiping left on the group name to Edit or Delete.

Offline Mode

3 way switch

Offline Mode

Off

On Wifi Mode

Switch to Offline Mode for placement where no Wi-Fi is available.

Perfect to place in car, warehouse, storeroom, etc.

For recordings to be timestamped correctly, the device must fetch the time from the internet once. It has an internal clock that will keep time after that.

For first time use - setup in Wi-Fi mode, the device will pull the time from the internet.

On the side of the camera, switch to the top to enter Offline Mode.

In this mode, the camera stays in standby mode, and records video to the SD card whenever any movement is detected.

The SD card must be removed from the camera to view the recorded files on a computer.

Every time motion is detected, the blue light will fast flash.

Keep it powered with Solar

Using a compatible solar panel, the camera can be powered without requiring to recharge the camera, as long as there is adequate sunlight.

The solar panel should be conected to the micro USB at the back of the camera.

The solar panel should be placed at a position that receives maximum sunlight.

Solar Panel - This is suitable for outdoor use.
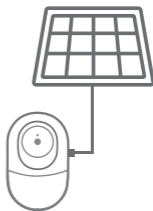
1. Remove the silicone weatherproof protector. Cover the USB jack from the solar panel with the USB Cable silicone protector.

2. Plug in the USB cable into the USB jack revealed behind the silicone protector.

Note: Make sure the solar panel is kept clean for maximum efficiency.

The Ideal Viewing Setup

The field of view is diagonal 130° and horizontal 110°, Make sure the monitoring area is within it's field of view.

The ideal viewing distance is 2-10 meters (7-33ft), which enables you to recognize a human.

Install at height of 2 - 3m (6 - 10ft) above ground for optimal detection.

Place it enough distance away from incoming motion to allow the camera to wake and take a snapshot.

Note: It is designed to be installed vertically.

2meters (7ft)

Ground

Ideal Viewing Distance:
2-10 meters (7-33ft)
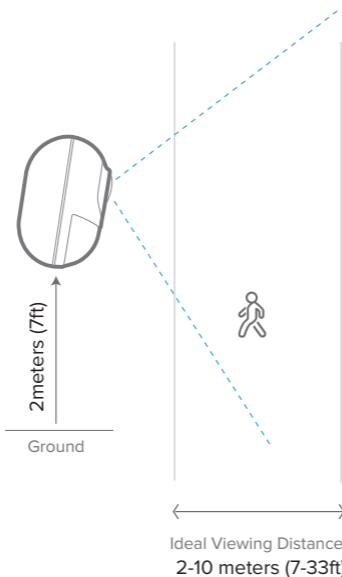
Cover the Monitoring Area

When installing the camera, it's not suggested to make the PIR sensor vertically face the moving object. Please note that if the moving object approaches the PIR sensor vertically, the PIR sensor may not detect the motion events. You are advised to install the camera at an angle (the angle between the PIR sensor and the detected object is larger than 10°) for effective motion detection.

- The PIR sensor's detecting distance: 30ft / 9m

- The PIR sensor's detecting angle: 120° horizontal

It's not suggested to make the PIR sensor vertically face the moving object.

The path of the moving object

θ

θ > 10°

Entrance
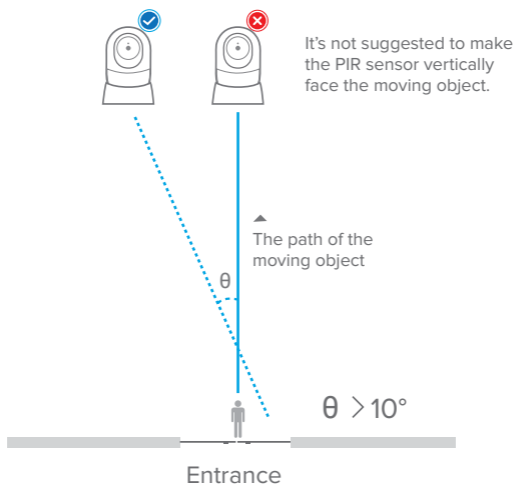
Tips to maximise battery runtime

- Reduce false alarms.
- Adjust the PIR sensitivity to one that works best for your purpose. We recommend a setting of 10 for average home use, and 30 - 50 for outdoor.
- Higher sensitivity offers longer detecting distance, but it would lead to more false alarms and notifications.
- Schedule notification timings (best to set the timings to stand guard when nobody is home)
- Keep the device away from extreme temperatures.
- Place the device in well lit areas so the nightvision LEDs do not need to kick in.
- Make sure the device has a strong wifi signal
- Use the alarm log option for recent activity instead of waking the camera to view live.

⚠️ Important Notes for Reducing False Alarms.

Less false alarms makes the battery runtime even longer.
The camera needs upto 2 seconds to wake and snap a picture.

For reducing false alarms:

- Do not install the camera facing any objects with bright lights, including sunshine, bright lamplights, etc.
- Do not install the camera in a place within 15 meters (50ft) of frequently moving vehicles.
- Stay away from the outlets, including the air conditioner vents, humidifier outlets, the heat transfer vent of projectors, etc.
- Do not install the camera facing the mirror.
- Stay away from wireless interference, inlcuding WiFi routers, phones and other wireless devices.

Notes

Playback is only available when an SD card is inserted and recognized by the camera. (SD Card not included, to be purchased separately).

Always power off the camera before inserting or removing the SD card.

Use your fingernail (or use the provided reset needle) to push the SD card in until you feel it is locked. Press the card down to release the card from the lock and remove it.

⚠️ The camera will automatically format the SD Card. Make sure you do not have sensitive data on the card.

Micro SD Card Requirements

Capacity	16GB card is suggested (Max 64GB)
Read and Write speed	Class 10
Format	FAT32

Depending on the size of the card installed, it may contain information dated further back than available for playback from the app. In case you require to go through these older video clips, use a computer to read contents of the SD card.

If no Wi-Fi signal is available - The camera will go into sleep mode to save power.
It will attempt to connect for 20 seconds if cannot connect it will attempt to connect every 2 minutes for upto 5 times. After that it will repeat every 4 hours.

If the Internet is disconnected (camera cannot contact the server) - It will attempt to connect for 20 seconds. if it cannot connect, it will attempt to connect every 2 minutes for upto 5 times. After that it will repeat every hour.

At a time only 1 viewer can watch the live feed.

Charging the batteries

The camera has a built in charger for the batteries.
It can charge and power the camera at the same time.
Plug in a micro USB cable to the camera's micro USB port
to begin charging the batteries.

Realtime charging indicator is shown in the app in the live view screen.

On the main camera list screen, the battery and WiFi status is update every 2 minutes.

Battery requirement

2pcs x 3.7V Li-on 18650 Rechargeable batteries (2600mAh or higher)

Please use the charging cable included with the camera for fastest charging speeds.

Important Safeguards on Battery Use

The batteries must be placed in the right direction of polarity
Do not use batteries of different brands and different models together.

Do not use new and old batteries together.

If you don't use the product for long periods, please remove the batteries in avoidance of erosion resulting from battery leakage.

Important Note

This camera is not designed for 24/7 full capacity running or around-the-clock live streaming. It's designed to record motion events and remotely view live streaming on demand.

Managing Push Notifications

You will receive notifications for motion detection, device offline and low battery.

From the home screen, enable or disable individual camera alarm push notifications for your device.

Note: You need to allow HDSmartCam App to send you notifications on your smartphones.

Go to "Settings" > "Notifications" on your smartphone, and then click HDSmartCam App to allow notifications.

Notifications can be sent to all shared cameras. See sharing options.

Account Management

Each camera can link with only one master account. For multiple user access, the camera should be shared by the linked master account.

Each account stores the list of cameras in the cloud. Only one device is allowed to be actively signed in to one account. Logging in from a new device will automatically logout of any other device.

Snapshot images are stored securely in the cloud for upto 7 days or 500 snapshots. (whichever is earlier)

Security - Motion snapshots are linked only to one master account. If the camera is transferred to another account, the previously taken snapshots will not be accessible by the new master account.

Mounting the camera

The camera includes a magnetic mount which can be used as a table or wall mount.

At the back of the camera, there is a standard tripod screw hole, that fits a screw-in security camera wall mount. The mount is an optional accessory that may not be included with your camera.

Note: Make sure there is a strong Wi-Fi signal strength at the point of installation.
If the signal is too weak, connectivity and service will be erratic.

LED Status

Attempting Wi-Fi connection:
Red and Purple quick alternate flashing

Quick Blink 1 time every 100 seconds:
Device is working and in standby mode

No LED Light visible:
Connected to WiFi, LED turned off to save power

Hard Reset:
Blue flash 3 times + 1 slow flash confirms reset successful.

Reset Button Modes

Single Quick press:
Soft Resets the camera

Enter Pairing Mode:
Press and hold for 3 seconds
Release after hearing the 'Beep Beep' sound

Hard Reset:
Press and hold for 10 seconds
Release after the second 'Beep Beep' sound

Troubleshooting

Image snapshots are blank
Issue: Network interruption
If there is any break in connection during image upload, the snapshot will show as blank. This could be due to the internet service provider, WiFi signal quality or speed of reaching our server.
Solution: Make sure the camera has a strong WiFi signal. Bring it closer to the base or install a WiFi repeater.

Connecting the camera to a different WiFi Network
Put the camera in pairing mode.
On app, enter the Device Settings > Network Connection
Follow the prompts until you select and connect to the new WiFi network.

Firmware update fails
Solution: Go back to the main screen and try it again.

Automatic Time Zone displays incorrect time
Disable then enable Automatic Time Zone and click Save.
If this doesnt update correctly, select time zone manually.

Not receiving motion alerts
Make sure Alarm Setting > Activity Detection is ON, and the appropriate sensitivity level selected.
Note: The camera will send a maximum 1 alert per minute.

Not receiving rich motion alerts with images
Network connection to the server maybe slow, make sure the camera has a strong WiFi signal and internet is fast.

Shared users are not receiving notifications or check logs
At the time of sharing, the permissions to allow the shared user for additional permissions may not have been set. This can be rectified from Account > Share options.

Specifications

	Model	VB-101
Hardware Features	Image Sensor	SONY 1/2.9" CMOS Sensor
	Recording Resolution	1080P - 1920 x 1080
	Display Resolution	720P - 1280 x 720
	Lens	Fixed, with IR-Cut Filter
	Angle of View	Diagonal: 130°
	PIR Detecting Distance	Upto 30ft (9 Meters)
	PIR Detecting Angle	Horizontal 120°
	Minimum Illumination	0 Lux (With IR Illuminator)
	Nightvision	Automatic, Upto 33ft, Indoor
	Dimensions with Stand	109mm x 71mm x 59mm (L x W x H)
	Weight (battery + stand included)	250g
	Package Dimensions	150mm x 98mm x 90mm (L x W x H)
	Weight (battery + stand included)	450g
	Interface	Micro SD Slot Full Duplex Microphone and Speaker Micro USB Power / Charge Interface
Software Features	Protocol	Advanced P2P
	Image Compression	H.264
	Maximal Frame Rate	15fps
	Audio	Full Duplex 2 Way Audio
	Supported Platforms	IOS and Android
	Record Mode	Motion triggered alarm recording
	Motion Alarm	Push Notification
Wi-Fi	Wireless Standard	IEEE 802.11b/g/n
	Operating Frequency	2.4GHz
	Wireless Security	WEP/WPA-PSK/WPA2-PSK
Battery	Quantity	2 pcs
	Type Specification	18650/2600mAh/3.6V Rechargeable Lithium Battery
	Battery Level Indication	Yes, in-app
Other Parameters	Standby Time	Up to 180 days in standby mode, OR 800 minutes of motion triggered recording and live view OR 500 minutes of motion triggered recording and live view in nightvision mode.
	Temperature	Operating Temperature : -10℃~+55℃ Storage Temperature: -40℃ ~ 70℃
	Humidity	Operating Humidity: 20% ~ 85% Storage Humidity: 10% ~ 90%
	Weatherproof	IP65 Rated

Technical Support

For other technical support, please contact us at
info@ipcamsupport.com