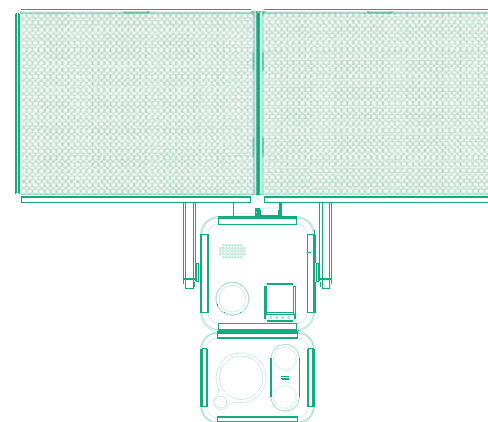


N1

USER MANUAL

Solar Dual Linkage
AOV Camera



Safety Messages

Before first use, please spend some time familiarizing yourself with this manual first so that you get the most out of this product's features and use it safely.

1. This product comes with a built-in battery. For your safety, do not attempt to disassemble it on your own.
2. Only use the standard 5V charger or solar panel to charge this product. Using incompatible chargers or solar panels of other brands can result in fire, explosion, or serious injury.
3. Avoid charging, using, or storing this product around fire sources, like fire and heater.
4. Never discard this product in fire to prevent the risk of explosion.
5. If this product emits an odor, overheats, changes color, gets distorted, or exhibits any anomalies, discontinue use and remove it immediately from the charger or solar panel whether it is being used, charged, or stored. Dispose of the damaged product in accordance with local regulations.
6. The recommended operating temperature of the camera is 14°F~122°F(−10°C~50°C). Battery performance may drop at low temperatures. At −4°F(−20°C), the battery may drain in short time, or even may not charge. It will work normally as the temperature rises.

01

Working Principle

This intelligent solar-powered security camera completely eliminates traditional limitations of power and connectivity. Its high-efficiency solar panel converts sunlight into electricity to charge a built-in 20,000mWh battery, reliably powering an innovative dual-lens system: a 100° fixed wide-angle lens for complete panoramic coverage, combined with a PTZ zoom lens that provides detailed tracking up to 100 meters.

During periods of inactivity, the camera operates in an ultra-low power Sentinel Mode (only 100mW), using on-device AI processing to maintain intelligent monitoring at 1 frame per second – perfectly balancing energy efficiency and security needs. When a person, vehicle, or pet is detected within the 30-meter monitoring zone, the system responds instantly within 0.2 seconds, activating real-time HD recording while simultaneously pushing alerts to your smart phone, ensuring 24/7 recording.

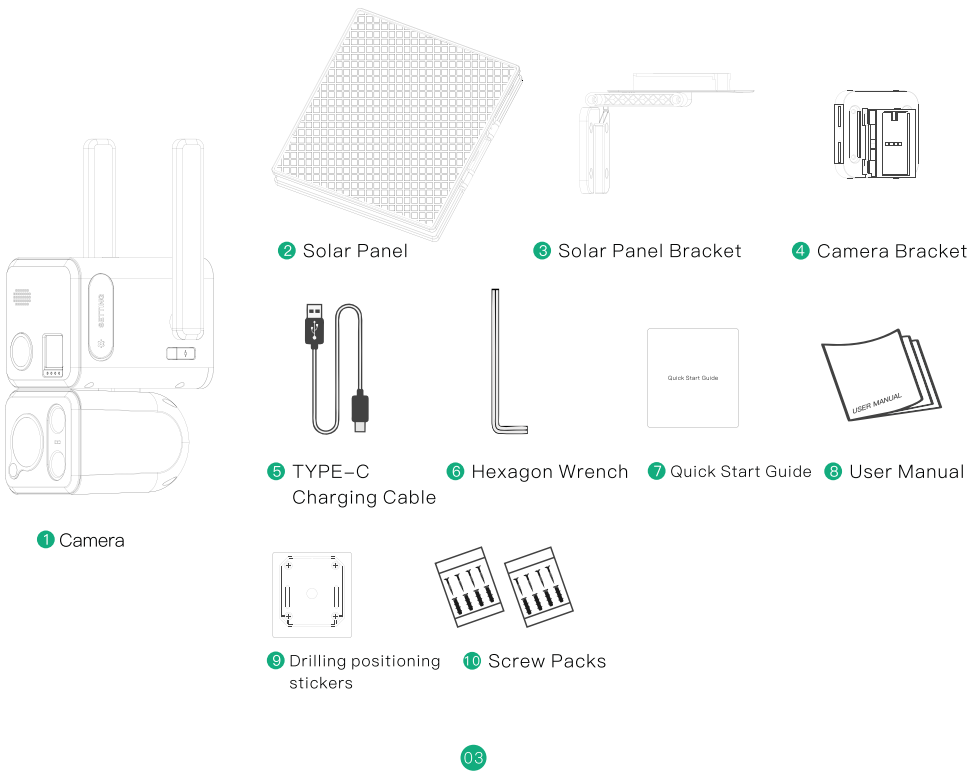
All recordings are stored locally with optional cloud backup support. the camera maintains constant online status, enabling you to remotely view live footage, precisely control PTZ movements, and activate audio-visual alarms from anywhere via the mobile app.

The integrated 20,000mWh battery and 16W solar panel form a highly efficient energy system that provides up to 6 days of operation without sunlight, while delivering approximately 10,000mWh of daily recharge under normal lighting conditions.

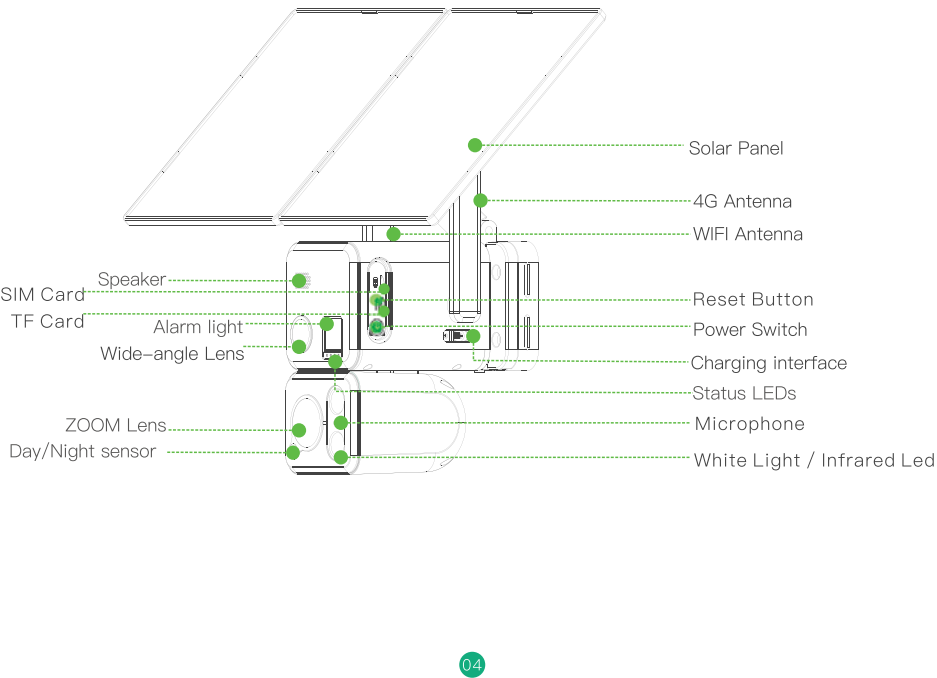
Designed for year-round continuous operation in environments with fewer than 400 daily triggering events and up to 6 consecutive rainy days, this system delivers truly worry-free security protection with global coverage.

02

1.What's Included

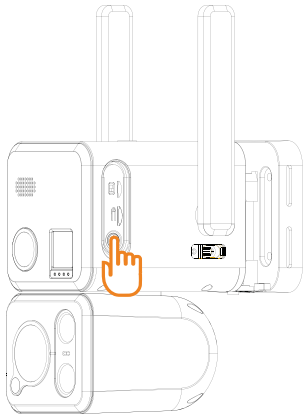


2.Product Overview

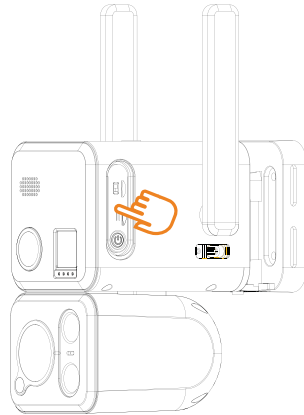


3.Boot Instructions

- 1 Hold the power button for 3 seconds, then wait for the device to boot up.



- 2 Tapping and holding the reset button for 5 seconds, ready to match the network.



05

4.Download APP & Register

1.Download APP

Download the APP NIVIEW from App Store (iOS devices) or Google Play(Android device). or visit website **APP.NICEVIEWER.COM** to download the APP.



APP.NICEVIEWER.COM

Scan the QR code or visit website to download the APP.



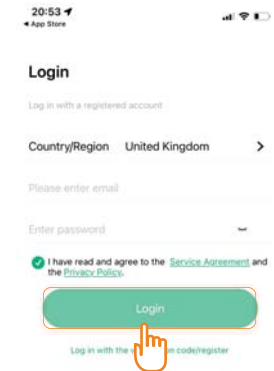
NiView



NiView-Camera

2. Register

First-time user choose verification code mode to register, use Email to register your account by APP and set the password for your confidentiality. Account and password to login.



07

7.Configuration and Addition of WI-FI Devices

3. Add Camera

Run the app, click the upper right corner “+” to add.



1.1

4. Choose Network Type

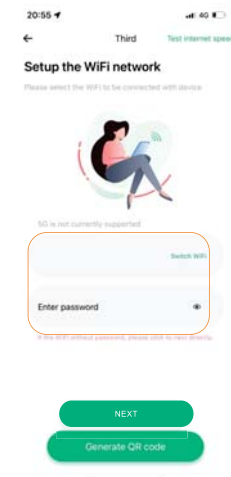
Select the WiFi option on the left.



7.Configuration and Addition of WI-FI Devices

5. Enter Network Information

Click Switch WiFi to select your home WiFi SSID, and enter the password below. (In order to avoid input errors, after the input is completed, you can click the eye pattern on the right to check whether the password is entered correctly).

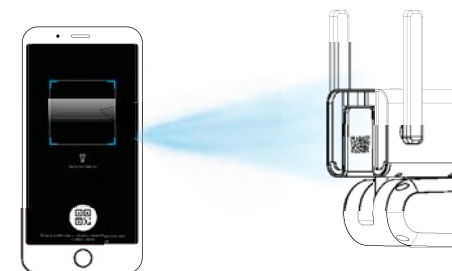


Enter the WiFi SSID and password below

Attention:
5G is not currently supported

6.Scan QR code to Add Devices

Scan the QR code of the camera body, and click "connect" after hearing the mobile phone scan prompt voice. The APP and the camera will be automatically connected to network."



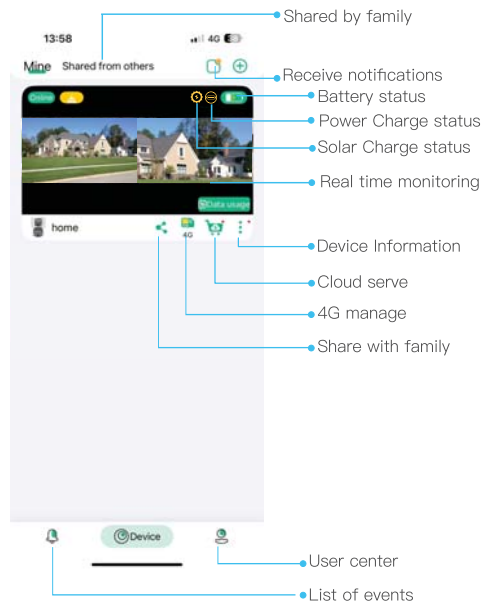
Notice: Versions below iOS11 require manual connection to the camera hotspot network. Please follow the APP prompts, go to the phone settings interface to connect to the hotspot starting with NIVIEW_XXXXX, then return to the APP interface to configure the network.

1.2

8.APP Homepage Instructions

7.Homepage Function

Introduction of camera's functions in the home page.

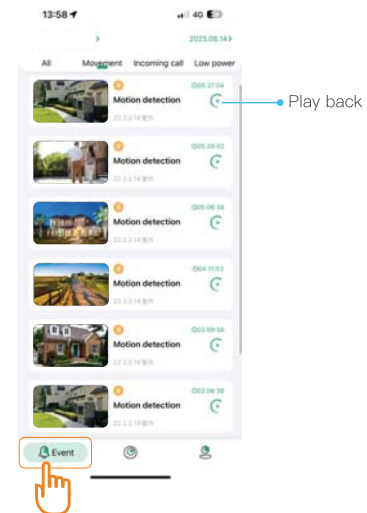


13

8.APP Homepage Instructions

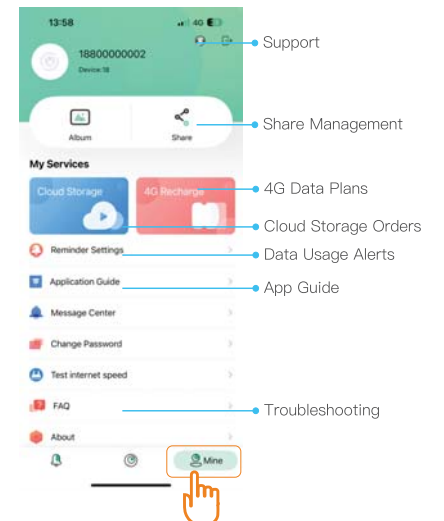
8.Viewing the Event List

Click "Event" at the bottom of the page to enter the event list to view the alarm list of the device.



9.Manage Account Information

Click "Mine" at the bottom of the page to enter the APP page, you can modify the login password and manage all functions.

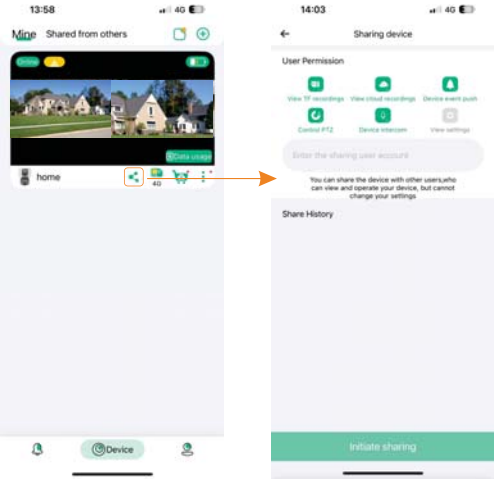


14

9.APP Homepage Instructions

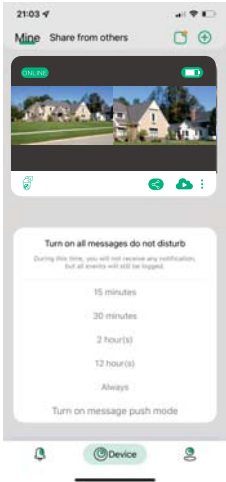
10.Sharing Function

After your family has registered the account, click  to share with them.



11.Do not Disturb Mode

At the top of the page  Enter the Do Not Disturb mode setting. When PIR is triggered, you will get the notifications in the real time. If you do not want to receive notifications, you can turn on Do Not Disturb mode.



10.Packages

12.Cloud Storage Service

Click  at the home page to purchase the cloud storage packages.

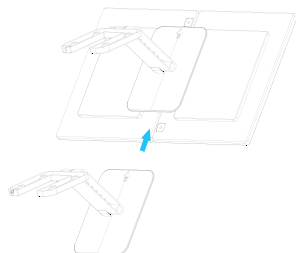


11. Installation Instructions

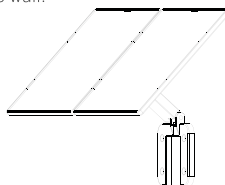
1. Unfold the folded solar panel and flatten it.



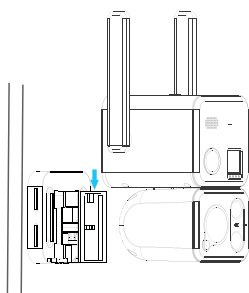
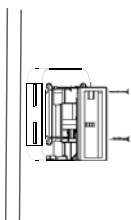
2. Insert the solar panel stand from bottom to top.



3. Assembly is complete. Depending on the installation method, either attach the solar panel to the camera stand or directly mount it to the wall.



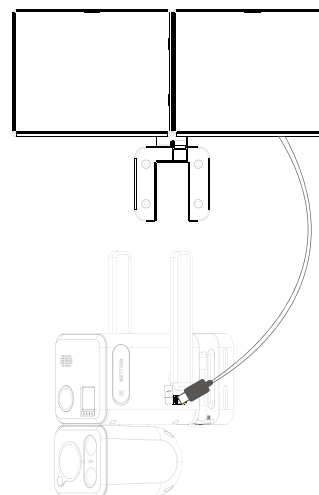
4. Secure the camera stand to the wall with screws. Insert the camera from top to bottom into the stand.



17

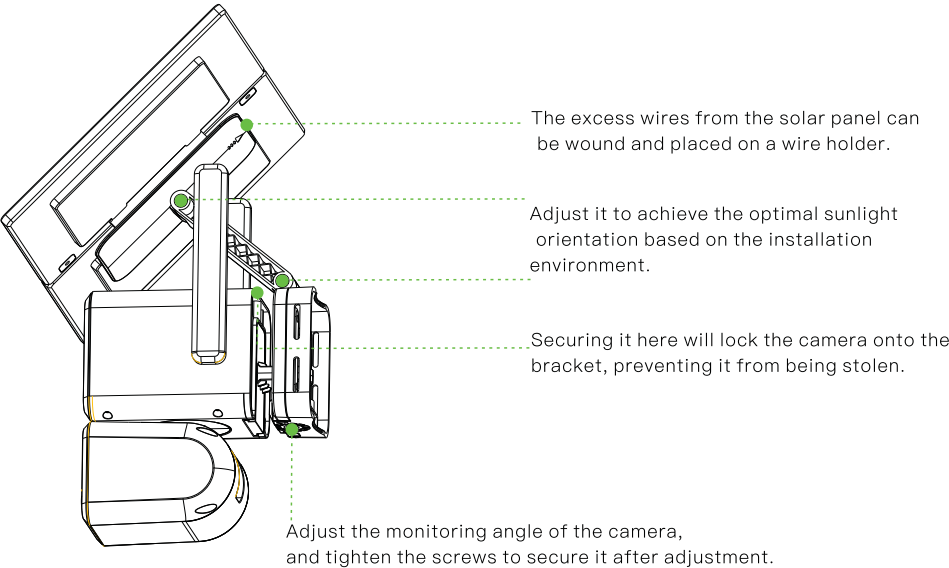
12. Wall Mounted Installation Instructions

Plug the Type-C connector of the solar panel into the power port of the camera. Make sure to insert it fully to ensure waterproofing. Any excess wire can be wound around the wire holder at the back of the solar panel.



18

13.Commissioning Instructions



14.Global Solar Panel Installation Reference

Global Solar Panel Installation Reference

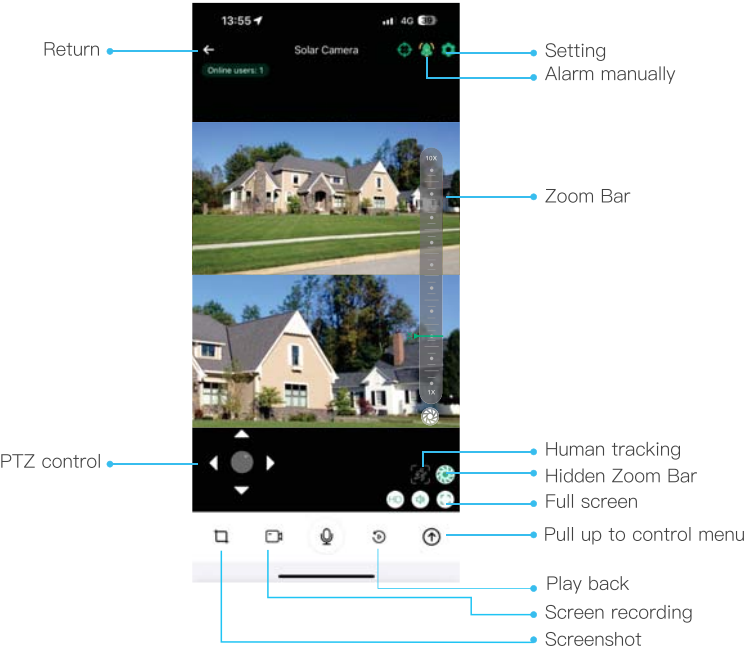
Latitude Zone	Target Regions	Orientation	Tilt Angle	Key Notes
0°–15°	Singapore, Nairobi, Quito	Slightly North	5°–10°	Min. 5° tilt to avoid water pooling
15°–25°	Haikou, Mumbai, Havana	True South	20°–25°	Low-angle optimization
25°–35°	Shanghai, Tokyo, Sydney (North-facing)	South/North (SH)	25°–30°	Wind-prone areas: ≤30°
35°–45°	Beijing, NYC, Rome	South or West-tilted (185°–200°)	35°–40°	West-tilt boosts afternoon yield
45°–55°	Harbin, London, Vancouver	Prioritize West (270°)	40°–45°	5–10% gain vs south; ≥40° for snow zones
>55°	Mohe, Oslo, Reykjavik	South + Increased Tilt	50°–55°	Maximize low-angle sunlight
Special Zones	UK, Coastal Scandinavia	West (270°)	30°–35°	Aligns with PM energy demand
Environmental Adaptation:	Heavy snow: ≥40° tilt + 60cm ground clearance			
	High wind: ≤30° tilt to reduce load			
	Shading: Avoid obstructions within 5x panel height			

delete cloud storage data.

15.Real-time Monitoring

14.Real-time Monitoring

Click the screen on the homepage to access real-time monitoring



21

16.Play back

15.Video Playback of Memory Card

Click the video playback button on the homepage of the pull-up control menu to enter playback, select memory card playback.



22

16.Video Playback of Cloud Storage

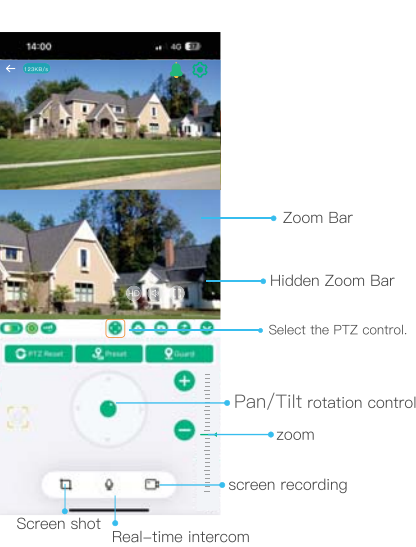
Click the video playback button on the homepage of the pull-up control menu to enter playback, select cloud storage playback.



17.Control Instructions

17.PTZ Control

Click the pull-up menu to enter the control page,
Click the  to control the PTZ camera.



PTZ Reset

When inaccuracies in the PTZ directional control, finger-point tracking, or human tracking, you can select the PTZ Reset function. The camera will automatically perform a reset procedure, returning the PTZ mechanism to its default calibrated position to ensure the precision of all subsequent tracking and control operations.



Preset:

When the user has multiple fixed-point to monitoring, can control the PTZ to the position that requires fixed-point monitoring and save the reserved position for quick positioning.



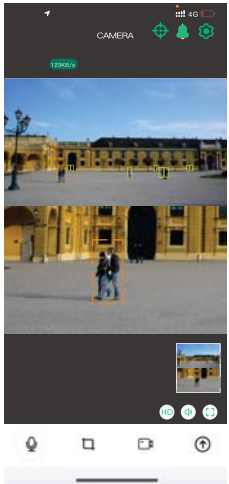
Guard:

When human tracking is turned on, the camera will follow the human figure to rotate. Set the guard position to ensure that your key position can be monitored at any time.
The setting method is to control the PTZ to your key monitoring point and click the guard position.

18.Intelligent Tracking and Linkage

18.Intelligent Tracking and Linkage

In the detection settings, choose to Turn on or Turn off humanoid tracking



Finger Tracking Function:

Clicking anywhere on the upper wide-angle screen, the ptz monitoring below will be positioned there automatically.

Humanoid tracking function:

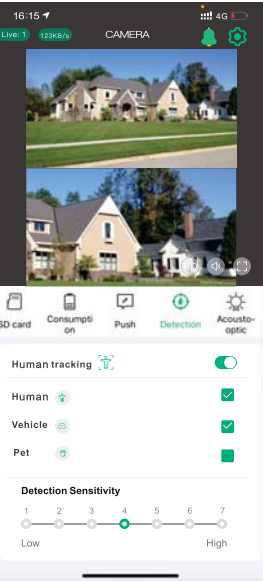
Tuning on the Humanoid tracking function, the human shape will be judged by the upper wide-angle camera, and the PTZ camera will be linked for pan-tilt tracking.
When double-clicking any position on the wide-angle screen, the lower focus monitor will be positioned.

Humanoid Mark:

When a person is detected within the monitoring range, a point frame will be displayed around the person

19.Detection Setting

19.Detection Settings



Click  to enter camera motion detection settings, you can set the sensitivity and detection distance adjustment.

Human tracking

Automatically pivot and follow the movement, exclusively limited to tracking humans.

Human、Vehicle、Pet

Select trigger types (Person/Vehicle/Pet) to define detection targets. When a selected object enters the monitoring zone, the camera will instantly:

- Switch from low-frame-rate to real-time recording
- Send push alerts to your app.

Detection Sensitivity

Adjust sensitivity to control detection range. Lower sensitivity reduces effective detection distance.

20.Power consumption

20.Power consumption

Click  to enter power management, select the use mode according to the environment and user needs, which can better manage the use of the battery.

Low power protection:

It is recommended to turn on this function. When the power of the camera is lower than 20%, the camera will automatically turn off Sentry time-lapse recordings and other power-consuming functions.

 AI Sentry Mode:

In AI Sentry Mode, the camera saves time-lapse recordings at your chosen detection frequency (default: 1 check per second). When it detects trigger objects like people, cars, or pets, it automatically switches to real-time recording.

Default trigger: People (customize in Detection Settings)
Low-power operation between detections.

 All time mode:

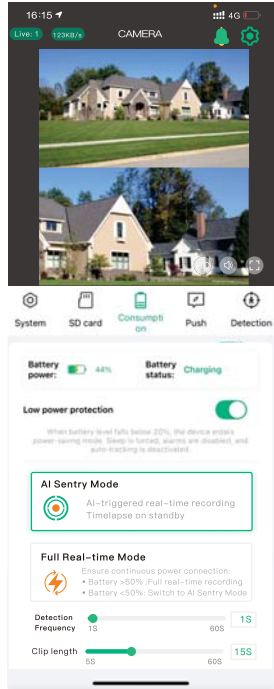
Real-time recording activates when battery is >50%. Automatically reverts to AI Sentry Mode if battery drops < 50%. Important: Continuous real-time recording requires constant power connection. Unplugging may cause shutdown.

Detection Frequency (1-60 seconds)

Sets how often the camera scans for activity and adjusts timelapse speed. Default: 1 second (most frequent checks)
Higher values = longer intervals between scans
Longer intervals reduce detection sensitivity and power consumption

Clip Duration (5-60 seconds)

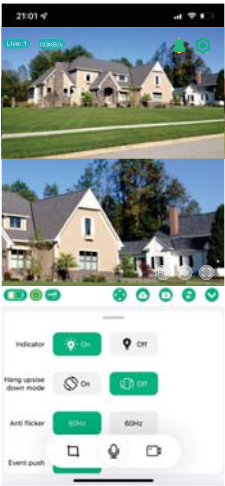
Determines how long real-time recording lasts after detecting triggers. Default: 15 seconds (recommended for most homes)
Shorter clips save storage; longer clips capture more details



21.Other System Settings

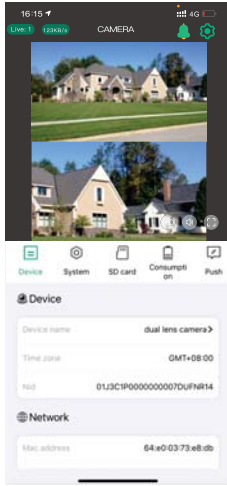
21.Quick Settings

Click  to enter the camera quick settings.



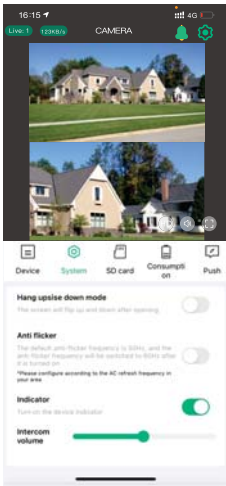
22. Device Information

Click  to enter device information, check firmware version and upgrade.



23.System Settings

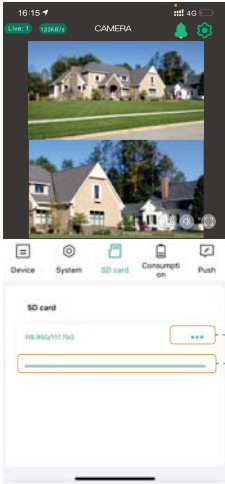
Click  to enter system settings, change the camera's display mode and other system settings.



21.Other System Settings

24.Memory Card Settings

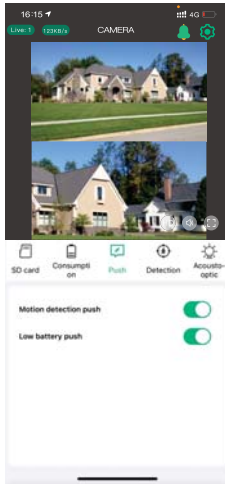
Click  to enter memory card settings, you can check its usage status and format.



Format
Status

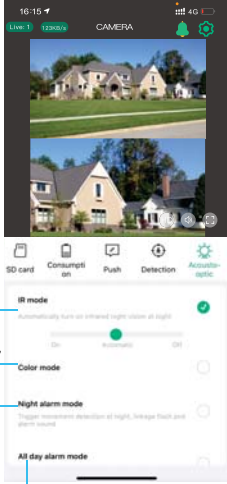
25.Alert Push Settings

Click  to enter the push settings of the camera, select the information to be accepted according to your needs.



26.Sound & light Settings

Click  to enter camera sound and light settings, setting working mode of infrared led, white lights and alarm.



Infrared leds control

White lights are on at night, camera video is full color

At night, when human passes by, the white lights flash and sound alarm.

All day alarm mode, when human passes by, the white lights flash and sound alarm.

23.Power & Solar Working Principle

Power & Solar Working Principle

Your camera operates on a dual–power system (20,000mAh battery + 16W solar panel):

Energy Cycle:

Solar panel converts sunlight → Charges battery → Powers camera

Smart Detection:

Standby: 1 fps recording + AI scanning

Alarm: Triggers real–time recording & app alerts upon intrusion

Endurance Data:

Standby: $\approx 50\text{mA/h}$ (400hrs at full charge)

Event recording: 20mA per 15–sec clip

Solar recharge: $\approx 10,000\text{mAh/day}$ (normal weather)

Sustainable Operation:

- ≤ 500 daily events
- ≤ 7 consecutive rainy days

Installation Tip:

For high–traffic areas, use power adapter

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24.FAQ

1. Q: Will the camera show red lights when night vision is activated?

A: The built–in infrared leds make the camera only show some dim red lights when night vision is activated, but the image quality is still clear under no light environment.

2. Q: What is the longest recording time?

A: During periods of inactivity, the camera operates in an ultra–low power Sentinel Mode (only 100mW), using on–device AI processing to maintain intelligent monitoring at 1 frame per second – perfectly balancing energy efficiency and security needs. When a person, vehicle, or pet is detected within the 30–meter monitoring zone, the system responds instantly within 0.2 seconds, activating real–time HD recording 5–60seconds while simultaneously pushing alerts to your smart phone, ensuring 24/7 recording.

3. Q:How to check the video playback?

A: Click the video playback button on the homepage of the pull–up control menu ,select memory card playback or cloud storage playback.

4. Q: What will happen when the memory card runs out of space?

A:The oldest footage will be overwritten by the latest one. Please back up the important videos timely or delete the unnecessary videos to release more space. Alternatively, you can subscribe to a cloud plan.

5. Q: How many cameras can I connect to the same account?

A: You can add 50 cameras, but we recommend adding up to 10 devices for a better experience.

6. Q: Why can't I receive the push notifications on the mobile device?

A: Make sure you have allowed NiView App to push notifications to your mobile device.

7. Q: How to share the camera?

A: To share device access, the invited user must first download the NIVIEW APP and complete registration, selecting the same server region as the owner (Europe, the Americas, Oceania, Africa, Asia, or Mainland China). The owner can then initiate sharing by entering the recipient's account information via the share feature  in the homepage. Each device can be shared with up to 8 users, and the owner may modify or revoke access permissions for any shared user at any time through **【Me】**  – **【Share Management】** 

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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 radiofrequency 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. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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.

RF Exposure Warning Statements:

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