Wireless Solar-Powered Magnetic Camera

User Manual

Wireless Solar-Powered Magnetic Camera

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Wireless Solar-Powered Magnetic Camera

Quick Start

Thanks for purchasing the wireless magnetic hitch backup camera kit.
Please read this manual carefully and keep it for future reference. It contains important information about how to use the camera and how to pair it with the monitor.
We hope this product meets your expectations.

| STEP	INSTRUCTIONS	TIPS
Charging	Connect the camera to a power adapter using the USB-C cable	**RED Light Steady:** charging **Yellow Light Flash:** Battery level display
Magnetic Mount	1. Install the **camera antenna** 2. Clean the vehicle surface 3. Attach the camera's magnetic base to a metal area (rear/roof)	Twist the camera manually to adjust the viewing angle
Network Setup	1. To power the monitor, use the included Type-C to USB cable (two connection methods available): A. Preferred Method: Plug the USB end directly into the vehicle's built-in USB charging port (for a streamlined setup). B. Alternative Method: If no USB port is available, first insert the provided car charger into the vehicle's cigarette lighter/power outlet, then plug the USB end of the cable into the charger. 2. Long press the power button to turn on camera, and after a few seconds, the monitor will automatically display the camera's image	**Red light on:** working

General Description

Product Description

INCLUDED IN THE BOX:

5"Gesture Control Monitor	Suction Cup Bracket	Cigarette Lighter	2m USB-C Cable
Wifi Magnetic Solar Power Camera	Optional Camera Bracket&Screws	Power Adapter& 0.8m USB-C Cable	Antenna

Key Features
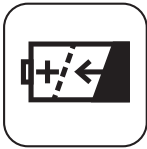
|		
AHD 1080P	9000mAh	Magnetic Mount
Waterproof IP69K Rating	Night Vision 10 m / 33 ft	Viewing Angle 120°

5-inch Display	Clear view with flexible, non-obstructive mounting
1080P High Definition	1080P CMOS sensor, sharp video, clear night vision and all-weather driving safety
Convenient Setup	Magnetic base, no drilling required. Easy install-and-play for various vehicles
300m (984ft) Stable	Up to 300m (984ft) range. Anti-interference signal for lag-free video at high speeds
Smart Pairing	Auto/Manual quick pairing. Ready to use upon connecting to power
16-Hour Endurance	Built-in battery supports 16 hours of continuous outdoor operation
Dual-Channel Monitoring	Single / Split-screen modes to reduce visual blind spots
Smart Reversing Assist	Adjustable guide lines for accurate parking, reducing reliance on the rear-view mirror
Gesture Control	Non-contact hand-sweep switch for convenient, flexible operation

Wireless Solar-Powered Magnetic Camera

Technical Specifications

INTRODUCTION TO CAMERA
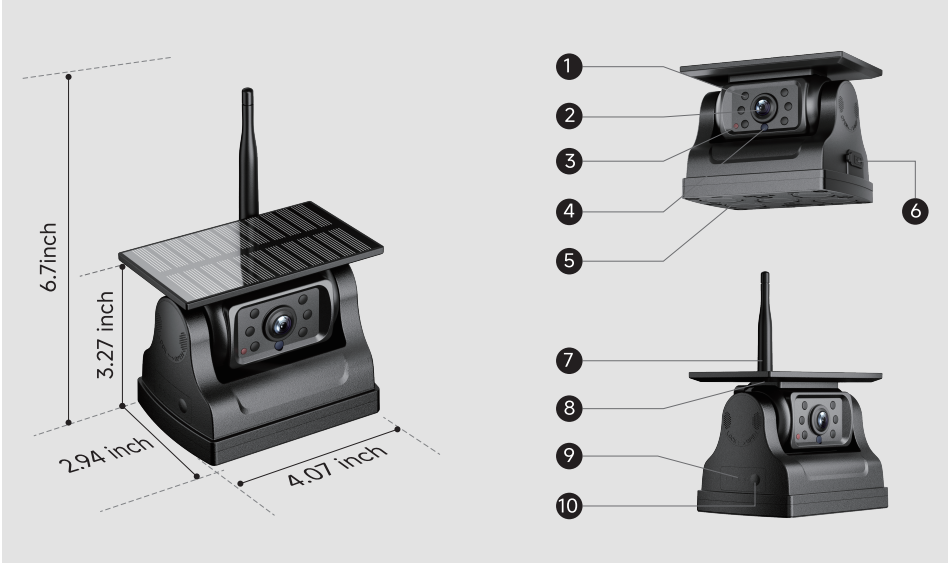
①	Infrared Light	⑥	USB -C Charging Port
②	Lens	⑦	Antenna
③	Red Indicator Light	⑧	Solar Panel
④	Light Sensor	⑨	Power Indicator
⑤	Magnetic Base	⑩	Power Button

CAMERA SPECIFICATION

Image Sensor	1/2.9 " CMOS	
Effective Pixels	1920*1080	
Waterproof Level	IP69K	
Viewing Angle-Diagonal	160°±5°	
Viewing Angle-Horizontal	120°±5°	
Viewing Angle-Vertical	65°±5°	
Working Time	16h (IR On) / 20h (IR Off)	
IR Distance	26-32ft (8-10m)	
Wireless Transfer Distance	984ft (300m) of Open Area	
Power Supply	+5V	
Output Power	19dBm	
Current Consumption	246mA (Typ.) @5V	Day mode (IR off, no display connected)
	258mA (Typ.) @5V	Day mode (IR off, with display connected)
	302mA (Typ.) @5V	Night mode (IR on, no display connected)
	314mA (Typ.) @5V	Night mode (IR on, with display connected)
Battery Capacity	9000mAh	
Working Temperature	-10°C ~ +50°C	
Storage Temperature	-10°C ~ +60°C	
Operating Humidity	85%RH	
Spread Spectrum	FHSS	
Center Frequency Range	2.412GHz~2.484GHz	

INTRODUCTION TO MONITOR

⌃ Increase / Select Button

⌄ Reduce / Select Button

OK Settings / Confirm Button

⏻ Monitor's Power Button / Back Button

MONITOR SPECIFICATION

Size	5 inch
Resolution	800*480
Power Supply	+5V~+24V
Operating Temperature	−20°C ~ +70°C
Storing Temperature	−40°C ~ +80°C
Operating Humidity	85%RH
Operating Frequency Range Cover	2.412GHz~2.484GHz
Output Power	19dBm @Typical
Hand Sweep Sensing	12cm(4.7in) Day / Night
Wireless Transfer Distance	984ft (300m) of Open Area

Wireless Solar-Powered Magnetic Camera

Installation & Pairing

Install the Monitor

1. Clean and dry the area where you will mount the monitor before fixing the suction cup.

2. Press the suction cup against the mounting surface and push the suction cup lock lever down to lock the suction cup in place.

3. Rotate the monitor onto the bracket. The angle of the monitor can be adjusted by loosening the rotary knob. Once in desired position,tighten the rotary knob to secure.

4. Insert the monitor car charger into the 12V DC power supply.
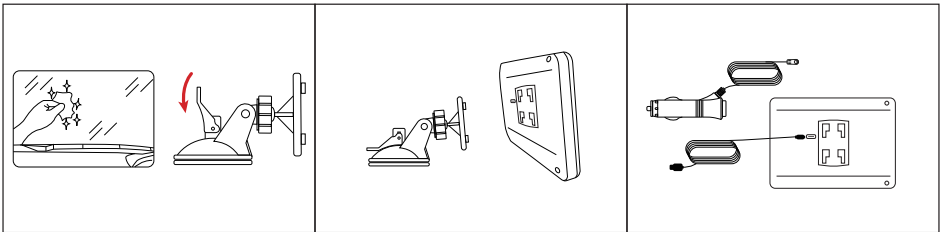
WARNING TIPS:
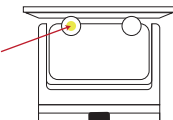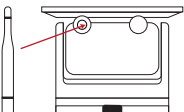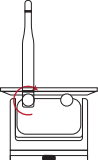
Before mounting the monitor, you can test the reception of the camera signal in different places. One location may have better reception than the other.

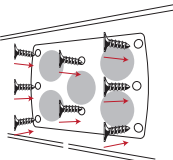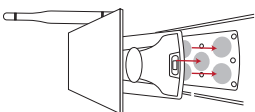# Wireless Solar-Powered Magnetic Camera
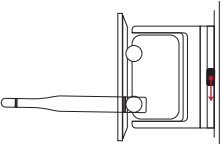
Installation & Pairing
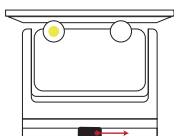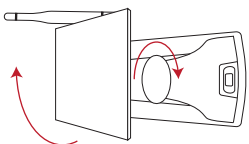
Install the Camera

1. Install the antenna on the camera before installation.

A. Remove the yellow protective cap.	B. Align the hole on the antenna with the connector on the camera/monitor.	C. Once aligned, rotate and tighten the connector until secure.

2. There are two primary methods to install the camera on the vehicle: Screw Mounting and Magnetic Mounting.

If you wish to use screw mounting, please follow these steps:

A. Press and hold the release button located on the bottom, and slide the lock to the right.	B. Install screws into the base at all 8 designated positions.	C. Align the camera base holes with the corresponding holes on the magnetic mounting plate.
D. Once aligned, push the camera to the left to securely slide the mounting plate underneath the camera housing.	E. The angle of the camera can be adjusted up and down to provide the optimal viewing angle for your vehicle.	

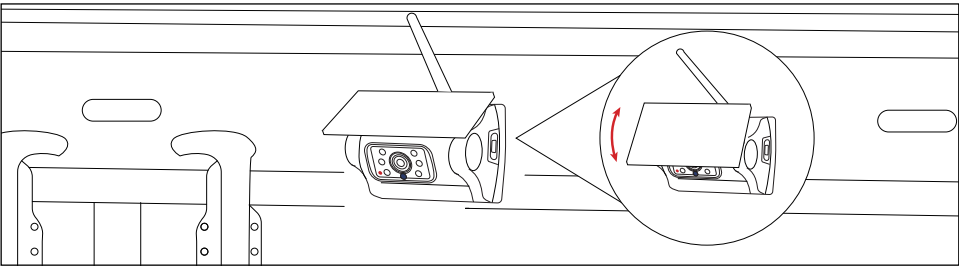# Wireless Solar-Powered Magnetic Camera

Installation & Pairing

Install the Camera

If you wish to use magnetic mounting, please follow these steps:
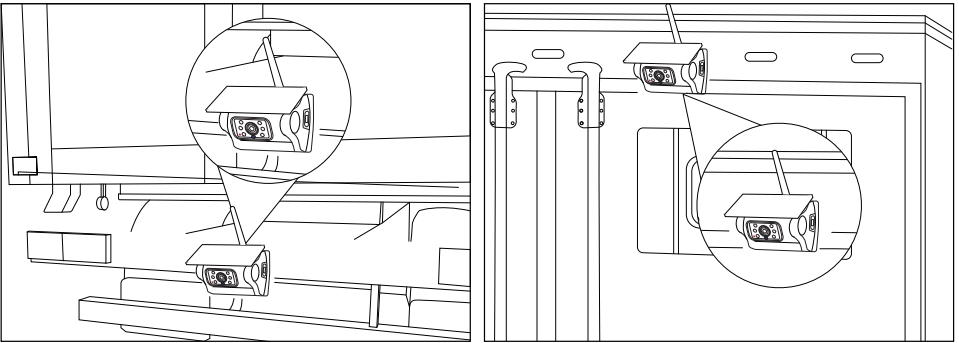
A. The backup camera has a magnetic base which works best when placed on a flat metal surface of the vehicle. Please avoid placing the camera on curved areas or shaped bumpers.
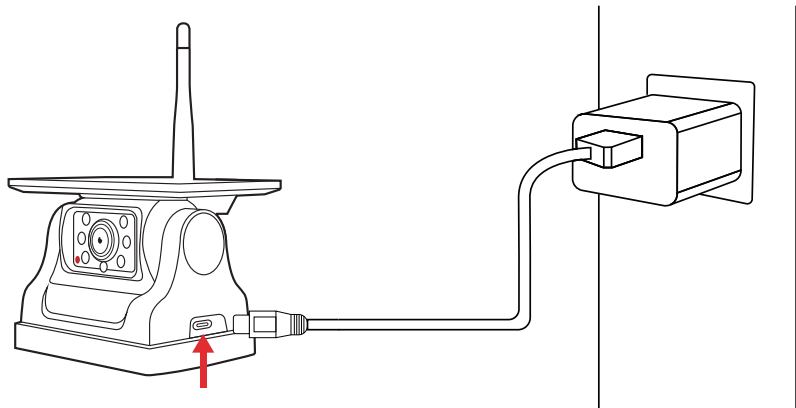

B. The angle of the camera can be adjusted up and down to provide the optimal viewing angle for your vehicle.

Wireless Solar-Powered Magnetic Camera

Installation & Pairing
Before Using

CHARGE THE BATTERY

Connect the included USB-C cable to the charging port on the back of the camera and charge it fully before first use.

| MOUNT THE BACKUP CAMERA	
Step	Description
1. Clean the surface	Clean the steel mounting surface with a dry cloth or alcohol wipe.
2. Magnetic fixation	Hold the magnetic base flat against metal; You should hear a "click", Tug gently to verify secure hold.
3. Adjust the angle	Adjust the backup camera angle by twisting the backup camera with hands
4. Non - iron body	For aluminum or fiberglass, use the supplied 3M pad or screw bracket.

Powering On the Monitor

1. Insert the Monitor Power Cord into the Cigarette Lighter and Connect.

2. Gesture Sensing Switch

This monitor features a gesture-sensing switch that lets you turn the monitor on or off without touching it. This gives you more flexibility in where you mount the monitor and makes operation more convenient.

To operate the switch, simply wave your hand within 3–5 cm (about 1–2 in.) of the sensor area to turn the monitor on or off.
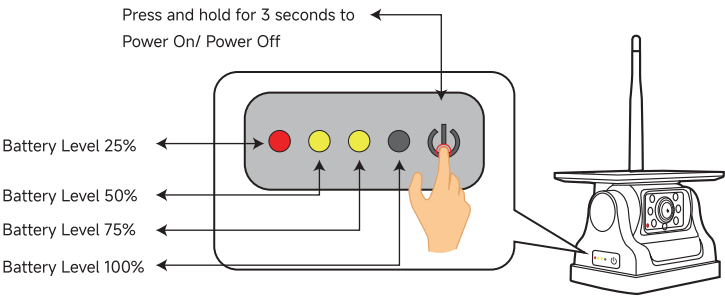
When the monitor is turned off, the camera stops working to save battery power. It will automatically resume operation when the monitor is turned back on.
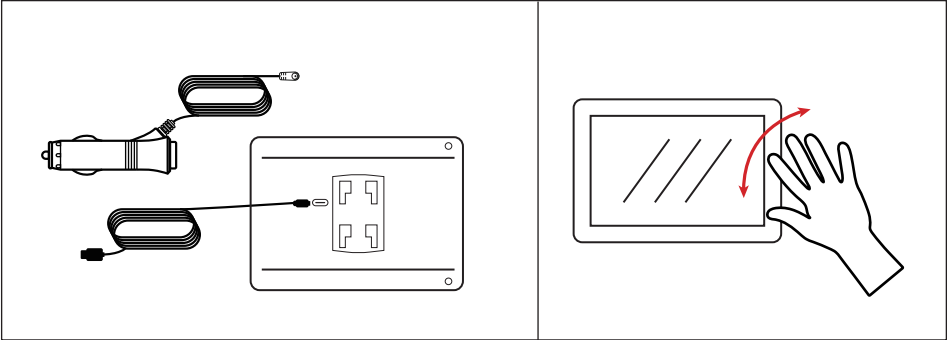
Connect

* Press the camera power button, and after a few seconds, the monitor will automatically display the camera's image.

 (No further action is required as the camera is paired with the monitor's channel at the factory.)

Press and hold for 3 seconds to Power On/ Power Off

Battery Level 25%

Battery Level 50%

Battery Level 75%

Battery Level 100%

Video Interface

|	
𝗧.ᵢₗₗ	Displays Signal Strength
👤 1 👤 2	Displays the Camera belonging to the single-channelview
🔋	Displays the Battery Level of the camera belonging to the single-channel view
	Each image can be displayed/hidden individually Parking Guide Lines
☀	Camera Solar Charging Icon

Wireless Solar-Powered Magnetic Camera

Monitor Function Introduction

1. Video Display and Functions

1.1 Switch Display

Short press 🔘 to switch the display interface in sequence:
Dual Screen -> Camera 1 -> Camera 2 -> Dual Screen, repeating the cycle.
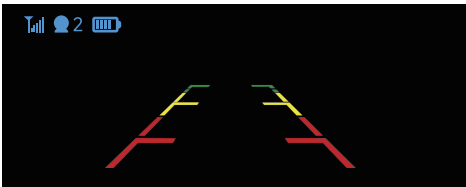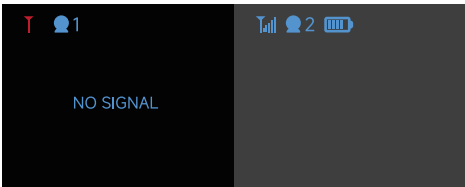
This kit includes 1 camera and 1 monitor, and the monitor supports a dual-screen display. You can freely assign the camera to Channel 1 or Channel 2.
If one camera is not enough, you can contact the manufacturer to purchase a second camera, which can also be paired with this monitor.
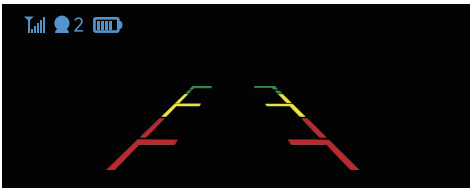
1.2 Backlight Brightness Adjustment

Short press 🔼🔽 to adjust the backlight brightness

1.3 Parking Guide Line Display

Long press 🔼 for 3 seconds to display/hide the parking guide line of the current screen

1.4 Parking Guide Line Adjustment

Long press ⌄ for 3 seconds to enter the adjustment mode for the guide line (up/down, left/right, and width),
Short press OK to switch between adjustment modes (Up/Down, Left/Right, Width),
Short press ∧ ⌄ to adjust the lines,
Long press OK to exit the adjustment mode.
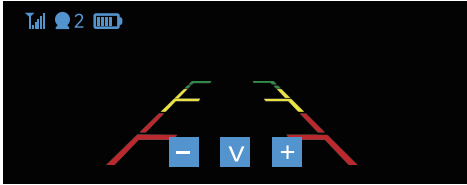
Up/Down Adjustment
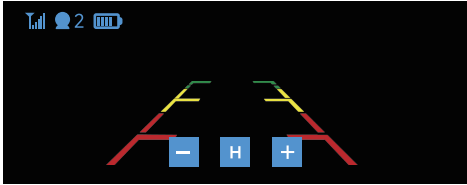
Left/Right Adjustment
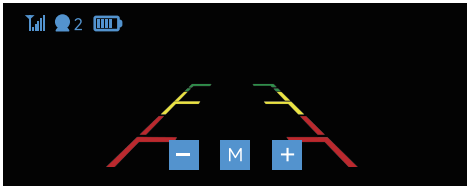
Width Adjustment

1.5 No Signal Display

The interface displays a black background with the "NO SIGNAL" message.

NO SIGNAL
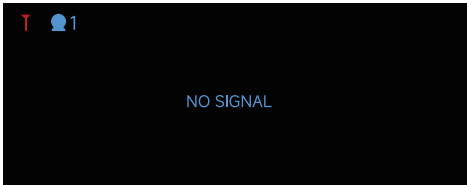
2. Settings Interface

Menu Operation Instructions
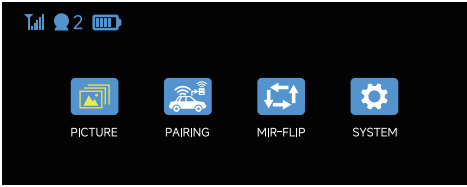
2.1 Image Settings (Requires Camera Connection for Adjustment)

Adjust Brightness:
Sets the brightness of the currently displayed camera image (Range 0-9)

Adjust Contrast:
Sets the contrast of the currently displayed camera image (Range 0-9).

Adjust Color Temperature:
Sets the color temperature of the currently displayed camera image (Range 0-9).

2.2 Pairing

Connecting Wireless Camera

The system will attempt to pair for 30 seconds. If the connection is successful, the system will automatically exit the menu and display the camera image.
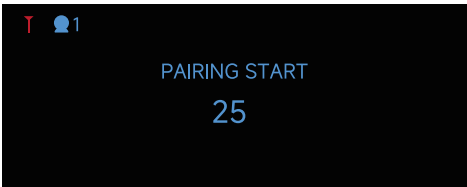
2.3 Flip Image Setting

Normal：
Displays the original image from the currently displayed camera.

Mirror：
Displays the mirror image (horizontal flip) of the currently displayed camera image.

Flip：
Displays the vertically flipped original image of the currently displayed camera image.

Mirror FFlip：
Displays the vertically flipped mirror image (horizontal and vertical flip) of the currently displayed camera image.
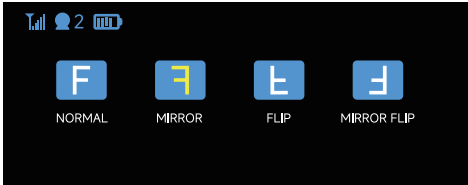
2.4 System Settings

Language Switch:
Switch the display language in sequence: Chinese -> English -> French -> German ->Italian -> Spanish -> Russian -> Japanese -> Chinese.
The corresponding interface language will switch simultaneously after each cycle.

Auto Sleep：
Sets the auto-sleep time from 0–90 seconds. The screen will automatically turn off if there is no operation during this set period.

Parking Guide Line：
Toggles the switch to turn on/off the parking guide line display for the current screen.

Restore Default：
Restores the factory settings and restarts the device.

Gesture Switch：
When activated, you can turn the screen on/off using the gesture control feature.

Safety Notes

1. General Safety

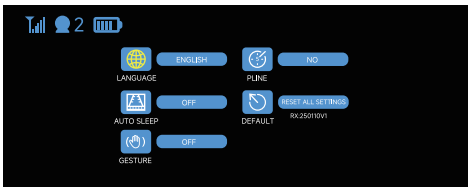➤ Operate the device only within −10 °C to 50 °C (−14 °F to 122 °F). Operating outside this range may cause malfunction or personal injury.

➤ Do not mount the camera or monitor where it may obstruct the driver's view or interfere with air-bag deployment.

➤ In high-speed or off-road conditions, verify that the magnetic base of the camera is secure; Use the supplied 3M pad if extra adhesion is required.

2. Battery & Charging

➤ The built-in 9000mAh Li-ion battery of the camera must be charged with the supplied USB-C cable.

➤ Red LED = Working; Yellow LED = Charging. Do not charge in flammable, explosive, or > 45 °C environments.

➤ Discontinue use and contact support if the battery shows swelling, leakage, or odor.

3. Waterproofing & Cleaning

➤ Rated IP69K: High-pressure and high- temperature water jet flushing. When using a high-pressure cleaner, maintain a sufficient distance from the equipment to prevent damage.

➤ Clean the lens with a soft, damp cloth; avoid alcohol or abrasive cleaners.

4. Wireless & Interference

➤ Operating in the 2.4 GHz band. Power off in restricted areas such as aircraft cabins or hospitals.

5. Disposal & Recycling

➤ Do not dispose of this product or battery in household waste. Recycle via qualified e-waste facilities.

Wireless Solar-Powered Magnetic Camera

Troubleshooting

1. Camera can't charge after one use?

➤ Please ensure to Turn Off the camera before charging.
Press and hold the power button for three seconds until all the battery indicator lights turn black.
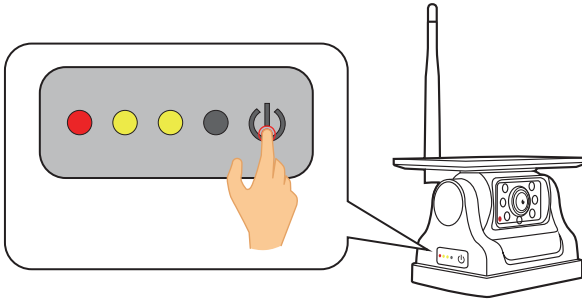
2. Have been charged for over 4 hours, and the camera still no power?

➤ Please ensure the input power for your Type-C connection above 5 Volt (1 Amp).
And do NOT use the DC input port to recharge the camera.

➤ Note:
Type-C to Type-C fast charging cables cannot be used to charge the camera.

3. Monitor can't turn on?

➤ Please verify that the power cable is securely connected to both the
monitor and the power source.

➤ Please confirm that the cigarette lighter socket is providing a 12V–24V DC Output,
as required by the monitor.

➤ Please inspect the fuse located within the cigarette socket adapter to ensure it has not blown and
is functioning correctly.

4. Camera and monitor can't be paired?

➤ Please verify that the camera is receiving power.

➤ Ensure that the display enters the pairing state first before powering up the camera.

5. No Image on the Display Screen?

➤ Kindly re-pair the camera and the monitor.

➤ Please check that the camera power supply is connected correctly.

6. Intermittent / Weak Signal Icon Appears?

➤ Please check if the camera antenna is fitted and secured correctly;
ensure the monitor antenna is positioned vertically.

➤ Reduce the distance between the camera and the monitor if the distance is too great.

➤ Large, dense objects could be obscuring the signal. If possible,
please move the obstructing objects.

➤ Interference from other wireless devices may be affecting the signal.
Please turn off those devices when using the camera system.

➤ Interference from overhead power lines may also be affecting the signal.
Please note this potential source of interference.

➤ Try unpairing and re-pairing the devices.

7. Night Vision is Poor or Can Not Function?

➤ Please check whether the light sensor on the camera is dirty or obstructed.

➤ Ensure the camera unit is installed at least 2 inches away from any rear lights.

8. Why is my solar panel not charging the camera?

➤ Ensure the solar panel is placed in direct sunlight (not shaded).

➤ Please clean the solar panel surface with a soft cloth (dust or dirt reduces efficiency).

➤ Test with a USB power source (If the camera works, the issue may be solar panel positioning or weather
conditions).

9. Does cold weather affect solar charging?

➤ Solar panels work in cold climates but may charge slower in winter due to shorter daylight hours.

➤ For consistent performance, supplement with USB charging during prolonged cloudy days.