User Manual

2.4GHz Digital Wireless Backup Camera System

Please read this manual thoroughly before operating the device,
and keep it for future reference.

V1.0

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1. Precautions

1.1 Storage and Keeping

(1) Do not expose the monitor to excessive heat or coldness, Storage temperature is -30~+80℃; Operating temperature is -20~+70℃; Humidity is Rh90%.

(2) Never use this device near a bathtub, wash basin, kitchen, damp basement, swimming pool or similar places.

(3) Never use this device in the environment with excessive moisture, dust or smoke.

(4) Avoid dropping or striking.

(5) Never use this device in enclosed spaces, areas with excessive vibration or subject to severe impacts.

(6) Never puncture, scratch or use abrasive cleaning materials on this device.

(7) Do not place cables where they may be pinched or stepped on.

(8) Leave at least a 2" space between the monitor and walls, cabinets or other objects to allow adequate air circulation around the device.

(9) The camera is designed to be waterproof; the waterproof rating is IP66.

1.2 Operating Precautions

(1) The device may be powered by a 5-volt automotive battery or vehicle electrical system.

(2) Make sure all cables are connected properly Observe polarity Improper cable connections may damage the monitor Remove the power cable connections when you do not intend to use the device.

Warning!

1. High voltage is present within the monitor Opening monitor case should be done by professionals.
2. Do not watch any video while driving unless you are monitoring rear view camera Monitor.

Special Notice

1.Occasionally, a few highlights or dark spots may occur on the LCD screen. That is a very common phenomenon in active-matrix Monitor technology, and it doesn’t necessarily indicate any defects or faults.

2.Never try to repair this device by yourself. If any problem, please turn off the Monitor at once and notify our company or authorized dealer. The monitor is a complex device. Any disassembly or modification may lead to damage and invalidate warranty.

1.3 Maintenance

(1) Remove all the cable connections from the monitor before cleaning the device.

(2) Use a mild household detergent and clean the unit with a slightly damp, soft cloth.

(3) Never use strong solvents such as thinner or benzine, as they might damage the finish of the device.

	Caution	
	Risk of electric shock Do not open	
Caution: to reduce the risk of electric shock, Do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.		

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This symbol is intended to alert the user not to waste electrical and electronic equipment.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your warranted and necessitate expensive repairs.

1.4 FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates,

uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

NOTE 2: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

1.5 IC warning

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's

licence-exempt RSS(s). Operation is subject to the following two conditions:

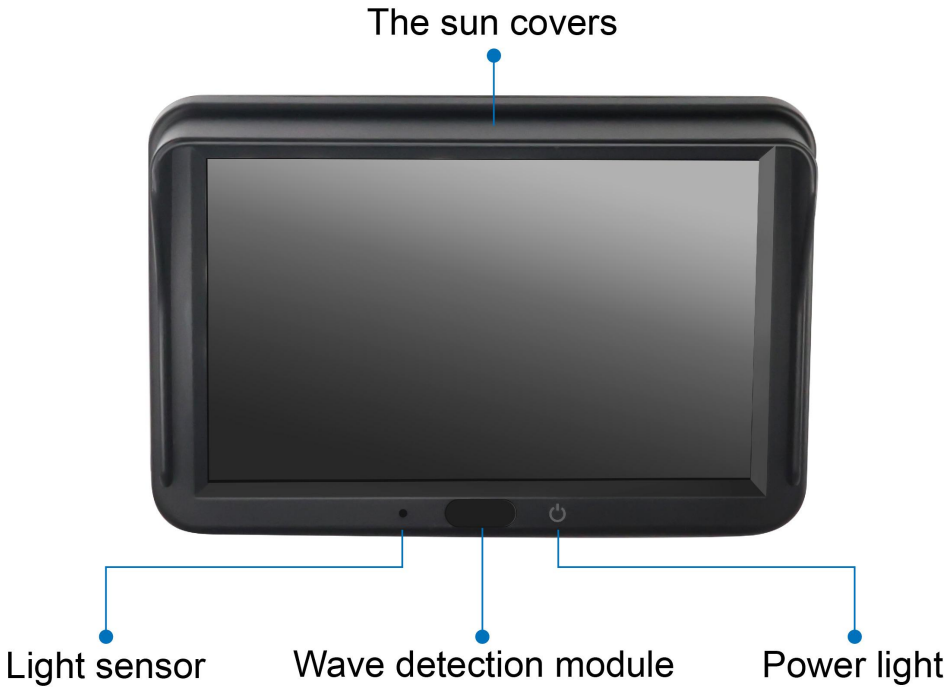
(1) This device may not cause interference.

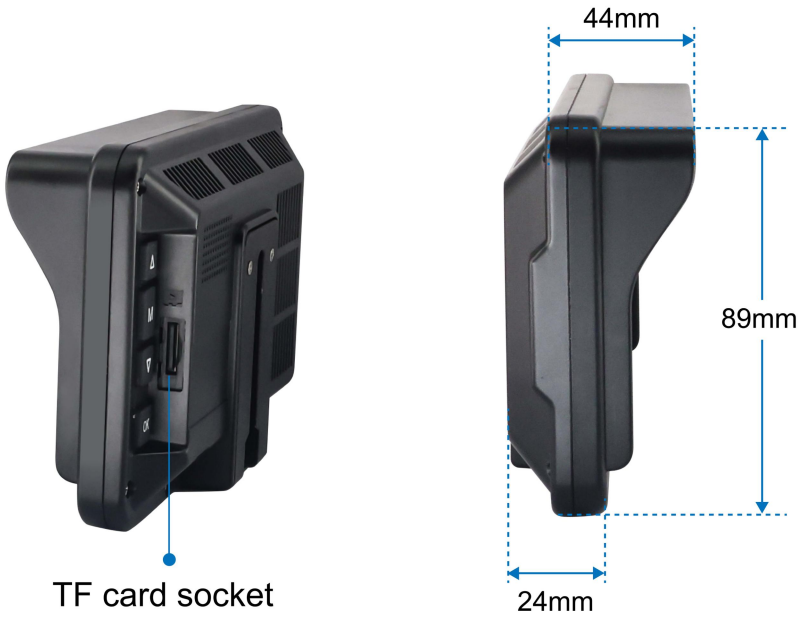
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareilest conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produirede brouillage, et (2) l'utilisateur de l'appareil doit acceptertout brouillage radioélectrique subi, mêmesi le brouillage est susceptible d'en compromettre lefonctionnement.

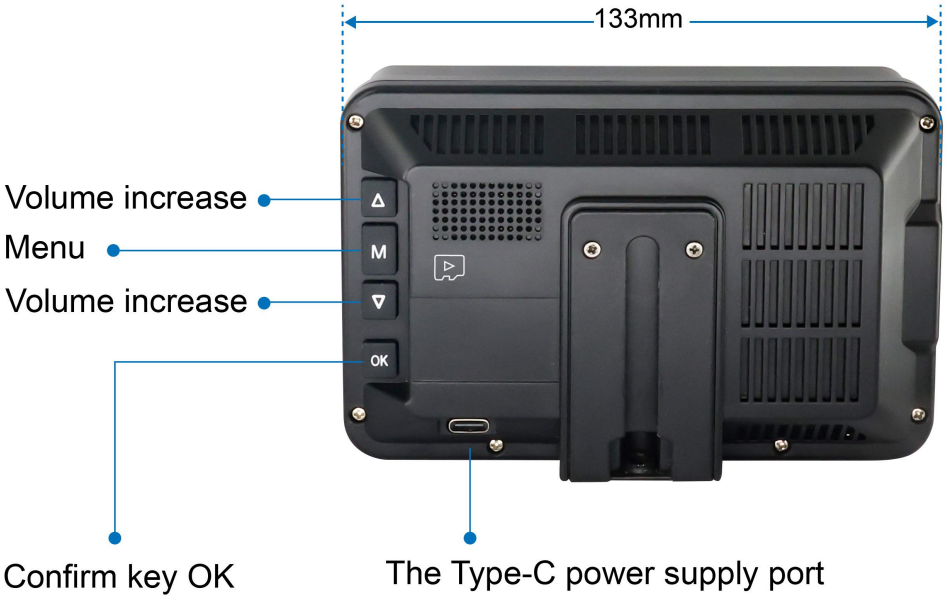
2. Features

2.1 Wireless Monitor:





Power indicator: the monitor will be on after power, the red light when the screen is dormant, and when the screen is green;



● Confirm that the key is OK

Press the preview screen to switch the video channel, long press the sleep monitor; press the "OK" button in the call menu to enter the menu item or set the options;

● menu

Press down to Monitor the menu or exit the menu;

● Volume reduction of the VOL-

Volume reduction and left shift menu selection;

● Volume increase in VOL +

Volume increase and right-shift menu selection;

(1) TFT LCD monitor with wide angle view and high-resolution Monitor.

(2) Support for 2-way wireless camera input.

(3) With the BSD function, it can detect pedestrians and cars.

(4) The image can be set to be a horizontal flip, a vertical flip, and a normal one.

(5) With a video recording function.

(6) Supports both manual and automatic backlight adjustment.

(7) Support parking line, parking line size and position can be adjusted.

(8) Support for automatic sleep.

(9) With a wave detection function for waking up the monitor or switching video channels.

(10) Equipped with the 1W speakers.

(11) Operating voltage: 5V.

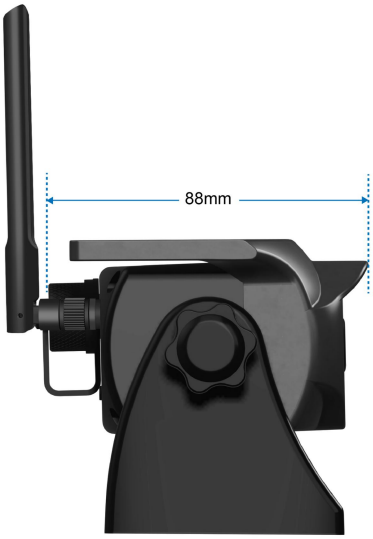
Specifications:

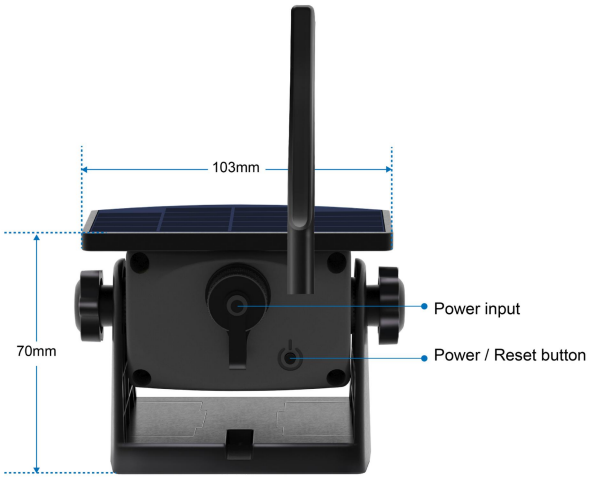
LCD Size	5’’
Resolution	800 x 3(RGB) x 480
Contrast	1000:1
Brightness	400cd/㎡
View Angle	U: 85 / D: 85, R / L: 85
Aspect Ratio	16:10
Camera Channel	2 channels
Operating Frequency	2408 - 2478 MHz
Receiving Sensitivity	-83 dBm
Decompression Form	H.264
Modulation	FHSS
Time Delay	Min :130 MS
Transmitting Distance	Max :180 M
Micro SD Card	Max :128 GB
Power Supply	DC 5V
Power Consumption	Max.10W
Loudspeaker	1W / 8Ω
Operating Temperature	-20~+70ºC, RH90%
Storage Temperature	-30~+80ºC, RH90%

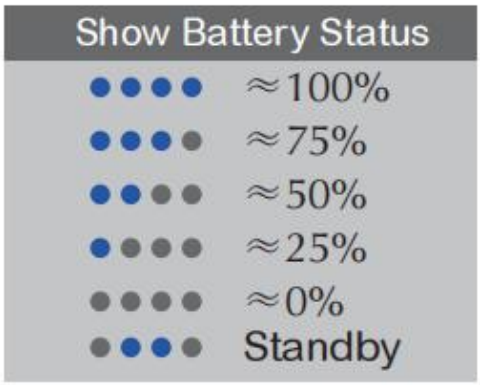
Total video duration:

capacity / Monitor	16GB	32GB	64GB	128GB
single	≈15h	≈30h	≈60h	≈120h

2.2 Wireless camera:







Power / Reset button:

Press and hold for at least 2 seconds to turn it on. Press and hold for at least 2 seconds to turn it off. Press it for four times to reset the camera.

Infrared indicator light:

Four infrared indicator lights will be on in the darkness.

Battery indicator light:

When cameras fully charged, four lights are all on. In camera's sleep state, only the two lights in

the middle are on.

(1) Smart Power Saving Mode: The camera enters power saving mode when you don't use it for 30 seconds. If you don't use it for a long time, it is recommended to power off the camera to avoid draining the battery.

(2) Rechargeable Battery.

(3) Magnetic Mount.

(4) Portable and Easy Installation.

(5) Battery Standby Time: 90 days.

Specifications:

Battery Capacity	3.7V/3000mAh
Charging Voltage	DC 5~12V
Charging Time	4.5H
Discharging Time	7H(Daytime)
Charging Temperature	0 ℃ ~ +40 ℃
Discharging Temperature	-20 ℃ ~ +60 ℃
Storage Temperature	-20 ℃ ~ +60 ℃
Waterproof Rating	IP66
Image Device	1/2.9" CMOS
Effective Pixels	1920 (H) × 1080 (V)
Transmission Distance	up to 197ft / 60m (No obstacles)
Transmission Power	FCC：≤26dBm; CE：≤20dBm; MIC：≤10dBm
Night Vision Distance	17ft / 5m
Viewing Angle	150°
Smart IR-Cut	Support
Battery Standby Time	365 days (Expose to sunlight for at least 2 hours per day)
Maximum Power of Solar Panel	0.8W
Maximum Charging Current	81mAh
Cell Efficiency	》24.3%

Special Notice

All specification are subject to change without notice.

3. Package List

 HDW737	 HDW818P
 U-Support Bracket	 Center Mount Bracket
 Camera power cord	 Power cable
 Car charger	

Special Notice

Accessory supply may be different for different application.

4. Installation Guide

4.1 Installation of fan support

(1) Connect the support connector into the fixed groove of the rear shell, and adjust the installation height of the Monitor by sliding the bracket;

(2) Adjust the Monitor angle and tighten the spherical knob on the fan bracket;

(3) Tear open the tape at the bottom of the bracket and stick the bracket to the desired place;

diagrammatic sketch

4.2 Installation of the suction cup bracket

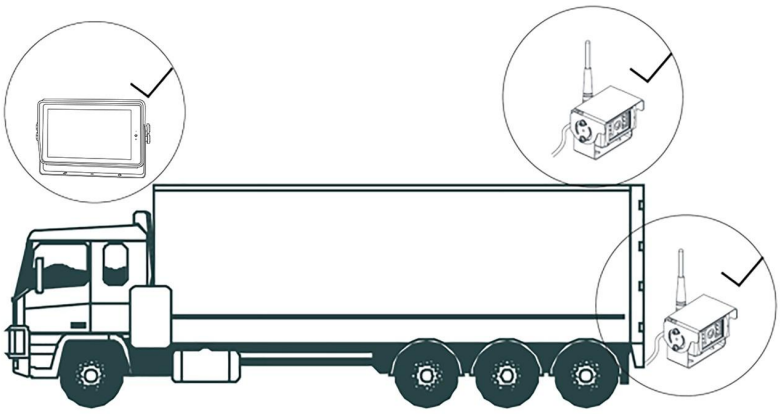
(1) The support connector is connected to the fixed groove of the rear shell, and the installation height of the Monitor and the Angle of the Monitor are adjusted by mobilizing two knobs on the bracket;

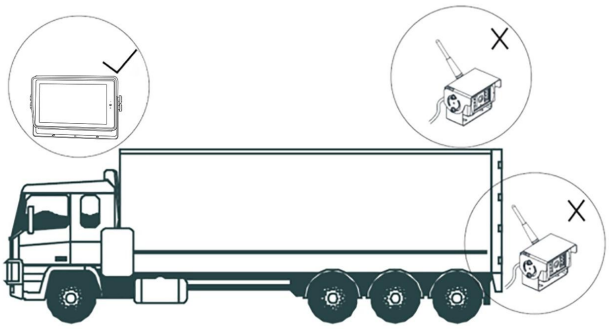
(2) Stick the bracket suction cup to the required fixed glass; (please clean the car glass and the support suction cup before sticking the suction cup)

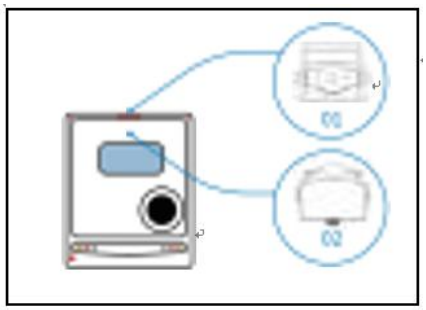
diagrammatic sketch

4.3 Equipment installation recommendations

1. Generally, the antenna should be perpendicular to the ground. Ensure that there are no obstacles around the antenna (Installation diagram) is similar to the figure below.







Solution of poor wireless signal during installation:

(1) Ensure the camera is at least 1 meter above the ground. Both the camera and monitor antennas should be vertical and securely tightened.

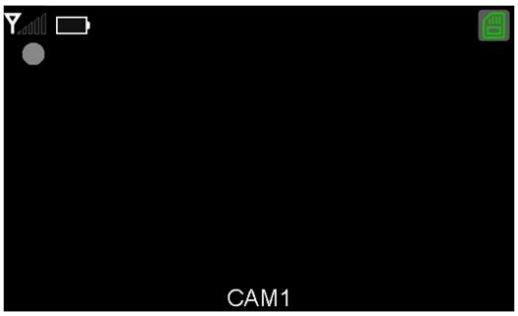
(2) If a metal shield is between the monitor and camera, use an extension antenna to bypass the shield and improve signal transmission.

(3) Install the patch antennas on the same side of the vehicle for better signal transmission..

Note: Please pair the monitor with the camera before installing the wireless system on the vehicle;

5. Menu Operation and Functional Specification

5.1 Preview interface resolution



(1) Signal Icon

(2) Battery Icon

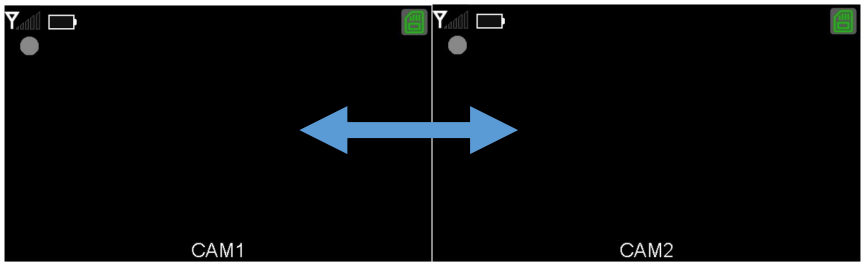
(3) TF Card Icon

(4)No Signal Alert

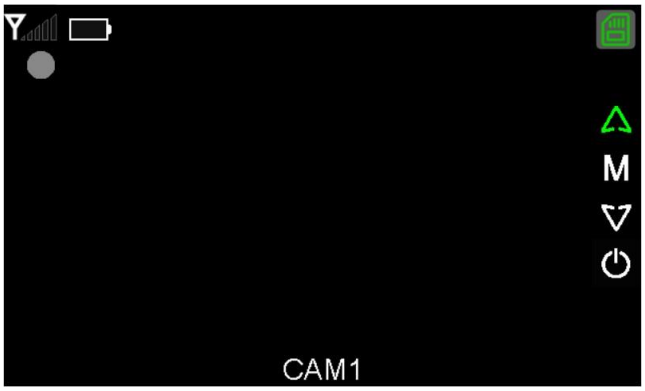
(5) Power Drop Alert.

(6) CAM 1 Indicator

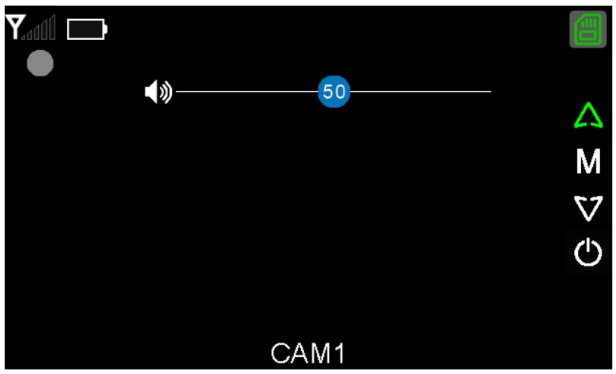
2 screen (if there are multiple cameras, it is the camera 2 screen of the camera code);



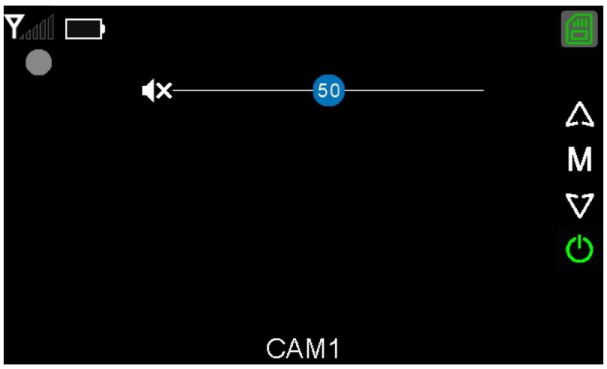
(7) When the key is pressed, the current pressed key is highlighted on the right side of the screen; (as shown, the current pressed volume increases VOL +)



(8) Press VOL + / VOL-key under the current page, the alarm volume bar will pop up, and can adjust the alarm sound, support continuous series, the adjustment range is 0~99; press MENU key to exit directly;



(9) If you press the OK key under the volume bar, you can mute or cancel the mute, and you can press the MENU key to directly exit the volume adjustment;

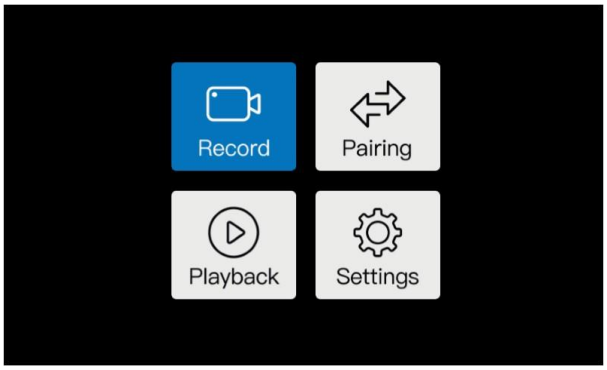


(10) Press the Menu key under the preview interface will call out the main menu, and the main menu content is as described in 5.2;

(11) Under the preview interface for a long time, see 5.2 for details;

(12) Under the preview interface, the gesture can identify the monitor to sleep, wake up and switch the page, see 5.2.2 for details;

5.2 Main Menu interface

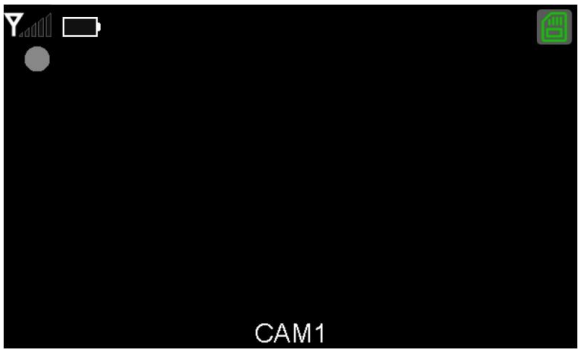


The blue highlight indicates that the icon is selected and can be selected through VOL + / VOL-movement. The main menu contains 4 ICONS, respectively: video, docking, playing and setting;

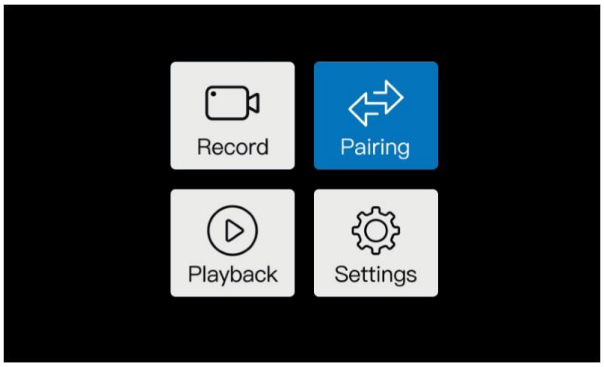
5.2.1 Record

After selecting this icon, press OK to open or close the video; to open the video, a circular icon

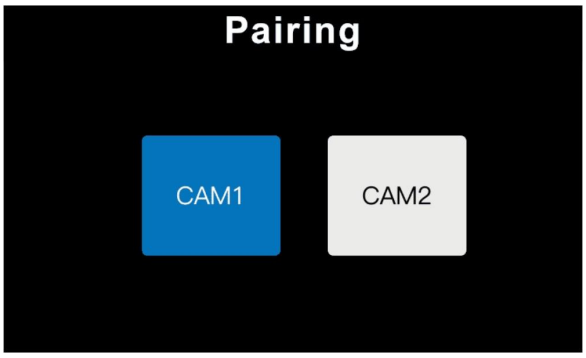
flashes under the signal icon, red for video screen, and gray with no video screen;



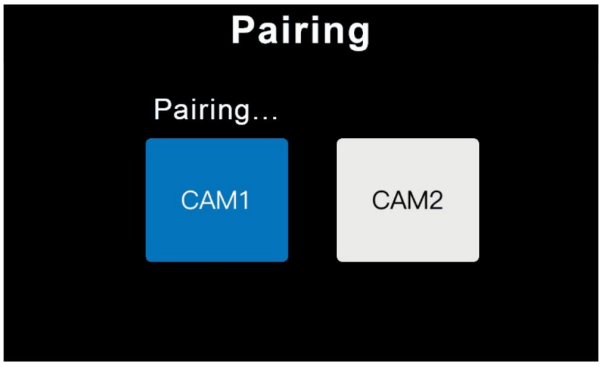
5.2.2 Pairing



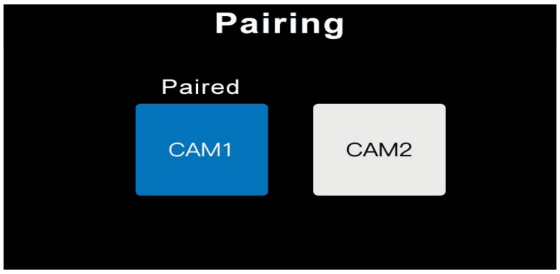
(1) After selecting the icon, press OK to open the pairing page as follows;



(2) Press the OK key in the selected icon to pair the video channel, and the corresponding channel icon will show the Pairing...;start the camera by long pressing the power button on the back of 2s and pair after 8 seconds.



(3) When paired with the camera, paired will be Monitored to indicate that the pairing is successful, and if not, there is no Monitor;

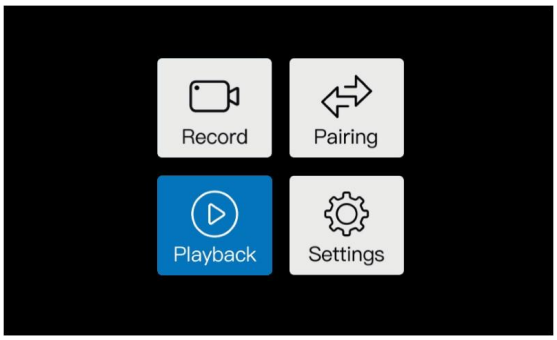


(4) Press the Menu button on the selected channel to clear pairing info;

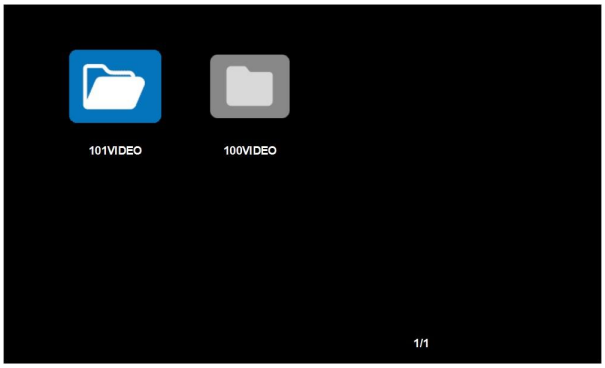
(6) Waking Up and Switching Cams: After pairing two cams, wave your hand left or right to wake them up. Once awake, waving again will switch channels.

(7) Cancel Pairing: Long press the Menu button to cancel pairing.

5.2.3 Playback



(1) After selecting the icon, press OK to open the play page as follows;



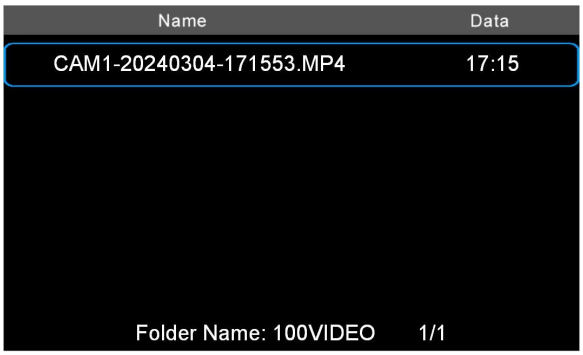
If there is no TF card inserted, or there is no video file in the TF card, indicate that there is no file;

(2)Video Folders: New folders are created when a folder reaches 128 files.

(3)Folder Organization: Folders are numbered by age; higher numbers are newer. Use the VOL+ / VOL- and OK buttons to navigate.

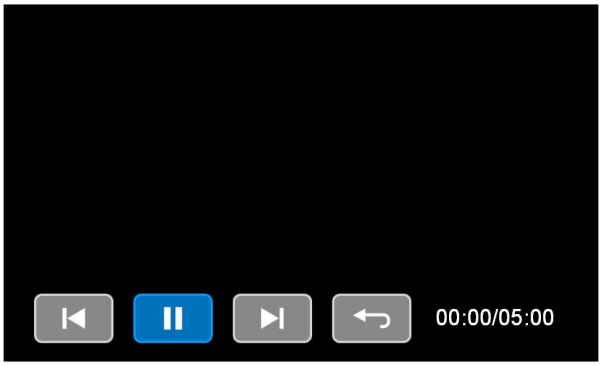
(4)Folder Navigation: Reaching the first or last folder on a page will automatically turn to the previous or next page.

(5) Inside a Folder: Inside the folder, video files are displayed in MP4 format with the file name and date.



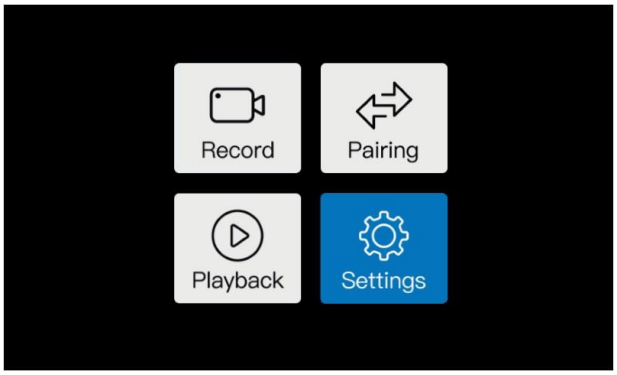
Specific, file name format: channel name-year month day-time and seconds. MP4; Time format: time: minutes

(6) After selecting the video file to be played, press the OK button to open the playing video;

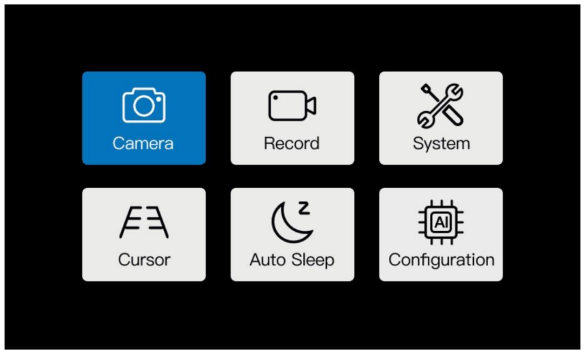


Under this page, there are functions of fast back, play / pause, fast forward and exit respectively, and the time on the right is play time / total time respectively;

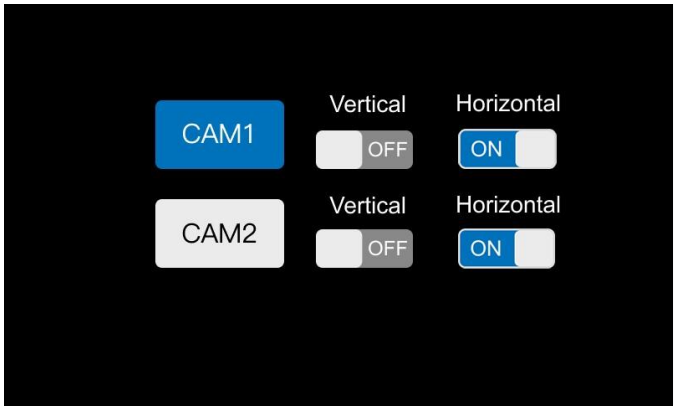
5.2.4 Settings



(1) After selecting the icon, press OK to open the setting interface as follows;



Camera parameter setting

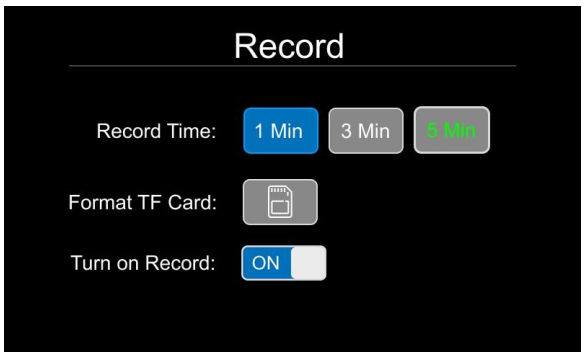


You can set the horizontal and vertical images of the camera picture;

Vertical mirror: close when set to OFF, open when set to ON, the default is OFF;

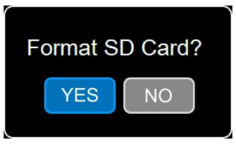
Horizontal mirror: close when set to OFF, open when set to ON, default to ON;

Video recording Settings



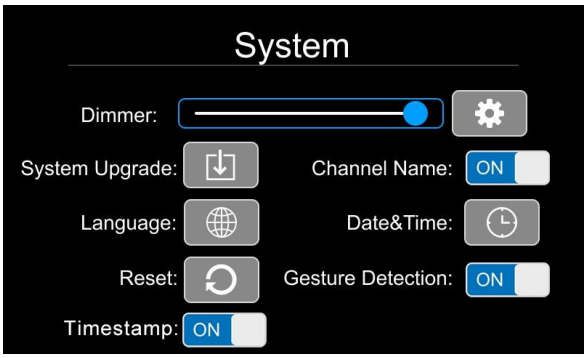
(1) Video time: it can be set to 1 minute, 3 minutes and 5 minutes, that is, set the length of each video file, and the default is 5 minutes. The icon text is gold for the current video duration;

(2) Format the TF card

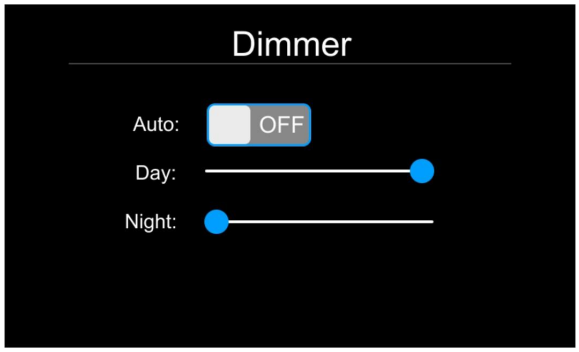


(3)Turn on Record: Power on the video, set to OFF, set to ON, default ON;

Camera parameter setting



(1) Dimmer: Automatic backlight, open the following setting button, will enter the dimmer Settings page, to set whether to open the automatic backlight;



Where Day: represents the maximum value of the automatic backlight range; **Night**: represents the minimum value of the automatic backlight range;

(2) System Upgrade: Upgrade the system using a TF card named SNCC7XFW with a .bin file..

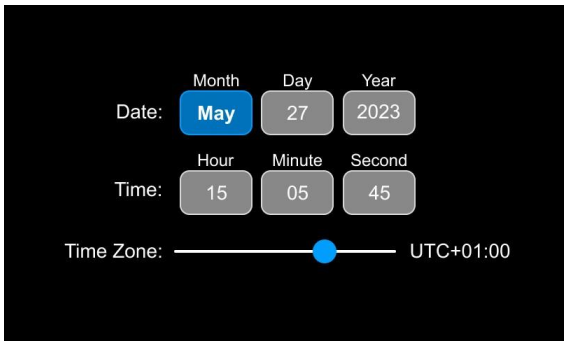
(3) Language: Switch between multiple languages.

(4) Reset: Selecting reset changes system parameters but not the camera or monitor connections.

(5) Timestamp: Timestamp function switch

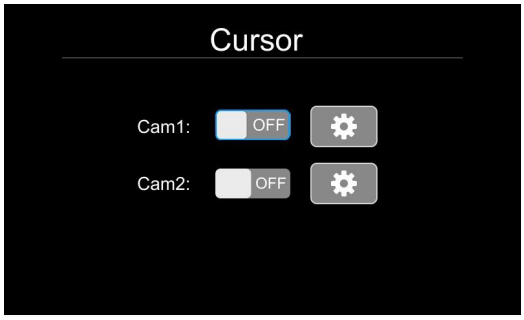
(6) Hide Channel Name: The channel name is not Monitored after opening.

(7) Data & time: time and timely zone setting;



(8) Gesture Detection: Wave detection switch

Reversing cursor setting



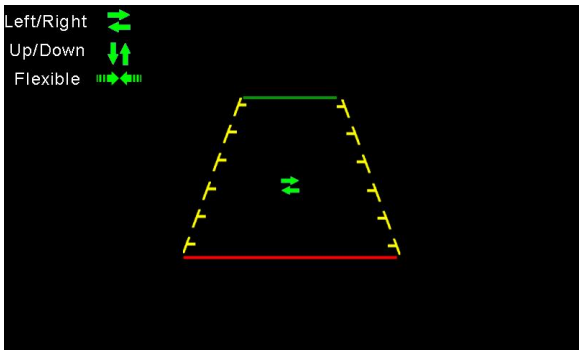
(1) Reversing Cursor: Press the left and right keys, then OK to toggle the reversing cursor ON/OFF. The default setting is OFF. When ON, enter the adjustment interface to position the cursor.

(2) Cursor Adjustment:

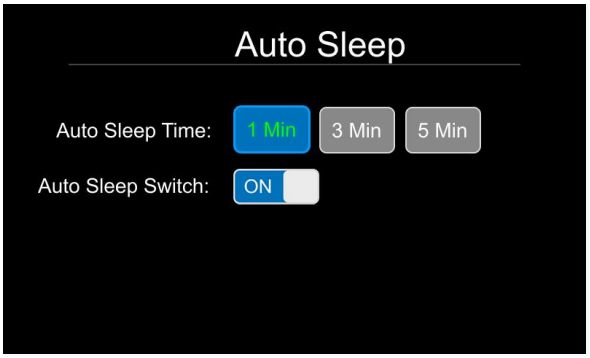
Left/Right Keys: Adjust cursor position and size.

OK Key: Switch between different adjustment modes.

The meaning of the icon in the middle part of the cursor is: the current left and right keys can adjust the left and right movement; the current left and right keys can adjust the cursor size; the left and right keys can adjust the cursor movement up and down;



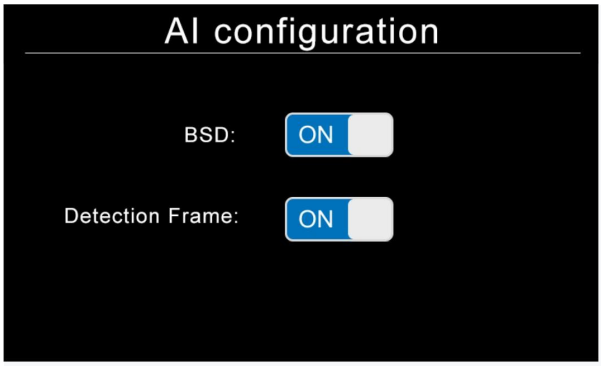
Sleep setting



(1) Auto Sleep Time: represents the countdown time of automatic dormancy,the default is 1 minute. The icon text in gold indicates the current countdown time of automatic dormancy;

(2) Auto Sleep Switch: Automatic sleep open or off option, the default is ON;

The algorithm setting



(1) BSD: blind spot detection (Blind Spot Monitoring, BSD) algorithm to open or close the button, open by default;

(2) Detection Frame: The algorithm box to open or close the button, open by default;

6. Troubleshooting

1. **Monitor has no image and no sound:**

   Check whether the power supply connection is correct, and whether the power supply has a voltage;

2. **The monitor always shows 'No Signal':**

   Check whether the camera is powered on, and whether the power supply indicator light is on;

3. **A pedestrian or car is detected but has no alarm sound:**

   a) Check whether the sound volume is turned off or set too low;

4. **Why the screen suddenly goes black when I check the video?**

   a) Firstly, check if the camera has power. If the camera runs out of power, charge it in time before using it. If it is still not working properly, refer to section 3 of this user manual-3 to pairing the Monitor. If all the methods above fail, please contact us.

5. **What should I do when the camera cannot be connected to?**

   a) Firstly, make sure that the camera is turned on, make sure the camera has sufficient power. If it is still not working properly, refer to section 3 of this user manual-3 to pairing the Monitor. If something still goes wrong, please contact us.

6. **How to wake up the camera in sleep state?**

   a) Open the APP and tap the camera on the camera list interface. If you can't find your camera, continue the following steps. When the camera is dormant, you can wake up by short pressing the power button on the back of the camera. Assuming that the camera and the LCD have been paired, the LCD will automatically wake up the dormant camera, and Monitor the image after waking up.

7. **How is the wireless connection signal of this magnetic 2.4G rearview camera?**

   a) The camera has a wireless signal coverage of up to 197 feet (60 meters), perfect for vehicles less than 30 feet long (the signal intensity range depends on the vehicle type and environment).

8. **What is the low-power function, and what are its benefits?**

   a) Low-power functions are designed to improve energy efficiency. When the LCD is not used, the camera will automatically go into sleep mode, saving power and reducing the need for frequent charging.

9. **Why is this product advertised as 1080P, but the exported video is 720P?**

   a) The camera is indeed equipped with a 1080p sensor, ensuring high-definition image quality. However, due to limitations in wireless technology, the camera's wireless transmission may restrict the video resolution to 720p to maintain a stable signal. Rest assured, despite the wireless transmission limitation, the camera itself maintains the

1080p resolution capability.

10. **Why can't I stick the camera to the car?**

    a) The camera's magnetic base is designed to mount quickly on iron/cobalt/nickel surfaces, ensuring flexibility of installation. If the desired installation location does not have such a surface, you may need to install a metal plate yourself to facilitate mounting in another location.