Haloview

User Manual

RD5 MINI

2.4G Digital 720P 5″ LCD Wireless Monitor

Please read all instructions carefully before using, and keep the manual for future reference.

Contents

● **Storage**

1. Do not expose the monitor to extreme heat, cold, or sudden temperature changes. The storage temperature of this device is -30 to + 80°C or -22 to +176°F . The operating temperature is -20 to +70°C or -4 to 158°F with the humidity under RH90%.
2. Never use this device in environments with excessive moisture, dust or smoke.
3. Avoid dropping or striking this device.
4. Never puncture, scratch or use abrasive cleaning materials on this device.
5. Leave at least a 2" space between the monitor and walls, cabinets or other objects to allow adequate air circulation around the device.
6. The monitor is not designed to be waterproof.

● **Operating Precautions**

1. The device can be powered by a 10 -32 volt automotive battery or vehicle electrical system.
2. 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. The opening of the case should be by professionals.
2. Do not watch the video while driving unless you are monitoring the rear view camera display.

⚠ **Special Notice**

Occasionally, a few highlights or dark spots may occur on the LCD screen. This is a very common phenomenon in active matrix display technology, and doesn't necessarily indicate any defects or faults. Never try to repair this device by yourself. In case of any problems, please turn off the display at once and notify our company or authorized dealer. The monitor is a complex device. Any disassembly or modification may lead to damage and void the warrantee.

● **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. Never use strong solvents such as thinner or benzine, as they might damage the finish of the device.

● **Declaration of conformity**

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

FC   RED

❷ Accessories

U-Support Bracket X1	Suction Cup Bracket X1	Sun shield X1
Camera conversion cable X1	Angle Adjustment Screws X2	Cigarette Lighter X1
Trigger Wires X1 (Optional)	BMW connector adaptor X1	User Manual X1
Bracket Adapter X1	Prewire Bracket X1	12M Cable X1

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User Manual

RD5 MINI

2.4G Digital 720P 5" LCD Wireless Monitor

⚠️ **Special Notice**

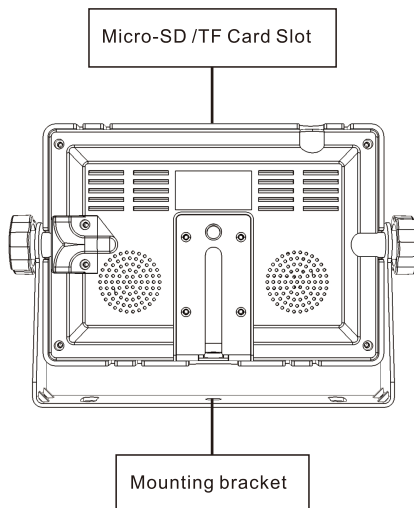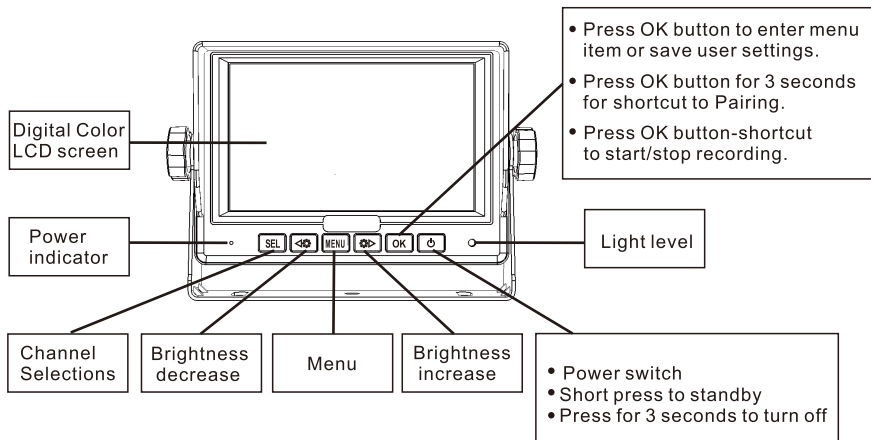Accessories supplied in kit may be different for each application.

❸ Features

1. NORMAL, MIRROR, FLIP and MIR-FLIP viewing available.
2. Split mode, auto-scan mode and single-display mode available.
3. Auto pairing: Auto pairing happens when camera is activated.
4. Auto dim function available.
5. 4 wireless camera inputs.
6. Multiple video formats: PAL / NTSC.
7. Wide voltage input: 10 - 32V.
8. Built-in DVR , playback function
9. Video input: 720P

❹ Specifications

|	
LCD size	5" 16:9
Resolution	800 x 3 (RGB) x 480
Contrast	500:1
Brightness	500 cd/m²
Viewing Angle	U/D: 50/70, R/L: 70
Aspect Ratio	16:9
Channel	4 channels
Operating Frequency	2400 - 2483.5 MHz
Receiving Sensitivity	-85 dBm
Video Compression	H.264
Latency	200ms
Transmitting Distance	984ft line of sight
Micro-SD /TF Card	Max.128G
Video Format	AVI
Power Supply	DC 10-32V
Power Consumption	Max. 5.5W
Loudspeaker	1W/8Ω
Rear Assist Marker Line	Yes
Operating temperature	-20~+70ºC,RH90%
Storage temperature	-30~+80ºC,RH90%

❺ Functions of each part

Digital Color LCD screen

- Press OK button to enter menu item or save user settings.
- Press OK button for 3 seconds for shortcut to Pairing.
- Press OK button-shortcut to start/stop recording.

Power indicator

Light level

Channel Selections

Brightness decrease

Menu

Brightness increase

- Power switch
- Short press to standby
- Press for 3 seconds to turn off

Micro-SD /TF Card Slot

Mounting bracket

1) Installation of Center Mounting Bracket:
　① Adjust monitor height by sliding monitor up or down in slot,
　　then tight knob.
　② Adjust monitor angle by loosening lower knob on center
　　mounting bracket, tilting monitor to desired angle,
　　and re-tighten knob.

Support attaching piece

2) Installation of U-support Bracket

Angle adjustment screws
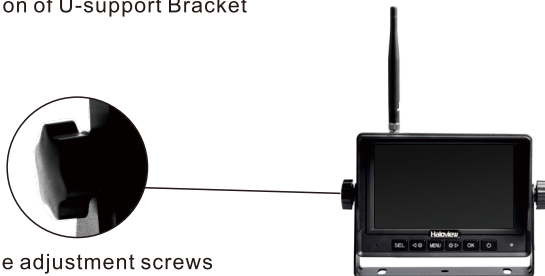
❼ Trigger Wire Function

7 PIN Cable Wiring Instruction (Optional)

| Power Wire	
Red Wire	DC IN 10-32V (Positive Wire)
Black Wire	GND (Negative Wire)
Trigger Wire	
Brown Trigger Wire	When it's activated, the monitor automatically switches to CAM1. All buttons invalid once Brown Trigger Wire triggered
Blue Trigger Wire	When it's activated, the monitor automatically switches to CAM2. (left side camera). All buttons invalid once Blue Trigger Wire triggered
Purple Trigger Wire	When it's activated, the monitor automatically switches to CAM3. (right side camera). All buttons invalid once Purple Trigger Wire triggered
Green Trigger Wire	When it's activated, the monitor automatically switches to CAM4. (rear view camera). All buttons invalid once Green Trigger Wire triggered
Yellow Trigger Wire	When it's activated, the monitor automatically switches to quad or split display. Connection depends on the application request. All buttons invalid once Yellow Trigger Wire triggered.

Trigger Function Introduction

1. When brown/blue/purple/green/yellow wires triggered at the same time by 10-32V, the monitor will display CAM4 as a default priority choice.

2. The proper installation of trigger wires will save battery power. The system will use very little power when monitor is in standby mode. Once any trigger wire is triggered, corresponding channel of CAM will be activated and displayed on the monitor. The system will reenter low power consumption status when triggered wire deactivated.

3. For multi cameras, trigger wires can help switch screen display automatically without pressing SEL button to avoid diverting the driver's attention during driving.

❽ Wiring Instruction

Camera Wiring

Power on the camera by connecting the Red positive wire to 10 - 32V power source, Black to Negative/Ground source, and connecting camera plug.

TX-BOX Connection 1

TX-BOX Connection 2
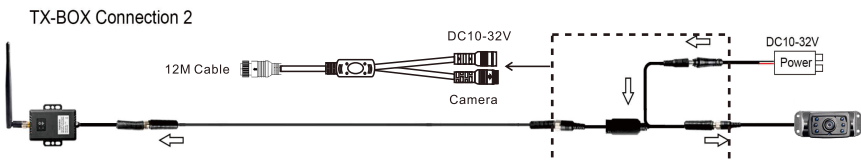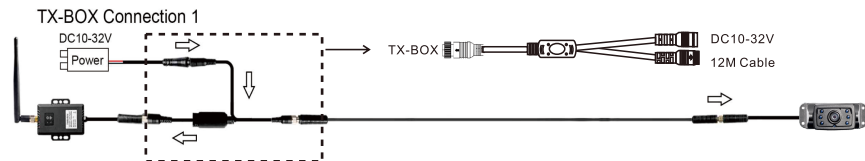
Monitor Wiring
Wiring Without Trigger Wires

This is the most commonly used method for users who have the single camera system. (one monitor and one camera). Connect the monitor with BMW connector adaptor, connect the DC connector of BMW connector adaptor to cigarette lighter. Power the monitor by vehicle 12V through cigarette lighter.

For more cameras, extra cameras can be paired separately to CAM1/CAM2/CAM3/CAM4. Please refer to page 20 PAIRING. CAM4 will be the only channel which will display parking lines. If you need parking lines, please pair a camera to CAM4. You can easily switch camera display by pressing SEL button.

❾ Installation

Please find best signal reception position before installation
The metal body of the vehicle can attenuate wireless signal strength sharply.
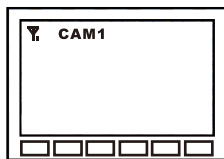It is necessary to test the signal strength before installation.

① Please connect monitor and camera as below picture
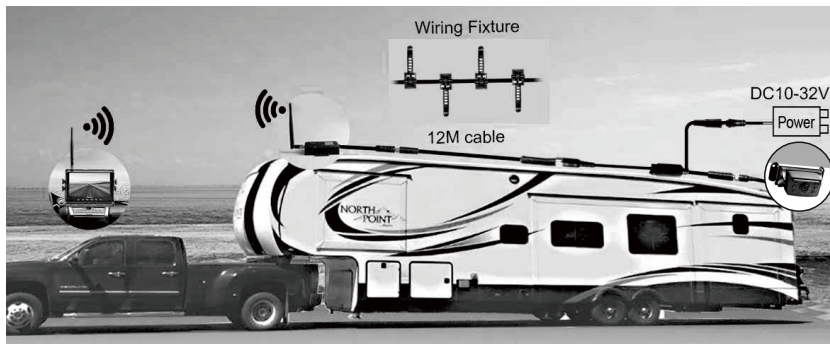
② Pairing the camera to the monitor, please refer to page 20 PAIRING. 4 cameras can be paired separately to CAM1/CAM2/CAM3/CAM4.

③ Put the monitor and the camera at the intended position to test signal strength.
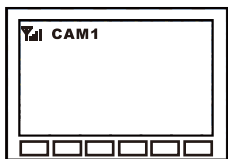
Good signal   **Poor signal**

If signal strength of the position that you planned to install a camera is under 2 bars, please change to another position, or mount the camera higher to make sure the antenna highest of the top without being blocked. Please refer to below pictures:
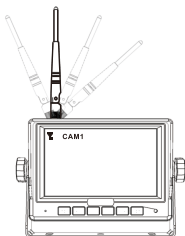
Installation

1) Antennas should be vertically lined to the ground. Make sure there is no obstacle around antennas.
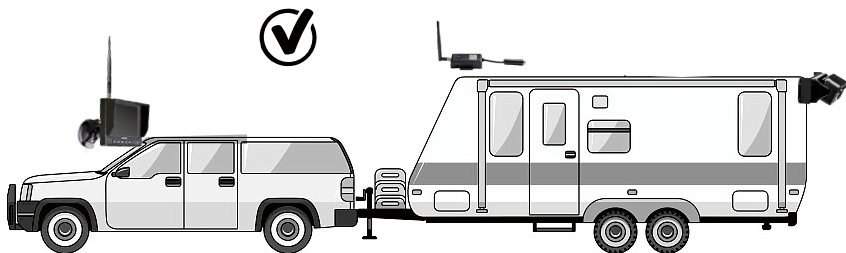
2) Magnet based extension antenna should be attached on the top of the vehicle. Make sure there is no obstacle around.
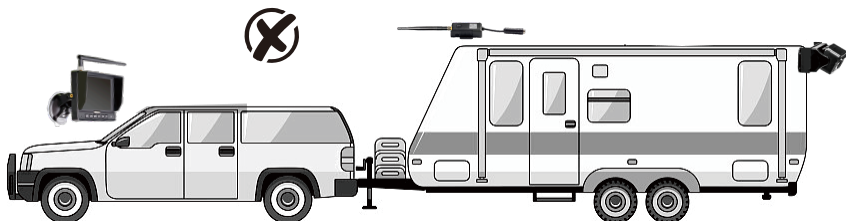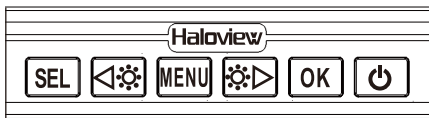

Antenna

If you get poor signal reception, or signal cannot reach at least 2 bars, please adjust the angle of antenna to find best signal reception position.

➓ Menu

10.01 Button Function

| Button	Function
SEL	Switch among cameras
◁☼	Decrease brightness
MENU	Enter menu or return to previous menu
☼▷	Increase brightness
OK	Function① : "Start recording"and"pause recording" Function② : "Start playing"and"pause playing"in video playback interface. Function③ : Press for 3 seconds to enter pairing status Function④ : Press OK button to enter menu item or save user settings.
⏻	Turn on/off monitor and standby

10.02 Menu

1) Press menu button to enter below interface.
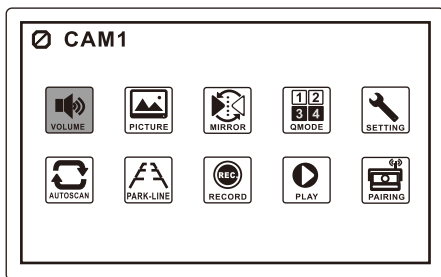
10.03   Volume

MENU is only allowed for operation under single image mode, not quad mode.
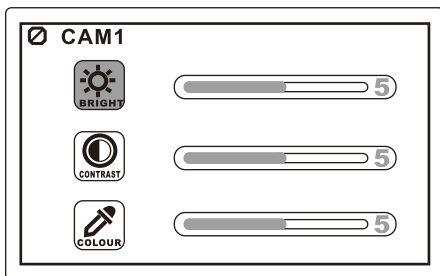Press MENU to display the following options and settings:

```
 Ø CAM1

    VOLUME          [=========        ]  5

    MUTE                  ( ON    OFF )
```
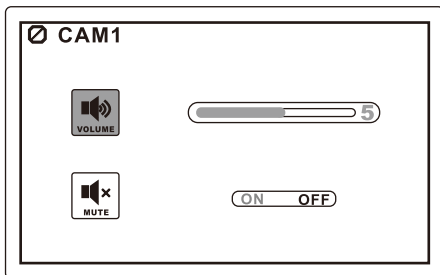
2)Press ◁☼ or ☼▷ to select VOLUME, Press OK to confirm. Press ◁☼ or ☼▷
to adjust settings.
3) Press◁☼ or ☼▷ and OK button to set MUTE or UNMUTE.

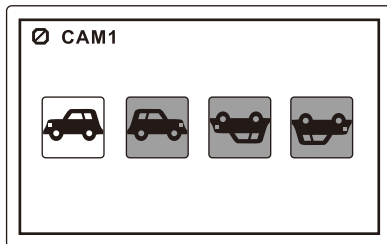## 10.04   Picture

1) Press MENU button to enter menu interface.

2) Press   ◁☼ or ☼▷   to select PICTURE, Press OK to enter.

```
 Ø CAM1

    BRIGHT      [=========        ]  5

    CONTRAST    [=========        ]  5

    COLOUR      [=========        ]  5
```

3)Press ◁☼ or ☼▷ to select BRIGHTNESS/CONTRAST/COLOR,
   Press OK to confirm. Press ◁☼ or ☼▷ to adjust settings.

10.05　Mirror

1) Press MENU button to switch to enter menu interface. Press ◁✺ or ✺▷ to select MIRROR. Press OK button to enter MIRROR setting.

2) Press ◁✺ or ✺▷ to select NORMAL/MIRROR/MIR-FLIP/FLIP.

3) For the Rd5 system, if the present channel connects to TX-BOX, only NORMALI and MIRROR functions are adjustable,If the channel connects to the wireless camera, all function is effective
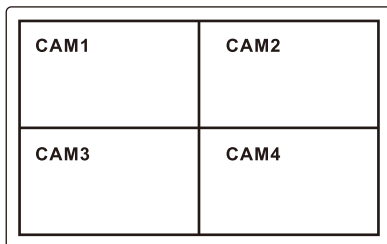
10.06　Qmode

1) Press MENU button to enter menu interface. Press ◁✺ or ✺▷ and OK button to enter QMODE.
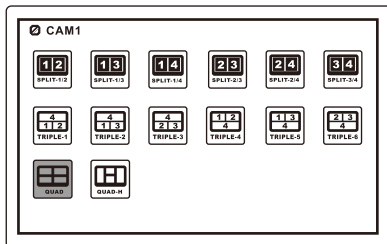
2) Press ◁✺ or ✺▷ to select display mode.

3) After setting, press SEL button to change display mode. For example, If you set QUAD mode" [QUAD] "

Pressing SEL button 4 times, the display will switch CAM1 to QUAD.

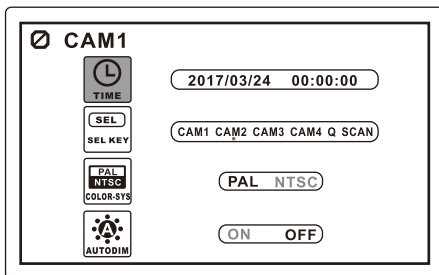| CAM1	CAM2
CAM3	CAM4

4) Quad or Split Audio Setting
   When the monitor display Quad or Split picture, you can press ◁☼ or ☼▷ button to play audio of any of the CAM channel.

| CAM1 ◁)) | CAM2 |
| CAM3 | CAM4 |

| CAM1 | CAM2 ◁)) |
| CAM3 | CAM4 |

| CAM1 | CAM2 |
| CAM3 ◁)) | CAM4 |

| CAM1 | CAM2 |
| CAM3 | CAM4 ◁)) |

10.07   Setting

1) Press MENU button to enter menu interface. Press ◁☼ or ☼▷ to select SETTING. Press OK button to enter SETTING.

2) SEL KEY: User defined CAM switching. For example, if CAM1, CAM2, Q(QUAD MODE) are selected, When pressing SEL key, the display will switch from CAM1 to CAM2, and QUAD MODE, it will skip CAM3, CAM4, and SCAN.

3) Press OK to move selection, press ◁☼ or ☼▷ key to select or cancel. The bottom yellow dot indicates current selection.

Ø CAM1

TIME   2017/03/24   00:00:00

SEL   CAM1 CAM2 CAM3 CAM4 Q SCAN
SEL KEY

PAL
NTSC   PAL   NTSC
COLOR-SYS

AUTODIM   ON   OFF

ICON	FUNCTION
TIME	Set current time. Please make sure your setting is correct, otherwise the time display on recorded videos will be incorrect.
PAL NTSC COLOR-SYS	Set video format of the camera. Please refer to below table.
AUTODIM	When the option is turned "ON", monitor will automatically decrease brightness in low light. Or you can turn "OFF" the auto-dim function.

VIDEO FORMAT	COUNTRY
PAL	Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, China, Cyprus, Czechoslovakia, Denmark, Dubai, Egypt, Finland, France, Germany, Gibraltar, Greece, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Jordan , Kuwait, Luxembourg, Malaysia, Netherlands, New Zealand, Norway, Sultanate of Oman, Poland, Portugal, San Marino, Saudi Arabia, Singapore, Spain, Sweden, Switzerland, Turkey, United Kingdom,
NTSC	Bolivia, Canada, Chile, Colombia, Costa Rica, Ecuador, Japan, South Korea, Mexico, United States

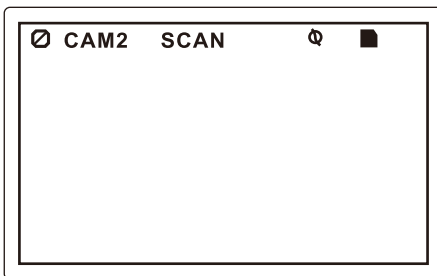2) Press ◁☼ or ☼▷ and OK button to set TIME/PAL-NTSC/AUTODIM.

10.08   Autoscan

1) Press MENU button to enter menu interface. Press ◁☼ or ☼▷ and OK button to enterAUTOSCAN setting.
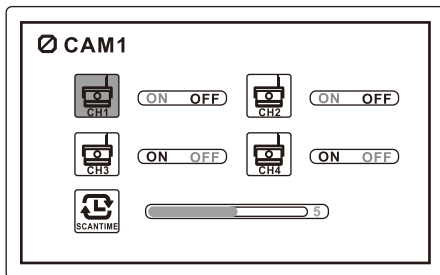
2) Press ◁☼ or ☼▷ and OK button to set AUTOSCAN channels and SCANTIME.

3) Press SEL button to switch to SCAN interface. A SCAN icon will appear on the display. Press again to exit SCAN mode.
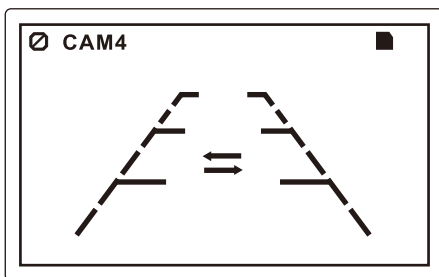
10.09   Park-line

1) Press MENU button to enter menu interface. Press ◁☼ or ☼▷ and OK button
   to enter PARK-LINE.
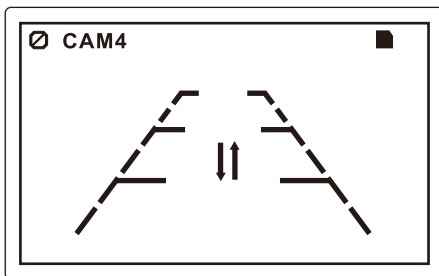   Display: To set the park line display in a certain channel of CAM. Press ◁☼ or ☼▷
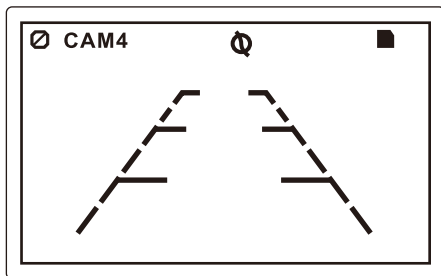   button to select, press OK button to confirm.
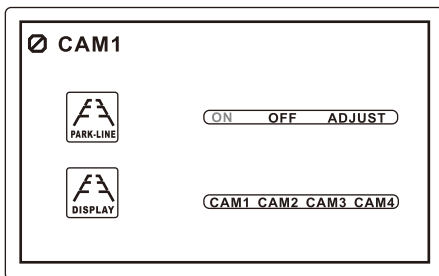
2) Turn on/off parking lines or enter adjust parking lines setting.

3) Press ◁☼ or ☼▷ button to adjust the position of parking lines.

4) Press ◁☼ or ☼▷ button to adjust the position of parking lines
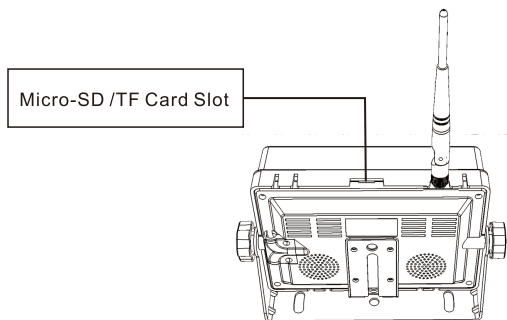
5) **Note**: Park line display in CAM4 as default, but it is settable if you want it display in other channels of CAM.

10.10   Record

1) Insert TF Card
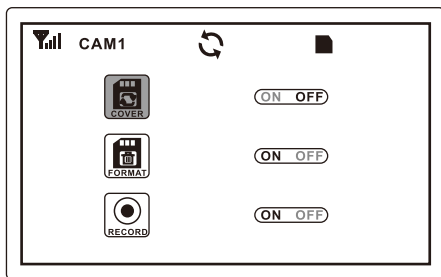Please insert TF card in TF card slot, max 128G Micro-SD/TF Card

Micro-SD /TF Card Slot

2) Format the TF card.
Note: TF card must be formatted before using.
Press MENU button to enter menu interface, and enter RECORD setting

When COVER is turned on, overwrite function will be activated. Previous recorded video files will be overwritten when TF card memory is full.
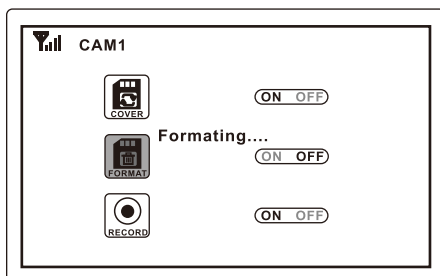
After TF card formatted, a yellow folder icon will be shown on the screen, indicating TF card is available now.
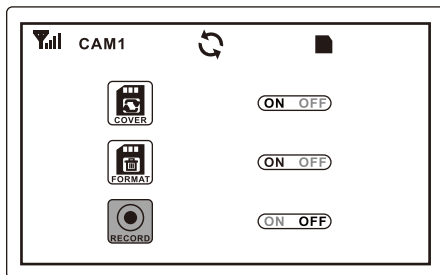
3) After setting, turn on RECORD to start recording or pause recording, or, you can press OK button to start recording or pause recording.

Note: Pressing OK button in QUAD or SPLIT display, the monitor will record all displayed channel of CAM at the same time.

10.11   Play Recorded File

Recorded videos can be played by monitor.

1) Press ◁ 🔆 or 🔆 ▷ and OK button to enter PLAY.

2) Press ◁ 🔆 or 🔆 ▷ and OK button to select a file.

```
Free: 14.48G  Total: 14.48G    ▶

    ..            FOLDER
    120115        FOLDER
        │ │ └── Day
        │ └──── Month
        └────── Year
```
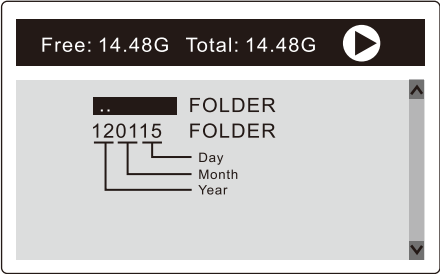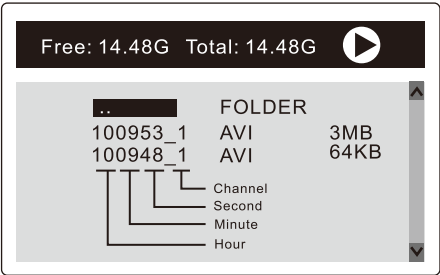
3) Press ◁ 🔆 or 🔆 ▷ to select TIME& CHANNEL, Press OK to enter.

```
Free: 14.48G  Total: 14.48G    ▶

    ..            FOLDER
    100953_1      AVI        3MB
    100948_1      AVI        64KB
        │ │ │ └── Channel
        │ │ └──── Second
        │ └────── Minute
        └──────── Hour
```

4) Press OK button to PLAY or PAUSE the file.

⏸ PAUSE

▶ PLAY
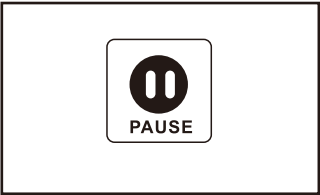
Recording Time

For Micro SD cards with different capacities, please refer to the table below for recording time under 3 different image modes.

This table is for reference only.
Data may vary under different environments.

| TF MODE	8G	16G	32G	64G	128G
SINGLE (1280x720x1)	9H	18H	36H	72H	144H
QUAD (512x352x4)	10H	20H	40H	80H	160H
SPLIT (512x592x2)	11H	22H	44H	88H	176H

10.12   Pairing

1) Press SEL button to select a channel that needs to be paired.

2) Monitor Pairing

Method 1: Enter menu interface and select PARIING, press OK to confirm, you will have 20 seconds for pairing.

Method 2: Press OK button for 3 seconds to enter PAIRING status，you will have 20 seconds for pairing.

```
Ø  CAM1


please  press  pair  key
      on  camera  side
            20
```
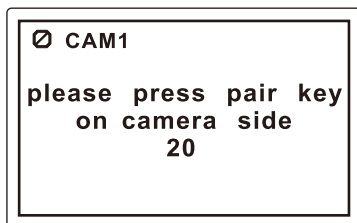
3) Pairing

Method 1：Press the pairing button on the side of the TX-BOX.

Method 2：Power off the TX-BOX and power on it again.
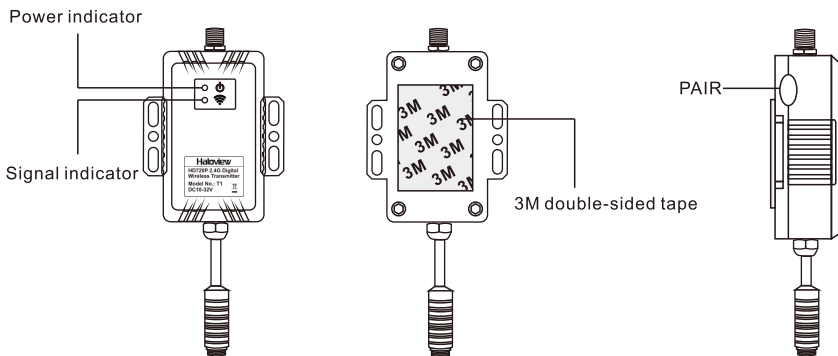

PAIR

4) Video will be displayed after pairing complete.

⚠ **Special Notice**

If no picture displayed after pairing, please retry pairing steps and power-on again the TX-BOX. The pairing must be completed within 20 seconds, otherwise you need to re-power the TX-BOX for pairing.

1. Functions of each part

Power indicator

Signal indicator

PAIR

3M double-sided tape

2. Status indicator

This indicator appears under three status:
1. The TX box is powered on without pairing.
2. The paired monitor is switching camera channel.
3. The paired monitor standby.

1. Press pairing button, 📶 indicator will light on, searching pairing camera for 20 seconds. If no camera available, indicator light will turn off.
2. Under pairing status, 📶 indicator light will normally light on instead of blinking

  if the camera is disconnected.

3. After pairing, 📶 indicator will blinking while transmitting picture.

⑫ Troubleshooting

The symptoms described below do not necessarily mean a failure within the display.
Please check the following items before you initiate request for repair.

Symptoms	Possible Causes/Solutions
No picture No sound	Improper connection of automobile adapter. Use of unauthorized power supply. Power switch is OFF. Please re-pairing the system. Refer to page 20 PAIRING.
No signal	Check whether the camera is powered on. Please check whether antennas are plugged on both monitor and camera. Please check the angle of the antenna. Please check whether metal obstacles near the antenna. Please re-pairing the system. Refer to page 20 PAIRING.
No sound	Check whether the sound volume is turned off or set too low.
Dark picture	Check whether brightness and contrast are adjusted correctly.
No color	Adjust the HUE settings.
Button invalid	All Button invalid when trigger wire is activated. Please deactivate trigger wire signal to get the button function valid. For example, you need to turn off LEFT TURN light or REVERSING light to deactivate trigger wire signal of CAM2 or CAM4. MENU button invalid in split display. If MENU button invalid, please check whether it is under split display. You need to switch to single display by pressing SEL button to get the MENU button valid.
Unable to record	Please check whether TF card inserted Please check whether TF card formatted before recording Please check whether TF card storage full

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