

Haloview

User Manual



MC7102

2.4G Digital 7" LCD Wireless Monitor

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

Haloview
www.haloview.com



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1 Precautions

● 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 warranty.

● 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 benzene, as they might damage the finish of the device.



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.

● 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

2 Accessories



U-Support Bracket X 1



Center Mount Bracket X 1



Sun Shield X 1



Camera conversion cable X 1



Angle Adjustment Screws X 4



Cigarette Lighter X 1



User Manual X 1



Special Notice

Accessories supplied in kit may be different for each application.

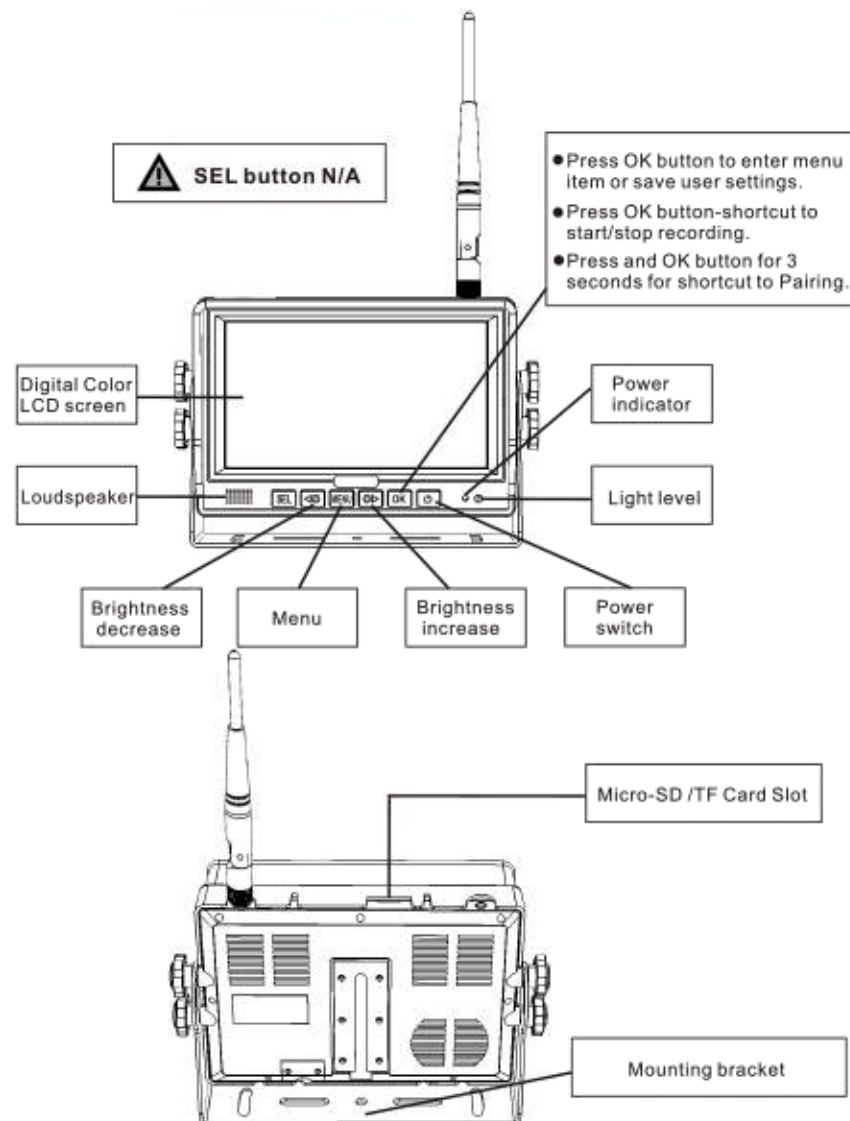
3 Features

1. Single Channel. 1 camera can be paired with more monitors. Support 1T1R, 1T2R, 1T3R and maximum 1T4R.
2. Automatically connection: When the distance between RX and TX is less than 150m, the monitor and camera will be connected automatically.
3. With Smart-IRCUT No color deviation, enable best image reproduction under the sunlight.
4. Built-in mic and speaker for audio. Auto dim function is available.
5. Built-in recorder. Real time recording, video playback.
6. Normal, mirror, FLIP, MIRROR-FLIP viewing options is available.
7. Latency of 200ms, which is imperceptible.
8. 4 high power IR LED provide 32 feet of night vision for camera.
9. 120° wide viewing angle
10. With 150m(492 feet) range line of sight.
11. IP69K waterproof level(highest IP rating) and 5.8G vibration rating.
12. 10-32V wide voltage input.

4 Specifications

LCD size	7" 16:9
Resolution	800 x 3 (RGB) x 480
Contrast	500:1
Brightness	400 cd/m ²
Viewing Angle	U: 50 / D: 70, R/L: 70
Aspect Ratio	16:9
Operating Frequency	2400 - 2483.5 MHz
Receiving Sensitivity	-89 dBm
Decompression Form	MPEG4
Latency	200ms
Transmitting Distance	150M(492 feet)
Micro-SD /TF Card	Max. 128G
System Format	PAL / NTSC
Power Supply	DC 10-32V
Power Consumption	Max. 6W
Loudspeaker	1W/8Ω
Operating temperature	-20~+70°C,RH90%
Storage temperature	-30~+80°C,RH90%

5 Functions of each part



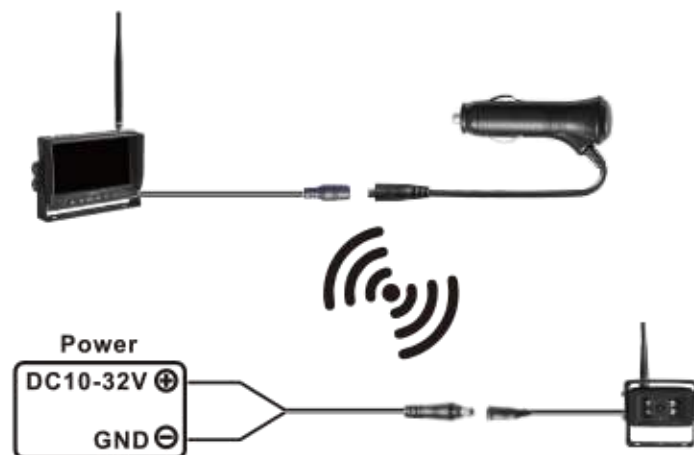
6 Basic Operation

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.



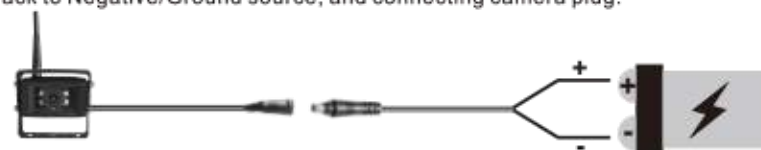
2) Installation of U-support Bracket



7 Wiring Instruction

Camera Wiring

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



Monitor Wiring



8 Installation

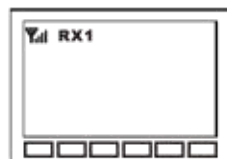
Please find best signal reception position before installation

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

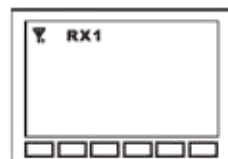
- ① Please connect monitor and camera as below picture



- ② Pairing the camera to the monitor, please refer to page 17 PAIRING.
- ③ Put the monitor and the camera at the intended position to test signal strength.

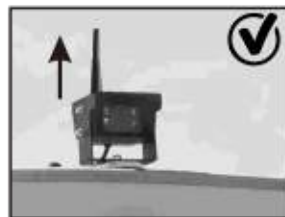
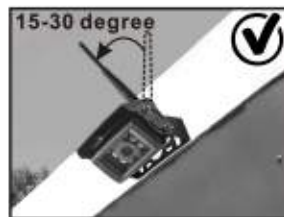


Good signal



Poor signal

If signal strength of the position that you planned to install a camera is under 3 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 Position 1: Mount the camera higher than your vehicle's roof, keeping the antenna vertical.

Installation Position 2: Mount the camera lower but as close as possible to vehicle's roof, and move the antenna outward **15-30 degree**. The antennas proximity to any metal surfaces on the vehicle may affect signal strength.

⚠ Special Notice

After position adjustment, you can start installation if your signal strength is still above 3 bars.

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 or between 2 antennas.



9 Menu

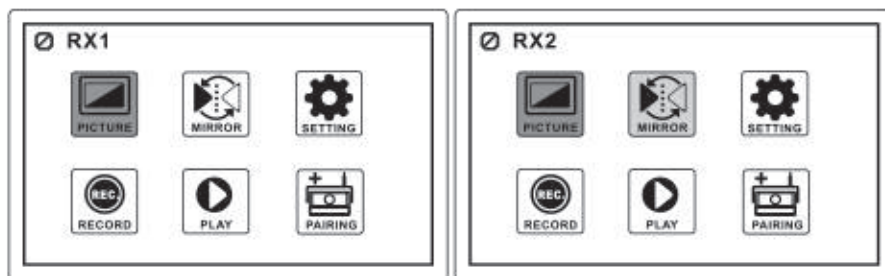
9.1 Button Function



Button	Function
SEL	SEL button N/A
⏮	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

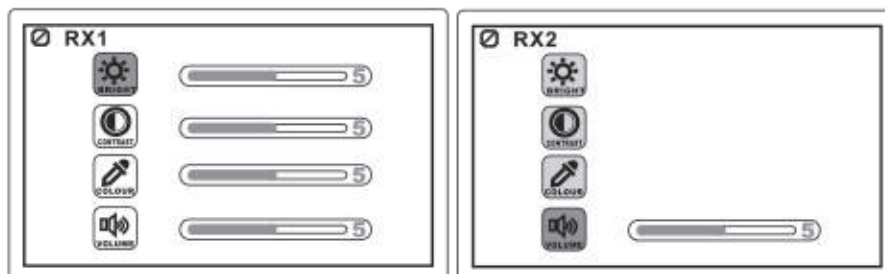
9.2 Menu

Press menu button to enter below interface.



9.3 Picture

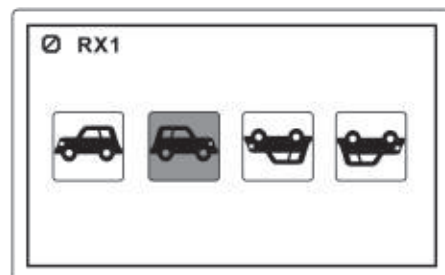
- 1) Press MENU button to enter menu interface.
- 2) Press or to select PICTURE, Press OK to enter.
- 3) Only RX1 can adjust BRIGHTNESS/CONTRAST/COLOR.



- 4) Press or to select BRIGHTNESS/CONTRAST/COLOR/VOLUME, Press OK to confirm. Press or to adjust settings.

9.4 Mirror

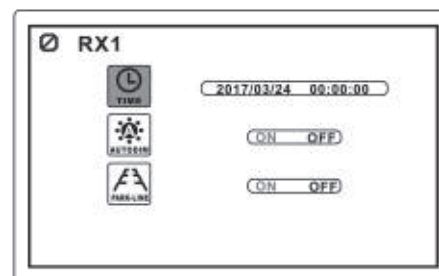
- 1) Press MENU button to switch to enter menu interface. Press or to select MIRROR. Press OK button to enter MIRROR setting.



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

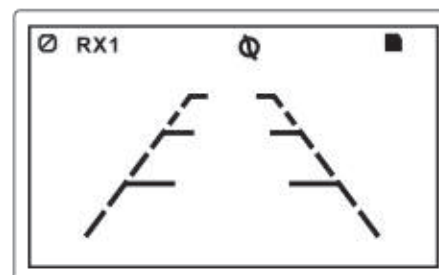
9.5 Setting

- 1) Press MENU button to enter menu interface. Press or to select SETTING. Press OK button to enter SETTING.



ICON	FUNCTION
	Set current time. Please make sure your setting is correct, otherwise the time display on recorded videos will be incorrect.
	When the option is turned "ON", monitor will automatically decrease brightness in low light. Or you can turn "OFF" the auto-dim function.
	Turn "ON" or turn "OFF" the parking lines.

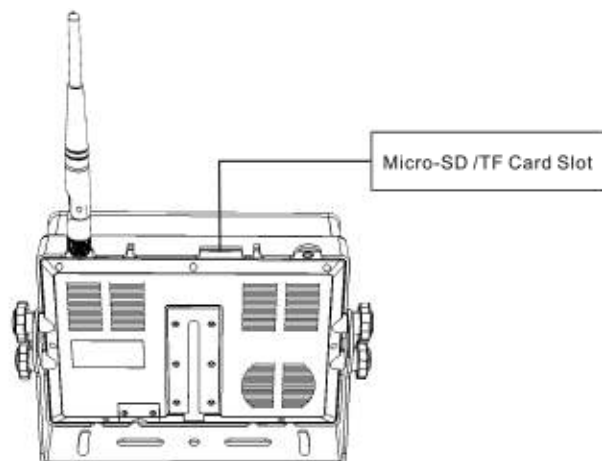
- 2) Press or and OK button to set TIME/AUTODIM/PARKLINE.



9.6 Record

1) Insert TF Card

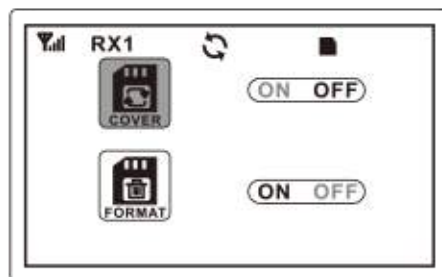
Please insert TF card in TF card slot, max 128G Micro-SD/TF Card



2) Format the TF card.

Note: TF card must be formatted before using.

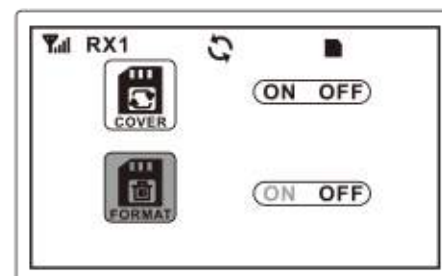
Press MENU button to enter menu interface, and enter RECORD setting



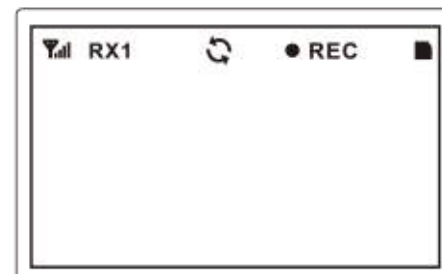
When COVER is turned on, overwrite function will be activated. Previous recorded video files will be overwritten while TF card memory is full.



After TF card formatted, a yellow folder icon will be shown on the screen, indicating TF card is available now.



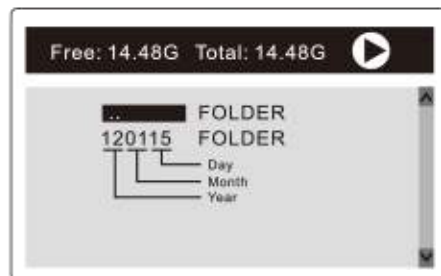
3) After setting, press OK button to start recording or pause recording



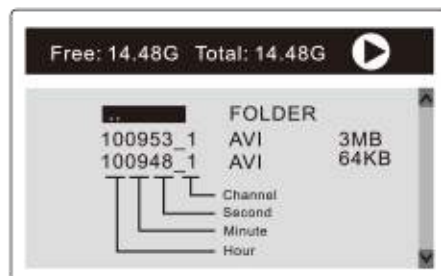
9.7 Play Recorded File

Recorded videos can be played by monitor.

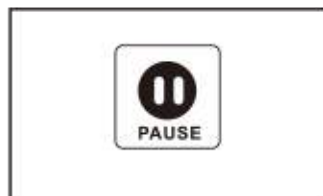
- 1) Press or and OK button to enter PLAY.
- 2) Press or and OK button to select a file.



- 3) Press or to select TIME& CHAMMEL, Press OK to enter.



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



Recording Time

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

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

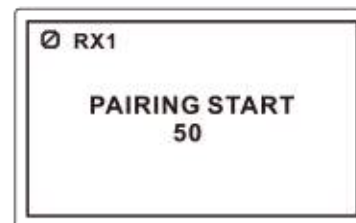
TF	8G	16G	32G	64G	128G
MODE					
SINGLE (640x480x1)	14H	28H	55H	110H	220H

9.8 Pairing

- 1) Monitor Pairing

Method 1: Enter menu interface and select PAIRING, press OK to confirm, you will have 50 seconds for pairing.

Method 2: Press OK button for 3 seconds to enter PAIRING status, you will have 50 seconds for pairing.



- 2) Camera Pairing

Press the pairing button on the back of the camera.

- 3) Video will be displayed after pairing complete.

- 4) The first paired monitor is the RX1, the second paired monitor is the RX2, the third paired monitor is the RX3, the fourth paired monitor is the RX4.

- 5) Pairing method: Power on all monitors and enter PAIRING status, power on the camera and press the PAIRING button at the rear side of the camera, the first paired monitor will be RX1. Press the camera PAIRING button, the second paired monitor will be RX2. Same PAIRING steps for RX3 and RX4.



Special Notice

If no picture displayed after pairing, please retry pairing steps and power-on again the camera. The pairing must be completed within 30 seconds, otherwise it will enter low power state, then the pairing button won't work. If so pls re-power the camera for pairing.

11 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 15 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 15 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.
Unable to record	Please check whether TF card inserted Please check whether TF card formatted before recording Please check whether TF card storage full

The monitor is equipped with Anti-Glare screen. Please remove the screen protector to get best picture quality after installation.

CAMERA SPECIFICATION

Model No.: CA102

Image Device	1/3" CMOS	
TV System	PAL	NTSC
Horizontal Sync Frequency	15.625kHz	15.734kHz
Vertical Sync Frequency	50 Hz	60 Hz
Frame Rate	25 f/s	30 f/s
Effective Pixels	756×504 pixels	
Sensing Area	4.80mm×3.73mm	
Video Output	1.0Vp-p, 75 Ohm	
Scanning System	2:1 Interlace	
Sync. System	Internal	
Gamma Consumption	0.45	
AGC	Auto	
White Balance	Auto	
BLC	Auto	
S/N Ratio	Better than 46.5dB	
Electronic Shutter	Auto:1/60(NTSC)/1/50(PAL)~1/100,000 Seconds	
Operation Frequency	2400-2483.5MHz	
Transmission Distance (barrier free)	150m(492 feet)	
Transmission Power	18dBm	
Video Codec	MPEG4	
Spread SPECTRUM	FHSS	
Latency	200ms	
RF Bit Rate	4Mbps	
Minimum Illumination	0Lux	
Power Supply	DC10~32V	
Night vision distance	8~10m	
Waterproof rating	IP69K	
Viewing Angle	120°	
Audio	Yes	
SMART IR-CUT	Yes	
Operating Temperature	-20°C ~ 70°C, RH95%MAX	
Storage Temperature	-30°C ~ 80°C, RH95%MAX	