# **HD Digital Wireless Backup Camera DVR System Product User Manual & Installation Instructions**



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

## **PACKAGE CONTENTS**



## What You Get

Color CCD Weatherproof Wireless Backup Camera Wireless Antennas 7" Wireless Color LCD Monitor Car cigarette lighter Sunshade Universal Mount With Adhesive Pad Butterfly Bracket Camera Power Cable

Screw Kit for Camera Installation

NOTE: The quantity and appearance of the cameras will vary depending on the product model.

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#### INTRODUCTION

#### NOTE!

Please read all of the installation instructions carefully before installing the product. Improper installation will void manufacture warranty.

Thanks on purchasing ours Digital Wireless Backup Camera DVR System! With this manual, you will be able to properly install and operate the unit.

The Backup Camera System is intended to be installed as a supplement aid to your standard rear view mirror & driving recorder that already exists in your vehicle. The Backup Camera System should not be used as a substitute for the standard rear view mirror or for any other mirror that exists in your vehicle.

In some jurisdictions, it is unlawful for a person to drive a motor vehicle equipped with a TV viewer or screen located forward of the back of the driver's seat or in any location that is visible, directly or indirectly, to the driver while operating the vehicle.

Please read the entire manual and follow the instructions and warnings carefully. Failure to do so can cause serious damage and/or injury, including loss of life. Be sure to obey all applicable local traffic and motor vehicle regulations as it pertains to this product.

Improper installation will void manufacture warranty.

## Usage:

- The Rear View Camera DVR System is designed to help the driver safety detect people and/or objects helping to avoid damage or injury. However, you the driver, must use it properly. Use of this system is not a substitute for safe, people or legal driving.
- Never back up while looking at the monitor alone. You should always check behind
  and around the vehicle when backing up, in the same way as you would if the vehicle
  did not have the Rear View Camera System. If you back up while looking only at the
  monitor, you may cause damage or injury. Always back up slowly.
- The Rear View Camera System is not intended for use during extensive back-up maneuvers or backing into cross traffic or pedestrian walkways.
- Please, always remember, the area displayed by the Rear View Camera System is limited. It does not display the entire panorama that is behind you.

## INSTALLATION

- Electric shock or product malfunction may occur if this product is installed incorrectly.
- Use this product within the voltage range specified. Failure to do so can cause electronic shock or product malfunction.
- Take special care when cleaning the monitor.
- Make sure to firmly affix the product before use.
- If smoke or burning smell is detected, disconnect the system immediately.
- Where the power cable may touch a metal case, cover the cable with friction tape. A short circuit or disconnected wire may cause a fire.
- While installing the Rear View System be careful with the wire positioning in order to avoid wire damage.
- Do not watch movies or operate the monitor while driving; as it may cause an
  accident.
- Do not install the monitor where it may obstruct drivers view or obstruct an air bag device
- Dropping the unit may cause possible mechanical failure.

Before drilling please check that no cable or wiring is on the other side of the wall. Please clamp all wires securely to recycle the possibility of them being damaged while vehicle is in use. Keep all cables away from hot/moving parts and electrical noisy components.

We recommend doing a benchmark test before installation to insure that all components are working properly.

- Step 1: Choose the monitor and camera locations.
- Step 2: Install all cables in vehicle, when necessary a 0.8(20mm) hole should be drilled for passing camera cable through vehicles walls. Install split grommets where applicable.
- Step 3: Once all cables and wiring have been properly routed, perform a system function test by temporarily connecting the system.

#### **Operating Precautions**

- 1. The device may be powered by a 12-36volt battery or the vehicle's electrical system.
- 2.Make sure all cables are connected properly. Improper cable connections may damage the monitor. Remove the power cable connections when not using the device.

## Warning!

- 1. This monitor is high voltage. Only professionals should open the monitor's case.
- 2.Do not watch the video while driving unless you are monitoring the rear view camera display.

## **Special Note**

Occasionally, a few highlights or dark spots may appear on the LCD screen. This does not necessarily indicate any monitor defects. Never try to repair this device yourself. If any problems occur, immediately turn the display off and notify our company or an authorized dealer. Any disassembly or modification may lead to damage and will also void the warranty.

## **Camera Connection:**

Locate the clearance lights wiring on your vehicle. You may need to remove the interior panel in order to locate. Connect the power cables for camera: Red wire to light's positive; Black wire to chassis ground.

## **Monitor Connection:**

 ${\bf Cigarette\ lighter\ adapter: firmly\ insert\ the\ lighter\ plug\ to\ the\ cigarette\ lighter\ socket.}$ 

Loose lead wire: To power the system connect the power (RED) 12V + wire to ignition power and the ground (BLACK) wire to the chassis ground. These are the only wires needed to power the system. Press "left" or "right" keys to toggle between different views.

DO NOT INSTALL monitor where it may obstruct driver view or obstruct air bag devices.

## **OPERATION GUIDE**

- 1. The monitor will automatically turn on when connected to a power source.
- 2. Image will automatically appear on the screen when a trigger is activated.
- 3. Grid lines can be turned ON/OFF.
- 4. Support recycle driving record function. Support 8GB to 128GB SD card.

## **SAFETY NOTICE**

This system is designed as a driver's aid.

Just using a backup camera will not completely erase a vehicle's blind spots.

# **System Operations**

**Button introduction** 



1. - 2.MENU 3.+ 4.Power 5.Channel6.Enter 7.Reversing line

## **System Setting**

To get to Main MENU, Press the MENU button to enter the setting, press the Increase or Decrease button to switch between different setting options, use the SEL buttons to select the setting.



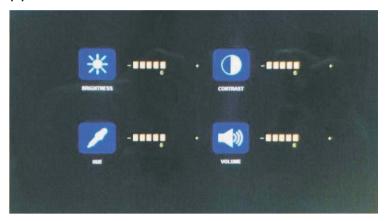
## (1) PAIRING

Press MENU and Choice the "PAIRING" icon and then press SEL to enter the camera view selection interface. User will have 20 seconds to press the buttons attached to the camera harness to let the camera pairing with the channel you have selected on the monitor.

## Remind:

- 1. Press CH- button to choice which Channel (CAM1 CAM2 CAM3 CAM4) you want to pairing with the camera. Then to do the Paring operation.
- 2. Just need to press the camera pairing button for a very short time during the 20 seconds pairing time.
- If the camera pairing button been press, Paring operation need to be done again.
- 4. Keep the monitor as close to the camera as possible when doing the pairing operation.

## (2)PICTURE



Press MENU and Choice the "PICTURE" icon and then press SEL to get in to the screen setting. User can use the Increase or Decrease and SEL button to set the screen BRIGHTNESS, CONTRAST, HUE. Press MENU button return to main menu.

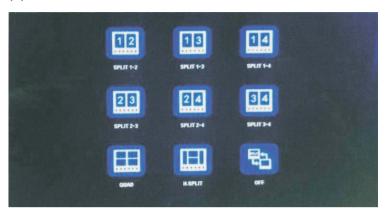
NOTE: The system have no volume function.

# (3)MIR-FLIP



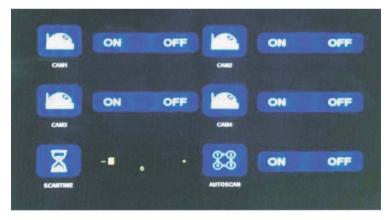
Press MENU and Choice the "MIR-FLIP" icon and then press SEL to get in to the image setting. User can use the Increase or Decrease button to set the image NORMOL, MIRROR, FLIP, MIR-FLIP. Press MENU button return to main menu.

# (4)MODE



Press MENU and Choice the "MODE" icon and then press SEL to get in to the display format setting. This monitor has 9 different display modes. You can use the Increase or Decrease and SEL button to choice the display that you need. Press MENU button return to main menu.

# (5) CAM-SETUP



Press MENU and Choice the "CAM-SETUP" icon and then press SEL to get in to the camera signal channel settings. You can turn on or turn off the camera signal channel as you need. Press MENU button return to main menu.

# (6) SYSTEM



Press MENU and Choice the "SYSTEM" icon and then press SEL to get in to the system settings. System settings included: TIME, LANGUAGE, COLOR-SYS, AUTO-DIM, DELAYTIME (Trigger delay), P-LINE(Parking guide line). Use the Increase or Decrease and SEL button to do the setting. Press MENU button return to main menu.

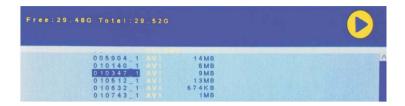
# (7)PLAY



Press MENU and Choice the "PLAY" icon and then press SEL to enter the record video library.



Press SEL button to enter record day director and then press Decrease button to choice which day video you want to watch.



After choice the day, then press the SEL button to enter choice the record video. Press Decrease button to choice video and then press SEL to Play. Press MENU to exit.

# (7) RECORD



Press MENU and Choice the "RECORD" icon and then press SEL to enter record setting. Press Increase or Decrease button to choice the setting. Press MENU button return to main menu.

REWRITE ON: When the SD card is full, the monitor will delete the earliest manual/timing record file one by one and keep recording.

REWRITE OFF: When the SD card is full, the recorder will stop working.

FORMAT: SD card must be formatted before being used. All documents in SD card will be lost once user format the card.

## **Recorder Function Remind:**

- 1. The recorder can work well with Class 8 and Class 10 SD Card. It can not work well with Class 4 SD Card.
- 2. After user plug the SD card in the monitor, please format the SD card.
- 3. The recorder can record 1 camera channel, 2 camera channels or 4 camera channels at the same time. But need all the cameras image be display on the screen. If 2 cameras or 4 cameras system just 1 camera image be display on the screen, it just can record the image that be display on the screen. If the screen show dual split or quad split display, all the cameras images be display on screen can be record.
- 4. After user format SD card and exit to the camera image, Please press the SEL button to start recording(The screen will display the word REC). If the recorder on recording, press SEL button, the recorder will stop recording.



## **CH-Button**

- 1. User can press the CH- button to choice the which camera channel can be show on the monitor(CAM1, CAM2, CAM3, CAM4 Dual Split, Quad Split).
- 2. When the monitor enters the automatic scan mode, you only need to press the CH button again to exit.
- 3. Before pairing the camera to the monitor, user also need to use CH- to choice the camera to be paired with which channel (CAM1, CAM2, CAM3, CAM4).

## **Recorder Function**

- 1. The recorder can work well with Class 8 and Class 10 SD Card. It can not work well with Class 4 SD Card.
- 2. After user plug the SD card in the monitor, please format the SD card.
- 3. The recorder just recorder the image display on the monitor.
- 4. The recorder can support 8GB-128GB SD card.
- 5. Support Loop recording, press SEL button to start or stop recording.

## **Monitor Specification**

- Supports both NTSC and PAL video systems
- Support up for 4 cameras
- Display effect can be changed for each individual camera
- Multiple Viewing Options Single/Split Screen/Quad
- Grid lines (can be switched on/off)
- Operating frequency: 2400-2483.5MHZ
- Transmitted Power:18db
- •Resolution: 1280 (H) X 1024 (V)
- Contrast: 500:1
- •Brightness: 500cd/m2
- Response Time(ms): 25
- Power Supply: DC12-36V
- •Power consumption: <500mA
- •Operating temperature: -20° C ~ 70° C
- •Storage temperature: -30° C~80° C

## **Camera Specification**

- •Image Sensor: 1/2.7 inch Starlight HD
- Picture Elements: 250,000 pixels • View Angle: 127° [H] 170° [D]
- •Resolution: 1000TV lines
  •TV System: PAL/NTSC
- •Waterproof Rating: IP69
- Minimum illumination: 0.5luxPower Supply: DC12V-36V
- Operating frequency: 2400-2483.5MHZ
- •Operating Temperature -20° C ~ +70° C / RH 95% Max
- •Storage Temperature -30° C ~ +80° C / RH 95% Max

## **Troubleshooting**

#### **Monitor No Power**

- -Car engine has not been started, start the car engine
- -Incorrect wiring connection. Check the wiring
- -Monitor power off in default, press power button to turn on

#### Camera No Power

- -Car engine has not been started, start the car engine
- -Incorrect wiring connection. Check the wiring

## No signal

-Check whether the camera has power supply (Make sure the power supply stability voltage enough ). Pair the monitor and the camera again.

## Dark picture

-Check whether brightness and contrast are adjusted correctly

#### No Color

-Adjust the HUE settings.

## Weak signal

-Check whether there is any interference and ensure that the camera's bracket is connected to the metal

#### SD card can not be write

-Use Class 10 SD card. Make sure SD card is 8GB-128GB. Do the format operation and press SEL button begin to recording.

## ONE YEAR WARRANTY

OUR COMPANY WARRANTS THIS PRODUCT AGAINST MATERIAL DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF PURCHASE. WE RESERVE THE RIGHT TO REPAIR OR REPLACE ANY SUCH DEFECTIVE UNIT AT OUR SOLE DISCRETION. OUR COMPANY IS NOT RESPONSIBLE FOR A DEFECT IN THE SYSTEM AS A RESULT OF MISUSE, IMPROPER INSTALLATION, DAMAGE OR MISHANDLING OF THE ELECTRONIC COMPONENTS.OUR COMPANY IS NOT RESPONSIBLE FOR CONSEQUENTIAL DAMAGES OF ANY KIND. THIS WARRANTY IS VOID IF: DEFECTS IN MATERIALS OR WORKMANSHIP OR DAMAGES RESULT FROM REPAIRS OR ALTERATIONS WHICH HAVE BEEN MADE OR ATTEMPTED BY OTHERS OR THE UNAUTHORIZED USE OF NONCONFORMING PARTS; THE DAMAGE IS DUE TO NORMAL WEAR AND TEAR, THIS DAMAGE IS DUE TO ABUSE, IMPROPER MAINTENANCE, NEGLECT OR ACCIDENT; OR THE DAMAGE IS DUE TO USE OF THE SYSTEM AFTER PARTIAL FAILURE OR USE WITH IMPROPER ACCESSORIES.

## **WARRANTY PERFORMANCE**

DURING THE ABOVE WARRANTY PERIOD, SHOULD YOUR REAR VIEW SAFETY PRODUCT EXHIBIT A DEFECT IN MATERIAL OR WORKMANSHIP, SUCH DEFECT WILL BE REPAIRED WHEN THE COMPLETE PRODUCT IS RETURNED, POSTAGE PREPAID AND INSURED.

## **FCC Warning Statement**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. 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 device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.