

Digital Wireless Camera System with Cigarette Lighter Adaptor

Product Manual / Installation Instructions



Rear View Camera Systems

What's in the Box?

- 1 5inch Digital Wireless Monitor
- 1 Wireless Backup Camera With Power Cable
- 1 Bracket

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Introduction

Congratulations on purchasing a Rear View Backup Camera 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 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.

Safety Information

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 manufacturer's warranty.

USAGE

- The Rear View Camera System is designed to help the driver safely 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, proper 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.

Safety Information

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 a burning smell is detected, disconnect the system immediately.
- Where the power cable may touch a metal case, cover the cable with a 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.
- The Rear View System should only be used when the vehicle is in reverse.
- 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 Beginning Installation

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

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 and the system has paired, perform a system function test by temporarily connecting the system. If the problem persists see troubleshooting (page 19).

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

SYSTEM COMES PAIRED.

- But if there is no image on monitor, your system is NOT paired and needs to be paired. (see page 9)

Installation Guide

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:

- Firmly insert the lighter plug to cigarette lighter socket. Do not install the monitor where it may obstruct driver's view or obstruct and air bag device.

Cleaning

- If dirt, rain or snow attaches to the camera, the monitor may not clearly display objects.
- Do not use alcohol, benzene or thinner to clean the camera. This will cause discoloration. To clean the camera, wipe with a clean cloth dampened with mild cleaner diluted with water and then wipe with a dry cloth.

Pairing:

1. Connect camera you are pairing to power
 2. Press "REV" in short time enter pairing model
 3. The system should pair automatically
- NOTE: Please make sure the camera is receiving power when you pair

System Operation

System Operation:

To turn on the monitor, press "POWER ON" button.

To get to Main Menu, press "MENU"

Use the arrow keys to navigate the menu and use the "MENU" button to confirm your selection.

To go back, press the "REV" button.

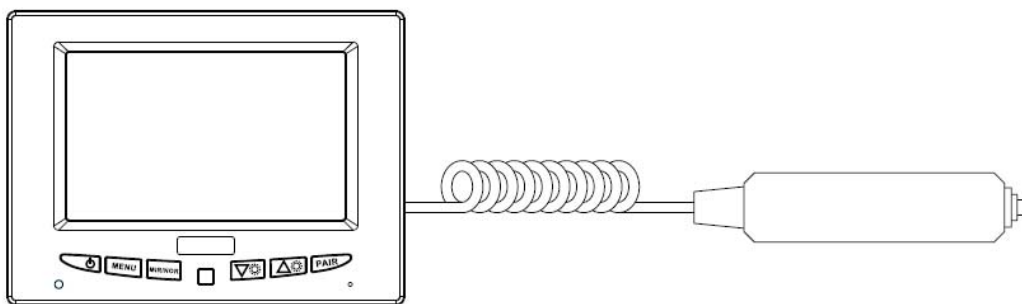
To adjust the volume, use the up and down arrows while viewing the camera

Menu Options:

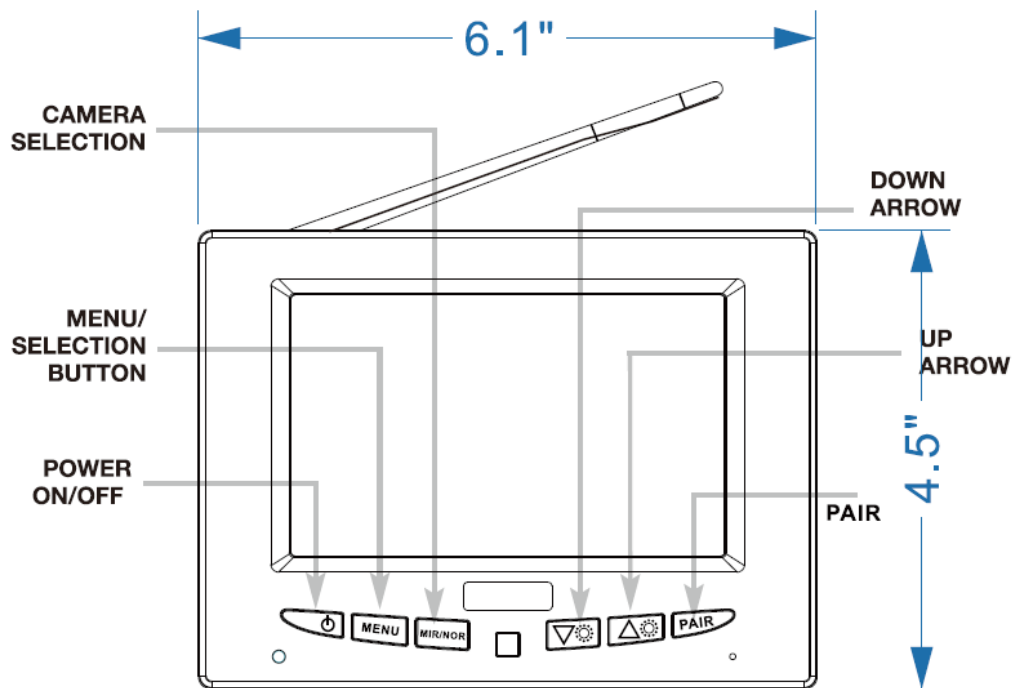
Image - adjust the image properties
(brightness,contrast,saturation)

Rotate - rotate the image in all four directions

Settings - adjust the grid-lines and the frequency

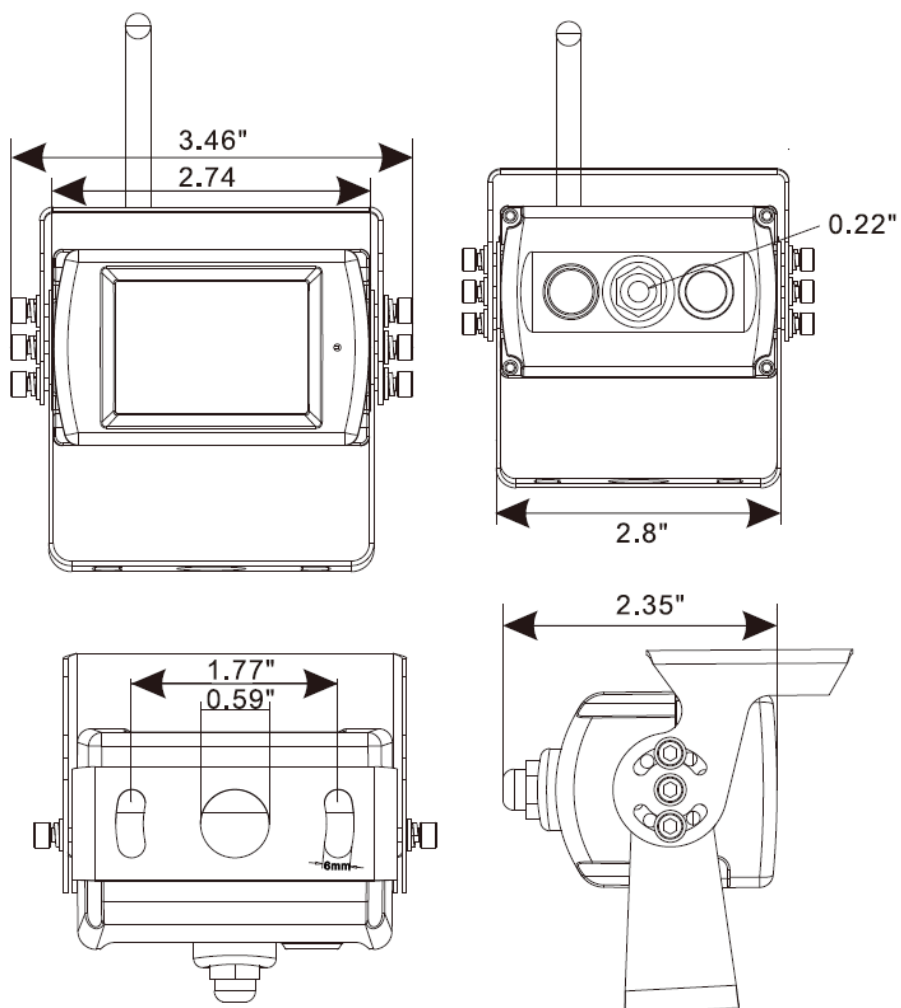


Operational Diagram



TFT LCD Digital Monitor	
Panel Size	5" LED Digital Panel
Video System	NTSC / PAL Automatic detection
Resolution	480 X 3 (RGB) X272
Brightness	350 cd/
Contrast ratio	500:1
Screen Mode	16:9
Field of View	Top 50° / Bottom 70° / Left 70° / Right 70°
Audio Output optiona	0.5W speaker
Dot pitch	0.077(W) × 0.231(H) mm
Active area	110.000(W) × 62.832(H) mm
Power Input	DC10-32V
Operating Temp.	-20°C ~ +70°C RH 90% MAX
Storing Temp.	-30°C ~ +80°C RH 90% MAX
frequency	2407-2473.5MHz
Transmission Type	Digital wireless
Transmission Range	300m (barrier-free)
Video input	1 channel
Video source	1VP-P 75Ω
AUTO	pairyes
Power consumption	About 4W
Power supply	DC9-32V

Camera Dimensions



Camera	
CAMERA type	1099 color camera
Video System	Internal
Effective Pixel	Array976 (H) x 496(V)
Camera correction	R=0.45-1.0
lensF	=2.5mm
Waterproof rate	IP68
Power consumption	About 3.5W(IR ON)
Power Input	DC10-32V
Operating Temp	-20°C ~ +70°C RH 90% MAX
Storing Temp	-30°C ~ +80°C RH 90% MAX
frequency	2407-2473.5MHz
Transmission Type	Digital wireless
Transmission Range	300m (barrier-free)
Video source	1VP-P 75Ω
S/N ratio	More than 48 Db
white balance	auto
IR control	auto

Splitting

Installing sun shield: Put shade cover on the display. Installing back cover: Put the monitor with shade cover in the back cover (only for embedded monitor)



Positioning



Troubleshooting

Monitor Displays Blue Screen & Displays No Signal

- Do a hard reset, unplug all cables and power cables leave out for 1 minute and then re-connect them.
- Check to ensure that the connection to the camera is tight.

No Image On Screen

- Verify camera is on correct camera input
- Verify camera is connected to power/ground

Audio on Camera

- Verify chosen camera has audio
- Verify volume setting

Signal Issues

- The antenna booster is an extendable antenna that can be used in case of signal issues.
- The cable is attached just like the standard antenna by screwing on the connection- The antenna itself is attached magnetically.

One Year Warranty

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.

Safety Precautions

The monitor should be kept out of direct sunlight, heat, water or humidity (it is made of sophisticated electronic equipment and must be used with care to avoid malfunction due to improper use or carelessness).

Make sure the monitor is securely fastened in a safe place. Please pay special attention to the position of the cable when installing the rear view system to avoid the cable being damaged

FCC STATEMENT

1. 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.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital, 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 the 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.