

# Wireless Backup Camera System With 7" Dual Screen Display

Product Manual / Installation Instructions



Rear View Camera Systems  
Model # RVS- 2CAM

Rear View Safety, Inc. © 2016

 REAR VIEW  
**SAFETY**  
A Safe Fleet Brand

# What's in the Box?



- 1 Split Screen Digital Wireless Monitor with Cigarette Lighter Adaptor OR Loose Lead Wires (See Item Options)
- 1 CCD Wireless Backup Camera with Power Cable
- 1 Extendable Suction Cup Mount for Monitor

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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.

## Safety Information

If you have questions about this product, contact:

Customer Service:  
Rear View Safety  
1797 Atlantic Avenue  
Brooklyn, NY 11233  
Tel: 1.800.764.1028

IN NO EVENT SHALL SELLER OR MANUFACTURER BE LIABLE FOR ANY DIRECT OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE PRODUCT OR THE USE OF ANY PRODUCT.



## 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 20).

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 10)



## 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:

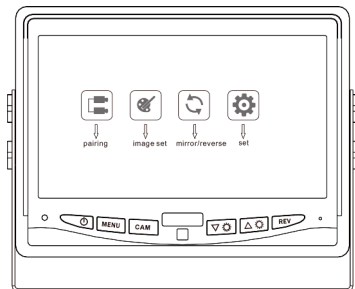
- Firmly insert the lighter plug to cigarette lighter socket. Do not install the monitor where it may obstruct driver's view or obstruct and air bag device.

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## 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.

# Auto Pairing



## Auto Pairing:

1. Connect camera you are pairing to power.
2. Use the "CAM" button to select the channel you want to pair to.
3. Press "MENU" to open the menu and press "MENU" again to initiate "pairing mode". You will see the system start counting down from 50 seconds. Once "pairing mode" is active it will last for 50 seconds.
4. The system should pair automatically.
5. Unplug paired camera from power before pairing a 2nd camera.

NOTE: Please make sure the camera is receiving power when you pair.

## 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

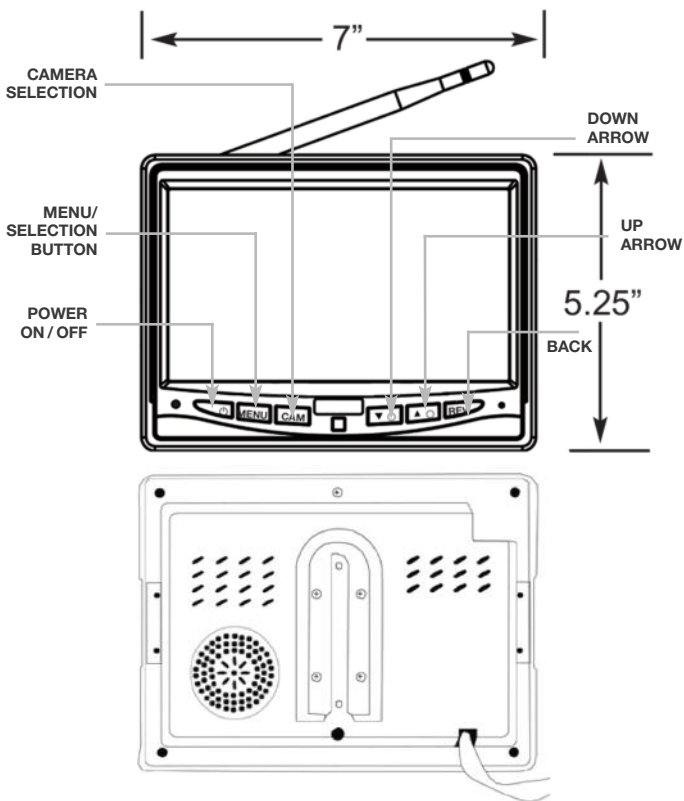
## Turning on Grid Lines:

Press "MENU" to enter the Main Menu

Highlight "SETTINGS", press "MENU" to enter

Highlight "GRID LINES" or "DISTANCE GRID", Press "MENU", highlight "ON" or "OFF", press "MENU" to confirm and "REV" to exit

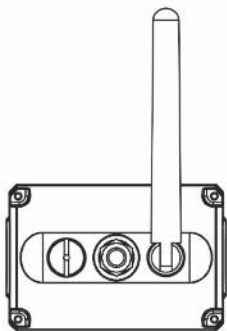
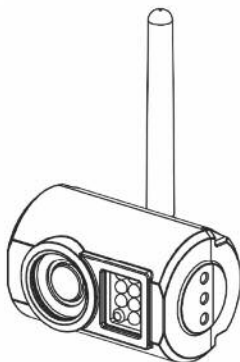
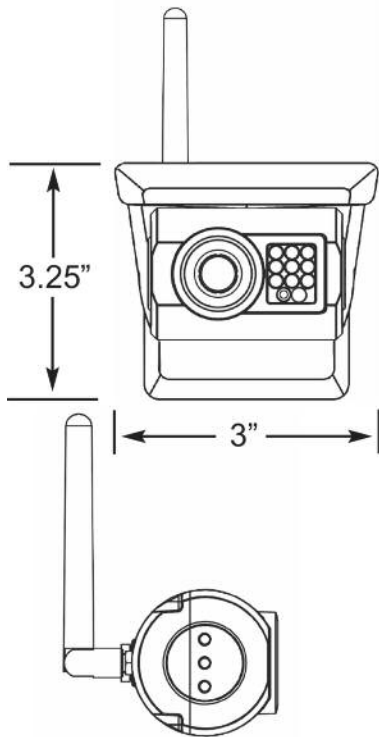
# Operational Diagram



# Monitor Specification

TFT LCD Digital Monitor	
Screen Size	7"
Dot Resolution	800H x 3 (RGB) 480v
Display Format	16:9 / 500:1
Display Brightness	400cd/m <sup>2</sup>
Viewing Angle	U:50° / D:60° / R:70°
Video Input	2 channel
Video Source	1Vp-p, 75Ω
Power Supply	DC 12V(+/- 10%)
Power Consumption	5W
Operating Temperature	-30°C ~ +80° C
Video System	Auto NTSC/PAL
Overall Dimensions	7"L x 5"H x 1"D
Weight	400G
Impact Rating	5G
Dot Pitch	0.192H x 0.1805v
Sync System	Internal
Weight	520g

# Camera Dimensions



# Camera Specifications

Camera	1/4" Sharp® Color CCD
Picture Elements	250,000 pixels
Gamma Correction	r=0.45 to 1.0
Image Sensor	540 TV lines
Lens	2.1mm
View Angle	130°
Sync System	Internal Synchronization
Infrared distance	50 Feet (9 Infrared)
Usable Illumination	0 Lux (IR On) DC
Power Source	12V/3A (+/- 10%)
S/N Ratio	More than 48dB
Electronic Iris	1/50, 160-1/100,000sec
Video Output	1Vp.p 75ohm
IR Switch Control	ACDS Automatic Control
Impact Rating	20G Vibration/100G Shock
Operating Temperature	-30°C - +80°C/RH 95% Max
Storage Temperature	-30°C - +60°C/RH 95% Max
Waterproof Rating	IP68

# Splitting

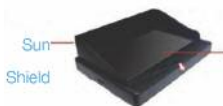
Installing sun shield: Put shade cover on the display. Installing back cover: Put the monitor with shade cover in the back cover (only for embedded monitor)



Splitting back cover: Hold monitor with 2 hands and detach with fingers, as indicated by arrows. (only for embedded monitor)

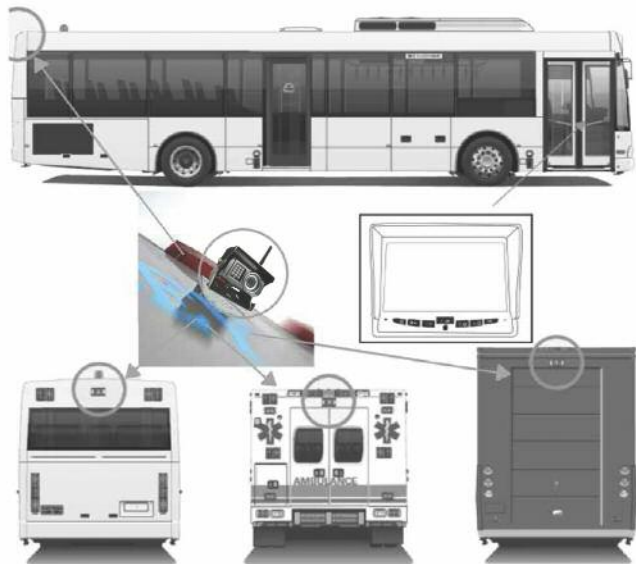


Splitting sun shield: Take the monitor with the left hand and detach with right hand as indicated by the white arrow. (see below)





# 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

Rear View Safety, Inc. 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.

Rear View Safety, Inc. is not responsible for a defect in the system as a result of misuse, improper installation, damage or mishandling of the electronic components. Rear View Safety, Inc. 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 Rear View Safety, Inc. 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 REAR VIEW SAFETY, INC. PRODUCT IS RETURNED, POSTAGE PREPAID AND INSURED, TO REAR VIEW SAFETY, INC. OTHER THAN THE POSTAGE AND INSURANCE REQUIREMENT, NO CHARGE WILL BE MADE FOR REPAIRS COVERED BY THIS WARRANTY.

## Warranty Disclaimers

NO WARRANTY, ORAL OR WRITTEN, EXPRESSED OR IMPLIED, OTHER THE ABOVE WARRANTY IS MADE WITH REGARD TO THIS REAR VIEW SAFETY, INC. REAR VIEW SAFETY, INC. DISCLAIMS ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE AND ALL OTHER WARRANTIES IN NO EVENT SHALL REAR VIEW SAFETY, INC. LIABLE FOR ANY INCIDENTAL, SPECIAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES OR FOR ANY COSTS, ATTORNEY FEES, EXPENSES, LOSSES OR DELAYS ALLEGED TO BE AS A CONSEQUENCE OF ANY DAMAGE TO, FAILURE OF, OR DEFECT IN ANY PRODUCT INCLUDING, BUT NOT LIMITED TO, ANY CLAIMS FOR LOSS OF PROFITS.

## Disclaimer

Rear View Safety and/or its affiliates does not guarantee or promise that the user of our systems will not be in/part of an accident or otherwise not collide with an object and/or person. Our systems are not a substitute for careful and cautious driving or for the consistent adherence to all applicable traffic laws and motor vehicle safety regulations. The Rear View Safety products are not a substitute for rearview mirrors or for any other motor vehicle equipment mandated by law. Our camera systems have a limited field of vision and do not provide a comprehensive view of the rear or side area of the vehicle. Always make sure to look around your vehicle and use your mirrors to confirm rearward clearance and that your vehicle can maneuver safely. Rear View Safety and/or its affiliates shall have no responsibility or liability for damage and/or injury resulting from accidents occurring with vehicles having some of Rear View Safety products installed, and Rear View Safety and/or its affiliates, the manufacturer, distributor and seller shall not be liable for any injury, loss or damage, incidental or consequential, arising out of the use or intended use of the product. In no event shall Rear View Safety and/or its affiliates have any liability for any losses (whether direct or indirect, in contract, tort or otherwise) incurred in connection with the systems, including but not limited to damaged property, personal injury and/or loss of life. Neither shall Rear View Safety and/or its affiliates have any responsibility for any decision, action or inaction taken by any person in reliance on Rear View Safety systems, or for any delays, inaccuracies and/or errors in connection with our systems functions.



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**BETTER CAMERAS. BETTER SERVICE.  
IT'S OUR GUARANTEE.**

