Quad View Backup Camera System
(9 Inch Monitor)

Product Manual



Rear View Safety, Inc. © 2016

REAR VIEW SAFETY
REVERSE WITH CONFIDENCE™

What's in the Box?



System connects to four (4) cameras

- 1 DIGITAL 9" TFT LCD Quad View Color Monitor with universal mount/stand and wire
- 2 66' Extension Cables for Backup Cameras
- 2 33' Extension Cables for Side Cameras
- 1 Remote Control
- 1 Power Connection Wire
- 1 Screw Kit for installation

Table of Contents

Introduction 4
Safety Information 5-7
Before Beginning Installation 8
Installation Guide 9
Wiring Camera & Monitor 10-11
Installing the Monitor 12
Installation Diagram 13
Monitor Operation 14
Splitting & Splicing 15
Positioning 16
Power Harness 17
Monitor Dimensions 18
Monitor Specifications 19
Camera Dimensions 20
Camera Specifications 21
Camera Dimensions 22
Camera Specifications 23
Troubleshooting 24
Warranty 25
Disclaimer 26

Introduction

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

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 exstensive 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 RVS System be careful with the wire positioning in order to avoid wire damage.
- The RVS 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.

REAR VIEW SAFETY
REVERSE WITH CONFIDENCE™

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.

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. If the system seems to not be operating properly see troubleshooting (page 17).

Camera Installation

1. Attach camera bracket close to rear marker lights, centered on vehicle.
2. Camera: Drill a 20mm (0.8in) diameter hole into vehicle body near the camera and bracket. Insert camera cable into vehicle (be careful not to kink cable) and fit grommet into hole. Apply sealant around grommet to increase resistance to water penetration. Connect camera to the camera extension cable which runs inside the vehicle.
3. Feed as much cable as possible into vehicle & clamp securely. This reduces the possibility of cable being hooked or snagged. The aviation camera cable uses aircraft grade connectors which means the camera cable can be exposed to all weather elements.
4. Attach camera to bracket using screws provided and adjust the angle.

Wiring Camera

5. The power harness on this unit has 4 camera ports (BLUE-BACKUP, YELLOW-LEFT, BROWN-RIGHT, and BLACK-FRONT.)
6. Each camera should be connected to its corresponding port. All that is needed for the system to work is to connect the POWER (red) to 12V and the GROUND (black).
7. The camera and monitor can always be activated by manually pushing the power button on monitor. This is in addition to utilizing the positive triggers.
8. As you may have noticed, there are also 3 multi-colored wires (blue, brown, yellow). These are trigger wires, and when they are energized (12V) they will turn on their corresponding channel. The Blue wire will also turn on gridlines and sound.
9. The camera system can be wired to be powered "ON" the entire time the vehicle is on. This is typical in RV and some commercial applications.

Monitor

1. To Attach the Pedestal mount to the dashboard or to the headliner use self-tapping screws and/or the adhesive pad.
2. Attach monitor to mount, and adjust mounting angle to allow optimum driver viewing comfort. (see figure 1.1 on page 11)

- Infrared technology built into camera IRs are activated automatically according to the lighting conditions.
- When using the postive trigger functions (blue, yellow & white wires) each trigger function needs to work on a seperate 12V+ source i.e. the Yellow and White wires can be wired to a turn signal circuit etc.
- Grid lines function can be turned on/off by manually from menu. (See page 13)

Note: If connecting power directly to battery, the camera is always ON and therefore can drain battery. Therefore it is recommended to connect power to an ignition switched accessory power source.

Figure 1.1

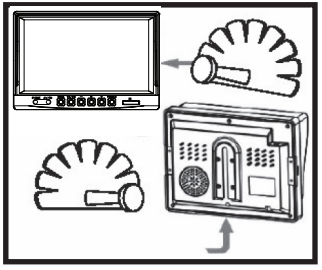
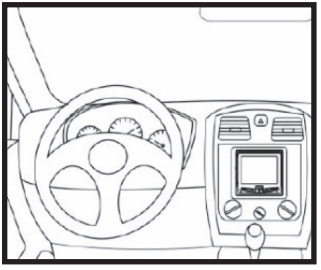
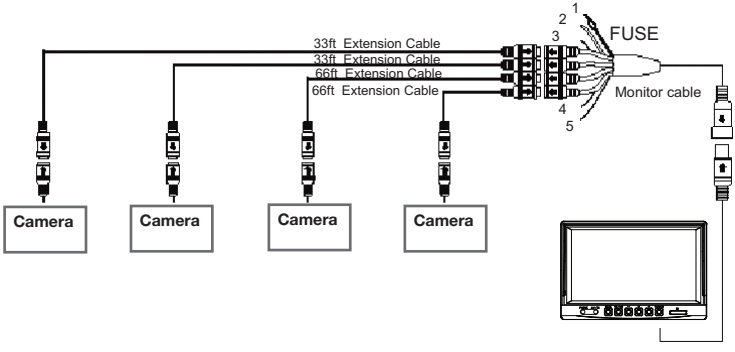


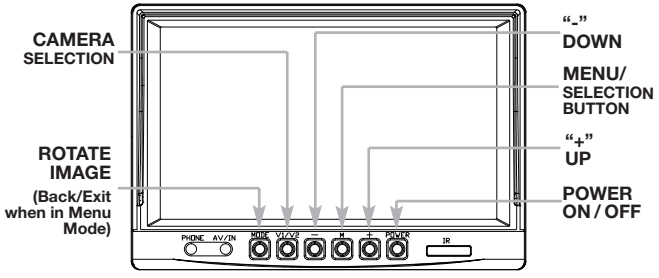
Figure 1.4



Installation Diagram



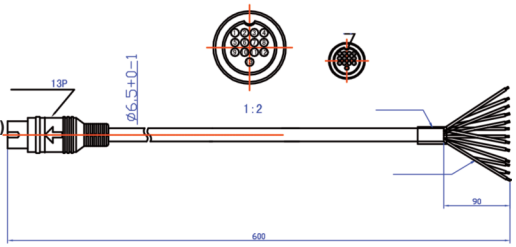
1. Red (power+)
2. Yellow (Left)
3. Brown (Right)
4. Blue (Back)
5. Black (Ground)

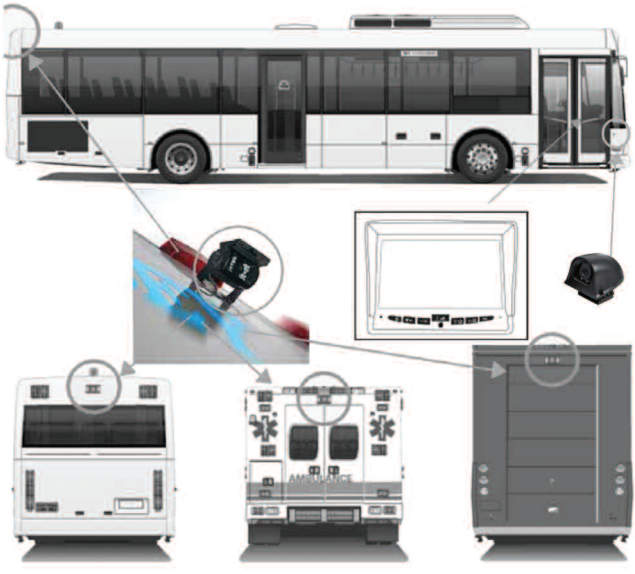


- To **turn on** the monitor, press "POWER" button.
- To get to the menu, press "MENU" and use arrows to choose your settings
- To **display options** press "MENU" to select.
- To adjust **brightness**, press "MENU". Use arrows to choose desired camera and press "MENU" to select. Once selected, use arrows to set the brightness.
- To adjust **contrast** press "MENU". Use arrows to choose desired camera and press "MENU" to select. Once selected, use arrows to set the brightness
- To adjust **saturation** press "MENU". Use arrows to choose desired camera and press "MENU" to select. Once selected, use arrows to set the brightness
- To adjust **distance grid** press "MENU" to select. Once selected, use arrows to choose desired camera and press "MENU". Use arrows to set the distance.
- To set **auto power** press "MENU" to select. Once selected, use arrows to choose off or on and press "MENU".
- To **reset** press "MENU" to select. Once selected, use arrows to choose yes or no and press "MENU".
- To **return to previous** press "REV" when in menu.
- To **rotate screen** press "REV".
- To adjust the **volume** press "UP" and "DOWN" buttons.

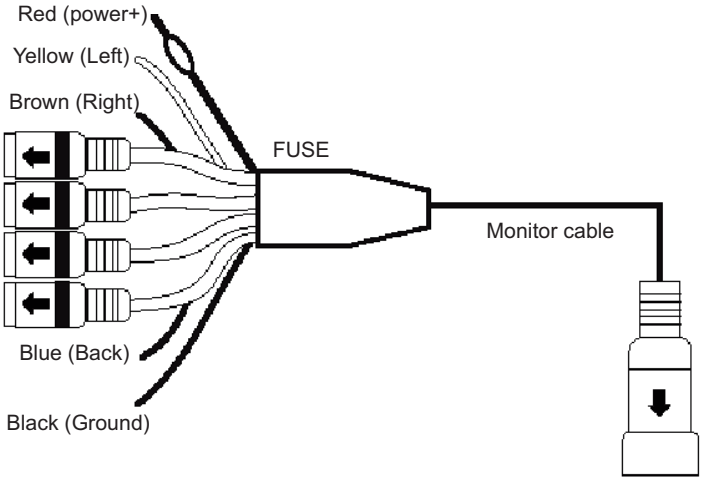
Splitting & Splicing

1. Red (-12-24V)
2. Green (video back)
3. Blue (trigger back)
4. Brown (trigger right)
5. Yellow (trigger left)
6. White (audio)
7. Light blue (video front)
8. Gray (video right)
9. Pink (12V)
10. Purple (Audio out)
11. Black (GND)
12. Green (Video out)
13. Orange (left)




AMBULANCE

Power Harness



DESCRIPTIONS

Blue - Back
Brown - Right
Yellow - Left
Red - Power 12V+
Black - Ground 12V-

Troubleshooting

Monitor Displays Blue Screen & Displays No Signal

- Do a hard reset, unplug all cables and power cables and leave them out for 1 minute and then re-connect them.
- Check to ensure that the connection to the camera is tight.
- Verify camera cable is plugged into port labeled Backup Camera
- Verify that the blue positive trigger on power harness is put to power 12v+.

If the problem still persists, verify that alternate ports work. If alternate ports do not work, remove Blue Trigger wire from 12V+ and select alternate channels.

Monitor Will Not Power-Up (no backlight on power button)

- Check fuse
- Check 12v+ to monitor
- Check ground connection

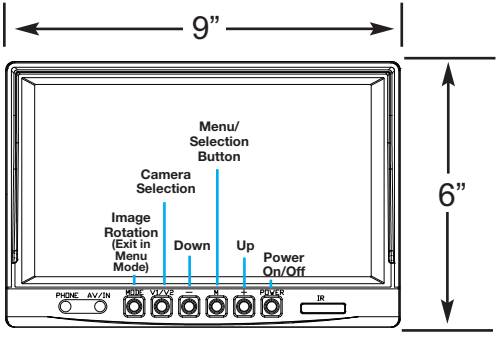
No Image On Screen

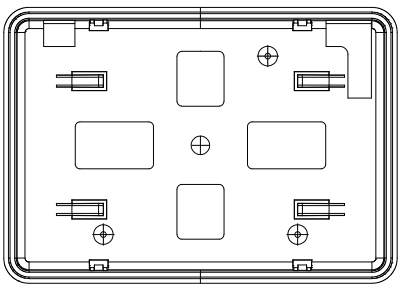
- Verify camera is on correct camera input
- Verify cable is connected to monitor
- Verify camera is connected to cable
- Connect known working camera and cable to monitor.
- Verify Blue trigger is receiving power

Audio on Camera

- Verify chosen camera has audio
- Verify volume setting
- Confirm that the Blue audio trigger is connected to 12v+

Monitor Dimensions







Monitor Specifications

TFT LCD Digital Monitor	
Screen Size	9"
Dot Resolution	800H x 3 (RGB) x 480V
Display Format	16:9 / 500:1
Display Brightness	400cd/m^2
Viewing Angle	U:50° / D:60° / R:70°
Video Input	3 channel
Video Source	1Vp-p, 75Ω
Power Supply	DC 12V-24V (+/- 10%)
Power Consumption	5W
Operating Temperature	-30°C ~ +80° C
Video System	Auto NTSC/PAL
Overall Dimensions	9"L x 5.25"H x 1"D
Weight	400G
Impact Rating	5G
Dot Pitch	0.192H x 0.1805V
Sync System	Internal

Warranty

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.

REAR VIEW SAFETY

REVERSE WITH CONFIDENCE™

If you have any questions about this product, contact:

Rear View Safety, Inc.
1797 Atlantic Avenue
Brooklyn, NY 11233
800.764.1028

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