

## 8883210 Wireless Rear Observation System with Night Vision Camera



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# What's in the Box?

QTY.	Part Included in Kit	Replacement Part
1	Color CCD Infrared Weather Resistant Wireless Camera	8883211
1	7" TFT LCD Color Wireless Monitor with Standard U-Bracket Mount, Suction Cup Pedestal Mount, Built In Power Harness	-
1	Sun Shade	-
3	Wireless Antennas	-
1	Remote Control	-
1	Extension Cable for Wireless Antenna	-

# 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 Observation System With Night Vision Camera. With this manual you will be able to properly install and operate the unit.

The Rear Observation System is intended to be installed as a supplement aid to your standard rear view mirror that already exists in your vehicle. The Rear Observation 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 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 Observation 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 Observation System. If you back up while looking only at the monitor, you may cause damage or injury. Always back up slowly.
- The Rear Observation 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 Observation System is limited. It does not display the entire panorama that is behind you.

# Safety Information

- 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 electric 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 install the monitor where it may obstruct drivers view or obstruct an air bag device.
- Dropping the unit may cause possible mechanical/ electrical 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 components causing electrical interference.

We recommend doing a bench test before installation to insure that all components are working properly (pg 12).

**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 (pg 16).

# Before Beginning Installation

## Camera

The camera and monitor will require their own power sources routed individually to each component. They do not have a cable that interconnects. Do not run power wires over sharp edges. Keep power wires away from HOT and/or rotating parts such as, but not limited to, exhaust systems and drive shafts.

## Monitor

1. The monitor will require being wired to power source such as keyed on ignition or switched power.
2. If needed, a minimum of a 7/8" hole will be required to pass the monitor wire junction through.
3. Connect the monitor trigger wire according to the camera location to the appropriate trigger source such as a reverse or turn signal circuit.
4. Mount the monitor using the provided U-bracket or suction cup pedestal.

Once all cables have been properly routed, power on the system and check that the system is paired. If the system is paired, meaning the camera can be manually selected, but the trigger wire does not activate the camera - see page 10 on how to change which channel the camera is paired to.



# Installation Guide

## The Power Harness

- Both the monitor and camera require their own individual power sources. Connect the (RED) +12VDC wire to ignition/switched on power and the ground (BLACK) wire to chassis ground. If interference occurs or camera has difficulty connecting to the monitor, try tying the ground wire into an existing ground wire or run a ground directly to battery.
- These are the only wires needed to power the entire system and all the cameras. Each camera can be seen at any time by simply pressing the power button and toggling the MODE button.
- The four positive trigger wires (CH1, CH2, CH3, CH4) each represent one channel and will turn on their channel when the trigger wire is energized with +12VDC.
- Camera 2 is the designated backup channel. To have the the backup camera come on when you go into reverse, connect the CH2 wire to reverse power (or any power source that comes on only in reverse).
- The other channels can similarly be triggered (i.e. side cameras can be triggered by the turn signals etc.)
- To automatically have the monitor turn ON when the vehicle turns on, tie the power wire into any key on ignition source.
- To have a specific camera come on with the monitor, tie the camera trigger wire into the keyed ON ignition source.

**Note:** When the channel wire is active it will have precedence over the other triggers. Therefore, if you wish to use multiple triggers, do not attach the trigger to constant power.

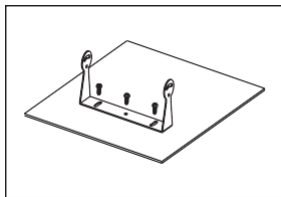
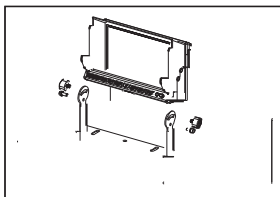
# Pairing

1. Power ON the monitor and be sure that power is available to the camera.
2. Toggle the "MODE" button on the monitor to select the camera channel you wish to pair to.
3. Once on the channel is selected, Toggle the "MENU" button on the monitor.
4. Select "Pairing" from the menu and press the "■" button on the monitor to begin pairing the camera.
5. Finish pairing by toggling the push button attached to the camera within the 50 seconds displayed on the monitor. When pairing is complete, the monitor will display the camera image.

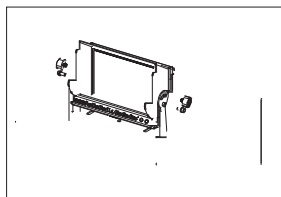
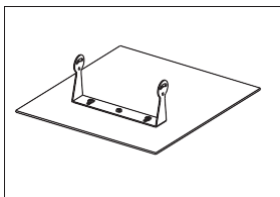
**Note:** Paired camera's can be moved to different slots. If the included camera is paired to slot 1 (CH1) and needs to be moved to slot 2 (CH2) - follow the above instructions after selecting the new slot and the camera will pair to the new slot/channel.

# Standard U-Bracket Monitor Installation

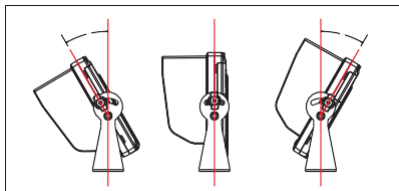
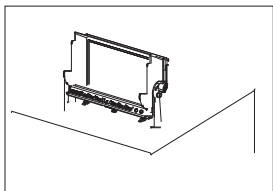
1. Remove the thumb and allen screw from the monitor then remove monitor. Place bracket in desired location and fasten down with 3 screws. (See below pictures)



2. Using the thumb and allen screws put the monitor into the bracket, adjust angle, and lock it. (See below pictures)



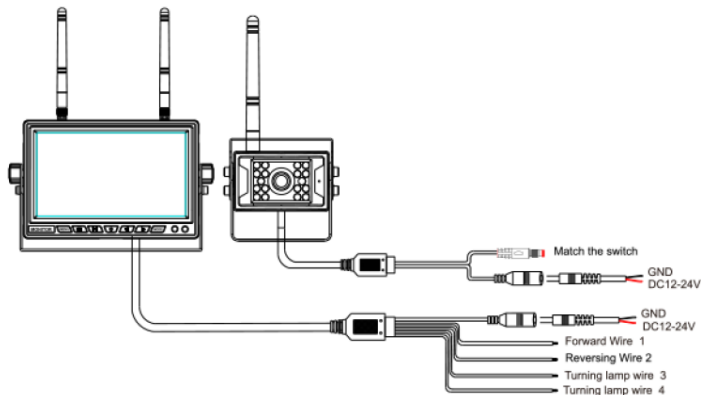
3. Finish installation. The adjustable angle is 30° forward or backward. (See below pictures)



# Installation Diagram

## Connection

*NOTE: Diagrams are for installation reference only, monitor and camera are a representative image*



## Remote Control

1. "MODE"key: Press shortly to switch to split image
2. "⏻" Power key: Boot/Turn-off
3. "▷"key: Move left
4. "◁"key: Move right
5. "△"key: Move up
6. "▽"key: Move down
7. MENU: Setting key for system menu
8. CH1CH2CH3CH4: Switch to single image shortly



# Monitor Specifications



## 7" monitor

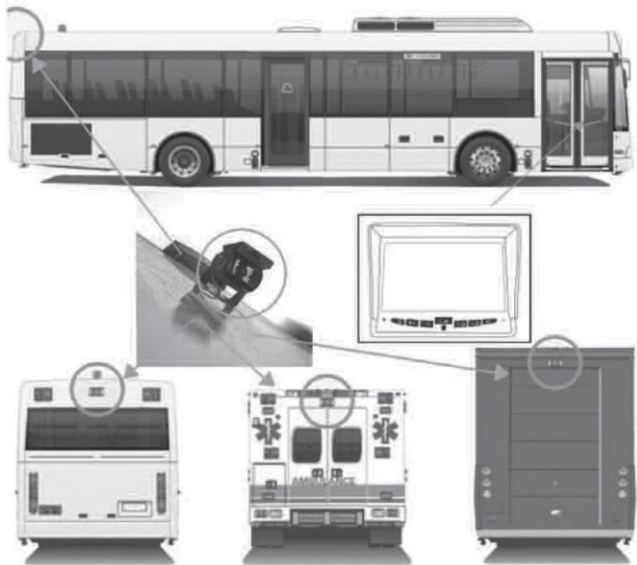
- |               |                          |
|---------------|--------------------------|
| 1. Menu       | 5. Menu Down/Volume Down |
| 2. Select     | 6. Menu Up/Volume Up     |
| 3. Play/Pause | 7. Mode                  |
| 4. Power      | 8. Remote Control Window |

Screen size	7 inch
Aspect ratio	16:9
Resolution	800x480
Brightness	500cdm
Audio & Video	4 Ways video input
Video System	PAL & NTSC Auto Switch
Voltage	12V-24V
Power	5W
Impact Rating	5G
Language	Multi-language
OSD Menu	Pairing, Vision Control, Time Setting, Language, System Reset
Wireless Range	328 ft @ 2.4Ghz
Bracket	U Type Bracket, Pedestal Bracket
Sunshade	Removable
Operation	-4°F – 158°F

# Camera Specifications

Sensor	1/4 Sharp Color CCD
Resolution (PAL)	582(H)×510(V) pixels
Audio	Built-in Microphone
Lens	2.8mm
View angle	150°
Power	12-24V
Wireless Range	328 ft @ 2.4Ghz
Min illumination	0.1 Lux, infrared night vision
Power Consumption	3W
Water Resistant	IP68
Operation Temperature	-4°F – 158°F

# Positioning



# Troubleshooting

## **Monitor Displays Blue Screen & Displays "No Signal"**

- Do a hard reset, disconnect monitor and camera(s) from power for 1 minute. Reconnect.
- Check that the camera is receiving +12VDC and that it has a clean and tight ground connection.
- Verify that the camera is paired to the monitor by following the procedure on page 10.
- Verify that the trigger on power harness is put to power +12VDC.
- Verify that vehicle voltage is above 12VDC at all spliced locations.

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

- Check fuse
- Check +12VDC connection
- Check ground connection
- Try power and ground direct to battery

## **No Image On Screen**

- Verify camera is on correct camera input
- Verify monitor power cable is connected.
- Verify camera power cable is connected.
- Connect known working camera and cable to monitor.
- Verify trigger source is supplying power
- Verify power at all connections
- Verify camera pairing



# Warranty

## Two Year Warranty

Buyers Products Company, Inc. warrants this product against material defects for a period of two years from date of purchase. We reserve the right to repair or replace any such defective unit at our sole discretion. Buyers Products Company, Inc. is not responsible for a defect in the system as a result of misuse, improper installation, damage or mishandling of the electronic components. Buyers Products Company, 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 Buyers Products Company, Inc. system after partial failure or use with improper accessories.

## Warranty Performance

DURING THE ABOVE WARRANTY PERIOD, SHOULD YOUR Buyers Products Company PRODUCT EXHIBIT A DEFECT IN MATERIAL OR WORKMANSHIP, SUCH DEFECT WILL BE REPAIRED WHEN THE COMPLETE Buyers Products Company, INC. PRODUCT IS RE-TURNED, POSTAGE PREPAID AND INSURED, TO Buyers Products Company, INC. OTHER THAN THE POSTAGE AND INSURANCE REQUIREMENT, NO CHARGE WILL BE MADE FOR REPAIRS COVERED BY THIS WARRANTY.

## Warranty Disclaimers

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# Disclaimer

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