

# 8883050 Quad Screen Back Up Camera System With Night Vision Camera & DVR



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### What's in the Box?

QTY.	Description	Replacement Part Number
1	Color CCD Infrared Weather Resistant Camera with DVR	8883053
1	7" TFT LCD Color Monitor with Standard U-Bracket Mount, Pedestal Mount and Flush Mount	8883051
1	Sun Shade	N/A
1	65' Camera Cable	8883165
1	Power Harness	8883052
1	Remote Control	N/A

#### Accessories

8883116- 16' Camera Cable 8883132- 32' Camera Cable 8883165- 65' Camera Cable 8883182- 82' Camera Cable

### 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 and DVR function. 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 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. Check your local or state laws for more information.

# Safety Information

### **A WARNING**

- 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.
- Failure to visually assess the area around the vehicle (directly or by use of the mirrors) may result in a crash causing serious injury or death.
- The areas shown in the surround view camera system display are limited. The display may not show all pedestrians or other objects around your vehicle.
- Do not solely rely only on the surround view camera system display to assess whether it is safe to move your vehicle.
- Failure to pay proper attention to your surroundings while driving may result in a crash causing serious injury or death.
- To help mitigate the chances of a collision, only look at the surround view camera system display when it is safe to do so.
- The surround view camera does not eliminate all blind spots.
- The guidelines on the camera views on the display may differ from the actual positions/distances due to a change in camera height, road conditions and other factors. The guidelines are to be used as reference only.

### Safety Information

# Please follow these guidelines when installing and using your camera system:

- 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 including potentially failure of the camera system.
- Take special care when cleaning the monitor. Clean the monitor with a water damped cloth and microfiber towel.
- Firmly affix the all components of the system per these instructions before use.
- Use automotive protective wire wrap or split wire loom in any areas where the cables may come in contact with metal frame or structure edges. Wire abrasion may cause a short circuit or a fire.
- While installing the Rear View System be careful with the wire positioning in order to avoid wire damage.
- The Rear View System is to be used only 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 and/ or electrical failure.

# **Product Usage**

The Rear Observation System is designed to assist the driver to 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
  must 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.
- The area displayed by the Rear Observation System is limited. It does not display the entire panorama that is behind you.

# Before Beginning Installation

Before drilling, check that no cable or wiring is on the other side of the wall. Clamp or secure 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 ensure that all components are working properly. Once the bench test is complete, follow the steps below:

**Step 1:** Choose the monitor and camera locations.

**Step 2:** Install all cables in vehicle, when necessary, a 13/16" (20mm) hole should be drilled for passing camera cable through vehicles walls. Install split grommets in all drilled holes to avoid abrasion with the harness.

**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 the troubleshooting section in the back of this manual.

### Installation Guide

#### **Camera Cable Routing**

- 1. Be sure to route the cable carefully. The camera cable uses aircraft grade connectors which means the camera cable can be exposed to all weather elements. Do not run the cable over sharp edges. Do not kink the cable and keep the cable away from HOT and rotating parts, such as but not limited to, exhaust systems and drive shafts.
- 2. Fasten and secure all excess cable.

#### **Monitor**

- 1. Attach the Pedestal mount to the dashboard or to the headliner/roof using self-tapping screws and/or the adhesive pad.
- 2. Attach the monitor to mount and adjust mounting angle to allow optimum driver viewing comfort.

#### **Rear View Camera Installation**

- 1. Camera plug will require a minimum of a 5/8" (16mm) opening or hole to be fed through. If none exist, find and mark location to drill hole for plug. Be sure there are no wires or obstructions behind marked location.
- 2. Deburr hole and install harness split grommets.
- 3. Feed the camera plug and cable through the hole.
- 4. Secure camera to license plate mounting hole locations using existing mounting hardware.
- 5. Adjust camera angle by loosening set screws with a 1.5mm Allen key. Once the desired angle is found, tighten set screws.

### Installation Guide

#### **Power Harness**

- To power the system, connect the power +12-24VDC (yellow wire) to ignition power. Connect the ground (black wire) to chassis ground.
- Each camera can be seen at any time by simply pressing the power button and using each channel button to toggle.
- 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 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, connect the power wire to 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 blue trigger to constant power.

#### **Audio**

 There is audio on channel 2. On CH3 the trigger wire must be energized (+12VDC) to activate the audio. On CH2 the audio is always on.

# Display Button Function and Operation



- 1. Press "MENU" to enter or exit the menu screen
- 2. Press "CH1" to enter CH1 image display
  - a. "CH1" button is also used to select "left" in the on screen display menu
  - **b.** "CH1" button also will allow one to select cam1/cam2/cam3/cam4 once in the recording playback list.
- 3. Press "CH2" to enter CH2 image display
  - a. "CH2" button is also used to select "right" in the onscreen display menu
  - **b.** "CH2" button also will allow one to select cam1/cam2/cam3/cam4 once in the recording playback list.
- **4.** Press "POWER" and hold power button for 3 seconds to turn off the display screen; or to turn on the display screen when the display screen is off.
- 5. Press "CH3" to enter CH3 image display
  - a. "CH3" button is also used to select "down" in the onscreen display menu
  - **b.** "CH3" button will also select previous file in the playback list.
- 6. Press "CH4" to enter CH4 image display
  - a. "CH4" button is also used to select "up" in the onscreen display menu
  - **b.** "CH4" button will also select next file in the playback list.
- 7. Press "MODE" to switch the mode of image display
  - **a.** "MODE" button will also begin play and pause when playback the recording video.

# On-Screen Display Menu Options







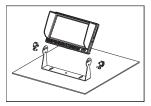
- Picture: Settings to adjust brightness/color/contrast/reset for each camera
- 2. Playback: Press CH2 button to enter the Playback screens
- **3. Volume:** Press CH1 or CH2 buttons to either decrease or increase the volume
- Rotate: Press CH1 or CH2 buttons to rotate the screen image
- 5. Blue Screen: "CH3" to enter CH3 image display a. "CH3" button is also used to select "down" in the onscreen display menu
- **6. Language:** Press CH1 or CH2 buttons to scroll thru language options
- Time Stamp: Press CH1 or CH2 buttons to turn on (default) or off
  - **a.** If Time Stamp is "on", all channels will display the date and time when the video is played back
- Auto Cycle: Press CH1 or CH2 buttons to select. off (default) or on (single channel full screen displayed automatically)
- 9. ACC Delay: Press CH1 or CH2 buttons to access each CAM screen to adjust the delay time for each camera. Use CH1 or CH2 to decrease or increase the time

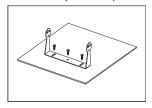
# On-Screen Display Menu Options

- 10. Guide Line: Press CH1 or CH2 buttons settings to turn on/off for each channel. Guide Lines are the back up camera lines on the screen
- **11. Time Setting:** Press CH1 or CH2 buttons settings to access screen to adjust the date and time
- Mirror Flip: Press CH1 or CH2 buttons to turn off or on (default) Mirror/non-mirror image adjustment for each channel
- Format: Press CH1 or CH2 buttons to enter screen to re-format the SD card
- 14. Version: System version number

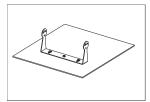
### Standard U-Bracket Monitor Installation

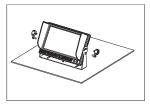
 Remove the thumb and allen screw from the monitor then remove monitor. Place bracket in desired location and fasten down with 3 screws. (See below pictures)



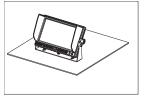


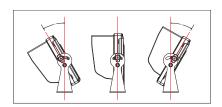
2. Using the thumb and allen screws put the monitor into the bracket, adjust angle, and lock it. (See below pictures)





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



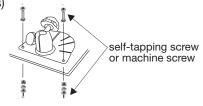


# Optional Monitor Installations

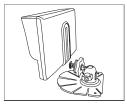
#### **Pedestal Mount**

1. Using screws, secure pedestal bracket. (See below



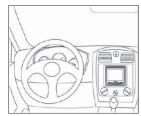


Secondly, slide the metal buckle piece on the top of the pedestal bracket into the notch on the back of the monitor. Move the bracket to the desired location and tighten. (See below pictures)

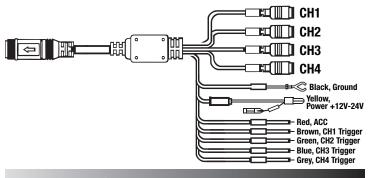




#### **Flush Mount**

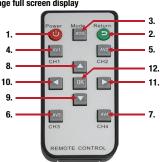


# Wiring Diagram



### **Remote Control Function**

- 1. Turn on / off display monitor
- 2. Return to the default screen or to the previous step
- 3. Switch multi-screen display mode
- 4. CH1 single image full screen display
- 5. CH2 single image full screen display
- 6. CH3 single image full screen display
- 7. CH4 single image full screen display
- 8. Scroll up menu
- 9. Scroll down menu
- 10. Scroll left
- 11. Scroll right
- 12. Menu + confirmation



# Monitor Specifications

	I	
Screen size	7 inch	
Aspect ratio	16:9	
Resolution	1024x600	
Brightness	500cdm	
Video	4 ways video input	
Video System	PAL & NTSC automatically	
Voltage	12V-24V	
Power Consumption	5W	
Impact Rating	5G	
Language	Multi-language	
OSD Menu	Display Menu, Brightness, Color, Contrast	
	Adjustable	
Built-In Speaker	Yes	
Bracket Accessories	U Type Bracket, Pedestal Bracket, Recessed	
	Mount	
Sunshade	Removable	
Operation Temperature	-4°F ~ 158°F	
Recording	DVR function recording four channels real time	
Video Compression	H.264	
Format	11.204	
Video Format	AVI	
Recording Resolution	640x480	
Recording Speed	30 FPS	
Video Storage Capacity	SD memory card (class 10), MAX 256GB	
	(access SD card by removing the cover on the	
	rear left side of the display module)	

# Camera Specifications

Sensor	1/4 CMOS
Resolution (PAL)	582 (H) x 510 (V) pixels
TV Line	420 TV Line
Lens	2.8mm
View angle	120°
Infrared distance	45ft (8pcs Infrared LED)
Min illumination	0 Lux (LED ON)
S/N Ratio	65dB
Video output	1Vp-p 75Ω
Water Resistant	IP69K
Impact Rating	20G Vibration/10G shock
Operation Temperature	-4°F ~ 167°F

### Troubleshooting

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

- Do a hard reset, unplug all cables and power cables, leave disconnected for 1 minute, and then re-connect.
- Check to ensure that the connection to the camera is tight.
- Verify camera cable is plugged into camera port
- Verify that the trigger on power harness is put to power +12VDC.
- If the problem persists, verify that alternate ports works.
   If alternate ports do not work, remove trigger wire from +12VDC and select alternate channels.

#### 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 cable is connected to monitor
- Verify camera is connected to cable
- Connect known working camera and cable to monitor
- Verify trigger source is supplying power

#### Audio on Camera

- Verify chosen camera has audio
- Verify volume setting
- Confirm that the CH3 trigger is connected to +12VDC

# 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 mis-use, 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 WORK-MANSHIP, 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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### Contact

If you have questions about this product, contact:

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### Notes