



5" Heavy Duty Camera System

Owner's manual (VWIC503)

Warranty Information

Thank you for purchasing a Vision Works camera system. We have taken great care to provide you with a top quality product. Vision Works comes with a one year warranty that covers defective materials or workmanship, as long as no wiring or parts are modified in any manner. If our product is found to be modified the warranty will be nullified.

Please read and follow the owner's manual for installation and operation of your camera system.

Return Policy:

No merchandise should be returned to Vision Works for credit unless accompanied by a return authorization number from our company. You will receive credit for the full amount of the return, if the merchandise is returned within 30 days of the invoice date. Any merchandise that is not returned within 30 days of the invoice date is subject to a restocking fee of 15%. Contact your Vision Works dealer for return information.

Merchandise that has been special ordered cannot be returned for credit. Non-stock items returned for credit will be subject to vendor's return policy.

Important!

1. To prevent short circuit, make sure that the system is not plugged in or receiving power while making system connections. In the event of a system short circuit, replacement of the 3A fuse will be required. Fuses are located under the threaded tip of the cigarette lighter, and inside the threaded barrel section of the RED 12volt supply wire. Replacement fuses are not included with this kit.
2. To ensure that you do not drain your battery, it may be necessary to disconnect the cigarette adaptor when not in use.
3. The camera is completely weatherproof but the monitor is NOT and should NOT be exposed to water. Please ask about weatherproof monitors if you have no cab.

1.0 Specifications

Monitor Specifications






Model	5"
Screen Size	5 inch
Aspect Ratio	16:9
Luminance	350cd/m2
Resolution	800*R.G.B*480
Audio & Video	3 video/3 audio input (dual channel, single image display)
System	PAL & NTSC automatically
Voltage	12V-24V
Language	Multi-language
OSD Menu	Display menu, brightness, color, contrast adjustable
Built-in Speaker	Included
Bracket Accessories	U type bracket

Camera Specifications

Model	SONY
Resolution	700 TVL
Lens	3.6 mm
No. of Pins	4
Weatherproof Rating	IP68
Low. Temp Rating	-20 C -4 F
Magnet	Yes
Auto Shading	Yes

2.0 Parts Identification

Monitor		Quantity 1
Camera with Magnet		Quantity 1

Main Harness		Quantity 1
Video Extension Cable (15ft)		Quantity 1
Cigarette Lighter Adapter		Quantity 1
AV Accessory Cable		Quantity 1
Remote Control (CR2025 battery included)		Quantity 1

3.0 Assembly Instructions

Monitor Assembly

The monitor U bracket can be removed with the screws on the sides of the monitor if you want to drill the mounting holes, using the base as a pattern. Otherwise screw or bolt the U bracket securely in the area that gives the operator the best view of the screen.

Camera Assembly

Camera can be mounted using magnet and attaching hardware. These are the steps required to attach the magnet to the camera.

1. Position and align center hole of camera and bracket assembly on top of magnet.
2. Install bolt from underside of magnet and secure with flat washer and nut. Tighten this connection.

Tip: Although magnet contains 65lb pull force, it we recommend mounting your camera on a flat surface, and a zip tie be used in addition to fasten the camera as a preventative measure in the event the camera is knocked off.

4.1 Installation Instructions:

Step 1:

Connect **MONITOR** harness to the **MAIN HARNESS MONITOR INPUT**. Ensure arrows are aligned on outer jacket of cable ends. Turn silver cable connector nut clockwise to secure connection of the cables (IF YOU BEND THE PINS IT VOIDS THE WARRANTY). Ref. Picture Below & Fig.3



Step 2:

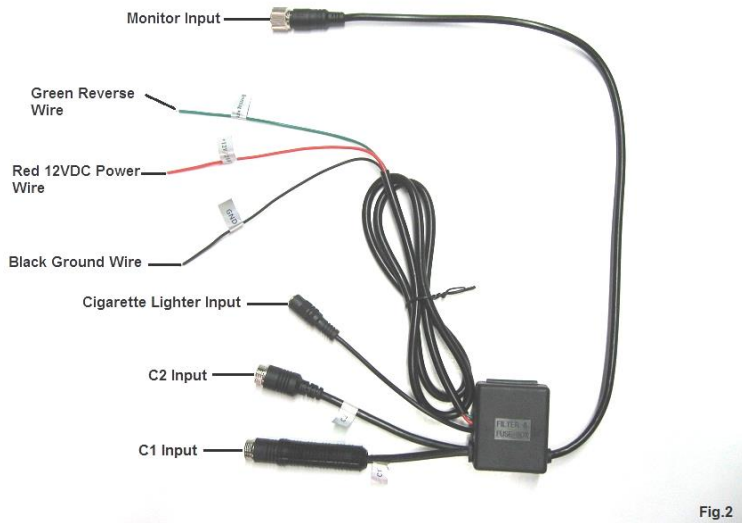
Connect **VIDEO EXTENSION CABLE** harness to C1 input on **MAIN HARNESS**.

Ensure arrows are aligned on outer jacket of cable ends.

Turn silver cable connector nut clockwise to secure the connection of the cables.

Do not over tighten. Pull rubber sleeve membrane over cable connection.

Ref. Fig.2 (next page)



Step 3:

Connect other end of **VIDEO EXTENSION CABLE** harness to **CAMERA** harness cable. Again, ensure arrows are aligned on outer jacket of cable ends. Turn silver cable connector nut clockwise to secure the connection of the cables. Do not overtighten.

Ref. Fig.2

Step 4 (Optional Second and Third Camera):

The **MAIN HARNESS** included in this kit contains three video cable inputs. The extra cable inputs can be used to accept a video signal from a second or third optional camera. These additional cameras can be selected on the monitor (V1/V2/V3) controls. It will also activate and provide a video feed to the monitor if 12VDC power is supplied to the GREEN wire on the **MAIN HARNESS**.

Note: A common application for the C2 video feed is for rear view imaging when in reverse. For C2 video feed for a reverse application, it is common to connect the GREEN wire to the reverse wire on the vehicle. Ref. Fig.2

Ref. Fig.2

Step 5 (Optional AV Cable):

Included in kit is an **AV Accessory Cable** adaptor that will allow you to play videos from a DVD player or alternate video source. It can be installed into C1 or C2 monitor inputs.

4.2 Power Cable Connection Installation:

Method 1:

Cigarette Lighter Adapter - system can be powered by connecting the **MAIN HARNESS** CIGARETTE LIGHTER INPUT to the mating connector of the **CIGARETTE LIGHTER ADAPTER**. The cigarette lighter adapter can now be installed into a 12VDC power source. To verify that the system is receiving power, cup your hands over the camera lens, and the LED lights will have a red glow. Ref. Fig.2

Method 2:

Hardwire Option: - connect BLACK wire of **MAIN HARNESS** to ground. Connect RED wire of **MAIN HARNESS** to 12VDC power supply. To verify that the system is receiving power, cup your hands over the camera lens, and the LED lights will have a red glow. **DO NOT CONNECT THE OTHER TRIGGER WIRES UNLESS YOU WANT TO TRIGGER A CAMERA TO COME ON.** Otherwise only connect the Red to 12v power and Black to ground.

Ref. Fig.2

5 Operating Instructions:

Monitor:

Ref. Figure



Power Button – press to power on/off monitor and camera system.

Menu Button – press simultaneously to adjust **Picture, System, Volume, Mirror Image, Clock/Trigger Delay.** Menu options will disappear 5 seconds after menu button is pushed. Ref. Fig.3

Picture - use AV button and + / - buttons to adjust brightness, contrast, color, and tint. Picture reset can also be selected to reset picture to factory default settings.

System - use AV button and + / - buttons to adjust language, rotation, and system settings.

Volume - use + / - buttons to adjust monitor volume.

Mirror Image - use AV button to select Mirror option and + / - buttons to activate/deactivate mirror image.

Clock - use AV button to select camera and + / - buttons to increase/decrease delay time of image when the trigger wires are used in the system.

Mode Button – used to quickly alter the display for different pre-set brightness and contrast settings. When you plug a second camera into the monitor harness...you can chose CH1 or CH2 for the camera that you want displayed on the screen

Reverse Screen - To reverse image on screen press menu button until TCON is displayed. Press the up or down button (this is a useful function when you want to mirror or un-mirror the image on the screen).

Remote:

Note: Battery Protective Sleeve must be removed prior to use.

Reference **Monitor Functions** in chapter 4.5 for definitions of Remote Control button command. Ref. Fig. →

