VISIONWORKS
EQUIPMENT CAMERAS

5" MONITOR LICENSE PLATE CAMERA SYSTEM

VWIC500-L Owners Manual

QUALITY | AFFORDABLE | DURABLE

Updated
07/9/2020

WARRANTY INFORMATION

Thank you for purchasing a Visionworks camera system. We have taken great care to provide you with a top-quality product. Visionworks comes with a one-year warranty (from the date of purchase) 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. The camera has a three-year warranty if you register on our website. Please go to visionworkscameras.com and click on "Warranty Registration" or use the QR Code to increase your warranty from one year to three years.

RETURN POLICY

No merchandise should be returned to Visionworks 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 Visionworks 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.

To avoid electrical shock and maintain optimal functionality, do not open the enclosures. High voltage may be present and there are no user serviceable parts inside. All warranties will be void should any enclosures be tampered with in any way.

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 12 volt supply wire. Replacement fuses are not included with this kit.

To ensure that you do not drain your battery, please disconnect the cigarette adaptor when not in use.

The camera is completely weatherproof, but the monitor is NOT and should NOT be exposed to water. Please ask about weatherproof monitors if you do not have a weatherproof cab.

SAFETY & IMPORTANT INFORMATION

WHAT'S INCLUDED

Identify your parts and find our what is included in your Visionworks camera system.

Fig 1.

License Plate Camera

Fig 2.

5" Monitor w/Self-Adhesive Bracket

Fig 3.

Suction Cup Monitor Mount

Fig 4.

Main Harness

Fig 5.

30 ft. Camera Extension Cable

Fig 6.

Cigarrete Lighter Adapter

Model	Resolution	Viewing Angle	Lens
CMOS 7070	420 TVL	170 Degree	1.9 mm

Weatherproof Rating	Low Temp. Rating	Connection Type
IP68	–20 C –4 F	4 Pin

CAMERA SPECS

MONITOR SPECS

Model	5"
Screen Size	5 inches
Aspect Ratio	16:9
Luminance	350 cd/md2
Resolution	400*R.G.B*272
Language	Multi-Language
Mount Type	Sticky/Suction
Sunshade	None
Voltage	12V-24V

Audio & Video	2 video/2 audio input (dual channel single image display)
System	PAL & NTSC automatically
OSD Menu	Display Menu, Brightness, Color, Contrast Adjustable

Set Up	Mirror for individual image, can set reserve trigger delay in settings

CAMERA ASSEMBLY

Fig 1.

PERMANENT MOUNTING

Remove screws from license plate and attach your license plate camera over your license plate with the original screws. See picture below for reference.

Four plastic tabs to mount monitor

MONITOR ASSEMBLY

Fig 2.   **Fig 3.**

MONITOR ASSEMBLY

Before assembling and mounting your monitor please consider a location for your monitor that is out of direct sunlight (to prolong the life of your monitor and for optimal viewing) and a spot that does not obstruct your view.

Option 1: Self Adhesive Base
Install monitor onto monitor base that contains 3M self-adhesive tape backing. Ensure the four plastic tabs on base are locked into position on rear of monitor. Adjust and position monitor and base assembly to preferred viewing location. Viewing surface location must be clean and fairly smooth. Once desired position is located, remove protective 3M tape backing from monitor base, and position base to desired location applying gentle pressure to monitor base and mounting surface.

Option 2: Suction Cup Base
We only recommend using our suction cup mount on window surfaces. Make sure the four plastic tabs on base are locked into position on rear of monitor. There is a quick release on the base of the suction cup used to attach and remove base from the window.

INSTALLATION INSTRUCTIONS

Please follow all directions listed below. Make sure you have mounted your camera and your monitor (using the previous directions) before beginning step #1.

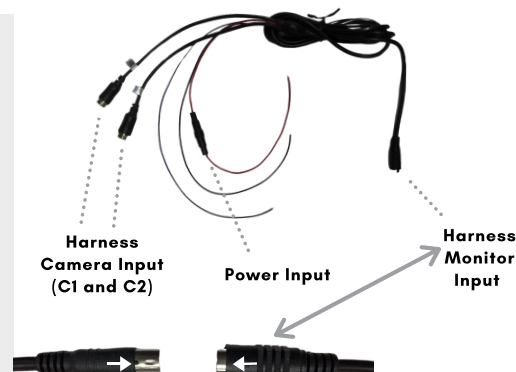## STEP #1: CONNECT MONITOR TO HARNESS

Connect your monitor cable harness to the main harness. 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).

Fig 2.   **Fig 4**

Harness Camera Input (C1 and C2)   **Power Input**   **Harness Monitor Input**

STEP #2: CONNECT HARNESS TO EXTENSION CABLE

Connect your 30 ft. extension cable to your C1 harness camera input. Ensure arrows are aligned on outer jacket of cable ends. Turn silver cable connector nut clockwise to secure the connection of the cables (IF YOU BEND THE PINS IT VOIDS THE WARRANTY).
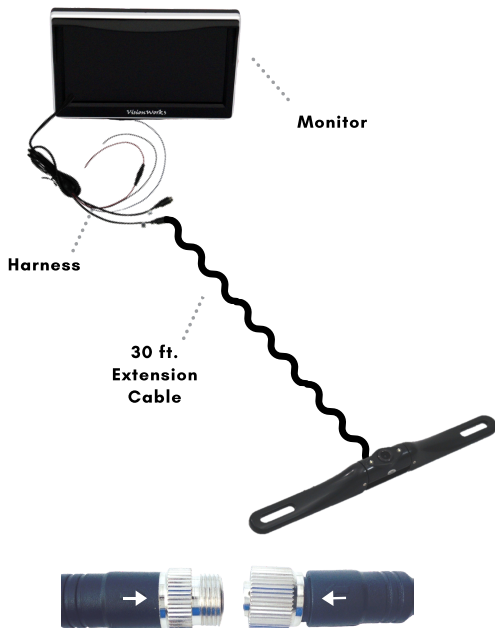
Do not over tighten. Pull rubber sleeve membrane over cable connection.

Harness Monitor Input

Power Input

Harness Camera Input (C1 and C2)

Fig 5.

Fig 4.

STEP #3: CONNECT EXTENSION CABLE TO CAMERA

Run your 30 ft. extension cable from your harness to your mounted camera. Cable routing is important. Please make sure the cables do not interfere with the normal operation of the machine or any safety equipment. Check for "pinch points" or other potential hazards to the cable(s). Secure all cables to vehicle/equipment using cable clips, zip ties or other style fasteners.

Connect the other end of the 30 ft extension cable to your camera harness cable. Ensure arrows are aligned on outer jacket of cable ends. Turn silver cable connector nut clockwise to secure the connection of the cables (IF YOU BEND THE PINS IT VOIDS THE WARRANTY). Do not over tighten. Pull rubber sleeve membrane over cable connection.

If you have more than one camera, repeat step #2 and #3. A common application for the CH2 video feed is for rear view imaging when in reverse. For CH2 video feed for a reverse application, it is common to connect the GREEN wire to the reverse wire on the vehicle.

Monitor

Harness

30 ft. Extension Cable

Fig 1.

Fig 5.

STEP #4: POWER CABLE INSTALLATION

Method #1: Cigarette Lighter Adapter

Your system can be powered by connecting the harness power 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.
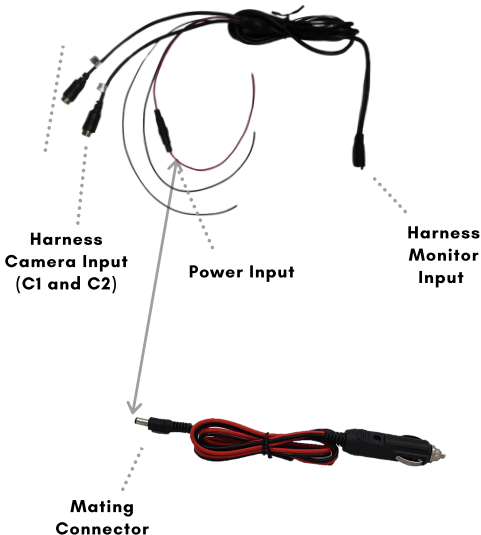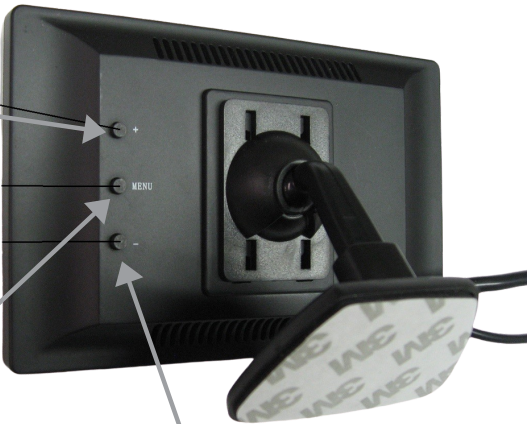
Fig 4.

Fig 6.

Harness Camera Input (C1 and C2)

Power Input

Harness Monitor Input

Mating Connector

Method #2: Hardwiring option

Connect the black wire of harness to ground. Connect the red wire of 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. The green wire is only used if you want the C2 input to automatically display when the vehicle is put into reverse. If this is your preference please attach this wire to the appropriate connection on your vehicle.

MONITOR OPERATION

Increases Parameter/up

Decreases Parameter/down

Menu Features	
First Press	Adjust Brightness
Second Press	Adjust Contrast
Third Press	Adjust Hue
Fourth Press	Adjust Language
Fifth Press	Factory Reset