



WVOS713 7" Digital Wireless Observation System

FEATURING **WiSight™** technology



WVOS713 Features:

- High Performance Automotive Grade 7" Color LCD Panel
- 3 Camera Input (1 Wireless Input Camera3)
- PAL/NTSC Compatible
- DC Auto Source Switching Triggers (Turn signal compatible)
- Backlit Control Buttons
- Built-in Audio Speaker
- Manual/auto Day/night Display Brightness Modes
- Programmable Source Name OSD

Camera-Monitor Warnings!

1. Camera/monitor system aids in the use of, but does not replace vehicle side/rear-view mirrors.
2. Objects in camera/monitor view are closer than they appear.
When backing up, proceed cautiously and be prepared to stop.

WVOS713

Important! - Please Read This Manual Before Installing!

Congratulations on your purchase of a Voyager WVOS713 LCD Observation Monitor. with WiSight™ technology. With proper installation and use, your WVOS713 is designed to provide you with years of trouble-free operate the unit. Please read this manual thoroughly beginning.

All Voyager Observation products are strictly intended to be installed as supplement aid to standard rear-view mirror systems that may already exist in your vehicle. Voyager Observation products are not intended for use as substitutes for-view mirror devices, Or for any other standard motor vehicle equipment required be installed on vehicles by law.

While Voyager observation products contribute to improving the vehicle operator's field Of view, these products are no substitute for proper defensive driving techniques and Observance of traffic laws and motor vehicle safety regulations.

Warnings!

RED POWER WIRE MUST BE CONNECTED TO ACCESSORY TO AVOID CURRENT DRAW IN THE KEY OFF POSITION.

Installation Location

It is unlawful in most jurisdictions for a person to drive a motor vehicle equipped with a television viewer or screen located at any point 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. The WVOS713 product is designed to be used primarily as a rear observation device in conjunction with closed circuit camera. In any installations where the WVOS713 is used to display television broadcasts or recorded video, playback, installation location must adhere to local laws and regulations.

Tampering

To prevent electrical shock, **DO NOT OPEN THE MONITOR CASE.** There are potentially harmful voltages inside the monitor. There are no user serviceable parts inside. If evidence of tampering is detected, the warranty will be considered void.

Moisture

While it will withstand short periods of exposure to moisture, this product does contain sensitive electronic components and exposure to moisture should be limited by the user/installer. This product is not designed for where constant exposure to moisture or immersion can be encountered. This unit should NEVER be cleaned with a power washer or used where direct power washer spray may be encountered.

Depth of view

OBJECTS VIEWED IN MONITOR ARE CLOSER THAN THEY APPEAR.

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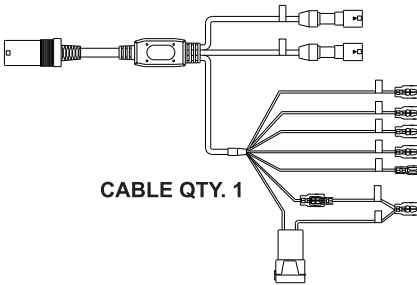
PACKING CONTENTS



SUN SHIELD
QTY. 1



LCD MONITOR
QTY. 1



CABLE QTY. 1



Machine Screw
M4x8mm
QTY. 4



4" WIRE TIE
QTY. 1



WVCMS10B
QTY. 1

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CONTROLS AND OPERATION



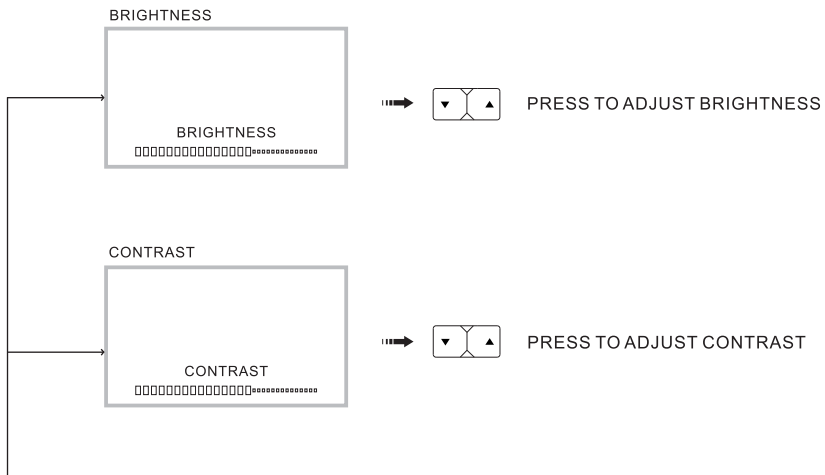
- 1. POWER ON/OFF** -Press once turns unit on
-Press again turns unit off
-When power applied and unit is off, only the red power button is backlit.
-When unit is turned on, all buttons are backlit.



2. MENU



- Each one press less than 1 second enters brightness, contrast, color or tint adjust mode in turns (see Fig. 1)
-Time out of OSD menu is approx. 5 seconds from last key pressed



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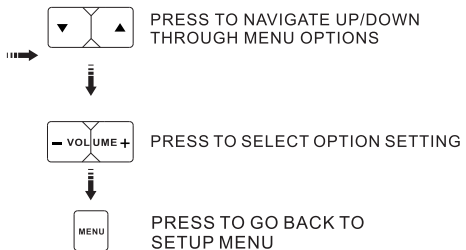
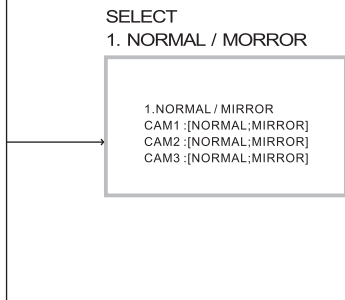
Fig.1 Brightness, contrast, color and tint control



- Press menu button over 2 seconds enters setup menu (See Fig.2)
- Press again before time out exits menu mode



Fig.2 Setup Menu



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SELECT 2. TRIGGER DELAY

2. TRIGGER DELAY
TRIGGER 1 : [0 SEC TO 20 SEC]
TRIGGER 2 : [0 SEC TO 20 SEC]
TRIGGER 3 : [0 SEC TO 20 SEC]



PRESS TO NAVIGATE UP/DOWN THROUGH MENU OPTIONS



PRESS TO TOGGLE THROUGH NUMBER SET



PRESS TO GO BACK TO SETUP MENU

SELECT 3. CAMERA NAME

3. CAMERA NAME
CAM 1 : [_____]
CAM 2 : [_____]
CAM 3 : [_____]



PRESS TO NAVIGATE UP/DOWN THROUGH MENU OPTIONS



PRESS TO SCROLL THROUGH ALPHA-NUMERIC CHARACTER SET



PRESS TO SELECT HIGH LIGHTED CHARACTER AND MOVE TO NEXT LETTER



PRESS TO GO BACK TO SETUP MENU

SELECT 4. SCALE MODE

4. SCALE MODE
DISPLAY MODE : [CAM1;CAM2;CAM3;ALL;NONE]
CAM1 SCALE : [SCALE1;SCALE2;SCALE3;SCALE4]
CAM2 SCALE : [SCALE1;SCALE2;SCALE3;SCALE4]
CAM3 SCALE : [SCALE1;SCALE2;SCALE3;SCALE4]
SCALE1
SCALE2
SCALE3
SCALE4



PRESS TO NAVIGATE UP/DOWN THROUGH MENU OPTIONS



PRESS TO SELECT OPTION SETTING



PRESS TO GO BACK TO SETUP MENU

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SELECT
SCALE1 / 2 / 3 / 4



PRESS TO SET UP EACH SCALE



PRESS TO SCROLL THROUGH
NUMBER (0 TO 9)

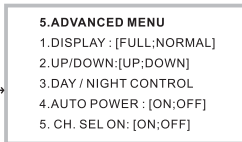


PRESS TO MOVE TO NEXT NUMBER SET



PRESS TO GO BACK TO SETUP MENU

SELECT
5. ADVANCED MENU



PRESS TO NAVIGATE UP/DOWN
THROUGH MENU OPTIONS

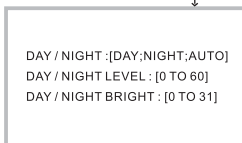


PRESS TO SELECT OPTION SETTING



PRESS TO GO BACK TO SETUP MENU

SELECT
DAY / NIGHT CONTROL



PRESS TO NAVIGATE UP/DOWN
THROUGH MENU OPTIONS



PRESS TO TOGGLE THROUGH AND
SET UP EACH LEVEL



PRESS TO GO BACK TO ADVANCED
MENU

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3. SELECT



Primary Function Input Source Select

-Pressing "SELECT" button sequences source input modes from Ch1 to Ch2 to Ch3.

-Source ID is indicated by OSD in top left corner.

Secondary Function Menu Option Selection

-While in Menu mode, the "SELECT" button is used to select the highlighted function or option setting

4. UP / DOWN



Primary Function Brightness, Contrast, Color and Tint Control

-Pressing "UP" button increases brightness, contrast, color or tint level

-Pressing "DN" button decreases brightness, contrast, color and tint level

Secondary Function Menu Navigation

-While in Menu modes, the " UP" and "DN" buttons are used to move cursor upward or downward

5. Day / Night



Primary Function DAY/NIGHT Mode Setting

-Pressing "DAY/NIGHT" button sequences day/night backlight compensation through "DAY", "NIGHT" and "AUTO" modes

Primary Function Speaker Volume Control

-Pressing "-" button decreases speaker volume.

-Pressing "+" button increases speaker volume.

6. Volume +/-



Secondary Function Menu Option Setting Selection

- While in certain Menu modes (i.e. Source Naming), the "-" and "+" buttons adjust settings or navigate through the available menu settings.

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INSTALLATION INSTRUCTIONS

BEFORE YOU BEGIN INSTALLATION:

Before drilling be sure that no cable or wiring is on the other side. Clamp all wires securely to reduce the possibility of them being damaged during installation and use.

Keep all cables away from hot or moving parts, and electrically noisy components.

Wiring Definitions:

- Power connection:

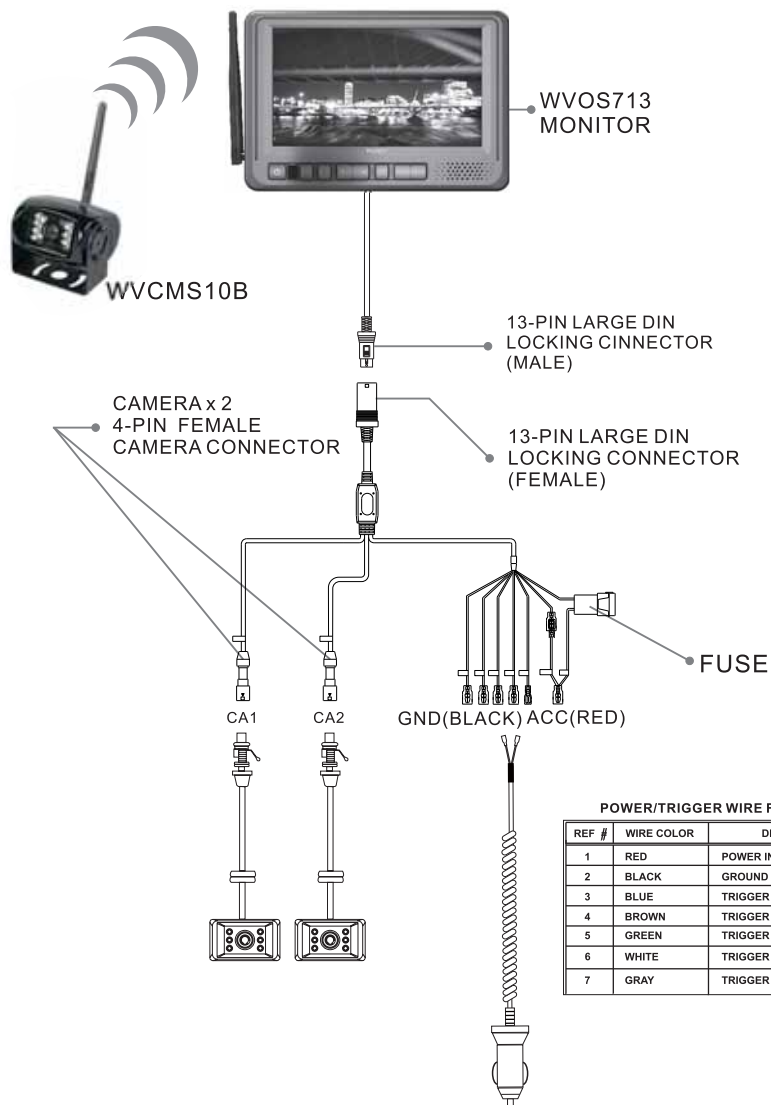
Pin 1	POWER IN DC (9V~ 30V) -Red
Pin 2	GROUND -Black
Pin 3	CAMERA 1 TRIGGER -Blue
Pin 4	CAMERA 2 TRIGGER -Brown
Pin 5	CAMERA 3 TRIGGER -Green
Pin 6	AUDIO/MUTE (AUDIO ON/OFF) -White
Pin 7	DAY/NIGHT TRIGGER - Gray
- Camera 1 input: 4-Pin Connection for camera or camera extension cable
- Camera 2 input: 4-Pin Connection for camera or camera extension cable
- LCD panel: 13-Pin Large DIN cable connection to monitor

General:

1. Choose the monitor, and camera locations.
2. Install all required cables in vehicle. A 3/4" (19mm) hole should be drilled for passing camera cables through vehicle walls, barriers, etc. Install split grommets where applicable. If additional cable protection is required install convoluted tubing over the cable.
3. After cable/wiring has been routed and components in place, temporarily make all system connections and perform a system function check. If system does not operate properly, see the troubleshooting section.
4. Make sure all cables are routed away from hot or moving parts, and away from sharp edges. Secure cables with wire ties.

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TYPICAL SYSTEM CONNECTION



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PRODUCT SPECIFICATIONS

LCD PANEL SPECIFICATIONS

Size/Type	7" (Analog) TFT LCD	
Brightness	500 cd/m ²	
Contrast Ratio	300	
View Angles	Top	40°
(@ CR_≥10)	Bottom	60°
	Horizontal	± 60°
Response Time	Rise : 15ms	
	Fall : 20 ms	
Back Light Type	LED	
Back Light Life	20,000 Hours (min)	

- **Operation Temperature Range** : -20°C ~ +65°C
- **Storage Temperature Range** : -35°C ~ +85°C
- **Max Humidity** : 85%
- **Operation Voltage Range** : DC 9V ~ 30V
- **Current Draw (typical)** : 600mA @12VDC
- **Signal system** : NTSC or PAL (Auto detection)
- **Video Aspect Ratio** : 16 : 9
Input Level : 1Vp-p 75Ω
- **Audio Input Level** : 150 mV (Max)
- **Product Weight** : 1.43 lbs / 650g
- **Product Dimensions** : Monitor Only Dimensions
7.75 W X 5.25 H X 1.25D inches

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PAIRING PROCESS

If your monitor is not receiving a signal from the camera; the two may not be paired correctly.

1. Camera and monitor must be connected to 12 Volt DC power supply.
2. Remove "pair" button cover from the side of the camera (using a coin or flat head screwdriver). Figure 4
3. Press and hold the "pair" button on the back of the monitor for 3 seconds and release. (Monitor will display "Please press TX pairing button")
4. Press and hold the "pair" button on the side of the camera for 3 seconds and release (you have 60 seconds to press this button.)

If done correctly, monitor will display "Pairing successful". If pairing is not successful, the monitor will display "Pairing failed". If you receive this message, repeat steps 2 - 4.

TROUBLE SHOOTING

Monitor will not turn on.	- Check power cord connection at monitor and 12VDC socket. - Check fuse in cigarette socket adapter.
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Monitor displays "No Signal".	- Check 12VDC power at camera. - Make sure antenna is tight and pointed correctly. - Make sure monitor is set to AV1. - Try manually pairing the system. See Pairing Process for instructions.
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Intermittent reception.	- Make sure antenna is tight and installed vertically.
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Notice: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

IMPORTANT NOTE: To comply with the FCC RF exposure compliance requirements, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. No change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

"Our WiSight wireless technology operates at nearly the same performance level as a wired system. However, slight delays and signal reductions are possible due to application or environmental factors."



For further technical support call:
1-877-305-0445