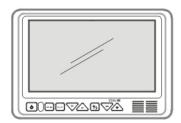
# **Voyager**®

## AOM-7694

## 7" FLAT PANEL COLOR OBSERVATION MONITOR OWNER'S MANUAL



## AOM-7694 Features:

- High Performance Automotive Grade 7" Color LCD Panel
- 4 Camera / A/V Inputs
- Single / Split / Tri / Quad Display Modes
- PAL/NTSC Compatible
- 1 Video Output for Display on External Video Monitor
- DC Auto Source Switching Triggers (Turn Signal Compatible)
- Backlit Control Buttons
- Built-In Audio Speaker
- Compatible with Voyager Standard or Motorized Tilt Cameras
- Manual/Auto Day/Night Display Brightness Modes
- Programmable Source Name OSD
- Flush-Mount Installation Kit Included



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#### **Camera-Monitor Warnings!**

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

Doc.Rev (2006/05/08)

## **Important! - Please Read This Manual Before Installing!**

Congratulations on your purchase of a Voyager AOM7694 LCD Observation Monitor. With proper installation and use, your AOM7694 LCD 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 the 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 A CCESSORY 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 AOM7694 product is designed to be used primarily as a rear observation device in conjunction with closed circuit camera. In any installations where the AOM7694 is used to display television broadcasts or recorded video, playback, installation <u>location</u> 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.

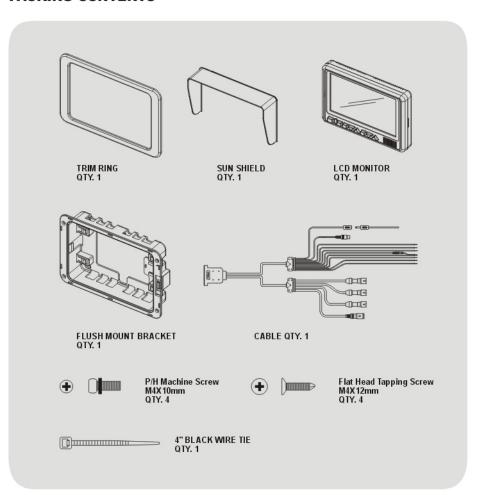
#### Moisture

Your Voyager AOM7694 was designed to be water-resistant. 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.

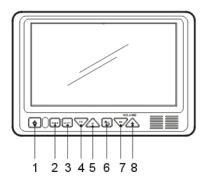
#### Depth of view

OBJECTS VIEWED IN MONITOR ARE CLOSER THAN THEY APPEAR.

## **PACKING CONTENTS**



## **CONTROLS AND OPERATION**



## 1. POWER ON/OFF

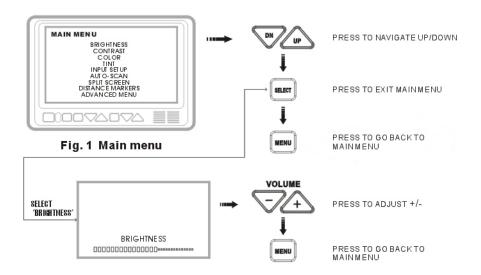


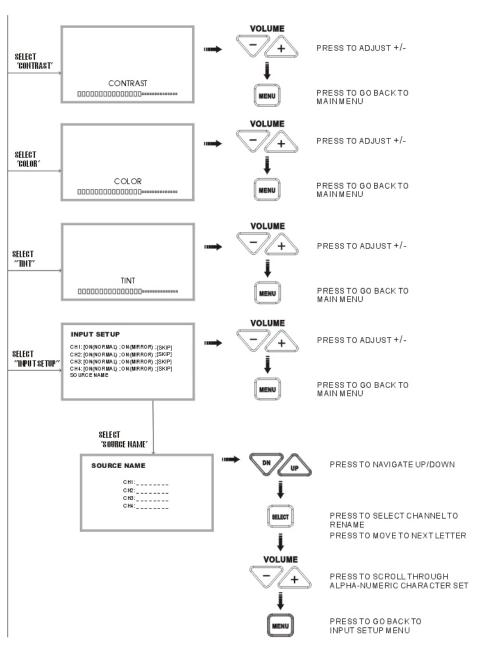
- -Press once turns unit on
- -Press again turns unit off
- -With power applied and unit is off, only the red power button is backlit.
- -When unit is turned on, all buttons are backlit.

## 2. MENU



- -Press once enters main menu mode (See Fig. 1)
- -Press again before time out exits menu mode
- -Time out of OSD menu is approx 8 seconds from last key pressed.



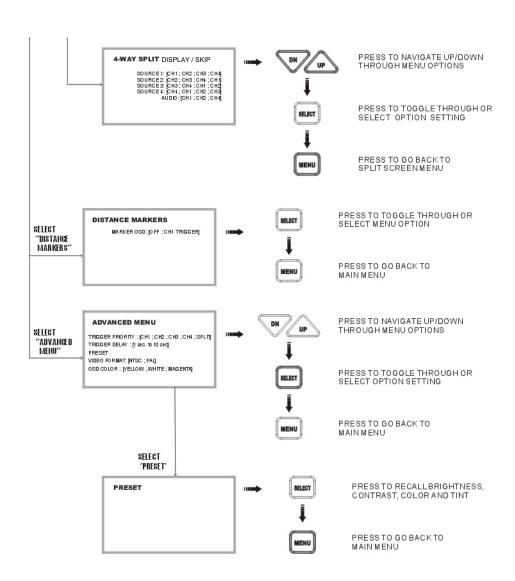


## AOM-7694 AUTO SCAN DN PRESS TO NAVIGATE UP/DOWN THROUGHMENU OPTIONS UP SCAN: [OFF;ON] DELAY TIME: [1 sec. to 10 sec.] SELECT "AUTO - SCAN" PRESS TO TOGGLE THROUGH OR SELECT MENU OPTION PRESS TO GO BACK TO MAIN MENU PRESS TO NAVIGATE UP/DOWN THROUGHMENU OPTIONS SPLIT SCREEN SELECT "SPLIT SCREEN" 2 - WAY 3 - WAY 4 - WAY PRESS TO TOGGLE THROUGH OR SELECT MENU OPTION SELECT "2-WAY" PRESS TO GO BACK TO MAIN MENU PRESS TO NAVIGATE UP/DOWN THROUGH MENU OPTIONS 2-WAY SPLIT DISPLAY / SKIP UP SOURCE 1: [CH1 ; CH2 ; CH3 ; CH4 SOURCE 2: [CH2 ; CH3 ; CH4 ; CH1] AUDIO: [CH7 ; CH7 ; OFF] PRESS TO TOGGLE THROUGH OR SELECT MENUSETTING SELECT PRESS TO GOBACK TO SPLIT SCREEN MENU PRESS TO NAVIGATE UP/DOWN THROUGH MENU OPTIONS 3-WAY SPLIT DISPLAY / SKIP SOURCE 1: [CH1 ; CH2 ; CH3 ; CH4 SOURCE 2: [CH2 ; CH3 ; CH4 ; CH1] SOURCE 3: [CH3 ; CH4 ; CH1 ; CH2 AUDIO: [CH7 ; CH7 ; OFF]

SELECT

PRESS TO TOGGLE THROUGH OR SELECT OPTION SETTING

PRESS TO GO BACK TO SPLIT SCREEN MENU



#### 3. SELECT



## **Primary Function Input Source Select**

- -Pressing "select" button sequences source input modes in order indicated in Fig. 2.
- -Source input modes that are Skipped through the menu control function will be skipped (example, see Fig. 3 that shows sequence with CAMINPUT 3 Skipped ).
- -Source ID is indicated by OSD in top left corner.
- -Source NAME is indicated by OSD bottom center.

## Secondary Function Menu Option Selection

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

## Third Function Scan Pause / Start

-While in source "SCAN" mode, pressing the select button will stop the scan and display the current source. "Pause" will be displayed by OSD.

Pressing the "select" button again will resume the source scan.

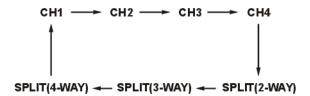


Fig. 2 Source Select Sequence (All Source Options " On" )

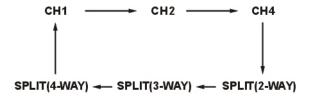


Fig. 3 Source Select Sequence (CH3"SKIP")

#### 4. UP / DOWN



## **Primary Function Camera Control**

- -Pressing "DN" button adjusts camera position downward
- -Pressing "UP" button adjusts camera position upward

## Secondary Function Menu Navigation

-While in Menu modes, the "UP" and "DN" buttons navigate through the available menu options.

## 5. Day / Night



## **Primary Function DAY/NIGHT Mode Setting**

- -Pressing "DAY/NIGHT" button sequences day/night backlight compensation through "DAY", "NIGHT" and "AUTO" modes.
- -Current mode setting is indicated by temporary OSD located bottom center.

## 6. Volume +/-



## Primary Function Speaker Volume Control

- -Pressing "-" button decreases speaker volume.
- -Pressing "+" button increases speaker volume.

## Secondary Function Menu Option Setting Selection

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

#### 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	CHANNEL 1 TRIGGER -Blue
	Pin 2	CHANNEL 2 TRIGGER -Brown
	Pin 3	CHANNEL 3 TRIGGER - Green
	Pin 4	POWER IN DC (10 TO 32V)-Red

Pin 5 AUDIO/MUTE (AUDIO ON/OFF) -White

Pin 6 CHANNEL 4 TRIGGER - Orange

Pin 7 GROUND-Black

Pin 8 2-WAY SPLIT TRIGGER - Yellow

■ Camera 1 input: 5-Pin Connection for tilt camera or camera

extension cable.

Camera 2 input:
 Camera 3 input:
 Camera 4 input:
 Camera 4 input:
 Camera 4 input:
 Connection for camera or camera extension cable.
 Connection for camera or camera extension cable.

■ LCD panel: 25-Pin D-Sub cable connection: to monitor.

## General:

- 1. Choose the monitor, and camera locations.
- 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.
- 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 cable.
- 4. Make sure all cables are routed away from hot or moving parts, and away from sharp edges. Secure cables with wire ties.

## **Backup (Rear) Camera**

- Rear-mounted cameras used for monitoring while backing up must be connected to the CA1 input. Trigger#1 must be connected to the reverse gear light circuit in the vehicle.
- There are two camera options for rear camera installations, standard and tilt. Tilt cameras and cables will connect directly to the 5-pin CA1 input. If a standard(non-tilt) camera is installed for rear camera, a 5-pin to 4-pin adapter harness (included) must be used.

## **Side Camera**

If side monitoring cameras are installed, they should be connected to either CA2 or CA3 inputs. Triggers 2 and 3 should be connected to the vehicle's turn signal circuits.

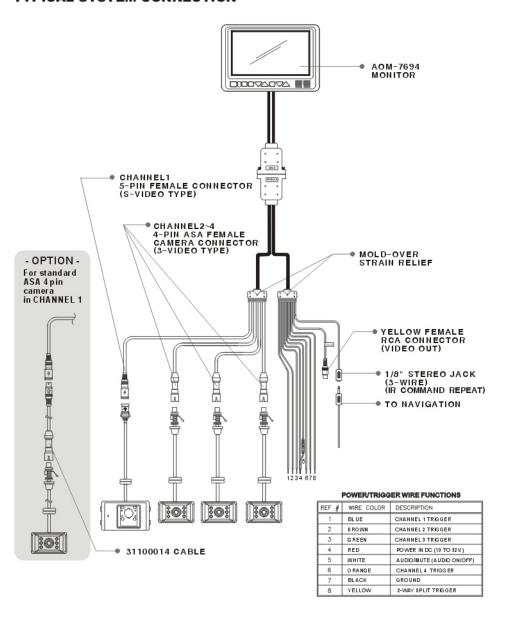
## **Navigation**

- If a navigation computer is installed, the video/audio output should be connected to CH4 input. The video output from the Nav. System must be NTSC composite. Adapter harness(1126810) is required to convert from the 4-pin camera connector to RCA connections.
- A remote control repeater connection(1/8" jack) is included to allow control of the navigation computer through the sensor on the front of the AOM7694 monitor.

## **External(Additional) Monitors**

 An RCA video output is included and intended for connection to an external monitor (i.e. Bedroom TV)

## **TYPICAL SYSTEM CONNECTION**



## **PRODUCT SPECIFICATIONS**

## LCD PANEL SPECIFICATIONS

Size/Type	7" (DIAGONAL) TFT LCD		
Brightness	400 cd/m² (min)		
	500 cd/㎡ (typ)		
Contrast Ratio	200 (min)		
	300 (typ)		
View Angles	Top (12 o'clock)	40° (min)	
(@ CR≥10)	Bottom (6 o'clock)	60° (min)	
	Horizontal	±60° (min)	
Response Time	Rise : 12 ms (typ) ; 24ms (max)		
	Fall: 18 ms (typ); 36ms (max)		
Back Light Type	CCFL		
Back Light Life	10,000 hrs (min)		

■ Operation Temperature Range :  $-20\,$   $^{\circ}$   $^{\circ}$   $^{\circ}$  +65  $^{\circ}$ 

■ Storage Temperature Range : -40 °C ~ +80 °C

Max Humidity: 85%

■ Max Vibration Force : 4G ■ Max Shock Force : 100G

■ Operation Voltage Range : DC 10V ~ 32V

■ Current Draw (typical) : Max 30W

• Signal system : NTSC or PAL (selectable)

■ Video Aspect Ratio: 16:9

Input Level: 1Vp-p 75Ω

Audio Input Level: Max 0.2 W-150 mV

Product Weight: 2.2 lbs / 1Kg

■ **Product Dimensions**: Monitor Only Dimensions 7.75 W X 5.25 H X 1.25D inches

Flange Dimensions 9.25 W X 6.25 H X 2 D inches

