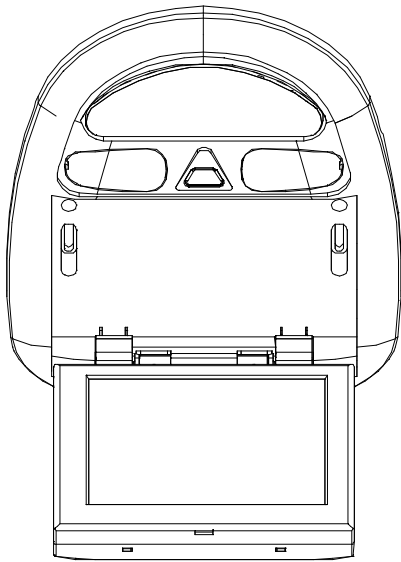


FlexVision®



LCM641S
Roof Mount
Flip Down
Monitor
Video Only
US Patent #D 413,856

Owner's Manual And Installation Guide

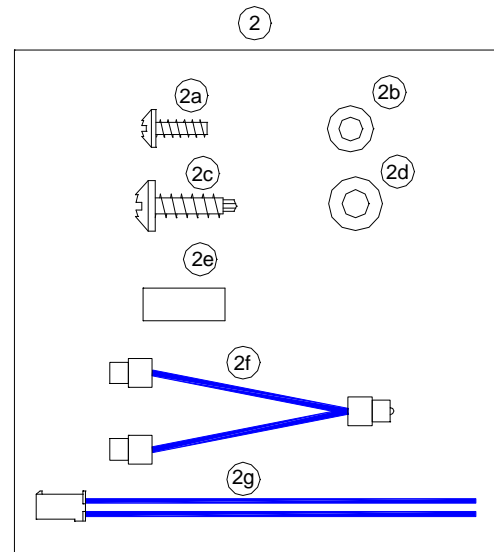
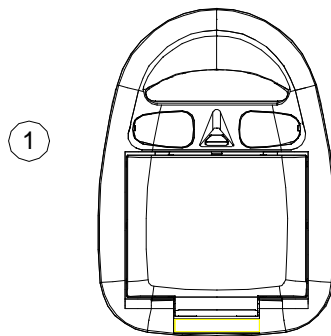
Audiovox Specialized Applications, LLC
23319 Cooper Dr.
Elkhart, IN 46514
1-800-688-3135
www.asaelectronics.com

Features:

- TFT Active Matrix Color LCD
- Built In Dome Lights
- “Hide Away” Screen When Not in Use
- Wide Viewing Angle (6.4” Diagonal)
- High Resolution (640 x 480)
- High Brightness (300 nit)
- Automatic Viewing Signal Sensing Turn-On Circuit
- Designed and Tested for Automotive Use

Installation may require Mini Console (Trim Ring) order no. 1181300

- 1) LCM641S Video Monitor – 1 pc.
- 2) Accessory kit (P/N 1186410) – 1 pc.
 - 2a) #4 x 3/8” Screws – 11 pcs.
 - 2b) #4 Washers – 11 pcs.
 - 2c) #6 x 5/8” Self-drilling Screws – 4 pcs.
 - 2d) #5 Washers – 4 pcs.
 - 2e) Spacers – 8 pcs.
 - 2f) Y-Adapter (P/N 0892165) – 1 pc.
 - 2g) Cord, Power – 1 pc.
- 3) Owner’s Manual/ Installation Guide (P/N 8010770)



Materials in this Package:

Tools Required:

- #2 Phillips Screwdriver
- #1 Phillips Screwdriver
- Wire Strippers
- Utility Knife
- Masking Tape
- Multimeter (to verify 12VDC and continuity, do not use test light)
- Misc. electrical connectors (to connect to vehicle power source....will vary from vehicle to vehicle)
- Marker Pen
- Electrical Tape

Vehicle Preparation:

- 1) Locate vehicle power source. Generally this is best found near the vehicle's fuse block, which is usually (though not always) under the steering wheel area. Locate an accessory hot circuit to tap into for video system power. Accessory hot means a circuit that is +12VDC when the ignition key is in either the "ACC'Y" or "Run" positions, and 0 Volts DC when the ignition key is removed from the vehicle.
- 2) Generally, the best location for the video monitor is where the vehicle's dome light is traditionally installed (center of roof, just behind the two front seats). The monitor should be located in such a manner that it can comfortably be viewed by the rear seat passengers in the vehicle. The monitor should **NEVER** be located in a position that would place it within the driver's field of view. This is not only hazardous for driving conditions (as it creates a distraction to the driver), but it is against the law in many states. Check your state laws.
- 3) Once a monitor location has been determined, there may be prep work required for the headliner. Some of the steps that may need to be taken depending upon your installation are:
 - a) Removing the vehicle's dome light.
 - b) The headliner **MAY** have to be cut out per the diagram below.**
 - c) If the mini-console is being used, it will have to be trimmed to fit the contour of the headliner. Refer to page 3.

NOTE: steps a-c listed above are not required in all installations....you may have to do none, some, or all of these steps.

****IF** your particular installation will require you to cut out the headliner, the box that this kit came in can be used as a template. You can remove the shelf that the video monitor rests upon and trace the opening onto the headliner for cutting.

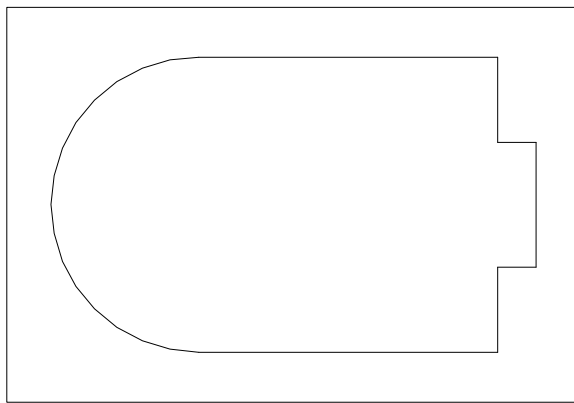


Figure 1

General Installation Approach:

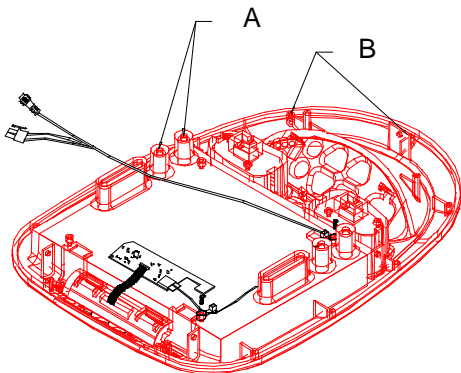
- 1) Before beginning installation please refer to this warning in the manual.
- 2) Review this manual to become familiar with requirements and hook ups.
- 3) Decide upon mounting location and method of mounting.
- 4) Prep the vehicle by removing any interior trim necessary to gain access to vehicle power hook up point as well as all areas where interconnecting wire harnesses will need to be located. If any access holes need to be cut into the vehicle (headliner, or other trim components, etc.), this should be done now as well. Refer to vehicle preparation section of manual.
- 5) Route all wire harnesses throughout the vehicle as necessary. (Refer to the wiring diagram section of this manual.) Be sure that all wiring is protected from sharp edges and is routed in such a manner that it will not be pinched when all components and interior trim are fully installed. Be sure to leave enough slack in the wiring to allow working room.
- 6) Remove A/V system components from their packaging and place them loosely in the vehicle at their respective locations.
- 7) Connect monitor (electrically) and verify proper operation of all system functions. Note: This is best done BEFORE, and AFTER monitor has been permanently mounted.
- 8) After verifying proper operation of the system, proceed with mounting video monitor.
- 9) When the monitor is mounted, recheck function of the entire system again to ensure that no wiring was pinched or connected improperly during final installation.

Rear Panel Features

A- Perimeter Screw Bosses – Use these to various console/ trim bezels.

B- Mounting Screw Bosses. – Use these to secure the unit to the roof structure of the vehicle and/or console assembly. (optional)

Figure 2



Hook Up Procedure

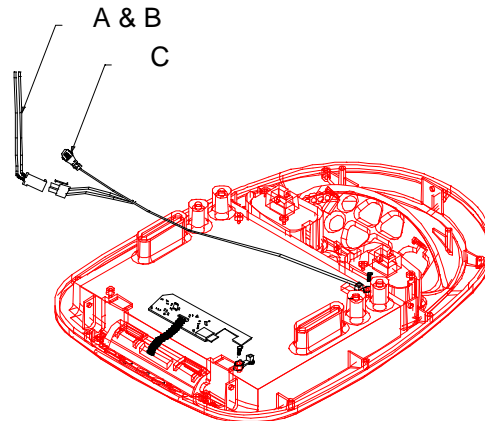
A – Connect the power harness to the mating connector on the monitor.

B – Connect power harness to the vehicle's electrical system by tapping into an accessory hot line.

C – Connect to video source using RCA connector .

D – Verify all functions of the system before final mounting of the finished assembly.

Figure 3



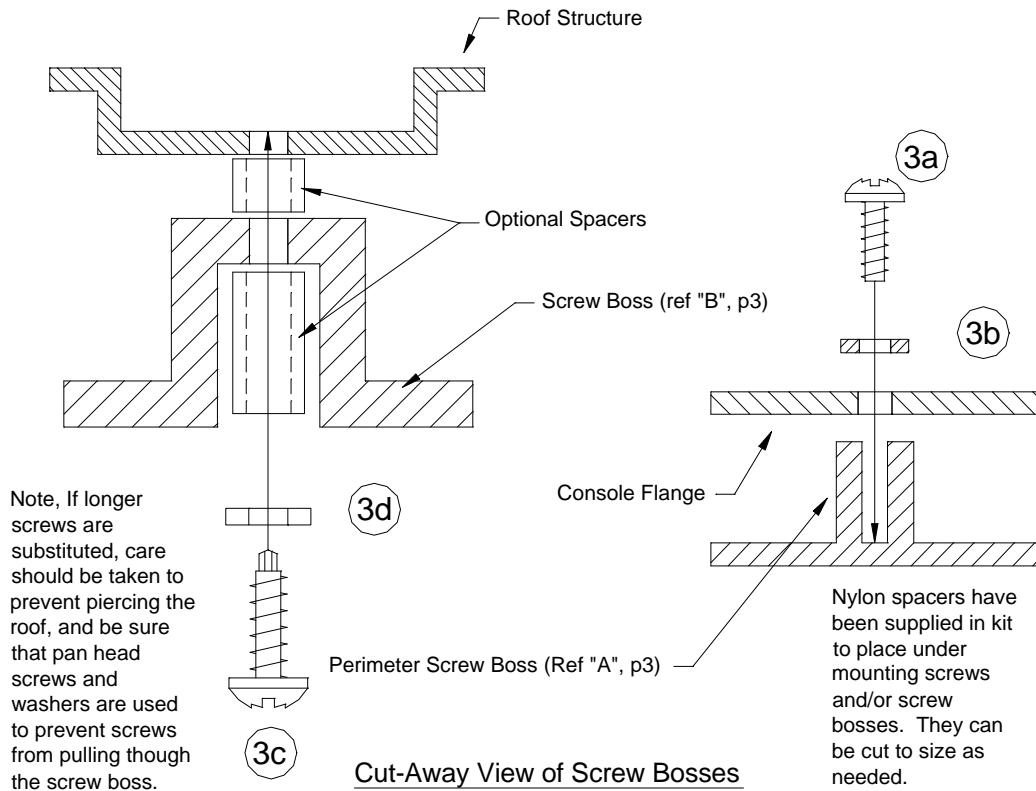


Figure 4

Full Size Console Installation:

This page covers special installation considerations for full size, custom console installation.

There are several "full size" custom consoles available for selected vehicles. Some of these vehicles are the Chevy Suburban, Ford Expedition, and the Dodge Durango. These full size consoles incorporate several additional features, and are particularly useful if the vehicle you are installing this system into already has an OEM overhead console in the headliner.

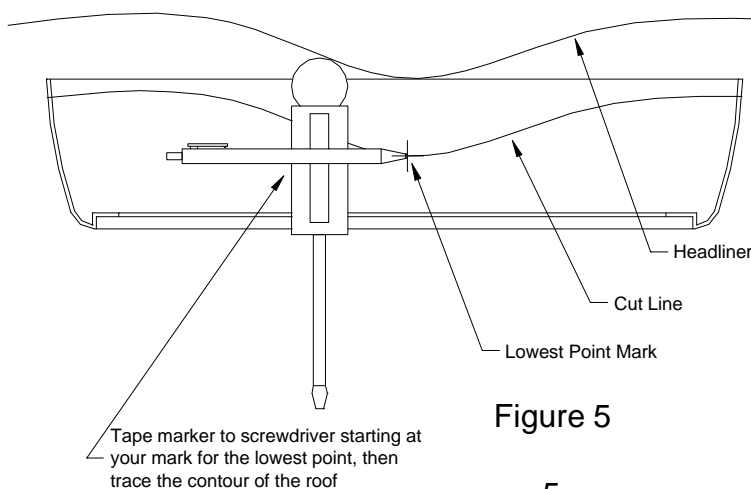
Refer to the installation manual that comes with the console itself for complete installation instructions. The diagram above shows a detail of the attachment of the console to the video pod.

Mini Console Installation:

This page only covers special installation considerations for the mini console installation. If the video monitor is to be installed with a custom full sized overhead console, turn to page 4 now.

If the video monitor is to be installed in a vehicle with the mini console (P/N 1181300), it may need to be trimmed to fit the vehicle headliner.

- 1) In this installation, the video monitor is mounted directly to the overhead cross member in the roof using the mounting screw bosses (item B on page 3). The screw bosses should contact the crossmember directly (ie: no gap between the screw boss and the roof structure). Also, be sure that the screws (2b on page 1) do not pierce the outer roof skin when fully fastened into the crossmember. The mini console is attached to the video monitor using the perimeter screw bosses (item A on page 3). It is important the screws used in this installation are not overtightened, and the video monitor and mini console are mounted in such a way the assembly does not distort (or bend) when the mounting screws are tightened.
- 2) It is best to mount the video monitor to the roof structure first without the mini console. There should be a gap between the headliner and outer flange of the video monitor. The mini console should be cut to fill this gap. Apply masking tape to outer surface of the mini console in the areas where the cut will be made.
- 3) Mark the cut to be made following the necessary contour of the roof. Suggested method of marking is as follows:
 - a) First mark the narrowest point of the mini console on the masking tape. Be careful to consider not only vertical location, but fore-aft location.
 - b) Using handle of a screwdriver, make a "transfer marking tool" see Fig. 5 below. Place tool against roof and the marker against the masking tape on the mini console. Trace the cut to be made around the entire perimeter of the mini console.
 - c) Cut the mini console with a sharp utility knife or shears. Make cut in several passes over marked line, each time cutting a little deeper. It is not necessary to cut completely through plastic, cut need only be 50% of the wall thickness of plastic. The plastic will break cleanly at the cut by bending back and forth several times.
 - d) Check the fit of trimmed console and make any minor adjustments necessary.
- 4) The mini console can be painted or covered with a material that matches the headliner before assembling the mini console to the video monitor.
- 5) The finished mini console should be attached to the video monitor, then attach assembly to the roof. See Fig.



Refer to Fig. 4 for detail on attaching console to video monitor and video monitor to vehicle structure

Figure 5

Specifications:

Video Input System:	NTSC
Power Input:	12VDC; 850mA Current Draw
Video Input:	1V peak to peak Composite Video; 75Ω
Operating Temperature:	10°C to 60°C
Storage Temperature:	-30°C to +80°C
Viewing Area:	6.4" Diagonal Measurement
Display type:	Color TFT Active Matrix
Resolution:	640 x 480
Brightness:	300 nit
View Angle Range (left-right):	±60°
View Angle Range (top):	15°
View Angle Range (down):	35°
Contrast Ratio:	120 : 1

*Specifications may change without notice

Warning:

It is unlawful in most jurisdictions for a person to drive a motor vehicle which is equipped with a television viewer or screen that is located in the motor vehicle at any point forward of the back of the driver's seat, or that is visible, directly or indirectly, to the driver while operating the vehicle. This product should only be installed to the rear of the back of the driver's seat where it will not be visible, directly or indirectly, to the operator of the motor vehicle.

Accessory List:

<u>Description</u>	<u>Part Number</u>
AVT-988 9" Color Television with Remote (12V)	AVT988
AVT-597 5" Color Television with Remote (12V)	AVT597
AVT-1498 13" Color Television with Remote (12V)	AVT1498
AVP-7000 Video Cassette Player (12V)	AVP7000
AVP-7285 Video Cassette Player (12V)	AVP7285
Wireless Headphone Kit: Includes 2 sets Wireless Headphones and Transmitter	WRFKIT1
BPA-501-12 4 Amp Adapter for use with AVT-988 9" and AVT-1498 13" Televisions	0891412
AC2A- 2 Amp Adapter for use with AVT-597 5" TV and AVP-7000 Video Cassette Player	0891436
Unified Remote Control	0892325
VAC-21- 12 Volt Corded Vacuum	VAC21
AVF-1 12 Volt Rechargeable Flashlight	AVF1
HP-175 Headphones with Pivoting Ear Cup	HP175
HP-275 Headphones with Volume Control on Cord	HP275
HP-375 Studio Quality Headphones	HP375

Unlike household electronics, all of our products have been specifically designed and tested for the mobile environment and are only available through ASA. To order any of these products, please contact Audiovox Specialized Applications at www.asaelectronics.com or 800-688-3135.



AUDIOVOX **S**PECIALIZED **A**PPPLICATIONS, L.L.C.

23319 Cooper Dr.
Elkhart, IN 46514

Manual P/N 8010770
Rev. D 12/00