

# FlexVision®

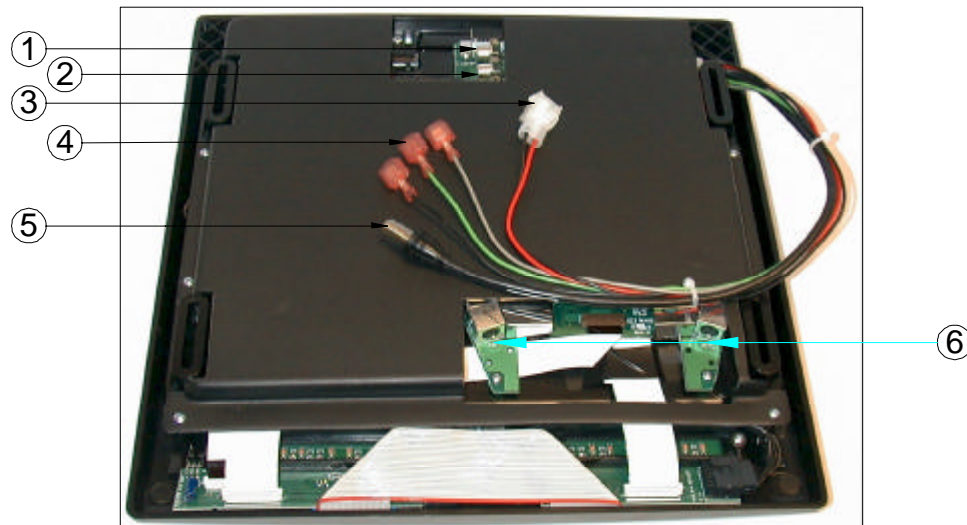
## LCM1210FD Owner's/Installation Manual

LCM1210 Flip-Down  
In Vehicle  
Entertainment System



Audiovox Specialized Applications, LLC  
23319 Cooper Dr.  
Elkhart, IN 46514  
219-264-3135

## Rear Panel Features:



- 1) Left RCA Out: Hook-up for the left audio out (white male RCA jack)
- 2) Right RCA Out: Hook-up for the right audio out (red male RCA jack)
- 3) Power Harness Connection: This plug connects to the power harness mating plug
- 4) Optional Headphone Connections: Green is right positive, Gray is left positive and Black is the ground
- 5) Antenna Connections: This connects to the antenna if applicable.
- 6) DIN Connectors: The source component harness (P/N 8010730) connects here. A cable tie will mount through holes provided in PCB, and is recommended for wire strain relief. A second component harness is needed to utilize both mini-din connectors.

## Front Button Panel Features:

- 1) Power: This button turns LCM1210FD on and off. Dimly lit when in stand-by mode
- 2) Channel  $\Delta$   $\nabla$ : Pressing  $\Delta$  will select channels higher and pressing  $\nabla$  will select channels lower than current channel.
- 3) Volume  $\Delta$   $\nabla$ : Pressing  $\Delta$  will raise the volume and pressing  $\nabla$  will lower the volume.
- 4) Select: Each press of this button selects the next source (1-3). Note that some sources produce an image, depending upon whether components are connected to all sources.
- 5) Latch: Sliding this latch forward will release the 12.1" monitor to drop into playing position.
- 6) AP: Places the tuner in auto-program mode. Auto program will scan all channels available and store active channels into memory for easy selection with the channel up/down buttons.
- 7) Bright  $\Delta$   $\nabla$ : Pressing this button  $\Delta$  will increase monitor brightness, and pressing this button  $\nabla$  will decrease monitor brightness.
- 8) Contrast  $\Delta$   $\nabla$ : Pressing this button  $\Delta$  will increase picture contrast, and pressing this button  $\nabla$  will decrease contrast.
- 9) Color  $\Delta$   $\nabla$ : Pressing this button  $\Delta$  will increase color separation and pressing this button  $\nabla$  will decrease color separation.

## **General Installation Approach:**

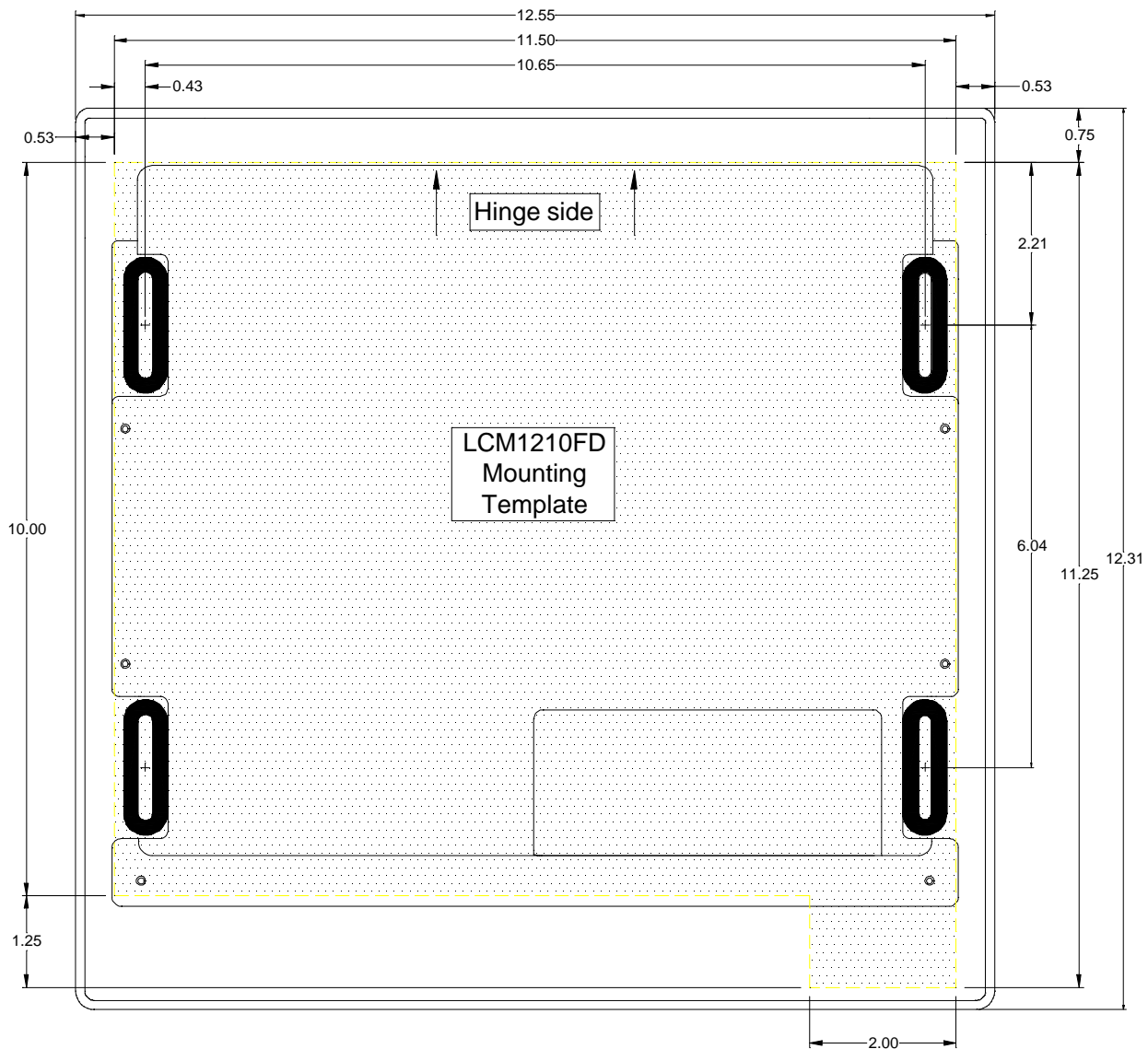
- 1) Before beginning installation, please refer to warning on page 10.
- 2) Decide upon system configuration and options that will be installed (ie: what components, VCP, remote headphones, 2<sup>nd</sup> VCP, etc).
- 3) Review all manuals to become familiar with electrical requirements and hook ups.
- 4) Decide upon mounting locations of all components and method of mounting.
- 5) 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, other trim components, etc.) this should be done now as well. Refer to page 4.
- 6) Route the wiring harnesses throughout the vehicle as necessary. (Refer to the wiring diagram on pages 5 and 6 of this manual as well as the wiring instructions for the individual components and accessory options being installed). 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 at each component to allow working room.
- 7) Remove all A/V system components from their packaging and place them loosely in the vehicle at their respective locations.
- 8) Connect all components together (electrically) and verify proper operation of all system functions. NOTE: This is best done both BEFORE and AFTER all components have been permanently mounted.
- 9) After verifying proper operation of the system, proceed with mounting of each component.
- 10) When all components are mounted, recheck function of entire system again to ensure that no wiring was pinched or connected improperly during final installation.

## **Notes:**

- Connecting to both the Wireless Headphones IR Transmitter and an FM Modulator will require an additional RCA Adapter (P/N 0892165).
- One dual RCA Patch Cord is needed to connect the TV/Monitor to the Wireless Headphone IR Transmitter. Available in two lengths: 3 Ft. (P/N 0892351) and 12 Ft. (P/N 0892353).
- One dual RCA Patch Cord is needed to connect the TV/Monitor to the FM Modulator, and is included in the FM Modulator package (P/N 0190730).
- For audio output, there are a few scenarios that may apply to your system:
  - a) Remote headphone jacks may be added and located throughout the vehicle.
  - b) Additional speakers and amplifiers may be added throughout the vehicle.

## Vehicle Preparation:

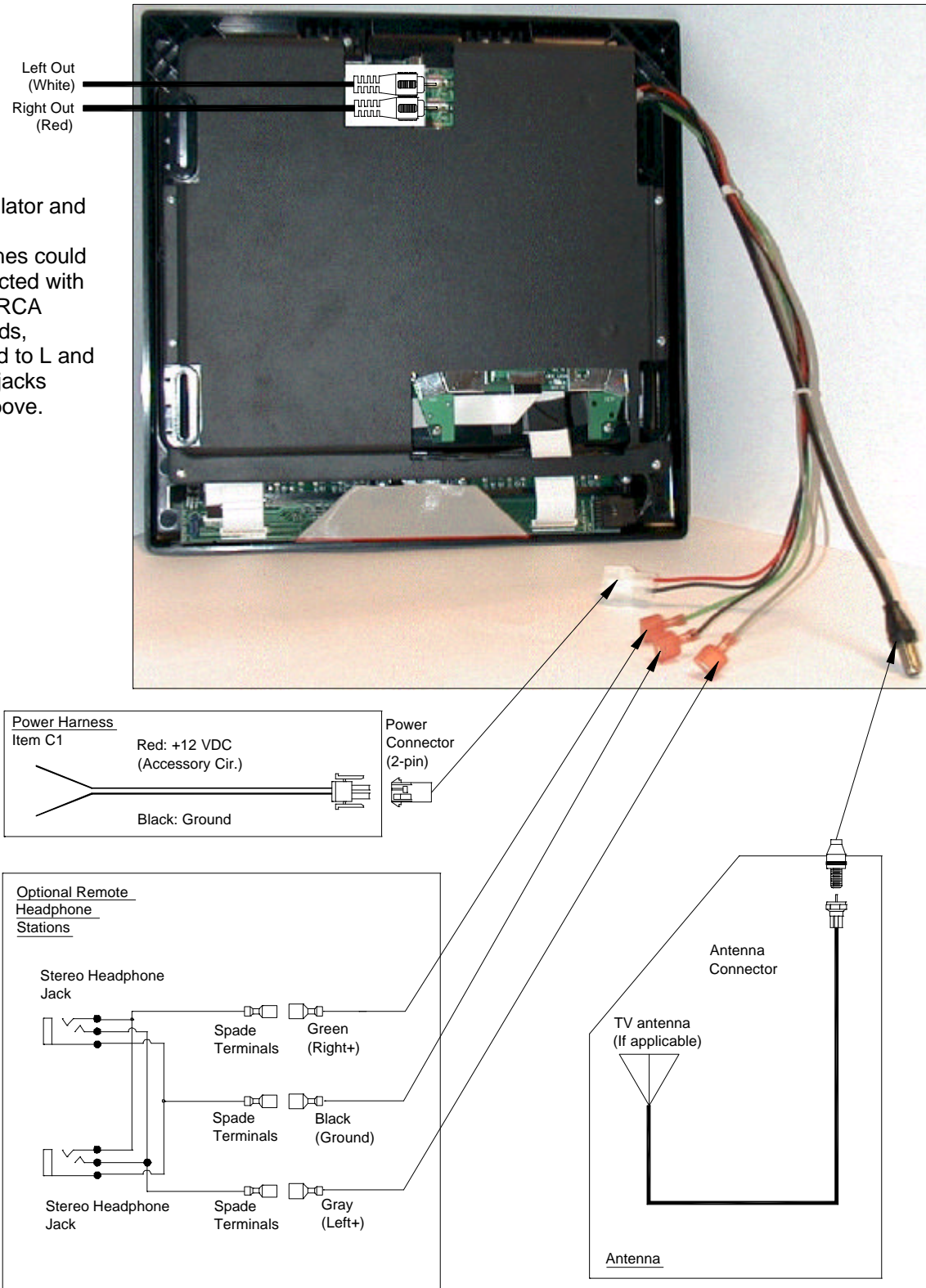
- 1) Locate vehicle power source. Generally this is best found near the vehicle's fuse block, which is usually (though not always) under the steering wheel area. Locate an accessory hot circuit to tap into video system power. Accessory hot means a circuit that is +12VDC when the ignition key is in either the "ACC'Y" or "Run" positions, and 0 volts DC when the ignition key is removed from the vehicle.
- 2) Mounting location and method for the individual components will vary from vehicle to vehicle. This manual will only focus on the installation of the video pod itself and related console accessories.
- 3) Generally, the best location for the video pod itself is where the vehicle's dome light is traditionally installed (center of roof, just behind the two front seats). The pod 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.
- 4) Once the pod location has been determined, there may be prep work required for the headliner. See mounting detail below for headliner cutout dimensions and hole locations.



## Wiring Diagram Hook Up Procedure:

- 1) Connect the power harness to the mating connector on the video pod.
- 2) Connect the power harness to vehicle's electrical system by tapping into an accessory hot line.
- 3) Verify all functions of the system before final mounting of the finished assembly.

FM Modulator and wireless headphones could be connected with two dual RCA patch cords, connected to L and R output jacks shown above.

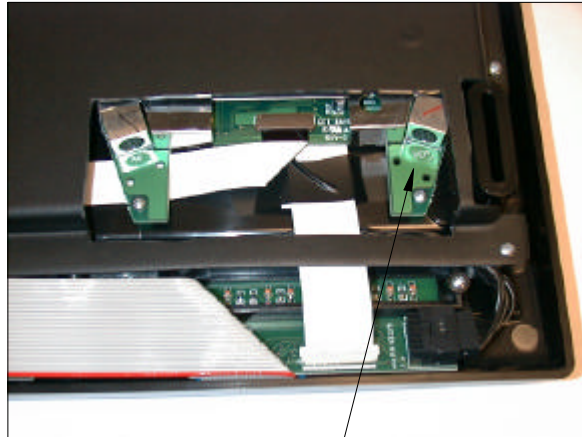


# Wiring procedure and Hook Up Diagram cont.:

## FM Modulator/Wireless Headphone Connections

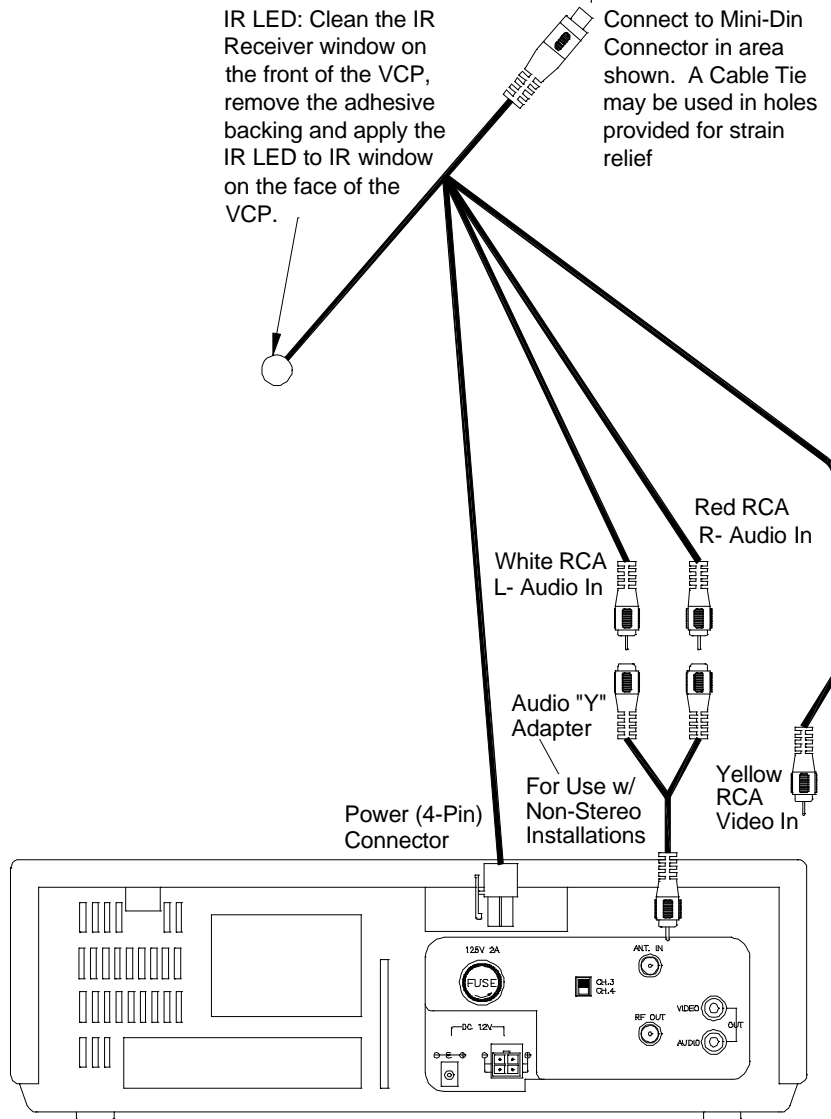
FM Modulator white RCA jacks to Red RCA (Right Audio Out) and Red or Yellow RCA from Modulator to Red RCA (Left Audio Out). WHS-100 Wireless Headphones Red or Yellow to White RCA (Left Audio Out) and Wireless Headphone White RCA to White RCA (Right Audio Out)

Mini-Din Connection Detail

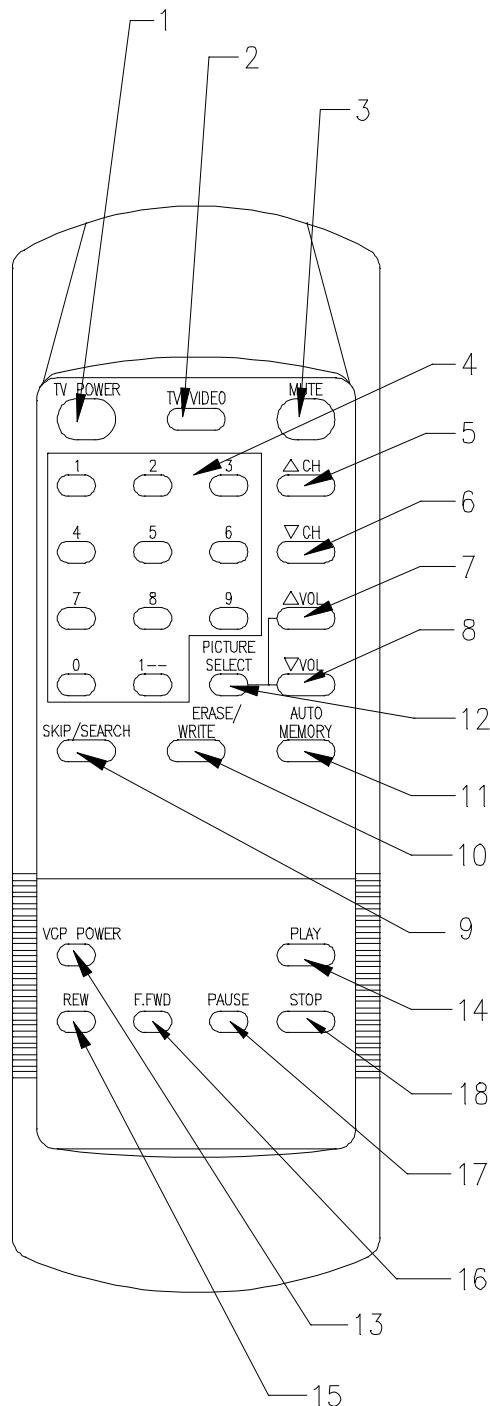


IR LED: Clean the IR Receiver window on the front of the VCP, remove the adhesive backing and apply the IR LED to IR window on the face of the VCP.

Connect to Mini-Din Connector in area shown. A Cable Tie may be used in holes provided for strain relief



## Remote Control Functionality:

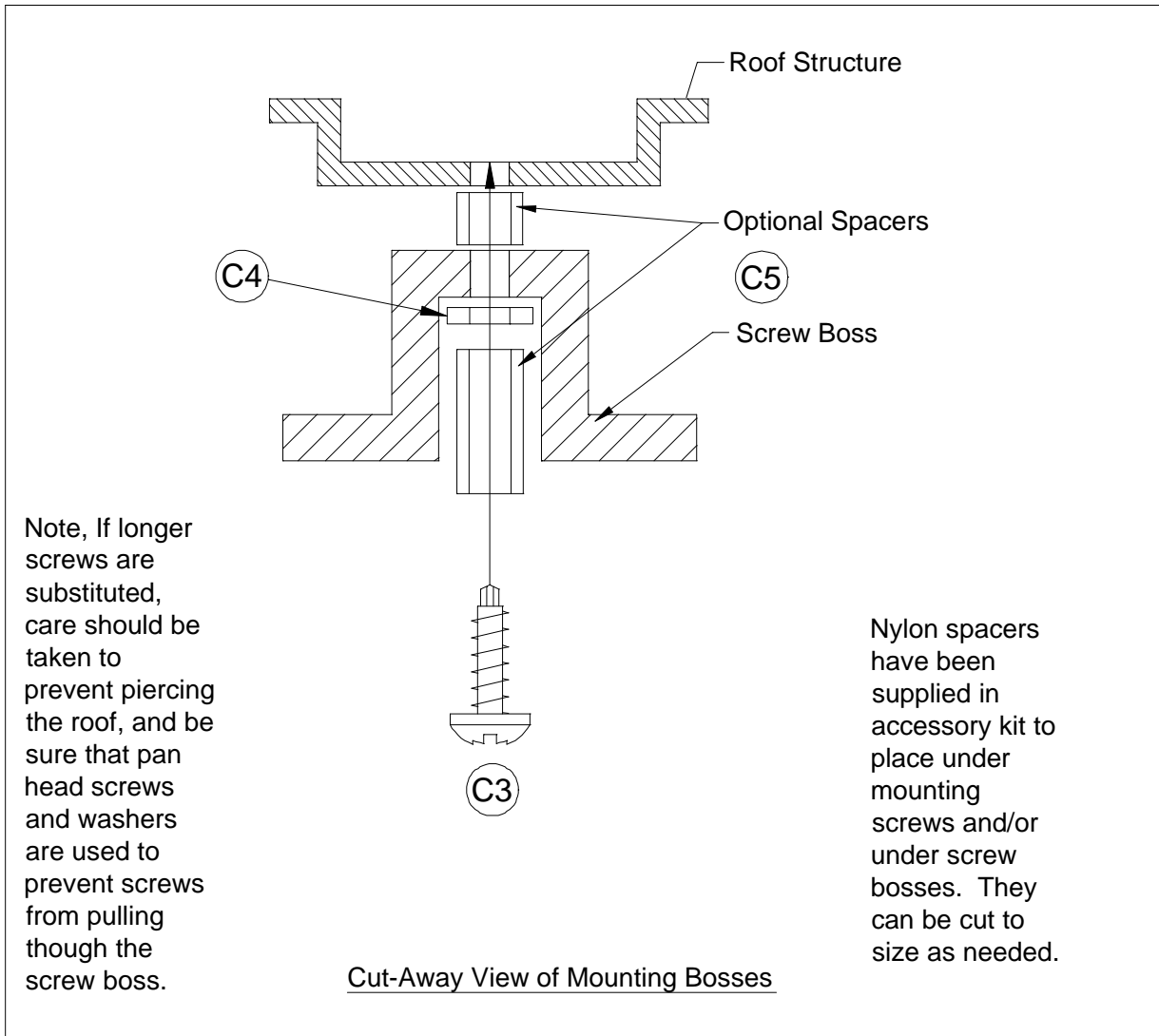


### TELEVISION CONTROLS:

- 1) TV Power: Turns unit on/off
- 2) TV/Video: Toggles between 3 available sources; Tuner/VCP/DVD (VCP2)
- 3) Mute: Mutes headphone audio
- 4) 0-9: Numbers for channel selection
- 5) Δ CH: Channel Up
- 6) ∇ CH: Channel Down
- 7) Δ Vol: Volume Up
- 8) ∇ Vol: Volume Down
- 9) Skip/Search: Toggles on/off. Skips channels that are not auto-programmed
- 10) Write/Erase: Controls manual adding/deleting auto-programmed channels
- 11) Auto-Memory: Programs stronger stations into memory
- 12) Picture Select: This function is not active on remote. User must adjust with controls on unit.

VCP CONTROLS: If a VCP is connected to source 2 or 3, these buttons will control functionality of the VCP. The IR emitter must be connected to the front of the VCP.

- 13) VCP Power: Toggles VCP power on/off
- 14) Play: Play tape in VCP
- 15) REW: Rewind tape in VCP
- 16) FFWD: Fast forward tape in the VCP
- 17) Pause: this button will stop current play, rewind the tape and replay the tape from the beginning
- 18) Stop: Stop the tape in the VCP.



**Antenna Information:**

The following are a few points to consider in regards to TV reception in a mobile application.

Generally in a mobile application, the lower channels are the most difficult to receive due to the size of the antenna needed to receive the signal.

When the antennas are inside the vehicle, the TV signal can be obstructed by the outside metal of the vehicle. This will diminish UHF performance and may eliminate VHF reception altogether. VHF channels are 2-13 and UHF channels are 14-69.

Depending on the location of the antenna and the direction of the vehicle, some VHF signal may be received.

## **Troubleshooting:**

Symptom:	Cause:	Possible Solution:
Picture scrolls or is fuzzy	Antenna type or location	Change antenna or try antenna in a different location
Poor Reception	Vehicle is moving	
Not receiving certain channels	Connections	Vehicle may be outside of TV signal range. Check antenna connections. Check number of antenna connections- the more connections there are, the greater the chance of signal loss, reduce the number of connectons if possible.
Unit will not respond to remote control	Sensor is blocked Batteries in remote control are weak	Clear path for sensors or clean sensor lens. Replace batteries
No power to unit	Power connection Fuse blown at fuse panel	Check connections Replace fuse

For Installation Help, Call:

Audiovox Specialized Applications, LLC  
800-688-3135  
M-F, 8:00AM –5:00PM CST

## **Specifications:**

Video System:	NSTC Analog Composite Video (1V P-P, 75Ω)
A/V Switching:	3 channels
Power:	10-16 VDC, Negative Ground
Aux Audio Outputs:	Left and Right Variable (800mV max, 8Ω load min.) Left and Right Fixed (300mV typical, 600Ω load min.)
Current Consumption (stand-by mode):	67mA
Current Consumption (on, but no VCP):	635mA
Current Consumption (with one VCP on):	1.5A
Audio Noise Floor (30KHz BW):	1.164mV (-58dB re:1V)
THD+N @ -10dBV, 1KHz (30KHz BW):	0.356%
Crosstalk @ 1KHz:	60dB
Maximum Input Level, Audio L and R:	800mV
Frequency Response, 20Hz – 20KHz:	±1.5dB
Frequency Response, 40Hz – 16KHz:	±0.5dB
Channel Balance:	±0.5dB, 0.05dB Typical
Volume Control:	Dual 64 position log taper w/true 1dB/step accuracy
Unit Weight:	4.5 lbs.

## **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

Description	Part Number
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](http://www.asaelectronics.com) or 800-688-3135.





