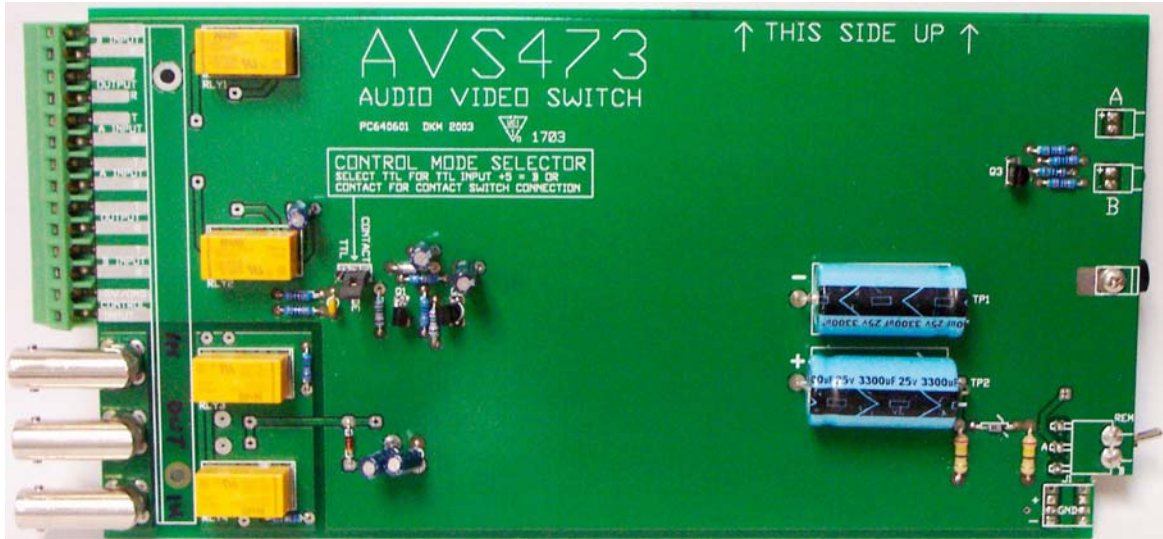# AVS473

AUDIO VIDEO SWITCH

INSTALLATION MANUAL

IB 628202

AVS473
AUDIO VIDEO SWITCH

DESCRIPTION

The **AVS473 AUDIO VIDEO SWITCH** is a 2X1 Stereo audio follow video switch that is controlled by an external contact closure or a TTL control voltage, either mode can be selected by a jumper on the PC board. This device switches both video and Left/Right Stereo balanced audio sources to the secondary channel output when a control input signal is active . The unit switches back to the primary channel when the signal is not active. If a power failure occurs the unit will automatically switch to the Primary video and audio source.

The unit can be used to engage a hot standby source or to put up a test pattern when the main power fails or can be switched by any other equipment that has a contact closure or TTL signal output. This system will maintain your video and stereo audio integrity and reduce trouble calls. It can also be used where unattended video switching must occur.

FEATURES

Two front panel LED's indicate the output channel selected.

Three Female BNC connectors are used for the video inputs and output, and a screw terminal connector is used for the balanced stereo audio inputs and outputs. This audio plug can be pre-wired before card installation.

The AVS473 card fits into the RMS400 power supply and mainframe. Up to nine cards will fit into this rack. The rack is 5.250"H x 19.00"W x 10.500"D and has a built-in power supply to power the nine cards. The mainframe is powered by two redundant 24VAC wall mount power cubes.

SET-UP AND INSTALLATION

Remove the equipment from the packing materials. The following materials should be supplied with each order.

QTY 1   AVS473.
QTY 1   Front Panel Label Decal.
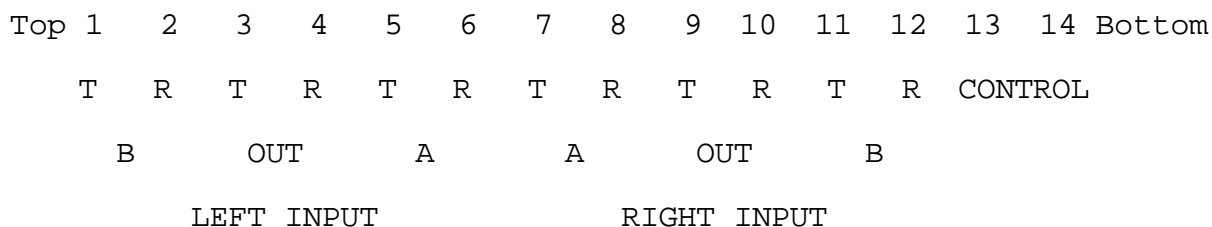QTY 1   Instruction Book.

SET-UP AND INSTALLATION (continued)

Locate a convenient place to mount the RMS400 power supply. Next attach the Primary video signal to the input BNC connector labeled (A INPUT). Then attach the Secondary video signal to the BNC connector labeled (B INPUT). The BNC connector labeled (COM OUTPUT) is the output of the video switch. The selected video will appear at this connector.

The audio connector is labeled on the top side of the PC board with white lettering. The following is a table of the connections from top to bottom, used to switch Balanced audio from Primary to Secondary input. This audio switch is accomplished by internal relay switching. In the event of power loss the audio is switched to the Primary audio "A".

1.   "B" input "Left" Tip or +
2.   "B" input "Left" Ring or -

3.   "COMM" output "Left" Tip or +
4.   "COMM" output "Left" Ring or -

5.   "A" input "Left" Tip or +
6.   "A" input "Left" Ring or -

7.   "A" input "Right" Tip or +
8.   "A" input "Right" Ring or -

9.   "COMM" output "Right" Tip or +
10. "COMM" output "Right" Ring or -

11. "B" input "Right" Tip or +
12. "B" input "Right" Ring or -

13. "+5/GND   (GND for TTL or Contact input)
14. "CONTROL INPUT" (TTL Active or Contact input)

CONNECTOR BLOCK DIAGRAM

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Top 1   2   3   4   5   6   7   8   9   10  11  12  13  14 Bottom

      T   R   T   R   T   R   T   R   T   R   T   R   CONTROL

      B       OUT       A       A       OUT       B

        LEFT INPUT              RIGHT INPUT
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When audio wiring is complete Plug the card into the mainframe. The power will turn on when the card is pushed all the way into the rack. Attach the thumb-screw fastener on the front panel to secure the card into the rack.

AVS473.ISB

CONTACT CLOSURE CONTROL OPERATION

When using the unit in CONTACT CLOSURE CONTROL mode, move the "MODE" jumper on the PC card to the "contact" position. Then connect one wire from your external switch to the "+5V/GND" terminal, and the other wire from your switch to the "CONTROL INPUT" terminal. Now when you close the switch the unit will switch to the "B" channel and stay there as long as the switch is closed. When the switch opens the unit will switch to the "A" channel and stay there until the switch closes again. In the event of a power failure the unit will stay in the "A" channel position. If mono is to be switched the extra unused contacts of the AVS473 can be used to activate external alarms.

TTL CONTROL OPERATION

When using the unit in TTL CONTROL mode, move the "MODE" jumper on the PC card to the "TTL" position. Then connect the ground from your TTL source to the screw terminal marked "+5/GND". Connect the TTL active input to the terminal marked "CONTROL INPUT". Now when a + TTL voltage is applied to the "CONTROL INPUT" terminal the unit will switch to the "B" channel. When the TTL signal goes to ground the unit will switch to the "A" channel. In the event of a power failure the unit will stay in the "A" channel position. If mono is to be switched the extra unused contacts of the AVS473 can be used to activate external alarms.

MAINTENANCE

There are no adjustments or calibration required with the AVS473.

SPECIFICATIONS

VIDEO	SPECIFICATION
Standard	NTSC or PAL (Auto-Select)
Level (Composite Video)	0.7 to 2 Vp-p (1.0 Vp-p STD.)
Frequency Response	$\geq$ 0.2 dB from DC to 40MHz
Cross-Talk (Pri/Sec input)	$\leq$ 75 dB
Signal to Noise Ratio	$\leq$ 90 dB
Frequency Response	Flat from Dc to 50KHz
Cross-Talk (Pri/Sec)	$\leq$ 80 dB
Cross-Talk (Left/Right)	$\leq$ 80 dB
Signal to noise ratio	$\leq$ 90 dB
Power requirement	+/- 12VDC (RMS400)