

Addendum to ATB-300 Series Audio Switcher covering ATB-300-9 features and operation

Introduction and Basic Description

The Broadcast Devices, Inc. ATB-300 Audio Toolbox series can be outfitted with a 4 channel base band composite audio/switcher/DA and digital stereo decoder module. This module allows the ATB-300 to accept up to four composite base band FM stereo signals that are routed to a four output composite audio distribution amplifier and simultaneously allow for the selected input to be converted to an AES3 digital audio signal suitable for input to any AES3 compatible device. The AES3 output has been decoded to left and right and a 75 uS de emphasis applied providing flat frequency response. The ATB-300 allows for switching between any input to all AES3 and optional analog L/R outputs. All composite inputs are simultaneously routed to a four output composite distribution amplifier.

Installation Considerations

For remote control/status of the ATB-300 series follow the instructions in the ATB-300 Technical Reference manual supplied. For audio interface refer to the chart below for channel allocation

AES and Composite Input Version

INPUT CHANNEL	TYPE	LOCATION
1	DIGITAL	AES 1
2	DIGITAL	AES 2
3	DIGITAL	AES 3
4	DIGITAL	AES 4
5	ANALOG	COMPOSITE BASE BAND 1
6	ANALOG	COMPOSITE BASE BAND 2
7	ANALOG	COMPOSITE BASE BAND 3
8	ANALOG	COMPOSITE BASE BAND 4

Note that on channels 5-8 menu items referred to in the ATB-300 Technical Reference manual apply for composite signals that are applied to AES3 outputs. Analog composite base band outputs are not affected by these menu selections. The composite switcher/DA is designed to produce unity gain through the unit. The ATB-300 can simultaneously output composite base band of a selected composite input and an AES3 version of the same signal. Refer to Fig. 1 for a basic block diagram of signal flow.

Note that AES3 inputs are not converted to base band output through the ATB-300 series.

Audio I/O Connection

The ATB-300 series accessory panels allow for easy interface to the ATB-300 series. The ATB-300-9 version is optionally supplied with a single rack unit interface whereby AE3 I/O is interfaced from AES standard XLR connectors and the composite base band I/O is accomplished with 50 ohm BNC connectors. Note that for BNC connection there is a jumper selection for balanced or unbalanced composite input. Factory default is unbalanced. For balanced input move Jumpers JP-4 to the balanced position. Do not remove JP5-8 from their unbalanced position as the ATB-300-9 supports unbalanced output only. See Figure 2. DIP-100 Interface Panel Diagram for connection information.

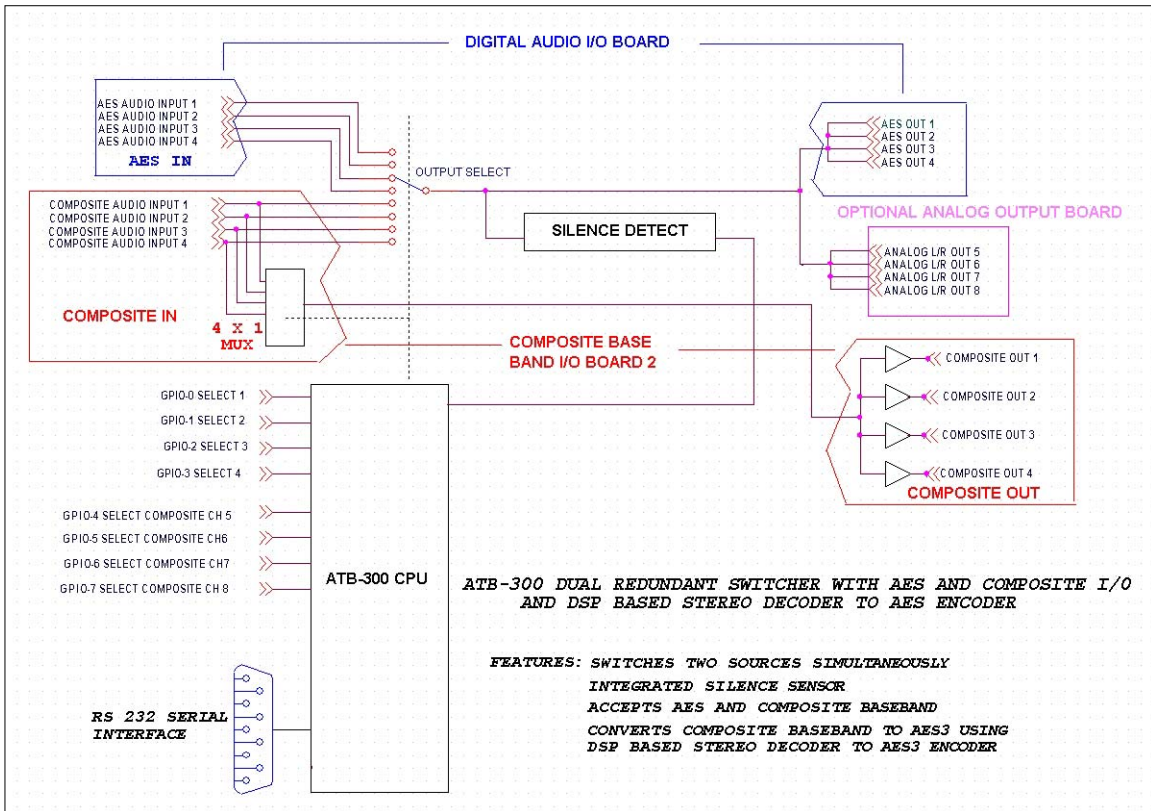


Figure 1. ATB-300-9 Basic Block Diagram

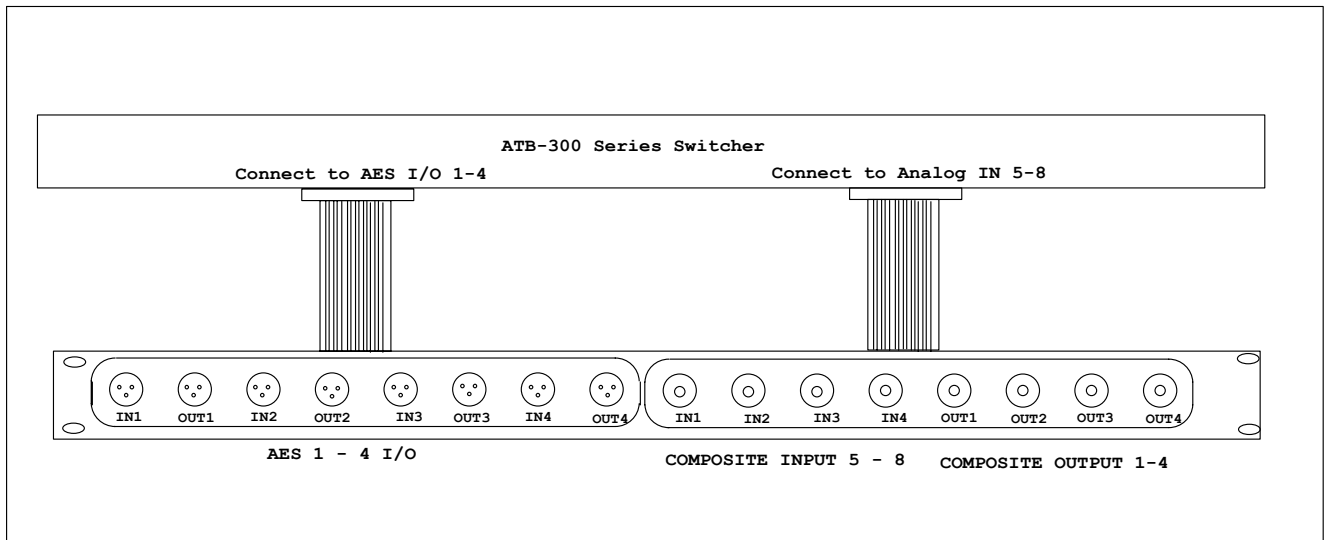


Figure 2. DIP-100 Interface Panel Connection Diagram