

Installation and Operation Manual



ADC-1 *Analog to Digital Converter*

Manual Update: 06/16/2015

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Visit www.broadcasttools.com for important product update information.

INTRODUCTION

Thank you for your purchase of the Broadcast Tools® Analog to Digital Converter, which we will refer to throughout the manual as the ADC-1. We're confident this product will give you many years of dependable service. This manual is intended to give you all the information needed to install and operate the product.

SAFETY INFORMATION

Only qualified personnel should install Broadcast Tools® products. Incorrect or inappropriate use and/or installation could result in a hazardous condition.

Broadcast Tools, Inc., is unable to support NON-Broadcast Tools software, hardware or NON-Broadcast Tools computer/hardware/software problems. If you experience these problems, please research your hardware/software instruction manuals or contact the manufacturer's technical support department.

WHO TO CONTACT FOR HELP

If you have any questions regarding your product or you need assistance, please contact your distributor from whom you purchased this equipment.

If you would like more information about Broadcast Tools® products, you may reach us at:

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**THANK YOU FOR CHOOSING
BROADCAST TOOLS® BRAND PRODUCTS!**

Broadcast Tools is a Veteran Owned Business



Designed, Assembled and Supported in WA State, USA



CAUTION!

Broadcast Tools® Products, as with any electronic device, can fail without warning. Do not use this product in applications where a life threatening condition could result due to failure.

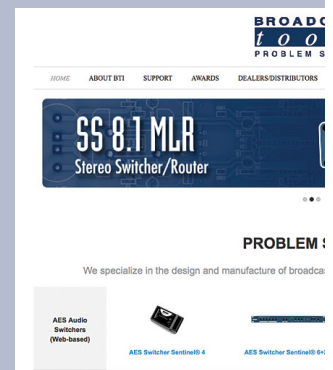


NOTE:

This manual should be read thoroughly before installation and operation.

WEBSITE:

Visit our web site for product updates and additional information.

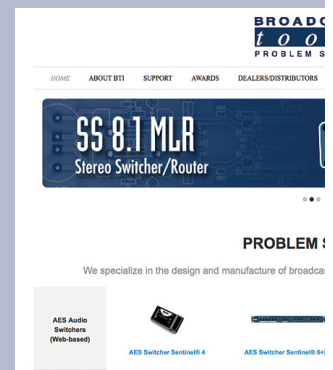


PRODUCT DESCRIPTION

The ADC-1 provides professional quality 24-bit A/D conversion. The A/D converter may be configured for sample rates of 44.1 or 48kHz (32kHz may be special ordered) or an external word clock from 32 to 96kHz. Additional features include; balanced stereo analog input and AES output via plug-in euroblock connectors. The front panel is equipped with a sample rate switch and led indicators, left and right analog input trimmers, dual 10-LED input meters and power LED indicator. The ADC-1 is powered by a surge protected internal bi-polar 15-vdc power supply affording superior headroom and high definition audio. The ADC-1 may be set on a desktop, mounted on a wall or up to three units may be mounted on the optional RA-1, Rack-Able mounting shelf.

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DESCRIPTION

OPERATION

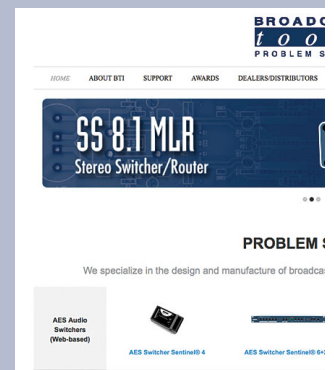
Power Insert the power plug into the power jack on the ADC-1 and the wall transformer into the proper AC outlet. Verify that the power LED is lit.

LT Lvl / RT Lvl Adjust these controls to the desired AES output level.

Left VU calibrate trimmer - R29. **Right VU calibrate trimmer - R31.**

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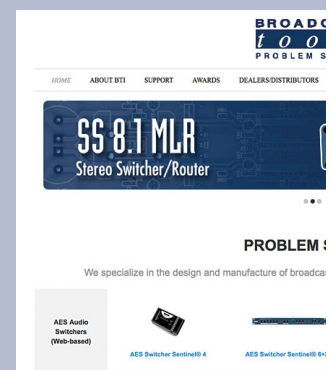


SPECIFICATIONS

Analog Input Level	0dBu to +24dBu. +4dBu analog input provides -20dBfs AES output when adjusted with the front panel trimmers.
Analog Input Impedance:	10K Ω balanced.
Frequency Response:	10 to 20kHz +/- 0.5dB.
Distortion:	<.001%HD / IMD
Noise:	<108dB Ref
AES Output Impedance:	110 Ω , balanced.
Word clock input impedance:	75 Ω , balanced
Word clock input level:	5 volts
Word clock PLL input range:	32 to 96kHz
Connectors:	AES, analog Inputs/Outputs connections: Plug-in euroblock screw terminals, Word Clock; BNC
Power Requirement:	16 Vac, 600 ma, wall transformer, Supplied. Surge protected power supply.
Size:	1/3" rack space, Painted chassis w/ 4 – 6-32 mounting holes.
Weight:	2.0 lb.
Options:	RA-1, Rack Shelf. 1 RU. / 220 Vac 50-60 Hz CE wall transformer.

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LIMITED WARRANTY

The term “Buyer” as used in this document refers to and includes both (but only) (a) any person or entity who acquires such an item for the purpose of resale to others (i.e., a dealer or distributor of an item), and (b) the first person or entity who acquires such an item for such person’s or entity’s own use.

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Functional Diagram

