BROADCAST tools®INC

PROBLEM SOLVED

Installation and Operation Manual

COP–2/RJ
Connect O' Pad 2/RJ

Manual update: 11/21/17
If you need a firmware upgrade, contact Broadcast Tools®

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ALL SPECIFICATIONS AND FEATURES FOR THIS PRODUCT ARE SUBJECT TO
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NOTE: We recommend the use of Chrome, Firefox or Safari as your browser.

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

INTRODUCTION

Thank you for your purchase of a Broadcast Tools® COP-2/RJ, Connect O' Pad. We are confident that this product will give you many years of dependable service. This manual is intended to give you all the information needed to install the Broadcast Tools® COP-2/RJ.

SAFETY INFORMATION

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

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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BROADCAST TOOLS® BRAND PRODUCTS!

Designed, Assembled and Tested in Washington State, USA.

Broadcast Tools is a Veteran Owned Business

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.
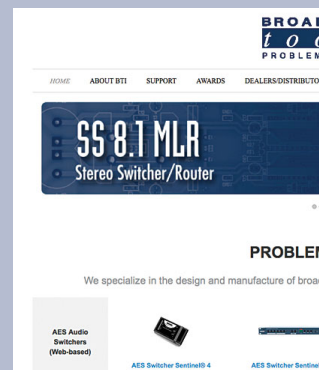
NOTE:

This manual should be read thoroughly before installation and operation.

WEBSITE:
Visit our web site for product updates and additional information.

INTRODUCTION

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Product Description

Here's another problem solver from Broadcast Tools for the XDS PRO4R/PRO1R, IDC-SFX/Pro (NON-option B) series, StarGuide II or III satellite receivers. The COP-2/RJ, provides an effective way to connect the audio outputs of the listed receivers to devices that use StudioHub+ compatible RJ45 audio inputs. The COP-2/RJ is designed to plug into the male 9-pin D-Sub connector on the audio modules of the listed receivers. The COP-2/RJ is equipped with a shielded RJ45 output jack for connection to the balanced analog audio left and right outputs or one AES output (switch selectable.) Left and right multi-turn trimmers are provided for analog level adjustments/attenuation. The COP-2/RJ has approximately one db of insertion loss, allowing level adjustments from -1db below program reference all the way down to off. Mounting screws are provided to secure the COP-2/RJ to the receiver's male DB-9 connector.

RJ45 Pinout

The output RJ45 jack conforms to StudioHub+ wiring standards.
Please use shielded twisted pair Cat5e or Cat6 cables and connectors (STP).

StudioHub+ Pinout:

Function:	Wire Pair:	RJ45 Pins:
Left+/AES+*	White/Orange	1
Left-/AES-*	Orange/White	2
Right+	White/Green	3
Right -	Green/White	6
n/c	White/Blue	5
GND*	Blue/White	4
15V-*	White/Brown	7
15V+*	Brown/White	8
GND	Shield Shield	

* AES enabled with SW-1 in "AES" position.
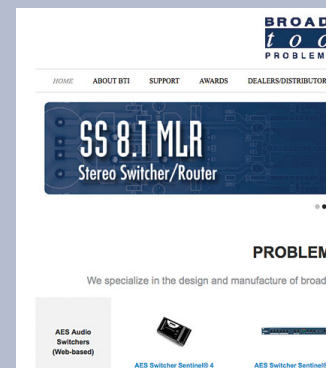** Not connected

AES/Analog Switch (SW-1)

In Analog "ANA" position, the left channel analog audio is routed to pins 1 and 2 of the RJ45 jack. In the "AES" positon the satellite receiver's AES output signal is routed to pins 1 and 2 of the RJ45 jack.

CAUTION!

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products, as any electronic device, can fail ...

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SS 8.1 MLR
Stereo Switcher/Router

PROBLEM

We specialize in the design and manufacture of broad

AES Audio
Switchers
(Web-based)

AES Switcher Sentinel9 4   AES Switcher Sentinel

DESCRIPTION

3

DB-9 Female Connector Pinout
Pin 1 = Left +
Pin 2 = GND
Pin 3 = AES +
Pin 4 = GND
Pin 5 = Right +
Pin 6 = Left –
Pin 7 = GND
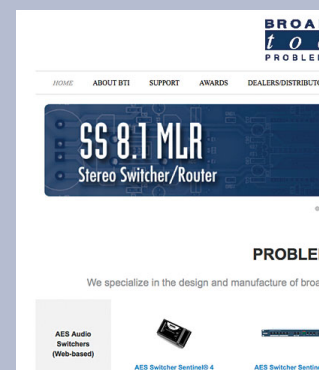Pin 8 = AES –
Pin 9 = Right -

Installation Guidelines

Step 1: Set the SW-1 switch for AES or Analog, depending on which format you wish to use.
Step 2: Plug the COP-2/RJ into the desired "Audio x" (x = port)) connector on the rear panel. For the IDC WW1-MAX/IDC SFX Pro (NON-option B) receivers, plug the COP-2/RJ into the desired "Audio Channel x" (x = port 1 thru 4) connector on the rear panel.
Step 3: Tighten the two 4–40 mounting screws on the COP's 9-pin male D-sub connector's mounting ears, securing the COP-2/RJ to the receiver's mating connector.
Step 4: Connect the COP to a StudioHub+ compatible input device or adapter using a shielded Cat5 or Cat6 cable.
Step 5: If you're using the COP in analog audio mode use the left and right trimmers on the COP to adjust the audio level from the receiver.

COA-xx and COP-x Selection Guide

Receiver	COA-9 XDS/MAX	COP-2 Lt/Rt Level adjust	COP-2/RJ Lt/Rt Level adjust	COP-3 Lt/Rt Level adjust	COA-15 MAX	COA-37 XDS
StarGuide II Receiver's	X	X	X		X	X
StarGuide III Receiver's	X	X	X		X	X
XDS Pro Receiver's	X	X	X		X	X
WW1/MAX / IDC Receiver's	X	X	X		X	X
IDC SFX 21xx,31xx and 41xx Series Pro Receiver's	X	X	X		X	
IDC SFX 21xx,31xx and 41xx Series Pro Receiver's "OPTION B" NOTE: This receiver is used by NPR.				X	X	

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DESCRIPTION

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COP-2/RJ
Component Layout

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J1

R1
LT

R2
RT

SW1

RP1

ANA

AES

JP1

J2

C1

R3