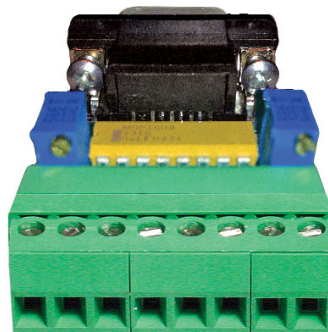


INTERCOM CONSOLE MODULE
ASSY 26/20 REV C COPYRIGHT 1998
BROADCAST TOOLS, INC.
C18
C17
C16
D5
D4
R24
R23
R22
R9
R10
RP1
C7
R17
EA 34

BROADCAST[®]
t o o l s **INC**
PROBLEM SOLVED

Installation and Operation Manual



COP-2 **Connect 'O Pad**

Manual update: 12/26/11

If you need a firmware upgrade, contact Broadcast Tools[®]

No part of this document may be reproduced or distributed without permission.
ALL SPECIFICATIONS AND FEATURES FOR THIS PRODUCT ARE SUBJECT TO
CHANGE WITHOUT NOTICE

NOTE: We recommend the use of Chrome, Firefox or Safari as your browser.

Due to the dynamic nature of product design, the information contained in this document is subject to change without notice. Broadcast Tools, Inc., assumes no responsibility for errors and/or omissions contained in this document. Revisions of this information or new editions may be issued to incorporate such changes.

*Broadcast Tools[®] is a registered trademark of Broadcast Tools, Inc.
tiny TOOLS[™] is a trademark of Broadcast Tools, Inc.
All Sentinel[®] labeled products are registered trademarks of Broadcast Tools, Inc.
Copyright[®] 1989 - 2012 by Broadcast Tools, Inc. All rights reserved.
No part of this document may be reproduced or distributed without permission.*

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

INTRODUCTION

Thank you for your purchase of a Broadcast Tools® COP-2, 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.

SAFETY INFORMATION

Only qualified technical personnel should install Broadcast Tools products. Any attempt to install this device by a person who is not technically qualified could result in a hazardous condition. Please ensure that proper safety precautions have been taken before installing this device. If you are unfamiliar with this type of equipment, please contact a properly qualified engineer to handle the installation and setup of the Broadcast Tools product.

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 manufacturers 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:

Broadcast Tools, Inc.
131 State Street
Sedro-Woolley, WA 98284-1540 USA
Voice: 360.854.9559
Fax: 866.783.1742

Internet Home Page: www.broadcasttools.com
E-mail: support@broadcasttools.com

**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.

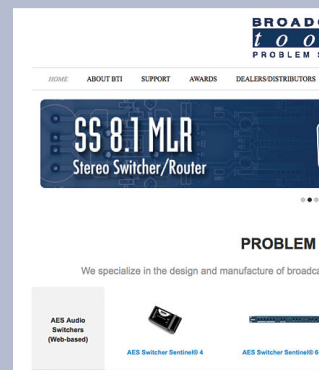


NOTE:

This manual should be read thoroughly before installation and operation.

WEBSITE:

Visit our web site for product updates and additional information.



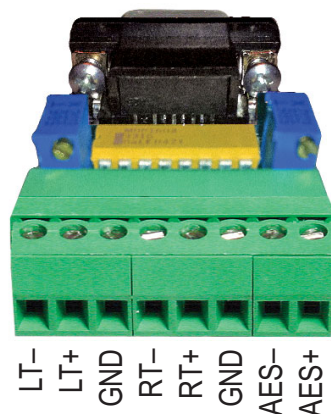
INTRODUCTION

Product Description

Here’s another problem solver from Broadcast Tools for the XDS, WW1-IDC/MAX, IDC-SFX/Pro (NON-option B) series, StarGuide II or III satellite receivers. The COP-2, provides an effective way to connect and adjust the audio outputs of the listed receivers. The COP-2 is designed to plug into the male 9-pin D-Sub connector on the audio modules of the listed receivers. The COP-2 is equipped with an eight-position removable screw terminal for connection to the balanced analog audio left and right outputs, along with one AES output. Left and right multi-turn trimmers are provided for level adjustments. The COP-2 has approximately one db of insertion loss, allowing level adjustments from -1db to off from program reference. Mounting screws are provided to secure the COP-2 to the audio decoder modules male DB-9 connector.

Installation Guidelines

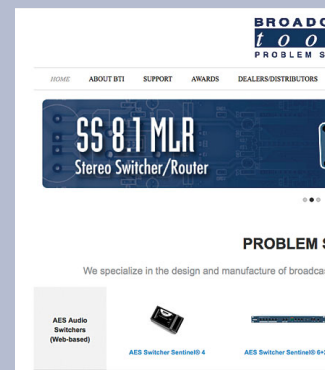
- Step 1: Plug the COP-2 into the desired “Audio x” (x = port)) connector on the rear panel. For the IDC WW1-MAX/ IDC SFX Pro (NON-option B) receivers, plug the COP-2 into the desired “Audio Channel x” (x = port 1 thru 4) connector on the rear panel.
- Step 2: Install the two 4–40 screws (supplied) into the COP-2, 9-pin male D-sub connector’s mounting ears, securing the COP-2 to the receiver’s mating connector.
- Step 3: To wire the plug, follow the pin-out supplied on the bottom of the COP-2’s printed circuit board or follow the example below. Then remove the plug from the header; remove about 1/8” of insulation from each wire. Insert the wire into the desired terminal and then tighten the screw. Be sure no bare wires are exposed.



- Step 4: Reinstall the removable screw terminal plug into the connector.
- Step 5: Analog audio output adjustments are made through the left and right trimmers.

WEBSITE:

Visit our web site for product updates and additional information.



COA-xx and COP-x Selection Guide

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

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.

Broadcast Tools warrants to each Buyer of any item manufactured by Broadcast Tools that the item will be free from defects in materials and workmanship at the time it is shipped by Broadcast Tools if the item is properly installed, used and maintained.

EXCLUSIVE REMEDIES

If Broadcast Tools is notified, in writing, of a failure of any item manufactured by Broadcast Tools to conform to the foregoing Limited Warranty within one (1) year following the date of the Buyer’s acquisition of the item, and if the item is returned to Broadcast Tools in accordance with Broadcast Tools’ instructions for confirmation by inspection of the defect (which at Broadcast Tools’ election may include, without limitation, a requirement that the Buyer first obtain a Return Authorization number from Broadcast Tools, that the Buyer furnish proof of purchase in the form of an invoice and/or receipt, and that the Buyer prepay all freight charges associated with any return of the item to Broadcast Tools using such freight service as Broadcast Tools reasonably may specify), Broadcast Tools will repair or replace the defective item, or will refund the purchase price paid by the Buyer for the item. Broadcast Tools shall have the exclusive right to choose between these alternative remedies.

NO OTHER WARRANTIES OR REMEDIES

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, BROADCAST TOOLS AND ITS SUPPLIERS DISCLAIM ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE; AND THE FOREGOING ALTERNATIVE REMEDIES SHALL BE EXCLUSIVE OF ALL OTHER REMEDIES. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS, WHICH VARY FROM STATE/JURISDICTION TO STATE/JURISDICTION.

NO LIABILITY FOR CONSEQUENTIAL DAMAGES

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NEITHER BROADCAST TOOLS NOR ANY OF ITS SUPPLIERS SHALL HAVE ANY LIABILITY FOR ANY SPECIAL, INCIDENTAL, INDIRECT, CONSEQUENTIAL OR PUNITIVE DAMAGES WHATSOEVER (INCLUDING, WITHOUT LIMITATION, ANY DAMAGES FOR LOST PROFITS, BUSINESS INTERRUPTION, LOSS OF DATA OR INFORMATION, COST OF CAPITAL, CLAIMS OF CUSTOMERS, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF OR THE INABILITY TO USE ANY ITEM SUPPLIED BY BROADCAST TOOLS, EVEN IF BROADCAST TOOLS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES HAVE ANY LIABILITY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY OR PUNITIVE DAMAGES. THIS LIMITATION OF LIABILITY APPLIES WHETHER A CLAIM IS ONE ALLEGING BREACH OF A CONTRACT OR WARRANTY, NEGLIGENCE OR OTHER TORT, FOR THE VIOLATION OF ANY STATUTORY DUTY, THE FAILURE OF ANY LIMITED OR EXCLUSIVE REMEDY TO ACHIEVE ITS ESSENTIAL PURPOSE, OR ANY OTHER CLAIM OF ANY NATURE. BECAUSE SOME STATES AND JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, THIS LIMITATION MAY NOT APPLY TO YOU.

Broadcast Tools, Inc.

131 State Street
Sedro-Woolley, WA 98284 • USA

360.854.9559 **voice** • 866.783.1742 **fax**
support@broadcasttools.com **e-mail**
www.broadcasttools.com **website**