



## *Installation and Operation Manual*



### **SDD-8 SERIAL DATA DIRECTOR**

Software Version 32401

Manual Update: 05/28/2001

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## INTRODUCTION

Thank you for your purchase of a Broadcast Tools, Inc., Serial Data Director, SDD-8. 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 unit.

## 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 is a Veteran Owned Business



Designed, Assembled and Supported in WA State, USA



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**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.

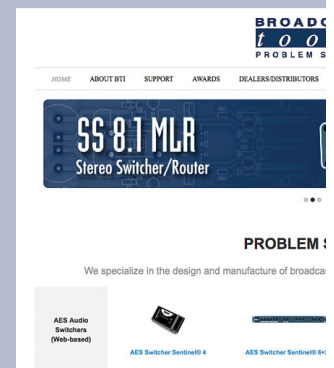


### **NOTE:**

This manual should be read thoroughly before installation and operation.

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## PRODUCT DESCRIPTION

The Broadcast Tools SDD-8 is a Serial Data Director, with one master RS232 port, and 8 - RS232 target ports that can be selected under software control, from a host computer, or other serial device. The function of the unit is very similar to a mechanical port selection switch (A, B, C, etc.) The master port is a DB-9 Female connector, with "reversing jumpers" for the RX/TX pins. There are eight DB-9 Male connectors for target ports 1 through 8 (with "reversing jumpers"). (NO handshaking is supported). A green LED indicator displays the status of each of the serial ports. When the green LED is on, that port is connected to the "internal serial bus." Two yellow LED indicators show the power status. Also, a pair of LED indicators monitors the "internal serial bus." The on-board switching regulator allows for operation on AC input voltages from 12 to 24VAC. The SDD-8 is supplied with a 12 Vac @ 500ma power cube. An expansion connector can be used to connect up to 3 – additional SDD-8 units on the same "local bus." This (with proper jumper selection) will allow for a 1 of 32-target serial port selection. If more than one board is used, only one master port can be enabled.

## FEATURES

Baud rates from 2400 to 9600

## POWER

Connect the 2.1mm barrel type power connector into the unit and the 12vac, 500 ma wall transformer into a 120 Vac 50-60 Hz power source. The rear panel yellow power LED indicates when power is applied to the unit. (220 Vac 50-60 Hz wall transformer OPTIONAL)

## INSTALLATION

Installation of the SDD-8 in **high RF environments** should be performed with care. Shielded cable is suggested for all connections. All shields should be tied to the EGND terminals. The station ground should be connected to the chassis ground screw located on the far right side of the SDD-8 as viewed from the rear. It is recommended that all cables connected to the SDD-8 be looped through ferrite cores to suppress RF. Surge protection with RF filtering is also suggested for the wall transformer. The purchase of an inexpensive UPS will provide back up in case of power outages.



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



### NOTE:

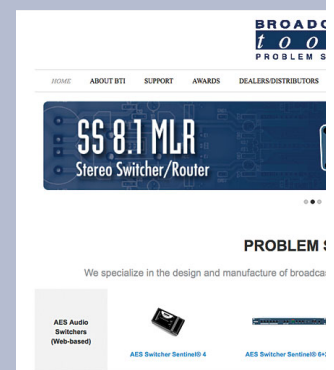
*For safety, DO NOT connect ...*

### ! TIP

*Helpful tips area.*

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The SDD-8 is very simple to install. All connections are via DB-9 connectors. Installation of the SDD-8 consists of five steps:

1. Inspection
2. Jumper selection, if applicable
3. Bench test
4. Mount the unit in a rack.
5. Connect your equipment to the unit

## STEP 1: INSPECTION

Please examine your SDD-8 carefully for any damage that may have been sustained during shipping. If any is noted, please notify the shipper immediately and retain the packaging for inspection by the shipper. The package should contain the SDD-8, Serial cable, 12vac, 500 ma wall power transformer and this manual.

## STEP 2: COMMANDS & JUMPERS (see page 5)

## STEP 3: BENCH TEST

Place each unit on a workspace and connect power to the unit. Check to see if the yellow power LED is lit. Perform the desired operation.

## STEP 4: MOUNTING

Mount the unit on a rack shelf, such as the Broadcast Tools RM-3, if needed allowing adequate airflow for cooling.

## STEP 5: CONNECT YOUR EQUIPMENT

The SDD-8 interfaces to your equipment via the DB-9 D-Sub connectors. Follow the silk-screened legends on the PCB for the desired connections.

## COMMANDS – JUMPER SETTINGS

**&** (AMPERSAND, “7” KEY) = ATTENTION CODE (DISABLE ALL PORTS ON ALL BOARDS)

**NOTE: ONLY ONE BOARD IN A MULTI-BOARD SYSTEM CAN BE ACTIVE AT ANY TIME, WITH FROM 1-8 PORTS SELECTED.**

**EXAMPLE: &00** SELECTS PORT 0 (Channel 1) ON UNIT 0, then enter the desired ASCII string for the connected equipment.

**&XX** = DATA (3 CHARACTERS)



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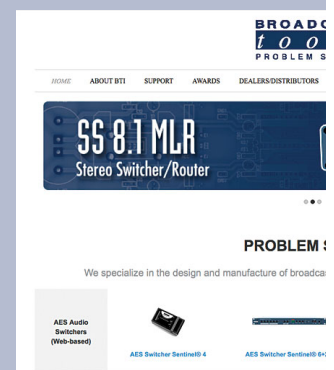


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## DESCRIPTION

## JUMPERS:

J10 - INSTALLED FOR NORMAL OPERATION

J11 - INSTALLED FOR NO TIMEOUT

J11 - REMOVED TO ENABLE TIMEOUT

J12 - KEEP ALIVE RECEIVED CHARACTERS WILL EXTEND TIMEOUT

J12 - KEEP ALIVE DISABLED

J13 - INSTALL FOR COMPUTER MODE

J13 - REMOVE FOR MODEM MODE

J14 - INSTALL TO USE INTERNAL DEFAULT BAUD RATE (AT POWER-UP)

J14 - REMOVE TO FORCE BAUD RATE TO 9600,N,8,1 (AT POWER-UP)

*NOTE: THIS JUMPER IS ACTIVE WHEN J15 IS REMOVED (OPERATING)*

J15 - INSTALL TO DISABLE BAUD RATE RESET ON TIME-OUT

J15 - REMOVE TO ALLOW BAUD RATE RESET TO INTERNAL DEFAULT VALUE

AFTER TIME-OUT

J16 - RESERVED

J17 - RESERVED

J18 - INSTALLED FOR EXTERNAL ADDRESS

J18 - REMOVED FOR INTERNAL ADDRESS (EEPROM)

J19 - ADDRESS HIGH BIT

J20 - ADDRESS MID BIT

J21 - ADDRESS LOW BIT

## SPECIFICATIONS

LOGIC:

Flash Microprocessor

CONNECTORS:

DB-9 male, Male/Female.

POWER REQUIREMENTS:

12 volts AC, 500 ma.

Wall transformer supplied

PHYSICAL DIMENSIONS:

16 - 5/16" x 4" x 1.00" (WDH)

WEIGHT:

2.0 lb.

SHIPPING WEIGHT:

3.0 lb.

MOUNTING OPTIONS:

RM-3 Rack shelf. 1- RU



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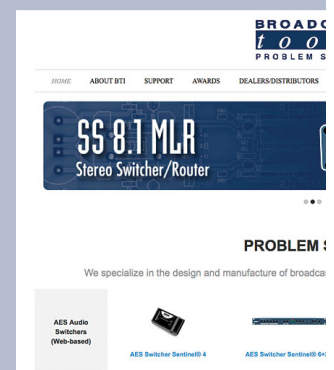


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Helpful tips area.

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