bdi

Tech Talk CDS Application Note #2

Application: Using the CDS-300/302 Composite Audio Switcher/DA with an inexpensive CD/ DVD Player and a spare stereo generator to provide back up audio at a transmitter site for stations lacking a back up path to the transmitter site.

Benefits: Interfacing the CDS-300/302 to an inexpensive CD/DVD Player capable of MP3 play-back you can provide hours of playback audio at very little cost. The cost of the player used in this example was less than fifty dollars. By combining this application with a surplus processor/stereo generator a station can have processed stereo audio on air for back up in the event of a path failure or other emergency.

Application Note: The accompanying diagrams show the suggested connection of remote control interface and audio connection between the BDI CDS-300/302 and CD/DVD Player. Audio connection is taken from the analog left/right output of the player and connected to a processor/stereo generator then to the B input of the CDS-300/302. Proper cable wiring is shown in the diagram. It is necessary to modify the player by soldering a pair of wires to the start button of the machine. A player with a wired remote could also be used. Choose a CD/DVD player that is suitable for your needs. If you will be recording MP3 files make sure that the recording CD player and the CD/DVD player that you use for this project are compatible with each other. Also, choose a player that will remain on at all times. Some players go to "sleep" after a certain amount of time. Players suitable for this project can be had for less than $50.00 making this an inexpensive project that will provide many hours of backup audio for a station.

Many stations have a retired process/stereo generator on the shelf collecting dust. This project puts one of these units to good use by providing many hours of back up audio in case of a failure of the main audio path. Suitable older processor/stereo generator units can be purchased from reputable used equipment dealers or by searching the worldwide web.

Here is how it works: If your primary feed were to fail, the CDS-302 will switch automatically after predetermined silence. A CDS-300 will have to be commanded via remote control but will perform the same remote start function. Once the CDS-302 switches to the B input, the remote control status output will command the CD/DVD player to start playing. Depending on the your recording sample rate and amount of compression, the CD player can provide many hours of playback audio to your transmitter pending restoration of the primary feed. For example, at 128 kB/sec can provide over ten hours of back up audio with this simple and inexpensive setup. BDI can supply the parts necessary for this example or a wired perforated board with components mounted. Call us for availability.

For any application feel free to call or email us for further information. Telephone – (914) 737-5032 or email us at Techsupport@Broadcast-Devices.com
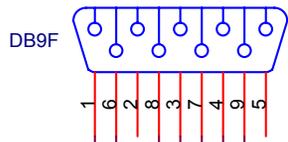
You can install the suggested circuit inside the player. Here we used a DB9 connector for connection and support. You can also use a 1/4" or 1/8" tip/ring/sleave phone jack. Use the tip and ring for connections and the sleave can be used for a ground between the player and CDS-302.
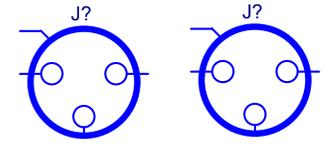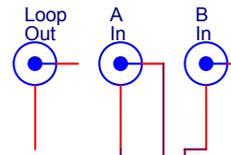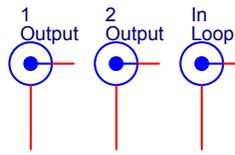
This photo shows a simple two wire solder connection across the front panel start switch. This is the only control connection needed for the player.

This photo shows the DB9 connector protruding from the rear panel. Make sure that whatever type of hole that you cut that you plan where the hole will be so that the connector doesn't interfere with the cover or components inside the player.
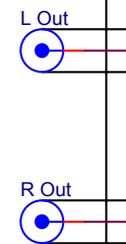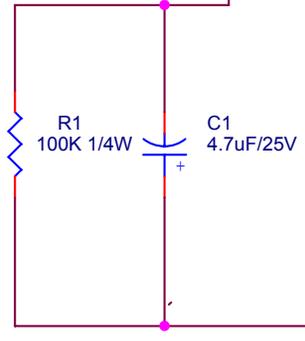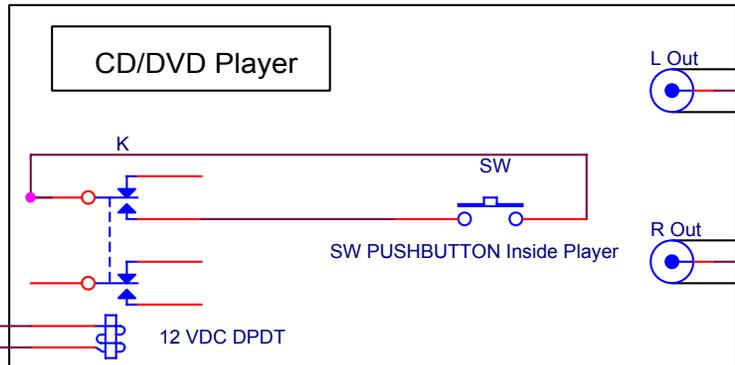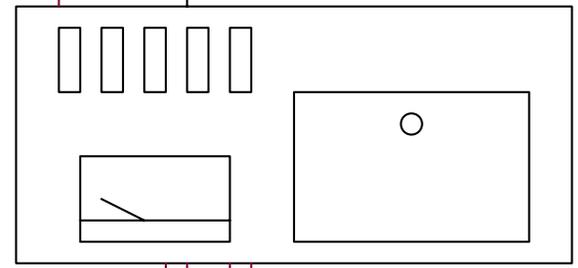
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DB9F

CDS-300 or 302 REMOTE CONTROL
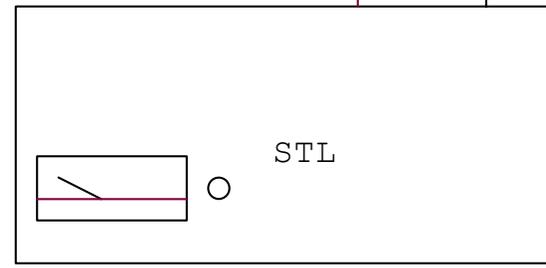
1 6 2 8 3 7 4 9 5

1 Output
2 Output
In Loop

Loop Out
A In
B In

J?   J?

A Command to R/C

B Command to R/C

R/C Cont/Status Common

A Selected Status Out to R/C

Composite Baseband Connection from Aux. Audio Processor/Stereo Generator to B Input

STL

CD/DVD Player

R1 100K 1/4W

C1 4.7uF/25V
+

K

SW

SW PUSHBUTTON Inside Player

12 VDC DPDT

L Out

R Out

Suggested Analog Audio Cable and Remote Control Wiring Between Player and CDS Series Switchers

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BDI Tech Talk Application Note
   CDS-300/302 Application 2
   CDS-300/302/CD/DVD Interface
Call BDI Applications Engineering at (914) 737-5032 or email to:
TechSupport@Broadcast-Devices.com