C2N-DAP8

Digital Audio Processor

Quick Start

These instructions can be performed in the office or at the job site to get your Crestron® C2N-DAP8 Digital Audio Processor (DAP8) ready for operation quickly. They cover basic procedures necessary to verify that the unit functions properly, and include running the example program, which is downloadable from the Crestron FTP website.
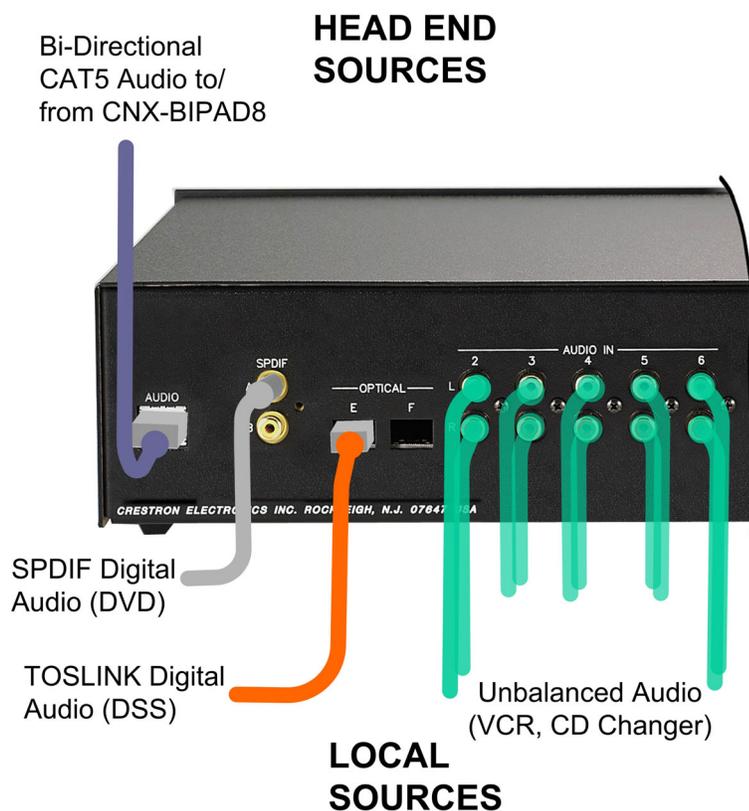
Hardware Hookup

Before starting the hardware hookup procedures, make certain power to all devices is off.

NOTE: The DAP8RC is designed to be used only with a Crestron 2-Series control system.

NOTE: The DAP8RC requires 21 Watts of Cresnet power and may require a dedicated Crestron power supply.
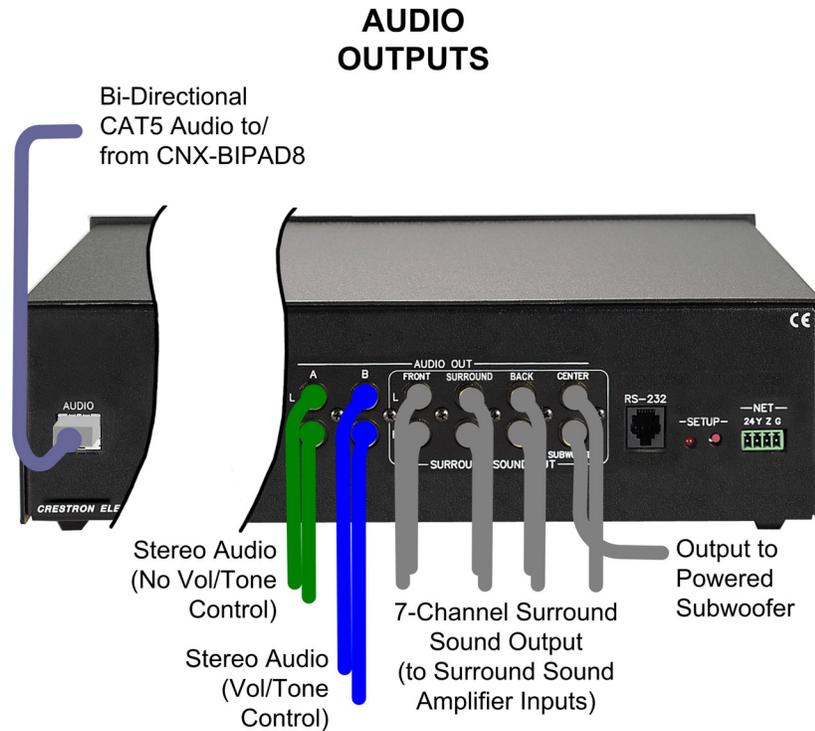
Connect Head End and Local Sources

Connect audio sources to the DAP8 using the diagram below as a guide.

Connect Outputs

Connect audio outputs from the DAP8 using the diagram below as a guide.

AUDIO OUTPUTS

Bi-Directional CAT5 Audio to/ from CNX-BIPAD8

Stereo Audio (No Vol/Tone Control)

Stereo Audio (Vol/Tone Control)

7-Channel Surround Sound Output (to Surround Sound Amplifier Inputs)

Output to Powered Subwoofer

Network ID

The Net ID of the DAP8 is factory set to **50**. The Net IDs of multiple DAP8s in the same system must be unique, and the Net ID of each unit must match an ID code specified in the SIMPL Windows program. Refer to "Identity Code" on page 10 of the Operations Guide for the DAP8 (Doc. 8186) for details.

Communication Setup

To upload a SIMPL Windows program or the example program for the DAP8, it is necessary to establish communications with a 2-Series control system.

- Use a standard DB9 male to female "straight-through" cable, to connect a PC's serial port to the control system's computer port.

- Use a 4-wire Cresnet cable to connect the DAP8 to the control system.

If communication cannot be established, refer to the "Troubleshooting Communications" section in the Operations Guide for the control system.

C2N-DAP8

4-Wire Cresnet Cable

Serial Port (DB9)

Computer Port (DB9)

PC

CONTROL SYSTEM
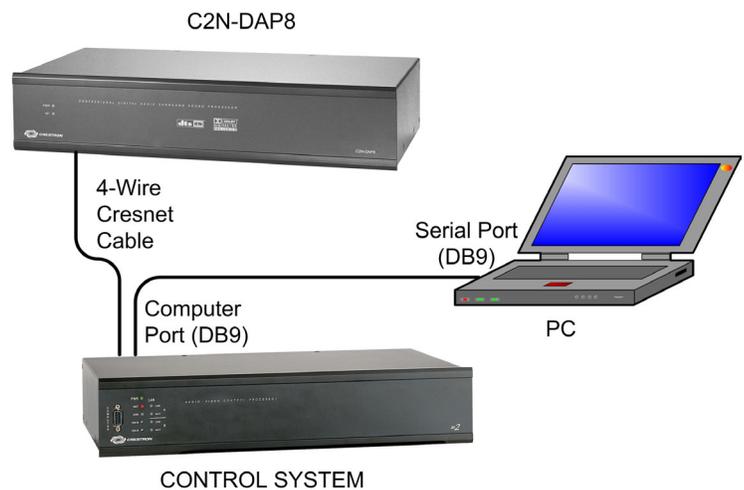
Load the Example Program and Verify Operation

Download the DAP8 example program from the Crestron FTP site (ftp://ftp.crestron.com/Examples). Search for C2N-DAP8.Basic Example.zip.

The example program does virtually all of the functions that can be accomplished via the Digital Audio Tools (DAT) software, and lets you immediately hear the results of your adjustments. It can serve as a model program for those individuals who wish to do system setup and room balancing functions via a touchpanel.

NOTE: The supplied program is designed to work with a Crestron TPS-4500 touchpanel and a PRO2 control system. If your system uses a different touchpanel and/or control system, convert the programs accordingly.

NOTE: The example program includes features specific to the C2N-DAP8RC, which do not apply to the C2N-DAP8, and are therefore not described in this Quick Start.

After downloading the example program, load the .spz program to the control system, and load the .vtz program to the touchpanel. Refer to "Upload via Crestron Viewport" on page 47 of the Operations Guide for the DAP8 (Doc. 8186) for details. Once these programs are loaded, the touchpanel main screen appears.

The **MUTE** button and the up and down arrows at the lower right control the sound being supplied to the available speakers indicated by the LEDs in the upper right corner. The gauge shows the relative sound level.

The SOURCE SELECT area is used to select the digital or analog source material connected to the unit's input ports.

The UTILITY area lets you select the **AUDIO** switching utilities or **SYSTEM SETUP**.

The TONE CONTROL area provides controls appropriate to the chosen audio source and decoding mode.

- To begin, select **SYSTEM SETUP**. The display provides a set of buttons you use to select the parts of the system to be configured—**SPEAKER CONFIG**, **AUDIO CONFIG**, and **EQ'S**—plus **AUDIO SWITCH,** which are used to set the internal routing of audio signals. Initially, the large screen area to the right is blank.
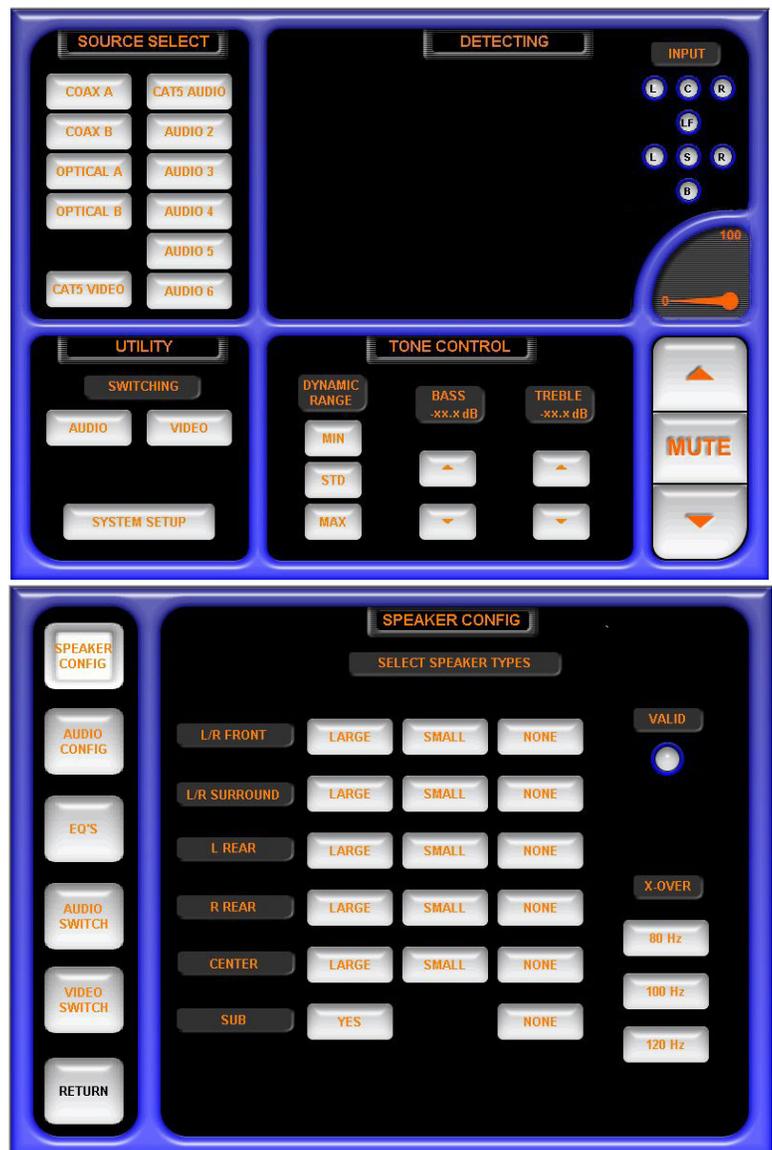
- From the system setup display, select **SPEAKER CONFIG** to display the SPEAKER CONFIG window. Use this screen to specify the speaker arrangement of your system and to set the crossover frequency for the subwoofer.

- From the system setup display, select **AUDIO CONFIG** to display the AUDIO CONFIG window. Use this screen to set up the volume trims, the delays, and the noise generator settings. These settings are usually used together during room calibration. The VOLUME TRIMS specify the relative gain for each speaker in the room. The DELAY X 1ms settings specify the delays needed to ensure that the sound from all speakers reach the listener's ears at exactly the same time.

  Use the NOISE GENERATOR buttons to select the noise source. The default **STD** (Dolby) button toggles to **PINK.** Press **BYPASS** to bypass all equalization filters and tone controls. Use the **ON** and **MUTE** buttons to turn each speaker on and off.

- From the system setup display, selecting the **EQ's** button displays the EQUALIZATION window used to specify the various filter settings for each speaker in the system.

- From the system setup display, select **AUDIO SWITCH** to display the AUDIO SWITCHING window used to select the analog source you wish to appear on the three possible outputs.

> **NOTE:** Any output from the **AUDIO** CAT5 connector and the AUDIO OUT **A** and **B** RCA connectors is stereo from the unit's analog crosspoint and does not contain any surround sound encoding. But, any analog audio routed to the AUDIO OUT **B** connectors will also appear on the SURROUND SOUND OUT connectors unless a digital source is selected for the surround sound processor. Digital sources, though, cannot appear on the analog outputs.

  Select the analog audio source that will appear on the CAT5, OUTPUT A, and OUTPUT B audio output connectors. You can also choose to mute the signal to those outputs.

  The OUTPUT B CONTROLS section affects only the signals to OUTPUT B. The BASS, TREBLE, and BALANCE controls are initially set to their middle positions; the VOLUME control is set to its zero position.

  The three buttons at the bottom provide both electronic and relay mute control of all outputs, and a standard 'loudness' selection that provides emphasized treble and bass. The electronic mute reduces the level of the output to –80dB (effectively silent); the relay mute opens the output circuits.

- After performing the system setup procedures, press **RETURN** to display the default main screen. Use the SOURCE SELECT buttons to choose the desired audio source. When any of the digital audio inputs are chosen as the source selection, the system automatically detects the encoding method of the incoming signal and displays the appropriate decoding mode choices.

Room Calibration

After you have determined that the DAP8 is functioning properly, the next step is to install it at the site and to calibrate the DAP8 to the listening area. This process, called room calibration, is a critical part of setting up a home theater. Without proper calibration, the impact of a movie or musical soundtrack will lack what the sound engineer had originally intended.

Calibration procedures are beyond the scope of this Quick Start. Instead, refer to "Surround Sound System Setup" on page 18 of the Operations Guide for the DAP8 (Doc. 8186) for detailed instructions.

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www.crestron.com   change without notice.