Crestron **C2-AUDIO-6PAK**
Six-Zone Audio Package
Reference Guide

CRESTRON

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Contents

Six-Zone Audio Package: C2-AUDIO-6PAK

Introduction

The C2-AUDIO-6PAK, or Audio Six-Pack, is a complete package of 15 high-performance components plus programming software, all specially designed to work together. This packaged solution requires only minimal configuration and quick setup for a 6-zone audio distribution system. It is also an excellent way to start a basic system that is fully expandable for future upgrades. When enhanced with additional Crestron® components and accessories, the package becomes the foundation for a truly sophisticated home control and automation system.

Functional Summary

- 6-zone audio distribution system
- 15 component audio package provides six zones of audio control
- Minimal configuration and quick setup
- Simple Wizard-type programming
- Fully expandable to complete control and automation system
- Domestic and international models with user interfaces available in three different colors
- Built-In 10/100 BaseT Ethernet port (CP2E option only)
- Built-In Web Server (CP2E option only)

The keypads packaged with the Audio Six-Pack are available in three different colors: almond (A), black (B), and white (W). The exact color is denoted by the A, B, or W suffix and the end of the sort name (e.g., the C2-AUDIO-6PAKA includes almond-color keypads). Depending on which package is selected, the CP2 or CP2E is the control system that contains the software program and provides connectivity for communication and control of all devices within the package. The CP2E is functionally identical to the CP2, with the exception that it also provides LAN and Web access through its built-in 10/100 BaseT Ethernet port, which supports dynamic/static IP addressing and full-duplex TCP/IP and UDP/IP protocols. The type of control system is denoted in the first portion of the name; either 'C2' for the CP2 or 'C2E' for the CP2E. Furthermore, the Audio Six-Pack is available as a domestic or international system. All of the features are identical between the two with the exceptions of the international AC power requirements and the unit

nomenclature of some components in the package. Throughout this guide, all references to C2-AUDIO-6PAK apply to the different user interface colors, type of control system, and their respective international versions as well, except where noted.

The C2-AUDIO-6PAK is anchored by the Crestron 2-Series control system (CP2 or CP2E) and the CNAMPX-12x60 Multi-Channel Power Amplifier. The CNAMPX-12x60 provides 12 channels of amplification with power specifications of 60 Watts per channel (WPC) at 8 ohms, 90 WPC into 4 ohms and 220 WPC bridged at 8 ohms. Use a bridged wiring configuration to provide over 200 watts of power to each speaker. Bridging channels requires a Crestron CNXBRMO Mono Converter & Bridge (not part of the Audio Six-Pack). For more information on bridging channels, refer to "Advanced Wiring" on page 7.

NOTE: Cresnet® cable is not included with the C2-AUDIO-6PAK. It must be procured separately.

The complete list of hardware components includes:

- CP2 or CP2E, control system

- CNAMPX-12x60, multi-channel amplifier (domestic model) or CNAMPXI-12x60, multi-channel amplifier (international model)

- CNPWS-75, external power supply (domestic model) or CNPWSI-75, external power supply (international model)

- CNX-PAD8A, professional audio distribution processor

- C2N-DBF12, 12-button function keypad (quantity six keypads per pak)

- C2N-HBLOCK, multi-type network distribution block.

- IRP2, Cresnet Infrared Emitter (quantity four per pak)

Also included with the C2-AUDIO-6PAK is the Crestron Audio Six-Pack CD (version 1.2), which contains among other software, the Audio Six-Pack Wizard. This Wizard provides an easy-to-follow configuration of the entire six-zone audio system.

NOTE: The Wizard in the Crestron Audio Six-Pack CD (version 1.2) allows a system to be configured with either a CP2 or CP2E processor. If a different processor is part of your system, use the Crestron Application Builder™ (AppBuilder) after completing the steps in the Wizard to swap control systems. Refer to "Appendix A: Swapping Control Systems" on page 23 for details.

NOTE: An earlier version of the CD is compatible with the CNX version of the Audio Six-Pack. Only the software on the Crestron Audio Six-Pack CD (version 1.2 and later) works correctly with the C2-AUDIO-6PAK. Refer to "Appendix B: Notice to CNX-AUDIO-6PAK Users" on page 24 for making changes to an existing CNX-AUDIO-6PAK system.

Hardware Setup

Identity Code

Every equipment and user interface within the network requires a unique identity code (Net ID). These codes are assigned a two-digit hexadecimal number from 03 to

FE. For your convenience, all hardware devices in the C2-AUDIO-6PAK have been assigned unique Net IDs. However, the six keypads are zone specific. Be sure to install the given user interface into the appropriate room as defined in the Crestron Audio Six-Pack Wizard. Each keypad is physically labeled with the Net ID in the barcode label. The room/Net ID key is as follows:

- Room 1 contains keypad with Net ID = 4C
- Room 2 contains keypad with Net ID = 52
- Room 3 contains keypad with Net ID = 53
- Room 4 contains keypad with Net ID = 54
- Room 5 contains keypad with Net ID = 55
- Room 6 contains keypad with Net ID = 56

Network Wiring

Refer to the network wiring diagram, shown below, when making all network connections between the hardware devices of the C2-AUDIO-6PAK.

NOTE: Cresnet cable is not included with the C2-AUDIO-6PAK. It must be procured separately.
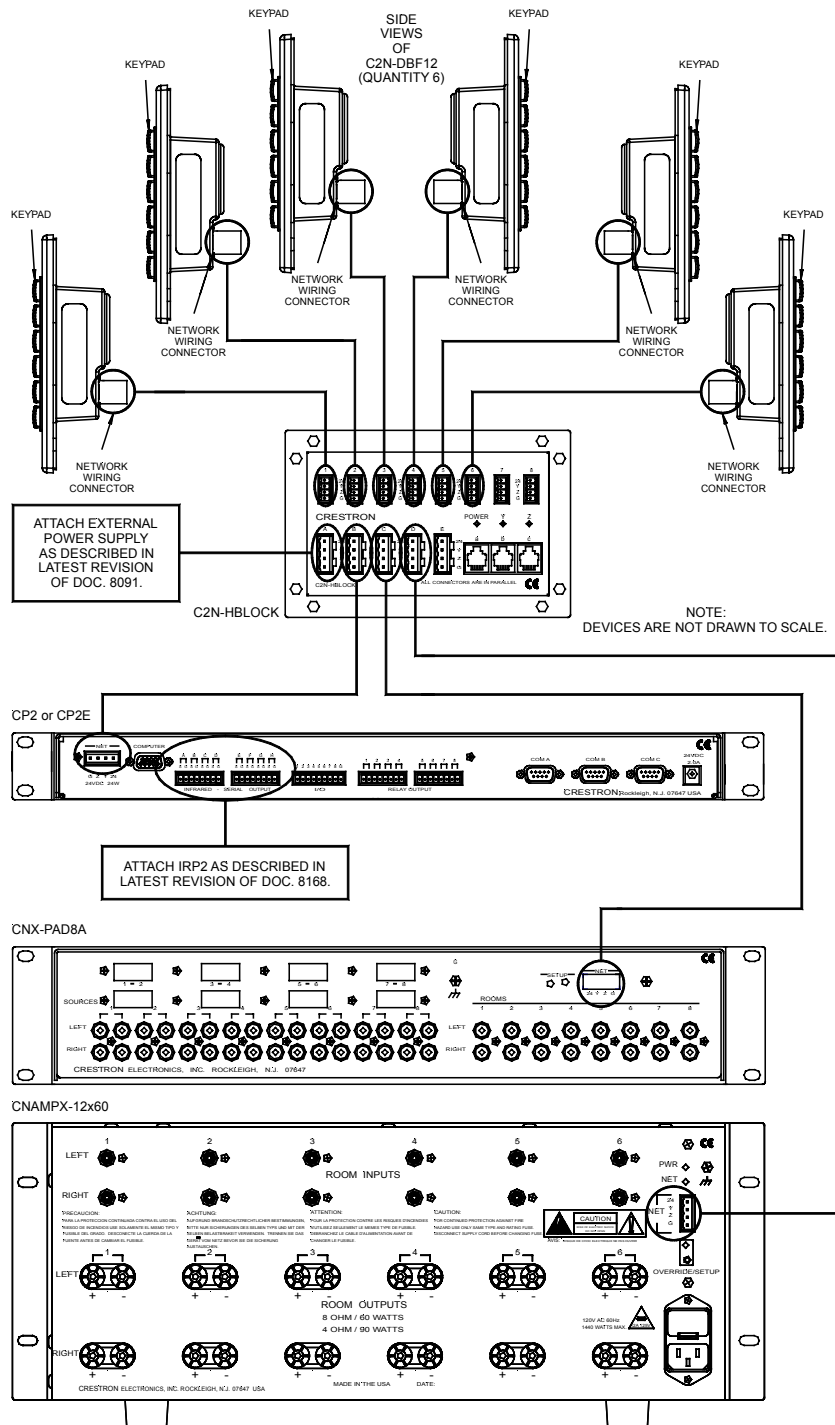
Four-Wire Network Connector

The four-wire network cable is used to provide power and communications with Crestron devices. Before making any four-wire network connections, refer to the following network interconnection diagram and the cautions that follow.

Recommended Network Cable, Liberty Wire Reference: Cresnet
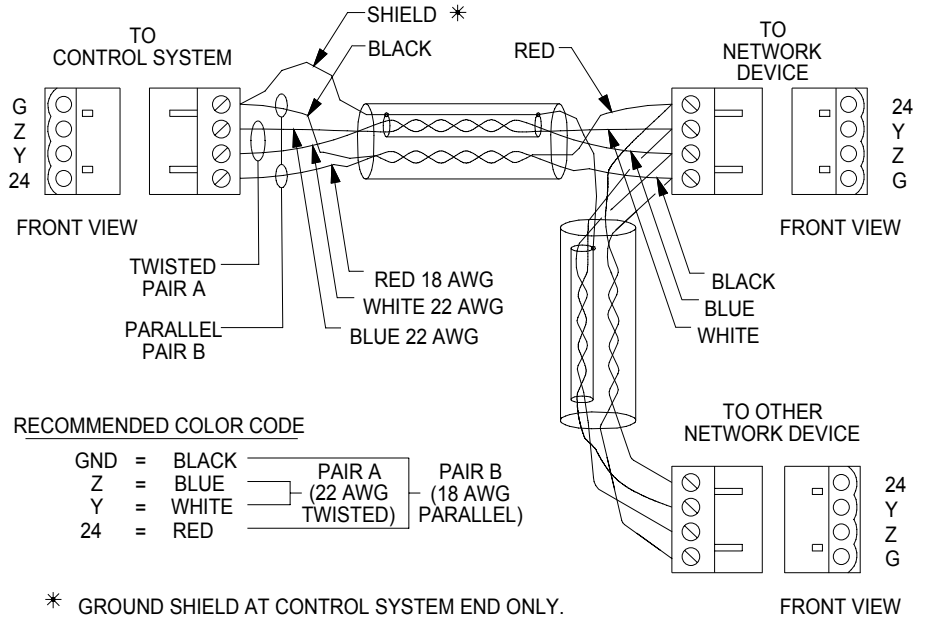
CAUTION: Possible equipment damage if miswired.

NOTE: Do not power up system until all wiring is verified. Care should be taken to ensure data (Y, Z) and power (24, G) connections are not crossed.

NOTE: A C2N-HBLOCK, multi-type network distribution block is provided as part of the Audio Six-Pack for testing purposes and convenience of wiring.

CAT5 Wiring

CAT5 wiring can also be used to connect Crestron devices. Before making any CAT5 connections, refer to the following network interconnection diagram and the cautions that follow.

CAT5 Interconnect Drawing

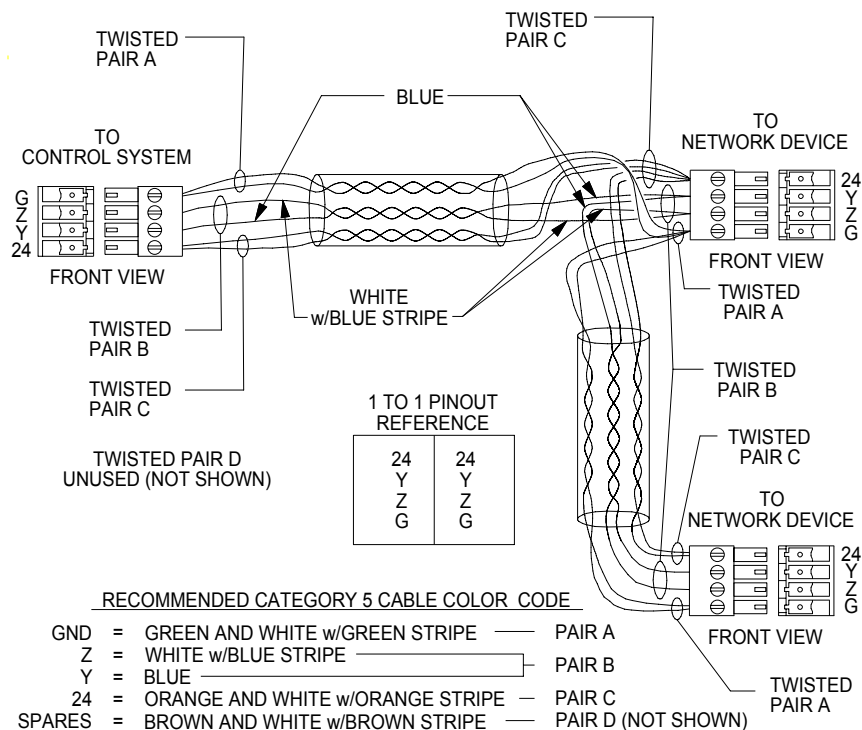**CAUTION:** Possible equipment damage if miswired.

NOTE: Do not power up system until all wiring is verified. Care should be taken to ensure data (Y, Z) and power (24, G) connections are not crossed.

NOTE: To calculate maximum CAT5 cable length, use the following equation:
$$L = 3000/PF$$
where   L = maximum cable length (feet)
          PF = total power factor for equipment on run (watts).

NOTE: For additional information on audio/video connections over CAT5, refer to the latest version of the Crestron CAT5 Wiring Reference Guide (Doc. 6137), which is available from the Downloads | Product Manuals section of the Crestron website (www.crestron.com).

Audio Source Wiring

NOTE: Use good quality shielded interconnects between source equipment, CNX-PAD8A, and CNAMPX-12x60 to minimize noise. The required wire gauge is dependent on the length of the wire run.

Refer to the following audio wiring diagram when making audio connections between the hardware devices of the C2-AUDIO-6PAK and the sources.

Advanced Wiring

If the intent is to use the C2-AUDIO-6PAK in a configuration other than its basic design, refer to the individual device Operations Guides when making these "advanced" wiring connections.

NOTE: Bridging channels requires a Crestron CNXBRMO Mono Converter & Bridge (not part of the Six-Zone Audio Package). No more than two CNXBRMOs should be connected to a single CNAMPX-12x60 when bridging. When implementing a two-CNXBRMO bridge, Crestron recommends connecting one to ROOM INPUTS 1 & 2 and connecting the other to ROOM INPUTS 5 & 6 on the CNAMPX-12x60. Failure to make these connections in this particular application may result in damage to the amplifier.

Audio Wiring
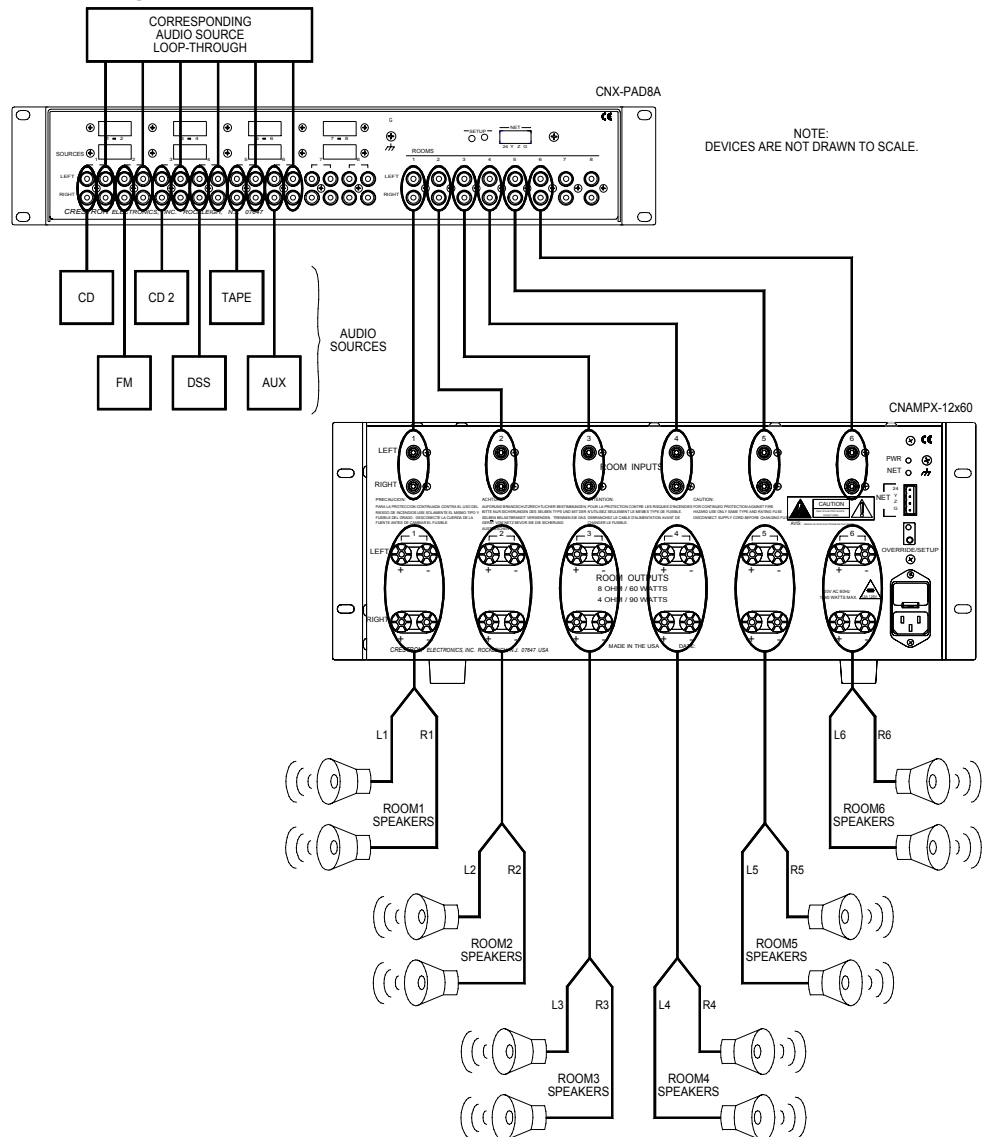
Software Setup

NOTE: Have a question or comment about Crestron software?

Answers to frequently asked questions (FAQs) can be viewed in the Online Help section of the Crestron website (www.crestron.com). To post your own question or view questions you have submitted to Crestron's True Blue Support, log in at http://www.crestron.com/accounts/login.asp. First-time users will need to establish a user account.

Software System Requirements

NOTE: The Audio Six-Pack Wizard is available from the Crestron Audio Six-Pack CD and also as part of the Crestron Application Builder (AppBuilder) version 1.2.4 and later, which can be obtained from the Downloads | Software Updates section of the Crestron website (www.crestron.com). Crestron software and any files on the website are for Authorized Crestron dealers and Crestron Authorized Independent Programmers (CAIP) only. New users may be required to register to obtain access to certain areas of the site (including the FTP site).

The PC where the contents of the Crestron Audio Six-Pack CD or Crestron AppBuilder (version 1.2.4 or later) are installed should meet these system requirements.

Minimum Required PC Configuration

>Windows 98/NT/2000/XP: 333MHz Pentium II with 256MB RAM
>Display Setting of "256 Colors"

Recommended PC Configuration

>Windows 98/NT/2000/XP: 1.3GHz Pentium 4 with 512MB RAM
>Display Setting of "High Color (16 bit)" or higher

Installation via the Crestron Audio Six-Pack CD

Insert the Crestron Audio Six-Pack CD (version 1.2 or later) into the PC's CD-ROM drive. If the CD does not start automatically, select **Run** from the Windows start menu. Type the letter for the CD-ROM drive and **:\Setup**.

NOTE: The Wizard in the Crestron Audio Six-Pack CD (version 1.2) allows a system to be configured with either a CP2 or CP2E processor. If a different processor is part of your system, use the Crestron AppBuilder after completing the steps in the Wizard to swap control systems. Refer to "Appendix A: Swapping Control Systems" on page 23 for details.

NOTE: An earlier version of the CD is compatible with the CNX version of the Audio Six-Pack. Only the software on the Crestron Audio Six-Pack CD (version 1.2 and later) works correctly with the C2-AUDIO-6PAK. Refer to "Appendix B: Notice to CNX-AUDIO-6PAK Users" on page 24 for making changes to an existing CNX-AUDIO-6PAK system.

There are certain versions of SIMPL Windows®, Crestron VisionTools® Pro-e (VT Pro-e), and the Crestron Database required to successfully operate with the

Wizard. The minimum required versions are available from the Crestron Audio Six-Pack CD.

The versions are:

- SIMPL Windows v2.04.14.05 or later. Requires SIMPL+$^®$ Cross Compiler version 1.1.
- VT Pro-e v3.1.2.0 or later.
- Crestron Database v16.0.4 or later.
- Crestron AppBuilder v1.2.4 with Audio Six-Pack Wizard.

The latest software versions can also be obtained from the Downloads | Software Updates section of the Crestron website (www.crestron.com).

Installation of Crestron Application Builder

Download and double click the Crestron AppBuilder .EXE (version 1.2 or later) file from the Crestron website. The InstallShield Wizard opens. Follow the steps to complete the install.

There are certain versions of SIMPL Windows, VT Pro-e, and the Crestron Database required to successfully operate with the Wizard. The minimum required versions can be obtained from the Downloads | Software Updates section of the Crestron website (www.crestron.com). The versions are:

- SIMPL Windows v2.04.14.05 or later. Requires SIMPL+$^®$ Cross Compiler version 1.1.
- VT Pro-e v3.1.2.0 or later.
- Crestron Database v16.0.4 or later.
- Crestron AppBuilder v1.2.4 with Audio Six-Pack Wizard.

Three Step Configuration

NOTE: The Wizard in the Crestron Audio Six-Pack CD (version 1.2) allows a system to be configured with either a CP2 or CP2E processor. If a different processor is part of your system, use the Crestron AppBuilder after completing the steps in the Wizard to swap control systems. Refer to "Appendix A: Swapping Control Systems" on page 23 for details.

Use the easy three-step configuration of the Crestron Audio Six-Pack Wizard described on the following pages to complete the six-zone audio system. Refer to the on-line and context-sensitive (F1) help, if assistance is needed.

Start Audio Six-Pack Wizard

Open the Audio Six-Pack Wizard and begin with the screen shown below.

Start Screen
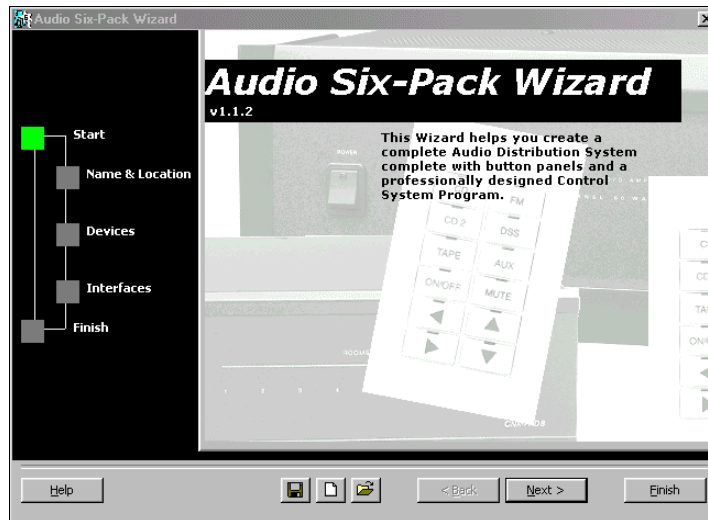
To move onto the first step in the configuration of the audio system, click on the **Next>** button or click on the square in the left column entitled **"Name & Location"**. Advance through the Wizard steps using either of these methods. An alternative method of initiating configuration is to click on the "Create New System" icon (⬜).

Step 1: Name the System

From the next screen, shown below, specify the CP2 or CP2E as the processor to be used and enter a name in the *System Name:* field. This name will be assigned to all application files (Audio Six-Pack Wizard, SIMPL Windows, and VT Pro-e) for the system. In the second field, enter a location to save all files that are created using the Wizard. Defaults for each field are shown below.
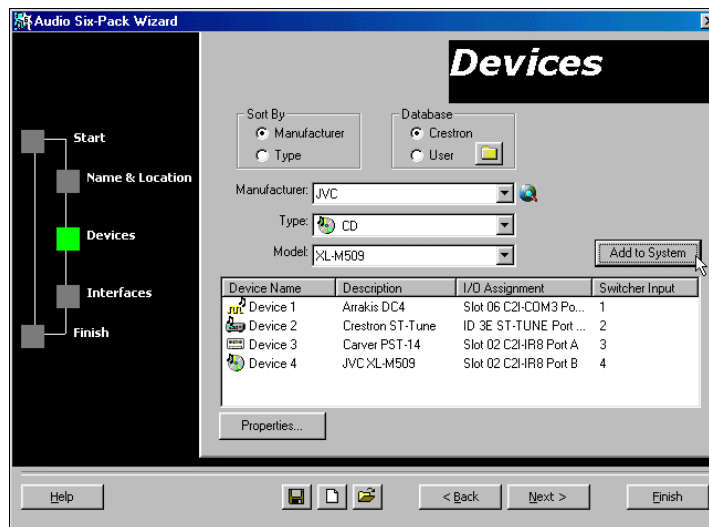
Name the System
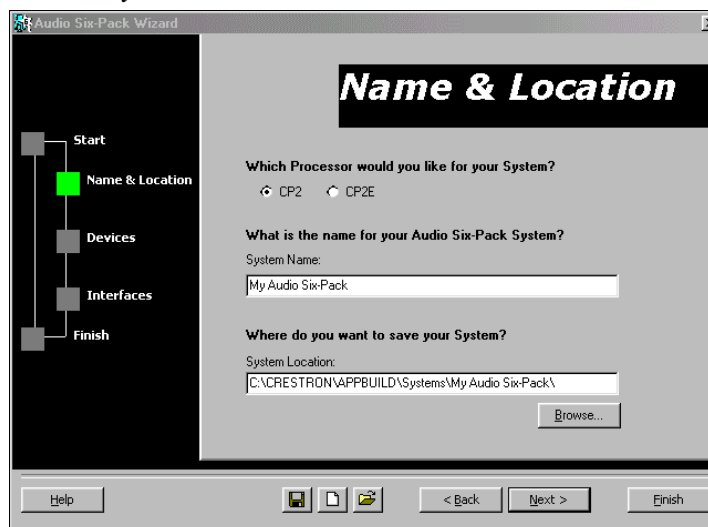
The Crestron Database contains information collected about devices that have, at one time, been programmed into a Crestron system. The User Database is a place to store information about devices that are not yet part of the Crestron Database.

Step 2: Add Sources

The Devices screen of the Audio Six-Pack Wizard allows the user to select all the audio sources in the system that need to be controlled. The Wizard has access to either the Crestron or User Database. Make a choice by selecting the correct *Database* button, as shown in the screen below. A source can be added by first selecting how to search for it. Decide how to sort the devices by selecting either the *Manufacturer* or *Type* button from the *Sort By* area.

NOTE: It is possible to rebuild the User Database. Simply click on the folder icon in the *Database* area of the Devices screen to open the "Preferences" window.

Add Sources

Use the pull-down arrows to select the *Manufacturer*, *Type*, and *Model* of each source in the system. Once the three parameters are selected for a single source, click the **Add to System** button to automatically enter the source into the list at the bottom of the screen.

Notice that the Wizard keeps a running list of each source. The list includes the device name, a description of the source, I/O assignment, and the Switcher Input. Continue to add sources by repeating the procedure in the previous paragraph.

It is possible to assign properties to each source. Double click on an item from the list of sources or alternatively, select the source and click on the Properties button, or right click the source, then select **Properties** from the pull-down list. The "Device # Properties" window appears with up to four tabs of its own: Audio, I/O Assignment, Commands, and Properties. The pound symbol (#) in the title of the window indicates the number assigned to the actual device.

Audio Properties

The Audio tab of the "Device # Properties" window, as shown after this paragraph, identifies the name of the source device and assigns the predetermined input number to the CNX-PAD8. The input number to the audio switcher can be changed.

"Device # Properties" Window – Audio Tab

"Device # Properties" Window – Audio Tab
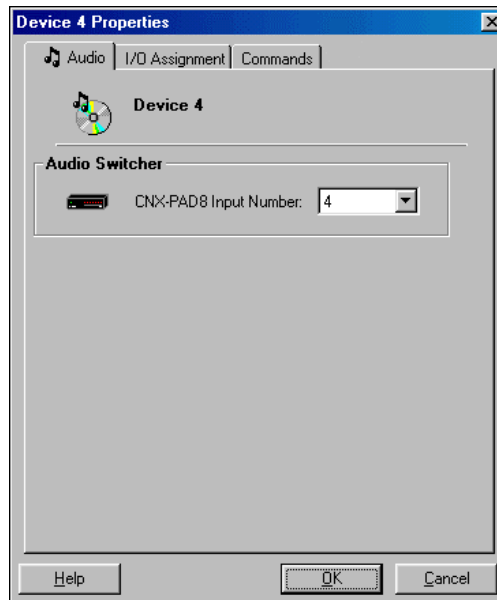
I/O Assignment Properties

The I/O Assignment tab of the "Device # Properties" window, shown after this paragraph, enables a change of the port assignment for the source as well as the controlling device. Click the **OK** button to apply and save any changes made and close the window. The **Cancel** button closes the window without saving any changes that have been made.

"Device # Properties" Window – I/O Assignment Tab
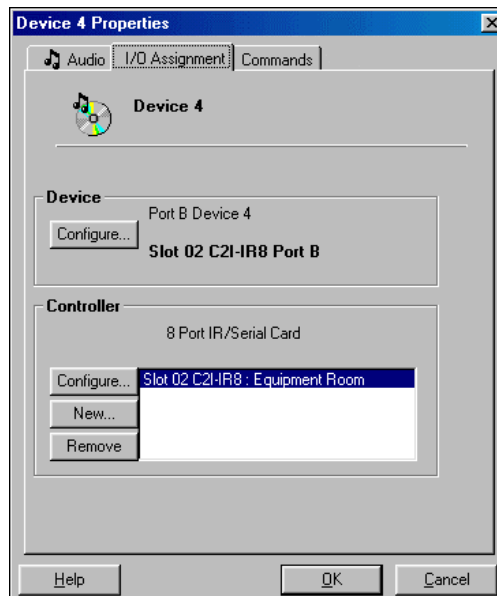
The *Device* area displays all control information about the currently selected device, specifically it reveals how this device is connected to the control system. Click on the **Configure** button to modify how this device is connected to the control system. For example, a CD might automatically be assigned to port C of an IR card. To place

this device on port D, simply click the **Configure** button, select the Port Assignment tab from the "Device Settings" window, and choose a new port assignment.

The *Controller* area displays all control information about the device that controls the currently selected device. For example, if the selected device is an IR controlled CD, the controller may be an internal IR card such as the C2I-IR8. The top line of text displays a description of this controlling device. The list box shows all controllers to which the current device may be assigned. There are three buttons to modify the contents of the list box.

- Click the **Configure** button to modify the controller location in the control system.

- Click the **New** button to add a controller to the list assuming a valid controller is available.

- Click the **Remove** button to remove the currently selected controller from the list. Some controllers (i.e., built-in cards) cannot be removed.

NOTE: Expert users can always modify any of the device properties directly in SIMPL Windows, after the program is generated.

Command Properties

This tab displays a list of possible commands, which are selectable. The four commands, shown after this paragraph, are mapped to two fixed buttons on the function keypad: left and right arrow. To execute the Next 1 command the user presses the right arrow button; to execute the Next 2 command the user presses and holds the right arrow button. Similarly, to execute the Prev 1 command the user presses the left arrow button; for Prev 2, the user presses and holds the left arrow button. Click the **OK** button to apply and save any changes made and close the window. The **Cancel** button closes the window without saving any changes that have been made.

*"Device # Properties" Window – Command Tab*
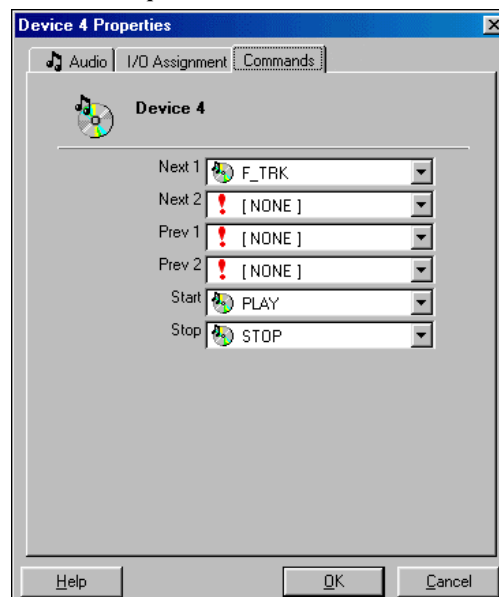
Properties

The Properties tab of the "Device # Properties" window, shown after this paragraph, lists a set of values for specified functions. Crestron recommends that the default values are used, but the programmer is free to alter them. Click the **OK** button to apply and save any changes made and close the window. The **Cancel** button closes the window without saving any changes that have been made.

NOTE: This tab is not available for all devices.

"Device # Properties" Window – Properties Tab
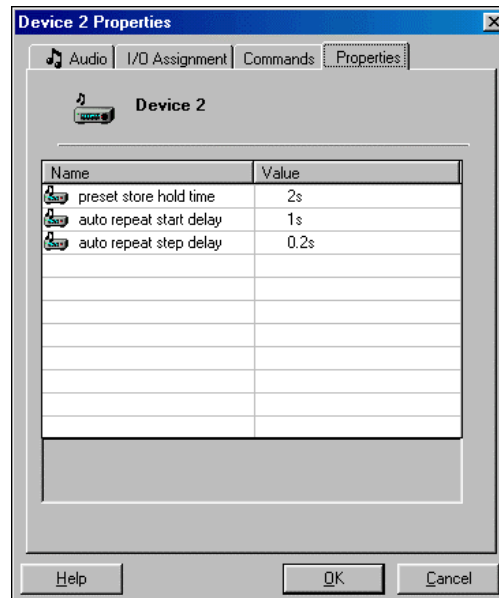
Step 3: Add Rooms

The C2-AUDIO-6PAK is designed to permit control of up to eight devices from up to six rooms. If the intent is to control more than eight devices or control seven or more devices from a single room, the designer should consider using Crestron AppBuilder to supplement the Audio Six-Pack Wizard or use Crestron AppBuilder solely.

The top six buttons on the function keypad are pre-configured for source selection, where by default the first button (on the top left of the panel) selects Device 1, the second button (top right) selects Device 2, the third, Device 3 and so forth. In applications with less than six devices, the extra source selection buttons will have no function assignment. In those applications with seven or eight devices, the extra devices will have no source selection buttons in certain rooms of the system. Use this step to determine which of the available sources can be selected from a given room.

The C2-AUDIO-6PAK is designed to provide control from up to six locations. The Interfaces screen of the Wizard allows the user to assign source control from each of the six rooms. From the pull-down above the user interface on the screen, as shown after this paragraph, choose a room. The top six buttons of the keypad need to be assigned to override the default settings. Move the cursor over one of the buttons and notice that the perimeter of the button changes to a blue color. Selection of a button changes the perimeter color to red and enables the *Selected Source Button* area of the screen. Select an available source from the *Source:* field and assign a label for the button on the keypad. Select another room and repeat the process.

NOTE: The keypad has standard source selector switch caps installed and a kit of custom switch caps is supplied with the C2-AUDIO-6PAK. Instructions for installing the custom switch caps or re-arranging the standard switch caps is

provided in the latest revision of the C2N-DBN12 and C2N-DBF12 Operations Guide (Doc. 6200).

NOTE: The lower six buttons on the keypad are fixed.

NOTE: The Net ID of each user interface is room specific and shown beneath the user interface on the screen.

Add Rooms
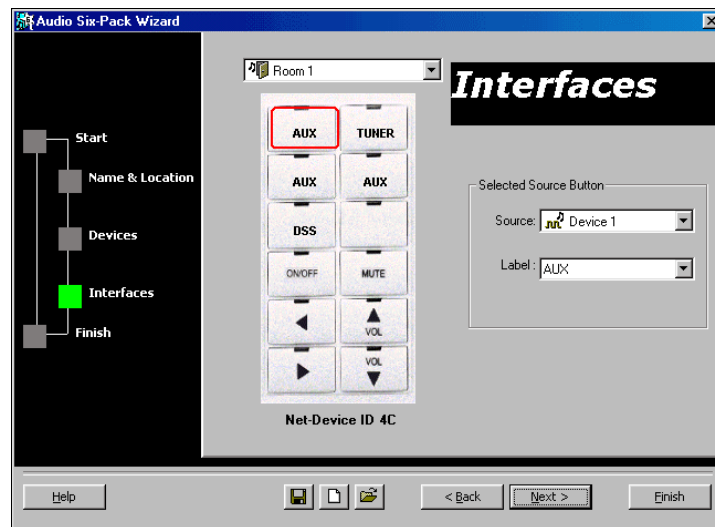
The switch caps on the lower six buttons on the keypad are fixed and cannot be altered. These include the On/Off button, Volume Up and Down, and Mute. The left and right arrow buttons are for the standard Next and Prev commands, as assigned in the Command tab of the "Device # Properties" window, as described in "Step 2: Add Sources" on page 11.

After configuring the buttons, click **Next**.

Upload the System

NOTE: The CP2E has a built-in Ethernet port and web-server. If a CP2E is part of your audio system, use the features in SIMPL Windows and VT Pro-e after compiling to take advantage of Crestron e-Control® capabilities. Search each application's help file for Ethernet / e-Control details. Also, review the latest version of the Crestron e-Control Reference Guide (Doc. 6052), which is available from the Downloads | Product Manuals section of the Crestron website (www.crestron.com).

The Finish screen, shown after this paragraph, provides the final steps to building the logic for the system. This involves creating and compiling the SIMPL Windows program and uploading it to the control system. The completed SIMPL Windows program is saved with the .smw extension in the system's program folder. It contains all the logic that enables communication between the control system, button panels, controlled devices and other C2-AUDIO-6PAK hardware.

Finish Screen
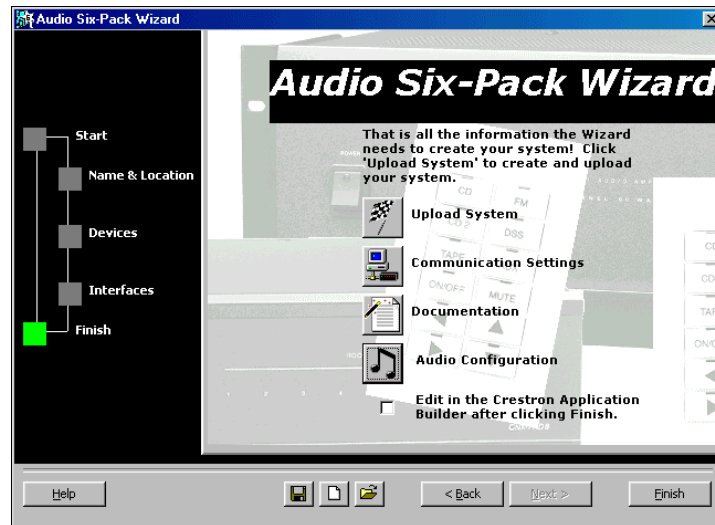
NOTE: The CP2E can use **TCP/IP** as the *Connection Type* when uploading system programs. For uploading details, refer to the latest version of the Crestron e-Control Reference Guide (Doc. 6052), which is available from the Downloads | Product Manuals section of the Crestron website (www.crestron.com).

Before uploading the system, it is probably a good idea to verify the communication preferences. The PC running the Wizard should be connected to the **COMPUTER** port of the CP2 via a straight through 9-pin cable. Only then can all system programs be uploaded. Select the **Communication Settings** button to open the "Port Settings" window, shown after this paragraph.

Verify Port Settings
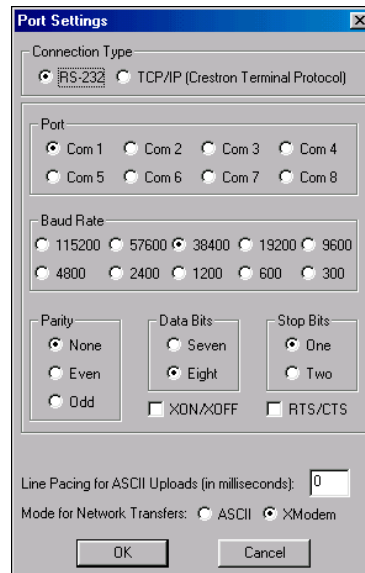
The **Documentation** button on the final screen of the Wizard displays an HTML report of the entire system including devices and their respective locations. These reports are a great troubleshooting tool.

The **Audio Configuration** button serves as a reminder that audio properties such as volume, bass, treble, and balance are set to Crestron default settings. Therefore, these properties need to be adjusted for personal preference. Refer to "Audio Configuration" on page 19 of this guide for details. Clicking on the button opens the help file to the Audio Configuration section.

The **Edit in Crestron Application Builder** button is available for those users that surpass the basic intent of the C2-AUDIO-6PAK. The options are numerous, but possibilities include:

- Add more zones

- Add keypads, touchpanels, and switches as user interfaces

If Crestron AppBuilder is to be used, check the **Edit in Crestron Application Builder** button and click **Finish** to modify the system as desired.

NOTE: Addition of user interfaces may require additional programming and configuration outside of Crestron AppBuilder.


NOTE: When modifications are made in SIMPL Windows (launched from Crestron AppBuilder for finishing touches) one cannot return to the Audio Six-Pack Wizard. All subsequent changes must be made in SIMPL Windows.

When communication between the PC and the control system has been established, click the **Upload System** button from the final screen of the Wizard. The "System Creation" window displays its progress as the Wizard creates and compiles the SIMPL Windows program. Then click **Continue** to proceed to the next and final action, uploading the program to the control system. After the transfer, click **Yes** to load the program into the control system. Then click **Finish** to exit the Wizard.

Open an existing System

Once the system is saved, it can be re-opened using the "Open an Existing System" icon (📂) at the bottom of any Audio Six-Pack Wizard screen. Navigate to the appropriate file via the "Open" window, shown below.

"Open" Window
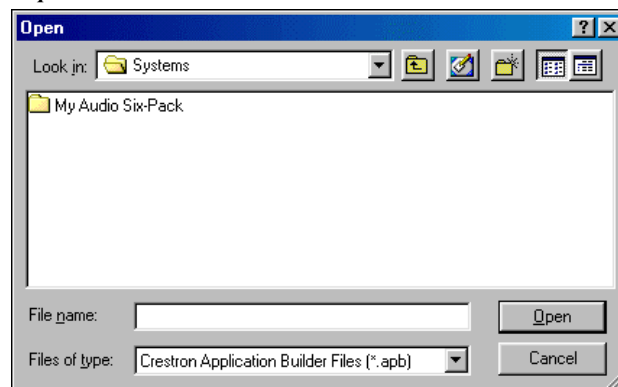
System Operation

This section describes how to use the function keypad to operate a Crestron audio distribution system.

NOTE: These keypads are standard Crestron network devices and as such do not have any functionality built-in. Instead, the program loaded into the CP2 governs their operation. If you choose to use these keypads without using the devices called out in the C2-AUDIO-6PAK, the programmer must determine how they operate.

The keypad provides on/off functionality, volume and mute control, source selection and control, and priority override.

On/Off Button

The On/Off button performs five distinct actions, based on when and how it is pressed.

- **Room On**: Press/release while room is off.

- **Room Off**: Press/release while room is on.

- **Sleep Mode On**: Press/hold for about two seconds until LEDs flash, then release. The button blinks slowly to indicate that sleep mode is active. Room turns off in one hour.

- **Sleep Mode Off**: Press/release while in sleep mode.

- **All Rooms Off**: Press/hold for about four seconds until room shuts off.
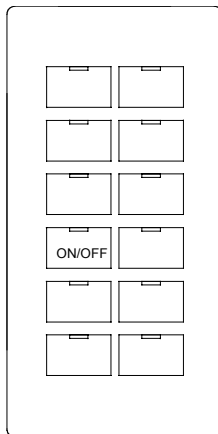
Volume and Mute Buttons

- **Mute Button**: Press to toggle volume mute on and off. LED blinks when volume is muted. Mute is cleared whenever volume is adjusted with the Volume Up/Down buttons or whenever a Source Selection button is selected.

- **Volume Up/Down Buttons**: Control room volume level. LED of selected source blinks when volume level is adjusted.
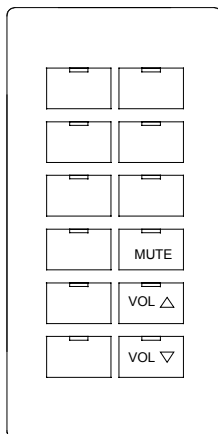
Source Selection and Control
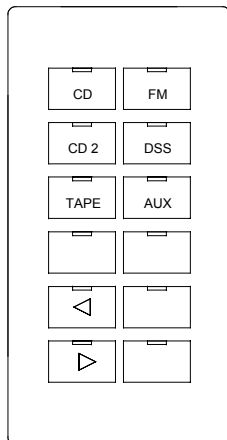
- **Source Selection Buttons**: These buttons select the source for listening/control in the given room. The buttons shown in the illustration to the left are pre-assembled. Each keypad is supplied with a kit of additional buttons, which include: DSS 2, SAT, SAT 2, FM 2, AM, TUNER, TV, DVD, VCR, and HDRIVE. Refer to the disassembly view in the latest version of the keypad Operations & Installation Guide (Doc. 6200) for instructions to replace source buttons.

  A solid LED indicates that the source is selected and can be controlled. A blinking LED indicates that a source is in use by another room and cannot be controlled Refer to "Priority Override" on page 19 for an exception.

  If a source is selected and has a solid LED, pressing the button again issues the NEXT1 command to that device.

- **Previous/Next Buttons**: These buttons control the selected source (unless the source LED is blinking, refer to "Priority Override" on page 19).

  Press and release the Prev/Next buttons to send the PREV1/NEXT1 commands to the selected source. Press and hold the Prev/Next buttons for about one second to send the PREV2/NEXT2 commands to the selected source.

  To change the NEXT and PREV commands for a given device, refer to the "Audio Properties" subsection of "Step 2: Add Sources" on page 11 for details.

Priority Override

The source button LEDs blink if another room has control priority over the selected source. This means that this room can listen to the source, but cannot control it.

If another room has control over the current source, control can be taken from the other room by pressing and holding the source button for about two seconds.

Audio Configuration

Default Settings:

Bass – 50%
Treble – 50%
Balance – 50 % (centered)
Min Volume – 30%
Max Volume – 70%
Startup Volume – 35%
Loudness - off

The function keypads provide additional functionality for configuring both the room and source settings. Room settings include properties such as bass, treble, and balance, and only affect the room from which they are adjusted. Source settings are the input gain on the CNX-PAD8A for each source, allowing the volume level of each source to be normalized relative to one another. Adjusting the input gain for a source affects the volume of that source in all rooms. Audio properties such as volume, bass, treble, and balance are set to Crestron default settings. Therefore, these properties need to be adjusted for personal preference. The default settings are listed to the left of this paragraph.

Under normal operation, the keypads operate as described in "System Operation" on page 18. In order to adjust the room or source settings, the appropriate mode, as described in the following subsections, must be entered.
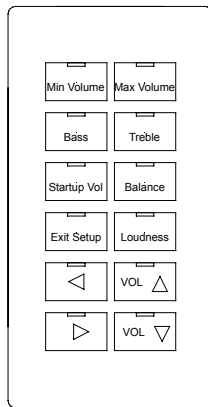
Setup Modes
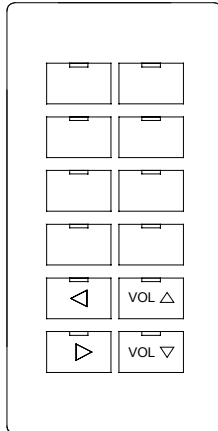
- **Enter Room Setup Mode**: Momentarily press both Volume Up and Down buttons simultaneously to enter *Room Setup Mode*.

- **Enter Source Setup Mode**: Press both Next and Prev buttons simultaneously to enter *Source Setup Mode*.

NOTE: Once a setup mode is entered, additional settings can influence operation.

Room Setup Mode Operation

- **Source Selection Buttons**: These buttons select one of six properties to adjust. Once selected, use the Volume Up/Down or Prev/Next buttons to adjust the level.

  Press and hold a button for about one second to set that property back to its default level. Holding a button for five seconds resets ALL settings.

- **On/Off Button**: This button's LED blinks rapidly to indicate *Room Setup Mode* activity. Momentarily press this button to exit *Room Setup Mode*.

- **Prev/Next Buttons**: Adjust the currently selected property left/right. Also, the Prev button (◄) and Next button (►) can be used to adjust selected properties down and up, respectively for ALL settings.

- **Mute Button**: Toggles loudness on and off. LED illuminates if loudness is currently on.

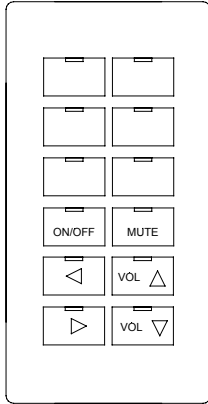- **Volume Up/Down Buttons**: Adjust the currently selected property up/down.

NOTE: The illustration is for reference only. The text that appears in this illustration for the 8 buttons at the top of the keypad does not actually appear on the button.

Source Setup Mode Operation

- **Source Selection Buttons**: These buttons select the sources assigned to them in "standard" mode. Use the Volume Up/Down buttons to adjust the input gain for that source.

- **On/Off Button**: This button's LED blinks rapidly along with the Mute button to indicate *Source Setup Mode* activity. Press this button to exit *Source Setup Mode.*

- **Prev/Next Buttons**: These buttons have no functionality in this mode.

- **Mute Button**: This button's LED blinks rapidly along with the On/Off button to indicate *Source Setup Mode* activity.

- **Volume Up/Down Buttons**: Adjust the input compensation of the currently selected source.

Problem Solving

Troubleshooting

Refer to the troubleshooting tables in each of the individual device Operations Guides to resolve trouble situations. If further assistance is required, please contact a Crestron customer service representative by calling:

- In the US and Canada, call Crestron's corporate headquarters at 1-888-CRESTRON [1-888-273-7876].

- In Europe, call Crestron International at +32-15-50-99-50.

- In Asia, call Crestron Asia at +852-2341-2016.

- In Latin America, call Crestron Latin America at +5255-5093-2160.

- In Australia and New Zealand, call Crestron Pacific at +613-9480-2999.

You can also log onto the online help section of the Crestron website (www.crestron.com) to ask questions about Crestron products. First-time users will need to establish a user account to fully benefit from all available features.

Firmware Upgrades

To take advantage of all the C2-AUDIO-6PAK features, it is important that the units that make up the pak contain the latest firmware available. Therefore, please check Crestron's website (http://www.crestron.com/downloads/software_updates.asp) for the latest version of firmware. Not every product has a firmware upgrade, but as Crestron improves functions, adds new features, and extends the capabilities of its products, firmware upgrades are posted. If you have questions regarding upgrades procedures, contact Crestron customer service.

Future Updates

As Crestron improves functions, adds new features, and extends the capabilities of the C2-AUDIO-6PAK, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron website (www.crestron.com) periodically for manual update availability and its relevance. Updates are available from the Download | Product Manuals section and are identified as an "Addendum" in the Download column.

Appendix A: Swapping Control Systems

NOTE: This appendix is intended for those using the Crestron Audio Six-Pack CD (v1.2) to program their audio system, which contains a control system other than the CP2 or CP2E.

If your audio system physically contains a control system other than the CP2 or CP2E, you must swap control systems after finishing the three configuration steps. Complete the following steps:

1. Open Crestron AppBuilder v1.2.4 or later.

2. Select **Edit | System Properties** to open the "System Properties" window, as shown below.

Swapping a Control System via the "System Properties" Window
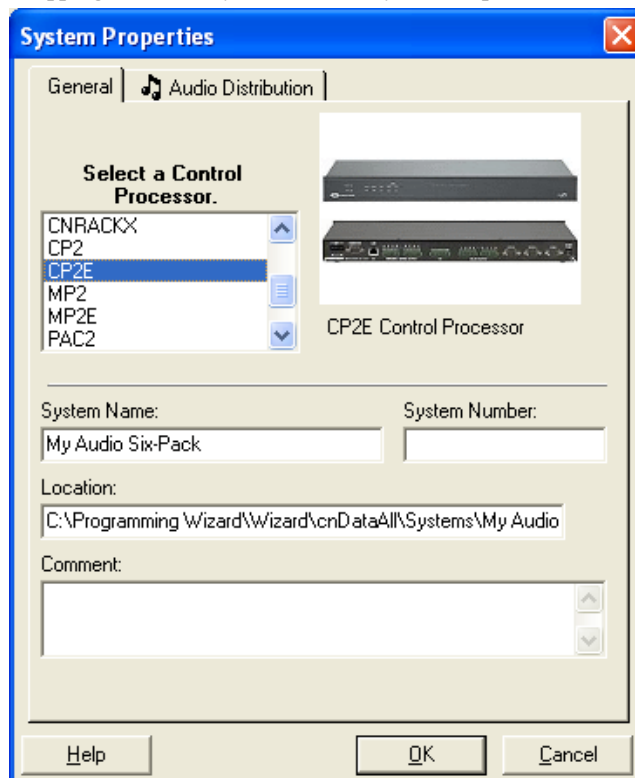
3. From the *General* tab, scroll to and select the appropriate control system from the *Select a Control Processor* window.

4. Select **OK** to close the "System Properties" window and initiate a control system swap in the program.

NOTE: The CP2E has a built-in Ethernet port and web-server. If a CP2E is part of your audio system, use the features in SIMPL Windows and VT Pro-e after compiling to take advantage of Crestron e-Control capabilities. Search each application's help file for Ethernet / e-Control details. Also, review the latest version of the Crestron e-Control Reference Guide (Doc. 6052), which is available from the Downloads | Product Manuals section of the Crestron website (www.crestron.com).

Appendix B: Notice to CNX-AUDIO-6PAK Users

If you have an existing CNX-AUDIO-6PAK system and wish to make changes to the system, a version of software is available to you from the Crestron Audio Six-Pack CD (version 1.1). Install the software as directed in "Installation via the Crestron Audio Six-Pack CD" or "Installation of Crestron Application Builder" on pages 8 and 9, respectively. From the **Start** menu, navigate to the Audio Six-Pack Wizard, as shown below and right mouse click. From the list of options choose **Properties**.

Accessing Software for the CNX-AUDIO-6PAK
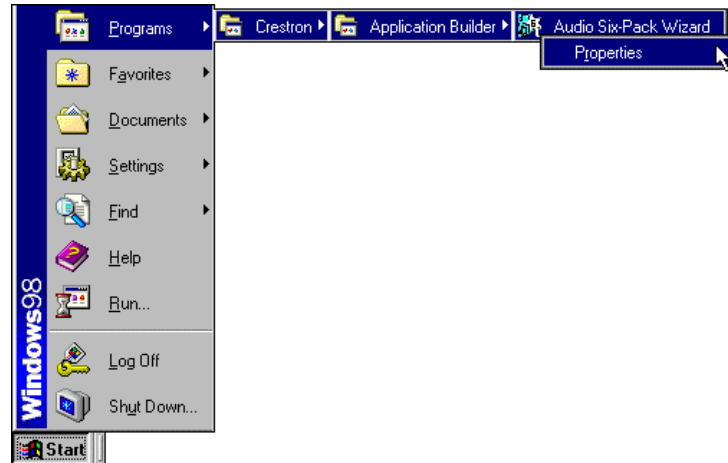
The "Audio Six-Pack Wizard Properties" window appears. In the *Target* area, highlight the "2", as shown below and press the **Delete** button. Click **OK**. The change in properties ensures that when the Audio Six-Pack Wizard is opened, a compatible version of software for the CNX-AUDIO 6PAK system opens.

"Audio Six-Pack Wizard Properties" Window
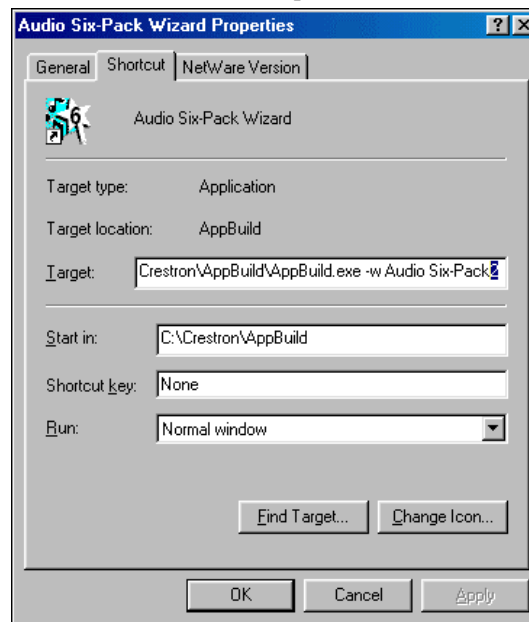
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