Crestron **C2N-DEMO** Interface Case Reference Guide



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# Crestron Demonstration Case: C2N-DEMO Interface Case

## Introduction

## **Features and Functions**

The Crestron<sup>®</sup> C2N-DEMO Interface Case (herein known as the Interface Case) is a pre-programmed Crestron system in a portable case. It is designed with the sales person in mind to give customers an understanding of how Crestron keypads and touchpanel interfaces can be incorporated into their audio-visual and automation systems. The Interface Case is programmed to demonstrate many of the most common functions that Crestron interfaces can perform. However, it is up to you, as a sales person, to spark their imagination as to how these devices can best work in each custom solution.



#### The Crestron C2N-DEMO Interface Case (Opened)

**NOTE**: The Interface Case can operate as a stand-alone demonstration tool or in conjunction with the Crestron C2N-DEMO Lighting Case.

#### **Case Contents**

The following table summarizes the products contained within the Interface Case.

Contents of the Interface Case
--------------------------------

MODEL	DESCRIPTION	QTY
CNX-B2	2-Button Designer Ketpad	1
CNX-B4	4-Button Designer Keypad	1
CNX-B6	6-Button Designer Keypad	1
CNX-B8	8-Button Designer keypad	1
CNX-B12	12-Button Designer Keypad	1
C2N-DB6	6-Button Decorator Keypad	1
C2N-DB8	8-Button Decorator Keypad	1
C2N-DB12	12-Button Decorator Keypad	1
CT-1000	4-Inch Compact Wall Mounted Touchpanel	1
TPS-2000L	5-Inch Compact Wall Mounted Touchpanel	1
CHV-THSTAT	Heating, Cooling, Relative Humidity Thermostat	1
CHV-RTHS	Remote Temperature and Hunidity Sensor	1
MC2E	2-Series Control Processor with Ethernet	1
CNPWS-75	75-Watt Power Supply	1
B-G1-FPAR	Architectual Keypad Faceplate	3
CT/LC-FP-S/STEEL	Stainless Faceplate with Black Trim	1

**NOTE**: The Interface Case also contains a CLW-DIMW and CLW-SWSW ganged together for visual inspection only. These devices are not programmed.

The Interface Case ships with three cables:

- Power Cord
- Cross-over Cable
- RCA to RCA Video Cable

#### Setup

Complete the following steps to setup your portable Interface Case.

1. Apply Power

Open the case lid, simply plug the supplied power cord into the case, and then into a standard 120 VAC wall receptacle.

2. Connect Video

Attach one end of the RCA to RCA video cable to the port in the Interface Case and the other end to a video source.

**NOTE**: The following step describes the IP setup for a Windows<sup>®</sup> XP operating system. The procedure may vary slightly for other systems.

#### 3. Set IP Address

To setup the static IP address for your laptop, go to **Start | Settings | Control Panel** and double click Network Connections. Right click on the icon for your Ethernet adapter and select Properties.

Highlight the *Internet Protocol (TCP/IP)* selection and click the **Properties** button.

Select the radio button labeled *Use the following IP address:* and enter in the following information.

"Internet Protocol (TCP/IP) Properties" Window

Internet Protocol (TCP/IP)	Properties	? 🔀		
General				
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.				
Obtain an IP address automatically	1			
● Use the following IP address: ──				
<u>I</u> P address:	192 . 168 . 40 . 100			
S <u>u</u> bnet mask:	255 . 255 . 255 . 0			
<u>D</u> efault gateway:	192 . 168 . 40 . 1			
Obtain DNS server address automatically				
─⊙ Use the following DNS server addr	resses:			
Preferred DNS server:	64 . 31 . 129 . 6			
Alternate DNS server:	216 . 174 . 31 . 6			
Ad <u>v</u> anced				
OK Cancel				

Click on **OK** to exit and save settings.

4. Ethernet Cable

Connect the supplied Ethernet cross-over cable between the Interface Case's Ethernet port and the Ethernet port on your laptop.

**NOTE**: Unless you have a hub, a standard Ethernet cable does not work when connecting the Interface Case to your laptop.

5. Web Page

Open Internet Explorer on your laptop and type in the following address: <u>http://192.168.40.11</u>.

# **System Functionality**

This section describes each interface and how it is intended to function. This information should be useful in how you approach your sales presentation, enabling you to concentrate on the features most relevant to your customer.

#### CNX-B2



This interface was programmed as a secondary interface for the dining room in this system. The entire virtual house can be monitored from the web page project associated with this system.

### Button 1 (DINNER PARTY)

This button controls two separate lighting scenes. If pressed and released within two seconds, it turns the dining room lights to a preset level. If pressed and held for longer than two seconds, it turns all the lights in this area to their off state.

#### Button 2 (MUSIC)

When this button is pressed the first time, it turns on the virtual audio system. Each additional press of the button scrolls through the sources. In order to better demonstrate this function, audio files have been stored to announce what source is currently active. The audio level is adjusted from the other dining room keypad (the CNX-B8).



This interface was programmed as a secondary interface for the master bedroom. The entire virtual house can be monitored from the web page project associated with this system.

#### Button 1 (LIGHTS)

This button turns the master bedroom lights to a preset level. The LED feedback light illuminates when this level is obtained.

#### Button 2 (LIGHTING OVERRIDE)

This button only shows toggling feedback in the stand-alone configuration, but allows for some discussion on the redundancy features of Crestron lighting systems. This button has more functionality when used in conjunction with the Crestron C2N-DEMO Lighting Case.

#### Button 3 ( TEMP)

This button changes the CHV-THSTAT's set point up by one degree with each press. Have your customer watch the front panel display of the thermostat or one of the graphical user interfaces as they display the same data. Keep in mind that the thermostat is rounding up or down its temperature value for display purposes, but the interfaces show the value at a one tenth degree resolution.

#### Button 4 (TEMP -)

This button functions the same as **TEMP**, but increments the set point down.

CNX-B6



This interface was programmed as the primary control point for the guest bathroom. The entire virtual house can be monitored from the web page project associated with this system.

#### Button 1 (MORNING)

This button turns the guest bathroom lights to a preset level. The LED feedback light illuminates when this level is obtained.

#### Button 2 (EVENING)

This button turns the guest bathroom lights to a preset level. The LED feedback light illuminates when this level is obtained.

#### Button 3 (VANITY)

This button toggles the vanity lights off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### **Button 4 (DOWN LIGHTS)**

This button toggles the down lights off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### Button 5 (FAN)

This button turns on the bathroom exhaust fan for 30 seconds. While the fan is on, the feedback LED flashes (on and off) approximately every 0.5 seconds. The button can be re-triggered at any time to restart the 30-second countdown. Explain to your customer that 30 seconds is just an arbitrary number and can be set to whatever time makes sense in their application.

#### Button 6 (ALL OFF)

This button turns all guest bathroom lights off over a two second period. It does not alter the exhaust fan operation.

This interface was programmed as the primary control point for the dining room. The entire virtual house can be monitored from the web page project associated with this system.

#### Button 1 (DINNER PARTY)

This button turns the dining room lights to a preset level. The LED feedback light illuminates when this level is obtained.

#### Button 2 (CHAND)

This button toggles the chandelier off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### Button 3 (SCONCE)

This button toggles the sconces off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### **Button 4 (DOWN LIGHTS)**

This button toggles the down lights off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### Button 5 (MUSIC)

This button toggles the audio system for the dining room on and off. The feedback LED illuminates only while the button is pressed.

#### Button 6 ( VOL)

This button increases the volume level of the virtual audio system. The feedback LED illuminates only while the button is pressed.

#### Button 7 (SOURCE)

This button cycles through the various virtual audio sources. The feedback LED illuminates only while the button is pressed. Audio WAV files are triggered with the

selection of each new source. This demonstrates how even a simple interface such a keypad can give detailed feedback information.

#### Button 8 (VOL -)

This button decreases the volume level of the virtual audio system. The feedback LED illuminates only while the button is pressed.

#### CNX-B12



This interface was programmed as the primary control point for the master bathroom. The entire virtual house can be monitored from the web page project associated with this system.

**NOTE:** The CNX-B12 is designated for the master bathroom and the CNX-B2 is designated for the dining room. Both are ganged together in the case to conserve space and to demonstrate how two keypads can be mounted together.

#### Button 1 (MORN)

This button turns the master bathroom lights to a preset level. The LED feedback light illuminates when this level is obtained.

#### Button 2 (DOWN)

This button toggles the down lights off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### Button 3 (NOON)

This button turns the master bathroom lights to a preset level. The LED feedback light illuminates when this level is obtained.

#### Button 4 (VANITY)

This button toggles the vanity lights off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### Button 5 (EVEN)

This button turns the master bathroom lights to a preset level. The LED feedback light illuminates when this level is obtained.

#### Button 6 (CLOSETS)

This button toggles the closet lights off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### Button 7 (RELAX)

This button turns the master bathroom lights to a preset level. The LED feedback light illuminates when this level is obtained.

#### Button 8 (FAN)

This button turns on the master bathroom exhaust fan for 30 seconds. While the fan is on, the feedback LED flashes (on and off) approximately every 0.5 seconds. The button can be re-triggered at any time to restart the 30-second countdown. Explain to your customer that 30 seconds is just an arbitrary number and can be set to whatever time makes sense in their application.

#### Button 9 (MUSIC)

This button toggles the audio system for the master bathroom on and off. The feedback LED illuminates when the audio system is active.

#### Button 10 (VOL +)

This button increases the volume level of the virtual audio system. The feedback LED illuminates only while the button is pressed.

#### Button 11 (SOURCE)

This button cycles through the various virtual audio sources. The feedback LED illuminates only while the button is pressed. Audio WAV files are triggered with the selection of each new source. This demonstrates how even a simple interface such a keypad can give detailed feedback information.

#### Button 12 (VOL -)

This button decreases the volume level of the virtual audio system. The feedback LED illuminates only while the button is pressed.



This interface was programmed as the primary control point for the family room. The entire virtual house can be monitored from the web page project associated with this system.

#### Button 1 (FRONT)

This button toggles the front down lights off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### Button 2 (LAMP)

This button toggles the lamp off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### Button 3 (REAR)

This button toggles the rear down lights off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### Button 4 (FAN)

This button turns on the fan and selects various speeds. The first press sets the fan to speed 4, the second press to speed 3, then to speed 2, speed 1, and finally back to the off state. The feedback LED illuminates whenever the fan is on.

#### Button 5 (FAMILY)

This button turns the family room lights to a preset level. The LED feedback light illuminates when this level is obtained.

#### Button 6 (PARTY)

This button turns various lights around the house to a preset level. The LED feedback light illuminates when this level is obtained.



This interface was programmed as the primary control point for the entry. The entire virtual house can be monitored from the web page project associated with this system.

#### Button 1 (HOME)

This button turns various lights around the house to a preset level. The LED feedback light illuminates when this level is obtained. When covering this feature, it is often helpful to inform your customer that a home button can have multiple functions. For example, the functionality of this button can be varied and determined by such things as time of day, sunrise or sunset, and whether the alarm system is armed or disarmed. A button never has to have a static function.

#### Button 2 (AWAY)

This button turns all the house lights to their off state over a number of seconds, each load having its own fade time. The feedback LED illuminates when this is achieved.

#### Button 3 (PATH)

This button turns various lights around the house to a preset level. The LED feedback light illuminates when this level is obtained.

#### Button 4 (PORCH)

This button toggles the porch lights off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### Button 5 (MUSIC)

This button toggles the audio system in the common areas of the virtual home on and off. The feedback LED illuminates when the audio system is active.

#### Button 6 (VOL +)

This button increases the volume level of the virtual audio system. The feedback LED illuminates only while the button is pressed.

#### Button 7 (SRC)

This button cycles through the various virtual audio sources. The feedback LED illuminates only while the button is pressed. Audio WAV files are triggered with the selection of each new source. This demonstrates how even a simple interface such a keypad can give detailed feedback information.

#### Button 8 (VOL -)

This button decreases the volume level of the virtual audio system. The feedback LED illuminates only while the button is pressed.

#### C2N-DB12



This interface was programmed as the primary control point for the entry. The entire virtual house can be monitored from the web page project associated with this system.

#### Button 1 (DOWN)

This button toggles the down lights off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### Button 2 (FAN)

This button turns on the fan and selects various speeds. The first press sets the fan to speed 4, the second press to speed 3, then to speed 2, speed 1, and finally back to the off state. The feedback LED illuminates whenever the fan is on.

#### Button 3 (LAMP)

This button toggles the lamp off and on with a two second fade time. The feedback LED illuminates anytime the light level is greater than 0%.

#### Button 4 (RAISE)

This button ramps up the light level of the last fixture selected from this keypad (Down / Lamp). This process takes five seconds from a level of 0% to reach 100%.

#### Button 5 (PATH)

This button turns various lights around the house to a preset level. The LED feedback light illuminates when this level is obtained.

#### Button 6 (LOWER)

This button ramps down the light level of the last fixture selected from this keypad (Down / Lamp). This process takes five seconds from a level of 100% to reach 0%.

#### Button 7 (XM)

This button turns on the virtual audio system and selects the XM radio for the source.

#### Button 8 (VOL +)

This button raises the volume level of the virtual audio system.

#### Button 9 (MP3)

This button turns on the virtual audio system and selects the MP3 server for the source.

#### Button 10 (VOL -)

This button lowers the volume level of the virtual audio system.

#### Button 11 (CD)

This button turns on the virtual audio system and selects the CD player for the source.

#### Button 12 (OFF)

This button turns off the virtual audio system and deselects the current source. Discuss the possibility of this same button resetting the default volume level in the room, stopping all the transport decks, and shutting off the amplifier.

### **Touchpanel Interfaces**

Due to the vast number of possibilities associated with touchpanel interfaces, it is not realistic to provide a detailed button-by-button overview of functionality. We trust the interfaces were designed in an intuitive self-explaining manner. Please call Bill Schafer for further explanation of system functionality.

## **Appendix: Factory Settings**

The C2N-DEMO Interface Case ships completely configured. In the event that the original factory settings are altered, corrupted, or erased, the following information is necessary for reconfiguring the processor in the case.

- IP address is 192.168.40.11
- Subnet mask is 255.255.255.0
- Default router is 192.168.40.10

## **Return and Warranty Policies**

#### Merchandise Returns / Repair Service

- 1. No merchandise may be returned for credit, exchange, or service without prior authorization from CRESTRON. To obtain warranty service for CRESTRON products, contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number, and return address.
- 2. Products may be returned for credit, exchange, or service with a CRESTRON Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to CRESTRON, 6 Volvo Drive, Rockleigh, N.J., or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. CRESTRON reserves the right in its sole and absolute discretion to charge a 15% restocking fee, plus shipping costs, on any products returned with an RMA.
- 3. Return freight charges following repair of items under warranty shall be paid by CRESTRON, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

## **CRESTRON Limited Warranty**

CRESTRON ELECTRONICS, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from CRESTRON, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/tilt heads and power supplies are covered for a period of one (1) year; touchscreen display and overlay components are covered for 90 days; batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from CRESTRON or an authorized CRESTRON dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

CRESTRON shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended, or if it has been subjected to misuse, accidental damage, modification, or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced, or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall CRESTRON be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. CRESTRON is not liable for any claim made by a third party or made by the purchaser for a third party.

CRESTRON shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, CRESTRON makes no other warranties, expressed or implied, nor authorizes any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supercedes all previous warranties.

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