Crestron INET-CBD Cameo[®] Wireless Keypads with infiNET[™] Operations & Installation Guide



Regulatory Compliance

As of the date of manufacture, the INET-CBD has been tested and found to comply with specifications for CE marking.

CE

Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Industry Canada (IC) Compliance Statement

CAN ICES-3(B)/NMB-3(B)

To satisfy RF exposure requirements, this device and its antenna must operate with a separation distance of at least 20 centimeters from all persons and must not be colocated or operating in conjunction with any other antenna or transmitter.

The specific patents that cover Crestron products are listed at patents.crestron.com.

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Cameo Wireless Keypads with infiNET: INET-CBD

Introduction

The Cameo[®] INET-CBD wireless keypad presents a fresh, innovative concept in keypad design, offering cutting edge wireless performance for ease of installation, in a highly configurable one-gang wall mount form factor that is at once inviting to the touch and appealing to the eye.

Perfect for retrofit applications in existing homes and landmark structures, the INET-CBD easily installs alongside light switches and other in-wall devices to deliver a custom keypad control solution without any need for dedicated control wiring. Cameo wireless keypads simply connect to the nearest 120 volt power line, communicating via the infiNETTM wireless control network to allow full keypad functionality with true feedback as part of a complete Crestron[®] control system.

Features and Functions

- Stylish and versatile wall mount keypad
- Standard electrical box installation
- Color matched smooth and textured finishes
- Installer-configurable with choice of three button sizes
- "Button Events" enable tap, double-tap, and hold functionality
- Customizable backlit button engraving (custom engraving sold separately)
- White LED lightpipe feedback indicators

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Features and Functions

(Continued)

- Built-in LED blinking and bar graph logic
- Auto-dimmable backlight and LED intensity
- Ambient light sensor
- Quick and easy installation
- 120 volt ac line powered
- infiNET 2-way RF wireless communications

Customizable Buttons

Exquisitely simple yet highly customizable, a single Cameo wireless keypad can be configured easily by the installer. Each keypad is furnished with an assortment of engravable button caps in three different sizes to support a variety of physical layouts. Button caps may also be ordered with custom backlit laser engraving to clearly designate each button's function.*

Through programming, each button can be configured to use "button events," affording up to three separate functions per button by tapping, double-tapping, or holding the button. "Shift key" functionality is even possible, allowing any button to be held while pressing another.

Auto-dimming Backlight

High-quality backlit laser-engraving* provides customizable button text that is easy to read under any lighting condition. A built-in light sensor controls the backlight intensity automatically to achieve a crisp, legible appearance in both darkened and fully lit rooms.

^{*} Custom engraving sold separately.

Enhanced LED Feedback

Six pinhead-sized white LEDs afford fully customizable feedback to show the status of each button. Ten blink patterns are built in, enabling blinking LED feedback with simplified programming and reduced traffic on the infiNET network. Onboard bar graph logic allows the feedback LEDs to function as a 6-segment bar graph display, providing clear level indication while adjusting lighting and audio settings. Auto-dimming LED intensity ensures optimal visibility under varying lighting conditions.

Ambient Light Sensor

In addition to controlling the backlight and LED intensity, the built-in light sensor can also be utilized by the control system to support daylight harvesting and other programmatic functions.

infiNET

Crestron infiNET wireless technology affords reliable 2-way communications throughout a residential or commercial structure without the need for physical control wiring. Employing a 2.4 GHz mesh network topology, each Cameo wireless keypad functions as an expander, passing command signals through to every other infiNET device within range (approximately 150 feet or 46 meters indoors), ensuring that every command reaches its intended destination without disruption.

Cameo wireless keypads work together with other infiNET devices like our infiNET wall box dimmers and switches, communicating with a Crestron control system via the C2N-MNETGW infiNET Wireless Gateway.¹ Up to 30 infiNET devices may coexist on a single wireless network, and every device that is added to the network effectively increases the range and stability of the entire network by providing multiple redundant signal paths.²

- 1. Item sold separately.
- 2. Any infiNET mesh network device that provides expander functionality effectively extends the range of the wireless network beyond the initial range of the gateway. Battery-powered infiNET devices do not provide expander functionality. A dedicated infiNET Wireless Expander, model C2N-MNETRPT, is also available.

Standard Wall Mount

Cameo wireless keypads are designed for installation in a standard electrical wall box and are powered by 120 volts ac, perfect for installation in a multigang box alongside other line-powered devices. Available in a selection of 12 "smooth" and "textured" finishes, Cameo wireless keypads match perfectly with popular off-the-shelf decoratorstyle faceplates.

COLOR/ TEXTURE	MODEL # SUFFIX	MATCHING LUTRON [®] FACEPLATE COLOR
Smooth Almond	A-S	Light Almond (LA)
Smooth Black	B-S	Black (BL)
Smooth Brown	BRN-S	Brown (BR)
Smooth Dark Almond	DA-S	Almond (AL)
Smooth Gray	GRY-S	Gray (GR)
Smooth Ivory	IVR-S	Ivory (IV)
Smooth White	W-S	White (WH)
Textured Almond	A-T	Eggshell (ES)
Textured Black	B-T	Midnight (MN)
Textured Dusk	DSK-T	Taupe (TP)
Textured Latte	LAT-T	Biscuit (BI)
Textured White	W-T	Snow (SW)

Available Colors/Textures

Specifications

Specifications for the INET-CBD keypads are listed in the following table.

INET-CBD Specifications

SPECIFICATION	DETAILS
Wireless	
RF Transceiver	infiNET 2-way RF, 2.4 GHz ISM Channels 11-26 (2400 to 2483.5 MHz), IEEE 802.15.4 compliant
Range (typical)	150 feet (46 meters) indoor, 250 feet (76 meters) outdoor to nearest mesh network device(s); Subject to site-specific conditions and individual device capabilities*
Gateway	Requires a C2N-MNETGW infiNET gateway
Power Requirements	120 volts ac, 50/60 Hz line power
Default MNET ID	01
INET-CBD Firmware	1.002.0005.upg or later
Minimum infiNET Gateway Version	Firmware version 2.001.0003 or later
Environmental	
Temperature	32° to 113° F (0° to 45° C)
Humidity	10% to 90% RH (non-condensing)
Heat Dissipation	1 Btu/h
Enclosure	
Chassis	Plastic
Mounting	Mounts in a 1-gang or larger electrical box
Faceplate	Requires a decorator style faceplate (not included)

(Continued on following page)

SPECIFICATION	DETAILS
Dimensions (Without Faceplate)	
Height	4.13 in (105 mm)
Width	1.75 in (45 mm)
Depth	1.87 in (48 mm)
Weight	3 oz (64 g)
Available Accessories	
C2N-MNETGW	infiNET Wireless Gateway
C2N-MNETRPT	infiNET Wireless Repeater
CB2-BTN[A, B, BRN, DA, GRY, IVR, W]-S	(1) Large Backlit Engravable Button Cap, Smooth (specify color)
CB2-BTN[A, B, DSK, LAT, W]-T	(1) Large Backlit Engravable Button Cap, Textured (specify color)
CB3-BTN[A, B, BRN, DA, GRY, IVR, W]-S	(1) Medium Backlit Engravable Button Cap, Smooth (specify color)
CB3-BTN[A, B, DSK, LAT, W]-T	(1) Medium Backlit Engravable Button Cap, Textured (specify color)
CB6-BTN[A, B, BRN, DA, GRY, IVR, W]-S	(1) Small Backlit Engravable Button Cap, Smooth (specify color)
CB6-BTN[A, B, DSK, LAT W]-T	(1) Small Backlit Engravable Button Cap, Textured (specify color)
CCR-L-1	Crestron Color Ring

INET-CBD Specifications (Continued)

* Any infiNET mesh network device that provides expander functionality effectively extends the range of the wireless network beyond the initial range of the gateway. Battery-powered infiNET devices do not provide expander functionality. A dedicated infiNET Wireless Expander, model C2N-MNETRPT, is also available.

Physical Description

This section provides information on the connections, controls, and indicators available on the INET-CBD.

The following illustration shows the INET-CBD with two triple-row button caps and three double-row button caps.

INET-CBD Keypad Physical Views (Black and Almond, Faceplate Not Included)



Button caps are laser engravable, designed with the Crestron Engraver software. The engraving software provides a single line of up to 10 characters, including spaces, for single-button caps, and two lines of characters on double- and triple-button caps. The Crestron Engraver software, Version 3.09.00 or later, is available from the Crestron website. (Requires Crestron Database software, Version 19.0.4 or later.)

The illustrations on the following page provide overall dimensions and a view of the rear housing assembly.



Rear Housing Assembly



#	CONNECTORS, CONTROLS, AND INDICATORS	DESCRIPTION
1	LINE	Captive screw terminal for the 120 volt ac power line
2	NEUTRAL	Captive screw terminal for the 120 volt ac neutral line
3	Ground	Captive screw terminal for the ground wire
4	LED	Feedback: (6) white LED light pipes, one per each of six small button positions; Programmable, auto-dimmable, adjustable intensity, 10 blinking patterns Bar graph: (1) 6-segment bar
		graph display utilizing the six feedback LEDs
5	Buttons	Keypad Buttons: Configurable for two to five single-action push buttons
		Button Events: Programmable for normal, tap, double-tap, and hold
		Button Caps: Includes (4) small, (3) medium, and (2) large button caps; Custom backlit engraved button caps are available separately
		Backlight: White LED backlight for button engraving, software- adjustable intensity, auto- dimmable
6	Ambient Light Sensor	Photosensor for control of auto- dimming function; Can also be configured to report ambient light level to control system

Connectors, Controls, and Indicators

Setup

Identity Code

NOTE: The latest software can be downloaded from the Crestron website (<u>www.crestron.com/software</u>).

The MNet ID of the INET-CBD has been factory set to **01**. After an infiNET device is added to an infiNET network, its MNet ID must be changed to a value that can be addressed by the control system program (03 to 20). The MNet IDs of multiple INET-CBD devices on the same gateway must be unique. MNet IDs are changed from a personal computer (PC) via Crestron Toolbox[™] (refer to "Establishing Communication" on page 17).

When setting the MNet ID, consider the following:

The MNet ID of each unit must match an ID code specified in the Crestron Studio[™], SIMPL Windows, D3 Pro[®], or SystemBuilder[™] program.

Each network device on the same gateway must have a unique MNet ID.

For more details, refer to the Crestron Toolbox help file.

Assembly and Installation

Assembly of the keypad consists of placing the button caps in position on the rear housing assembly and attaching the bezel. Button cap placement must match the program plan.

Installation consists of connecting to power and installing in an electrical box. A Phillips screwdriver (not supplied) is required for installation.

The INET-CBD is supplied partially assembled along with several items as listed in the following table.

Supplied Parts

DESCRIPTION	USE	QTY
Bezel	Used to hold button caps in position on rear housing and switch assembly	1
Screws, Black, Phillips, pan head, 2-28 x 3/16"	Used to attach the bezel assembly to the rear housing and switch assembly	2
Single-row button cap	Used to cover a single-row switch	5
Double-row button cap	Used to cover two switches that function as one	3
Triple-row button cap	Used to cover three switches that function as one	2
Screws, Steel, Phillips, combo head, 6-32 x 3/4"	Used to attach the assembled keypad to an electrical box	2

Assemble the keypad as described in the following steps. Refer to the accompanying illustration.

1. Arrange the button caps in position on the rear housing assembly according to the program plan.

NOTE: A single button cannot be installed in the lowest position of the keypad.

2. Carefully position the bezel over the button caps on the rear housing assembly.



Keypad Assembly

- 3. Hold the bezel and rear housing together.
- 4. Install and tighten the two supplied Phillips pan head, 2-28 x 3/16" cover screws (black), as shown in the illustration.
- 5. Press each button to ensure that the button caps move freely.

Use the following procedure to install the keypad in a standard, 1-gang electrical box (not supplied).

- 1. Turn ac power off.
- 2. Connect the ac power cable to the line, neutral, and ground INET-CBD screw terminals following all local and state codes.

CAUTION: Excess wire pinched between the keypad and electrical box could cause a short circuit. Make sure that all excess wire is completely inside the electrical box and not between the box and the keypad.

- 3. Make sure the keypad is oriented properly (note the location of the LED holes and light sensor) and place it in the electrical box.
- 4. Attach the keypad using the supplied $6-32 \ge 3/4$ " combo head screws.



- 5. Attach the desired decorator style faceplate (not supplied).
- 6. Turn ac power on.

Acquire the INET-CBD to the infiNET Network

Before an infiNET device can be used on an infiNET network, it must first be acquired to a C2N-MNETGW gateway that is connected to a Cresnet[®] network.

NOTE: An INET-CBD can be acquired by only one gateway.

Acquire the Keypad To acquire an INET-CBD to a C2N-MNETGW, perform the following.

 Place the C2N-MNETGW in the *Acquire* mode, from the unit itself or from Crestron Toolbox, as described in the C2N-MNETGW Operations Guide (Doc. 6317) at <u>www.crestron.com/manuals</u> or the Crestron Toolbox help file. **NOTE**: In an environment where multiple gateways are installed, only one gateway should be in the *Acquire* mode at a time.

- 2. The INET-CBD must be placed into *Setup* mode before it can enter *Acquire* mode.
 - a) Enter *Setup* mode by pressing any two buttons on the INET-CBD for about 10 seconds. The bottom LED should start blinking (1/2 second on; 1/2 second off).

NOTE: Press and release the bottom button to exit *Setup* mode. The unit also exits *Setup* mode after one minute of inactivity.

- b) The second to bottom LED indicates infiNET connection status:
 - ⇒ Solid indicates communications with gateway (and SIMPL program).
 - ⇒ Blinking (almost 2 seconds on; brief off) indicates communications with gateway but not being "polled" by the control system.
 - ⇒ Off indicates no communications with gateway (this includes unacquired units).
- 3. Once in *Setup* mode, INET-CBD can be configured:

NOTE: Pressing the top or bottom button always works, regardless of the keypad's button configuration.

- a) To acquire, press and hold the top button for 5 seconds. The top LED stays lit while the button is being held and blinks at the 5-second mark. Release the button to go into *Acquire* mode. If it is held for too long (see below), *Acquire* mode might be exited.
- b) In *Acquire* mode, the top LED blinks (1/2 second on; 1/2 second off). When the unit is acquired to the gateway, this LED stops blinking and the second to bottom LED becomes solid. Pressing the top button again while in *Acquire* mode exits *Acquire* mode.
- 4. Exit Setup mode on the keypad.

5. Take the C2N-MNETGW out of the *Acquire* mode once all devices have been acquired. Refer to the C2N-MNETGW Operations Guide (Doc. 6317).

NOTE: Other devices do not need to be "reacquired" on the network after the INET-CBD is acquired to the gateway.

To communicate with the control system program, an MNET ID value between 03 and 20 must be assigned to the INET-CBD. For information on assigning MNET ID values, refer to "Identity Code" on page 10.

It might be necessary to release an INET-CBD from a gateway. If an INET-CBD is to be released from a gateway, the gateway information must be cleared from the INET-CBD's memory.

- 1. Enter *Setup* mode as described in step 2 on the previous page.
- 2. Press and hold the top button for 10 seconds. The top LED blinks once to indicate the 1/2 second mark and then blinks twice to indicate that the 10 second mark. Release the button after the 10 second mark to unacquire.

NOTE: The unacquire process cannot be exited because the gateway information has already been removed from the keypad.

NOTE: Release the INET-CBD from the gateway using Crestron Toolbox. Refer to the C2N-MNETGW Operations Guide (Doc. 6317) or the Crestron Toolbox help file for instructions.

Button Arrangement

Button caps for the INET-CBD are supplied as loose button covers: a set of five single-button caps, three double-button caps, and two triple-button caps. Button arrangements can be mixed or matched to suit the needs of the installation.

A single-button cap placed in any position activates the covered button position. When a two- or three-button cap is used to cover multiple button positions, the bottom button position is activated. Refer to the following tables for details.

Remove Gateway Information from an INET-CBD

Using a	Two-Button	Cap
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BUTTON CAP PLACEMENT	ACTIVATED BUTTON
Covers Buttons 1 and 2	Button 2
Covers Buttons 2 and 3	Button 3
Covers Buttons 3 and 4	Button 4
Covers Buttons 4 and 5	Button 5
Covers Buttons 5 and 6	Button 6

Using a Three-Button Cap

BUTTON CAP PLACEMENT	ACTIVATED BUTTON
Covers Buttons 1, 2, and 3	Button 3
Covers Buttons 2, 3, and 4	Button 4
Covers Buttons 4, 5, and 6	Button 6

Uploading and Upgrading

Crestron recommends using the latest programming software and that each device contains the latest firmware to take advantage of the most recently released features. However, before attempting to upload or upgrade it is necessary to establish communication. Once communication has been established, files (for example, programs or firmware) can be transferred to the control system (or device). Finally, program checks can be performed (such as changing the device ID or creating an IP table) to ensure proper functioning.

NOTE: Crestron software and any files on the website are for authorized Crestron dealers and Crestron Service Providers (CSPs) only. New users must register to obtain access to certain areas of the site (including the FTP site).

Establishing Communication

Use Crestron Toolbox for communicating with the INET-CBD; refer to the Crestron Toolbox help file for details. There is a single method of communication: indirect.

Indirect

Indirect Communication



INET-CBD connects to the gateway, which connects to control system via Cresnet.

An Address Book entry must be defined for the gateway. For information, refer to the Toolbox help file.

Programs and Firmware

Program or firmware files may be distributed from programmers to installers or from Crestron to dealers. Firmware upgrades are available from the Crestron website as new features are developed after product releases. One has the option to upload programs via the programming software or to upload and upgrade via the Crestron Toolbox. For details on uploading and upgrading, refer to the Crestron Studio help file, SIMPL Windows help file, or the Crestron Toolbox help file.

If a Crestron Studio (or SIMPL Windows) program is provided, it can be uploaded to the control system using Crestron Studio (or SIMPL Windows) or Crestron Toolbox.

Crestron Studio or SIMPL Windows

Firmware

Check the Crestron website to find the latest firmware. (New users must register to obtain access to certain areas of the site, including the FTP site.)

Upgrade INET-CBD firmware via Crestron Toolbox.

- 1. Establish communication with the INET-CBD and display the "System Info" window.
- 2. Select **Functions** | **Firmware...** to upgrade the INET-CBD firmware.

Program Checks

For infiNET connections, using Crestron Toolbox, display the network device tree (**Tools** | **Network Device Tree View**) to show all network devices connected to the control system and all infiNET devices that have been acquired by the gateway. Right-click on the INET-CBD to display actions that can be performed on the INET-CBD.

Ambient Light Sensor Operation

As noted previously, the INET-CBD keypad has an ambient light sensor that can be used to automatically turn the backlight on in a dark room or off in a lit room to improve the readability of the button text. When this feature is enabled, three parameters are available to adjust this behavior: Auto Backlight Threshold, Max Auto Backlight, and Min Auto Backlight. The following chart illustrates the change in backlight intensity as ambient light increases until it reaches the threshold value, at which point the backlight is turned off.



Choosing the proper values for these parameters depends on factors such as the color of the keypad, the type and placement of lighting in the room, the orientation of the room's windows with respect to the sun, and personal preference. To simplify the process, Crestron ships the INET-CBD keypad with preset values for the three parameters. The preset values have been selected to produce an effect that should be acceptable to most people, in many common scenarios.

To use one of the built-in preset settings, during programming simply choose a non-zero value for the "Auto Backlight Preset" parameter. (Refer to the table on the following page.) Use a value of (0) to forego the preset values and set the parameters manually.

Finally, if two or more keypads are to be installed side-by-side, ensure that the backlights on all units are always coordinated. To do this, there are signals available on the programming symbol to allow one unit to act as the master backlight controller and the rest as slaves.

Refer to the SIMPL Windows help file for more information.

COLOR AND TEXTURE	RECOMMENDED SETTING FOR AUTO BACKLIGHT PRESET PARAMETER
Almond, Smooth/Textured	2
Black, Smooth/Textured	3
Brown, Smooth	3
Dark Almond, Smooth	2
Dusk, Textured	2
Gray, Smooth	1
Ivory, Smooth	2
Latte, Textured	2
White, Smooth/Textured	1

Auto Backlight Preset Parameter Settings

Problem Solving

Troubleshooting

The following table provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
The keypad does not function.	Improper MNET ID used.	Verify that the keypad's MNET ID matches the MNET ID in the software program.
	Keypad is not receiving power.	Check circuit breaker. Check ac connection.
	Keypad is not communicating with the C2N-MNETGW.	Open Crestron Toolbox and select the Network Device Tree. Expand the tree until the gateway to be managed is selected. Right-click the NET ID of the selected gateway to open the sub-menu and select Functions MNET Gateway If the keypad is not listed, acquire the device to the infiNET network (refer to "Acquire the INET-CBD on the infiNET Network" on page 13).

INET-CBD Troubleshooting

(Continued on following page)

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Keypad does not function, or does not function as expected. However, it reports on Cresnet at the proper MNET ID.	The unit is not programmed correctly.	Use SIMPL Debugger to check the behavior when buttons are pressed. Revise and reload the program as needed to correct the behavior.
Keypad performs erratically.	Communication between controller and the C2N-MNETGW unreliable.	C2N-MNETGW firmware version 2.001.0003 or later is required.
All LEDs blink four times after button press.	INET-CBD is not acquired by gateway.	Acquire the keypad to the infiNET network (refer to "Acquire the INET-CBD on the infiNET Network" on page 13).

INET-CBD Troubleshooting (Continued)

Bootloader Mode

In rare cases, it may be necessary to bypass the INET-CBD's standard firmware and enter into *Bootloader* mode. This might be necessary if the unit was loaded with a faulty version of firmware that might prevent future firmware upgrades. In addition, in the event of a failed or aborted firmware upgrade, the unit enters into *Bootloader* mode on its own.

NOTE: Since the INET-CBD is hard wired, entering *Bootloader* mode may require two people—one to turn power on and off and the other to manipulate the keypad buttons.

To enter *Bootloader* mode, make certain ac power is off then press and hold the bottom button while turning ac power back on. Continue to hold the bottom button.

NOTE: Button cap configuration does not affect these procedures; they work with any combination of installed button caps.

After 5 seconds, the LED next to the bottom button flashes for 1/2 second. Hold the bottom button for another 5 seconds to enter *Bootloader* mode. When the unit is in *Bootloader* mode, the LED next to the bottom button illuminates.

Once in *Bootloader* mode, if the unit needs to be acquired, press and hold the top button for 5 seconds. The LED next to the top button blinks every 1/2 second to indicate the unit is being acquired by the gateway and the LED next to the bottom button indicates the link status (refer to "Acquire the INET-CBD on the infiNET Network" on page 13 for LED behavior).

New firmware can be uploaded from Crestron Toolbox when the unit is in *Bootloader* mode. All LEDs blink during firmware upload.

Turn ac power off and then on again to exit *Bootloader* mode. If a previous attempt to upload firmware had failed, there is no way to restore it; firmware must be uploaded again.

Reference Documents

All documents mentioned in this guide are available at <u>www.crestron.com/manuals</u>.

List of Related Reference Documents

DOCUMENT TITLE

2-Series Control Systems Reference Guide

C2N-MNETGW infiNET Gateway

Further Inquiries

To locate specific information or resolve questions after reviewing this guide, contact Crestron's True Blue Support at 1-888-CRESTRON [1-888-273-7876] or, for assistance within a particular geographic region, refer to the listing of Crestron worldwide offices at www.crestron.com/offices.

To post a question about Crestron products, log onto Crestron's Online Help at <u>www.crestron.com/onlinehelp</u>. First-time users must establish a user account to fully benefit from all available features.

Future Updates

As Crestron improves functions, adds new features, and extends the capabilities of the INET-CBD, 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 periodically for manual update availability and its relevance. Updates are identified as an "Addendum" in the Download column.

Return and Warranty Policies

Merchandise Returns / Repair Service

- No merchandise may be returned for credit, exchange or service without prior authorization from Crestron. To obtain warranty service for Crestron products, contact an authorized Crestron dealer. Only authorized Crestron dealers may 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; touch screen 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 supersedes all previous warranties.

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Specifications subject to change without notice.