

## C2NI-CB

## Cameo® Keypad - International Version

Product Manual Crestron Electronics, Inc. The original language version of this document is U.S. English. All other languages are a translation of the original document.

#### Regulatory Model: M202248002

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# Overview

The Crestron<sup>®</sup> Cameo<sup>®</sup> International Keypad <u>C2NI-CB</u> series offers an attractive, customizable wall mount keypad for use in controlling lighting, shades, AV, and other functions in residential or commercial applications. It installs in a single-gang European or UK electrical box, and is available in a choice of almond, black, or white textured finishes. The keypad's push buttons are configurable using a selection of button sizes with optional backlit engraving, and auto-brightness control maintains clear legibility of the buttons under varying lighting conditions. White LED indicators provide true feedback of system settings and status. The C2NI-CB integrates with a Crestron control system or Crestron Home<sup>®</sup> system through a wired Cresnet<sup>®</sup> connection.

# Specifications

Product specifications for the C2NI-CB.

## **Product Specifications**

Power Requirements			
Cresnet Power Usage	0.5 W (0.02 A @ 24VDC)		
Controls and Indicators			
Keypad Buttons	<ul> <li>(2) Columns, each accommodating (1) button strip;</li> <li>Button strips available with a choice of two large buttons, three medium buttons, or one medium and four small buttons;</li> <li>Programmable for system functions via tap, double-tap, or press-and-hold events</li> <li>Included button strips are blank (replacement strips and engraving sold separately);</li> </ul>		
Button Backlighting	White LED backlighting illuminates behind the button engraving with manual or automatic day/night brightness adjustment		
Feedback Indicators	(12) White LEDs (one per possible button position); Manual or automatic day/night brightness adjustment; Programmable for any system function with ten assignable flash patterns and dual six-segment bargraph capability		

### **Light Sensor**

Photosensor detects the ambient light level to enable auto-brightness control, adjustable day/night threshold and intensity settings. Light level readings can be reported to the control system.

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Commu	nications

Cresnet	Cresnet secondary mode			
Connections	Connections			
INPUT	(2) 3-pin 3.5 mm detachable terminal blocks; Comprises (2) dry contact closure sensing inputs			
NET	4-pin 3.5 mm detachable terminal block; Cresnet secondary port, connects to a Cresnet control network			
Environmental				
Temperature	operature 0° to 45°C (32° to 113°F)			
Humidity	umidity 10% to 90% RH (noncondensing)			
Heat Dissipation 1.7 BTU/hour				

Construction		
Keypad	Plastic with metal mounting plate; Textured white, almond, or black finish	
Faceplate / Bezel	Plastic faceplate included, color-matched to keypad; Architectural series faceplates ( <u>C2NI/INETI-FP series</u> ) available separately	
Mounting	Mounts in a 1-Gang UK (BS 4662) electrical box, 1-Gang European (DIN 4907 electrical box, or 51 x 51 mm (2 x 2 in.) cutout	
Dimensions		
Height	87 mm (3.42 in.) including bezel	
Width	87 mm (3.42 in.) including bezel	
Depth	38 mm (1.49 in.)	
Weight		
5.21 oz (149 g)		

### Compliance

### Regulatory Model: M202248002

CE, Intertek® listed for US and Canada

To search for product certificates, refer to <u>support.crestron.com/app/certificates</u>.

# Installation

Refer to the following sections for information on how to install and set up the C2NI-CB keypad.

This section provides the following information:

- In the Box
- Assembly
- Mounting
- Wiring
- Button Arrangement

## In the Box

Qty.	Description
1	C2NI-CB, Cameo® Keypad - International Version
1	Metal Mounting Plate (2018605)
2	Screw, 4B x 3/4 in., Phillips head (2019088)
4	Screw, 04-40, 1/4 in., Phillips head (2007156)
1	Plastic bezel (2018646)
2	Two-button cap strip (2017989)
2	Three-button cap strip (2017987)
1	Five-button cap strip, left (2042656)
1	Five-button cap strip, right (2042657)

# Assembly

The following points must be considered during assembly:

- Product should be installed and used in accordance with appropriate electrical codes and regulations.
- Product should be installed by a qualified electrician.
- Sensors must be mounted on a vibration free surface.

**NOTE**: Before using the C2NI-CB, ensure the device is using the latest firmware. Check for the latest firmware for the C2NI-CB at <u>Firmware</u>. The firmware is loaded onto the device using Crestron Toolbox<sup>™</sup> software.

To assemble the keypad, do the following:

1. Place the light masks between the buttons to reduce backlight. The light masks will not fall out of their locations but can easily be removed and relocated as necessary.

**NOTE**: Retain the extra light masks in case the keypad is reprogrammed for a different configuration.

2. Attach the button strips to the housing assembly according to the program. Align the button strip with the button strip mounting posts, and press the button strip to secure it to the button strip mounting posts.



# Mounting

To mount the keypad:

1. Using a Phillips screwdriver and the two provided  $4B \times 3/4$  in. screws, attach the mounting plate to the electrical box.

**NOTE**: The mounting plate can be rotated  $90^{\circ}$  if necessary to accommodate the orientation of the electrical box.



2. Attach the housing assembly to the mounting plate.

**NOTE:** All wiring must be completed before attaching the assembly to the mounting plate.



3. Attach the bezel by placing it in position over the button caps and snapping it in place.

# Wiring

The wiring process consists of connecting the unit to the Cresnet<sup>®</sup> system, connecting a dry contact closure, if any, and attaching the unit to an electrical box.

NOTE: Verify there is sufficient Cresnet® power to power the devices.

To wire the keypad:

- 1. Connect the Cresnet cable (not supplied) to the **NET** port.
- 2. (Optional) connect the dry contact closure to the **INPUT** port.



## **Button Arrangement**

Each button cap can cover one or more buttons. When a button cap is pressed, the button activated is determined by the size and placement of the button cap. All buttons are programmable for press, double-press, or press-and-hold functions.

The top button in the left column is button 1L, followed by 2L, 3L, and so on. The right column begins with 1R and follows the same pattern as the left column. Rather than supplying loose button caps, complete sets of button cap strips are provided. Button cap strips can be mixed and matched for the installation but the button cap sizes within a strip cannot.

### Two Large Button Cap Strip Sets



#### Three Medium Button Cap Strip Sets



#### One Medium (Top) and Four Small Button Cap Strip Sets (sold separately)

Buttons 1L and 2L are covered. When the button cap is pressed, button 2L activates.

0	-2L ₀	○ 1R	
0	3L o	∘ 3R	
0	4L 0	∘ 4R –	F
0	5L 0	○ 5R	
0	6L 0	○ 6R	

Button 4R is covered. When the button cap is pressed, button 4R activates.

#### Four Small and One Medium (Bottom) Button Cap Strip Sets (sold separately)



# Configuration

The Cameo keypad has an ambient light sensor that helps control the backlight in a dark room. The three parameter settings that adjust the behavior of this sensor are **Auto Backlight Threshold**, **Max Auto Backlight**, and **Min Auto Backlight**.

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 this process, Crestron ships the Cameo keypad with preset values for the three parameters. The preset values have been selected to produce an effect that should be acceptable in many common scenarios.

To use one of the built-in preset settings, choose a nonzero value for the **Auto Backlight Preset** parameter during programming. Select one of the following values:

- 1d for white keypads (textured or smooth)
- **2d** for almond keypads
- **3d** for black keypads

If you plan to install two or more keypads side-by-side, you may want to ensure that the backlighting on all units is always in synchronization. To do this, there are signals available on the programming symbol to allow one unit to act as the primary backlight controller and the other units to act as secondary controllers.

See the SIMPL help file for more information on the Auto Backlight function.

# Troubleshooting

The following table provides troubleshooting information. If further assistance is required, contact Crestron True Blue support via phone, email, or chat as described at <a href="https://www.crestron.com/Support">www.crestron.com/Support</a>.

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
The keypad does not function.	The wrong power supply is being used.	Use a Crestron power supply.
	The unit is not receiving power or is receiving insufficient power.	Verify that the cable plugged into the <b>NET</b> port is secure. Verify that the power supply is correct.
	There is a loose connection in the network.	Verify that the cable plugged into the <b>NET</b> port is secure.
The keypad does not function. All twelve feedback LEDs are on low.	The incorrect Net ID is being used.	Verify that the Net ID matches the Net ID in the program.
Feedback indicators do not light.	The indicator intensity is set too low.	Set Min Auto Backlight Intensity to 1% or higher, or set Indicator Intensity analog input to 1% or higher if Auto Intensity has been disabled.

# Resources

The following resources are provided for the C2NI-CB.

**NOTE:** You may need to provide your Crestron.com web account credentials when prompted to access some of the following resources.

### **Crestron Support and Training**

- Cresnet Design Guide
- <u>Crestron True Blue Support</u>
- Crestron Resource Library
- Crestron Online Help (OLH)
- Crestron Training Institute (CTI) Portal

### **Programmer and Developer Resources**

- <u>help.crestron.com</u>: Provides help files for Crestron programming tools such as SIMPL, SIMPL#, and Crestron Toolbox™ software
- <u>developer.crestron.com</u>: Provides developer documentation for Crestron APIs, SDKs, and other development tools

### **Product Certificates**

To search for product certificates, refer to <u>support.crestron.com/app/certificates</u>.

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