

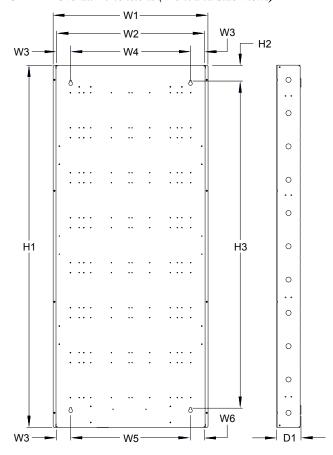
## Introduction

The Crestron® CAENIB Series automation enclosures are designed to house Crestron's CLXI-Series lighting control modules with optional load-side circuit breakers and a PAC2 or PAC2M control system. CAENIB enclosures are available in an assortment of sizes, suitable for surface or flush wall-mount installation. Each model has been engineered to provide a clean and manageable installation with abundant provisions for wire termination and electrical knockouts.

**NOTE:** The PAC2 occupies two module spaces in a double-wide enclosure and one module space in a single-wide.

**NOTE:** Four keyholes are located within the enclosure and should be used if surface mounting.

#### CAENIB Overall Dimensions (Front and Side Views)



#### Functional Summary

- Houses Crestron lighting modules, terminal blocks, professional automation computer, and third-party products with or without Crestron universal mounting plates
- Flush or surface mounted installation
- Ventilated cover for convection cooling of modules
- Conveniently located electrical knockouts for both high voltage and Class 2 wiring
- 16-gauge hot dipped galvanized steel

### **Specifications**

DIMENSIONS	7x2	7x1	4x2	4x1	2x1
H1	1575	1575	987	987	596
(mm (in))	(62)	(62)	(38 7/8)	(38 7/8)	(23 1/2)
H2	68	68	68	53	53
(mm (in))	(2 11/16)	(2 11/16)	(2 11/16)	(2 1/8)	(2 1/8)
H3	1422	1422	835	863	473
(mm (in))	(56)	(56)	(32 7/8)	(34)	(18 5/8)
W1	673	390	673	390	390
(mm (in))	(26 1/2)	(15 3/8)	(26 1/2)	(15 3/8)	(15 3/8)
W2	647	365	647	365	365
(mm (in))	(25 1/2)	(14 3/8)	(25 1/2)	(14 3/8)	(14 3/8)
W3	63	44	63	44	44
(mm (in))	(2 1/2)	(1 3/4)	(2 1/2)	(1 3/4)	(1 3/4)
W4	520	276	520	276	276
(mm (in))	(20 1/2)	(10 7/8)	(20 1/2)	(10 7/8)	(10 7/8)
W5 <sup>1</sup>	520	250	520	250	250
(mm (in))	(20 1/2)	(9 7/8)	(20 1/2)	(9 7/8)	(9 7/8)
W6	63	69	63	69	69
(mm (in))	(2 1/2)	(2 3/4)	(2 1/2)	(2 3/4)	(2 3/4)
D1	104	104	104	104	104
(mm (in))	(4 1/8)	(4 1/8)	(4 1/8)	(4 1/8)	(4 1/8)
Cover	1	1	1	1	1
Thickness	(1/16)	(1/16)	(1/16)	(1/16)	(1/16)
Cover Height (mm (in))	1593	1593	1006	1006	615
	(62 3/4)	(62 3/4)	(39 5/8)	(39 5/8)	(24 1/4)
Cover Width (mm (in))	692	409	692	409	409
	(27 1/4)	(16 1/8)	(27 1/4)	(16 1/8)	(16 1/8)
Included Cover Plates <sup>2</sup>	6	3	4	2	1
Weight (empty) <sup>3</sup> (kg (lb))	29.5	19.5	20	13.2	8.6
	(65)	(43)	(44)	(29)	(19)
Max. Weight (filled) (kg (lb))	90.9	45.5	45.5	22	14.1
	(200)	(100)	(100)	(55)	(31)

- The lower keyholes are not symmetrically spaced within single-wide enclosures.
- 2. Additional cover plates are available from Crestron.
- 3. Weight (empty) is the weight of an empty enclosure with a cover.



### **Regulatory Compliance**

### Conformité Reglementaire

This product is Listed to applicable UL Standards and requirements by Underwriters Laboratories Inc.

Ce produit est homologué selon les normes et les exigences UL applicables par Underwriters Laboratories Inc.



As of the date of manufacture, the CAENIB Series has been tested and found to comply with specifications for CE marking.



#### Federal Communications Commission (FCC) Compliance Statement

These devices comply with part 15 of the FCC Rules. Operation is subject to the following conditions: (1) These devices may not cause harmful interference and (2) these devices 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 Industrie Canada (IC) Déclaration de conformité

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

## Installation

The enclosure must be mounted by a licensed electrician in accordance with all national and local codes. Refer to the table on page 1 for the weight of a fully loaded enclosure.

When choosing components to place in the enclosure, refer to the table on page 1 to ensure that the maximum weight capacity is not exceeded. Each module's product page on the Crestron website lists the module's weight.

CLTI and CLTIBN terminal blocks and CLXI modules must be mounted using screw holes shown in the "Mounting Details" diagrams. Note that the CLTIBN terminal blocks include circuit breakers with overload protection. For applications where an RCCBO (Residual Current Circuit Breaker with Overload) is needed, the corresponding breaker provided must be replaced with the RCCBO of choice. Note that the presence of an RCCBO requires that the CLXI module be mounted in a different location to allow for the added size of the new breaker. For additional information, see the documentation that ships with the CLTIBN.

**CAUTION:** These enclosures house equipment that needs to be air-cooled. Therefore, mount in a well-ventilated area. The ambient temperature range should be 0°C to 40°C (32°F to 104°F). The relative humidity should range from 10% to 90% (noncondensing). Furthermore, allow adequate clearance in front of the vented cover for servicing and ventilation.

**NOTE:** Install modules into the lowest available spaces and continue toward the top of the enclosure.

**NOTE:** Enclosures are intended for indoor use only.

**NOTE:** When flush mounting, 16 mm (5/8 in) drywall is preferred.

# Wiring

**CAUTION:** All power feeds must be protected by appropriate branch circuit breakers as required by national and local code (supplied by others).

**NOTE:** Use copper conductors only – rated 60°C.

**NOTE:** All wiring must be installed in accordance with all local and national electrical codes.

**NOTE:** Two snap bushings are supplied. If required, insert into knockouts at the bottom of the enclosure to prevent damage to low voltage wiring.

High voltage and Class 2 field wires must be kept separate. Refer to the following illustrations showing single-wide and double-wide wiring details. Areas for high voltage wiring are shown along the top and side(s) of the unit. The lower area is reserved for Class 2 wiring.

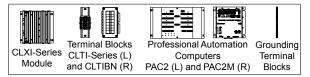
Tighten all CLTI- and CLTIBN-Series terminal block screws and grounding terminal block screws to the torque specified in the "Torque Data" table below.

**CAUTION:** Failure to properly tighten the screws may result in poor electrical connection and overheating of the terminals.

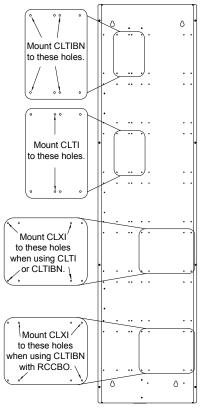
Torque Data

	CLTI/CLTIBN Terminal Blocks	Grounding Terminal Blocks		
Wire Range	0.34 - 6.0	2.5 – 6.0	10.0	16 – 25
(mm2 (AWG))	(22 - 10)	(14 – 10)	(8)	(6 – 4)
Torque	1.02	3.95	4.52	5.08
(N-m (lb-in))	(9)	(35)	(40)	(45)

Key - Typical Products in a CAENIB Enclosure

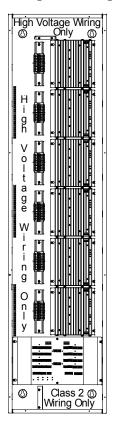


#### Mounting Details - Single-Wide CAENIB

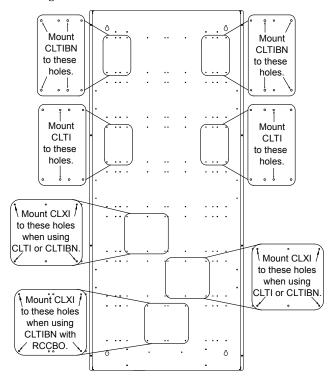


Mount CLTI and CLTIBN terminal blocks and CLXI modules to the holes shown above.

Wiring Details - Single-Wide CAENIB

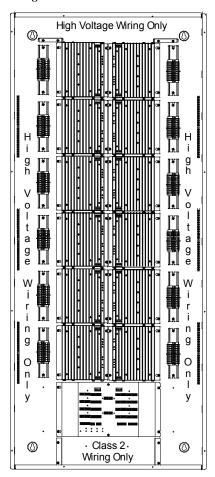


Mounting Details - Double-Wide CAENIB



Mount CLTI and CLTIBN terminal blocks and CLXI modules to the holes shown above.

#### Wiring Details - Double-Wide CAENIB



## **Cover Plates**

Prior to installing the ventilated cover, any bay in the CAENIB that does not contain a CLTIBN terminal block must be covered using a CAENIB blank cover plate. Each CAENIB model includes some cover plates for covering empty bays. Additional cover plates are available for purchase from Crestron. Refer to the table on page 1 to see how many cover plates are included with each CAENIB enclosure. For instructions on installing the blank cover plate, refer to the CAENIB-BP Installation Guide (Doc. 6563) available at http://www.crestron.com/manuals.

# **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 <a href="https://www.crestron.com/offices">www.crestron.com/offices</a>.

To post a question about Crestron products, log onto Crestron's Online Help at <a href="www.crestron.com/onlinehelp">www.crestron.com/onlinehelp</a>. 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 CAENIB Series, 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.

The specific patents that cover Crestron products are listed at <u>patents.crestron.com</u>.

Crestron and the Crestron logo are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. UL and the UL logo are either trademarks or registered trademarks of Underwriters Laboratories, Inc. in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

This document was written by the Technical Publications department at Crestron.

©2014 Crestron Electronics. Inc.

# **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.