

## Functional Summary

The Crestron® CLTIBN series of terminal blocks with circuit breakers provide an additional wiring option when installing Crestron CLXI-series modules in a Crestron CAENIB automation enclosure. CLTIBN terminal blocks feature 10A type “C” load-side breakers that offer additional circuit protection where desired, or where required by local electrical codes. CLTIBN terminal blocks ship separately from their corresponding CLXI modules to permit termination of the field wiring to the CLTIBN prior to installation of the module. Every CLTIBN includes a door kit and an adhesive circuit label (for labeling circuits) to be installed on the cover of the CAENIB enclosure. This door kit allows access to the circuit breakers located on the CLTIBN without removing the cover of the CAENIB enclosure.

## Industry Compliance

This product complies with the essential requirements of all applicable EU directives.



## Installation

The terminal block and module must be mounted into a CAENIB Enclosure by a licensed electrician, in accordance with all national and local codes.

**CAUTION:** This equipment is for indoor use only and needs to be air-cooled. Mount in a well-ventilated area. The ambient temperature must be 0°C to 40°C (32°F to 104°F). The relative humidity must be 0% to 90% (non-condensing).

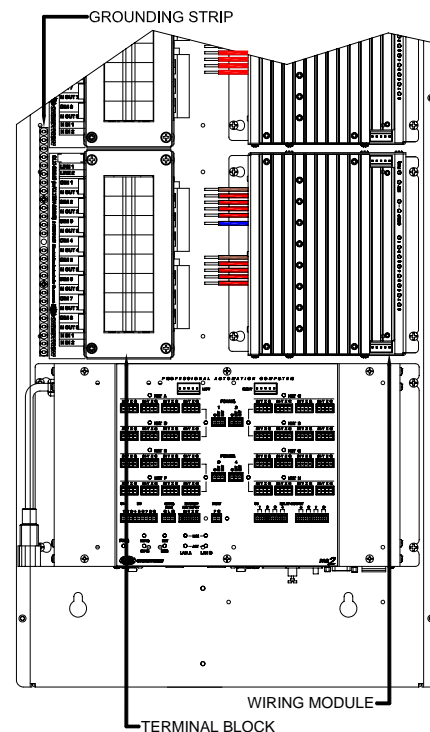
Terminal blocks are installed along the left side of single-wide enclosures and along the outside edges (left and right sides) of double-wide enclosures. Modules are installed along the right side of single-wide enclosures and side-by-side in the center of double-wide enclosures. When installing modules and terminal blocks in a double-wide enclosure, be sure to invert units on the right side so that they can be properly wired. Refer to the illustrations shown in the next column and next page when considering the location of terminal blocks and modules within an enclosure.

**NOTE:** For applications where an RCCBO (Residual Current Circuit Breaker with Overload) is needed, the CLTIBN’s breaker must be replaced with an RCCBO (supplied by other). Note that the presence of an RCCBO requires the CLXI module to be mounted in a different location to allow for the added size of the new breaker. Refer to the latest version of the CAENIB Installation Guide (Doc. 6562) which is available for download from the Crestron website ([www.crestron.com/manuals](http://www.crestron.com/manuals)).

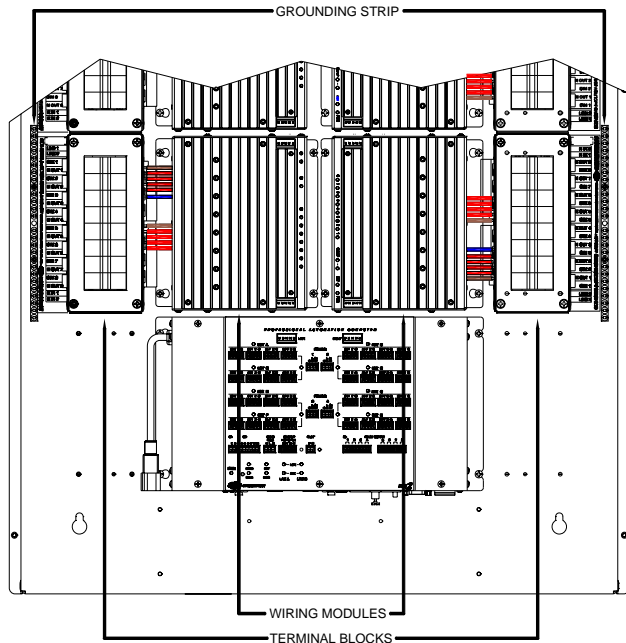
**NOTE:** To insure proper fit, terminal blocks and modules must be installed at the locations indicated in the latest version of the CAENIB Installation Guide.

**NOTE:** Modules and terminal blocks must be installed into the lowest available spaces and continue toward the top of the enclosure.

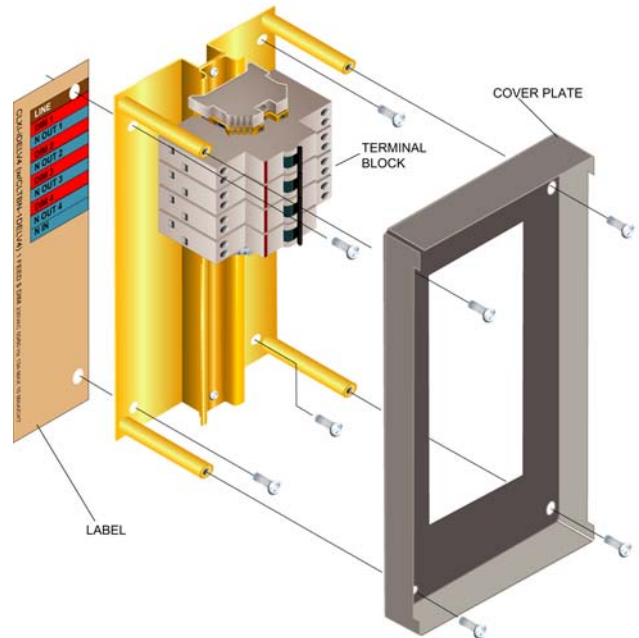
*Terminal Block & Module Locations (Single-wide Enclosure)*



*Terminal Block & Module Locations (Double-wide Enclosure)*



*CLTIBN Exploded View (CLTIBN-IDELV4 Shown)*



**NOTE:** Unless otherwise indicated, the lighting system specified in this guide is modular, requiring assembly in the field by a licensed electrician, in accordance with all national and local codes.

## Terminal Block Installation and Field Wiring

**CAUTION: RISK OF ELECTRIC SHOCK—MORE THAN ONE DISCONNECT SWITCH MAY BE REQUIRED TO DE-ENERGIZE THE EQUIPMENT BEFORE SERVICING.**

**NOTE:** Both left-side and right-side adhesive wiring labels are provided. The left-side labels are used in both single and double-wide enclosures. The right-side labels are only used in double-wide enclosures.

Using the diagram in the next column as reference, install the terminal block in the CAENIB enclosure.

1. Using a Phillips screwdriver, remove the four screws securing the cover plate to the CLTIBN and remove the cover plate.
2. Remove the backing from the left or right adhesive wiring label. Place the label in the location where the CLTIBN is to be mounted on the CAENIB. Align the holes in the label with the appropriate holes in the CAENIB. Refer to the latest version of the CAENIB Installation Guide for information on mounting locations.

3. Use the four supplied self-tapping pan Phillips screws (8B x ¼-inch (6 mm) length) to secure the terminal block and the appropriate (left or right) wiring label to the Crestron Automation Enclosure. The wiring label lies beneath the terminal block as shown in the terminal block-to-module wiring diagrams on page 4.

**NOTE:** When installed with other terminal blocks, CLTI-4IND and CLTI-2IND terminal blocks should be installed at the top of a CAENIB enclosure and grouped with other CLTI-4IND and CLTI-2IND terminal blocks.

**NOTE:** Use copper conductors only – rated 75°C.

4. With the branch circuit breakers and the terminal block circuit breakers turned off, connect the circuit feed (LINE and NEUTRAL) and controlled circuit (LOAD) wires to the terminal block per the markings provided on the wiring label (as shown in the terminal block-to-module wiring diagrams on page 4). Terminal blocks accept one 2.5 - 6.0 mm<sup>2</sup> wire. Circuit breaker lugs accept one conductor up to 16 mm<sup>2</sup>. Wires should be stripped to 12 mm. Tighten terminal blocks to 1 Nm. Tighten circuit breaker lugs to 1.2 Nm.
5. Grounding terminal blocks are available in the cabinet for termination of ground wires. Tighten to 4 Nm (2.5 - 6.0 mm<sup>2</sup>), 4.5 Nm (10.0 mm<sup>2</sup>), or 5.1 Nm (16 - 25 mm<sup>2</sup>).

## Module Installation

**CAUTION:** CLXI modules contain electrostatic sensitive devices (ESDs); units must be handled from metal chassis – do not touch PC boards or components.

**NOTE:** CLXI modules are to be installed after the enclosure has been completely wired and load wiring has been verified. Refer to the terminal block installation procedure on the previous page for details.

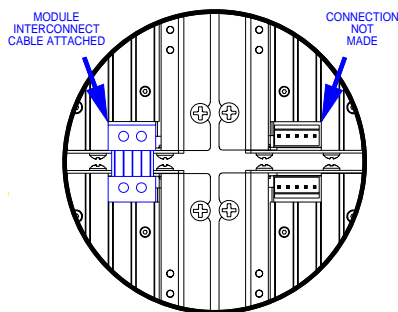
1. Use the four supplied self-tapping screws (8B x ¼ (6 mm) length) to secure the module to the enclosure.
2. Connect the CLXI modules to their corresponding CLTIBN terminal blocks as shown in the terminal block-to-module wiring diagrams that start on page 4. Illustrations are provided for installation on the right and left sides of a CAENIB enclosure. Wires are pre-stripped to 12 mm. Tighten terminal blocks to 1 Nm. Tighten circuit breaker lugs to 1.2 Nm.

**NOTE:** Do not remove any factory-installed jumper wires or bus-bars.

3. Replace the cover plate that was removed during the terminal block installation procedure described on the previous page.
4. If the module is being installed above or below another module within the enclosure, attach the supplied module interconnect cable between the two modules. The following illustration depicts the area within a double-wide enclosure where the corners of four modules meet.

**NOTE:** One wire on the module interconnect cable may be a different color from the rest. The color has no bearing on its orientation during installation.

### Use Module Interconnect Cable to Wire Module to Module



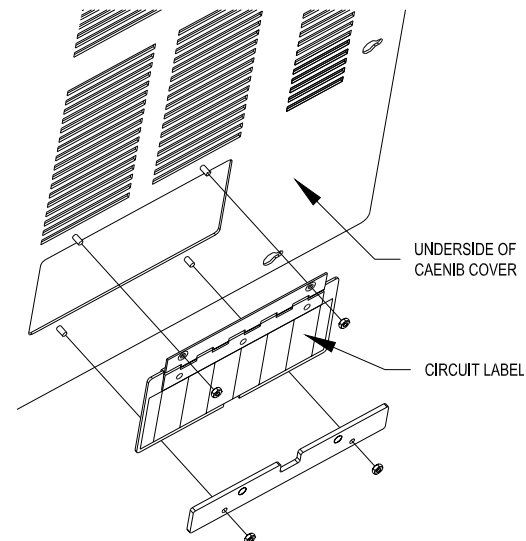
5. Refer to the respective CLTI/CLXI Installation Guide for instructions on completing the installation and testing of the CLXI module.

## Access Door Installation

After the terminal block and module have been installed and successfully tested, the access door must be installed on the CAENIB's cover in the location of the terminal block.

1. If a blank plate is installed, remove it by removing the nuts that secure the plate to the CAENIB cover. Remove the plate from the mounting studs on the CAENIB cover.
2. Install the access door assembly as shown in the following diagram.

### Install Access Door Assembly (Underside of CAENIB Cover shown)



3. Secure the door assembly to the CAENIB cover, by tightening the included nuts.
4. Open the access door and affix the included blank circuit label to the door. Label the circuits as required.

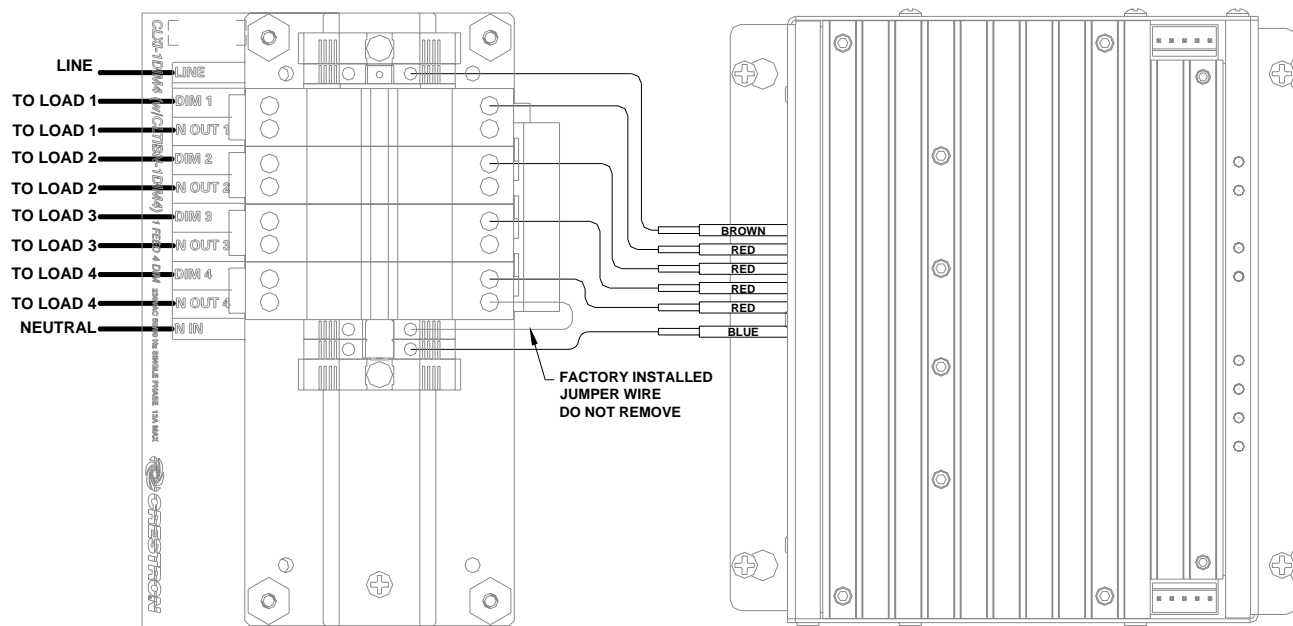
## Terminal Block to Module Wiring Diagrams

With the branch circuit breakers and the terminal block circuit breakers turned off, connect the circuit feed (LINE and NEUTRAL) and controlled circuit (LOAD) wires to the terminal blocks per the markings provided on the wiring labels (as shown in the following diagrams). Wires should be stripped to 12 mm. Terminal blocks accept one 2.5 - 6.0 mm<sup>2</sup> wire and should be tightened to 1 Nm. Circuit breaker lugs accept up to one 16 mm<sup>2</sup> wire and should be tightened to 1.2 Nm.

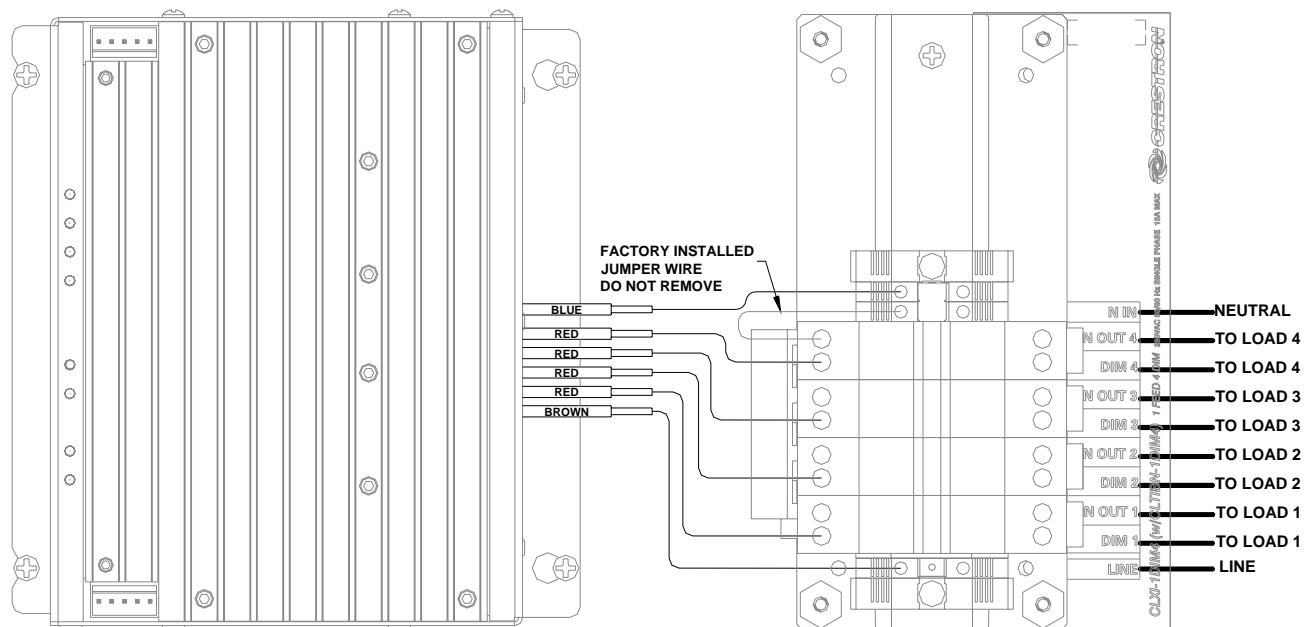
**NOTE:** Illustrations are provided for installation on the right and left sides of a CAENIB enclosure. Illustrations show the terminal block with the cover plate removed.

### CLTIBN-1DIM4 to CLXI-1DIM4

*Wiring of CLTIBN-1DIM4 Terminal Block and CLXI-1DIM4 (Single-wide and Left Side Double-wide Enclosures)*

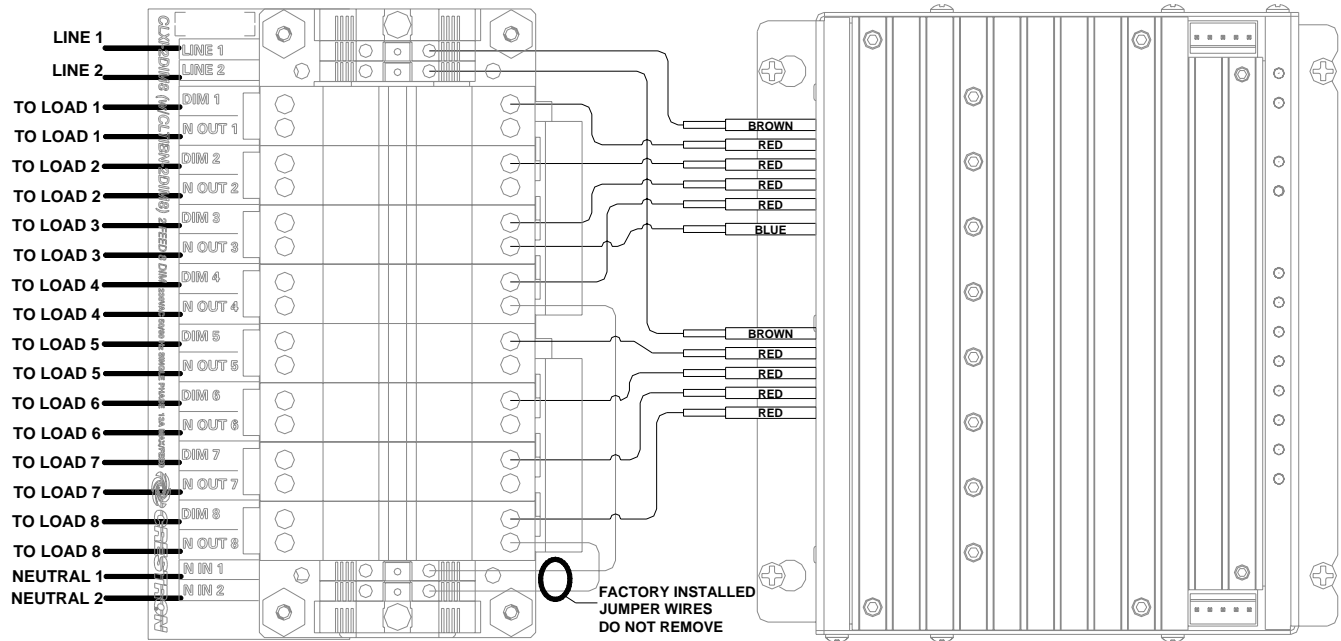


*Wiring of CLTIBN-1DIM4 Terminal Block and CLXI-1DIM4 (Right Side Double-wide Enclosures)*



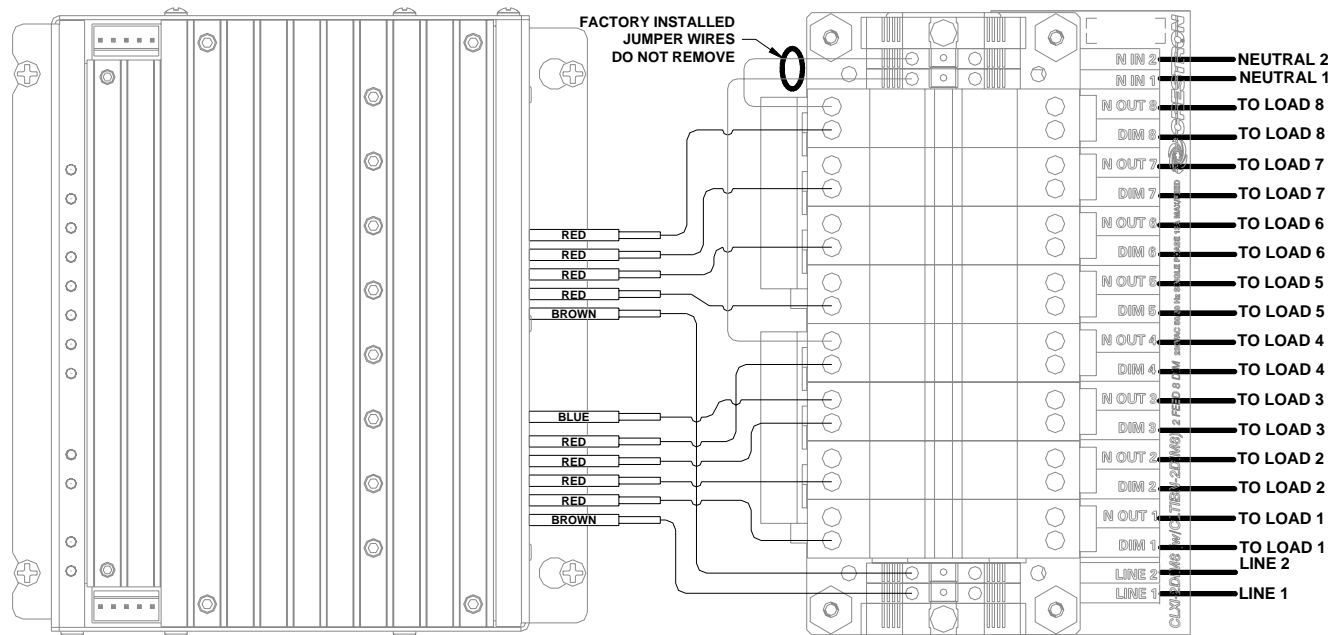
## CLTIBN-2DIM8 to CLXI-2DIM8

Wiring of CLTIBN-2DIM8 Terminal Block and CLXI-2DIM8 (Single-wide and Left Side Double-wide Enclosures)



**NOTE:** The blue wire from the module will share a circuit breaker lug with the neutral bus bar.

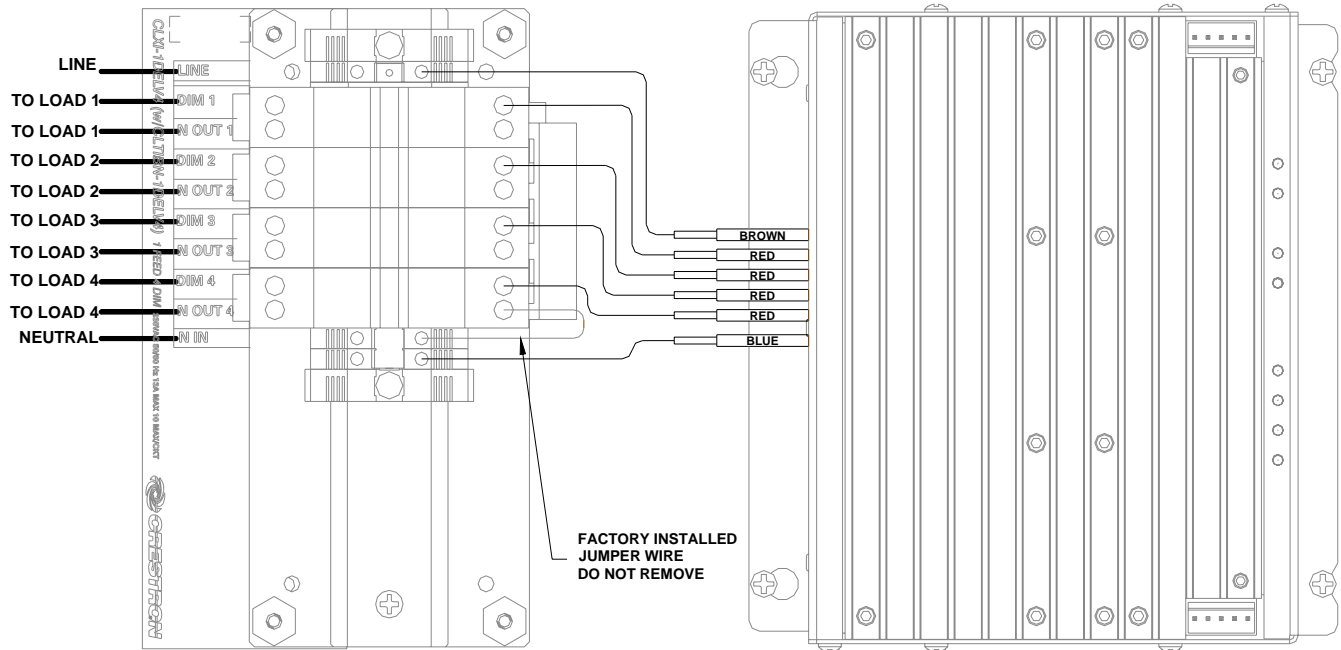
Wiring of CLTIBN-2DIM8 Terminal Block and CLXI-2DIM8 (Right Side Double-wide Enclosures)



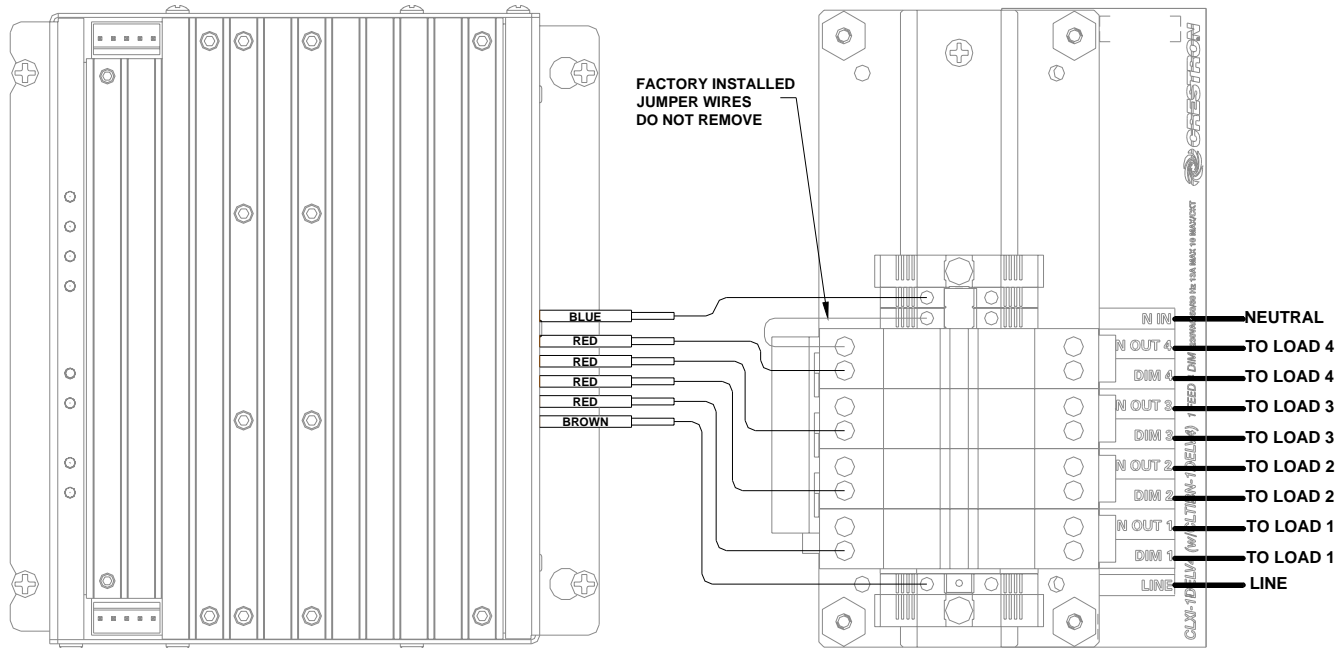
**NOTE:** The blue wire from the module will share a circuit breaker lug with the neutral bus bar.

## CLTIBN-1DELV4 to CLXI-1DELV4

Wiring of CLTIBN-1DELV4 Terminal Block and CLXI-1DELV4 (Single-wide and Left Side Double-wide Enclosures)

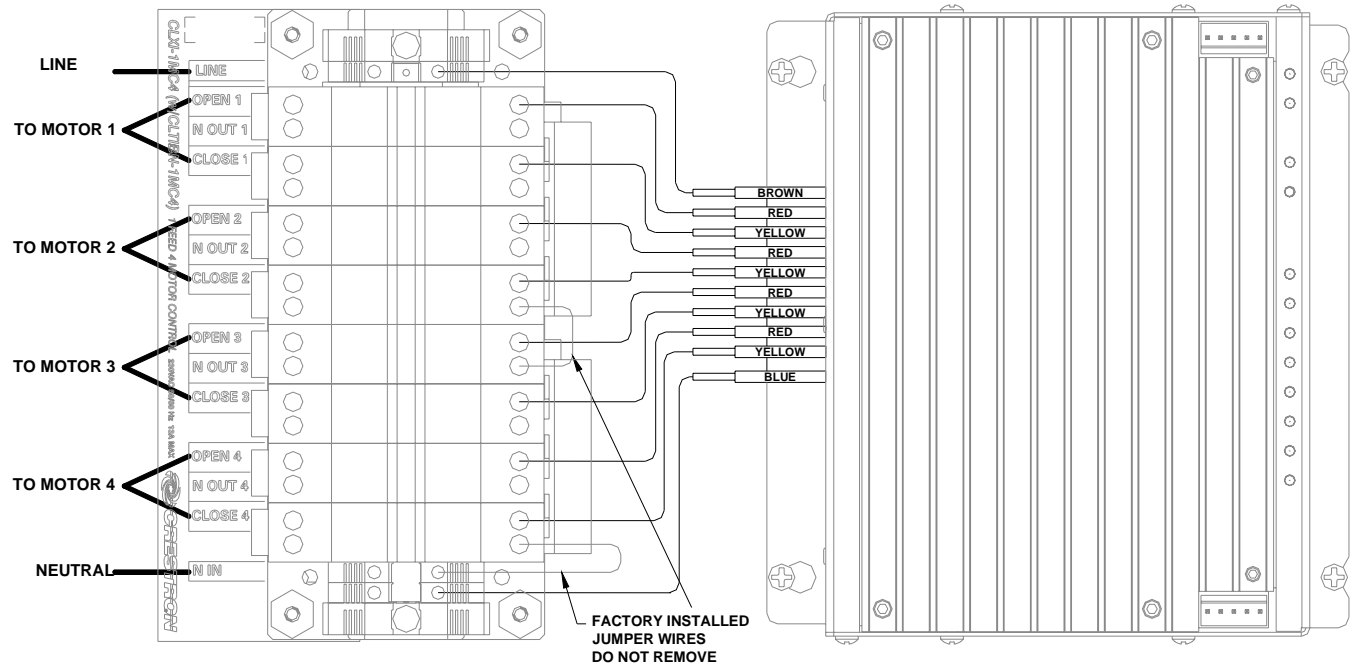


Wiring of CLTIBN-1DELV4 Terminal Block and CLXI-1DELV4 (Right Side Double-wide Enclosures)

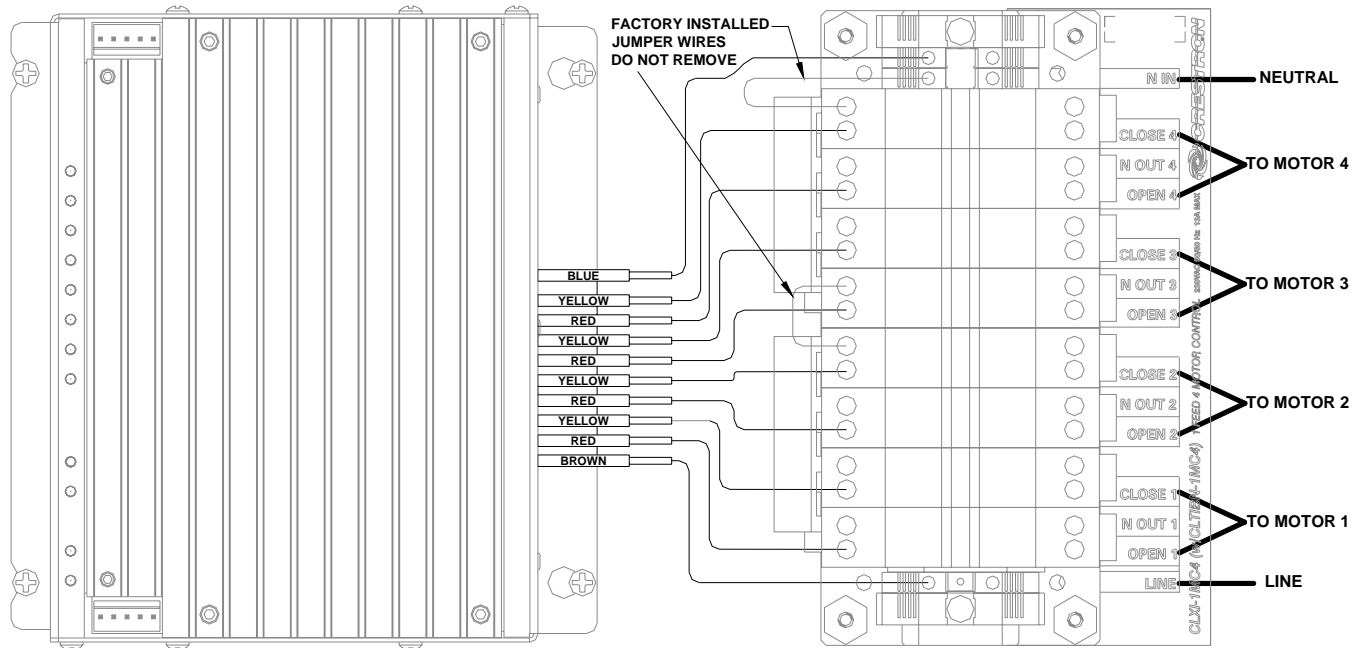


## CLTIBN-1MC4 to CLXI-1MC4

Wiring of CLTIBN-1MC4 Terminal Block and CLXI-1MC4 (Single-wide and Left Side Double-wide Enclosures)

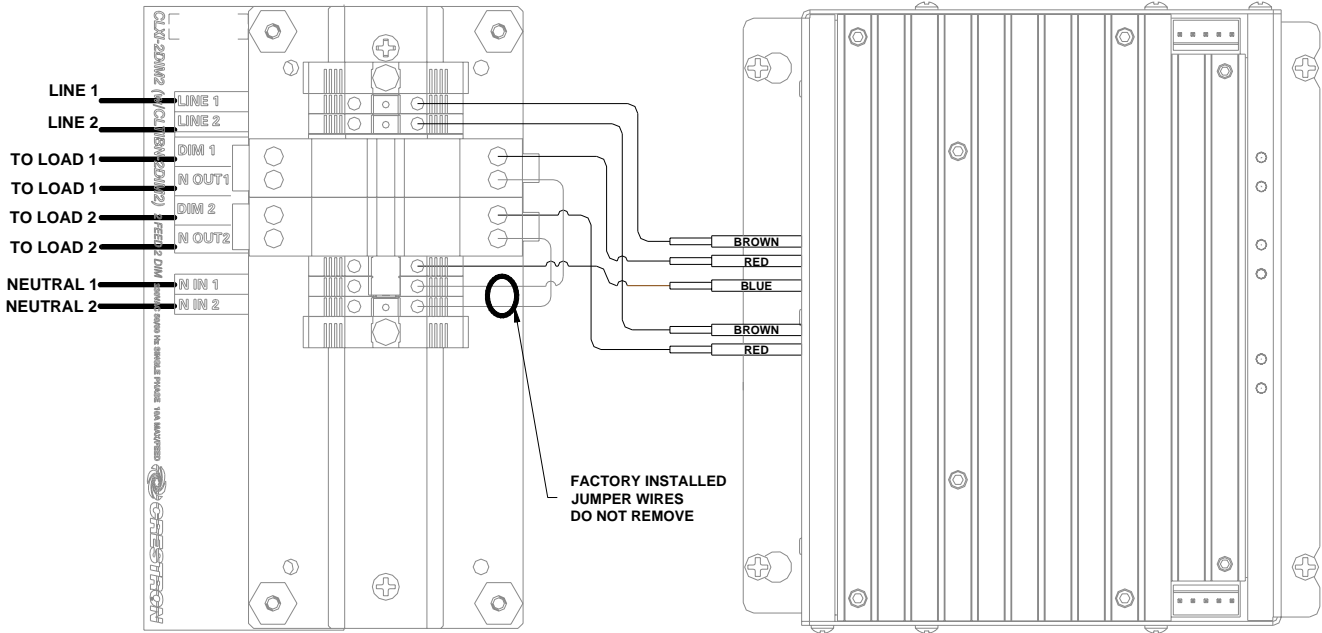


Wiring of CLTIBN-1MC4 Terminal Block and CLXI-1MC4 (Right Side Double-wide Enclosures)

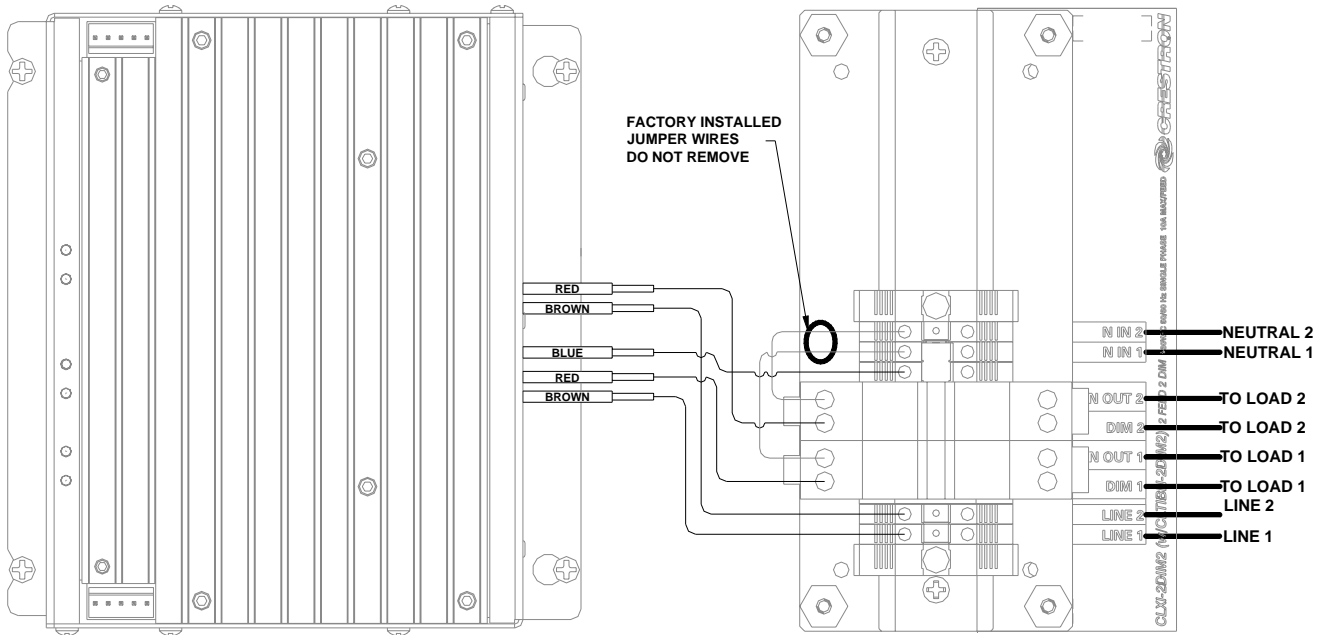


## CLTIBN-2DIM2 to CLXI-2DIM2

Wiring of CLTIBN-2DIM2 Terminal Block and CLXI-2DIM2 (Single-wide and Left Side Double-wide Enclosures)



Wiring of CLTIBN-2DIM2 Terminal Block and CLXI-2DIM2 (Right Side Double-wide Enclosures)

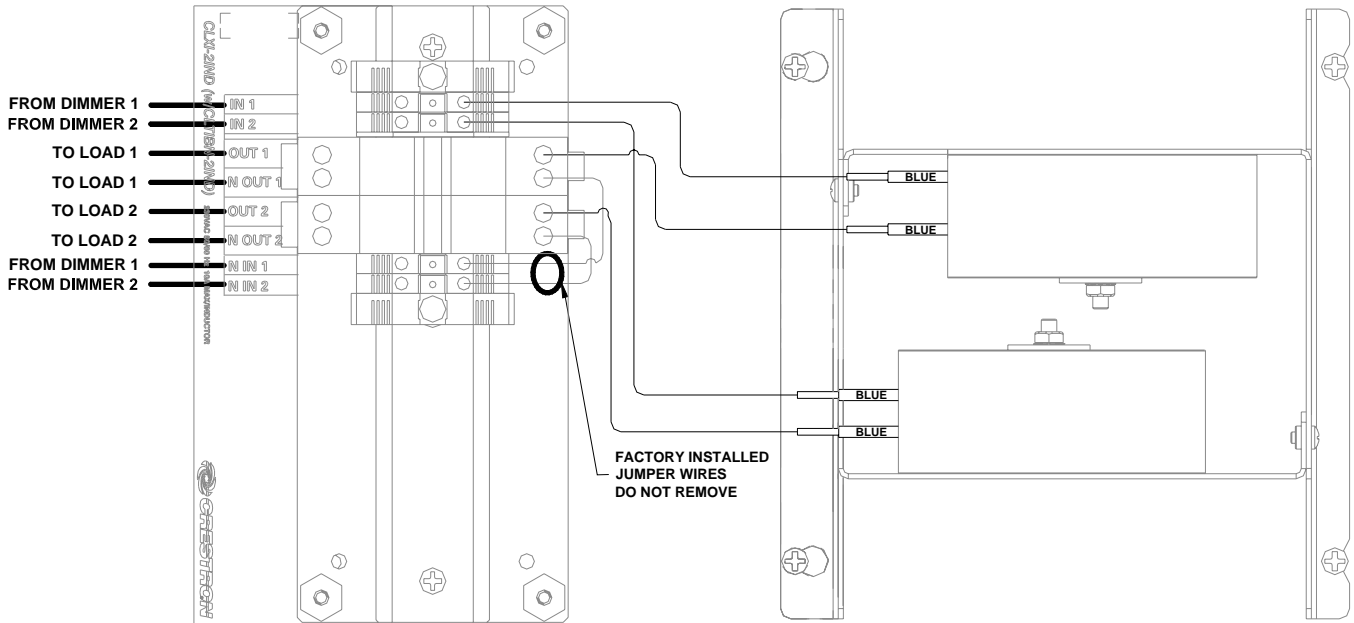




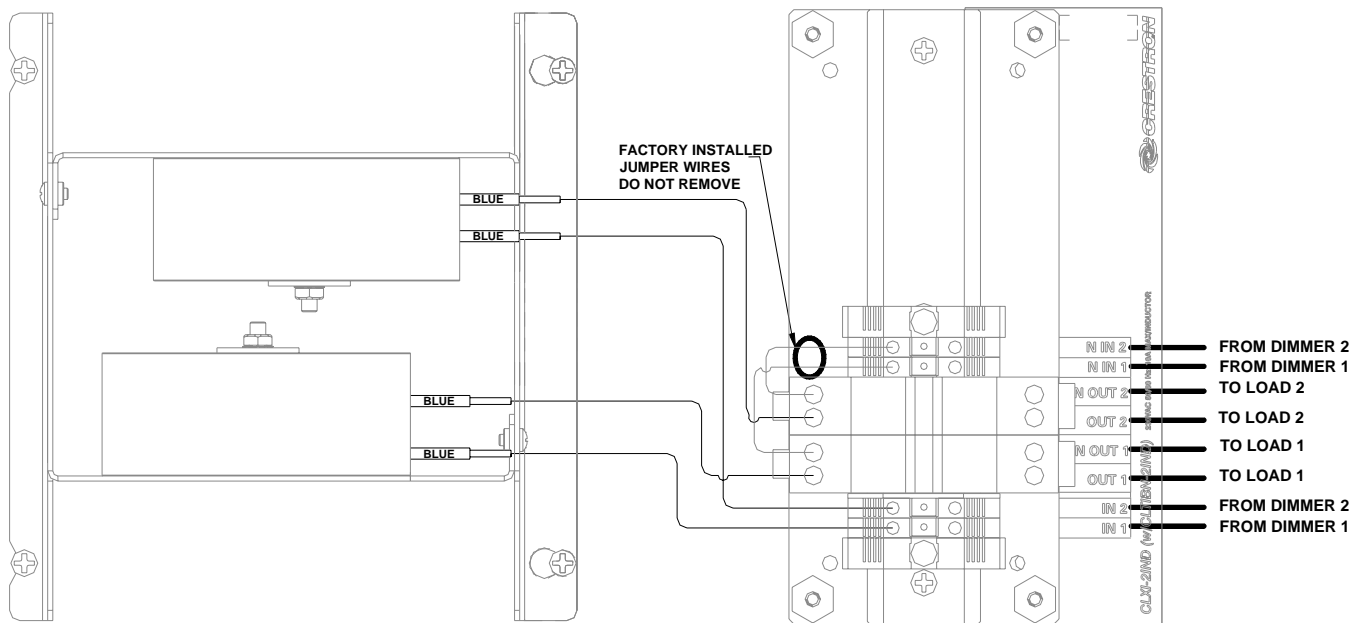
## CLTIBN-2IND to CLXI-2IND

**NOTE:** The CLTIBN-2IND inputs connect to the **DIM OUT** and **N OUT** lines of a CLXI dimming terminal block.

### Wiring of CLTIBN-2IND Terminal Block and CLXI-2IND (Single-wide and Left Side Double-wide Enclosures)

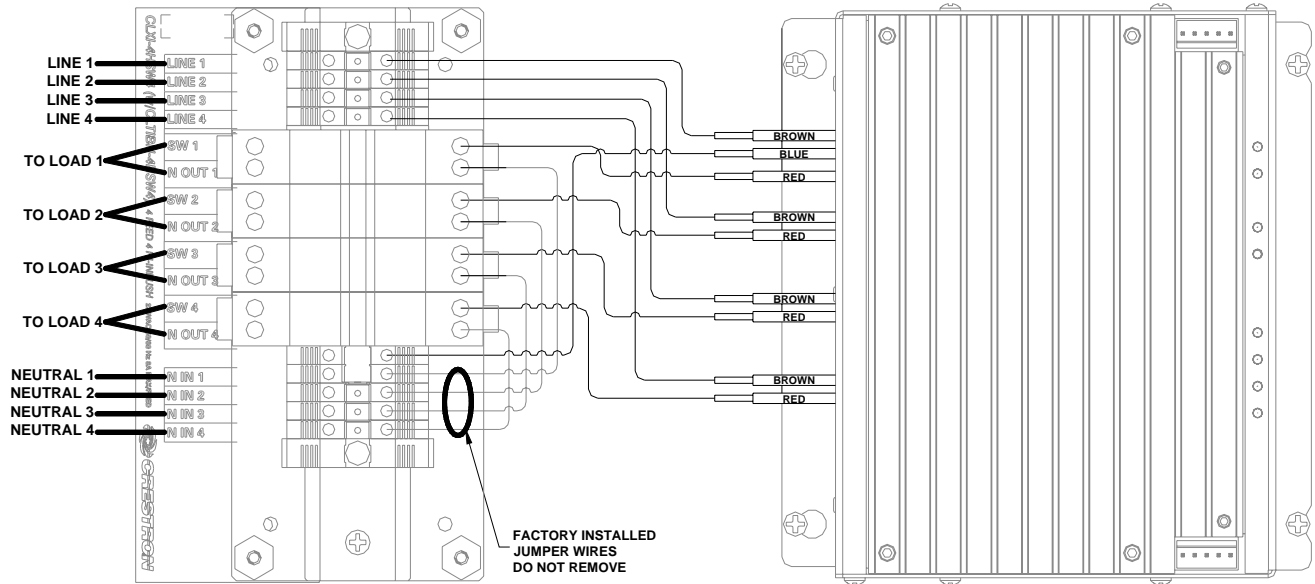


### Wiring of CLTIBN-2IND Terminal Block and CLXI-2IND (Right Side Double-wide Enclosures)

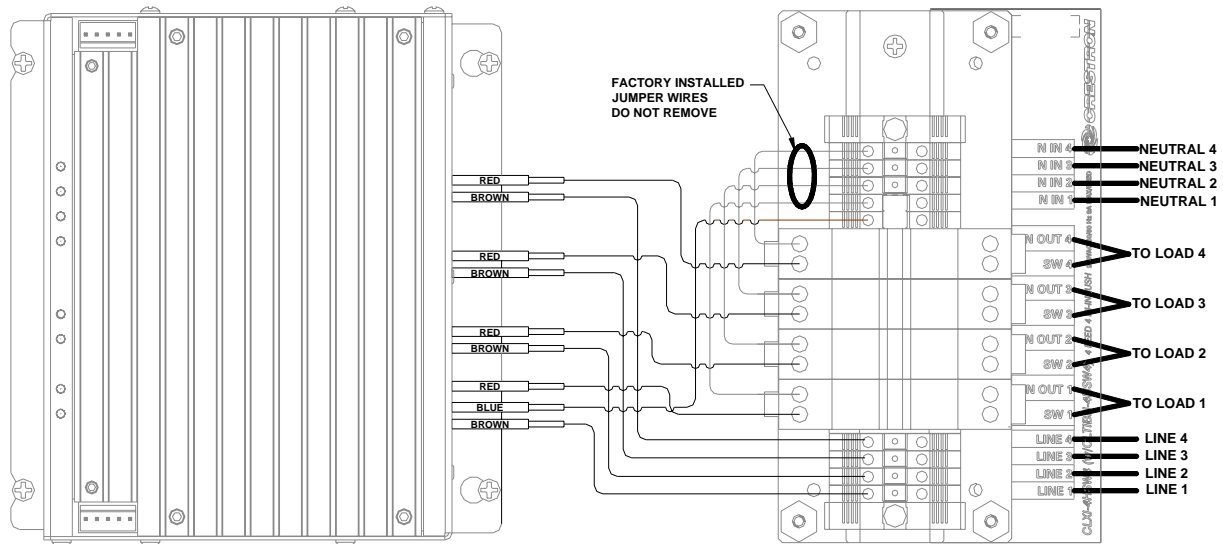


## CLTIBN-4HSW4 to CLXI-4HSW4

Wiring of CLTIBN-4HSW4 Terminal Block and CLXI-4HSW4 (Single-wide and Left Side Double-wide Enclosures)



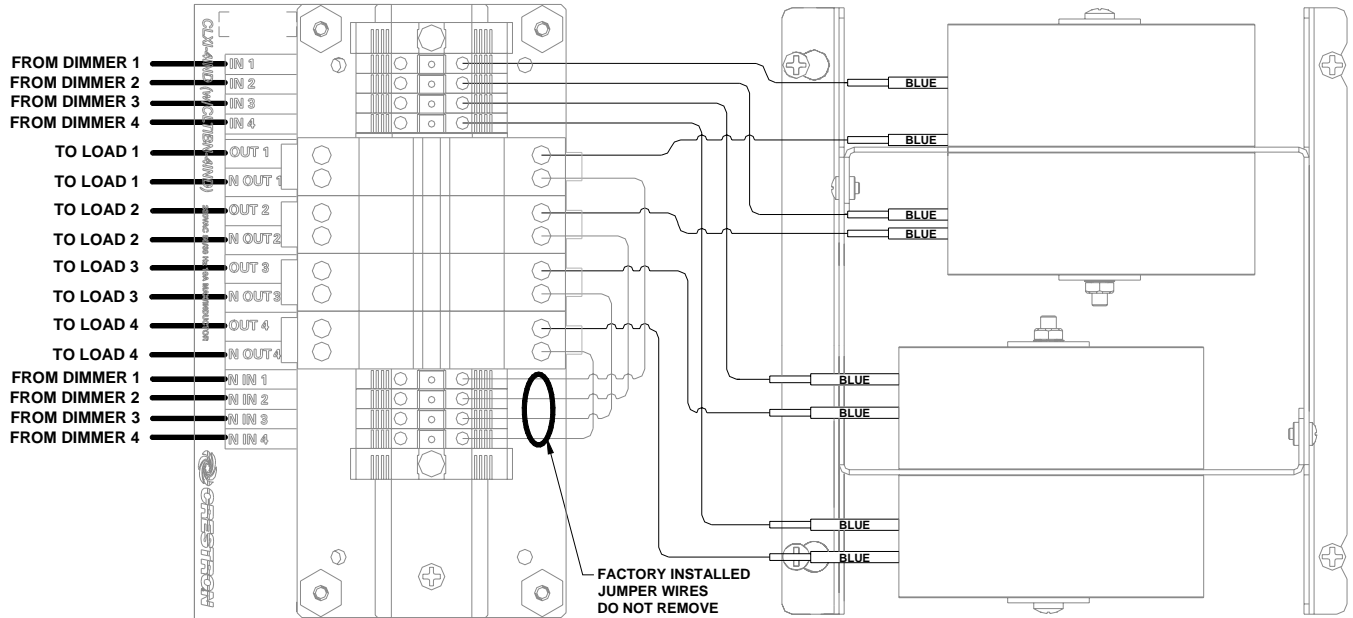
Wiring of CLTIBN-4HSW4 Terminal Block and CLXI-4HSW4 (Right Side Double-wide Enclosures)



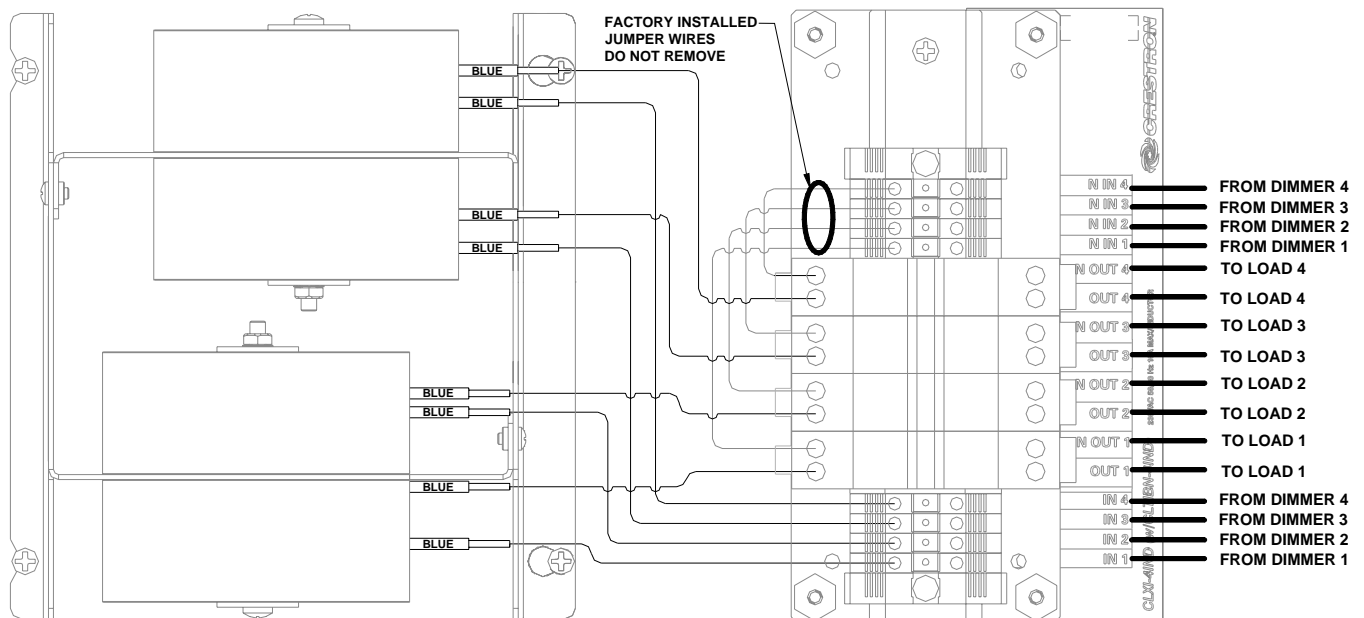
## CLTIBN-4IND to CLXI-4IND

**NOTE:** The CLTIBN-4IND inputs connect to the **DIM OUT** and **N OUT** lines of a CLTI dimming terminal block.

### Wiring of CLTIBN-4IND Terminal Block and CLXI-4IND (Single-wide and Left Side Double-wide Enclosures)



### Wiring of CLTIBN-4IND Terminal Block and CLXI-4IND (Right Side Double-wide Enclosures)



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## Further Inquiries

If you cannot locate specific information or have questions after reviewing this guide, please take advantage of Crestron's award winning customer service team by calling the Crestron corporate headquarters at 1-888-CRESTRON [1-888-273-7876]. For assistance in your local time zone, refer to the Crestron website (<http://www.crestron.com/offices>) for a listing of Crestron worldwide offices.

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

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## 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 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; 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 supersedes all previous warranties.

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