

Crestron **CNXENET**
CNX Ethernet Expansion Card

Operations & Installation Guide

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CNX Ethernet Expansion Card: CNXENET

Description

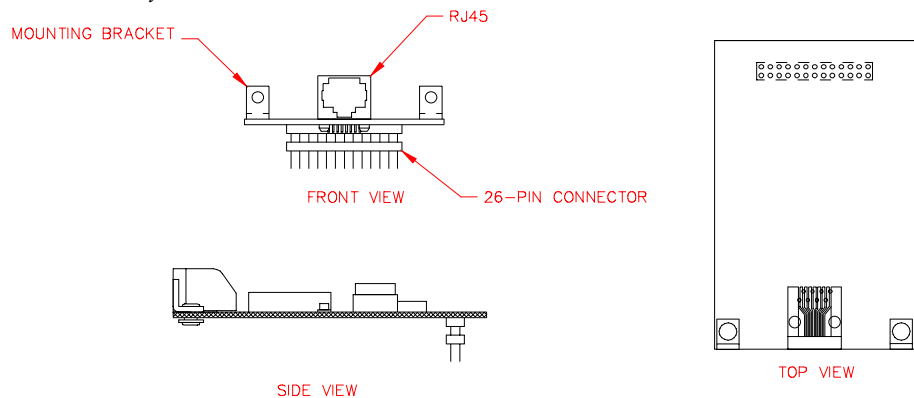
Functional Description

The CNXENET is an optional feature designed specifically for Crestron’s CNMSX and CNRACKX control systems. The field-upgradable card connects directly to Crestron’s exclusive DPA (Direct Processor Access) slot; providing high-speed access straight to the system processor. The CNXENET enhances communication via Ethernet/LAN, internet and intranet connections.

Physical Description

The CNXENET, shown below, is an expansion card that occupies the DPA slot and connects directly to the control system’s processor. There are two connectors located on the CNXENET. An 8-wire RJ45 connector for LAN is available externally from the control system once installed. Internally, one 26-pin connector mates with the control system processor board. Two mounting brackets keep the card in place.

CNXENET Physical Views



Leading Specifications

The table below provides a summary of leading specifications for the CNXENET. Dimensions and weights are approximations rounded to the nearest hundredth unit.

Leading Specifications of the CNXENET

SPECIFICATION	DETAILS
Network Type	10BASE-T
Protocols	TCP/IP, UDP/IP, ICMP, (Ping), & CIP
SIMPL™ Windows®	Version 1.21.03 or later
CNX Operating System*	Version 5.01.29x or later
CNX Monitor*	Version 2.05x or later, 50219x.mon
TCP-IP Stack*	Version 50218x.tcp or later
Dimensions	Height: 1.13 in (2.86 cm) Width: 2.25 in (5.72 cm) Depth: 3.50 in (8.89 cm)
Weight	0.08 lb (0.04 kg)

* These three items make up 50219x.upz which is located in the crestron/firmware folder after the install.

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



Installation into the CNMSX

Items required to install the CNXENET are either attached to the card or already reside on the control system. Below is a list of all the pieces needed and the quantities required. The only tools required are a Phillips tip screwdriver and a grounding strap. Follow the assembly procedure and illustrations that follow this paragraph.

Items Required to Install the CNXENET

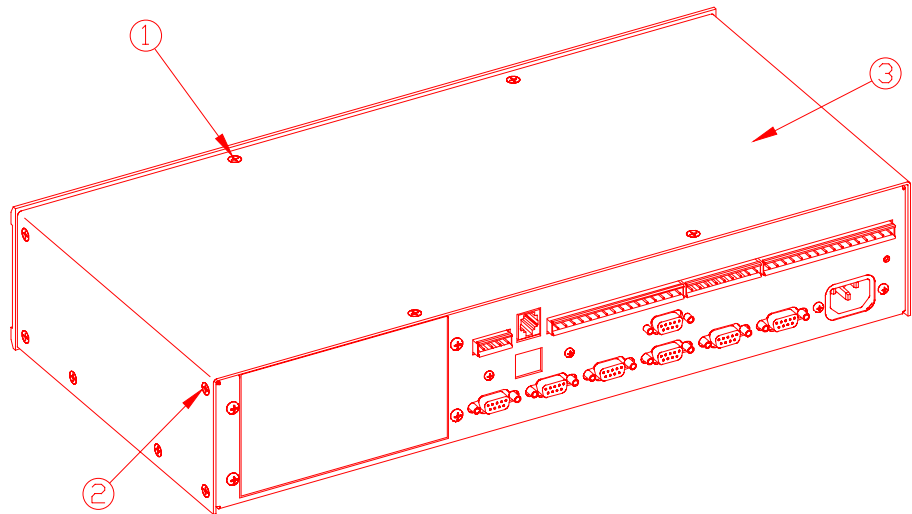
ITEM #	ITEM	PART NUMBER	QUANTITY
①	Screw	#6-32 x 0.25" LG	4
②	Screw	#6-32 x 0.375" LG	12
③	Control System Top Cover	Not Applicable	1
④	Screw	#6-32 x 0.25" LG	6
⑤	I/O Printed Circuit Board	Not Applicable	1
⑥	Screw	#4-40 x 0.375" LG	2
⑦	CNXENET Cover Plate	Not Applicable	1
⑧	CNXENET	ZA11144	1

CAUTION: The control system must be opened to install the CNXENET. Observe precautions for handling electrostatic sensitive devices (ESDs).

NOTE: It is assumed that the control system rack ear brackets are not attached during this installation procedure.

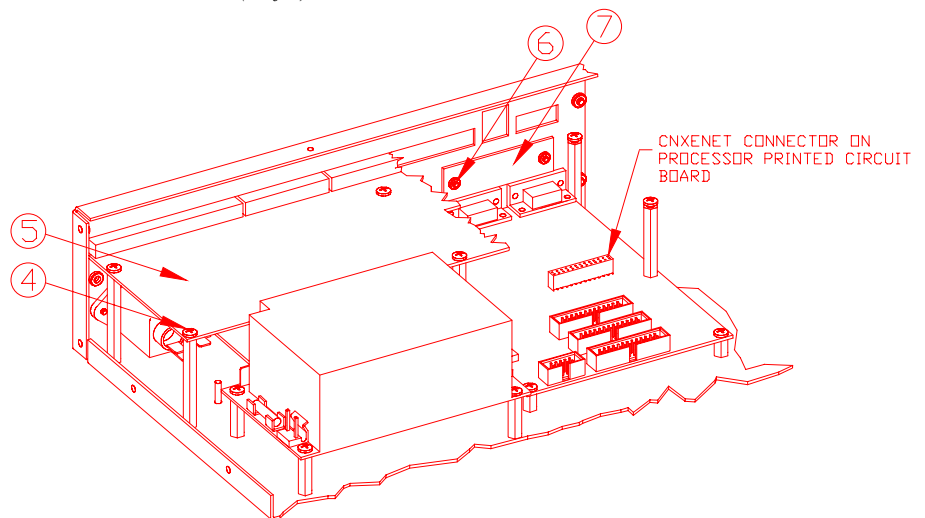
NOTE: The unit shown in the illustrations is a CNMSX-AV. The procedure is identical for the CNMSX-PRO.

CNXENET Installation (1 of 4) into CNMSX



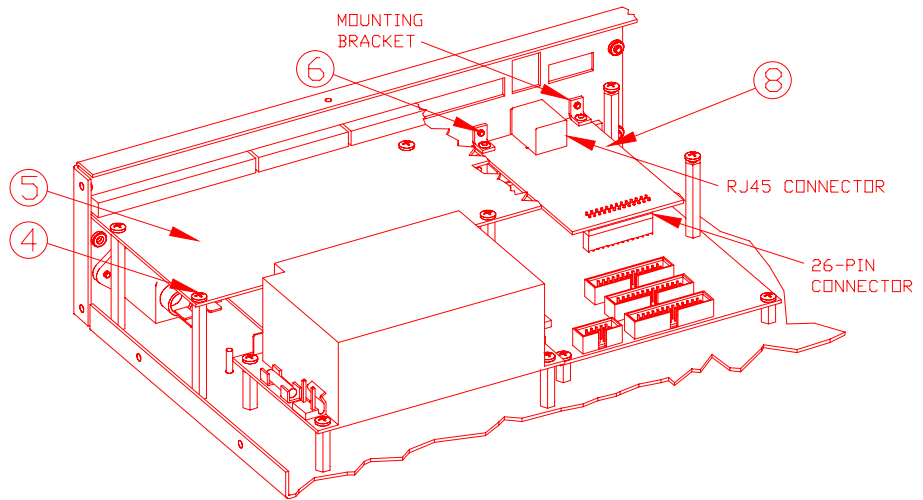
1. Place the control system right-side-up on a flat surface and remove four screws ① from the top of the unit.
2. Remove 12 screws ② from both sides of the control system. There are six screws per side.
3. Lift and remove control system top cover ③.

CNXENET Installation (2 of 4) into CNMSX



4. Remove six screws ④ that secure I/O printed circuit board ⑤ to the control system
5. Remove I/O printed circuit board ⑤.
6. Remove two screws ⑥ that secure CNXENET cover plate ⑦ to the control system.
7. Remove CNXENET cover plate ⑦.

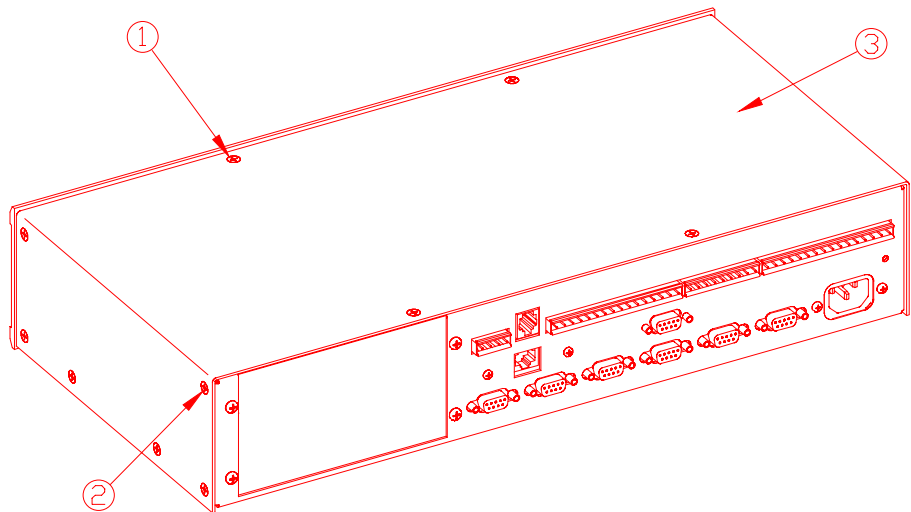
CNXENET Installation (3 of 4) into CNMSX



NOTE: Carefully push aside the computer interface ribbon cable to make room for the CNXENET.

8. Carefully align and insert pins on the 26-pin CNXENET connector with connector on processor board (labeled ETHERNET). Press CNXENET board (8) until pins are fully seated in connector; **DO NOT** force pins into connector.
9. Align mounting brackets on CNXENET printed circuit board with mounting holes in chassis so that RJ45 connector aligns with cut out.
10. Secure CNXENET (8) to the control system with two screws (6).
11. Replace and secure I/O printed circuit board (5) with six screws (4).

CNXENET Installation (4 of 4) into CNMSX



12. Secure control system top cover (3) with 12 screws (2) and four screws (1).

Problem Solving

Troubleshooting

The table below provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative; refer to “Further Inquiries” on page 5.

CNXENET Troubleshooting

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Communications via the DPA port is not functioning.	CNXENET improperly installed.	Follow installation procedures in this guide.
	Improper Ethernet connection.	Verify proper connection at Ethernet port.
	Damaged connector pins.	Follow installation procedures in this guide and inspect connector pins.
	Incorrect firmware/software.	Upgrade firmware/software versions as per those listed in the Leading Specifications section.

Further Inquiries

If after reviewing this Operations & Installation Guide for the CNXENET, you cannot locate specific information or have questions, please take advantage of Crestron's award winning customer service team by calling:

- In the US and Canada, call Crestron’s corporate headquarters at 1-888-CRESTRON [1-888-273-7876] or 1-201-767-3400.
- In Europe, call Crestron International at +32-15-50-99-50.
- In Asia, call Crestron Asia at +852-2341-2016.
- In Latin America, call Crestron Latin America at +5255-5093-2160.
- In Australia, call Crestron Pacific at +613-9480-2999.

For local support from exclusive Crestron factory-trained personnel in New Zealand call Amber Technologies at +649-410-8382.

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, Cresskill, 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 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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Doc. 8129
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