# Crestron **CNXCAGE**
# 3-Card Expansion Cage
# Operations & Installation Guide

CRESTRON
REMOTE CONTROL SYSTEMS

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# 3-Card Expansion Cage: CNXCAGE

## Description

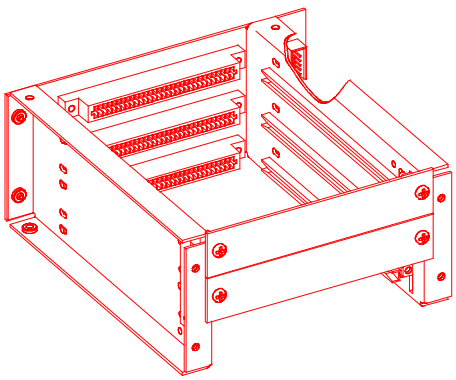
### Functional Description

The CNXCAGE is an optional feature designed specifically for Crestron's CNMSX-AV integrated control system. The field-upgradable unit offers three internal expansion slots to enhance and add versatility to the existing control system.

### Physical Description

The CNXCAGE, shown below, is a box-like unit that fits into a CNMSX-AV. Two blank plates are attached to the CNXCAGE when shipped. Plates must be removed if more than one expansion card is inserted. At the opposite end of the CNXCAGE there are a total of four connectors. Three are within the interior portion of the CNXCAGE; they are used to connect to expansion cards. The fourth connector is used to connect the CNXCAGE to the central processing unit (CPU) in the CNMSX-AV. Card guides to support expansion cards are located within the CNXCAGE on opposing sides. Total weight of the CNXCAGE is approximately 0.64 lbs. (0.29 Kg).

*CNXCAGE Physical View*



# Installation

Items required to install the CNXCAGE are either attached to the unit or already reside on the CNMSX-AV. 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.

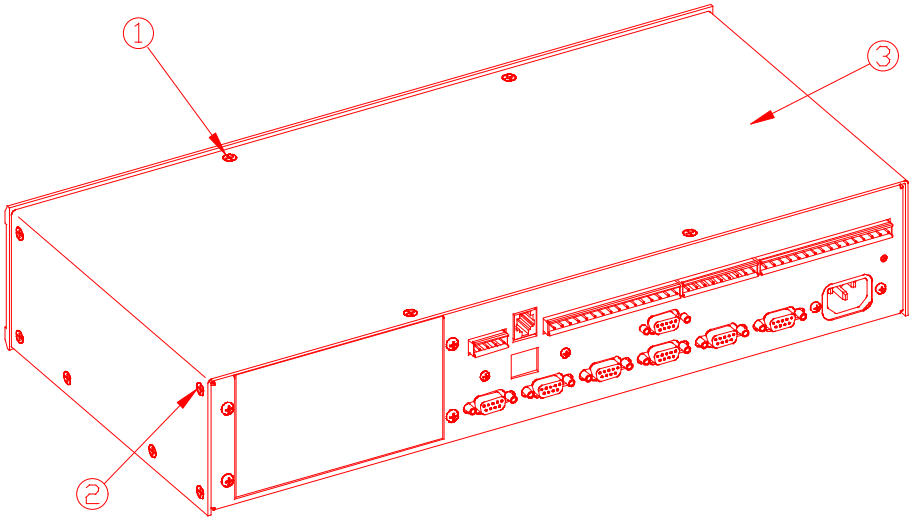
*Items Required to Install the CNXCAGE*

| ITEM # | ITEM | PART NUMBER | QUANTITY |
|---|---|---|---|
| 1 | Screw | #6-32 x 0.25" LG | 4 |
| 2 | Screw | #6-32 x 0.375" LG | 12 |
| 3 | CNMSX-AV Top Cover | Not Applicable | 1 |
| 4 | Screw | #6-32 x 0.375" LG | 4 |
| 5 | CNMSX-AV Cover Plate | Not Applicable | 1 |
| 6 | Screw | #6-32 x 0.375" LG | 2 |
| 7 | Nut | #6-32 | 2 |
| 8 | Washer | #6 | 2 |
| 9 | Cable Assembly | 15743 | 1 |
| 10 | CNXCAGE | ZA11051 | 1 |

**CAUTION:** The CNMSX-AV must be opened to install the CNXCAGE. To prevent electric shock, disconnect the line cord before opening the unit. Observe precautions for handling electrostatic sensitive devices (ESDs).

**NOTE:** It is assumed that the CNMSX-AV rack ear brackets are not attached during this installation procedure.

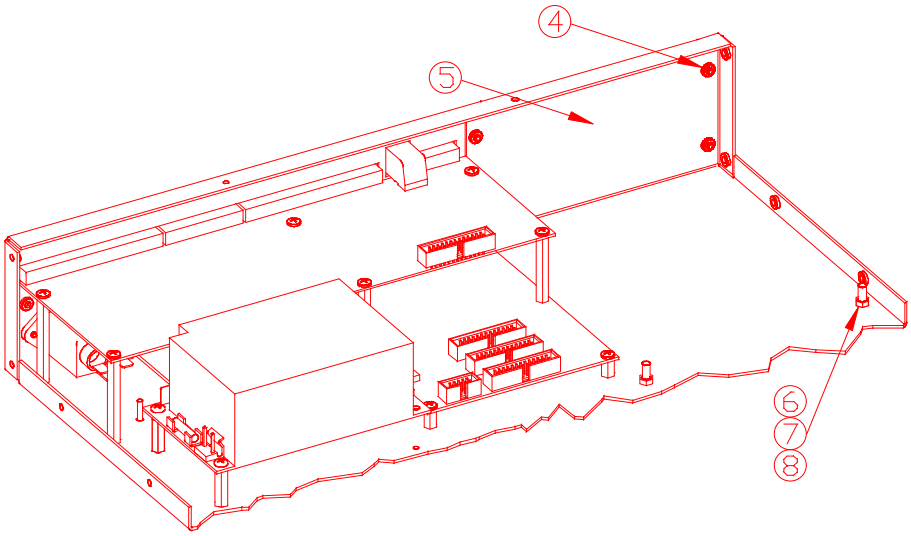
*CNXCAGE Installation (1 of 4)*




1. Place the CNMSX-AV 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 CNMSX-AV. There are 6 screws per side.

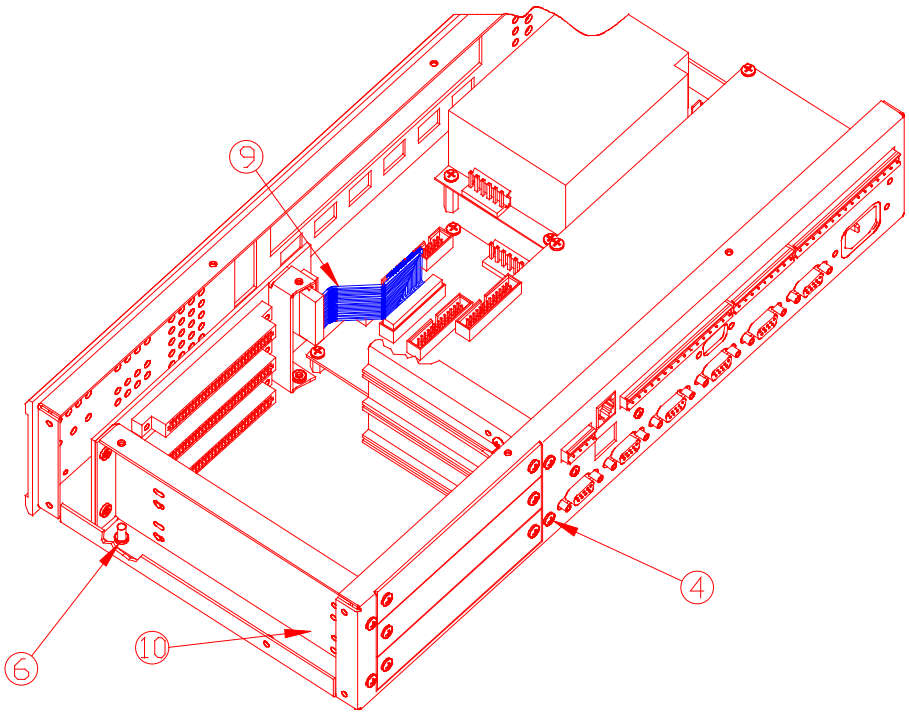
3. Lift and remove CNMSX-AV top cover ③.

*CNXCAGE Installation (2 of 4)*




4. Remove four screws ④ that secure cover plate ⑤ to CNMSX-AV.
5. Remove cover plate ⑤.
6. Turn CNMSX-AV onto its side and remove two screws ⑥, two nuts ⑦, and two washers ⑧ from the underside of the unit.

*CNXCAGE Installation (3 of 4)*

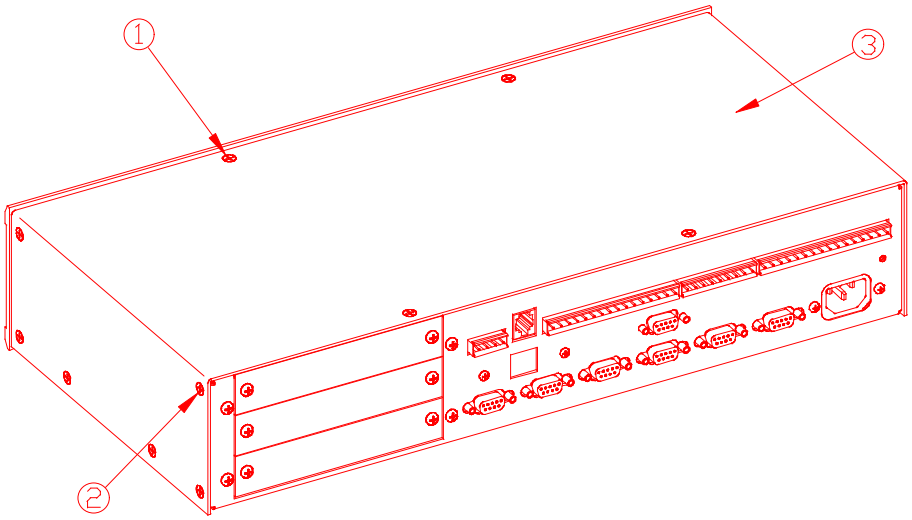



7. Attach the supplied cable assembly ⑨ to the P1 connector on the CNXCAGE ⑩. The cable assembly has been design to fit the

appropriate connector. There is no danger of improperly connecting the CNXCAGE.

8. Reposition the CNMSX-AV right-side-up on a flat surface and insert the CNXCAGE ⑩ with attached cable assembly ⑨ into the CNMSX-AV through the opening at the top and side of the unit.
9. Attach the cable assembly ⑨ to the P3 connector on the CNMSX-AV CPU.
10. Secure the CNXCAGE ⑩ to the CNMSX-AV with four screws ④ and two screws ⑥.

*CNXCAGE Installation (4 of 4)*




11. Secure CNMSX-AV top cover ③ with 12 screws ② and four screws ①.

**NOTE:** Verify that four short screws (6 mm) ① are installed on top and 12 long screws (9 mm) ② are installed on the side.

# Problem Solving

## Troubleshooting

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

*CNXCAGE Troubleshooting*

| TROUBLE | POSSIBLE CAUSE(S) | CORRECTIVE ACTION |
|---|---|---|
| Expansion card inserted into CNMSX-AV is not functioning. | Damaged pin on the CNXCAGE P1 or CNMSX-AV P3 connector. | Follow installation procedures in this guide and inspect connector pins. |
| | Damaged cable assembly. | Follow installation procedures in this guide and inspect cable assembly. |

## Further Inquiries

If after reviewing this Operations & Installation Guide for the CNXCAGE, you cannot locate specific information or have questions, please take advantage of Crestron's award winning technical support 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 +525.574.15.90.

For local support from exclusive Crestron factory-trained personnel call:

- In Australia, call Soundcorp at +613.941.61066.
- 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 Cresnet II products, denoted by a "CN" prefix model number, to be free from manufacturing defects in materials and workmanship for a period of three (3) years from the date of shipment to purchaser. Disk drives and any other moving or rotating mechanical parts are covered for a period of one (1) year. CRESTRON warrants all its other products for a period of one year from the defects mentioned above, excluding touchscreen display components which are covered for 90 days. Incandescent lamps are completely excluded from Crestron's Limited Warranty. 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.

CRESTRON shall not be liable to honor warranty terms 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 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 makes no other warranties nor authorizes any other party to offer any warranty, expressed or implied, including warranties of merchantability for this product. This warranty statement supersedes all previous warranties.

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*Specifications subject to change without notice.*

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