



Description

The DIN-AP3MEX is a Crestron® 3-Series Control System® automation processor that is designed for DIN rail-mounting applications. The device includes a built-in infiNET EX® and ER wireless gateway, high-speed Ethernet, Cresnet® network support, and BACnet network/IP support. DIN rail mounting allows for configuring complete automation systems using the DIN-AP3MEX along with additional Crestron and third-party DIN rail-mountable devices.

Additional Resources

Visit the product page on the Crestron website (www.crestron.com) for additional information and the latest firmware updates. Use a QR reader application on your mobile device to scan the QR image.



Installation

CAUTION: This equipment is intended for indoor use only. Mount the DIN-AP3MEX 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 10% to 90% (noncondensing).

CAUTION: To prevent overheating, do not operate the DIN-AP3MEX in an area that exceeds the environmental temperature range listed above. Consider using forced air ventilation to reduce overheating. Also use caution if installing the control system in a closed or multiunit rack assembly, since the operating ambient temperature of the environment may be greater than the room ambient temperature. Contact with thermal insulating materials on all sides of the unit should be avoided.

NOTES: Observe the following guidelines:

- Install and use the DIN-AP3MEX in accordance with appropriate electrical codes and regulations.
- A licensed electrician must install the DIN-AP3MEX.
- When installing in an enclosure, group high-voltage devices separately from low-voltage devices.

NOTE: Before using the DIN-AP3MEX, ensure that the device is using the latest firmware. Check for the latest firmware for the DIN-AP3MEX at www.crestron.com/firmware. Load the firmware onto the device using Crestron Toolbox™ software.

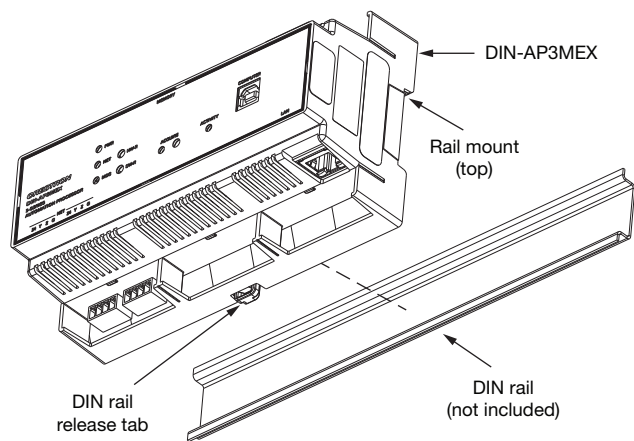
Preparing and Connecting Wires

When making connections, strip the ends of the wires approximately 7/16 in (11 mm). Use care to avoid nicking the conductors. Tighten the connector to 5 in-lb (0.5 to 0.6 Nm). The wire gauge should be 14 to 26 AWG.

Installing the DIN-AP3MEX

Use the DIN-AP3MEX in a well-ventilated area. The venting holes should not be obstructed under any circumstances. The DIN-AP3MEX is designed for installation in a DIN rail. Refer to the following diagram when installing.

Installing the DIN-AP3MEX



Use the following procedure to install the DIN-AP3MEX:

1. Use a flat object (such as a flat-head screwdriver) to pull the DIN rail release tab downward.
2. Place the top of the DIN-AP3MEX's rail mount over the top of the DIN rail.
3. Tilt the bottom of the DIN-AP3MEX toward the DIN rail until it snaps into place.

NOTE: When mounting DIN rail products, use a flat-head screwdriver to pull the DIN rail release tab while snapping the device onto the DIN rail.

To remove the DIN-AP3MEX from the DIN rail, use a small, flat object (such as a flat-head screwdriver) to pull the DIN rail release, and then tilt the bottom of the DIN-AP3MEX away from the DIN rail.

NOTE: Certain third-party DIN cabinets provide space for an informational label between each DIN rail row. Crestron's Engraver software (version 4.0 or later) can generate appropriate labels for all Crestron DIN rail products.

Mounting the Antenna

It is advised that the DIN-AP3MEX's antenna should be located outside of the DIN cabinet (or similar mounting enclosure). Use the Crestron ANT-EXT-10 (sold separately) to mount the antenna outside of the enclosure:

1. Remove the protective dust cover from the connector at the top of the ANT-EXT-10.
2. Attach the connector at the end of the ANT-EXT-10's attached cable to the DIN-AP3MEX's antenna connector.
3. Attach the DIN-AP3MEX's antenna to the connector at the top of the ANT-EXT-10, and then mount the ANT-EXT-10 in an appropriate location outside of the enclosure.

NOTE: For antenna placement and orientation guidelines, refer to the Best Practices for Installation and Setup of Crestron RF Products (Doc. 6689) at www.crestron.com/manuals.

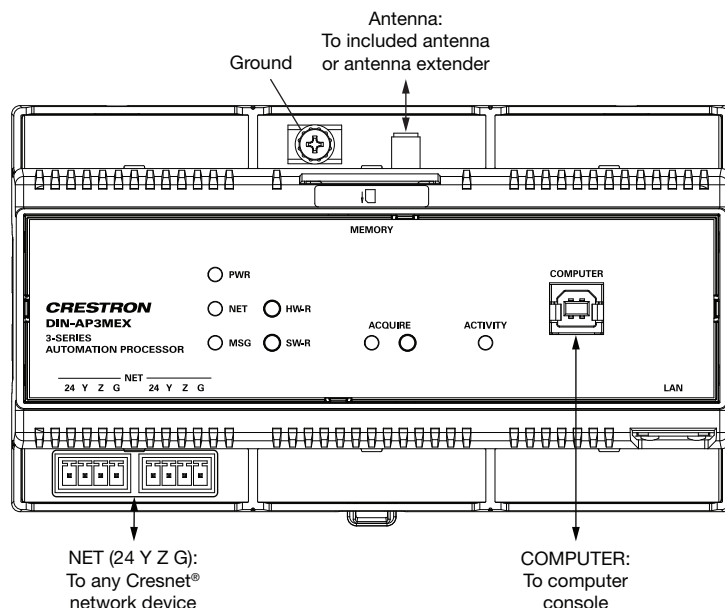
Hardware Hookup

Make any necessary connections to the device, and apply power after all connections have been made.

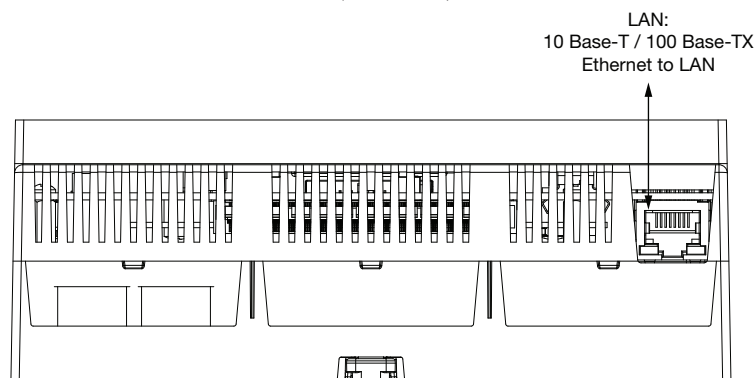
NOTE: When making connections to the DIN-AP3MEX, observe the following points:

- Use Crestron power supplies for Crestron equipment.
- The included cable cannot be extended.

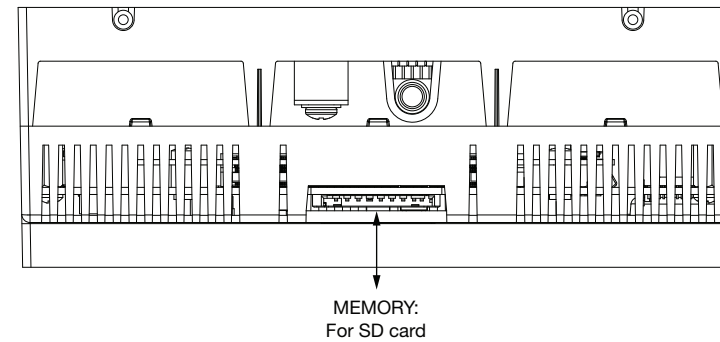
Hardware Connections for the DIN-AP3MEX (Front View)



Hardware Connections for DIN-AP3MEX (Bottom View)



Hardware Connections for DIN-AP3MEX (Top View)



NOTE: Ensure that the unit is properly grounded by connecting the chassis ground lug to an earth ground (building steel).

NOTE: To prevent overheating, do not operate this product in an area that exceeds the environmental range stated in the "Installation" section.

Configure the Control System

The control system can be configured using Crestron Toolbox or the built-in, web-based setup tool.

Crestron Toolbox

Use Crestron Toolbox to establish communication with and to configure the control system. For details, refer to the embedded Crestron Toolbox help file.

Web-Based Setup Tool

1. Use Crestron Toolbox to set the time and the time zone. For details, refer to the embedded Crestron Toolbox help file.
2. Open the Internet Explorer® web browser and enter the IP address of the DIN-AP3MEX. The control system's splash page is displayed.

NOTE: The web-based setup tool is accessible only from Internet Explorer.

NOTE: If a security warning is displayed, click **Install** to continue.

DIN-AP3MEX Splash Page



3. Click **Setup** to display the DIN-AP3MEX setup menu. The DIN-AP3MEX Setup menu displays the IP address, hostname, and MAC address of the device. The screen also allows access to various setup and programming screens.

DIN-AP3MEX Setup Menu



4. From the DIN-AP3MEX's **Setup** menu, click the following options to configure the control system:

- **Ethernet Setup** configures the DIN-AP3MEX's Ethernet settings and displays DHCP, hostname, IP address, subnet mask, default router, domain, and MAC address settings. In the **Ethernet Setup** menu, there are additional options:
 - Click **Advanced Settings** to specify DNS servers, web server settings, and SSL settings.
 - Click **MyCrestron Dynamic DNS** to configure the myCrestron.com Dynamic DNS service.
 - Click **Ethernet Diagnostics** to test the Ethernet communications.
 - Click **Reboot** to reboot the DIN-AP3MEX.
- **Application Setup** selects the programs to be loaded on start-up and the controls that programs are running.
- **Diagnostics** displays information about the connected devices, hardware configuration, and error logs.
- **About** displays firmware information.

Click the back button (⏪) to return to the previous screen.

Assign the RF Channel

Set the RF channel of the DIN-AP3MEX prior to operation. The DIN-AP3MEX can operate on channels 11 through 26. Crestron recommends using RF channel 15 or 20. The default RF channel is 15.

For optimum performance when installing a DIN-AP3MEX in a Wi-Fi® network environment, do not set the RF channel within a Wi-Fi channel band. Refer to the information below when choosing the RF channel in a Wi-Fi environment:

- Gateway channels 11 through 14 are within the Wi-Fi channel 1 band.
- Gateway channel 15 is adjacent to Wi-Fi channels 1 and 6.
- Gateway channels 16 through 19 are within the Wi-Fi channel 6 band.
- Gateway channel 20 is adjacent to Wi-Fi channels 6 and 11.
- Gateway channels 21 through 24 are within the Wi-Fi channel 11 band.
- Gateway channel 25 is adjacent to Wi-Fi channel 11.
- Gateway channel 26 is neither within nor adjacent to any Wi-Fi band.

NOTE: Crestron's RF devices are divided into two categories: infiNET EX devices and Crestron Extended Range (ER) devices. infiNET EX devices automatically set their RF channel assignment to match the gateway's channel, whereas ER devices must have their RF channel manually assigned to match the gateway's channel.

Use Crestron Toolbox software to set the DIN-AP3MEX's RF channel. From the "System Info" window, select **Functions > infiNET EX Gateway** from the menu bar. Refer to the Crestron Toolbox software help file for details.

Acquire Devices to the Control System

Crestron infiNET EX and ER devices can communicate with a DIN-AP3MEX after they have been acquired by the control system's gateway. A device can be acquired to only one gateway. Acquire mode can be activated by using Crestron Toolbox or by pushing the **ACQUIRE** button on the control system's front panel.

NOTE: Use Crestron Toolbox to set the RF channel before starting the acquiring process. The default RF channel is 15. ER devices must be configured to match the channel setting on the gateway.

NOTE: Acquire mode can be activated approximately 15 seconds after power is applied to the DIN-AP3MEX.

NOTE: The DIN-AP3MEX must be placed in Acquire mode before an infiNET EX device is placed into Acquire mode.

To acquire an infiNET EX or ER device via the **ACQUIRE** button on the DIN-AP3MEX, use the following procedure:

1. Press **ACQUIRE** on the DIN-AP3MEX to enter Acquire mode. The Acquire LED lights to indicate that the unit is ready to acquire infiNET EX and ER devices.

NOTE: Acquire mode automatically deactivates after one hour. The timeout period can be changed from Crestron Toolbox.

2. Bring the infiNET EX or ER device within range of the gateway, and then place it in Acquire mode as described in its manual. Once the device enters Acquire mode, it will be acquired within two minutes.
3. Repeat step 2 for each infiNET EX or ER device that needs to be acquired.
4. Press **ACQUIRE** on the DIN-AP3MEX to exit Acquire mode. The Acquire LED turns off.

Troubleshooting

The following table provides corrective action for possible troubleshooting situations. If further assistance is required, please contact a Crestron customer service representative.

DIN-AP3MEX Troubleshooting Table

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
The device does not function.	The device is not communicating with the network.	Use Crestron Toolbox to poll the network. Verify that the network is connected to the device.
	The device is not receiving power from a Crestron power supply.	Use the provided Crestron power supply. Verify that the connections are correct and secure.
	The device is not receiving sufficient power.	Use the Cresnet Power Calculator to help calculate how much power is needed.
The MSG LED illuminates.	There is a hardware or software failure.	Verify that the hardware configuration matches the software configuration. Use Crestron Toolbox to display the error log.
The compilation error RLCMCVT166 or RLCMCVT177 appears.	A poor analog versus serial signal definition exists in the SIMPL Windows program.	Confirm that the signal definition is properly defined in the program.

DIN-AP3MEX Troubleshooting Table (continued)

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
The system locks up.	There are various causes.	Hold down the SW-R button on the control system front panel to bypass the program and to communicate directly with the processor. Refer to "Troubleshooting Communications" in the Crestron 3-Series Control System Reference Guide (Doc. 7150) at www.crestron.com/manuals for more details.
A Cresnet device does not respond.	The device is not wired correctly.	Verify that the Cresnet wiring is correct and secure.
	An improper NET IP was used.	Verify that the device ID matches the NET ID in the program.
There is a loss of functionality due to electrostatic charge.	The device is improperly grounded.	Check that all ground connections have been properly made.
The A/V system device does not respond.	The IRP2 or the serial port is not placed properly.	Verify the placement of the IRP2 (hold the phosphor card under the IRP2 while pressing the button), and tighten serial cables.
	The wrong IR/serial port was used.	Verify that the proper IR/serial port is defined.
	The serial cable is not wired correctly.	Verify that serial cable is wired correctly for RS-232, -422, and -485.
	The device is not receiving sufficient power.	Use the Cresnet Power Calculator to help calculate how much power is needed.

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

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

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

Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions:(1) This device may not cause harmful interference and (2) this device 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

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

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The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed at patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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Specifications subject to change without notice.