

INET-IOEX-RYIO

infiNET EX® Control Module

Installation Guide



Description

The INET-IOEX-RYIO provides a low-voltage relay and digital input control interface for remote devices such as garage door openers, sensors, and motorized screens. It includes two isolated relays and two digital input ports. It communicates with a Crestron® control system via the infiNET EX® wireless network, enabling control and monitoring of the remote equipment without having to run wires through walls and ceilings.

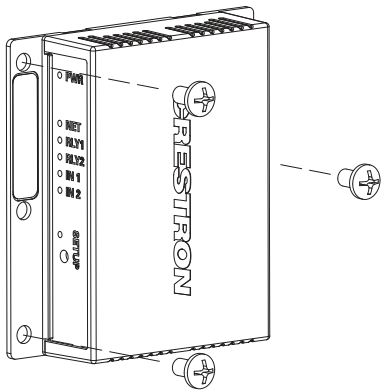
Additional Resources

Visit the product page on the Crestron website (www.crestron.com) or scan the QR code to the right for additional information and the latest firmware updates.



Installation

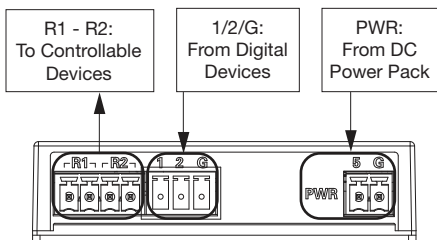
The INET-IOEX-RYIO can be mounted onto any flat surface using three screws (not included). For best results, position the device to avoid interference from nearby RF sources, obstructions, and metal surfaces.



Hardware Hookup

Make the necessary connections as called out in the following illustration.

When making connections to the INET-IOEX-RYIO, use Crestron power supplies for Crestron equipment.



CAUTION: Observe the + and - markings on the power pack leads. Connect the + to the 5 terminal and the - to the G terminal on the INET-IOEX-RYIO.

NOTE: The INET-IOEX-RYIO can also be powered via USB. For example, refer to the TTL-232R-5V-WE at www.mouser.com.

Wireless Communications

The INET-IOEX-RYIO connects to the Crestron network via the infiNET EX communications protocol. Use the procedures outlined below to join or leave an infiNET EX network and to verify communications between the device and the control system.

Joining an infiNET EX Network

Before the INET-IOEX-RYIO can be used, it must first join an infiNET EX network by being acquired by an infiNET EX gateway.

NOTE: A device can be acquired by only one gateway.

1. Put the infiNET EX gateway into Acquire mode from the unit itself or from Crestron Toolbox™, as described in its manual at www.crestron.com/manuals.

NOTE: In an environment where multiple gateways are installed, only one gateway should be in Acquire mode at any time.

2. Place the device into Acquire mode.
 - a. Tap the **SETUP** button three times, and then press and hold it down (tap-tap-tap-press+hold) until the LED on the device blinks once (this can take up to 10 seconds).
 - b. Release the button to start the acquire process. The LED blinks slowly to show that the device is actively scanning the infiNET EX network.
 - The top LED turns on for 5 seconds to show that the device has been successfully acquired by the infiNET EX network.
 - The LED blinks fast to indicate that the device was not successfully acquired by the infiNET EX network. Tap the **SETUP** button to acknowledge failure to acquire the infiNET EX network. Ensure the gateway is in Acquire mode and within range before attempting the acquire process again.
3. Once all devices have been acquired, take the gateway out of Acquire mode. Refer to the gateway's operations guide for details.

Leaving an infiNET EX Network

To leave an infiNET EX network, put the INET-IOEX-RYIO into Acquire mode, as described in "Joining an infiNET EX Network" above, when no gateway is in Acquire mode.

Verifying Communications Status

To check the communications status of the device, tap the **SETUP** button three times, and then press and hold it down (tap-tap-tap-press+hold) for up to 2 seconds. The LED blinks to indicate the communications status. Refer to the following table for details.

LED	COMMUNICATIONS STATUS
Turns on for 5 seconds	Device is communicating with the control system.
Blinks three times	Device is communicating with the gateway but the gateway is not communicating with the control system.
Blinks twice	Device was previously joined to the network but is not communicating with the gateway.
Blinks once	Device is not joined to the network.

As of the date of manufacture, the INET-IOEX-RYIO has been tested and found to comply with specifications for CE marking.



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 when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, 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

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Industrie Canada (IC) Déclaration de conformité

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

To satisfy RF exposure requirements, this device and its antenna must operate with a separation distance of at least 20 centimeters from all persons and must not be collocated in conjunction with any other antenna or transmitter.

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

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

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