

GLA-EXPEX

Crestron Green Light® Wireless Expander for infiNET EX® Networks
Installation Guide



infiNET EX



Description

The GLA-EXPEX is a two-way RF wireless expander designed to extend the range of Crestron® lighting control products in an infiNET EX® network. The GLA-EXPEX is optimized for installation in building systems where a hard-wired expander is necessary. Suitable for installation in plenum airspace, the GLA-EXPEX is built with a metal enclosure that mounts directly to two adjacent four-inch square junction boxes. Additionally, the GLA-EXPEX accepts a range of line voltages from 100 to 277 Volts, which makes it easy to install in almost any location. Up to five GLA-EXPEX devices can be deployed in any infiNET EX network.

GLA-EXPEX Specifications

SPECIFICATION	DETAILS
Power Requirements	100–277 Vac, 50/60 Hz
Environmental	
Temperature	32° to 104 °F (0° to 40 °C)
Humidity	10% to 90% RH (noncondensing)

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.



Important Notes

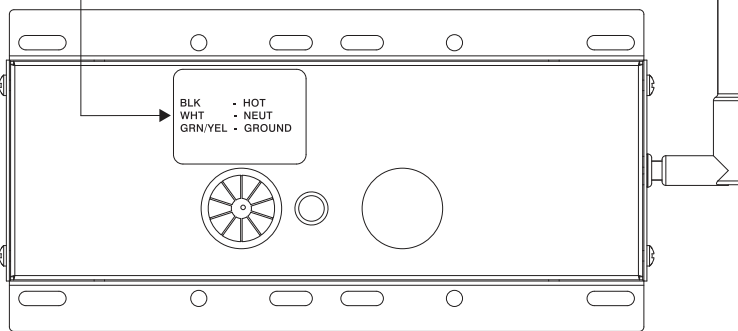
WARNING: To avoid fire, shock, or death, turn off the power at the circuit breaker or fuse and test that the power is off before wiring!

NOTE: Observe the following points:

- Install and use this product in accordance with appropriate electrical codes and regulations.
- A licensed electrician should install this product.

GLA-EXPEX (Back, flying leads not shown)

Feed-through wires from unit exit from this side.



CONNECTIONS	DESCRIPTIONS
HOT	14 AWG Class1 flying lead, black
NEUT	14 AWG Class1 flying lead, white
GROUND	14 AWG Class1 flying lead, green with yellow stripe

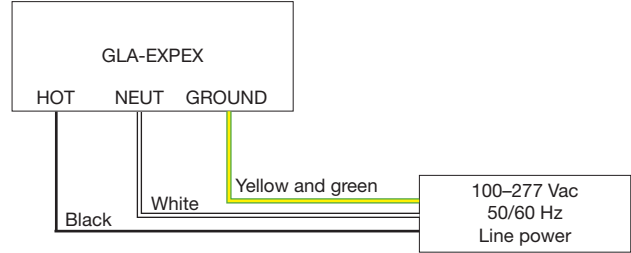
Wiring

WARNING: Turn off power to the GLA-EXPEX before wiring. Wiring with the power on can result in serious personal injury and damage to the device.

CAUTION: Install the GLA-EXPEX with 14 AWG (2.5 mm²) wire that complies with local electrical codes.

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

Typical Wiring Diagram

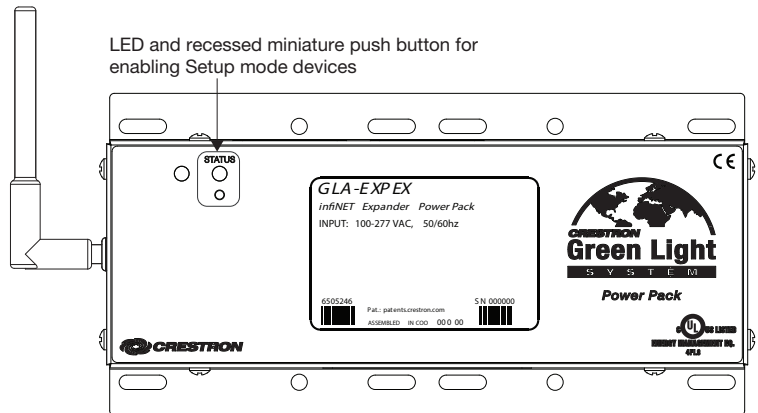


Device Status

The LED on the front of the GLA-EXPEX communicates the operational status of the device.

- The red LED lights when the GLA-EXPEX is not acquired by a gateway or is not communicating with a gateway.
- The red LED also lights while the GLA-EXPEX powers up.
- The green LED lights when the unit is successfully acquired and communicating with a gateway.

GLA-EXPEX (Front)



Wireless Communications

The device 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 a device can be used in a lighting system, it must first join an infiNET EX network. To join an infiNET EX network, the device must be 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. Refer to the gateway's manual at www.crestron.com/manuals for details.

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

2. Put the device into Acquire mode.
 - a. Tap the STATUS button three times and then press and hold it down (tap-tap-tap-press+hold) until the top LED on the device blinks once from amber to red (this can take up to 10 seconds).
 - b. Release the button to start the acquire process. The GLA-EXPEX LED blinks slowly, alternating between red and green, to show that the device is actively scanning the infiNET EX network.
 - The red LED turns on for 5 seconds to show that the device has been successfully acquired by the infiNET EX network.
 - The LED blinks alternately between amber and red to indicate that the device was not successfully acquired by the infiNET EX network. Tap the STATUS button to acknowledge the failure. 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 manual for details.

Leaving an infiNET EX Network

To leave an infiNET EX network, put the device 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 STATUS button three times and then press and hold it down (tap-tap-tap-press+hold) for up to 2 seconds. The LED indicates the communications status. Refer to the following table for details.

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

This product is Listed to applicable UL® Standards and requirements 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

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 no chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter, IC: 5683C-CWD7191, has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Antenna Type: Dipole, Maximum permissible antenna gain: 2.5 dBi, Impedance: 50 Ohms

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.

Le présent émetteur radio, IC: 5683C-CWD7191, a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Type d'antenne: Dipole, Gain admissible maximal: 2.5 dBi, Impédance: 50 Ohms

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 or operating 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.

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

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This document was written by the Technical Publications department at Crestron.

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Crestron Electronics, Inc.
15 Volvo Drive Rockleigh, NJ 07647
Tel: 888.CRESTRON
Fax: 201.767.7576
www.crestron.com

Installation Guide - DOC. 7212D
(2036184)
12.16

Specifications subject to
change without notice.