

# LightGrid Mesh Node

## Outdoor Wireless Control System



### BEFORE YOU BEGIN

Read these instructions completely and carefully.

#### FCC Statements:

**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.

To satisfy FCC/ISED RF exposure requirements a separation distance of 20 cm or more must be maintained between the antenna of this device and persons during operation. Operation at closer than 20 cm is not permitted.

#### CAN ICES-005 (B)/NMB-005 (B)

This device complies with part 15 of the FCC rules and with Innovation, Science and Economic Development Canada's license-exempt RSS standards. Operation is subject to the following two conditions:

- This device may not cause interference
- This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme à la partie 15 des règles de la FCC et aux flux RSS exempts de licence d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes :

- Cet appareil ne doit pas provoquer d'interférences
- Cet appareil doit accepter toutes les interférences, y compris les interférences pouvant entraîner un fonctionnement indésirable de l'appareil.

Pour être conforme aux limites d'exposition aux ondes RF des normes FCC/ISED, une distance de séparation d'au moins 20 cm doit être maintenue entre l'antenne de cet appareil et toute personne pendant son opération. Mettre en opération cet appareil à une distance plus rapprochée que 20 cm n'est pas permis.



#### ⚠ WARNING

##### RISK OF ELECTRIC SHOCK

Disconnect power before servicing or installing product.

##### RISK OF INJURY OR DAMAGE

Unit will fall if not installed properly. Follow installation instructions. Install in accordance with National Electric Code and local codes.

#### ⚠ CAUTION

##### RISK OF INJURY

Wear safety glasses and gloves during installation and servicing.

##### RISK OF CHANGES OR MODIFICATIONS

The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## Product Certifications

#### Mesh node:

FCC ID: 2AS3F-90003

ISED ID: 25008 -90003

#### Cellular Node Contains either:

FCC ID: XMR201707BG96

ISED ID: 10224A-201709BG96

or

FCC ID: XMR202007BG95M6

ISED ID: 10224A-2020BG95M6



PHOTOCONTROLLER  
E350111

## Before Installation

- **Carefully unpack unit.** Inspect for defects before installing.
- **Check electrical parameters.** Ensure that the fixture operating wattage is below 1000W, and the voltage at the pole is within the allowed range of the Controller (range is listed on the sticker on the bottom of the controller). Using controller outside these parameters will void its warranty.
- **Verify that power to the luminaire is ON 24/7 constant power.** The LightGrid mesh will not operate properly when operating on switched power from a master timer or photocell.
- **Confirm that the controller is the correct network ID** for the system it is intended to join. This will be on the sticker on the bottom of the node, labeled as Net A, Net B, Net C ... this must match the other controllers in the area or the node will not join the network.
- **Install the gateways first.** The startup and formation of the network is faster and smoother process when the Gateways are installed before starting to install Controllers.
- **Plan an installation route.** Generally it is best to install controllers nearest to the gateways first, and then proceed outwards.

## How to Install the LightGrid 2.x Controller

(The GESEM65-3 module is pictured below, however the instructions are applicable across the entire Select TX™ Gen3 family of modules.)

- ① **Check nearby poles.** At the pole to be installed, confirm there is either a Gateway or another active LightGrid Controller within 1000Ft. This is important, to make sure the node has a connection path for communications and is within its RF range limits.
- ② **Ensure Cellular Service is Accessible:** Prior to installing cellular nodes verify with LightGrid support team that cellular service is available at the location, providing latitude and longitude coordinates.
- ③ **Plug in the node:** Orient controller so large blade aligns with large slot in receptacle. Plug in, then twist clockwise until it is fully locked in place (Figure A).
- ④ **Confirm the fixture dims during the first 60 seconds.** When the controller is first plugged in, it will turn the luminaire ON and will then dim the luminaire. Before leaving the pole, you must visually confirm that you see the brightness of the luminaire drop, in order to confirm that dimming is working properly. Note: applies only to dimmable fixtures with an ANSI 5 Pin or 7 Pin socket. Fixtures with a standard 3 Pin socket will not be dimmable.
- ⑤ **Orient the Controller towards North:** Lift up on the controller, which will also lift the receptacle with it. While lifting, rotate the controller and socket until the word North on the top of the controller is directed toward true North. Then lower the assembly back into place (Figure B).
- ⑥ **Make sure red and yellow indicator LEDs are blinking.** This confirms the controller is looking for a network to join.

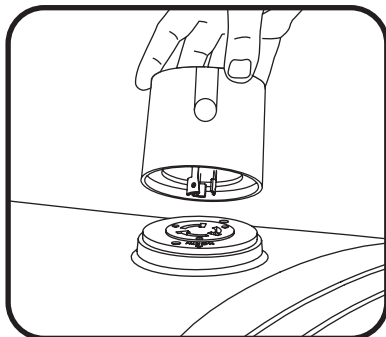


Figure A

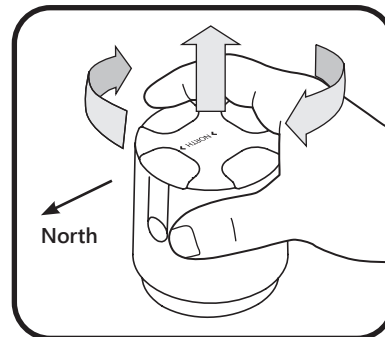


Figure B

## Troubleshooting

Symptom	Solution
The luminaire is not turning ON.	Check that the pole has power. The relay inside the Controller is Normally Closed, so the luminaire will always turn ON when the controller is first plugged in.
I did not see the dimming sequence in the first 60 seconds.	Unplug the controller, and try plugging it in again. If you still do not see the sequence, check that the dimming wires of the fixture (Grey & Violet) are properly connected to the dimming wires of the ANSI socket. If you confirm the wiring is connected and the controller still does not dim the luminaire, try another new controller.

## Questions

- Email: [lightgridsupport@gecurrent.com](mailto:lightgridsupport@gecurrent.com)
- Leave a Voicemail: 1-877-843-5590