iLUMIN

EG2-NA Ethernet Gateway

COOPER
Lighting Solutions

Contents

⚡ WARNING ⚡

WARNING HAZARDOUS VOLTAGES, DISCONNECT FROM SUPPLY BEFORE REMOVING COVERS

NO USER SERVICEABLE PARTS INSIDE SERVICE BY QUALIFIED PERSONNEL ONLY

⚠ SAFETY INSTRUCTIONS ⚠

IMPORTANT SAFEGUARDS

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

The EG2-NA is built and tested to strict safety regulations. By following the steps listed below and elsewhere within this guide, you can ensure safe installation and operation of these controller units.

- The EG2-NA must be installed only by a qualified electrician

- The installation must comply with the appropriate electrical codes and regulations in force in your area.

- The EG2-NA is designed for indoor installation and use only.

- Ensure that all wiring used conforms fully to local specifications and is sufficiently rated for the installation.

- All new wiring must be fully verified before applying power.

- The high voltage supply should be fed to the EG2-NA via an external isolation breaker with sufficient capacity for the planned installation.

- Ensure that the supply is fully isolated at an external breaker before removing the chassis covers. Test that power has been removed before starting to handle conductors.

- Ensure that high voltage and low voltage wiring remains separate.

SAVE THESE INSTRUCTIONS

Introduction

The Ethernet Gateway provides a connection between an iLumin lighting control network and an Ethernet Local Area Network, either through an Ethernet switch or wireless router.

The EG2-NA acts as a host for the iLumin series of remote applications including iOS (iPhone/iPod Touch/iPad & Android OS devices). Coupling the EG2-NA to a Wi-Fi network enables secure scene control, visual feedback and modification from your hand held device. Once configured, the EG2-NA automatically loads room and scene information to the connected hand held device.

In addition to its handheld device capability, the EG2-NA houses internal webserver pages that allow for basic scene control functions. These internal pages are accessed through an internet browser and are password protected for security.

The EG2-NA also facilitates the commissioning of the iLumin system, allowing our factory trained technicians to use the EG2-NA connection to configure the iLumin system using iCANsoft on a LAN or Wi-Fi enabled PC or via the internet rather than by connecting directly into the iLumin network.

Specification

- Unit requires 120-240 VAC 50/60 Hz 0.45A 1Ø Maximum
- iCAN network connection
- Ethernet connection is fully transformer isolated
- Ambient temperature range 32°F to 104°F (0°C to 40°C)
- Humidity 20% to 90% non-condensing
- Configuration and sequence memory
- Field upgradable FLASH program memory
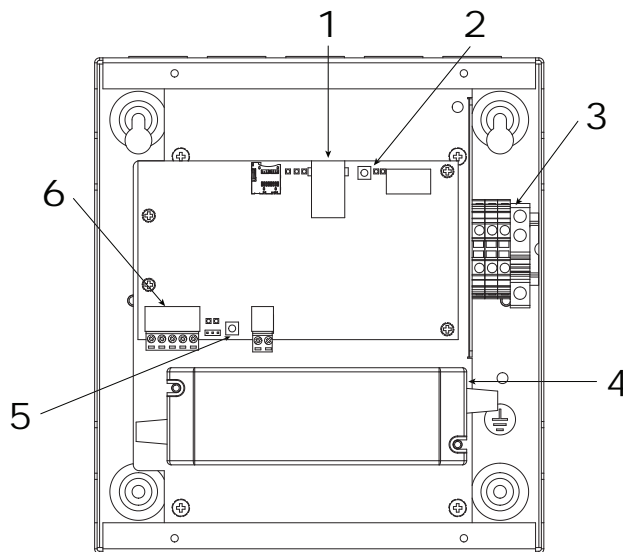- Internal +15 VDC, 2A power supply

Dimensions

8.66" (220 mm)
3.54" (90 mm)
9.45" (240 mm)
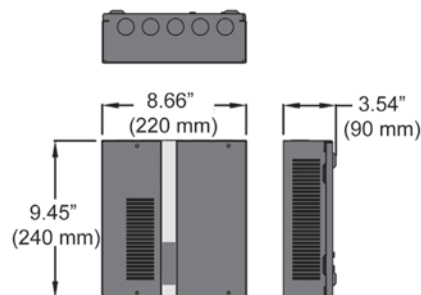
Weight
- Packed: 5.7 lbs. (2.6 kg)
- Unpacked: 5.3 lbs. (2.4 kg)

Product Overview

1. Ethernet Connection
2. Reset Button
3. Main Supply Terminal
4. Power Supply
5. CAN ID Button
6. Block iCAN Network Connector with a green (power) and yellow (network activity) LED

Mounting

Location and spacing

The EG2-NA should be installed in a dry ventilated location, where ambient conditions are maintained within the requirements of the unit.

The unit has ventilation slots on the sides to allow convection cooling and in no circumstances should these be blocked.

Allow 2″ (50mm) above and below the unit if trunking with a depth greater than 2″ (50mm) is used.

Ambient atmosphere requirements

- Temperature: 32°F to 104°F (0°C to +40°C)
- Humidity: 20% to 90%, non-condensing

Mounting Holes

The unit is provided with four 0.25″ (6.35mm) diameter fixing holes for wall mounting. The mounting holes can be accessed by undoing the four screws on the front cover and removing it.

Supply Wiring

Connecting the Supply

This unit requires a 120-240 VAC single phase supply (live and neutral) with 0.45 A capability.

A terminal block is used to connect the incoming feed to the internal power supply

Control Wiring

iCAN Network

A removable 5 position terminal block is provided for the connection of iCAN network cables. If the EG2-NA is located in the middle of the network, incoming and outgoing cables will terminate within the same connector.

Termination OFF

Termination ON

0V (Black)

CAN-L (Blue)

SHIELD (Gray)

CAN-H (White)

+12V (Red)
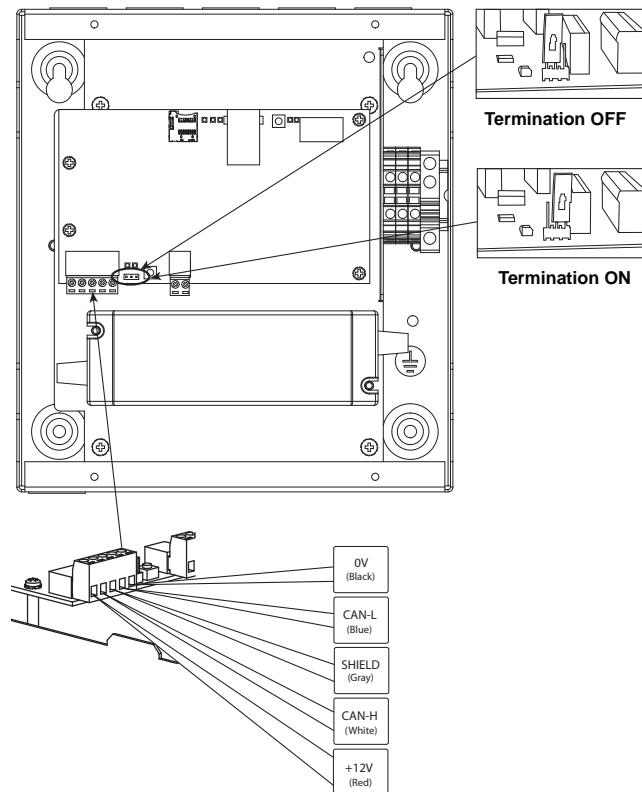
Wire Gauge for Supply Terminals

The live, neutral and earth ground power connections are made to the terminal block provided for main power connection. Recommended cable size for live, neutral, and earth is 26 AWG - 10 AWG.

Earth (Green/Yellow)
Neutral (Blue)
Live (Gray)
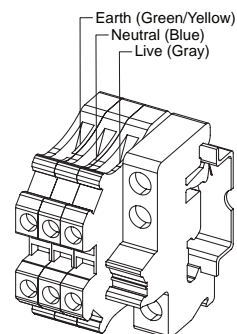
The EG-2-NA has in-built network termination. If the EG-2-NA is at the end of the network, ensure the CAN TERM jumper is fitted in the Termination ON position.

iCAN devices are 'daisy-chained' on the network. Spurs from the Network are not permitted and will result in communications problems. Devices on an iCAN network can be wired in any order. Termination is required at both ends of the network.
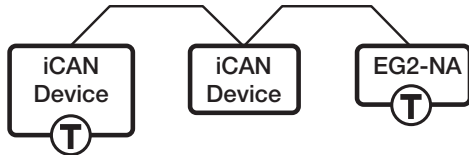
T - Indicates where a termination is required.

iCAN Connectors

- Cable type: Cooper Lighting Solutions LC or Belden 1502R or 1502P

- Maximum cable length: 1000 ft. (305 m) *

- Devices per segment: 100 (without bridge or repeater)

* A maximum segment distance of 3200 ft. (1000 m) is possible if an additional 12V power supply and bridge/repeater is used.

Setup Instructions

Ethernet Network

Connect the provided RJ45 (568B) jack to an Ethernet Switch or Wireless Router.
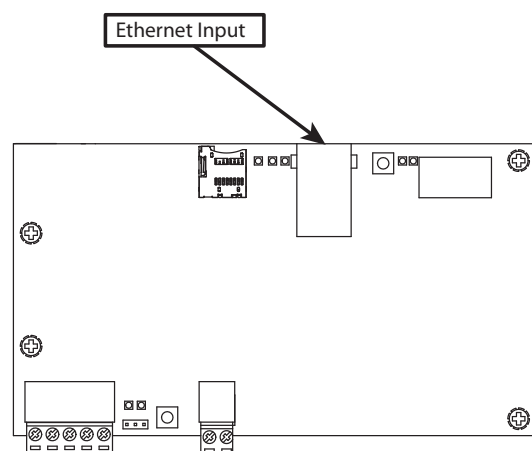
Configuration

iCAN Device Number

The EG2-NA is supplied with a iCANnet Device number with Segment number 255 and a node number in the range 1-255. Both Segment and Node number can be changed using iCANsoft.

Factory Default IP Settings

- IP Address: 192.168.0.100

- Mask: 255.255.255.0

- Default Gateway: 192.168.0.1

- DHCP: Off

Note: The EG2-NA default settings are to use a fixed IP address of 192.168.0.100. Any device used to communicate with the EG2-NA will need to be located within the 192.168.0.x subnet unless IP Address settings are changed.

Power Up

The EG2-NA takes approximately 60 seconds to be ready for use once power is applied. Wait for the Green CAN LED to flash slowly. The Green Power LED will double flash continuously while EG2-NA is on. If Ethernet is connected the Link and Data LEDs will indicate successful connection.

Setting the IP Address

The factory set IP Address can be changed using iCANsoft software either through a direct PC Node connection through the iCANnet or directly into the Ethernet port of the EG2-NA.

PC Node Method

Connect a computer running iCANsoft to the iCAN network using a Cooper Lighting Solutions PC Node. Search the network and load the EG2-NA into iCANsoft.
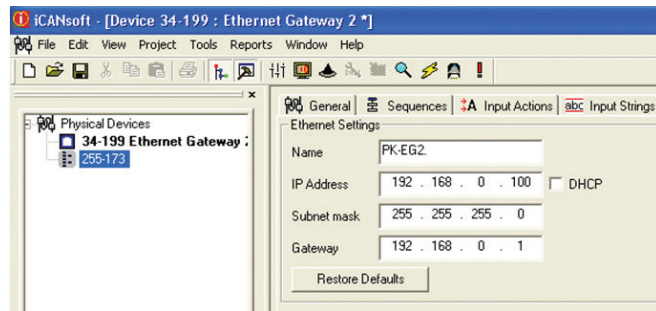
Open the EG2-NA device and select the Ethernet tab. Type in the desired settings. Select OK or Apply to downoad the changes to the EG2-NA.

To restore settings back to default, select the 'Restore Settings' button. Select OK or Apply to download the changes to the EG2-NA.

Ethernet Port Method

The EG2-NA is supplied from the factory without DHCP enabled and with a factory default IP address assigned. In order to communicate to the EG2-NA using the Ethernet port, the PC being used must be configured on the same subnet as the default IP address. For details of setting the IP address of your computer consult information online specific to your Operating System.

If the EG2-NA you are configuring is at the factory default settings, the following settings are suggested when assigning a static IP address to your computer:

- IP Address: 192.168.0.99
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.0.1

Once you have configured your PC's IP address, connect the EG2-NA directly to the PC. It may be necessary to use a crossover cable, however, most current computers are able to connect directly to another Ethernet device using a standard Ethernet cable.

iCANsoft will be used for the configuration process. Open iCANsoft, then select from the Toolbar Tools>Options>Network. Select the Ethernet Gateway option and change the IP Address to 192.168.0.100. Ensure that the 'Use Password' check box is ticked and the default password Cooper Lighting Solutions123 is entered (case sensitive).

Select OK to confirm.

Search the network and load the EG2-NA into iCANsoft. Follow the steps outlined in the PC Node Method section to configure the desired IP Address for the EG2-NA.

Once the IP Address settings have been applied, initialize the new settings in the EG2-NA device by pressing the reset button next to the Ethernet conneciton or by disconnecting and reapplying power.

Once configuration is complete, if you will be using iCANsoft through the ethernet connection, you will need to update the IP Address in the Toolbar Tools>Options>Network section to match the settings you have assigned to the unit. This screen will also allow you to re-select the option for PC Node to allow for direct PC Node access for this database.
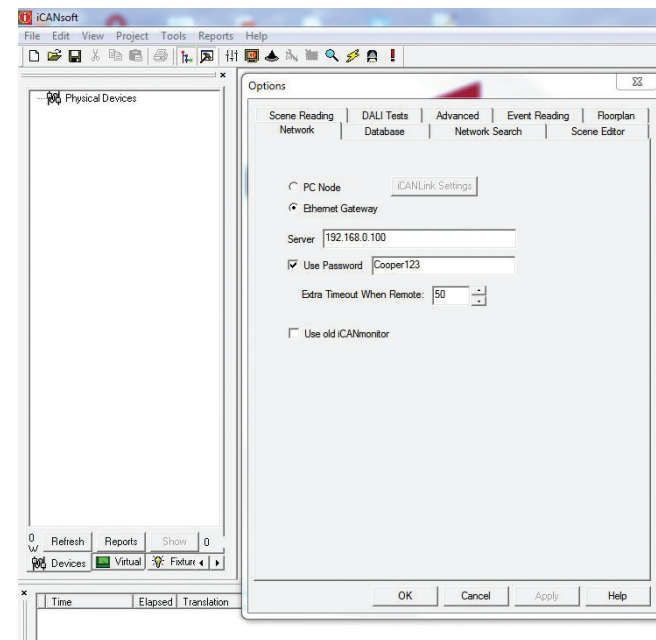
Reset to Factory Defaults

Factory defaults may be reset by the following procedure:

- Remove power from the board.
- Press the CAN ID button and reapply power. Keep the button pressed until the CAN LED flashes then stays on. At this point the Ethernet settings will have been restored to defaults.
- After setting to factory defaults, the IP address of the device will revert to 192.168.0.100

WARRANTIES AND LIMITATION OF LIABILITY

Please refer to www.cooperlighting.com under the Legal section for our terms and conditions.

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