# **Installation Guide**

# **EG-2** Ethernet Gateway





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## Introduction

The Ethernet Gateway provides a connection between an iCAN network and an Ethernet LAN. This allows a user to control and configure the iCAN system using iCANsoft on a LAN network PC or via the internet rather than by connecting directly into iCANnet™. Where a wireless LAN is in place (or by connecting a wireless router into the Ethernet Gateway) the user can access the network with a Wi-Fi enabled PC running iCANsoft. The Ethernet Gateway is also the host for the iCAN series of remote applications including iOS (iPhone®/ iPod touch®/ iPad®) and a webserver front end where applications are downloaded separately. Coupling the EG2 to a WIFI network enables scene control, visual feedback and modification from your hand held device.

The Ethernet Gateway also facilitates connection to the internet when used with iCANsoft, a firewall, ISP and a Ethernet switch, this then enables remote connection for programming & obtaining diagnostics of the lighting control system.

The built in astronomical timeclock feature enables preprogrammed timed events for your lighting system.

## Installation

#### Location

The EG2 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 its sides to allow convection cooling and in no circumstances should these be blocked.

#### Mounting

Always mount in well ventilated location Allow 50mm (2") above and below the unit if trunking with a depth greater than 50mm (2") is used.

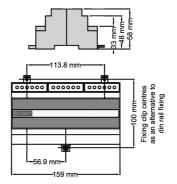
## Ambient atmosphere requirements

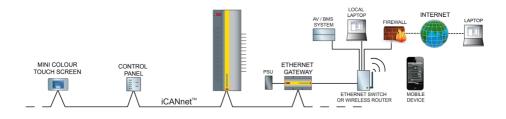
Temperature: +2°C to +40°C (+36°F to +104°F) Humidity: 5% to 95% non-condensing IP Rating: IP20

#### Weight:

0.25Kg (0.55 lbs)

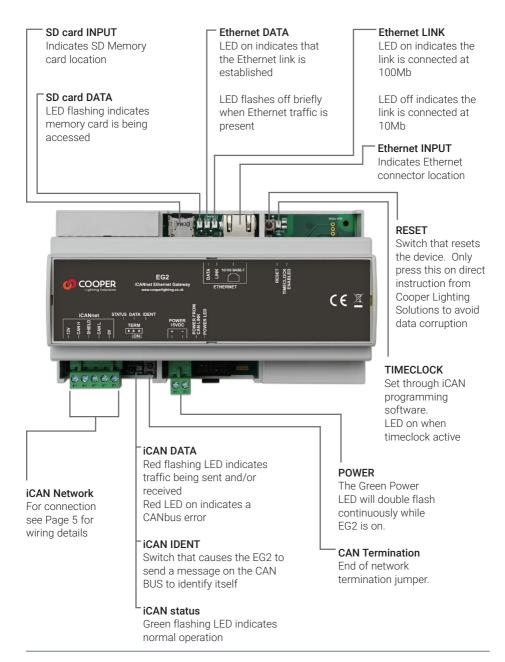
#### **Dimensions**





## **Product Overview**

The label on the enclosure identifies the position of the status LEDS, switches & connectors.



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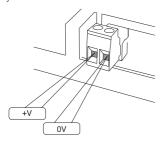
## Connecting the Supply

Power is to be supplied to the EG2 via an external regulated power supply in the range of 9-36VDC 0.3A

Cooper Lighting Solutions are able to provide a recommended power supply if required.

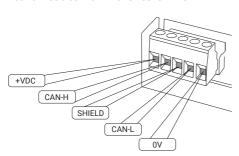
Catalogue Number: PSU-15-DIN (15VDC 0.67A)

A removable 2 way connector screw terminal plug is provided for the connection of the power supply. Terminal sizes: 2 x 1.5mm<sup>2</sup>



## **iCAN Network Connections**

A removable 5 way connector screw terminal plug is provided for the connection of iCAN network cables. Terminal sizes: 5 x 1.5mm<sup>2</sup>



Function	iCANnet Cable Colours
0V	Black
CAN L	Blue
Shield	Silver
CAN H	White
+VDC	Red

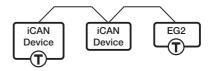
Maximum segment distance: 500m (1640 ft) Devices per segment: 100 (without bridge or repeater)

Consult Cooper Lighting Solutions for information on alternative cable types.

IMPORTANT NOTE: Connecting a mains potential cable to the iCAN Network terminals is likley to damage the unit and others connected, and invalidate warranty.

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.

## **Network Termination**



T - Indicates where a termination is required.

The EG-2 has built-in network termination. If the EG-2 is at the end of the network, ensure the CAN TERMINATION jumper is fitted in the Termination On position.





## Set Up Instructions

#### iCAN Network

Connect the EG2 to the iCAN network using the network connector. If the EG2 is at the end of a network set the Term link to ON otherwise set to the OFF position

#### Ethernet

Ethernet connection by RJ45 (568B). This should be connected to either an Ethernet Switch or to a Wireless Router.

## Configuration

#### iCAN Device Number

The EG2 is supplied with a iCAN Network Device number with Segment number 255 and a node number in the range 1-255. Both Segment and Node number can be changed using iCAN programming software.

## Factory Default IP settings

IP Address: 192.168.0.100 Subnet mask: 255.255.255.0 Gateway: 192.168.0.254

DHCP: Off

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

#### Power up

The EG2 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 is on.

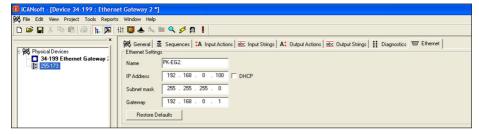
If Ethernet is connected the Link and Data LEDs will indicate successful connection.

## Setting the IP address

The factory set IP Address can be changed using the iCAN network connection or using a computer connected directly to the Ethernet port.

#### Changing with iCAN Network

Connect to the iCAN network a computer running iCAN programming software using an iCAN PC Node. Search the network and load the EG2 into the software.



Go the Ethernet tab. Either the Default settings can be applied or other settings can be applied. Select OK or Apply to download the changes to the EG2.

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## Change IP address via the Ethernet port

EG2 is supplied from the factory without DHCP enabled; therefore, it is necessary that the Ethernet port of the PC is set to the correct IP Address and Subnet Mask. For details of setting the IP address of your computer consult information on line. This will depend on your Operating System.

## Example

IP Address: 192.168.0.99 Subnet mask: 255.255.255.0 Gateway: 192.168.0.254

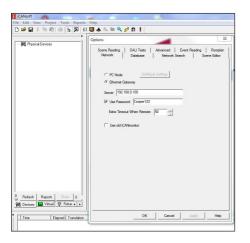
To connect the EG2 directly to the PC, it may be necessary to use a Crossover Cable, however, most modern computers are able to connect directly to another Ethernet device without a crossover cable.

The Ethernet port of your computer will need to configured to a compatible IP address.

Open iCAN programming software. It will be required to set the software to communicate using the Ethernet Port.

This is done by selecting from the Tool bar Tools>Options>Network.

Select Ethernet Gateway and change the IP address to 192.168.0.100. Also ensure the 'Use Password' check box is ticked. The detault password is Cooper123 (Case sentitive).



Select OK to confirm and set the address.

The software can now be used to configure any items connected on the network.

Set the IP address of the EG2 as described in section opposte. The new IP address will become valid when the EG2 is reset or power to the device is removed and re-instated.

## 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

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## **Technical Support**

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All products manufactured by Cooper Lighting Solutions are warranted to be free from defects in material and workmanship and shall conform to and perform in accordance with Seller's written specifications. For detailed warranty information, contact Cooper Lighting Solutions.

This warranty will be limited to the repair or replacement, at Seller's discretion, of any such goods found to be defective, upon their authorized return to Seller. This limited warranty does not apply if the goods have been damaged by accident, abuse, misuse, modification or misapplication, by damage during shipment or by improper service.

There are no warranties, which extend beyond the hereinabove-limited warranty, INCLUDING. BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS.

No employee, agent, dealer, or other person is authorised to give any warranties on behalf of the Seller or to assume for the Seller any other liability in connection with any of its goods except in writing and signed by the Seller. The Seller makes no representation that the goods comply with any present or future federal, state or local regulation or ordinance. Compliance is the Buyer's responsibility.

The use of the Seller's goods should be in accordance with the provision of the National Electrical Code, UL and/or other industry or military standards that are pertinent to the particular end use. Installation or use not in accordance with these codes and standards could be hazardous.









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