

mymesh

by Chess

Installation instruction



Mymesh Ethernet Gateway

Mymesh Building Light Control

The Mymesh Ethernet gateway is a product in the Chess Wise program for building light control. The Ethernet gateway automatically forms a wireless-sensor-and-control network with the surrounding BLC products and connects this network with a back office.

Safety ⚠

- Installation should be performed by qualified personnel only.
- The electrical installation must be in conformance with the national legislation and relevant standards.
- Do not use the Ethernet gateway if it is damaged.
- The Ethernet gateway must be installed on a dry location.

Application

Refer to the Ethernet gateway product sheet (see Chess Wise.eu) for the environmental conditions.

Location

Select a location for the Ethernet gateway in the direct neighborhood of other BLC products. Avoid closed metal cases.

Configuration

Factory default settings of the Ethernet gateway are shown below. In most cases these settings are suitable and no configuration is needed. At the host side a proxy server will route the connection to the required Edge server.

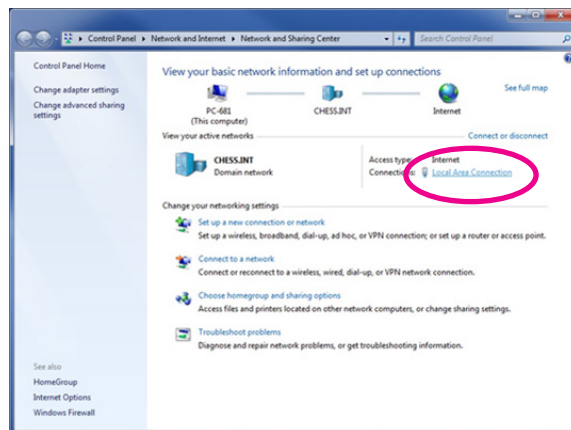
IP addressing	: DHCP
Firmware update url	: u1.edge.chess-wise.eu
Firmware update port number	: 80
Host url	: gw.edge.chess-wise.eu
Host port number	: 8080

Configuration

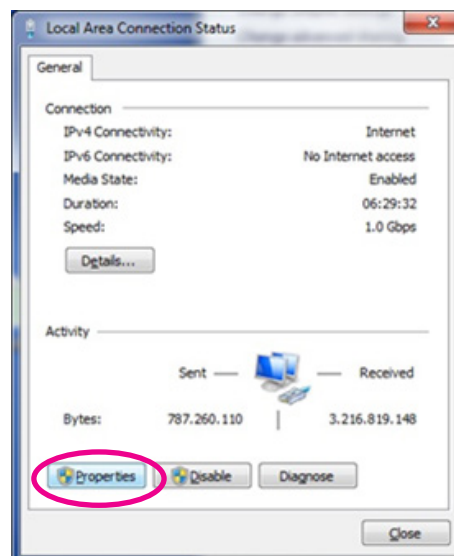
Follow the instructions below only in case the default settings need to be changed. An MS Windows computer is used for the description, but a similar approach can be used for other operating systems. Contact Chess Wise for further support if needed.

1. Disconnect all network connections of the computer (remove UTP cables and disable WiFi connections)
2. Connect the computer and the Ethernet gateway by means of an UTP cable (use a cross cable if needed).
3. Connect the mains power to the Ethernet gateway. The (right) power LED will blink.
4. Open in Control panel the Network and Sharing Center

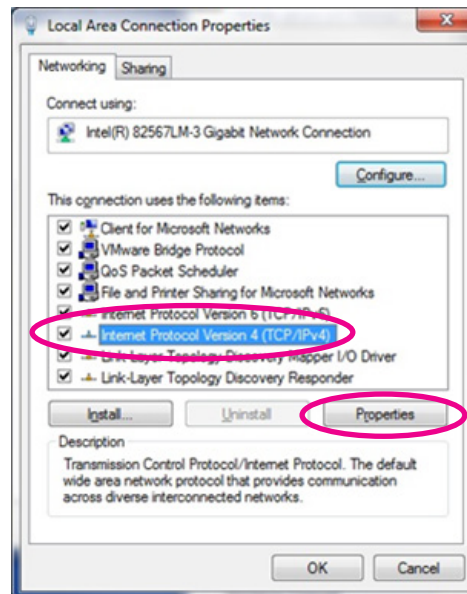
5. Open the **Local Area Connection** of the Ethernet gateway connection



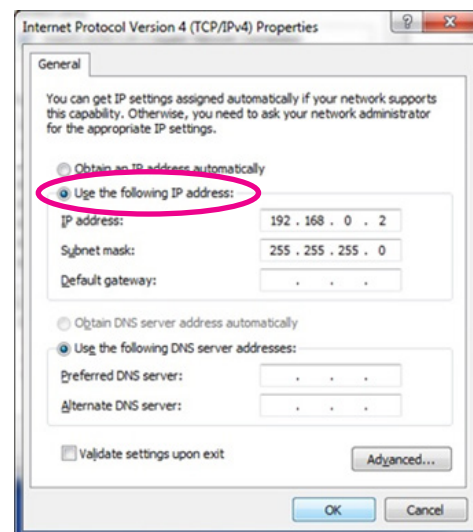
6. Open Properties



7. Select Internet Protocol Version 4 (TCP/IPv4) and properties



8. Remember the current network settings for restoring later on!!
9. Select the option for a fixed IP address and add the following:
- IP address: 192.168.0.2
 - Subnet mask: 255.255.255.0
10. Confirm the changes and close all configuration screens.
11. Open a web browser with url 192.168.0.1 (while the (left) network LED is off and the (right) power/status LED is on).
12. Restart the gateway if needed (the gateway will only wait for a connection with a web browser for 30 sec).
13. Following page will appear:



14. Select the IP connection mode: **DHPC** or **static**. In most cases **DCHP** is used. Only when no dynamic IP addressing is used static should be configured. For static refer to step **19**.
15. Check the **Firmware hostname** (u1.edge.chess-wise.eu) and **port** number (80). Only change these settings after consultation with Chess.
16. Check the Back office hostname to (gw.edge.chess-wise.eu) and port number (8080). Only change these settings after consultation with Chess.
17. Leave **keep alive** active.
18. Store the changes with **Save**. Proceed at step 27.
19. Following page will appear after selection of **static**.

Firmware version V1.0.028
 Build at Api 18 2019 10:06:23
 Device id F855F9A082AACE15
 MAC-Address 00:20:92:FF25:1C

Configurations

Mode:

Firmware:
 port

Back office:
 port

keep alive

Firmware version V1.0.028
 Build at Api 18 2019 10:06:23
 Device id F855F9A082AACE15
 MAC-Address 00:20:92:FF25:1C

Configurations

20. Enter the **local IP** address and **subnet mask** of the Ethernet gateway.
21. Enter the router IP address at **Gateway**.
22. Enter the address of a DNS server at **DNS**. This can be a local DNS server, an ISP's DNS server or a public DNS server (e.g. 8.8.8.8, Google public DNS server).
23. Check the **Firmware hostname** (u1.edge.chess-wise.eu) and port number (80). Only change these settings after consultation with Chess.
24. Check the Back office hostname to (gw.edge.chess-wise.eu) and **port** number (8080). Only change these settings after consultation with Chess.
25. Leave **keep alive** active.
26. Store the changes with **Save**.
27. Remove the UTP cable between the Ethernet gateway and computer.
28. Restore the original network settings of the computer. See step 4 to 8.

Mode:

Local IP:

Sub net mask:

Gateway:

DNS:

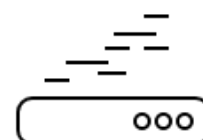
Firmware:
 port

Back office:
 port

keep alive

Installation

1. Mount the Ethernet gateway at the selected location and connect the UTP and power cable.
2. Open the iPad commission app and search for the Ethernet gateway in the device list.
3. Commission the Ethernet gateway in a room of the building. Reset the Ethernet gateway in the commission app to restart connection setup if needed.
4. After restart, the (left) host connection LED should be off and the (right) power/status LED should be on for 30 seconds. During this interval the gateway is accessible for configuration with a local computer.
5. Next the gateway will check for new IP firmware at the Chess firmware server. When this is the case, the gateway will automatically download and install it. This will take a number of seconds. During software update the (left) host connection LED will be on and the (right) power LED will blink quickly.
6. Afterwards the gateway will try to setup a connection with the host computer. The (left) host connection LED will be on and the (right) power/status LED will blink slowly. As soon as the host connection is established the power/status LED will be on.
7. The (center) Mymesh LED will be on when a surrounding Mymesh network is detected.
8. Refer to the section status LEDs for detailed connection status indications.



Problems

Suggestion for trouble shooting:

Host connection not established	Check the UTP cable Check the Ethernet gateway configuration settings Check accessibility of host computer Check firewall settings
Host connection broken	Check firewall timeout settings. Should be more than 5 min.
Mymesh connection not established	Check (using the iPad commission app) that the Ethernet gateway has been commissioned in a room of the building.

Status LEDs

Three green LEDs at the front indicate the Ethernet gateway status.



Power/status (see table below)



Mymesh network detection



Host connection (see table below)

The table below details the LED indications during connection setup.

		Gateway status
Off	Off	Power off. Check power cable
Off	Quick blink	No Ethernet detected. Check the UTP cable
Off	On	Awaiting configuration update (30 sec). During this time the configuration page can be opened with a browser.
Off	Slow blink	No DHCP or no DNS query result. On site network or gateway static IP configuration issue.
Quick blink	Quick blink	DHCP conflict. Remove and insert network cable or power cycle Ethernet gateway.
On	Quick blink	Awaiting firmware update connection or installing new IP firmware.
On	Slow blink	Awaiting Edge server connection
On	On	Connected to Edge server

Usage

The Ethernet gateway will connect the BLC network to the related Edge server.

Compliance



This product complies with the European directives and relevant standards for low voltage, EMC, RED, REACH and RoHS. The Ethernet gateway contains a 2.4 Ghz radio. The applied frequency of the radio is within the band 2.401 – 2.483 GHz and the maximum transmit power is +4 dBm.

Hereby, Chess Wise declares that the radio equipment type Ethernet gateway is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at chess-wise.eu/downloads.

Repair

Do not open this product. In case of failure the Ethernet gateway must be replaced.



Recycling

Do not dispose this product as household waste, but bring it to an appropriate collection point for recycling.