

Ethernet Interface SetUp with LightSet 8.xx

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Setting the IP Address

To quickly debug the unit, connect a single host computer and one or more units with Ethernet interface to a multi-port hub or switch.

Power all Ethernet units on this network.

Install the LightSet™ software and launch the program.

Under the “Communications” tab, select “Ethernet”.

Under the “Function Tab” select “Change IP Address”.

Click “Open UDP Port”

In the “This Computer” window you should now see the IP address of the current host computer. To exercise the units on this simple debug computer network, You will need to set each unit’s IP address to have the same first three numbers as this IP address. The fourth number must be different for each unit on this network.

To set the individual IP addresses, click the “Get IP” button.

In the window below the “Done” button, a list of all units on the network will be displayed. For each unit, a single line will identify the current IP address assigned to the unit, along with its permanent MAC address. The MAC address is a unique and permanent address that identifies this specific unit, and may also be found on the unit, printed near the Ethernet port.

You will need to change the IP address for each unit such that the first three hex numbers match that of the network, and the fourth hex number is unique for each unit (and different than the host computer).

To do this, select the IP address of the first unit in the list to the right of the “Change IP” button. When you select this unit, the three windows above should provide the “Current IP address”, the “MAC address”, and the “Change To address”.

To change the IP address, enter the new IP address into the “Change To address” window. Then click the “Change IP” button. You will then receive the message “Changing...Please Wait”. After about 10 seconds the screen should update, and all windows should now be updated with the new IP address.

Repeat the above process for each unit on the network. Once completed, click “Close UDP Port” and then “Done”. You may want to write down the IP addresses for each unit before proceeding to the next step.

To test the ports, click on the “Communications” tab and then select “Ethernet”.

A pop-up window will now allow you to enter the IP addresses that you wish to control with this simple GUI. Enter the first IP address in the window and then click “Add”. The IP address should now be visible in the list below with a select bubble in front of it. Once you have entered all IP addresses, select “OK” and you should see a list of the IP addresses for each of the units.

To control a specific unit, click the bubble in front of its IP address, and then click on the “Say Hello” button. If the unit is communicating correctly, you should see the following message in the text box below:

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You may now control the intensity or SSR function of the unit using the simple buttons on the GUI.

Quick Start Using HyperTerminal

The units may also be debugged more thoroughly using HyperTerminal, using either the Ethernet or RS-232 communication port.

To set up the RS-232 interface, enter the following parameters under ‘Properties’:

- Baud Rate: 115200
- Data Bits: 8 bit, ASCII based
- Parity: None
- Stop Bit: 1
- Flow Control: None

To set up the Ethernet port, enter the following parameters under “Properties”:

- IP Address: (matches the unit that you wish to control)
- Port: 10001
- Connect Using: TCP/IP (Winsock)

Once communication is established, use the ASCII commands and queries documented in the particular manual for the unit that that you wish to communicate.