



MICROSCAN

NL-220/NL-220F Communications Quick Start Guide

Overview

The NL220 (F) controllers communicate via an on-board web server as a user interface to set the required parameters to operate current Omron Microscan lighting. The instructions below show you how to acquire the **network address** of your NL-220 and start utilizing your controller.

There are two means to accomplish acquiring the network addr.

- (1) **Configuration program:** Download and install the **NL Configuration Program** that will communicate with your controller and obtain the network address.
- (2) **Pushbutton Method:** Follow the instructions below to obtain the address using three push buttons on the controller.

Assuming that 24-48 Vdc is connected to the NL220, connect network cable to RJ45 connector. (see section 5.1 of NL-200 Series Controller User Manual for power connection)

Acquire Network Address DHCP

DHCP (dynamic host configuration protocol)

The NL220 acquires its IP addr, subnet mask and gateway addr from a DHCP server.

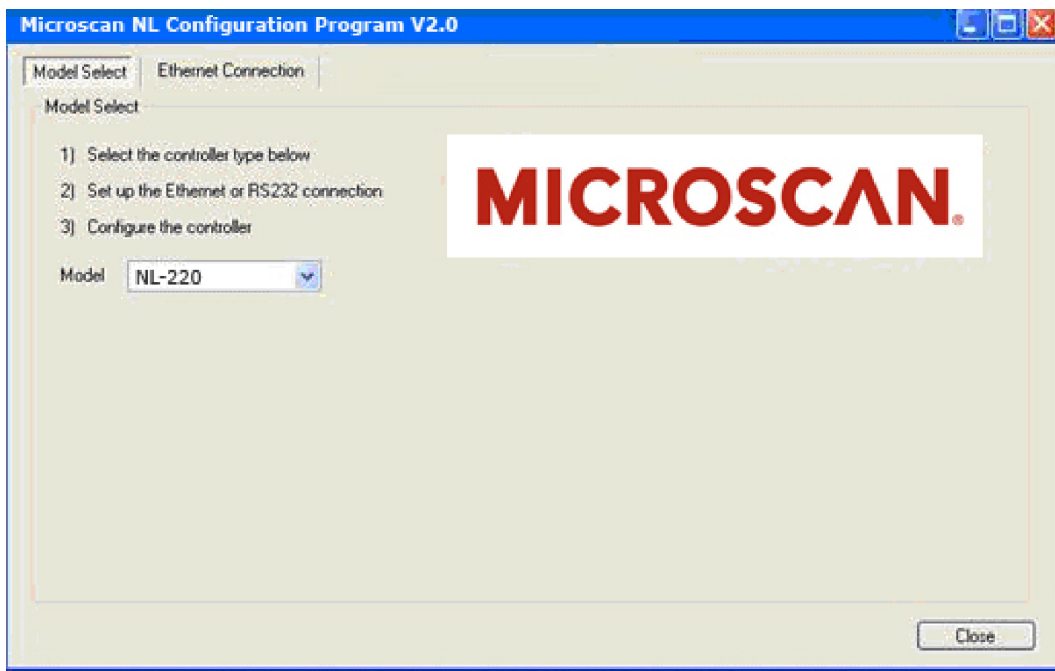
The PC on the network that you will communicate with your NL220 will have its Internet Protocol (TCP/IP) properties set to “Obtain an IP address automatically”.

The NL220 will have the middle and bottom bars of the left 7 segment display alternately flashing.

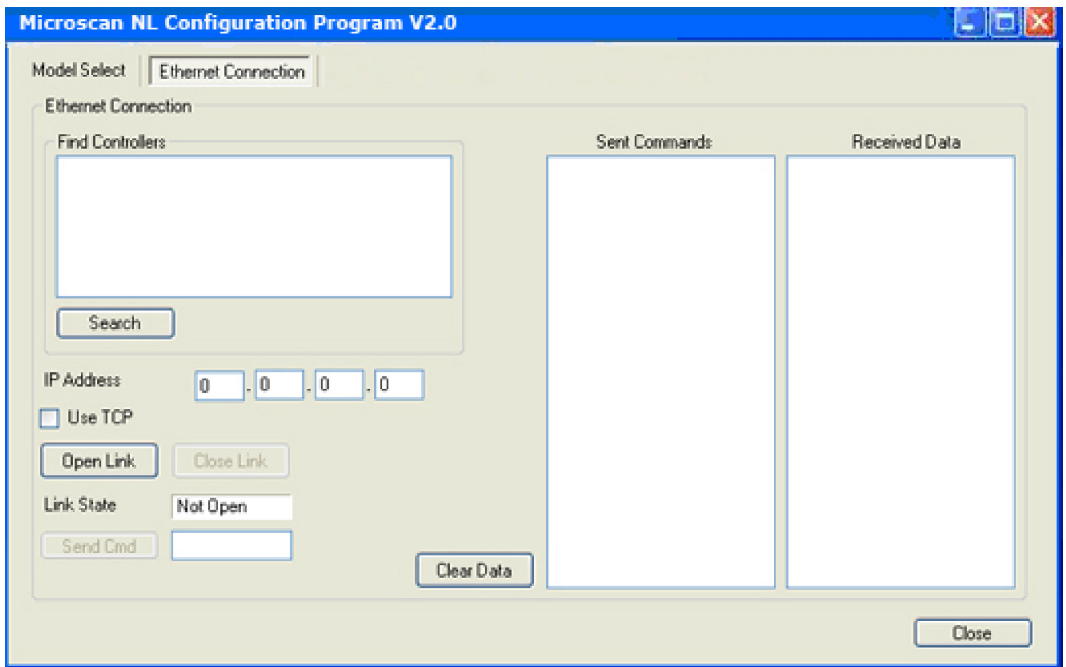
CONFIGURATION PROGRAM

Install and run Omron Microscan NL Configuration program.

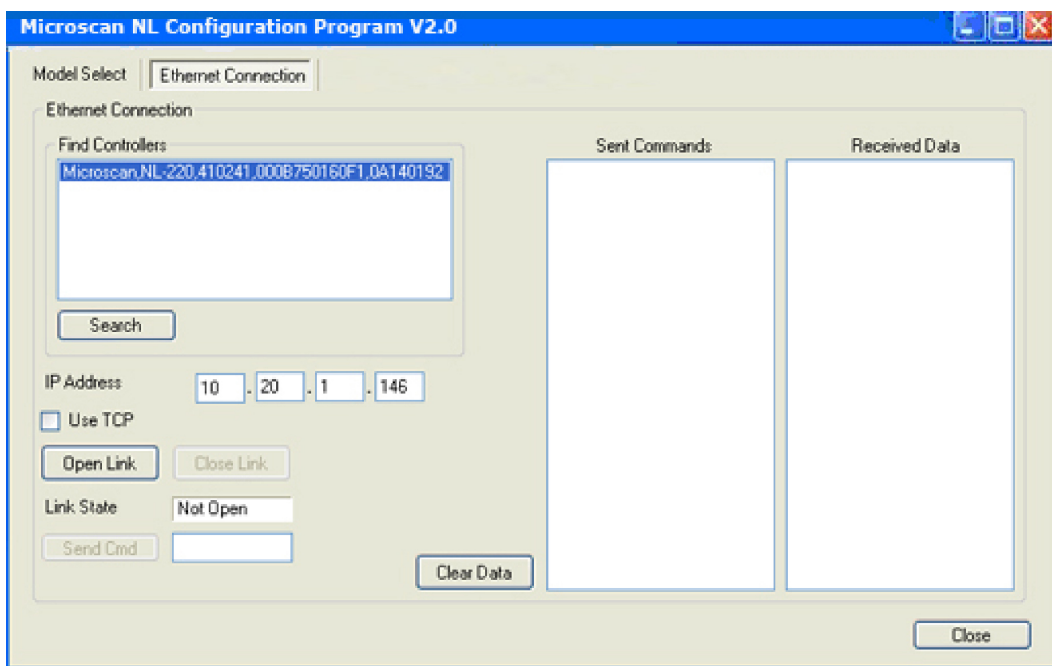
NOTE: Upon executing this program, you may be prompted to select the network adaptor to utilize. This case will arise if you are tied to multiple network adaptors. Select your adaptor and proceed.



NL Configuration program opening page.
Click on Ethernet Connection.



Ethernet Connection
Click Search



Ethernet Connection
Click Search

After clicking Search, click on **Microscan.NL-220.410241.000B750160F1.0A140192**

The address will appear in the IP Address area as above.

Now, open your PC Internet browser and type the network address of the NL220 at the URL address bar and hit enter.

The NL220 Main Page will appear on your screen. You are now ready to program your NL220. (see section 10 of NL-200 Series Controller User Manual)

PUSHBUTTON METHOD

The names of the pushbuttons are “SEL”, “UP Arrow” and “DOWN Arrow”.

Action (Push Button on NL220)	Reaction (7 segment display readout)
Press “SEL”	“CH1”
Press “Up Arrow”	“CH2”
Press “Up Arrow” again	“EtH
Press “SEL”	“F1P”
Press “SEL”	“IP1”
Press “SEL”	10 (this is the first number of the 4 part network address) 111.222.333.444
Press “SEL”	“IP2”
Press “SEL”	20 (the second number)
Press “SEL”	“IP3”
Press “SEL”	150 (the third number)
Press “SEL”	“IP4”
Press “SEL”	22 (the fourth number)
Press “SEL”	Sb1
Press “SEL”	255 (this is the 1st subnet mask number. You do not need the subnet mask or gateway mask numbers for addressing your NL220. Simply hit “SEL” several times until “END” appears on the 7 segment display.

At this point you have obtained the allocated network address that your DHCP server has assigned to the NL220. **10.20.150.22 Note this addr.**

Acquire Network Address DHCP - Pushbutton Method

The NL220 is now in “F1P” mode. Fixed internet address mode.

In order to reset back to DHCP mode:

Press “SEL”	“CH1”
Press “Up Arrow”	“CH2”
Press “Up Arrow” again	“EtH
Press “SEL”	“F1P”
Press “Up Arrow” until “dHc” appears	“IP1”
Press “SEL”	“dHc”
Press “SEL”	“END”

You are now back in DHCP mode.

Now, open your PC Internet browser and type the network address of the NL220 at the URL address bar and hit enter.

The NL220 Main Page will appear on your screen. You are now ready to program your NL220. (see section 10 of NL-200 Series Controller User Manual)

Acquire Network Address FIP

FIP (fixed internet address)

You may desire to communicate with your NL220 on a private network (using a PC dedicated to only communicating with your NL220(s)).

A crossover network cable is needed. (depending on the age of your PC, you may not require a crossover cable. Newer network interfaces automatically detect the polarity of the signals over the network)

You can find out what FIP address is being used by a PC at any time by:

- Go to Control Panel
- Select Network Connections
- Right click on Local Area Connection. Select Status
- Select the Support tab. The IP address is displayed. Please note!

When using a fixed IP address, you must ensure that you use an IP address that is not being used by any other device on the network. It is usual to keep the first three numbers of the IP address the same as other devices and to change only the last number. For example, if you have a network consisting of a PC (IP address 192.168.1.35) and two NL200s, you might give them addresses 192.168.1.201 and 192.168.1.202.

Acquire Network Address FIP

You must change the IP address in your NL220. The action is similar to reading the allocated address. We will use this example: **192.168.1.201**

Action (Push Button on NL220)	Reaction (7 segment display readout)
Press "SEL"	"CH1"
Press "Up Arrow"	"CH2"
Press "Up Arrow" again	"EtH"
Press "SEL"	"F1P"
Press "SEL"	"IP1"
Press "SEL"	192 (this is the first number of the 4 part network address) 111.222.333.444
Now, increment the address with the "Up Arrow" button until your first number appears.	
Press "SEL"	"IP2"
Press "SEL"	168 (the second number)
Now, increment the address with the "Up Arrow" button until your 2nd number appears.	
Press "SEL"	"IP3"
Press "SEL"	1 (the third number)
Now, increment the address with the "Up Arrow" button until your 3rd number appears.	
Press "SEL"	"IP4"
Press "SEL"	201 (the fourth number)
Now, increment the address with the "Up Arrow" button until your 4th number appears.	

Simply hit "SEL" several times until "END" appears on the 7 segment display.

Now, open your PC Internet browser and type the network address of the NL220 at the URL address bar and hit enter.

The NL220 Main Page will appear on your screen. You are now ready to program your NL220. (see section 10 of NL-200 Series Controller User Manual)