Configuring the IP address of the ETHER IO24 TCP RANGE

There are a number of ways that you can configure the fixed IP Address of the Ether IO24 TCP Range. The two different methods are outlined below either one can be used to configure the fixed IP address of the unit. They are:

- Method 1 (Using a Fixed IP on the PC with either Cross over cable or switch/hub)
- Method 2 (Using a DHCP server)

Method 1 (Using a Fixed IP on the PC with either Cross over cable or connection with a switch/hub)

This method requires a direct connection to the Ether IO24 TCP either via a cross over cable or connection through a switch/hub. The user might need to change their IP address and subnet mask so that the PC is within the same subnet as the Ether IO24 TCP's configuration jumper IP addresses.

1.   Remove power from the Ether IO24 TCP so that it is not powered.
2.   Remove all jumpers from the Ether IO24 TCP.
3.   Now place a jumper on either J3 or J4.

   Note:
   Placing the jumper on J3 will configure the IP address of the Ether IO24 TCP to 10.10.10.10 and communication will be through port 2424. Placing the jumper on J3 will configure the IP address of the Ether IO24 TCP to 192.168.1.10 and communication will be through port 2424.

4.   Plug in the network cable or crossover cable so that the Ether IO24 TCP is connected to the PC. Apply power to the unit.

5.   Open a web browser and type into the address bar 10.10.10.10 or 192.168.1.10 depending on which jumper was placed and press enter. Or you can run the Stand-Alone Java Configuration Utility (Java Applet) this utility is run directly from a web browser also. A security warning may appear in the browser asking if you want to run the program, accept and continue to run the utility. When using the stand alone utility, units will need to be discovered and selected from the list before continuing.

6.   The unit may not be able to be configured if the IP address of the PC is not within the same subnet mask as the Ether IO24. As the UDP packets will not reach the destination. If both IPs are within the same subnet skip to step 9.

7.   To check the IP address of the PC, a program called ipconfig will
       need to be run. This program can be run in the command prompt window
       by going to either Start>Programs>Accessories>Command prompt or
       Start>Run and type cmd or command. Type in ipconfig and press enter,
       the IP address and Subnet mask that is currently being used will be
   shown. This is shown below
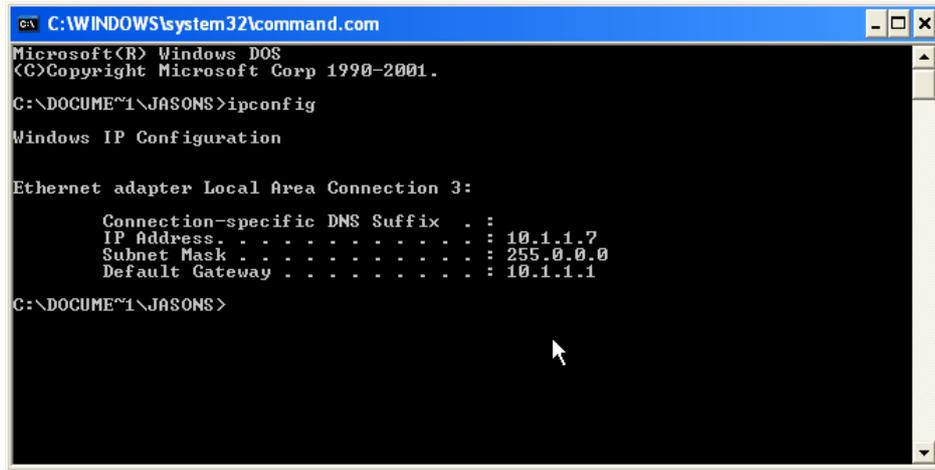
       If the IP address of the PC and Ether IO24 falls within the same
       subnet mask then the fixed IP address can be programmed into the
       unit this is shown in step 10.

       If the address doesn't fall within the same subnet mask the IP
       address of the PC will need to be changed this is shown in step 9.

8.   To change the IP address of the PC.
       Right click on My network places and select properties this will
       bring up the Network connections window.
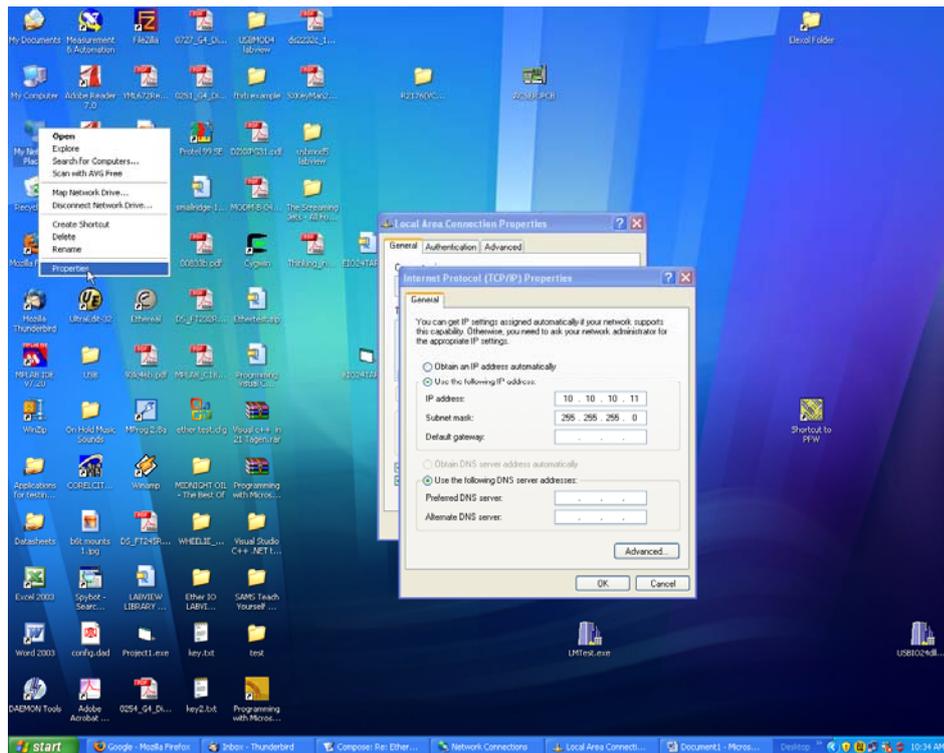
Right click on the Local Area Connection icon and go to properties. This will bring up the Local Area Connection properties window.
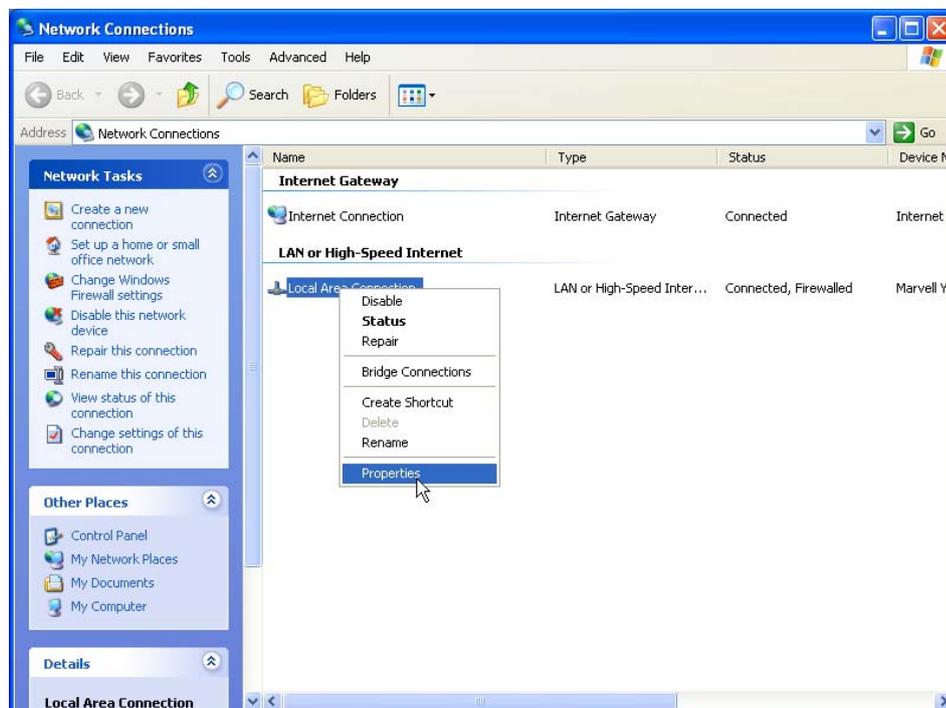
When the Local Area Connection Properties window opens up. Scroll down to Internet Protocol and click the properties button. This will bring up a new window which will display the Internet Protocol (TCP/IP) Properties.
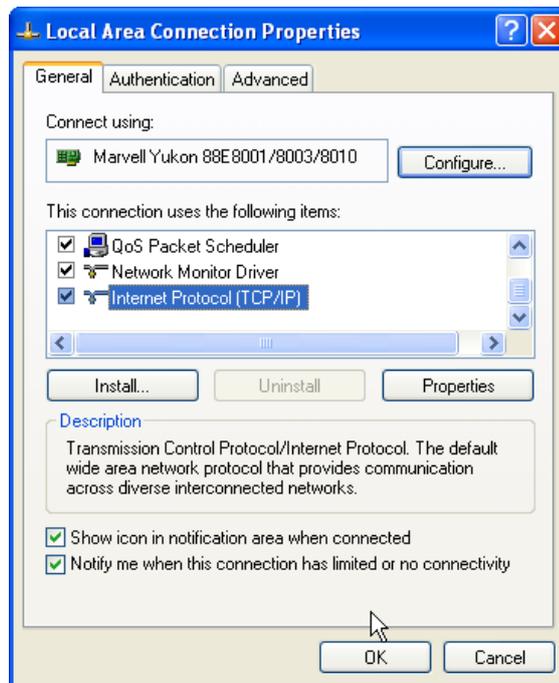

What you need to do is set an IP address and subnet mask that is will allow the default IP address of the Ether IO24 to be within the same subnet mask as the PC, so that the test and programming utility can be used to program the unit with a fixed IP address.

Below shows the PC being configured to use an IP address of 10.10.10.11 and a subnet mask of 255.255.255.0 when jumper 3 is placed, this will allow the test utility to run and find the Ether IO24 with IP address of 10.10.10.10
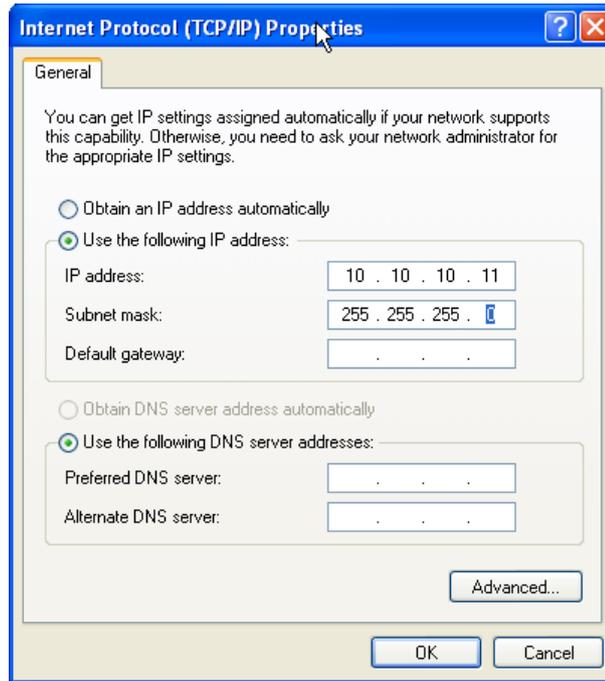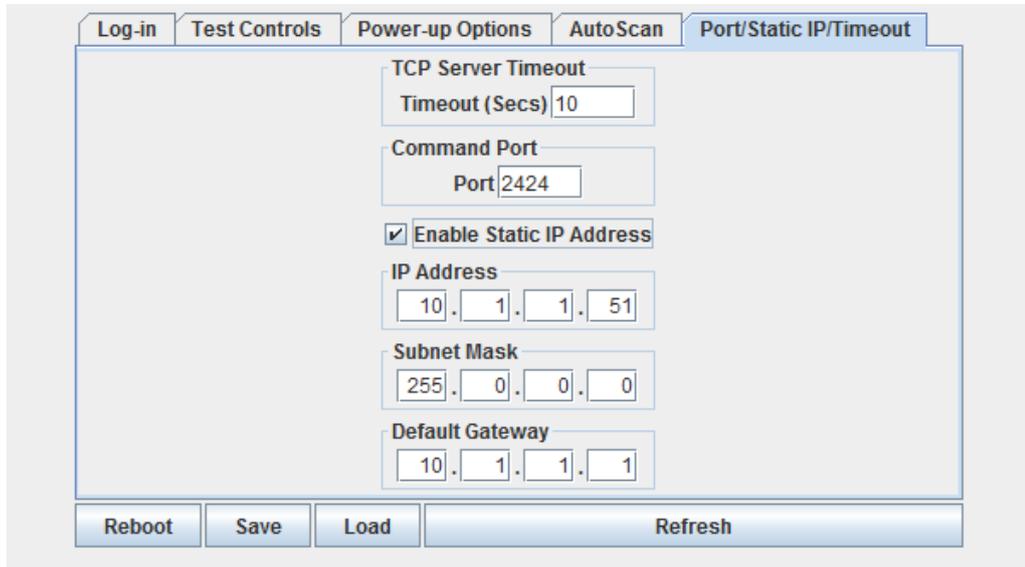
Similarly the PC can be configured to use and IP address of 192.168.1.11 and a subnet mask of 255.255.255.0 for when jumper 4 is being used.

9.   To program the fixed IP address into the Ether IO24 unit. Once a unit is selected on the Stand Alone Utility or the Java applet is loaded in the web browser. Log into the unit.
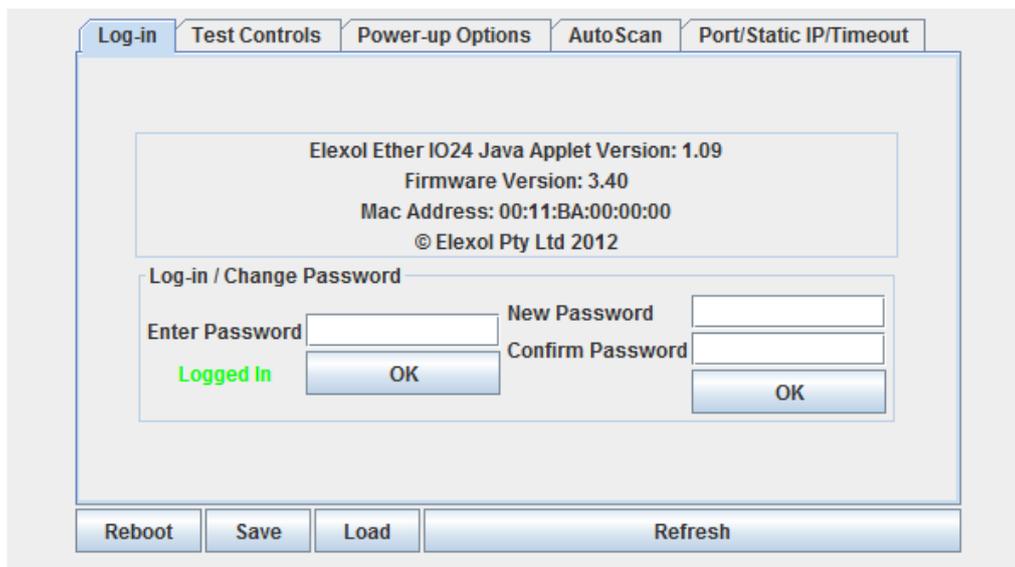
10.   Click the Port/Static IP/Timeout Tab. This will show where to enter the Fixed IP address for the unit.


Type the Fixed IP address, Subnet Mask and Default Gateway that you wish to use. The value will be written to the unit once you have selected another value to write. Make sure that the IP address entered falls into the subnet mask that you are using and select the Enable Static IP Address check box.

11.   The jumper on J3, J4 can be removed, J1 can be placed if you want to lock the eeprom values, or all jumpers can be removed so that the programmed port number can be used. The unit can then be rebooted with the Reboot button on the bottom left hand side.

12.   The Ether IO24 can be reset with the Reboot button on the bottom left hand side of the utility or power can be removed and restored to activate the new settings.

13.   After the unit has been reset, the unit will be found at the new IP address. Unless jumpers have been placed on J2, J3 or J4.

Method 2 (Using a DHCP server)

This method is pretty easy as the DHCP server assigns both the PC and Ether IO24 address's which are in the same subnet mask.

1. Remove power from the Ether I/O so that it is not powered.
2. Remove all jumpers from the Ether IO24.
3. Now place jumper J2. This will tell the Ether IO24 to obtain an IP address from the DHCP server.
4. Plug in the network cable so that the Ether IO24 is connected to the network.
5. Apply power to the unit and run the Stand-Alone Java Configuration Utility. A security warning may appear in the browser asking if you want to run the program, accept and continue to run the utility.
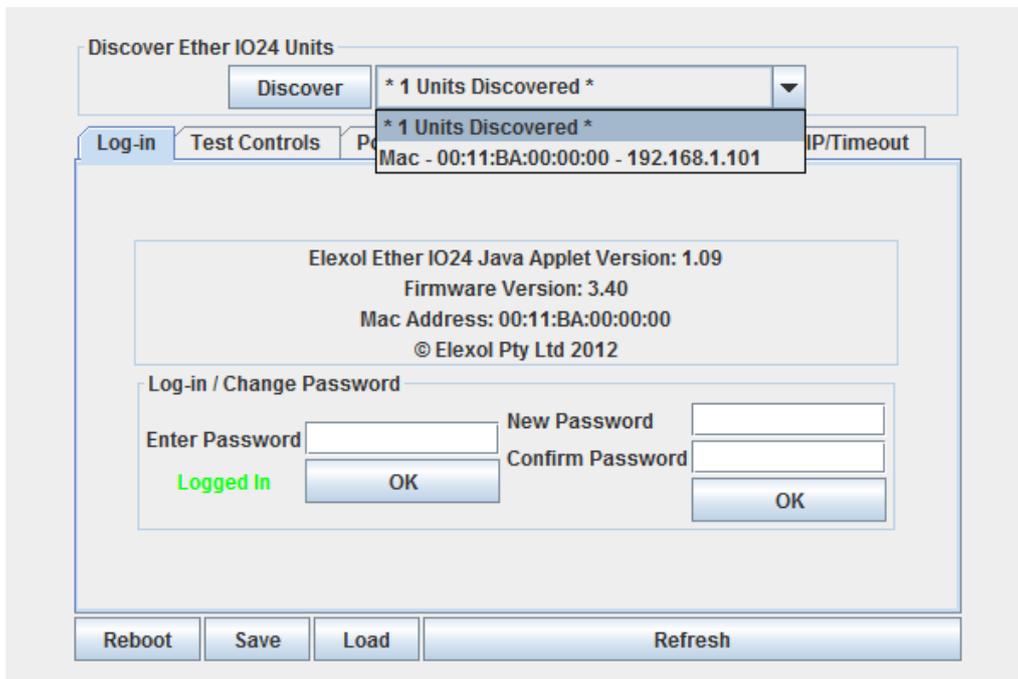
Units will need to be discovered and selected from the list before continuing. As shown above.

6. Follow steps 9 through to 13 in the previous method to program the Static IP Address.