

Reassigning IP addresses on Remote IO

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Wiring the Power to the Remote IO

On the side of the Remote IO Adaptor you can find a wiring diagram on how to connect the power, for the purpose of this exercise it is only necessary to connect the system 24V and 0V so that the adaptor powers up. The connection is on different pins depending on whether you are using a URB-TCP or a URB-TCP2.

There is no need to have any of the IO modules connected.

Setting the Adaptor IP

Default IP: 192.168.100.100.

Set the IP address of your PC to the same subnet as the adaptor, ie 192.168.100.XXX where XXX is anything that is NOT already used on your network.

Preferably use a wired Ethernet connection from your PC to the adaptor with only the adaptor and your PC connected. If your PC only has WiFi then you will need to connect via a router, despite what your current network IP addresses are you MUST set your PC to 192.168.100.XXX. Note you are likely to lose your connection to the rest of the network.

Using a CMD box run

C:\> ipconfig /all

and confirm that the IP address of your connection is 192.168.100.XXX. Run

C:\ping 192.168.100.100 and confirm that you get an answer from the adaptor similar to:

Pinging 192.168.100.10 with 32 bytes of data: Reply from 192.168.100.100: bytes=32 time<1ms TTL=255 Reply from 192.168.100.100: bytes=32 time<1ms TTL=255 Reply from 192.168.100.100: bytes=32 time<1ms TTL=255 Reply from 192.168.100.100: bytes=32 time<1ms TTL=255

If you are using a wired connection then turn off the WiFi and Bluetooth (if fitted), this is not compulsory but it eliminates some errors and is safer when you turn off your firewall.

Microsoft Edge or VM software

If you have Microsoft Edge installed then it is likely that you will have two virtual Ethernet network connections, as shown in the following image. It is necessary to disable these connections as they interfere with the BOOTP Server. Any virtual Ethernet connections that have been installed for virtual machines should also be disabled for the same reason.



Turn off your firewall.

Windows Security



To do this type firewall into your search box and select Firewall & Network Protection to give the following page. Turn off all three firewalls, the Domain, Public & Private.

Ignore the warnings from Windows.

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Open "BOOTP Server" software from UniLogic dynamic ribbon, note that to get this option you must add a TCP or TCP2 module to the hardware configuration. Alternatively select Tools > URB Remote IO Configurator from the Visilogic ribbon, then select BOOTP Server.



Type	Time	Ethernet Address(MAC)	IP Address	Transaction ID	
1	14:15:36	46-08-61-A2-01-06		805816526	
2	14:15:39	F8-8C-12-86-33-CD	10.1.20.52	473488648	
<u>p</u>	14:36:01	00-00-22-30-00-3E		16829867	
1	14:16:03	00-00-22-10-00-3E		16829867	
0	14:16:05	00-00-22-30-00-3E		16829867	
n.p.H	Clear Histo	ny (i	artBootp	Stop B	orip
the He	Oear Histo story r Ethernet	ry Si Address(MAC) IP Add	art bootp areas Sub	Step B net Mask Gater	oolp ay Address
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In order to detect the adaptor, you **MUST** power cycle the TCP/TCP2. This adaptor will send 20 consecutive BOOTP request messages every 2 seconds **ONLY** after power cycle. Make sure that dipswitch 9 in ON and the Ethernet cable is connected before the power cycle in order for the adaptor to be detected.

Press on "Start BOOTP"

You will see new connections being added, check your adaptor's MAC address which is shown on a label on the side of the module. Double click on the MAC address for your adaptor.



Set your adaptor's IP and click OK, there is no acknowledgement that anything has happened.



The BOOTP Server now shows the new IP address for the adaptor.

Cycle the power on the TCP/TCP2 adaptor.

You should now be able to Ping the new IP address.

You can change the IP address by repeating the last stage as long as dipswitch 9 is ON. You must cycle the power before you try to Ping the new IP address. When you have the IP address you require remove the power from the adaptor and turn off dipswitch 9.

If your change of IP address includes a change of subnet make sure that you change the IP address of your PC to match the new subnet before Pinging the adaptor to confirm the IP address change.

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Switch your PC firewall back on and re-enable any network connections.