

How to establish an Ethernet connection to a PLC+ Module

These instructions summarize the basic steps to allow you to connect an Altronic PLC+ module to your Personal Computer (PC) or laptop.

To connect a PLC+ Module to your PC, either temporarily change the TCP/IP configuration of your existing network adapter or create a separate private network using a second network adapter to build a private network. The necessary steps to accomplish this will vary with your operating system, but are outlined below for Windows based computers.

You must have a PC with at least one Network Interface Card (NIC) installed.

- IP Address 10.1.100.100 is the default factory IP address setting of all PLC+ Modules. It is also the address that the PLC+ Modules go to when the network settings are reset.
- You must set the IP address of your network interface to an address of 10.1.100.x, where x is any integer from 1 to 254, except 100, in order to initially communicate with any PLC+ Module.

The IP address of your PC may be assigned dynamically and you will usually have no control over its address. To Connect the PLC+ directly to the host PC You must change the IP address on your PC to static, and to the same 10.1.100 address prefix as the PLC+ Module (see note B below). The PLC+ has a fixed IP address assigned to it from the factory. Its fixed IP address is 10.1.100.100.

Follow the procedure below for Windows 7 Operating System:

1. From the Windows 7 desktop, click on the windows button in the lower left-hand corner, and then click on Control Panel.
 2. Click on View network status and tasks.
 3. Click on the Local Area Connections icon.
 4. Click on the properties button.
 5. Click on the Internet Protocol Version 4 (TCP/IPv4) item and click on the properties button.
 6. Click on the Use the following IP address option.
 7. Change the IP address to 10.1.100.XXX (for example 10.1.100.115 see note A below)
 8. Change the Subnet Mask to 255.255.255.0.
 9. Click OK on the Internet Protocol Properties screen.
 10. Click OK on the Local Area Connection Properties screen.
 11. Click Close on the Local Area Connection Status screen.
4. Double-click on the Internet Protocol (TCP/IP) item.
 5. Click on the Use the following IP address option.
 6. Change the IP address to 10.1.100.XXX (for example 10.1.100.115 see note A below)
 7. Change the Subnet Mask to 255.255.255.0.
 8. Click OK on the Internet Protocol Properties screen.
 9. Click OK on the Local Area Connection Properties screen.
 10. Click Close on the Local Area Connection Status screen.

Notes:

- A. The leading portion of the IP address (10.1.100.XXX) represents the sub-network that we are creating for the PLC+ Module. The trailing portion (.XXX) represents the host/node number that you select. The default of the PLC+ module is 10.1.100.100, the PC's address can be between 1 and 253 exclusive of 100.
- B. Follow this procedure for changing the IP address of your primary NIC card in the PC. Please be aware that you will have to change its IP address back to its original settings to connect to your existing network. You can preserve your existing network connection by adding a second NIC card to your PC and setting it to the static address for the PLC+.

Follow the procedure below for Windows XP Operating System:

1. From the Windows XP desktop, click on the Start button in the lower left-hand corner, and then click on Control Panel.
2. Double-click on the Network Connections icon.
3. Click on the network adapter and select Change settings of the connection.