

Plus-X I/O Units

Manual Supplement – Configuring Units with and without DHCP



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Introduction

Each Plus-X device must be assigned a static IP address for communication with the ARC Plus remote control system. If a dynamic address were used for this purpose, the address could change making it impossible for the remote control system to find the Plus-X unit.

On the other hand, using a dynamic IP address assigned by Dynamic Host Configuration Protocol (DHCP) is an easy way to do initial setup of the Plus-X device. Using an address automatically assigned by DHCP eliminates the need to use crossover cables or to reset the network settings on a computer.

This document describes the procedure for establishing initial communications with a Plus-X device in a network that supports DHCP and in a network that does not. Initial setup of the Plus-X device includes assignment of a static IP address.

The table below lists the firmware version in which DHCP functionality was introduced for each Plus-X device. The table also specifies the default hostname that must be used for initial connection to these units when they are installed on a network that supports DHCP.

Plus-X Unit	DHCP Firmware Revision	Hostname*
Plus-X IIU	1.1.3	PLUSXIIU
Plus-X ICRU	1.0.27	PLUSXICRU
Plus-X 300	1.0.17	PLUSX300
Plus-X 600	1.0.15	PLUSX600
Plus-X AC-8	1.0.16	PLUSXAC8
Plus-X Dual IP-8 Adapter	1.0.11	PLUSXIP8
Plus-X GSC Adapter	1.0.10	PLUSXGSC

* Hostnames can be used in either upper or lower case.

Initial Connection Using DHCP

Connect the Plus-X device to your LAN and apply power. If this is the first power-up for a new unit or the first network connection after execution of a master-initialization, the Plus-X device will issue a DHCP request for an IP address. If the network supports DHCP functionality, a dynamic IP address will be assigned to the unit. To access the unit, launch a web browser and enter the hostname from the table above in the browser's address field, followed by the forward-slash symbol. For example: "PLUSX300/".

The login screen for the unit will be displayed, similar to the Plus-X 300 login screen shown below.



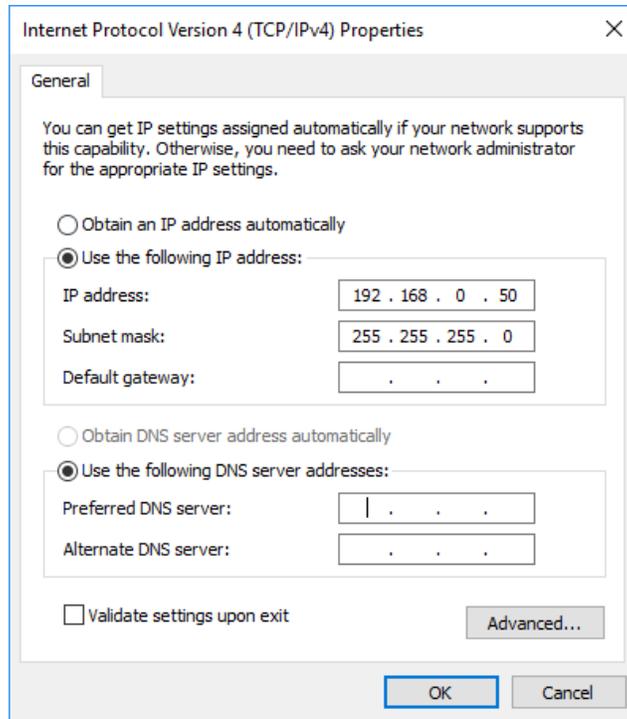
Enter the default Username *admin*, and the default Password *password*. Some firmware versions will require that you enter a new password for the administrator account before proceeding beyond this point.

Note: If the login page is not displayed or the browser indicates that the page cannot be found, it is possible the connected network does not support DHCP. In this case follow the steps outlined below for “Initial Connection Without DHCP”. Otherwise, continue to “Set a Static IP Address”.

Initial Connection Without DHCP

If your network does not support the DHCP protocol, the Plus-X unit’s request for a dynamic IP address will fail. If this happens, the Plus-X device will assign itself the default static IP address of 192.168.0.100. To access the unit, it will be necessary to connect your PC directly to the Plus-X device using a crossover LAN cable or using a simple Ethernet switch.

In addition, your PC’s internal network interface must be set to a static IP address of the form 192.168.0.x. In the Windows Control Panel, search for *Change Ethernet Settings*, then select *Change adapter options* then *Local Area Connection*. Navigate to the Internet Protocol Version 4 (TCP/IPv4) Properties dialog box as displayed below.

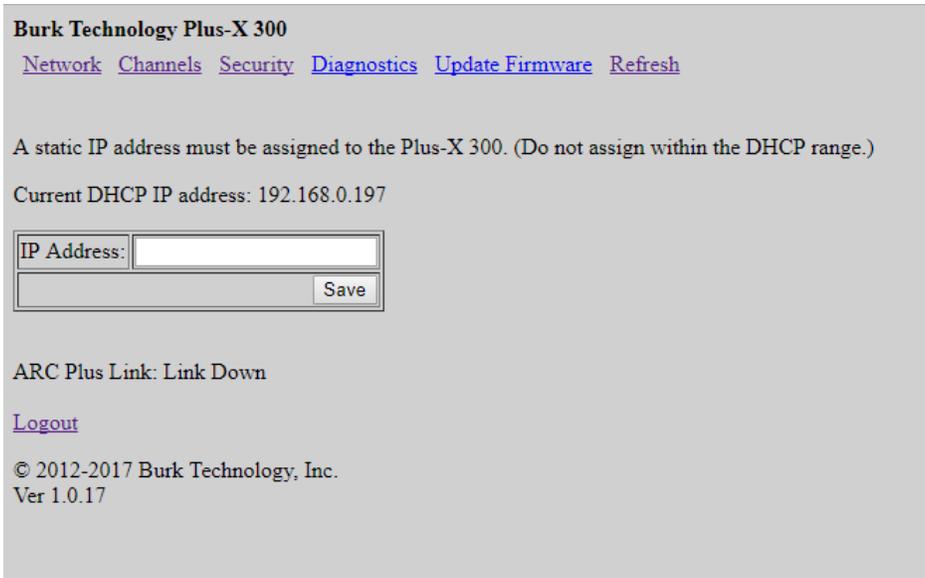


Select “Use the following IP address:” and enter an address of the form 192.168.0.x, where x is any value between 1 and 255 except 100 which is the Plus-X default IP address. Also set the subnet mask to 255.255.255.0 as shown above and click *OK*.

Now launch a browser and enter 192.168.0.100 in the address field. The login screen for the unit will be displayed. Enter the default Username *admin*, and the default Password *password*. Some firmware versions will require that you enter a new password for the administrator account before proceeding beyond this point.

Set a Static IP Address

For most Plus-X devices, the first screen displayed after login is the *Network* page, as shown below for the Plus-X 300.



On some units, for example the Plus-X AC-8, it is necessary to select the *Network* menu option to display this page.

Enter a static IP address for this unit as assigned by your network administrator in the *IP Address* box and click *Save*.

Note: It is important that the assigned static IP address be outside the DHCP address range used by the router to avoid potential conflicts with other DHCP devices.

If your initial connection was made without DHCP, your PC should now be restored to its prior network settings, and both the PC and the Plus-X device should be connected to the normal LAN.

Complete the Network Settings

In most cases your browser will be redirected to the login page for the Plus-X device. If this does not happen automatically, enter the static IP address assigned above in the browser's address field. Login to the Plus-X device using the admin account.

On this second login, a different *Network* page is displayed as shown below for the Plus-X 300. If the *Network* page is not automatically displayed, select the *Network* menu item.

Burk Technology Plus-X 300

[Network](#) [Channels](#) [Security](#) [Diagnostics](#) [Update Firmware](#) [Refresh](#)

Name:	<input type="text"/>	An optional name that is displayed on the log in page and the header.
Hostname:	PLUSX300	An optional hostname for use on a local network.
IP Address: *	192.168.0.55	The static IP address for this unit. (Do not assign within the DHCP range.)
Subnet Mask: *	255.255.255.0	The subnet mask associated with the IP address above.
Gateway: *	192.168.0.1	The IP address of the router used for connections outside the local network.
ARC Plus IP Address: *	0.0.0.0	The IP address of the ARC Plus that communicates with this device.
	Link Down	
HTTP Port: *	80	The port number to use for the web page. By default this is port 80.
Plus-X Port: *	45000	The port number to use for communication with the ARC Plus. By default this is port 45000.
	<input type="button" value="Save"/>	
* Indicates required field		

ARC Plus Link: Link Down

[Logout](#)

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You will see the IP address you previously assigned. Additional fields, indicated by asterisks, must now be completed. It may be necessary to obtain the Subnet Mask and Gateway IP address from your network administrator. It is also necessary to assign the IP address of the ARC Plus unit that will be controlling this Plus-X device.

The default values for HTTP Port and Plus-X Port can most often be accepted. It is also a good idea to change the hostname from the default value so conflicts will not occur if multiple Plus-X devices of the same model are installed on the network.

Click the **Save** button to activate these settings.

Please refer to the user manuals for your Plus-X unit and for your ARC Plus system for additional configuration and operating instructions.