

This Quick Start Guide will show you how to set up the Plus-X 300 in four simple steps. For detailed configuration and setup information, visit www.burk.com/downloads, select the Plus-X 300 support page and download the Plus-X 300 Installation and Operation Manual.

1 UNPACKING

In addition to this Quick Start Guide, you will find the following in each package:

- (1) Plus-X 300 Unit
- (1) Ethernet Cable
- (1) 15 V Wall Adapter
- (1) 2-pin Terminal Block
- (1) 9-pin Terminal Block
- (2) 12-Pin Terminal Block



CUSTOMER SUPPORT

PHONE:

(978) 486 - 3711

M-F 9am - 5pm EST

EMAIL:

support@burk.com

2 NETWORK SETUP

1. Plug in the power cord and connect the Plus-X 300 to your network via the rear-panel Ethernet connector.
2. If your network supports DHCP functionality, a dynamic IP address will be assigned to the unit. If DHCP is not supported on your network skip ahead to step 3 now. To access the unit, launch a web browser and enter the hostname **PLUSX300/** in the browser's address field then skip to step 5. Be sure to include the forward-slash symbol in the hostname.
3. If your network doesn't support DHCP, the Plus-X 300 will assign itself the default IP address 192.168.0.100. You will need to connect a PC with a web browser to the Plus-X 300 at this IP address before you can change the network settings on the unit. One way to do this is to unplug your PC from any other LAN and connect your PC to the Plus-X 300 via a network switch or a cross-over ethernet cable. Then configure your PC with a compatible IP address so that you may connect to the Plus-X 300. Running Windows, the following steps will allow you to configure your PC with a compatible IP address:

1 From the Control Panel, select Network Connections.	5 Select Properties.
2 Double-click the icon for the network you will be using.	6 Choose "Use the following IP address" and enter an IP address of 192.168.0.x, where x is any valid address location except 100.
3 On the General tab, click Properties.	7 Enter Subnet Mask 255.255.255.0
4 Click Internet Protocol version 4 "TCP/IPv4".	8 Click OK.

4. Open a browser and enter the Plus-X 300 default IP address of 192.168.0.100.
5. The login screen will then be displayed. Enter the username admin and the password "password".
6. You will be prompted that the password is weak and will be recommended to change it. You can also change the password at any time from the Security link on the Plus-X 300 web page.

7. The first screen displayed after initial login is an abbreviated Network page requiring you to enter a static IP address for the Plus-X 300. Check with your network administrator for an available IP address that is not within the DHCP address range.

8. Your browser will be automatically redirected to the new IP address. 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 300 should be connected to the normal LAN.

9. Log in to the Plus-X 300 at its new static IP address, go to the Settings tab on the web page and select Network to change the network information.

Add the following network information and select save to confirm the changes.

a. NetBIOS/Hostname – This name should be changed from its default value of PLUSX300 so conflicts will not occur if multiple Plus-X devices of the same model are installed on the network.

b. IP Address – This field will display the static IP address you entered in a previous step.

c. Subnet Mask – Check with your network administrator otherwise the factory default setting can be used.

d. Gateway – Check with your network administrator otherwise the factory default setting can be used.

2 NETWORK SETUP (CONTINUED)

- e. **ARC Plus IP address** – Enter the IP address of the ARC Plus Touch or ARC Plus SL unit that the Plus-X 300 will be connected to.
- f. **HTTP Port** – Check with your network administrator. The factory default setting is port 80.
- g. **Plus-X Port** – Check with your network administrator otherwise the factory default setting can be used. This port must match the setting for Plus-X Port on your ARC Plus Touch or ARC Plus SL unit.

10. To verify communication, open a command prompt on your computer and ping the address you just assigned to the unit to ensure it is correctly configured.

3 CONNECTING AND CONFIGURING I/O ON THE PLUS-X 300

The Plus-X 300 allows connection of 8 inputs that can be individually configured as status or meter as well as 4 raise and 4 lower channels. Raise channels connect to odd numbers and lower channels connect to even numbers on the 12-pin terminal blocks that connect to the control relay outputs. Click on the Channels link in the menu bar on the Plus-X 300 web GUI to configure the channel behavior.

Meter and Status Inputs

When an input is used as a status channel the Lower and Upper thresholds must be adjusted to indicate proper state changes. The Plus-X 300 inputs have a 1500 mV internal pull-up voltage to allow the channel to be used as a status input.

Status Thresholds			
Input	Lower (mV)	Upper (mV)	Update
1	1000	1000	Update
2	1000	2500	Update
3	1000	2500	Update
4	1000	2500	Update
5	1000	2500	Update
6	1000	2500	Update
7	1000	2500	Update
8	1000	2500	Update

When using a dry contact closure status:

- Set the Lower threshold to 200 mV.
- Set the Upper threshold to 1000 mV.

When using a wet contact closure adjust the upper and lower thresholds as appropriate for your device.

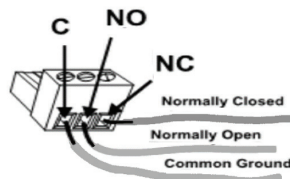
Meter inputs can be wired without any additional configuration.

Relay Outputs

The relays may be used as raise/lower pairs or individually as up to 8 command channels. To configure the relay behavior, click the Pair checkbox in the center column to pair the associated relays (1 and 2, 3 and 4, etc.). When paired, the relays will behave as one raise/lower channel. When not paired, each relay behaves independently.

1. Connect your site equipment to the provided 12-pin push-on block connectors. Secure the wires with the built-in setscrews. Connections are standard, from left to right: common (C), normally open (NO), and normally closed (NC).
2. Connect the push-on blocks to the rear panel of the Plus-X 300 with the setscrews facing up. Use care to properly align each terminal with the contacts on the back panel of the unit.

	Relay 1	Relay 2
Type	<input type="radio"/> Latching <input type="radio"/> Momentary	<input type="radio"/> Latching <input type="radio"/> Momentary
	<input type="checkbox"/> Pair Relay Channels	
	Update Relay 1 & 2	



4 CONNECTING TO AN ARC PLUS TOUCH OR ARC PLUS SL

The Plus-X 300 communicates with the ARC Plus Touch or ARC Plus SL via LAN/WAN, allowing installation anywhere a network connection is available.

Use AutoLoad Plus to add the Plus-X device to the ARC Plus Touch or ARC Plus SL unit. Ensure you have the current version of AutoLoad Plus installed on your computer. To obtain the current version, visit www.burk.com/downloads and select the AutoLoad Plus support page. On the AutoLoad Plus menu, select Edit->Plus-X Devices and click **Add**. The dialog box shown to the right will be displayed.

The screenshot shows a dialog box titled "Plus-X Device" with the following fields: Device type (Plus-X 300), Description (Plus-X 300), IP address (empty), Port (45000), a checked box for "Map the default set of channels", and a Starting channel (1). There are OK and Cancel buttons at the bottom.

- Select Plus-X 300 and enter its network information.

Note: If adding more than one Plus X device to an ARC Plus, change the starting channel so that other assigned channels are not overwritten.

- Select OK to confirm the first Plus X device.
- If adding more than one Plus X device, repeat the same steps.
- Save the configuration by selecting File>Save in AutoLoad Plus.

To confirm that the Plus-X 300 is communicating, log in to the ARC Plus Touch or ARC Plus SL using the web browser. All assigned channels should show their default values.

MANUALLY MAPPING PLUS-X CHANNELS

1. To manually map Plus-X channels to the ARC Plus, click the Command tab. Locate an unused channel and click the [...] button in the Source column. This will bring up the Source dialog. Click the Plus-X button and choose the Plus-X device and channel you wish to use.
2. Use the Commands tab in AutoLoad Plus to configure additional relay settings for the newly added Plus-X 300 channels.
3. Select File>Save to save the changes to the ARC Plus.

Note: If the channels show as offline or a warning is displayed, check the network configuration and ensure the configuration is saved within AutoLoad Plus.

Refer to the Plus-X 300 Installation and Operation Manual for further information on configuring and operating the Plus-X 300 unit.