NET/X™ NT-IPXB NETWORK CONTROLLER: STEP-BY-STEP INSTALLATION GUIDE

DO NOT INSTALL the device until you have the LAN network connection information, including the ***Router's IP address, User Name and Password***.

STEP 1: GET YOUR ETHERNET NETWORK INFORMATION

Confirm your LAN network router information. If you don't already know the DHCP range of your DHCP server on your router, you'll need to log into your router and retrieve that information (which means you'll need the router login information also!). Enter the IP address of your router in the address bar of your browser and log in. The DHCP range will be listed in the DHCP settings area.

STEP 2: GATHER IP INFORMATION (IF REPLACING A EXISTING NETWORK CONTROLLER)

A. If an existing NT-SSAx/CLK Network Controller with an NT-IP232 is being replaced, the first step is to look at the display of the NT-IP232 that is being used. Write down the following information:

IP Address: _____ . _____ . _____ . _____

Port Number: _____

STEP 3: CONNECT TO THE LAN USING THE ETHERNET CABLE

Connect the power to the NT-IPXB and then connect to your network using the Ethernet cable provided. The unit ships with DHCP enabled, meaning that the network router will automatically assign an IP address to the NT-IPXB.

STEP 4: LOG INTO THE NT-IPXB

Once you have connected to your LAN,

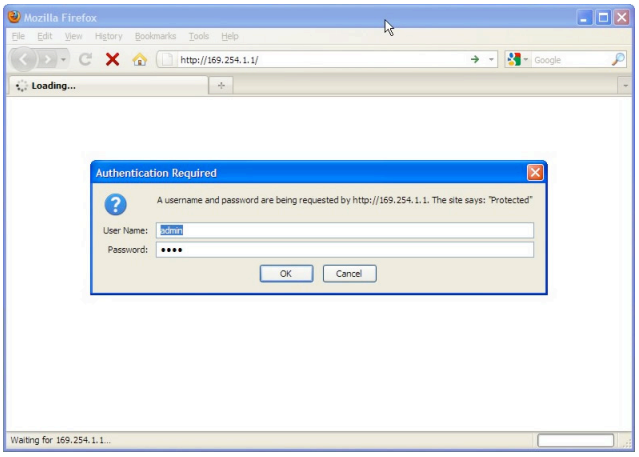
A. Look at the display on the NT-IPXB and write down the IP address that has been assigned from the router.

IP Address: _____ . _____ . _____ . _____

B. Open your browser (Internet Explorer, Firefox, Safari, etc.) and type the IP address into the browser address bar.

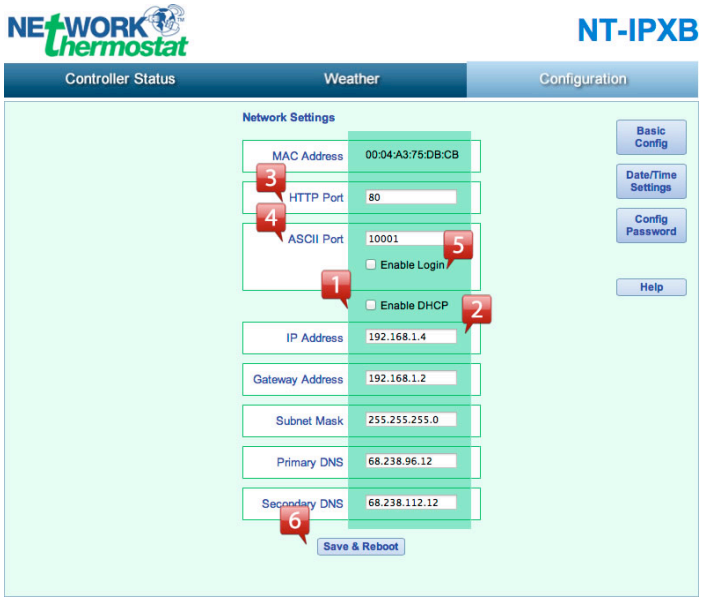
C. When the password dialog box is displayed, enter the defaults. (Both are *lower case*).

User Name: **admin**
Password: **netx**



STEP 5: CHANGE THE ADDRESS TO A STATIC IP ADDRESS ON YOUR LAN

Click on the Configuration tab, and then click the Network Settings button.



Static IP Address, HTTP Port 80, ASCII Port 10001

1 On the Network Settings page, UNCHECK the 'Enable DHCP' box

2 Enter a STATIC IP address for your local network. If you don't know what IP address you can use, you'll need to login to your router and see where the DHCP range is set. Select an available IP address that is OUTSIDE of the DHCP range. It cannot be one that is being used by any other device/computer on the local area network.
(Do not change any of the other settings; Gateway, Subnet, Primary & Secondary DNS. These items have been automatically pre-filled to work with your network settings.)

3 Leave the HTTP Port at 80 (default). This is the port number that is used for the web pages, where the configuration pages reside.

4 Leave the ASCII Port at 10001 (default). If you have more than one Net/X™ NT-IPXB, increment this number by one for each addition NT-IPXB installed; 10002 for the second, 10003 for the third, etc. This is the port number that is used for the API protocol for the Net/X™ Command Center software. Having a separate ASCII port for each NT-IPXB will allow there to be a single external Static IP used for the entire network.

5 Leave the 'Enable Login' check box ***unchecked***.

6 Then click 'Save & Reboot'. When the unit finishes its reboot sequence (about 5-10 seconds) it will be located on your LAN at the address you entered (and shown on the display of the NT-IPXB.

The next step is needed in order to connect to your NT-IPXB from:
1) The Net/X-Web Cloud Suite for XBus & StrongMesh systems, or
2) The Net/X™ Command Center software for XBus & StrongMesh systems from a remote location

STEP 6: SET UP PORT FORWARDING ON YOUR ROUTER

Port Forwarding is a term used in the networking world which is simply the process of translating one address to another. The 'Internet' uses an addressing system (IP addresses and Ports) that is in the public domain. Your LAN is your private network with its own addressing (IP addresses and Ports). Port forwarding allows the Internet and LAN addresses to get translated through the router so connections can be rerouted from the public side (Internet) to the private side (your LAN). This is not a complicated task, and the simple steps below will take you through it. If you'd like to read more technical details, please feel free to read the Wikipedia article on port forwarding at http://en.wikipedia.org/wiki/Port_forwarding . Net/X has partnered up with the leading port forwarding company, www.PortForward.com, giving you simple instructions and pictures for setting up your router properly.

1 Log into your router using the router's name and password. If you don't know the user name and password, there is a huge router Username & Password list at http://portforward.com/default_username_password/ .
These are the DEFAULT entries given by the router manufacturers.

2 In a separate browser window, go to http://portforward.com/cports.htm and scroll down the list until you find ANY Net/X product, such as an RP32-xx (where xx can be either –WIFI or –IP) thermostat and click the link. (The process is exactly the same for any Net/X product.

3 Then, locate your router in the list and click the matching model number. You can then either have the team at

portforward.com set up your router for you, or you can click 'skip this advertisement' in the upper right corner to continue to step-by-step instructions.

In the example above, the NT-IPXB is set to the local static IP address 192.168.1.4 and ASCII port 10001. After your port forwarding set up is complete, any connection from the Internet to Port 10001 on your Internet address (DSL or cable modem address assigned by your Internet Service Provider) will be routed to the local address of 192.168.1.4, port 10001.

If you have multiple Net/X™ NT-IPXB, you will need to use a separate local static IP address and a separate port number for EACH device. Portforward.com instructions show port forwarding for both the HTTP ports and the ASCII ports. In most cases, you will need to ONLY port forward the ASCII port, as this is the port used for the Net/X-Web cloud service and the Net/X Command Center software.

Start with your first NT-IPXB at 10001 (default) and increment by 1 for each additional unit. Typical Addressing Scheme for locations with multiple Net/X™ Ethernet Thermostats should look like this:

NT-IPXB	IP Address	HTTP Port	ASCII Port
Location 1	xxx.xxx.xxx.xxx	80	10001
Location 2	xxx.xxx.xxx.xxx	80	10002
Location 3	xxx.xxx.xxx.xxx	80	10003
…	…	…	…

STEP 7: ADD YOUR NT-IPXB TO THE NET/X COMMAND CENTER SOFTWARE

Now that you have a permanent location for your Net/X NT-IPXB and you've set up port forwarding, you can simply add it to your Net/X Command Center software by clicking the 'Add Controller' icon in the menu bar and entering a Name, Ethernet IP address and Port number.