

NetX™ CloudConnect™ Communications Wi-Fi Step-by-Step Installation Guide

⚠ ATTENTION: DO NOT INSTALL the thermostat until you have all the necessary network information. See the list in **Step 1** for X-Series WIFI thermostat network information requirements.

STEP 1 GET YOUR NETWORK INFORMATION

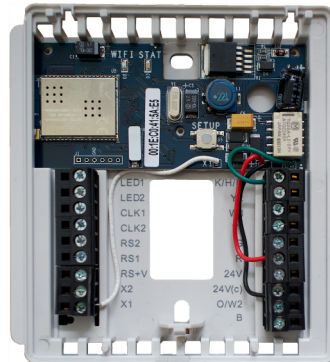
To properly setup a CloudConnect™ configuration you will need the following information for a WIFI install.

- SSID
- Wi-Fi Password

Confirm your network information. If you do not already know this information, you can log on to your router and retrieve it. This means you know the network gateway address and login information. Enter the IP address of your router in the address bar of your browser and log in. The SSID and Security Mode will be listed in the wireless settings and the DHCP range will be listed in the DHCP settings area. Alternately, the label on your router may list the router's IP address, Security Mode and Password etc.

STEP 2: INSTALL THE THERMOSTAT BACKPLATE

Turn off the power to the HVAC unit and follow the detailed instructions included with the thermostat. Make sure the wires are connected to the correct terminals. In addition to the thermostat wires, there are three (3) wires from the Backplate. Connect the RED wire to the R terminal (along with the Red wire in the thermostat cable), the BLACK wire to the 24(c) terminal (along with the common wire in the thermostat cable), and the WHITE wire to the X1 terminal. These wires are shipped in the proper locations and are noted here for completeness.



STEP 3: CONNECT TO THE WI-FI THERMOSTAT USING 'SOFT AP' MODE & SETTING LOCAL WI-FI NETWORK

Using any Windows PC, Apple Computer, or smart phone with a Wi-Fi radio and a web browser, search for the Wi-Fi network with the SSID name of NetX-XXXXXX where the XXXXXX matches the last six digits of the Wi-Fi Backplate MAC ID. If your computer is connected to the internet with an ethernet cable, it is recommended to temporarily disconnect this cable during this step.

Connect to the NetX-XXXXXX network. This is an open network and does not

have a password. It may take up to a full minute for your computer to connect to the Wi-Fi Backplate.

Use any current release browser (Chrome, Firefox, or Safari) to navigate to **192.168.7.1**. This is the Soft AP address for the Wi-Fi Backplate.

💡 TIP: For information on an extra step needed for using Soft AP on android devices, click link below.

<https://networkthermostat.com/app-notes/soft-ap-android-tips>

When the device connects to the thermostat, the screen below will be displayed in the browser.

STEP 4: ENTER YOUR WI-FI NETWORK INFORMATION:

1. On the right side of the screen, Click 'Scan for Networks'.
2. A pop-up dialog will display all available Wi-Fi networks. Select your network.

The screenshot shows the thermostat's web interface with two main sections: Network Settings and WiFi Settings. The Network Settings section includes fields for MAC Address (00:1E:C0:41:5A:E5), HTTP Port (80), ASCII Port (10001), IP Address (192.168.7.1), Gateway Address (192.168.7.1), Subnet Mask (255.255.0.0), Primary DNS (169.254.1.1), and Secondary DNS (0.0.0.0). There are checkboxes for 'Enable Login' and 'Enable DHCP'. The WiFi Settings section includes a 'Scan for Networks' button, a field for SSID (NetX-XXXXXX), a dropdown for Security Mode (None), and a field for Pass Phrase. A pop-up dialog shows a list of available WiFi networks, including 'Home Network 1', 'Business Network', 'Fioptrics Router', 'HP-Print-10-Officejet Pro 8600', 'Cool Beans Cafe', 'Work At Home', 'Business Network', and 'Guest'. A 'Save & Reboot' button is at the bottom.

STEP 4: ENTER YOUR WI-FI NETWORK INFORMATION (CONT):

3. The Security Mode will be automatically selected.
4. Enter the wireless network's Pass Phrase. If your network uses WEP, it will be necessary to know the length of the Pass Phrase and if it is ASCII or HEX. (Note: WEP networks have significant security vulnerabilities and are easily hacked. It is recommended that WPA or WPA2 network security mode be used).
5. Leave 'Enable DHCP' checked.
6. Then click 'Save & Reboot'.

Depending on the type of Wi-Fi security that is being used, the reconnection to your regular Wi-Fi network may take only a few seconds, or it may take up to a minute to make the secure link.

Once the thermostat is connected to your network, the backplate LEDs will indicate the following status:

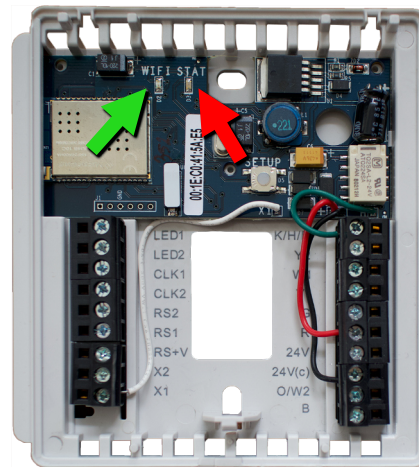
Green LED (Network Connection Indicator):

ON: This indicates the Backplate is connected to your router

Red LED (Face Plate Connectivity Indicator):

Blinking: The face plate is removed and has communicated with the backplate since the last backplate reset.

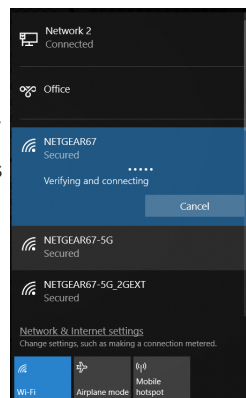
NOTE: After the Wi-Fi Backplate reboots, if the thermostat does not connect to the Wi-Fi network within a few minutes, a wrong SSID, Security Mode and/or Password has been entered. Use one of the Recovery Modes outlined in the **Troubleshooting** section at the end of this instruction guide to reset the thermostat backplate.



STEP 5: RECONNECT YOUR COMPUTER TO WIRELESS NETWORK

While the thermostat is rebooting (it will only take a few seconds), go back to your computer's Network Settings, locate your wireless network and reconnect to it so you can establish communication with your thermostat. (This will be the SSID and password you just entered).

The screen shot to the right shows typical PC wireless networks. In this case, the thermostat network has the SSID name NETGEAR67. When the Wi-Fi Backplate is properly connected to the wireless network, the Green LED will be on steady (indicating the thermostat is connected to the network you selected).



TIP: If a hardwire ethernet cable was removed in **Step 3**, it can be plugged back into the computer now.

STEP 6: INSTALL THE THERMOSTAT ONTO THE BACKPLATE

Follow the instruction guide to install the thermostat onto the Backplate. When connected to the network, the faceplate Wi-Fi icon will display.

NOTE: If the Wifi Icon is blinking, the backplate is still in Soft AP mode.

STEP 7: FIND YOUR NETX THERMOSTAT USING THE NETX™ DEVICE EXPLORER TOOL

The NetX™ Device Explorer tool can be downloaded here. The Device Explorer will run on any Windows PC or Mac computer allowing you to see and connect to any of your NetX Devices on your local network, using only your browser.

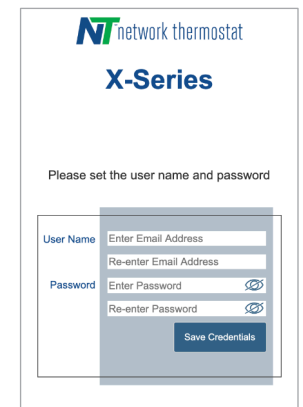
<http://www.networkthermostat.com/software/netx-explorer-mac-and-pc>

Start the NetX™ Device Explorer. Click on the 'Discover Devices' button. Double click on one of the thermostat entries to go to its Credentials page.



STEP 8: CONFIGURE CREDENTIALS

Your browser will open to the thermostat's Credentials page. Enter your username and password for the thermostat. Click on the "Save Credentials" button to save your information. You will be taken to the login page for the thermostat. For CloudConnect™ configuration go to the URL in the next step.

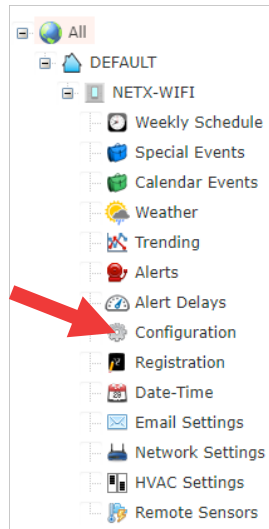


STEP 9: CONNECT TO YOUR THERMOSTAT USING NETX™ CLOUDCONNECT™ SERVICE

Using a desktop browser, go to the URL <https://netx-cloud.com>. Log in with the same username and password you used on **Step 8**.

Once logged in, you will see a dashboard with your thermostats on the right and a drop down menu on the left. Expand the menu under "New Site" and "Default." Expand the thermostat (click the '+' to the left of the thermostat name) and navigate to the Configuration page. Go to **Step 10** for Configuration.

NOTE: Thermostats are automatically enrolled with free CloudConnect™ for 30 days.



1. Enter a unique descriptive name in the Thermostat Name box.

NOTE: Thermostat names may have a maximum length of 15 characters with no spaces.

2. Click the Apply button for the thermostat name to be saved.

3. Enter the Site Name.

4. Enter your address with Zip Code. Adding the Zip Code allows the thermostat to access your current weather and forecast information)

5. Click the Apply button.

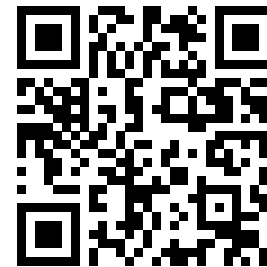
6. Make any additional adjustments as needed.

ATTENTION: Make sure to click the appropriate Apply button located in the same block as the parameters you have adjusted. The thermostat will not update its parameters unless the appropriate Apply button is clicked.

STEP 10: EDIT YOUR THERMOSTAT CONFIGURATION

A screenshot of the thermostat configuration page. The page is divided into several sections. Section 1 (callout 1) is 'Thermostat Name' with a text box containing 'X-SERIES' and an 'Apply' button. Section 2 (callout 2) is 'LED Assign' with two rows of color-coded buttons (green for Filter, yellow for Fault) and dropdown menus for 'Chg Filter' and 'Ineff Run', each with an 'Apply' button. Section 3 (callout 3) is 'Site Name' with a text box containing 'Your Site'. Section 4 (callout 4) is 'Address' with text boxes for '123 Any Street', 'Your City', and 'Texas (TX)'. Section 5 (callout 5) is 'Zip/Post' with a text box containing '76051' and an 'Apply' button. Other sections include 'Recirc Fan Timer' (5 Min/Hour), 'Override Timer' (8:20 Hours), 'Temp Scale' (Deg F selected), 'Heat Pump Balance Points' (-54 and 118), and 'Messages'.

DIRECTCONNECT INSTALLATIONS (NON-CLOUD APPLICATIONS)



If you decide you don't want or need the CloudConnect™ service, refer to the DirectConnect™ instructions and move your thermostat to a static IP address and port forward your router, as described in the DirectConnect™ documentation. Go to the link below or use this QR code (to the right) for additional instructions and documentation.

<https://networkthermostat.com/x-series-installation>

TROUBLESHOOTING

Here is a chart showing the Green and Red LED status.

	Green LED (Network Connection Indicator)	Red LED (Faceplate Connectivity Indicator)
ON:	Backplate is connected to your router	Backplate is not communicating with the Faceplate (the Faceplate is not on the Backplate) since last backplate reset.
BLINKING:	Wi-Fi Backplate is in Soft AP mode (allows connection directly from a PC to the Wi-Fi Backplate , for network configuration purposes).	Face plate is removed and has communicated with the backplate since the last backplate reset.
OFF:	OFF: No network connection. during a 'reboot', the Green LED will remain off until the Backplate makes a connection to the router with valid security credentials.	OFF: There is no power connected to the backplate.

RECOVERY MODES

Recovery Mode

There are two options for recovery mode: Soft Reset and Factory Reset. Soft Reset only changes your network settings while all other settings are retained. Factory reset, removes all your changes and returns your Wi-Fi Backplate to its original factory configuration. See below how to use each reset.

Soft Reset

Press and hold the SETUP button (yellow arrow) for 10 seconds. When both the WIFI Green LED (green arrow) and Red STAT LED (red arrow) flash together, release the SETUP button and the Wi-Fi Backplate will remove the network settings, reboot, and return to Soft AP Mode. Follow the instructions in **STEP 3** and **STEP 4** above to connect to your Wi-Fi Backplate.

 **NOTE:** This reset maintains your current username and password.

Factory Reset

Press and hold the SETUP button (yellow arrow) until both the WIFI Green LED (green arrow) and Red STAT LED (red arrow) flash together, release the SETUP button. While the LEDs are flashing simultaneously, press the SETUP button with three short presses and the Wi-Fi Backplate will remove ALL programming, reboot, and return to Soft AP Mode. Follow the instructions in **STEP 3** and **STEP 4** above to connect to your Wi-Fi Plate.