How To Set Up The CyberQ

Part II:
Setting Up An Infrastructure Link On A WiFi Network

Because the CyberQ is not a computing device like a laptop, smart Phone, or tablet, it requires some adjustments in your router’s firmware to link and operate smoothly. The full procedure takes an hour or less in most cases. We will describe the process in detail, but remember that there are many brands and models of router on the market and many Internet providers that can introduce variations.

1. Preparing the WiFi Router

First, you will need to access the router’s built-in firmware. While you can use a computer or tablet connected wirelessly, the preferable alternative is to use a computer connected to the router with an Ethernet cable. You will also need to know the User ID and password used to access the firmware, plus the network name and password used to link to your WiFi network.

WiFi router firmware is Web-based, and accessed by entering an IP address into your browser software. Here are some common addresses:

192.168.1.1
192.168.0.1
192.168.1.254
10.0.0.1

An exception to this is Apple routers, which are controlled with a program called Airport Utility, available in both Mac and Windows versions.

Enter your wifi router’s firmware using the appropriate IP address, User ID, and password. Look for a tab or a link that deals with wireless setup. Within this topic, you will be looking for items that control your router’s SSID (the name of your network), the WiFi channel it broadcasts on, and other characteristics. You probably don’t want to change the SSID, which is the name of your network, but verify that the broadcast channel is not on auto, but set to channel 1, 6, or 11, and that compatibility is set to accept b,g,and n (plus ac if your router has that capability). Make sure that wireless security is set to your customary level (usually WPA2 PSK), and that your password is what you want it to be. Note that if you change the SSID, security type, or password, this can cause problems with other devices on your network.
2. Linking the CyberQ

The following steps are also detailed in Section 11 of the manual:

Please perform a system reset by holding down all 4 directional arrows until your display reads: RESETTING EEPROM

1. Press and hold down the UP and DOWN arrows together to enter SETUP mode.
2. When >SYSTEM SETUP is displayed, push the RIGHT arrow.
3. Scroll down to >SCAN WIFI and push RIGHT arrow.
4. Scroll to your Wifi Network and then press the CENTER button.
5. Press the LEFT arrow to go back to WiFi Setup
6. Scroll down until you see KEY: then push the CENTER button.
7. Enter your Wifi Network password using the directional arrows. Use the UP arrow to select numbers and upper-case letters, use the DOWN arrow to select lower-case letters, and the RIGHT arrow to move to the next character. Double-check your entry.
8. Press the CENTER button to save the password.
9. Unplug the unit and plug it back in.
10. The unit will now reboot, then display IP ADDRESS INFS CONNECTING. If the link is successful, the display will show the IP address supplied by your router. To find this IP address again, press and hold down the UP and DOWN arrows together to enter SYSTEM SETUP mode. Push the Right arrow to enter WiFi Setup, then scroll down to just below SCAN WIFI and you should see the CyberQ’s Network IP Address. (This should look something like 192.168.1.XXX)
11. Enter this address into a web browser on a device that is also connected to the same Wifi network and you should see the CyberQ Temperature Controller status screen. *Note: most browsers will automatically add http://www. to the address. You just need to enter the numbers without the www. in the browser address window.

Your CyberQ is now successfully linked, but one more step is required to make the CyberQ’s IP address constant, which is convenient for general operation, and required for port forwarding. To do this, you need to go back into your router’s firmware and find the section dealing with DHCP addresses.

With some routers this function is located in the LAN section where you can get a list of attached devices. Other routers have a separate section for DHCP assignments. What you are looking for is a list of all the devices that are attached to your LAN. In some cases, there will be a checkbox that lets you define a device address as reserved, while in others you may have to click an add button and define a reserved location, selecting an address or device from a drop-down box, perhaps even entering a MAC address. Whatever the methodology, it will probably be harder to find the list than to change it (this is true of Apple’s over-simplified router software). Also, some routers (particularly AT&T Uverse models) do not apparently have the ability to reserve an address.