



CyberQ WiFi USER GUIDE REV2.1 for V1.2 Firmware

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1.SAFETY WARNINGS

INSTALLATION / SAFETY INFORMATION. READ AND UNDERSTAND THIS USER GUIDE COMPLETELY BEFORE INSTALLING OR USING THIS PRODUCT!!



WARNING: FIRE HAZARD, BURN HAZARD!! Even quality electronics can fail CAUSING THE BLOWER TO RUN CONSTANTLY AND CAUSING EXCESSIVE TEMPERATURES! Power Draft Fans can get the temperature of your pit higher than through natural draft, so use extra caution in opening your pit and determining its placement. Always inspect your probe wires for damage. Damaged probe wires can cause the blower to run constantly causing your pit to become excessively hot.



WARNING: FIRE HAZARD, BURN HAZARD!! FLAMES, SPARKS AND LIT EMBERS CAN EXIT ANY OPENING ON YOUR PIT CAUSING FIRES - Keep your pit located a safe distance from anything flammable like buildings, walls, solvents, cars, fuel, wood piles, furniture, etc. and always use caution when opening the pit. Be aware that an ember that has fallen or is ejected from the charcoal cooker can be blown by a light wind into a garage or other structure, debris field, woods, or grass field and cause a fire to start. Always have a fire extinguisher and water supply close by. If the cooker is to be used on a wooden or combustible surface such as a wooden deck, always place the cooker on a non-flammable pad intended for this purpose.



WARNING: FIRE HAZARD, BURN HAZARD !! Even quality electronics can fail and cause the temperature to read incorrectly - BE SURE TO USE A REDUNDANT DIAL THERMOMETER AS A BACKUP TEMPERATURE SENSOR ON YOUR PIT – This will allow you to verify your control's temperature reading for your safety. Even though the CyberQ WiFi can be controlled remotely allowing you to cook while you are away, someone should always be present when your pit is cooking to prevent fires.



WARNING: SMOKE CAN COMBUST WHEN OXYGEN IS INTRODUCED AND PRODUCE SEVERE BURNS – ALWAYS USE CAUTION WHEN OPENING THE LID OR DOOR OF YOUR PIT.



WARNING: KEEP YOUR CONTROL DRY – Allowing your control to get wet can cause damage to its electronics and/or make it operate incorrectly CREATING A HAZARDOUS CONDITION.



WARNING: Pit fires can occur when liquids are spilled or when cooking at temperatures that cause surfaces inside the cooker to reach the ignition temperature of fats. Never pour or toss water directly into a fat fire. Reduce the temperature by cooling the fire in the firebox with a water spray. Close the cooking chamber door and the firebox while it is steaming to smother the fire. This procedure may need to be repeated several times before the pit fire is under control.

NOTE: Pit fires can be largely avoided if the cooker is kept clean and free from fat buildup during or between cooks. Changing drip trays during a cook cycle will help keep flammable fats in the cooker to a minimum. Cooking temperatures should be kept low enough to avoid ignition. You are dealing with an open fire when you are cooking on charcoal and wood.



WARNING: There are hot surfaces on all parts of the cooker before, during and after cooking. Always wear protective clothing when tending the cooker or attempting to extinguish a fire or dumping a firebox in the proper ash receptacle at the end of a cook. Always be ready to call your local Fire Company in the case of an emergency before the situation gets out of control.



CAUTION: fire danger is always present, even in the best of conditions. There is no substitute for continuous safety scrutiny on the part of the user.



WARNING: SHOCK HAZARD, HIGH VOLTAGE!! The power supply for this product is plugged into a 120 or 240 VAC Mains. THIS VOLTAGE CAN KILL OR HURT YOU. KEEP THE POWER SUPPLY AWAY FROM WATER AND OFF OF THE GROUND - do not let it get exposed to rain or snow and NEVER TOUCH THE POWER SUPPLY IF IT GETS WET.



To satisfy FCC RF Exposure requirements for mobile and base station transmission devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during operation. To ensure compliance, operation at closer than this distance is not recommended. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2.LIMITED WARRANTY

THE BBQ GURU warrants this product to be free from defect in workmanship and materials for a period of ninety days from the date of purchase.

1. Should unit malfunction, return it to the factory. If defective it will be repaired or replaced at no charge.
2. There are no user serviceable parts on this unit. This warranty is void if the unit shows evidence of being tampered with or subjected to excessive heat, moisture, corrosion or other misuse.
3. Components which wear or damage with misuse are excluded, e.g. relays, probes, etc.
4. THE BBQ GURU shall not be responsible for any damage or losses however caused, which may be experienced as a result of the installation or use of this product. THE BBQ GURU's liability for any breach of this agreement shall not exceed the purchase price paid E. & O.E.

3.CyberQ WiFi Features

- Built in WiFi Web Server allows remote access from your mobile device or PC
- 2.4 GHz, IEEE Std. 802.11b™, Wi-Fi® certified (WFA ID: WFA7150)
- 16 Character by two line backlit LCD display
- Email Alert Capability (requires internet connectivity)
- Rugged, armored high-temperature pit and food (meat) probes
- Controls your pit and monitors up to 3 food (meat) temperatures
- All new full-time adaptive control algorithm learns your pit to control better stability / accuracy
- Open lid detect senses when the pit's lid is open to minimize the temperature disturbance and recover quickly to the setpoint, can be turned on /off (default is ON)
- Exclusive low and slow ramp down feature (cook and hold) ramps your pit down on rising food (meat) temperatures, so your food (meat) never overcooks
- Scrolling display shows all of your temperatures, time, and status
- Audible alarm sounds on food (meat) done (default is ON)
- Adjustable deviation alarm sounds when your pit's temperature goes either too high or low
- Real time blower status indication and output % helps you to measure fuel use
- Display in degrees F or C
- User adjustable # of beeps setting
- 32 to 475 deg F range with +/- 2 deg F accuracy
- Runs on 100-240VAC (for worldwide use) or 12VDC for automotive supply use

4.Radio Frequency Interference with the CyberQ WiFi

Other 2.4GHz such as cordless phones and wireless networked devices may cause interference with the CyberQ WiFi and prevent a reliable connection. It is the customer's responsibility to diagnose the source of the interference and determine which devices need to be turned off or eliminated from the installation.

5.Probes

The probes provided with your CyberQ WiFi are rugged stainless steel precision thermocouples. These are not low cost thermistors like inexpensive monitors. The thermocouple wires have an armor braid with moisture and smoke resistant Teflon insulation that is rated for temperatures up to 500 degrees F. The user can pass these thin wires under the lid of the grill or through a small hole opening without creating a large gap which would allow air to get through (air intrusion). Be careful not to kink these rugged yet small wires or let them come in contact with flames. Always store them by rolling them neatly. These probes are user-replaceable and are available at www.thebbqguru.com; we recommend having a spare set for unforeseen emergencies.



Important Note: Be sure to fully insert your probes into the control. **Push the plug into the receptacle until you feel and hear it snap in place.** If you do not plug the probes in securely, you may experience sporadic temperature readings and the CyberQ WiFi will not control your cooker accurately. The temperature may also read low causing you cooker to get excessively hot.



Important Note: The pit probe must be placed in the pit for proper temperature regulation. If the pit probe is not located in the pit, proper control will not take place. This can cause the blower to run constantly causing your pit to become excessively hot.

5.1.Food Probe(s)

If you decide not to use the food probe(s), they should be unplugged before applying power to the CyberQ WiFi, not during operation. This will allow the CyberQ WiFi time to sense how you are trying to cook and configure its alarm operation to prevent false food alarms. You can also leave the food probe plugged in and just not use it.

6.Power Draft Blowers

All blowers are equipped with an adjustable damper and an aluminum nozzle. The blower housing is constructed of stainless steel for a clean, durable and long lasting finish.

6.1.Blower Size

The Standard 4 CFM blower is good for small or medium size grills and smokers.

The 10 CFM and 25 CFM blowers are good for medium and large grills and smokers.

6.2.Blower Damper Adjustment

The adjustable damper can be completely closed to kill the fire, or can be adjusted to a small opening for cold smoking (very low temps). This feature allows the user to make fine adjustments on their own grill or smoker due to natural drafts that effects cooking temperature during the blower's off cycle. Testing on different settings is recommended. Open damper fully for quick start up or grilling at high temperatures. Close 1/2 way for smaller cookers or low and slow cooking. Close 3/4 of the way for cold smoking.

7.Key Operation

UP▲ - Indexes value up / scrolls

DOWN▼ - Indexes value down / scrolls

LEFT ◀ - Selects digit / previous menu

RIGHT ▶ - Selects digit / next menu

MODIFY/ENTER (M/E) ● - Selects / saves, (powers up/down when held down)

UP + DOWN▲+▼ - Access / leave Setup menu

7.1.Key Backlight

The Key Backlight blinks, showing when there is WiFi activity.

7.2.Keypress Chirp

Whenever a key is pressed a short chirp occurs on the beeper as user feedback for a valid keypress. The default value is ON.

7.3.Silencing the Beeper with any Keypress

Anytime the beeper is sounding, pressing any key will silence it and clear the alarm condition. To turn the alarm beeper off, set the Alarm Beeps in the System Setup menu to zero.

7.4. Backlight & Contrast Hot Keys

The contrast and brightness can be adjusted by the “hot keys” described below and in the system setup menu.

Pressing the M/E KEY and UP KEY increases the Backlight brightness.

Pressing the M/E KEY and DOWN KEY decreases the Backlight brightness.

Pressing the M/E KEY and RIGHT KEY increases the Display contrast.

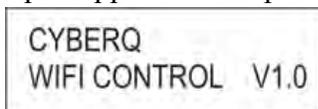
Pressing the M/E KEY and LEFT KEY decreases the Display contrast.

7.5. Reset to Defaults

Holding down all four arrow keys (UP, DOWN, LEFT, RIGHT) for approximately 5 seconds will reset all setting to factory defaults. The CyberQ WiFi will then show RESETTING EEPROM and restart.

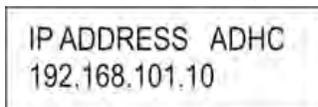
8. Powering up

Upon application of power the following screen will display:



CYBERQ
WIFI CONTROL V1.0

Then the IP address, adhoc (ADHC) or infrastructure (INFS) will be displayed for 5 seconds as follows:



IP ADDRESS ADHC
192.168.101.10

See section 10. for more details on this screen.

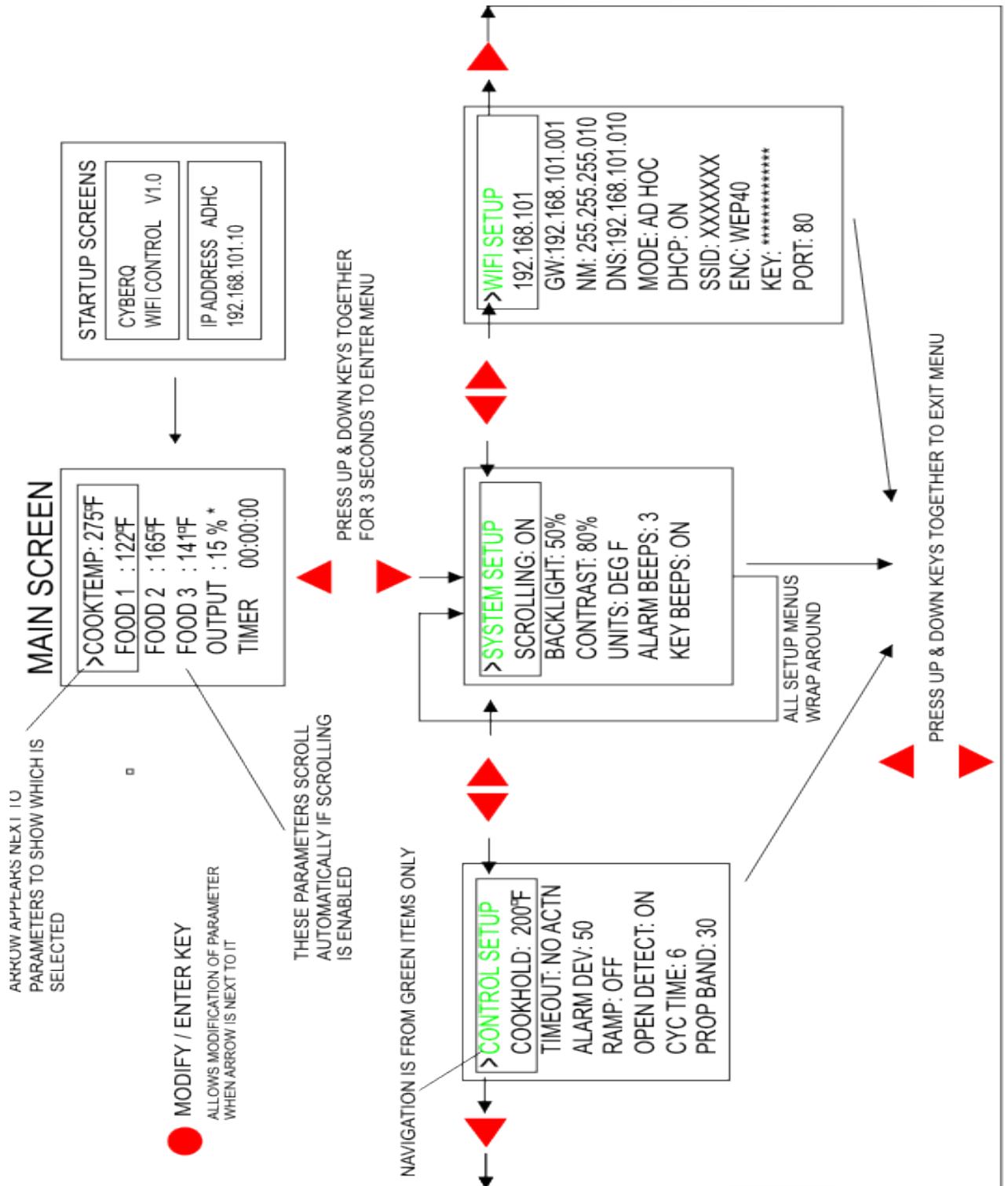
TURNING OFF - To turn the CyberQ WiFi off, press and hold the M/E key for 4 seconds.

TURNING ON - To turn CyberQ WiFi on, press and hold the M/E key for 2 seconds.

8.1. Power Interruption Recovery Feature with Internal Memory

Because of the internal EEPROM memory, if there is a brief or sustained power interruption at any time while cooking with your CyberQ WiFi, the unit will automatically restart and continue to control your grill/smoker at the same settings you originally set once power is restored. If you are operating in infrastructure mode on your network, the network service should not be interrupted. If you are operating in adhoc mode, you may need to disconnect your PC or mobile device from the network, and reset power to the CyberQ WiFi.

9. Menu Diagram



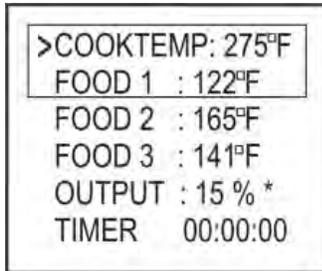
9.1.Main Screen

When the main screen is displayed, using the UP and DOWN Keys will index the display up and down through the list of parameters. Two lines are displayed at a time and are indexed through one line at a time. If scrolling is turned on, the main screen items are indexed through automatically. An arrow appears on the display next to any parameter that can be modified. The only main screen parameter that

cannot be changed in the example below is “OUTPUT : 15 % *” since this is just reporting the output percentage.

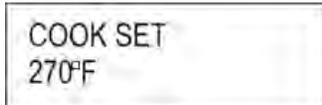
To modify a value, index to the value you wish to modify by using the UP/DOWN keys. The line will be denoted with an arrow. Select the value using the M/E key. Navigate to the value you wish to modify using the LEFT/RIGHT keys. Modify the value using the UP/DOWN keys. Press the M/E key to save. The labels COOKTEMP, FOOD1, FOOD2, FOOD3 may be changed via the web interface, but will always remain the same on the controller.

If a food or cook sensor is unplugged or damaged (open), it will show OPEN next to the corresponding item.



9.1.1.Cook Temp

Scroll to COOKTEMP (pit temp) in the MAIN SCREEN using the UP/DOWN keys (arrow will display) to modify its value. Press the M/E key to modify the cook setpoint as follows:

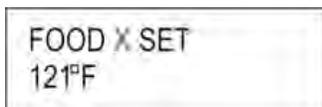


Use the LEFT and RIGHT keys to select the digit to be modified. Adjust the values using the UP and DOWN Keys. You may press the M/E key to enter and store the value immediately and return to the main screen. Otherwise 4 seconds after the last adjustment to the parameter is made, the changed value will be stored and the display will revert back to its previous point in the main screen indexing.

The adjustment range of the COOK SET is 32–475 degF or 0-246degC. The default value for the COOK SET is 275 F.

9.1.2.Food Temp

Scroll to FOOD X (1, 2 or 3) in the MAIN SCREEN using the UP/DOWN keys (arrow will display) to modify its value. Press the M/E key to modify the setpoint of all 3 food probes individually as follows:



Use the LEFT and RIGHT keys to select the digit to be modified. Adjust the values using the UP and DOWN Keys. You may press the M/E key to enter and store the value immediately and return to the main screen. Otherwise 4 seconds after the last adjustment to the parameter is made, the changed value will be stored and the display will revert back to its previous point in the main screen indexing.

The adjustment range is 32–475 degF or 0-246degC. The default value is 180 F.

When the food temperature exceeds the food setpoint, the FOOD DONE message blinks with the temperature and the beeper sounds. Please note that if you set the setpoint below the food's actual temperature, the DONE alarm will sound (press any key to clear alarm).

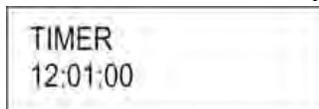
9.1.3. Output %

The output percent is not changeable by the user but is simply a display of the output percentage of the control. The "*" character is shown next to the output % value when the output is energized.

TIP: During your cook if you notice the output percentage hanging around 80-100% for a long time, you may be running out of charcoal. If you notice the output % hanging around 10% for a long time and the temperature is oscillating you may want to close the blower damper adjustment slightly for better control.

9.1.4. Timer

Scroll the TIMER in the MAIN SCREEN using the UP/DOWN keys (arrow will display) to modify its value. Press the M/E key:



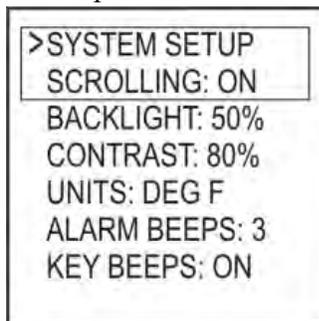
Use the LEFT and RIGHT keys to select the digit to be modified. Adjust the values using the UP and DOWN Keys. You may press the M/E key to enter and store the value immediately and return to the main screen. Otherwise 4 seconds after the last adjustment to the parameter is made, the changed value shall be stored and the display shall revert back to where it left off in the main screen indexing.

Once you enter a value the control will begin counting down. The maximum value is 99:59:59. When it expires, the action specified in TIMEOUT will be taken.

9.2. System Setup

To access the SYSTEM SETUP from the MAIN SCREEN display, press and hold the UP and DOWN keys together for 3 seconds.

Just as with the main screen, pressing the UP or DOWN Keys will index up and down through the list of shown parameters as follows:



When SYSTEM SETUP is in the top line (with arrow) pressing the LEFT or RIGHT key will index to the next or previous setup screens (see menu diagram).

Scroll through the values using the UP/DOWN keys. To modify a value press the M/E key. Use the LEFT/RIGHT keys select the digit to be modified. Adjust the value with the UP/DOWN Keys. Press the M/E key to save. To return to the MAIN SREEN press the UP and DOWN keys together.

9.2.1. Scrolling

You may select whether or not the MAIN SCREEN automatically scrolls. The default value is OFF. Set using the UP/DOWN keys as described above.

9.2.2. Backlight

The backlight is adjustable from 0-100%. Select the digit using the LEFT and RIGHT keys and adjust the value using the UP/DOWN keys.

9.2.3. Contrast

The screen Contrast is adjustable from 0-100%. Select the digit using the LEFT and RIGHT keys and adjust the value using the UP/DOWN keys.

9.2.4. Units

You may select whether to use Deg F or Deg C. Default is Deg F. Select the digit using the LEFT and RIGHT keys and adjust the value using the UP/DOWN keys.

9.2.5. Alarm Beeps

You may select from OFF, 1, 2, 3, 4 and 5. Select the digit using the LEFT and RIGHT keys and adjust the value using the UP/DOWN keys.

9.2.6. Key Beeps

Whenever a key is pressed a short chirp occurs as feedback for a keypress. The default value is ON. Select the digit using the LEFT and RIGHT keys and adjust the value using the UP/DOWN keys.

9.3. Control Setup Screen

To access the CONTROL SETUP from the MAIN SCREEN display, press and hold the UP and DOWN keys together for 3 seconds, then press the LEFT KEY. To return to the MAIN SREEN press the UP and DOWN keys together.

Once in CONTROL SETUP, pressing the UP or DOWN keys singly will index up and down through the list of shown parameters as follows:



Scroll through values in the CONTROL SETUP SCREEN using the UP/DOWN keys. To modify a value press the M/E key. Use the LEFT/RIGHT keys select the digit to be modified. Adjust the value with the UP/DOWN Keys. Press the M/E key to save. To return to the MAIN SREEN press the UP and DOWN keys together.

When CONTROL SETUP is in the top line (with arrow) pressing the LEFT or RIGHT key will index to the other setup screens (see menu diagram).

9.3.1. Cook Hold

COOK HOLD defines the temperature that the cook setpoint will be reset to when the TIMER expires, if TIMEOUT action is set to HOLD. The default is 200 degF. Set using the UP/DOWN keys.

9.3.2. Timeout

TIMEOUT defines the action that will be taken when the timer counts to 00:00:00. The selections are NO ACTN, HOLD, ALARM, SHDN. The default is NO ACTION. Set using the UP/DOWN keys.

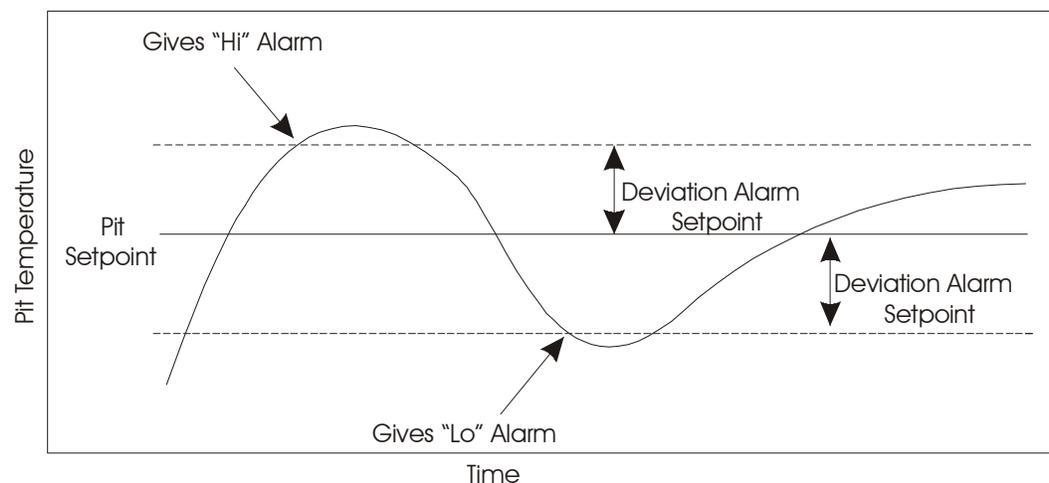
TIMEOUT SELECTION	CONTROL ACTION	MESSAGE DISPLAYED	BEEPER ACTION
NO ACTN	none	none	none
HOLD	COOKSET is set to COOKHOLD value	TIMEOUT HOLD 200 F (or cook hold temp) Is flashed continuously until a key is pressed to clear it.	Beeps <u>once</u> at ALARM BEEPS selection.
ALARM	none	TIMEOUT ALARM Is flashed continuously until a key is pressed to clear it.	Beeps continuously at ALARM BEEPS selection until a key is pressed to clear it.
SHDN	Sets the COOK SET to 32 degF	TIMEOUT SHDN Is flashed continuously until a key is pressed to clear it.	Beeps continuously at ALARM BEEPS selection until a key is pressed to clear it.

9.3.3. Alarm Deviation Setpoint

If the temperature of the pit deviates above the setpoint by the alarm deviation setpoint, the alarm will sound and the display will blink COOK TEMP HIGH and the temperature value.

If the temperature of the pit deviates below the setpoint by the alarm deviation setpoint, the alarm will sound and the display will blink COOK TEMP LOW and the temperature value.

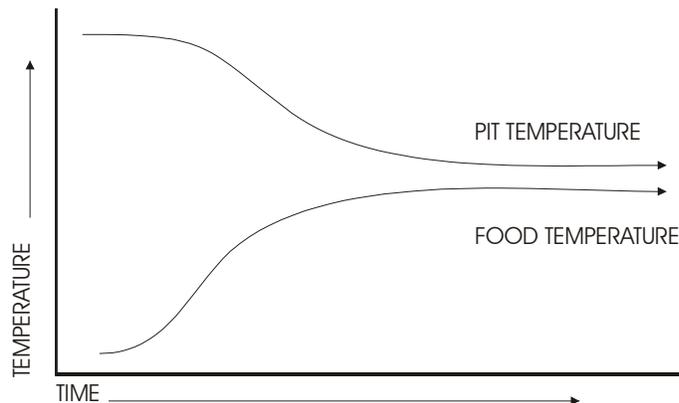
The alarm is only allowed once the temperature gets near the cook temperature setpoint. The alarm deviation is settable from 10-100 degF and the factory default is 50 degF.



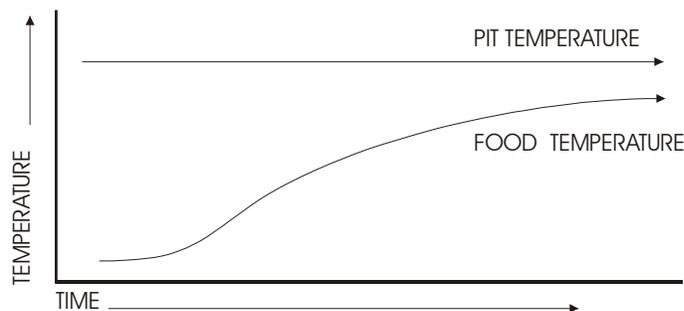
9.3.4. Ramp (Cook and Hold)

When the ramp is set to on, the low and slow ramp mode is enabled. The ramp selection tells the control which sensor to ramp from, so the selections are off, Food1, Food2, Food3. This mode is used for slow cooks so your food (meat) never overcooks. This feature will gradually lower the pit temperature to the food X set point temperature when the food is within approximately 30° of being done. The controller

will hold the pit temperature slightly above your food set point as long as there is fuel. This feature is similar to cook and hold, but the control calculates everything for you. The factory default setting is off so you must enable this feature to use it. Note when using this feature, you may want to start your pit temperature a little higher than normal to reduce cook time and not overcook your food.



Food /Pit plot with Ramp Set to On (Food1, 2, or 3 selection)



Food /Pit plot with Ramp Set to off

9.3.5. Open Lid Detect

This feature will allow quick recovery to the setpoint temperature after you open your lid. When the open lid is set to off and you open your pit's lid, the temperature will drop. This can cause the blower to over-fire the coals and cause overshoot when the lid is shut. This mode detects when the pit's lid is open and minimizes the blower running during that time. Some overshoot will always be present when your pit's lid is opened and closed even if the blower is off, because it still introduces oxygen to the fire. The factory default is ON so you must turn this OFF if you have problems with excess air currents in your pit.

When the open lid detect is enabled, the rate of temperature rise of your pit will be limited to preventing over-firing. This will make a typical startup to a temperature of 250 deg F take a minimum of about 20-30 minutes and will help to eliminate startup overshoot.

9.3.6. Cycle Time

The advanced user can adjust the cycle time from 4 to 10 seconds. The default value is 6 seconds (ideal for most pits). Select the digit using the LEFT and RIGHT keys and adjust the value using the UP/DOWN keys. This value is the time (in seconds) between power draft fan pulses. The default value of 6 seconds will work well with most pits.

9.3.7. Proportional Band

The advanced user can adjust the Proportional Band from 5-100 deg F. Select the digit using the LEFT and RIGHT keys and adjust the value using the UP/DOWN keys. This value is the band of temperature over

which the power draft fan will pulse. Say your internal pit setpoint is 225 (215 + 10 deg offset). Below 200 the power draft blower will be full on, above 225 the power draft blower will be full off and at 212.5 the power draft blower will cycle 50% of the time. The default value of 25 degrees will work well with most pits. If you notice that the pit temperature is oscillating up and down more than 5 to 10 degrees and never settles out, the proportional band can be made larger. Making the proportional band smaller will make the pit reach the setpoint faster, but will also increase the overshoot on startup.

The CyberQ WiFi's Adaptive Control Strategy is designed to operate with a wide variety of bbq pits by continually learning what your pit is doing and adapting to many factors such as outside air temperature, amount of charcoal, damper settings, etc. For the CyberQ WiFi to work properly and determine how to adapt, the temperature inside the pit cannot be oscillating up and down and the lid must stay closed. If you open the lid often, especially on startup, the control cannot be expected to maintain setpoint. If you leave the lid closed for approximately 10-20 minutes, the temperature will become stable after the control adapts. If the lid has been shut for at least 20 -30 minutes and you notice the temperature going up and down significantly (+/- 10 degrees or more) the fan damper needs to be closed more; try ½ the current setting. Sometimes the pit may run a few degrees high or low due to various conditions; don't sweat it, the control will bring it back to setpoint. Also remember that pit temperatures of 20 degrees high or low rarely have an effect on the quality of food.

9.4. WiFi Setup Screen

To access the WiFi from the MAIN SCREEN display, press and hold the UP and DOWN keys together for 3 seconds. Navigate to the WiFi SCREEN using the LEFT/RIGHT arrows. To return to the MAIN SCREEN press the UP and DOWN keys together.

```
WIFI SETUP
192.168.101
GW:192.168.101.001
NM: 255.255.255.010
DNS:192.168.101.010
MODE: AD HOC
DHCP: ON
SSID: XXXXXXXX
ENC: WEP40
KEY: XXXXXXXX
PORT: 80
```

For ease of use we suggest setting up your WiFi settings by following the instructions in section 10. . The interface is much easier to use and it can be done from any PC or mobile device equipped with a wireless card.

***It is important to remember to cycle power (turn unit off and then on again) after changing the WiFi Settings. They will not be used until power is cycled. If changing parameters from an adhoc or WiFi connection, you can use the reset button at the bottom of the web page.

Just as with the main screen, pressing the UP or DOWN Keys will index up and down through the list of shown parameters as follows:

When WIFI SETUP is in the top line (with arrow) pressing the LEFT or RIGHT key will index to the next or previous setup screens (see menu diagram).

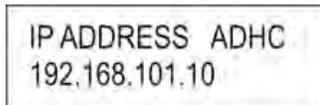
Scroll through values in the WiFi SCREEN using the UP/DOWN keys. To modify a value press the M/E key Use the LEFT/RIGHT keys select the digit to be modified Adjust the value with the

UP/DOWN Keys. Press the M/E key to save. To return to the MAIN SREEN press the UP and DOWN keys together. See sections 10. and 11. Connecting in Infrastructure Mode & Remotely Over the Internet (DIFFICULTY: ADVANCED) for specific information.

10. The Easy Way to Access the CyberQ Wifi with your Phone, Mac or PC in Adhoc Mode

The simplest way to use your CyberQ WiFi is in adhoc mode. Adhoc simply means that the CyberQ WiFi will create its own network independently of any routers. Adhoc will only allow access to the CyberQ WiFi pages from one wireless equipped mobile device or PC that is within the range of the CyberQ WiFi. This mode is great for initial setup or for cooking at home. The steps below assume that you have not changed any of the WiFi settings in the CyberQ WiFi. If you made any changes to the wifi settings we suggest that you first follow the steps in 7.5. Reset to Defaults before proceeding.

- 1)Apply power to the CyberQ WiFi.
- 2)Make sure that after the software version is displayed a valid ip address appears:



This shows you that the mode is Adhoc and it was able to create a wireless network and assign the CyberQ WiFi an ip address. If the address shows NO NETWORK then unplug the power and plug it back in.

- 3) Using a PC or mobile device with wireless networking enabled, go to the place where you can select the network you want to log on to.
 - *In an iPhone or iPad this is Settings > Wi-Fi. Make sure WiFi is set to on, then select “my CyberQ WiFi”. Once you select the “my CyberQ WiFi” as the network then enter the default password of 1234abcdef.

Once connected you should see wifi signal bars as follows:

*On a PC this is the  at the lower right.

*On a Mac / idevice this is the  at the top.

When connected the buttons on the front of the CyberQ WiFi will illuminate and blink indicating data transmission.

- 4) Open a browser (safari, internet explorer, etc.) window and type 192.168.101.10 to load the CyberQ WiFi Controller pages. From this browser window you can monitor and control your cook and make changes to the setup of the controller. Be sure to close any applications that require internet access when using Adhoc mode.

11. Connecting in Infrastructure Mode & Remotely Over the Internet (DIFFICULTY: ADVANCED)

Several steps are required before you can access your CyberQ WiFi on the internet:

- 1) Understand basic networking terms
- 2) Configure the CyberQ WiFi so that it can join your WiFi network.
- 3) Enable port forwarding on your router so it will point to the CyberQ WiFi

11.1. Understand Basic Networking Terms

ISP (Internet Service Provider) – The people who sell you internet service, i.e. Comcast, Verizon, etc.

Router – This is the device that manages and connects your local network to the internet. It may have a built in cable modem or you may have an external cable modem that connects to your ISP. It manages all of the local traffic on your network and also determines how data is passed back and forth between your local network and the internet.

IP Address - An IP address (Internet Protocol) address is your computer's equivalent of your postal address and just like the mail service, each computer has to have its own address so that it will only receive the information that is meant for it and not anything that is meant for someone else.

Your Public IP address is the address that is assigned to you by your ISP. The Private IP addresses on your network is generally assigned to your computers and devices by your router.

Adhoc Mode – This mode of the CyberQ WiFi allows easy connection and access from one (1) mobile device or PC. In this mode, the CyberQ WiFi actually creates its own wireless network.

Infrastructure Mode – This mode of the CyberQ WiFi is required for internet access or your existing network access to the CyberQ WiFi.

DHCP (Dynamic Host Configuration Protocol) – This basically means that IP addresses are not static, they can be changed at any time. In the case of ISP DHCP, it means that your ISP can change your public IP address. In case of DHCP enabled on your router it means that your router can change the local IP addresses at any time.

Ports - Every IP address is divided up into many ports for different functions. When one computer sends data to another computer, it sends it from a port on an IP address to a port on an IP address. A port can only be used by one program at a time. The protocol used for the CyberQ WiFi's web pages is HTTP (Hypertext Transfer Protocol)

Port Forwarding - Port forwarding allows remote computers, for example, computers on the Internet, to connect to a specific computer or device within a private local area network (LAN).

SSID - A service set identifier (SSID) is a name that identifies an 802.11 wireless LAN.

Key – This is the encryption key. The types of encryption are shown below:

WEP - Wired Equivalent Privacy. Supposed to give roughly the same level of security as a wired network. This was the original security setting on wireless networks. In the CyberQ WiFi it must be a value containing the characters 1,2,3,4,5,6,7,8,9,A,B,C,D,E,F (hexadecimal value). WEP 40 requires 10 Characters, WEP104 requires 26 characters.

WPA - WiFi Protected Access. Provides better encryption than WEP and also has user authentication.

WPA2 - a more secure version of WPA which provides "government grade" security. There are two versions of WPA2 - Personal & Enterprise.

WPA AUTO – Automatically selects a WPA or WPA2 network

WPA or WPA2 PASS – Uses a pass phrase instead of hex values.

OPEN – No Encryption pass required.

MAC Address – this is ID of computers and network devices. It never changes and is assigned to the device when it is manufactured.

Gate Way Address - A default gateway is the device that passes traffic from the local subnet to devices on other subnets. The default gateway often connects a local network to the Internet, although internal gateways for local networks also exist. For 99% of applications you don't have to deal with this; this parameter in the CyberQ WiFi is reserved for advanced IT personnel.

Net Mask Address - Bundled with an IP address there is always a "Netmask" value. The Netmask, together with the IP address, defines the network the computer belongs to, that is which other IP addresses the computer can touch directly in the same LAN. For 99% of applications you don't have to deal with this; this parameter in the CyberQ WiFi is reserved for advanced IT personnel.

DNS - Domain Name System is the method by which website or domain names are translated into IP addresses. Specify such an address manually, according to the information provided by the ISP. For 99% of applications you don't have to deal with this; this parameter in the CyberQ WiFi is reserved for advanced IT personnel.

11.2. Change Your CyberQ WiFi to Infrastructure mode

Follow the instructions in section 10. to perform the initial setup. This can be done from the front panel keys, but is much easier from a computer or phone. From the CyberQ WiFi Web Page click on the WIFI Setup page link at the top. Set DHCP client to On, and Enter the SSID (your network's name), Encryption, and Key. If you haven't changed your router's SSID and WEP KEY since it was installed you may be able to get it from the label on the side of the router. Reset power to the CyberQ WiFi to apply the settings

On Power up, when the CyberQ WiFi is configured for infrastructure mode and DHCP and no IP address is assigned by your router, then NO NETWORK will be displayed in the IP address location. When using WPA or WPA2 the screen above may show NO NETWORK, but will connect after a minute or so. The buttons on the front of the CyberQ WiFi will illuminate and blink indicating data transmission. If you are using wireless security (WEP, WPA, WPA2 etc...) and NO NETWORK appears, then reset power to the CyberQ WiFi. Sometimes the CyberQ WiFi will take up to 2 minutes to connect to your router. When connected the buttons on the front of the CyberQ WiFi will illuminate and blink indicating data transmission.

11.3. Enable port forwarding on your router that it will point to the CyberQ WiFi

When your router was installed, you should have been given a way to configure the router. Typically this requires opening up your web browser, and typing in an address like <http://192.168.1.1> Another possibility is that the router install program created a shortcut on your desktop. If you aren't sure of how to do this or you have forgotten your username or password, consult the manuals for your router or call your ISP. Configuration of every router is different so you'll have to determine this yourself. Some ISPs block incoming ports and you will have to contact your ISP about this.



We cannot cover or support every possibility of network configurations. Some knowledge of networking is required, so we encourage you to go online and learn about networks, many resources are available. If you are not comfortable with setting up Infrastructure mode, simply use the CyberQ WiFi in Adhoc mode as described in section 10. .

If you need help setting up your router to work with the CyberQ WiFi, first check BBQ Forums and ask some of the other users, second, call the router manufacturer, and third, call your ISP if it is an ISP supplied router.



We assume no liability for damage done to your network system at home or work by trying to get it to function with the CyberQ WiFi. If you are not comfortable with setting up Infrastructure mode, hire someone who is, or use the CyberQ WiFi in Adhoc mode as described in section 10. .

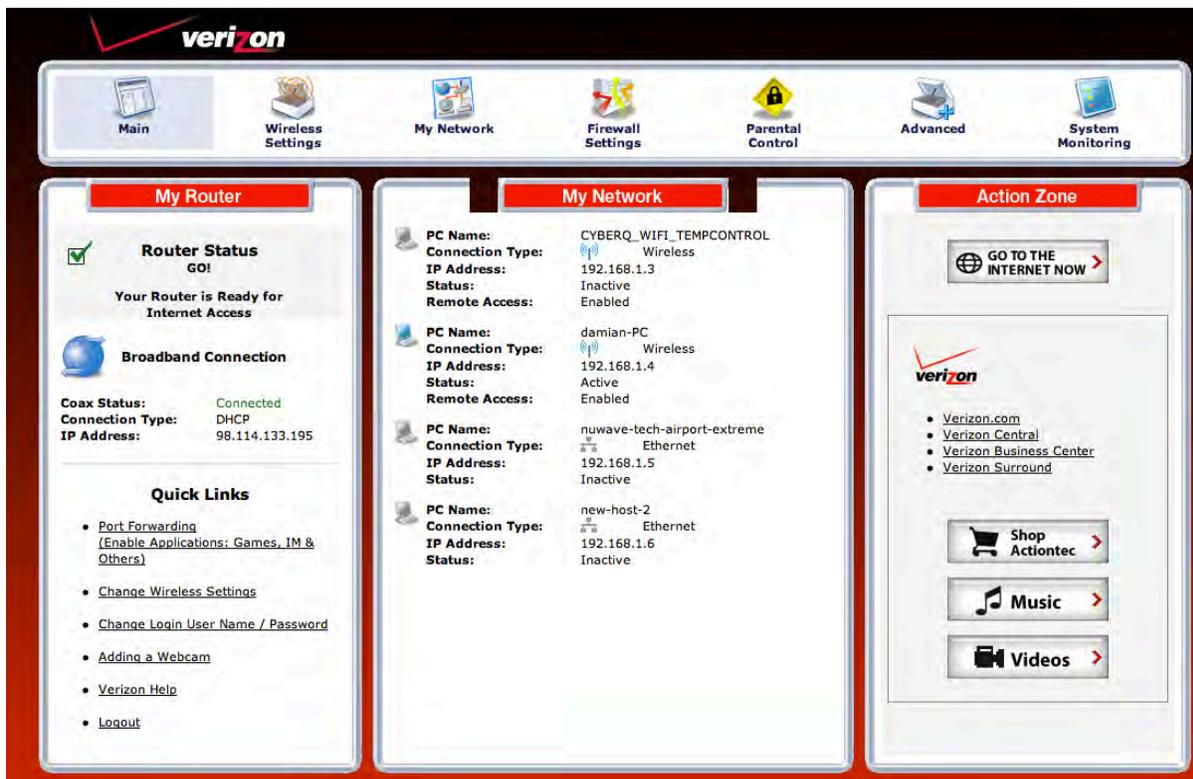
In this user manual we will use the example of the Verizon ISP with the MI424WR Wireless Broadband Router, one of the most popular ISPs and routers. Your router and ISP may differ, but the concepts will be the same.

Type 192.168.1.1 into your browser and then login to your router:



You will now see the router setup screen. Click Port forwarding at the lower left under quick links.

Under the Broadband Connection globe on the left you will see your public IP address; write it down for later. You will need it to access the CyberQ WiFi over the internet. Also make note of your local IP address (under the My Network tab), you will need that if you want to access your CyberQ WiFi on your local network.



Create a new port forwarding rule by selecting CYBERQ_WIFI_TEMPCONTROL under the “Specify IP” dropdown and select “HTTP” under the application dropdown. Then click Add and then click Refresh and it should now appear in the list. Note that the CyberQ WiFi’s IP address (192.168.1.3) was assigned to port 80. 80 is the default port number used by all web browsers to get web pages using HTTP (Hypertext Transfer Protocol). Some ISPs block certain common ports such as port 80. You can enter a custom port # such as 8080 on the router port forwarding and on the CyberQ’s Port setup. To test port forwarding, type in the internet ipaddress of the router in a browser from a computer or phone not connected to your LAN (router). If you have selected a port number other than 80, you will need to enter the port number after the ip address as follows `http://xxx.xx.xxx.xxx:8080`. This applies both for local and internet access.

Port Forwarding

This feature enables applications (Games, Webcams, IM & Others) by opening a tunnel between remote (Internet) computers and a specific device port inside your local area network(LAN).

Create new port forwarding rule:

CYBERQ_WIFI_TEMPCONTROL - 192.168.1.3 HTTP (Web) TCP Any -> 80

Buttons: Add, Reset, Cancel, Advanced >>

Applied rules:

Networked Computer / Device	Applications & Ports Forwarded	WAN Connection Type	Status	Delete
localhost 127.0.0.1	Verizon FIOS Service Tcp Any -> 4567	All Broadband Devices	Active	
<input checked="" type="checkbox"/> 192.168.1.4:52049	Teredo UDP Any -> 52049	All Broadband Devices	Active	<input type="checkbox"/>
<input checked="" type="checkbox"/> 192.168.1.4:22088	Skype UDP at 192.168.1.4:22088 (1679) UDP Any -> 22088	All Broadband Devices	Active	<input type="checkbox"/>
<input checked="" type="checkbox"/> 192.168.1.4:22088	Skype TCP at 192.168.1.4:22088 (1679) TCP Any -> 22088	All Broadband Devices	Active	<input type="checkbox"/>
<input checked="" type="checkbox"/> CYBERQ_WIFI_TEMPCONTROL 192.168.1.3	HTTP TCP Any -> 80	All Broadband Devices	Active	<input type="checkbox"/>

Buttons: Delete, Resolve Now, Apply, Refresh

Go to the browser and type your local IP address of the CyberQ WiFi (192.168.1.3 in this example, yours may be different). You should arrive at the Main Screen for the CyberQ WiFi.

BBQ GURU

CyberQ wifi Temperature Controller

[Main Screen](#) | [System Setup](#) | [Control Setup](#) | [WIFI Setup](#) | [Email Alerts](#)

System Setup

Scrolling	Off
LCD Backlight	50 %
LCD Contrast	10 %
Units	Deg F
Alarm Beeps	3
Key Beeps	On

Buttons: Submit Values, Cancel Changes, Reboot Device

Repeat this by typing in your router's IP address. You should see the same Main Screen.

When you type in your router's IP address, the internet generates a request at port 80 of your router. The router receives the port 80 request, and since you made a port forwarding rule for port 80 that points to the CyberQ WiFi, your router forwards that request to the IP address CyberQ WiFi. The CyberQ WiFi receives the request and serves up the web page allowing you to monitor your cook from any web connected phone, tablet, or computer anywhere by simply typing your router's IP address in any

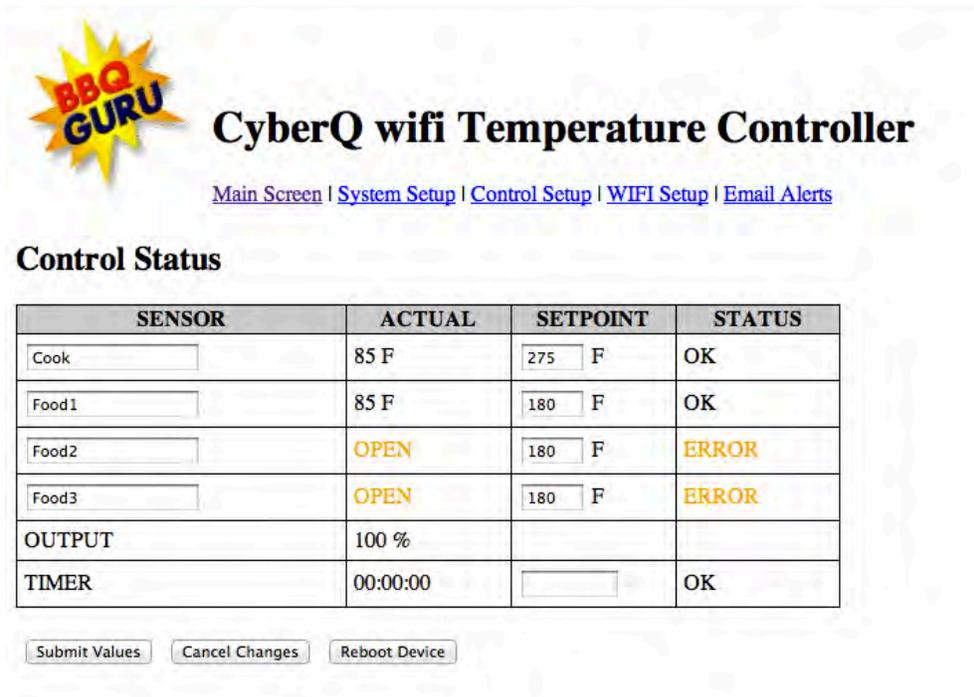
browser. Remember, however, that your router's IP address can be changed by your ISP at any time unless you pay extra for a static IP address.

11.4. DHCP Problems

If you experience problems with the IP address of your CyberQ WiFi changing and not being able to access it, you can correlate a MAC address of the CyberQ WiFi with a specific IP address and turn off DHCP on both the router and the CyberQ WiFi. You can also assign the CyberQ WiFi a static ip address and leave DHCP enabled.

If you experience problems with your router IP address changing and not being able to access the CyberQ WiFi contact your ISP. The ISP may change your routers ip address from time to time. Depending on the level of inconvenience this causes you may purchase a static ip address from your isp.

11.5. Web Interface Main Screen



BBQ GURU

CyberQ wifi Temperature Controller

[Main Screen](#) | [System Setup](#) | [Control Setup](#) | [WIFI Setup](#) | [Email Alerts](#)

Control Status

SENSOR	ACTUAL	SETPOINT	STATUS
<input type="text" value="Cook"/>	85 F	<input type="text" value="275"/> F	OK
<input type="text" value="Food1"/>	85 F	<input type="text" value="180"/> F	OK
<input type="text" value="Food2"/>	OPEN	<input type="text" value="180"/> F	ERROR
<input type="text" value="Food3"/>	OPEN	<input type="text" value="180"/> F	ERROR
OUTPUT	100 %		
TIMER	00:00:00	<input type="text"/>	OK

This screen contains the same information as the section 9.1.Main Screen. You may enter names for the sensors (up to 16 characters). This will only be shown on the web pages. In release V1.0 and later, the CyberQ may be rebooted remotely using the reboot device button.

11.6. Web Interface System Setup Screen



CyberQ wifi Temperature Controller

[Main Screen](#) | [System Setup](#) | [Control Setup](#) | [WIFI Setup](#) | [Email Alerts](#)

System Setup

Scrolling	<input type="text" value="Off"/>
LCD Backlight	<input type="text" value="50"/> %
LCD Contrast	<input type="text" value="10"/> %
Units	<input type="text" value="Deg F"/>
Alarm Beeps	<input type="text" value="3"/>
Key Beeps	<input type="text" value="On"/>

This screen contains the same information as the section 9.2. System Setup.

11.7. Web Interface Control Setup Screen



CyberQ wifi Temperature Controller

[Main Screen](#) | [System Setup](#) | [Control Setup](#) | [WIFI Setup](#) | [Email Alerts](#)

Control Setup

Cook Hold	<input type="text" value="200"/> F
Timeout Action	<input type="text" value="No Action"/>
Alarm Dev	<input type="text" value="50"/> F
Ramp	<input type="text" value="Off"/>
Open Detect	<input type="text" value="On"/>
Cyc Time	<input type="text" value="6"/>
Prop Band	<input type="text" value="50"/> F

This screen contains the same information as the section 9.3. Control Setup Screen.

11.8. Web Interface WiFi Setup Screen



CyberQ wifi Temperature Controller

[Main Screen](#) | [System Setup](#) | [Control Setup](#) | [WIFI Setup](#) | [Email Alerts](#)

WIFI Setup

MAC Address	00:1E:C0:02:FD:AF
Static IP Address	<input type="text" value="192.168.101.10"/> This is the value used when a.) using Infrastructure mode and DHCP client is turned off or b.) using Ad Hoc mode
Static Gateway Address	<input type="text" value="192.168.101.1"/> This is the value used when using Infrastructure mode and DHCP client is turned off. Ignored when using Infrastructure mode with DHCP client on or Ad Hoc mode.
Static Netmask Address	<input type="text" value="255.255.255.10"/> This is the value used when using Infrastructure mode and DHCP client is turned off. Ignored when using Infrastructure mode with DHCP client on or Ad Hoc mode.
Static DNS Address	<input type="text" value="192.168.101.10"/> This is the value used when using Infrastructure mode and DHCP client is turned off. Ignored when using Infrastructure mode with DHCP client on or Ad Hoc mode.
WIFI Mode	<input type="text" value="Infrastructure"/>
DHCP Client	<input type="text" value="On"/> This is only used in Infrastructure mode. When in Ad Hoc mode, device will act as a DHCP Server and DNS Server.
SSID	<input type="text" value="M77K3"/>
Encryption	<input type="text" value="WEP40"/>
Key	<input type="text" value="*****"/>
HTTP Username	<input type="text"/>
HTTP Password	<input type="text"/> Set either username or password to blank to disable password protection.
HTTP Port	<input type="text" value="80"/>

These parameters require a power-cycle.

This screen contains the same information as the section 9.4. WiFi Setup Screen, with a few additions.

11.8.1. HTTP Password Protection

In release V1.0 and later, an HTTP password can be entered that will restrict access to unauthorized users. If no username and password are entered, general access to everything is allowed.

11.9. Web Interface Email Setup Screen



CyberQ Wifi Temperature Controller

[Main Screen](#) | [System Setup](#) | [Control Setup](#) | [WIFI Setup](#) | [Email Alerts](#)

E-Mail Setup

SMTP Hostname	<input type="text" value="smtp.gmx.com"/>
SMTP TCP Port	<input type="text" value="587"/> Set to 0 to disable all E-mail functionality. The default port for most SMTP servers is 25.
SMTP Authentication Username	<input type="text" value="john@gmx.com"/> Leave blank if no authentication needed
SMTP Authentication Password	<input type="password" value="*****"/> Leave blank if no authentication needed
Email Recipient	<input type="text" value="john@gmx.com"/>
Email From	<input type="text" value="john@gmx.com"/>
Email Subject	<input type="text" value="Temperature Controller Status E-Mail"/>
Email Alert Interval (minutes)	<input type="text" value="1"/> Set to 0 to turn off alarm interval. If alarm interval is off, only alarms will cause an e-mail.
Email Now	<input type="checkbox"/> Form must be submitted with this checked for e-mail to be sent now.

Status

Email Attempts	8
Email Success	7
Minutes since last try	3
Minutes since last interval	3

These parameters require a power-cycle.

This screen is not available in the local user setup.

NOTE:

- The email software does not support SSL, so you have to find an email service provider that will allow you to send emails without SSL.
- This feature works only in infrastructure mode, when connected to the internet.
- If you use Outlook or Outlook Express this information may be obtainable from the account setup.

See the FAQ at the end of this document for examples of non-SSL required email providers.

The email Alert Interval can be set from 0-999 minutes

The email will be sent in the form of the following text:

Alarm: Cook Low Deviation
Cook Temp: 250 F
Food 1 Temp: 123 F
Food 2 Temp: 145 F
Food 3 Temp: 153 F
Output: 55%
Timer: 14:00:00

11.10. Sending Emails to your cell phone as text:

Here are the steps for sending an email to your phone.

You will need: the company that handles your cell phone service, the cell phone number, and the email extension of the cell phone service provider.

Now you can determine the email address. The email address will be the cell phone number followed by the carrier extension. An example email address would be 8565551111@vtext.com for cell phone number 856-555-1111 with Verizon Wireless as a service provider. Some of the more popular cell phone carrier extensions are listed below. The extension can be obtained from your service provider.

Some examples are:

Verizon Wireless: (cell#)@vtext.com
AT&T: (cell#)@txt.att.net
Cingular: (cell#)@mycingular.com
Nextel: (cell#)@messaging.nextel.com
T-Mobile: (cell#)@tmomail.net
Sprint: (cell#)@messaging.sprintpcs.com
Tracfone: (cell#)@cingularme.com

A better way to receive email alerts on your phone is to check the email address specified in email alerts with a web-enabled phone.

12. Application Developer Information – XML Interfaces

In V1.0 and later the following .xml interfaces are provided for ease of interfacing to apps:

status.xml – real-time updates of temp/time data.

all.xml - this is similar to status.xml but has more sensor information (names and setpoints). These values are not present in status.xml to keep the execution of status.xml low.

config.xml - this is similar to all.xml but adds all user configurable values.

12.1. status.xml alarm values

Alarm Value	Status Description	Applies to
0	OK	All
1	HIGH	cook status only
2	LOW	cook status only
3	DONE	food status only
4	ERROR	cook and food status only
5	HOLD	timer status only
6	ALARM	timer status only
7	SHUTDOWN	timer status only

13. Connections

The connections from left to right at the bottom of the control are:

COOK (Pit) Sensor, Food1 Sensor, Food2 Sensor, Food3 Sensor, Fan, +12V Power.

14. Building a Proper Fire for Good Control

How you build the fire in your pit is critical for good control, especially at low temperatures. Stack the charcoal inside your pit so it's shaped like a pyramid, small at the top and large at the bottom. Light the fire by lighting a few coals at the top. Do not over-fire the charcoal or light it at the bottom, because this will only translate into startup overshoot and over-firing. Some overshoot is normal and it may take a while for the fire to stabilize.

14.1. Eliminating Large Fluctuations in the Pit Temperature

Normally the CyberQ WiFi will be able to adjust the airflow via the blower to deliver precise control and no damper adjustment will be required. If the pit has become over fired or if you built the fire too big, you may see large temperature swings (+/- 10 deg or more). To eliminate this you may need to restrict the airflow by adjusting the blower damper. A good rule of thumb is that if you see large temperature swings, try closing the damper to half the current setting; the pit should stabilize within 10-15 minutes after adjustment.

14.2. Extinguishing the Pit

If there is fuel left over from the cook, you can save this fuel by closing off any open dampers or removing the blower and plugging the inducer sleeve opening with a kill plug. This should put the fire out in about 30-45 min.

15. Calibration Screen

If the LEFT and RIGHT keys are held down when power is applied, the controller shall enter the sensor calibration menu.

The sensor zero calibration menu shall use only the FOOD1 TEMP and shall be displayed as follows:

ZERO ADJ: + 5

FOOD1: 32 °F

The top line display is the temperature value that is being added or subtracted from the sensor using the UP and DOWN keys. The bottom line displays the actual FOOD1 temperature. The Zero Calibration is adjustable +/- 50 degrees max.

Pressing the LEFT or RIGHT KEY will move between the ZERO and SPAN ADJ screens.

The sensor span calibration menu shall use only the FOOD1 TEMP and shall be displayed as follows:

SPAN ADJ: - 3

FOOD1: 475 °F

The top line display is the temperature value that is being added or subtracted from the sensor using the UP and DOWN keys. The bottom line displays the actual FOOD1 temperature. The Span Calibration is adjustable +/- 25 degrees max.

Pressing the LEFT & RIGHT keys will display CALIBRATION SAVED, sound the beeper, save the values, and restart the controller.

16. Calibration Procedure

16.1. Calibrating the Zero (Low end temperature)

1. Press and hold LEFT AND RIGHT keys and apply electrical power, continue to hold them down until the ZERO ADJ Screen is shown. Let the CyberQ warm up for about 15-20 minutes before proceeding.
2. The display will now show the adjustment amount and the temperature of the food 1 probe.
3. In a Styrofoam cup make an ice / water slurry using about 75% ice and 25% water. Fill it to the top with the slurry. Place the food probe into the bottom of the cup and stir it using the probe. Give the probe a couple of minutes to settle in the cup.
4. Adjust the value shown on the display to show 33 degrees F using the UP & DOWN keys. Remember that the display only updates every 3 seconds.
5. Proceed to Calibrating the Span by pressing the LEFT OR RIGHT key.

16.2. Calibrating the Span (High end temperature)

1. The display will now show the adjustment amount and the temperature of the food 1 probe.
2. Fill a second Styrofoam cup with some water that is at a rolling boil. Be careful not to get burned. Place the food probe into the bottom of the cup and stir it around gently. Give the probe a couple of minutes to settle in the cup.
3. Adjust the value shown on the display to show 211 degrees F using the UP and DOWN keys. Remember that the display only updates every 3 seconds.
4. Return to the Zero calibration by pressing the LEFT OR RIGHT key and perform calibration according to Calibrating the Zero step # 3.
5. To exit the calibration press the LEFT & RIGHT keys; the display will show CALIBRATION SAVED, sound the beeper, save the values, and restart the controller.

17. Firmware Updates (DIFFICULTY: INTERMEDIATE)

Firmware updates are accomplished using TFTP (trivial file transfer protocol). Firmware updates are supplied in the form of two files tcimage.bin (web pages) and tboot.bin (firmware). Before performing firmware updates, please make note of your WiFi, email and any other critical settings.

PC Users Firmware Update in Adhoc Mode (Recommended)

Here are the Firmware update steps:

1. Reset the CyberQ WiFi to Factory defaults by holding down all four arrow keys until the display shows "RESETTING EEPROM".
2. Connect to the control via adhoc mode from your PC.
3. If using Windows 7 or Vista you have to enable TFTP: open Control Panel > Programs and Features > click Turn Windows features on or off in left side > enable Client Telnet and Client TFTP then click in OK.
4. Go to a command prompt to invoke the TFTP commands: To get to a command prompt on a Windows XP computer go to Start > Programs > Accessories > Command Prompt. On Windows Vista or 7 go to the start menu and search on command prompt.
5. *Upload the controller web pages to the CyberQ WiFi: >tftp -i 192.168.101.10 put tcimage.bin (your IP address may differ)
6. *Upload the controller firmware to the CyberQ WiFi: >tftp -i 192.168.101.10 put tboot.bin (your IP address may differ)
7. The controller may reset after the firmware update. You may have to reconnect to the adhoc network.
8. If you do not receive a time out message. you have successfully sent the files to the controller.

PC Users Firmware Update in Infrastructure Mode (Advanced)

Here are the Firmware update steps:

1. Connect to the control from your PC.
2. If using Windows 7 or Vista you have to enable TFTP: open Control Panel > Programs and Features > click Turn Windows features on or off in left side > enable Client Telnet and Client TFTP then click in OK.
3. Go to a command prompt to invoke the TFTP commands: To get to a command prompt on a Windows XP computer go to Start > Programs > Accessories > Command Prompt. On Windows Vista or 7 go to the start menu and search on command prompt.
4. *Upload the controller web pages to the CyberQ WiFi: >tftp -i 192.168.101.10 put tcimage.bin. (your IP address may differ)
5. *Upload the controller firmware to the CyberQ WiFi: >tftp -i 192.168.101.10 put tcboot.bin (your IP address may differ)
6. The controller may reset its settings after the firmware update, you may have to re-enter your network information again to reconnect to the network.
7. If you do not receive a time out message, you have successfully sent the files to the controller.

*Both of these files are supplied by The BBQ Guru and must reside in the same folder as the command prompt location.

You may also send your CyberQ WiFi to The BBQ Guru and they will perform a firmware update for a nominal fee.

MAC OS X Users

Mac OSX also has a command line TFTP Client. To update the firmware follow the same basic steps as for PC users, but skip steps 3 and 4 (ad hoc mode instructions). You will use the OSX terminal application to get to the command prompt.

Type tftp and press enter.

You will see the following to show that tftp is selected:

“tftp>”

Type the following at each tftp prompt (what you should type is underlined):

tftp> connect 192.168.101.10 (or your CyberQ IP address)

tftp> binary

tftp> timeout 60

tftp> put tcimage.bin

(You will see “Sent xxxx bytes in x.x seconds”)

tftp> put tcboot.bin

(You will see “Sent xxxx bytes in x.x seconds”)

tftp> quit

18. Contact THE BBQ GURU

THE BBQ GURU

357 Ivyland Road

Warminster PA. 18974-2205

www.thebbqguru.com

Email: customerservice@thebbqguru.com

19. WiFi Specifications

Under ideal conditions with no obstructions the CyberQ WiFi can achieve a range of up to 1000 ft (line of site outdoors). Indoors, the range is unpredictable and depends greatly on the building construction. The indoor range is typically 50-150 feet.

The CyberQ WiFi Contains Transmitter Module FCC ID:W7OZG2100-ZG2101 Radio regulation certification for United States (FCC), Canada (IC), Europe (ETSI) and Japan (ARIB) 2.4 GHz, IEEE Std. 802.11b™, Wi-Fi® certified (WFA ID: WFA7150)

The WiFi components in this product have been certified under Wi-Fi 802.11 with WPA2, WPA, and WEP System Interoperability ASD Model Test Plan with Test Engine For IEEE 802.11a, b, and g Devices (Version 1.0).

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

20. FAQ / Troubleshooting

20.1. I am using Adhoc mode, but my controller shows NO NETWORK on power up

1. Reset Power to the CyberQ WiFi and it will look for a valid ip address.
2. Make sure any previously connected devices are logged off the adhoc network created by the CyberQ and reset power.
3. If you are using multiple CyberQ WiFi's at the same time, try changing the ip address using the front panel keys to something like 192.168.101.11.

20.2. My Computer shows I am connected to the CyberQ WiFi, but I can't view the webpages?

1. If you are in adhoc mode, only one client is allowed access at a time. To get access, reset the CyberQ WiFi by holding down the MODIFY/ENTER Key and try again from the new client.
2. Double check the CyberQ WiFi's IP address.
3. Interference - Other 2.4GHz such as cordless phones and wireless networked devices may cause interference with the CyberQ WiFi and prevent a reliable connection. It is the customer's responsibility to diagnose the source of the interference and determine which devices need to be turned off or eliminated from the installation.

20.3. How do I change the Name (SSID) and Password (KEY) for my CyberQ WiFi?

There are two methods; from the web interface or from the front panel keys.

Web Interface:

1. Connect using adhoc mode, enter the CyberQ's IP address in your browser.
2. Click on the WiFi setup tab.
3. Change the SSID and the KEY entries.

4. Press and hold the MODIFY/ENTER key on the front panel to reset.

Front Panel Keys:

1. Hold down UP and DOWN until SYSTEM SETUP is displayed.
2. Press RIGHT until you see WIFI SETUP.
3. Press DOWN until SSID is displayed.
4. Press MODIFY/ENTER to modify the SSID. Adjust the value using the UP/DOWN and LEFT/RIGHT. When you done changing the value, press the MODIFY/ENTER.
5. Press DOWN until KEY is displayed.
6. Press MODIFY/ENTER to modify the SSID. Adjust the value using the UP/DOWN and LEFT/RIGHT. When you done changing the value, press the MODIFY/ENTER.
7. Press and hold the MODIFY/ENTER key to reset.

20.4. Why doesn't the CyberQ WiFi show up in my list of DHCP clients on my router?

1. Check to make sure that your router supports wireless b devices and that b is turned on.
2. Check to make sure that the CyberQ WiFi is set to infrastructure mode and that the SSID, Key, and Encryption type all match your router. This is critical, all capitalization must be correct.

20.5. My router shows the CyberQ WiFi in the client list, but I cannot access the CyberQ WiFi from a computer on the same LAN?

1. Reset the router and when it comes up, reset the CyberQ WiFi.
2. Try Updating your router firmware.
3. Contact your router manufacturer.
4. Try a different router.

20.6. Why can't I send emails from the CyberQ WiFi?

The CyberQ WiFi must first be connected successfully to a router (with an internet connection) in infrastructure mode so that it has network / internet access. Secondly the CyberQ WiFi only supports non SSL SMTP email servers. For other providers, do a Google search on "non SSL email" providers. This is a common issue encountered by users of IP web cams, so searching forums related to web cams can also be helpful.

20.7. What email servers do not require SSL?

Here is an example:

GMX

SMTP Hostname: smtp.gmx.com

SMTP TCP Port: 587 (this varies)

SMTP Authentication Username: myname@gmx.com

SMTP Authentication Password: mypassword

Email Recipient: whoever@whatever.com (can be any email address)

Email From: myname@gmx.com

Email Subject: Whatever you want

Go to gmx.com to create a gmx account. The mypassword above is the one you use to create your gmx account.

20.8. Why can't I send emails from the CyberQ WiFi, I am using the non-ssl providers suggested and all of my info is entered correctly?

Check the Email From field. It must have a valid email address of .com or .net.

20.9. I am trying to setup the CyberQ in infrastructure mode. I have verified my settings for SSID, ENCRYPTION and KEY, but no IP address is shown during power up of the CyberQ.

On some networks there is a delay to establish the IP address, but it will appear after a minute or so. After about one minute after power up, hold down the up and down keys until SYSTEM SETUP is displayed. Press the right key to access the WIFI settings and look for the IP address there. If everything is set correctly, it should appear there. In firmware release 1.0, the splash screen time was increased.

20.10. I can't get port forwarding working correctly to allow remote web access

I am successfully connected in infrastructure mode and I have setup incoming TCP requests at port 80 to point to the CyberQ WiFi's IP address, but I still cannot access it using my public IP address: Check with your ISP, sometimes they block incoming ports. Changing the port on the Cyber Q and your router to another port like 8080 should resolve this. Keep in mind when you access the CyberQ you will have to enter the ip address `http://xxx.xx.xxx.xxx:8080` so that you are directed to the correct port.

20.11. What changed in Ver1.2 release?

1. We added no-cache headers in HTML for non-images. This is to help solve IOS6 safari caching problems. This also required a change to the JavaScript POST requests.
2. Problems fixed converting from F to C
3. Added FW_VER to config.xml