Quick Start Guide
BWR54G1

Materials Checklist

Check to make sure you have all of the materials provided for setting up the BWR54G1 Access Point / Router:

1. Quick Start Guide
2. Bountiful WiFi Access Point / Router
3. AC/DC power supply
4. CAT-5 Ethernet networking cable

Overview

With your new router you will be able to share your Internet connection and network your computers.

Web-based Setup

The router is easily configured, including advanced functionality, with your web browser without installing extra software or programs. You can thereby manage the router and update settings from any computer on the network.

LED Status Indicators

On the front of the router are LEDs to indicate the status of your WLAN, WAN and LAN connections.

Function	LED Display	On	Blinking	Off
Power	Green	System On	NA	System Off
Router status	Green	Active	NA	Inactive
WLAN	Green	WLAN connected	WLAN data transmit / receive	Inactive WLAN
WAN	Green	WAN connected	WAN activity	Inactive WAN
LAN 1	Green	Ethernet Link	Transmitting / receiving data	Disconnected
LAN 2	Green	Ethernet Link	Transmitting / receiving data	Disconnected
LAN 3	Green	Ethernet Link	Transmitting / receiving data	Disconnected
LAN 4	Green	Ethernet Link	Transmitting / receiving data	Disconnected

IP Address Sharing

The router uses Network Address Translation (NAT) to share the single IP address assigned to you by your ISP, saving the cost of adding additional IP addresses to your Internet service.

Firewall

The router is equipped with a firewall to protect you from a wide array of hacker attacks.

Integrated 10/100 Fast Ethernet 4-Port Switch

This router has a four-port network switch allowing you to connect your wired LAN computers into the network, thereby sharing printers, data files, etc. The switch features automatic speed detection to adjust to the speed of the connected devices.

VPN Pass-through

Your router will allow your VPN-equipped computer to pass through the Router to your office network if you connect to your office network through your home using a VPN connection.

DHCP (Dynamic Host Configuration Protocol)

DHCP, supported on this router, allows the easiest connections to a network. The DHCP server assigns an IP address to each computer or device automatically.

Controlling Access through MAC Address Filtering

For added security, you can set up a list of MAC addresses (unique client identifiers in each networking device)) that are allowed to access your network. Every computer has its own MAC address. Simply enter these into a list using the web-based user interface.

Installation and Configuration
Step 1: Install Wireless Access Point / Router

Note: Your router should be placed in a location that is central to where your computers will be used.

A. Power your computer and DSL/cable modem down.
- Using the network cable that came with the modem, connect the modem to the WAN port on the back of the Wireless Access Point / Router.
- If your DSL or cable modem is currently connected to your computer, disconnect it from your computer. If you wish to configure the Wireless Access Point / Router via a wired connection, connect the computer with the network cable

provided to one of the LAN ports at the back of the Wireless Access Point / Router.

B. If all computers in your network will be wireless, then no other connections need to be made to the Wireless Access Point / Router.

C. Power up your broadband modem and wait for the lights to stop flashing.

D. Attach the two antennas included and power up your Wireless Access Point / Router by connecting the power supply to the Power port on the back and then connecting to a power outlet. The Power LED on the front of the Wireless Access Point / Router should illuminate green.

E. Turn the computer back on.

Step 2: Setting up your PC

Follow the steps below for the operating system of the computer that was originally connected to the DSL or cable modem or the computer that is the closest to the modem.

A. **If you have Windows 98 or Me:**

1. Click the **Start** button, select **Settings** and then **Control Panel**.
2. Double click on the **Network** icon.
3. In the **Configuration** window scroll down to the bottom. Highlight the TCP/IP that has been associated with your network adapter or adapter (example: TCP/IP-> Instant Wireless Network PC Adapter). Do not highlight any TCP/IP that says **Dial-Up Adapter**.
4. Once you have highlighted the appropriate network adapter, double click and select the **IP Address** tab.
5. If **Obtain an IP address automatically** is selected and you have a dynamic IP address click **OK** and go to **Step C**.
6. If **Obtain an IP address automatically** is selected and you have a static IP address click **OK** and go to **Step D** (your computer may require a restart).
7. If **Specify an IP address** is selected, write down the **IP Address** _____ and **Subnet Mask**_____. Then change to **Obtain an IP address automatically** by clicking the radio button. Click on the **Gateway** tab, write down the **Installed Gateway** _____ and then highlight and click remove. Click on the **DNS Configuration** tab and write down the **DNS Server Search Order** _____ numbers in the middle window, then click the **Disable DNS** radio button at the top. Click **OK** to close each window and restart your computer. Then go to **Step D** and use the information you just wrote down.

B. **If you have Windows 2000 or XP:**

1. Click the **Start** button, select **Settings** (skip **Settings** for XP) and then **Control Panel**.
2. Double click on the **Network and Dial-up Connections** icon.
3. Double click on the **Local Area Connection** icon.
4. Click on the **Properties** button and double click on the **Internet Protocol (TCP/IP)**.
5. If **Obtain an IP address automatically** is selected and you have a dynamic IP address, go to **Step C**.
6. If **Obtain an IP address automatically** is selected and you have a static IP address, go to **Step D**.
7. If **Use the following IP address** is selected, write down the **IP Address** _____, **Subnet Mask**_____ and **Default Gateway**_____ then change it to **Obtain an IP address automatically** by clicking the radio button.
8. Next, write down the **Preferred DNS Server** _____ and **Alternate DNS Server**_____ numbers and click on **Obtain DNS server address automatically**. Click **OK** and then go to **Step D** to use the information you just wrote down.

Note: Select the Static IP option only if this was purchased from your service provider (normally an additional expense). This option allows you to retain the same IP address for every connection.

C. **Dynamic IP Installation**
If you have a Dynamic IP connection follow the directions below otherwise, skip to Step D.
1. On the computer nearest to your DSL or cable modem, click the **Start** button, select **Settings** and then select **Control Panel**.
2. Find the **Add/Remove Programs** icon and double click.
3. Search for the program **WinPoet** in the window, and if found, highlight (if not found, skip this step). Once highlighted, click the **Add/Remove** button. When Windows asks if you are sure you want to remove it, click **Yes** or **OK**. After the uninstall is done, click **Yes** or **OK** and restart your computer if Windows asks you to.
4. Open up your web browser and type **http://192.168.0.1** in the space where you would type in a web address and press your **Enter** key. If the Bountiful WiFi configuration window does not pop up press the **Enter** key again and wait 60 seconds. If the box still does not pop up, restart your computer and do this step over or try it on another computer.
5. A box should pop up requesting a user name and password. Leave the user name blank and enter **admin** for the password. Click **OK**.
6. This will bring you to the **Setup** page of the Router. Go down to the section at the bottom of the page entitled **Login**.
7. If applicable, click the **PPPoE** radio button to enable PPPoE. **Skip to step 9**.
8. If not using **PPPoE**, click on the **DISABLE** radio button.

9. In the **user name** slot enter your DSL/cable user name. In the **Password** slot enter your DSL/cable Password.
10. Click **Apply** at the very bottom of the page, wait 10 seconds and restart your computer. You are now ready to surf the web.

• You may now go to **Step 5** to test for your fast internet connection.
• If you still do not have Internet access go to **Troubleshooting**.

D. **Static IP Installation**
If you have a static IP address, follow the directions below.
1. Open up your web browser. In the space where you would type in a web address type the following: **http://192.168.0.1** and press your **Enter** key. If the box below does not pop up press the **Enter** key again and wait 60 seconds. If the box still does not pop up, reboot your computer and do this step over or try it on another computer.
2. A box should pop up requesting a user name and password. Leave user name blank. Enter **admin** for the password. Then click **OK**.
3. This will bring you to the **Setup** page of the Router. In the middle of the page you will see a section entitled **WAN IP Address**. The radio button is clicked on **Obtain an IP Address Automatically**. It needs to be changed to **Specify an IP Address**.
4. After this is done, enter the IP address information that you just wrote down or that was given to you by your service provider. In the first line you will enter your **IP Address**. In the second line you will enter your **Subnet Mask**. In the third line you will enter your **Gateway Address**. The final slots are for your DNS numbers. You will either have two or three sets of numbers to enter.
5. Once you have entered all the IP Address information into the Wireless Access Point / Router, click **Apply** at the very bottom of the page to complete your setup.
6. Restart your computer. You are now ready to surf the web.

• You may now go to **Step 5** to test for your fast internet connection.
• If you still do not have Internet access go to **Troubleshooting**.

Step 3: Testing

A. **Testing for an Internet connection**
You are now ready to test for an Internet connection. On each computer, open your web browser to access a website. If you are able to access the Internet, the installation for that computer is successful.
• For any computer that is unable to access the Internet, follow **Step B** and then test for an Internet connection again.
• For any computer that still does not have an Internet connection go to **Troubleshooting**.
B. If you have completed the appropriate steps above to test for an Internet connection by opening your web browser and you still do not have an Internet connection, you need to do a power cycle. Do this with the following steps:

1. Turn off the computer
2. Unplug the router
3. Turn off the modem
4. Wait 30 seconds
5. Turn on the Modem
6. Plug in the router
7. Turn on the computer

Check to see if you have an Internet connection again. If you still do not, go to **Troubleshooting**.

Troubleshooting

Solution 1
Installation: Connecting the cables and installing the adapters correctly.
A. Be sure the modem is connected into the WAN port of your Wireless Access Point / Router and that you are using the same cable that came with the modem to connect to the router. If you are running a firewall software program, temporarily disable it.
B. If a computer is wired into the router, be sure it is connected to one of the numbered ports on the router (not the Uplink port). Use straight-through, not cross-over, cables.

Solution 2
Web Browser Settings: Making sure my web browser settings are correct so I can access the Internet.
If you use Internet Explorer:
A. Go to Start, Settings, Control Panel, Internet Options, Connections and the LAN Settings button.
B. Clear all checked settings in this window. Then open your browser and select the Tools menu. Under Internet Options, click on the Connection tab and make sure that **Never dial a connection** is selected.
If you use Netscape Navigator:
A. Go to the Edit menu and select Preferences.
B. Go to Advanced, Proxies and click **Direct Connection to the Internet**.

Solution 3
Wireless Network Settings: Making sure the "Name" of my Wireless network is correct so my Wireless computers can access the Internet.
A. When using a Wireless Access Point / Router, the SSID must be the same on all wireless adapters and on the Wireless Access Point / Router. The SSID is **BWiFi** by default. If you choose to change the SSID on the Wireless Access Point / Router, be sure to change it to the identical word or phrase on the wireless adapters. To check the SSID on the wireless adapters, use the configuration utilities provided on each system with a WiFi device.
B. You will also see the Mode under the Configuration tab. Be sure all adapters have the mode set to **Infrastructure** (never Ad Hoc) when using the Wireless Access Point / Router.
C. Security settings of each WiFi device must also match those configured on the Access Point / Router. The default settings of the router have security disabled to promote easy

initial WiFi device association. After initial network configuration, appropriate security settings may be chosen.

Solution 4
Dropped Connections: Solving the problem of my DSL connection dropping on occasion.
A. Open your web browser. In the space where you would type a web address type the following: **http://192.168.0.1** and press your **Enter** key.
B. If a box doesn't pop up, press your **Enter** key again and wait. A box should pop up requesting a user name and password. Leave user name blank, enter **admin** for the password and then click **OK**. This will bring you to the router's setup page.
C. At the bottom of the page you will see an option for **Keep Alive**. Click on the box to enable the Keep Alive function. Then click **Apply** at the bottom of the page.

Solution 5
Increasing Wireless Range: Increasing the distance of my
Wireless network.
A. Range is fully dependent on environment. Placing the Wireless Access Point / Router as high as possible, as close to the center of the home as possible and adjusting the angles of the antennas to 90 degrees are all common solutions.
B. Keep the Wireless Access Point / Router away from any large, metal objects. If you feel you are getting interference with the signal, go to the router's setup page http://192.168.0.1 and change the channel (it is on channel 6 by default).

Solution 6
Setting up Security on my Wireless Network: Enabling encryption to give me more security with my Wireless network.
A. Enabling encryption will encrypt all the data traveling through the air in your Wireless network. To enable this feature, first log into the Wireless Access Point / Router's setup page by typing the following into your web browser: **http://192.168.0.1** and pressing **Return**.
B. Leave user name blank, enter **admin** for the password. Once in the router's setup page, find the section that says **WEP**. Click on the **Mandatory** radio button.
C. Click on the **WEP Key Setting** button. Make sure it is **64 bit**. Then enter any word or phrase you choose into the **Passphrase** slot. Be sure you have this word or phrase written down exactly how you enter it.
D. Click the **Generate** button and then the **Apply** button. You now have encryption set on the router.
E. Next, click on the green television-like icon in your system tray on one of your computers.
F. When the configuration utility pops up, click the **Encryption** tab. Where it says **Encryption (WEP)**, highlight **64 bit**. Enter the identical passphrase you used on the router into the **Passphrase** slot, click **Apply**, then click **OK**. Do this for every computer that has a wireless adapter.

Solution 7

Setting up my VPN: Setting up my VPN through the Wireless Access Point / Router.
A. To set up a VPN with the router, go to http://192.168.0.1/Filters.htm in your web
browser. Leave the user name blank, enter **admin** for the password.
B. When the page appears, go to the bottom and enable **IPSec Pass Through** or **PPTP
Pass Through**, depending on which type of VPN you are using.

Technical Support

You may register your product at www.bountifulwifi.com. Also check this website for
code updates and tech bulletins.

If you have problems with the router call 1-800-BOUNTWIF in the USA or email
tech@bountifulwifi.com.

Regulatory Information

FCC Statement:

DECLEARATION OF CONFORMITY WITH FCC RULES FOR
ELECTROMAGNETIC COMPATIBILITY

We, Bountiful WiFi LLC of 707 West 700 South #202A, Woods Cross, UT 84087,
declare under our sole responsibility that the product

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to which this declaration relates, complies with Part 15 of the FCC Rules. Operation is
subject to the following two conditions: (1) this device may not cause harmful
interference, and (2) this device must accept any interference received, including
interference that may cause undesired operation.

Caution: Exposure to Radio Frequency Radiation.
The radiated output power of this device is far below the FCC radio frequency exposure
limits. Nevertheless, the device shall be used in such a manner that the potential for
human contact during normal operation is minimized.

When connecting an external antenna to the device, the antenna shall be placed in such a
manner to minimize the potential for human contact during normal operation. In order to
avoid the possibility of exceeding the FCC radio frequency exposure limits, human
proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

FCC Notice: 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 the receiver.
- Connect the equipment into an outlet on a circuit different from that which the
  receiver is connected.
- Consult the dealer or an experienced radio/TXV technician for help.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

Modifications: The FCC requires the user to be notified that any changes or modifications to this device that are not expressly approved by Bountiful WiFi may void the user's authority to operate the equipment.

Canada-Industry Canada (IC): The wireless radio of this device complies with RSS 139 & RSS 210 Industry Canada. This Class B digital device complies with Canadian ICES-003