

# Quick ▶▶▶▶▶ installation guide

Start here first ▶

## 802.11G Hi-Speed **Wireless-G** Access Point and Workgroup Bridge

**HI-SPEED** 54G  
SERIES

HWBA54G



Website: [www.hawkingtech.com](http://www.hawkingtech.com)

E-Mail: [techsupport@hawkingtech.com](mailto:techsupport@hawkingtech.com)

© Copyright 2003 Hawking Technologies, Inc. All rights reserved.

Step

1

## Check the Requirements for Installation



**HWBA54G** Rev. M

### Hi-Speed 54M Wireless-G Access Point / Bridge

This QIG Will Guide You Through  
the Initial Setup of your Product

---

#### What You Will Need To Get Started:

- Pentium compatible CPU or above.
- Wireless 802.11b/g network. (i.e. AP or Wireless Device)
- One CD-Rom Drive.

---

#### Check Your Package Contents:



Hi-Speed Wireless-G  
Access Point/Bridge



CD-Rom  
Contains:  
Setup Wizard  
Users Manual



Power Adapter



Ethernet Cable

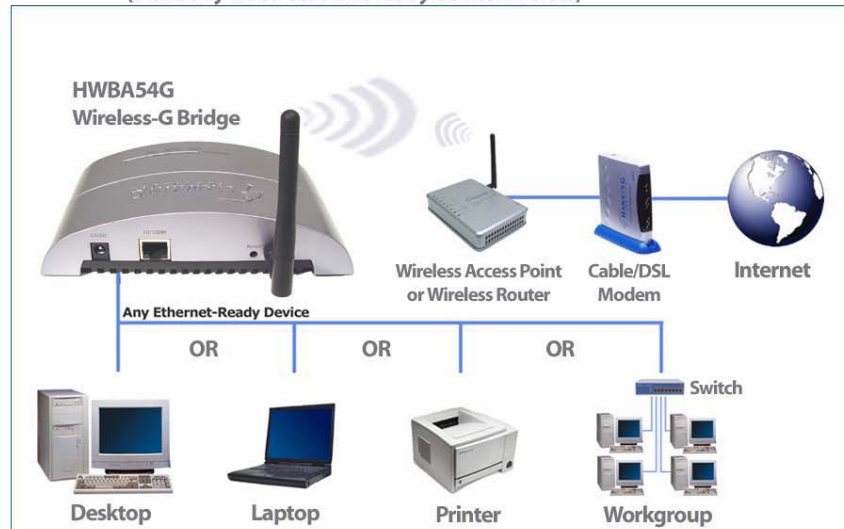
# Functions

The Hawking HWBA54G's unique multi-function feature lets you choose exactly how you wish to use your AP-Bridge within your network.

## Function 1 - Wireless Access Point (Add wireless access to any wired network)



## Function 2 - Wireless Bridge (Make any wired ethernet-ready device wireless)





## Product Overview

HWBA54G

## Overview

### PWR, LAN, and WLAN LEDs

- A solid light on the PWR LED indicates that the unit is on and operational.
- A solid light on the LAN LED indicates a successful connection between the AP/Bridge and a wired Ethernet network.
- A blinking light on the WLAN LED indicates a successful and active data transfer connection between the AP/Bridge and a wireless network.



### Antenna

- Adjustable for optimal reception.
- Removeable for upgrade to Hawking Hi-Gain Antenna line products.

### Power Port

- Connects to supplied AC Adapter



### "Reset" Button

- Pressing the reset button with a pencil tip (for less than 5 seconds) will reboot the device, keeping your original configurations intact.
- If problems continue to persist or you have forgotten your password, pressing the reset button for more than 5 seconds will reset the device back to its factory default settings.

### 10/100M Ethernet Port

- Connects to local network devices such as a DSL/Cable Modem

Step

2

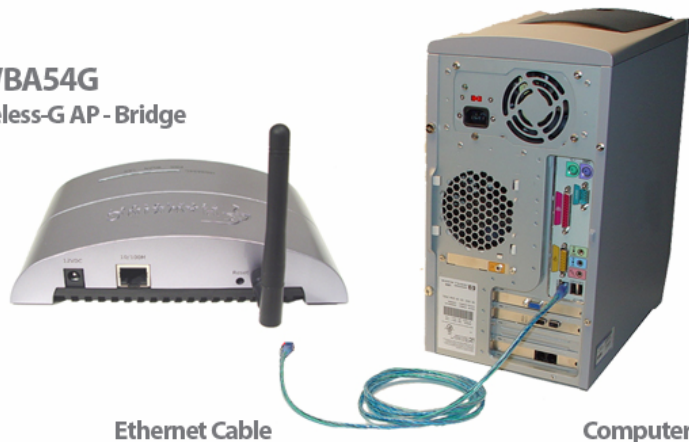
## Setup the Wireless AP / Bridge

- 1) Remove the HWBA54G and the power adapter from your package. Plug one end of the power into an available power outlet and the other into the "DC 5V" on the AP-Bridge.



- 2) Connect one end of the included Ethernet cable to the LAN port of your PC (Laptop or Desktop). Plug the other end of the Ethernet cable into the LAN port of the HWBA54G Bridge - AP.

**HWBA54G**  
Wireless-G AP - Bridge

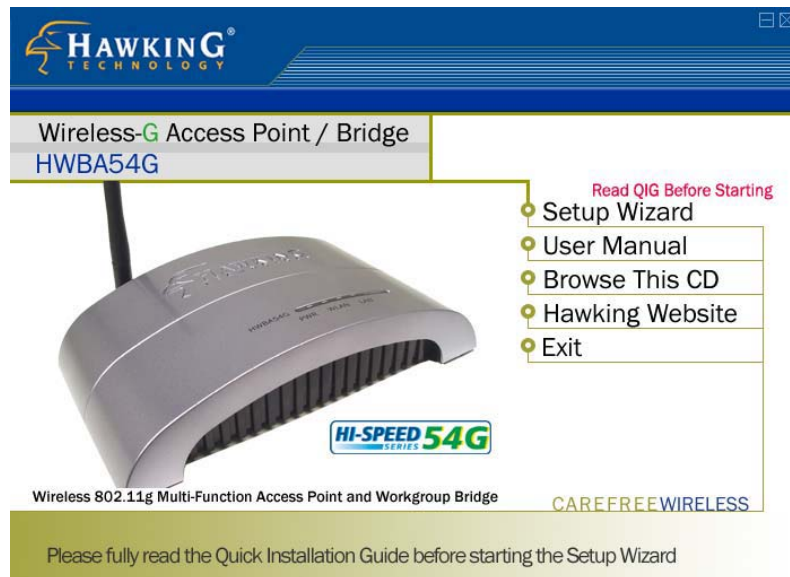


Ethernet Cable

Computer

1) **POWER ON:** After you have correctly connected your Access Point to your PC, please power on both units.

2) **INSERT THE SETUP CD:** Find the Setup-CD in your package and insert it into your CD-Rom drive. Wait for the Auto-Load Page to load. If the page does not load, please click on the “**My Computer**” icon of you PC and find your CD-Rom Drive. Right-Click on the CD-Rom drive icon and choose “**Explore.**” Find the file titled “**autorun**” and execute it.



Click on the “**Setup Wizard**” tab to begin configuration of your Router.

3) **SCAN FOR DEVICE:** Once the Setup Wizard has loaded you will need to select your device from a list of HWBA54G devices in your network. If nothing appears in the box, double check all your connections and click on “**Refresh.**” Once the Wizard has detected your device click “**Next**” to move on to the next step.

HAWKING TECHNOLOGY

HWBA54G Wireless-G AP/Bridge Setup Wizard

Wireless Access Point Name

Hawking HWBA54G

Refresh

Make sure that the Wireless-G Access Point is powered on and is connected to your PC or network through the "LAN" port on the HWBA54G.

Please search and select the Wireless-G Access Point that you wish to configure.

Back Next

LOGIN HWBA54G

Please log into your Access Point

Login

Password

Default Login/Password : admin/1234

OK Cancel

A prompt will appear asking you to login to the device. Use the following login information and click “**OK**”

**Login: admin**  
**Password: 1234**

4) **SET IP ADDRESS:** To successfully communicate to the HWBA54G, an IP Address must be assigned to the unit. If you are on a network with a router that distributes IP Address automatically (DHCP) you have the option to automatically configure the IP Address. However the AP/Bridge must be connected to your network and not directly to the PC for this to work.

You may also manually assign your IP Address (Recommended).

**Note:** The IP Address of the device must be in the same context/subnet of the PC it is connected to in order to complete the setup of the device. The listed IP Address in the Setup Wizard is the recommended IP based on the IP Address on your PC. You may change the last number of the IP Address but it is highly recommended that you DO NOT adjust the other numbers.

When you have selected your IP Address click “Next” to continue the setup.



**HAWKING**  
TECHNOLOGY

**HWBA54G** Wireless-G AP/Bridge

IP address Setup

**Automatically Obtain IP Settings (DHCP)**  
Obtain your IP Settings from your Network.  
DHCP Must be Enabled and the HWBA54G must be connected to your network.

**Set Your IP Manually**  
**Note:** The IP Address of the device must be in the same subnet of your PC in order to complete the configuration. It is recommended you use the listed IP.

IP Address

Subnet

Gateway

Rev. M



5) **STATUS:** This screen displays the results of your settings. Please save this information somewhere secure for future use. You will need to enter the IP address in your web-browser for future configurations.

**HAWKING**  
TECHNOLOGY

**HWBA54G** Wireless-G AP/Bridge **Product Status**

The following information is the IP Address of your Wireless-G Access Point / Bridge. Please be sure to **save this information** for future use. You will need to remember this IP address to login to the configuration menu for advanced setup options.

| IP Address Information | Manual Setting |
|------------------------|----------------|
| IP Address             | 192.168.1.54   |
| Subnet                 | 255.255.255.0  |
| Gateway                | 192.168.1.1    |

Please click NEXT when you are ready to continue.

Back Next

Click **NEXT** to continue.

Step

3

## Wireless Access Point Setup

The Hawking Wireless-G Bridge/AP is a very versatile product with many unique functions and features. However, to keep the setup simple, this QIG will only be covering the two most popular functions: **Wireless Access Point** and **Wireless Client Bridge Mode** – If you wish to configure your Wireless-G Bridge/AP differently, (i.e. P2P or P2M) read the manual for more information on how to setup each operation mode or click the **INFO** button next to the mode for a visual setup diagram.

**This section will go over how to setup your device as a Wireless-G Access Point. If you wish to setup your product as a Client Bridge please skip forward to Step 4.**

After clicking “**Next**” from the Setup Wizard you will be asked again to enter the default Login information.

**HAWKING TECHNOLOGY**

Mode | Status | Admin | LAN

### Access Point

**HWBA54G**  
Wireless Access Point Station

**Mode Selection:**

- [Access Point](#)
- [Bridge Mode](#)

**Current Mode:**  
Access Point

**Access Point Mode**

Internet

Cable/DSL Modem

Broadband Router w/ Switch

**HWBA54G**  
Wireless-G Access Point  
Turn Any Wired Network Wireless

Desktop w/ Wireless PCI Card

Laptop w/ Wireless PC Card

Wireless Ethernet Bridge

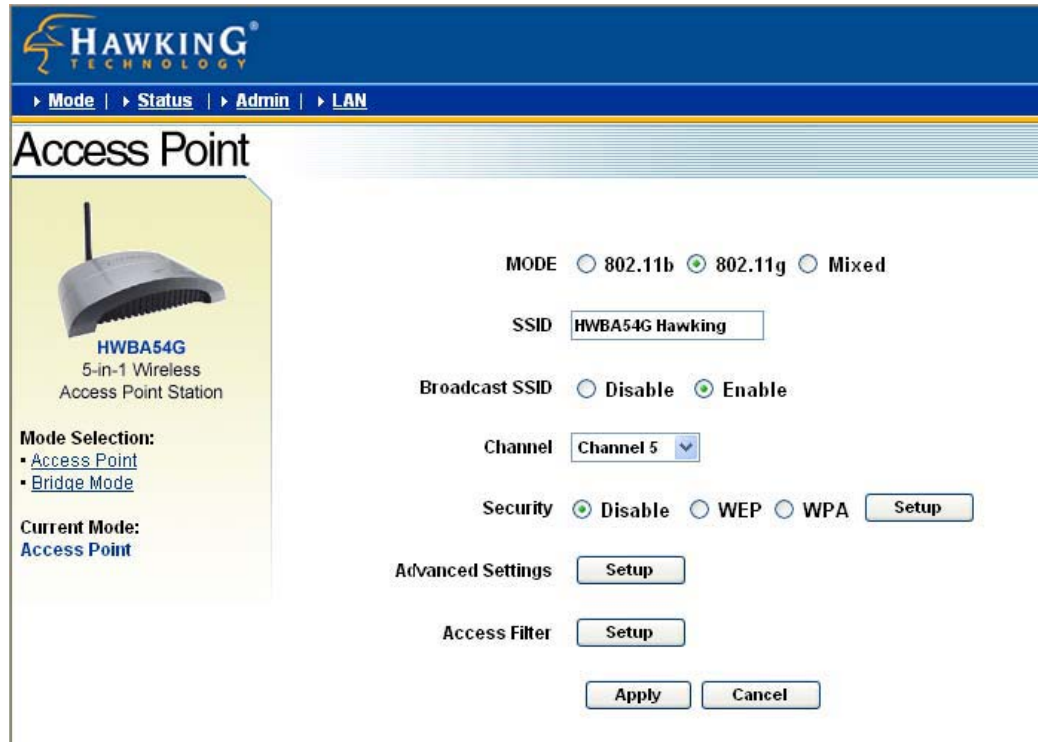
This mode allows you to connect the Wired (or Ethernet) portion to a router and create a Wireless LAN network. This is the default mode selection.

**Setup**

Click “**Setup**” to begin Access Point Configuration

## Configuring Your Device as a Wireless Access Point


The following steps will guide you through the Wireless Access Point setup. If you chose to configure your AP as a Bridge please refer to the section proceeding this.



**HAWKING TECHNOLOGY**

Mode | Status | Admin | LAN

### Access Point

  
**HWBA54G**  
5-in-1 Wireless Access Point Station

**Mode Selection:**

- Access Point
- Bridge Mode

**Current Mode:**  
Access Point

**MODE**  802.11b  802.11g  Mixed

**SSID**

**Broadcast SSID**  Disable  Enable

**Channel**

**Security**  Disable  WEP  WPA

**Advanced Settings**

**Access Filter**

**Network ID:** In the Access Point Setup Wizard you will be asked to enter the **SSID** you wish to assign for your wireless network. This will be the ID that all wireless devices in your network must have in order to communicate between one another. You may also choose the wireless channel you wish for your network to run under.

**Security:** If you wish to setup security for your wireless network you may do so here. Note: all devices in your wireless network must have the same WEP Key to communicate. If you wish to skip this step click **Next**.

**Note:** Do not adjust any other settings unless you have read the manual and feel the need to do so.

Your setup is now complete. Click **Apply** to confirm the settings. Once the settings have applied, remove the HWBA54G from your PC and connect it directly to your network

**Note:** To connect the device to a network, connect the LAN port to an open port on your network switch or router using the included Ethernet Cable.

Step

4

## Client Bridge Mode Setup

### Configure Your Device as a Wireless Bridge

The Bridge Setup Wizard will guide you through the configuration of your device into an Ethernet Bridge. To start select **Bridge Mode** on the left side menu.

The screenshot shows the Hawking Technology web interface. At the top, there is a navigation menu with links for Mode, Status, Admin, and LAN. The main heading is "Access Point". On the left, there is a sidebar with a product image of the HWBA54G Wireless Access Point Station. Below the image, it says "Mode Selection:" with links for "Access Point" and "Bridge Mode". It also indicates "Current Mode: Bridge Mode". The main content area is titled "Bridge Modes" and "Client Wireless Bridge". It features a diagram titled "Bridge Client Mode" showing the HWBA54G Wireless-G Bridge connected to a Wireless Access Point or Wireless Router, which is connected to a Cable/DSL Modem and the Internet. Below the bridge, there are icons for "Any Ethernet-Ready Device" (Desktop, Laptop, Printer, Workgroup) connected via a Switch. A "Setup" button is located at the bottom of the diagram area.

**Bridge Modes**

**Client Wireless Bridge**


**Bridge Client Mode**

This mode allows you to connect to an AP or Wireless Router. The computer or gaming device connected connected to the 5-in-1 now becomes a client on the Wireless LAN network.

[Setup](#)

After selecting the Bridge Mode, click **Setup** to configure the device as a **Client Wireless Bridge**.

## Access Point



**HWBA54G**  
5-in-1 Wireless  
Access Point Station

**Mode Selection:**

- [Access Point](#)
- [Bridge Mode](#)

**Current Mode:**  
Client Wireless Bridge

Station Mode  802.11b  802.11g

MAC Cloning Mode  Disabled  Enabled

SSID

Operation Mode  Ad-Hoc  Infrastructure

Channel

Security  Disable  WEP  WPA

Preamble Type  Short  Long

Transmit Rate

The Bridge Mode settings page lets you choose between two wireless modes for your Bridge. Click the **Infrastructure Mode** if you want your wireless computers to network with computers on your wired network using a wireless access point. Click the **Ad-Hoc Mode** if you want multiple wireless computers to network directly with each other. If you are confused as to which mode to choose please view the diagrams below to help make your decision. Click the bubble next to your selection.

### Infrastructure Mode



### Ad-Hoc Mode



**SSID Selection:** You may manually enter the SSID (Identification) of your Wireless Network or you may let the **Site Survey** automatically search for wireless networks in your network. You may also select the frequency channel of operation for your Bridge (Ad-Hoc Mode Only). Click on **Site Survey** to view the available networks and select the one that you wish to associate with.

|                       | SSID    | Security   | Channel | Signal % | Network Type   |
|-----------------------|---------|------------|---------|----------|----------------|
| <input type="radio"/> | Hawking | WEP Enable | 11      | 97%      | Infrastructure |

Click **Join** after you have selected your network. If your network does not appear please check your wireless setup and click **Scan** once the problem has been fixed.

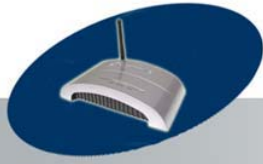
**Security:** If your network is using Wireless Security (WEP) you may enter the key here. If not, click **Apply** to complete the installation.

After configuration you may disconnect the Bridge from your PC and connect it to any Ethernet-ready network device you wish to add to the wireless network. Your setup is now complete.

If you wish to switch the operation mode of your HWBA54G back to Bridge mode or Access Point mode, simply re-login to the configuration menu by entering the IP Address of the device (which you previously saved) into your web-browser and adjust the settings accordingly.

**Note:** Please refer to the user's manual in this CD for further information to configure your AP-Bridge in any other mode.

Thank you for choosing Hawking Technologies.



## Networking Terms

HWBA54G

**Ethernet:** A networking standard using cables (Category 5) to create a network.

**Network Adapter:** Also known as a NIC (Network Interface Card). Used to provide PC's or laptops with an Ethernet port or wireless access to the network.

**Broadband Modem:** A device that allows broadband connection to the internet. Broadband connections include speeds faster than 56k (dial up modem speed). The two most common types of Broadband connections are DSL and Cable. Cable modem relies on the bandwidth of cable television lines while DSL modems rely on the telephone lines operating at DSL speeds.

**Router:** A device used to share internet access from one user to multiple users. By taking one IP address (Addresses used by ISP's to assign broadband services to your computer) the Router distributes the services of your broadband access among multiple users and IP's.

### Wireless IEEE 802.11 – Wireless Network Specifications

- **802.11** -- applies to wireless LANs (Networks) and provides 1 or 2 Mbps transmission in the 2.4 GHz band using either frequency hopping spread spectrum (FHSS) or direct sequence spread spectrum (DSSS).
- **802.11b** (also referred to as *802.11 High Rate* or *Wi-Fi*) -- an extension to 802.11 that applies to wireless LANs and provides 11 Mbps transmission (with a fallback to 5.5, 2 and 1 Mbps) in the 2.4 GHz band. 802.11b uses only DSSS. 802.11b was a 1999 ratification to the original 802.11 standard, allowing wireless functionality comparable to Ethernet.
- **802.11g** -- applies to wireless LANs and provides 54 Mbps in the 2.4 GHz band. Backwards compatible with IEEE 802.11b products.

**ESSID:** A unique name identification for your wireless network. All wireless devices must have the same ID or else they will not work together.

**Channel:** A Channel that all Wireless devices communicate on. All Wireless devices on the network must be set on the same channel to work.

**WEP/WPA:** Wireless networking security protocols and standards, used to keep hackers from entering your wireless network.

