MERCUSYS Archer C50

MERCUSYS AC1200 Wireless Dual Band Gigabit Router User Manual

Model: Archer C50

1. INTRODUCTION

The MERCUSYS AC1200 Wireless Dual Band Gigabit Router, Model Archer C50, is designed to provide a high-speed, reliable network for your home or small office. Utilizing the next-generation Wi-Fi standard, 802.11ac, it offers combined wireless data transfer rates of up to 1.2Gbps, making it ideal for bandwidth-intensive tasks such as seamless HD streaming, online gaming, and large file downloads.

The Archer C50 operates on both 2.4GHz (300Mbps) and 5GHz (867Mbps) bands simultaneously, ensuring stable connections and optimal coverage across medium to large homes. It features two dual-band external antennas for enhanced signal strength and includes Gigabit Ethernet ports for fast wired connections.

Figure 1.1: Front view of the Archer C50 Wireless Dual Band Gigabit Router.

2. PACKAGE CONTENTS

Verify that all items are included in your package. If any item is missing or damaged, please contact your retailer.

- MERCUSYS AC1200 Wireless Dual Band Gigabit Router (Archer C50)
- Power Adapter
- Ethernet Cable
- Quick Installation Guide

Figure 2.1: Archer C50 Product Packaging.

3. PHYSICAL OVERVIEW

3.1 Front Panel Indicators

The front panel features LED indicators that provide information about the router's status and activity.

- **Power:** Indicates the power status of the router.
- **System:** Indicates the system status. Blinking usually means normal operation.
- **Wi-Fi 2.4GHz:** Indicates the status of the 2.4GHz wireless network.
- **Wi-Fi 5GHz:** Indicates the status of the 5GHz wireless network.
- **Internet:** Indicates the status of the WAN (Internet) connection.
- **LAN (1-4):** Indicates activity on the respective LAN ports.

Figure 3.1: Archer C50 Front Panel.

3.2 Rear Panel Ports and Buttons

The rear panel contains all the necessary ports for connecting the router to your network and power, along with control buttons.

- **WPS/Reset Button:** Press briefly for WPS function. Press and hold for several seconds to reset the router to factory default settings.
- **Internet (WAN) Port:** Connect your modem's Ethernet cable here.
- **Ethernet (LAN) Ports (1-4):** Connect your wired devices (computers, gaming consoles, etc.) here.
- **USB Port:** For connecting USB storage devices or printers (functionality may vary by firmware).
- **Power On/Off Button:** Turns the router power on or off.
- **Power Port:** Connect the provided power adapter here.

Figure 3.2: Archer C50 Rear Panel.

4. SETUP

4.1 Hardware Connection

Follow these steps to connect your router:

1. **Power Off:** Disconnect the power from your modem and router (if applicable).
2. **Connect Modem:** Connect your modem to the **Internet (WAN)** port on the Archer C50 router using an Ethernet cable.
3. **Connect Devices (Optional):** Connect your computers or other wired devices to the **Ethernet (LAN)** ports (1-4) using Ethernet cables.
4. **Power On:** Connect the power adapter to the router's **Power Port** and plug it into a power outlet. Press the **Power On/Off** button if necessary.

5. **Power On Modem:** Power on your modem. Wait for approximately 2 minutes for the modem to initialize.

For Cable Connection

You can connect the TP-Link Wi-Fi router to a modem with an Ethernet cable via the WAN port

ISP

Coaxial Cable

Modem

Ethernet Cable

WAN Port

(Internet Service Provider)

TP-link Wi-Fi routers work will with your ISP, such as: *Virgin* media
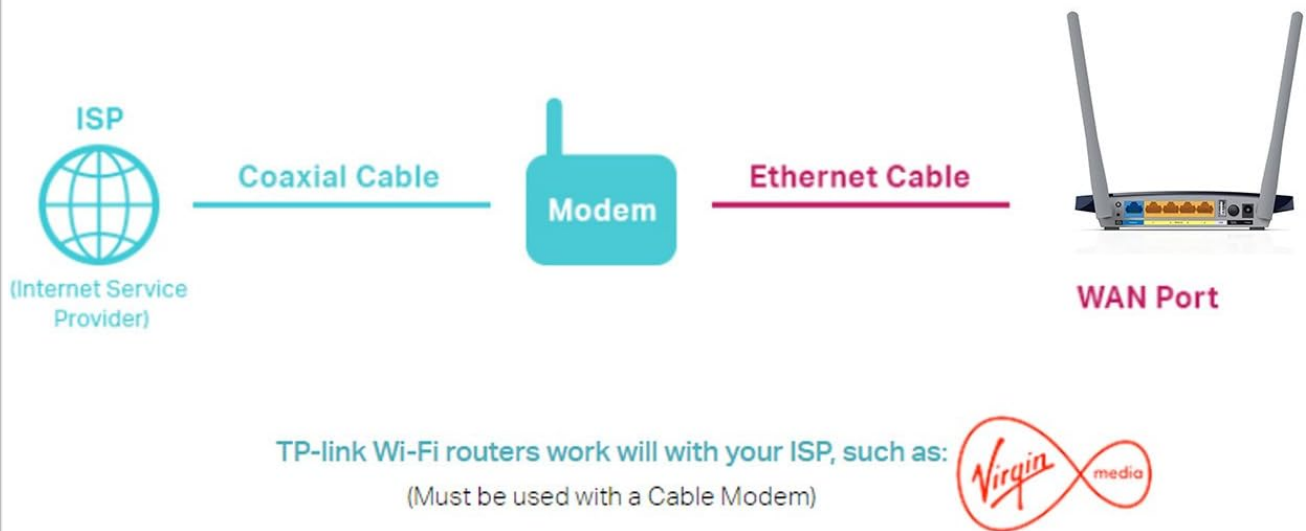(Must be used with a Cable Modem)

Figure 4.1: Cable Connection Diagram.

4.2 Initial Configuration

After hardware connection, configure your router via a web browser:

1. **Connect to Router:** Connect your computer to the router either via an Ethernet cable (to a LAN port) or wirelessly using the default Wi-Fi name (SSID) and password printed on the label at the bottom of the router.
2. **Access Web Interface:** Open a web browser and type http://tplinkwifi.net or http://192.168.0.1 (default IP address) into the address bar and press Enter.
3. **Login:** Create a new login password when prompted.
4. **Run Quick Setup:** Follow the on-screen instructions of the Quick Setup wizard to configure your Internet connection and wireless settings.

5. OPERATING THE ROUTER

5.1 Wireless Network Configuration

The Archer C50 supports dual-band Wi-Fi, providing two separate wireless networks:

- **2.4GHz Band:** Offers wider coverage and better penetration through walls, suitable for general web browsing and email.
- **5GHz Band:** Provides faster speeds with less interference, ideal for HD video streaming and online gaming.

You can configure the SSID (network name) and password for each band through the router's web management interface under the Wireless settings.

5.2 Guest Network

The Guest Network feature allows you to provide Wi-Fi access to guests without sharing your main network's password, ensuring the security of your private data.

5.3 Parental Control and WPS

The router includes Parental Control features to manage and restrict internet access for children. The WPS (Wi-Fi Protected Setup) button allows for quick and secure connection of WPS-compatible devices to your wireless network without entering the password manually.

5.4 Using the TP-Link Tether App

The TP-Link Tether app provides an easy way to access and manage your router from your mobile device. You can set up the router, manage network settings, control parental controls, and monitor connected devices directly from your smartphone or tablet.

Figure 5.1: TP-Link Tether App Interface.
Download the TP-Link Tether app from the App Store or Google Play.

6. MAINTENANCE

To ensure optimal performance and longevity of your Archer C50 router, consider the following maintenance tips:

- **Firmware Updates:** Regularly check the official MERCUSYS website for the latest firmware updates. Updating firmware can improve performance, add new features, and fix security vulnerabilities.
- **Proper Placement:** Place the router in a central location, away from obstructions (like thick walls or large metal objects) and interference sources (like microwaves or cordless phones). Elevating the router can also improve signal distribution.
- **Ventilation:** Ensure the router has adequate ventilation to prevent overheating. Do not cover the ventilation holes.
- **Regular Reboot:** Periodically reboot your router (e.g., once a month) by unplugging it from the power outlet for 10-15 seconds and then plugging it back in. This can help clear temporary issues and refresh network connections.
- **Secure Passwords:** Use strong, unique passwords for your Wi-Fi networks and router's administration page.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your Archer C50 router.

- **Cannot Access the Internet:**

  - Check all cable connections. Ensure the Ethernet cable from your modem is securely plugged into the router's WAN port.
  - Verify that your modem is working correctly. Try connecting a computer directly to the modem to see if it can access the internet.
  - Reboot both your modem and router.
  - Check the Internet LED on the router. If it's off or red, there might be an issue with your ISP connection or router configuration.

- **Wireless Connection Drops Frequently or is Unstable:**

  - Ensure the router is placed in a central location, away from obstacles and interference sources.
  - Try changing the wireless channel in the router's settings to avoid interference from neighboring networks.
  - Update the wireless adapter drivers on your devices.
  - Consider using the 5GHz band for devices that support it, as it generally has less interference.

- **Forgot Router Login Password:**

  - If you forgot the password for the web management page, you will need to reset the router to factory default settings. Press and hold the WPS/Reset button on the rear panel for about 5-10 seconds until the system LED blinks rapidly. This will erase all custom settings.

- **Forgot Wi-Fi Password:**

  - You can retrieve or change your Wi-Fi password by logging into the router's web management page. Navigate to the Wireless settings.

- If you cannot log in, you may need to reset the router to factory defaults (see above) and use the default Wi-Fi password printed on the router's label.

8. SPECIFICATIONS

Feature	Description
Model Name	Archer C50
Wi-Fi Technology	802.11ac, 802.11b, 802.11g, 802.11n
Network Standard	Wireless AC
Frequency Band Class	Dual-Band (2.4 GHz and 5 GHz)
Maximum Data Transfer Rate	1200 Mbps (300Mbps 2.4GHz + 867Mbps 5GHz)
Number of Antennas	2 External Dual Band Antennas
Number of Ports	1 WAN Port, 4 LAN Ports (RJ-45)
Special Features	WPS, Wireless, USB Port
Wi-Fi Range	Medium to Large Homes
Recommended Use	Multi-Device, SOHO, Video Chat, Web Surfing, Gaming, Home
Operating System Compatibility	Linux, Mac, Windows
Product Dimensions	5.7 x 9.1 x 1.5 inches (14.5 x 23.1 x 3.8 cm)
Item Weight	1.39 pounds (0.63 kg)
Color	Black
Certifications	4-UL Certified

9. WARRANTY AND TECHNICAL SUPPORT

The MERCUSYS Archer C50 router comes with a **2-year manufacturer warranty**. This warranty covers defects in materials and workmanship under normal use.

For technical assistance, MERCUSYS provides **unlimited 24/7 technical support**. If you encounter any issues or have questions regarding the setup, operation, or troubleshooting of your router, please contact MERCUSYS customer support through their official website or the contact information provided in your product documentation.

Please retain your proof of purchase for warranty claims.