Peplink BPL-021

Peplink Balance 20 Dual-WAN Router User Manual
Model: BPL-021

1. INTRODUCTION

The Peplink Balance 20 is a Dual-WAN router designed for users requiring reliable and high-performance internet connectivity. This device allows for the aggregation of multiple internet connections, enhancing bandwidth and ensuring network uptime through intelligent load balancing and automatic failover capabilities. Key features include:

- Dual-WAN (2 WAN) ports for internet connectivity, plus 1 USB WAN port for 4G LTE / 3G modems.
- Optional activation of a 3rd GE WAN port with a license key.
- 4-port GE LAN switch for local network devices.
- 150Mbps router throughput.
- Advanced load balancing algorithms to distribute network traffic.
- Automatic health checks and failover for continuous internet access.

2. PACKAGE CONTENTS

Verify that all items are present in your package:

- Peplink Balance 20 Router
- 12V2A Power Supply

Image: The Peplink Balance 20 router shown alongside its included 12V2A power supply.
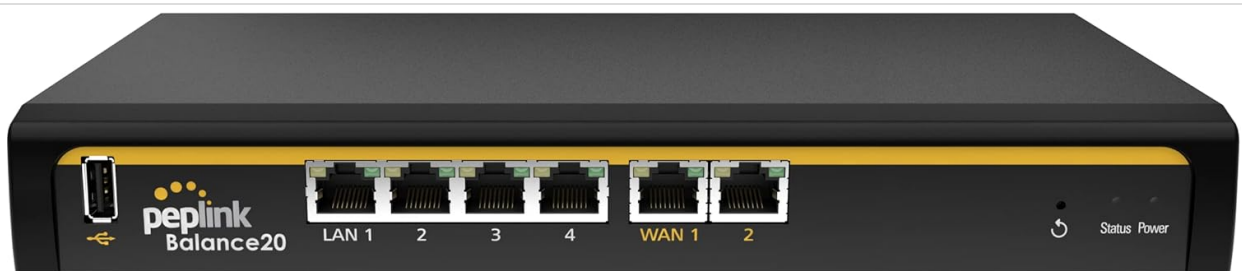
3. PRODUCT OVERVIEW

3.1 Front Panel

Image: Front view of the Peplink Balance 20 router, displaying the USB WAN port, four LAN ports (1-4), two WAN ports (1-2), and LED indicators for Status and Power.

- **USB WAN Port:** Connect a 4G LTE / 3G USB modem for additional internet connectivity.
- **LAN Ports (1-4):** Four Gigabit Ethernet ports for connecting local network devices such as computers, switches, or wireless access points.
- **WAN Ports (1-2):** Two Gigabit Ethernet ports for connecting primary internet sources (e.g., DSL, Cable modems).
- **Status LED:** Indicates the operational status of the device.
- **Power LED:** Indicates the power status of the device.

3.2 Rear Panel

Image: Rear view of the Peplink Balance 20 router, showing the 12V DC power input and a cable holder.

- **12V DC Power Input:** Connect the included 12V2A power supply.
- **Cable Holder:** Provides strain relief for the power cable.

4. SETUP

Follow these steps to set up your Peplink Balance 20 router:

1. **Connect Internet Sources:** Connect your primary internet modems (e.g., cable modem, DSL modem) to the WAN 1 and WAN 2 ports on the router using Ethernet cables. If using a 4G LTE/3G USB modem, connect it to the USB WAN port.
2. **Connect Local Devices:** Connect your computers, switches, or wireless access points to the LAN 1-4 ports using Ethernet cables.
3. **Apply Power:** Connect the 12V2A power supply to the 12V DC input on the rear panel of the router, then plug the power supply into an electrical outlet. The Power LED on the front panel should illuminate.
4. **Access Web Administration:** Open a web browser on a device connected to the router's LAN. Enter the default IP address (typically 192.168.1.1) into the address bar. Follow the on-screen wizard for initial configuration, including setting up WAN connections and administrative passwords.
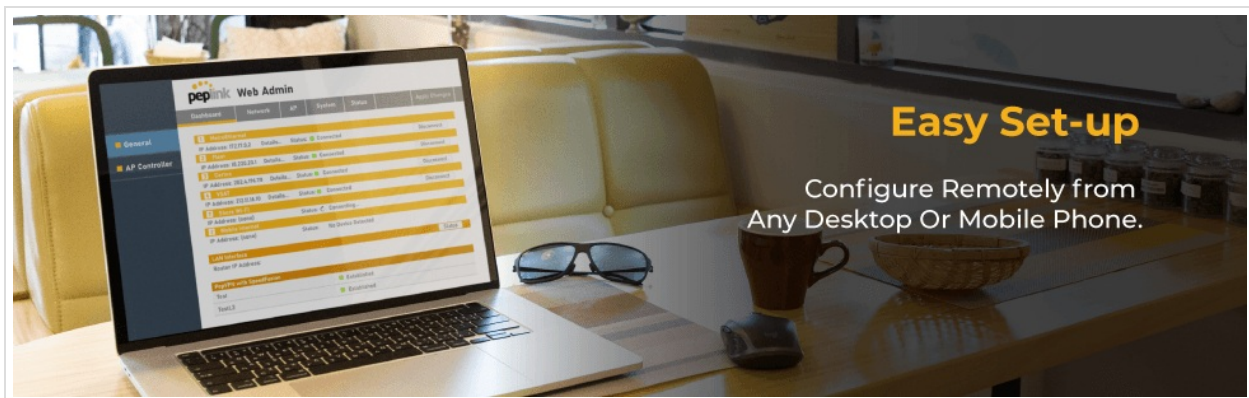

Image: A laptop displaying the Peplink Web Admin interface, illustrating the ease of remote configuration.

5. OPERATING INSTRUCTIONS

5.1 Dual-WAN Functionality

The Peplink Balance 20 leverages its Dual-WAN capabilities to provide enhanced internet performance and reliability.

Image: The Peplink Balance 20 router highlighted with 'Dual WAN' text, emphasizing its ability to utilize multiple internet connections.

Load Balancing

The router employs seven advanced load balancing algorithms to distribute network traffic across your connected WAN links. This optimizes bandwidth utilization, allowing for faster web page loading and improved overall network speed. You can configure rules to prioritize high-volume traffic to faster internet links.
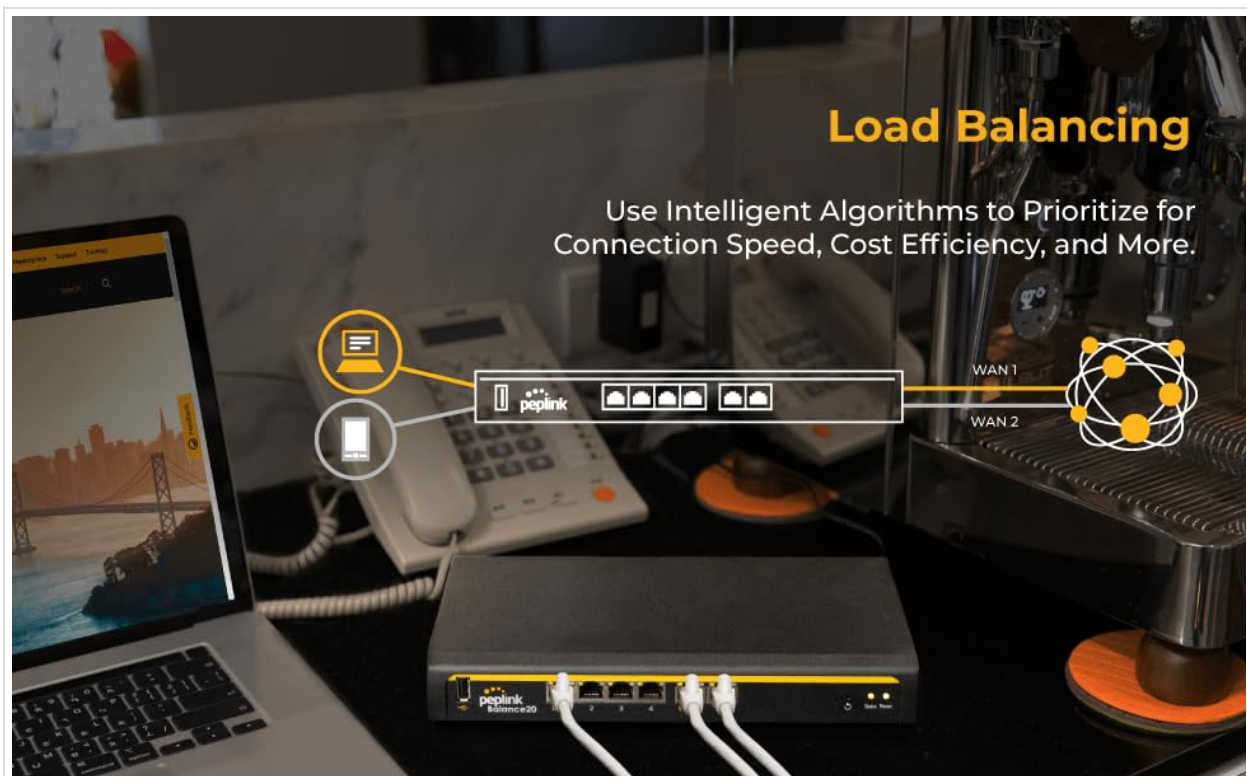

Image: A diagram showing the Peplink Balance 20 router distributing network traffic from multiple devices across two WAN connections for optimized performance.

Automatic Failover

For maximum reliability, the Peplink Balance 20 continuously monitors the status of your internet links. In the event of a link failure, the router automatically reroutes all traffic to the remaining active connections, ensuring uninterrupted internet access. This feature is crucial for maintaining business continuity or critical home network operations.
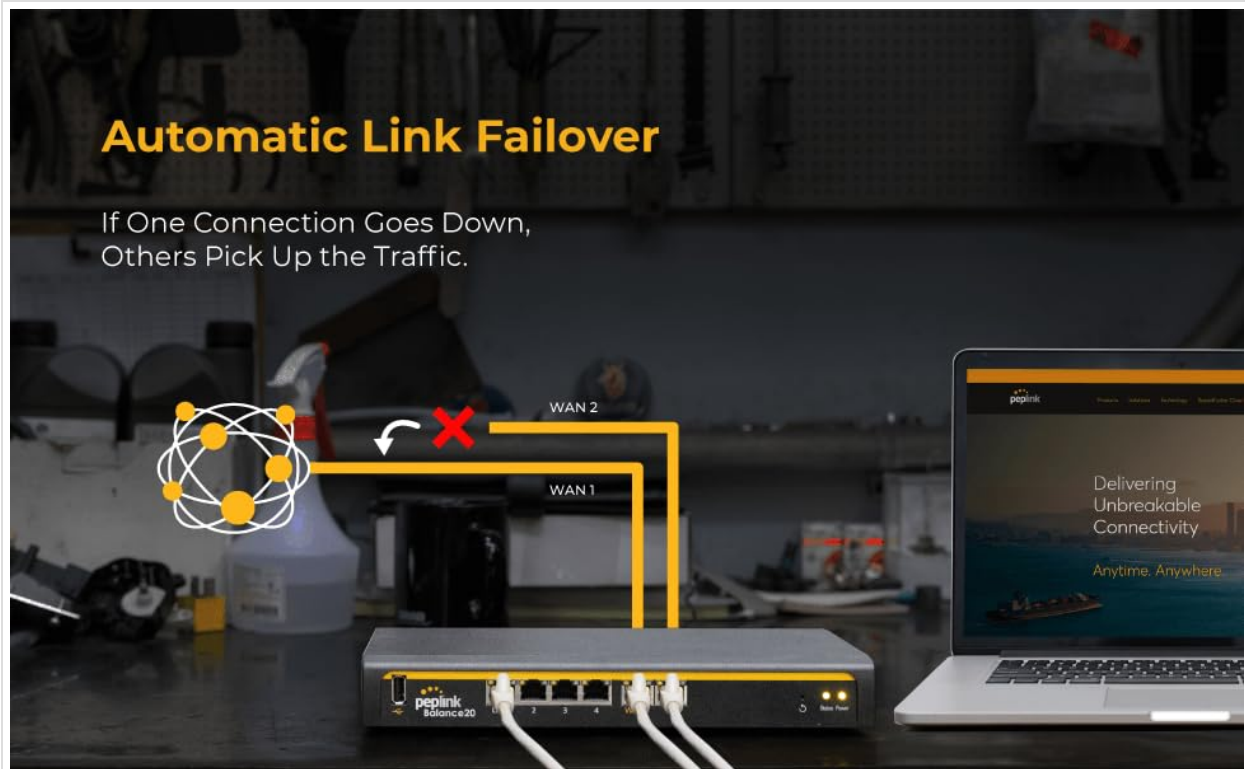

Image: A diagram demonstrating the automatic link failover feature, where if one WAN connection fails, the router seamlessly switches all traffic to the other active WAN connection.

5.2 Optional 3rd WAN Port

A third Gigabit Ethernet WAN port can be activated on the Peplink Balance 20 as an optional upgrade. This requires a license key available directly from Peplink, further expanding your connectivity options.

6. MAINTENANCE

To ensure optimal performance and longevity of your Peplink Balance 20 router, consider the following maintenance guidelines:

- **Placement:** Position the router in a well-ventilated area to prevent overheating. Avoid enclosed spaces or direct sunlight.
- **Cleaning:** Periodically clean the device and its vents to prevent dust accumulation, which can impede airflow and lead to overheating. Use a soft, dry cloth.
- **Firmware Updates:** Regularly check the Peplink website for firmware updates. Keeping the firmware current ensures access to the latest features, security patches, and performance improvements.
- **Power Cycle:** If you experience network issues, a simple power cycle (unplugging the power adapter for 10 seconds and then plugging it back in) can often resolve minor glitches.

7. TROUBLESHOOTING

If you encounter issues with your Peplink Balance 20 router, refer to the following common troubleshooting steps:

- **No Internet Access:**
    - Verify that your internet modems are powered on and functioning correctly.
    - Check the Ethernet cables connecting your modems to the router's WAN ports.
    - Log into the web administration interface to check the status of each WAN connection.

- **Slow Performance:**
    - Ensure that load balancing is configured appropriately for your internet links.
    - Check for any high-bandwidth applications or devices on your network.

- **Router Freezing/Unresponsive:**
    - If the router becomes unresponsive and requires frequent power cycling, ensure the device is in a well-ventilated area and not overheating.
    - Consider performing a firmware update.
    - If the issue persists, contact Peplink support for further assistance.

- **Cannot Access Web Admin:**
    - Ensure your device is connected to one of the router's LAN ports.
    - Verify that your device's IP settings are configured to obtain an IP address automatically (DHCP).
    - Try a different web browser.

8. SPECIFICATIONS

Feature	Specification
Model Number	BPL-021
WAN Ports	2x GE WAN ports + 1x USB WAN port (for 4G LTE / 3G modem)
Optional WAN Port	3rd GE WAN port (requires license key)
LAN Ports	4-port GE LAN switch
Router Throughput	150Mbps
Product Dimensions	10.2 x 5.24 x 1.37 inches
Item Weight	2.2 pounds
Operating Temperature	-40° – 149°F	-40° – 65°C
Connectivity Technology	Wired
Included Components	Balance 20, 12V2A Power Supply

9. SUPPORT

For technical support, warranty information, or further assistance, please visit the official Peplink website or contact their customer service. Refer to the documentation provided with your purchase for specific warranty terms and contact details.

Related Documents - BPL-021

Peplink Balance and MediaFast User Manual - Comprehensive Guide
Explore the features and functionalities of Peplink Balance and MediaFast routers with this comprehensive user manual. Learn about SD-WAN capabilities, load balancing, VPN bonding, content caching, and detailed setup instructions for various models.

Peplink Pepwave Router User Manual - Network Management and Configuration
Comprehensive user manual for Peplink Pepwave routers, detailing network status, client management, SpeedFusion VPN configuration, usage reports, event logs, and port information. Learn to manage your network efficiently.

Peplink B One Series User Manual: Setup, Features, and Configuration Guide
Comprehensive user manual for Peplink B One, B One Plus, and B One 5G SD-WAN routers. Covers setup, features, configuration, and advanced networking capabilities for businesses.

Peplink HD4 MBX 5G / CAT-20 Cellular Router External Antenna Ports
Detailed guide to the external antenna port configurations for Peplink HD4 MBX 5G and CAT-20 cellular routers, specifying QMA and RP SMA connectors for Wi-Fi, Cellular, and GPS interfaces, along with network and management ports.

Peplink B One Series User Manual: Setup, Features, and Configuration Guide
Comprehensive user manual for Peplink B One Series SD-WAN routers, covering setup, advanced features like SpeedFusion Connect and VPNs, configuration, and network management. Ideal for businesses seeking reliable connectivity.

Peplink Balance 2500 Mounting Kit Installation Guide
Installation guide for the Peplink Balance 2500 Mounting Kit. Learn how to assemble and install the rack mount hardware for the Balance 2500 network device using these step-by-step instructions.