AC1750 Dual Band Wireless Router with StreamBoost™ Technology

TEW-824DRU (v1.0R)

- Low latency gaming/voice prioritization
- AC1750: 1,300 Mbps WiFi AC + 450 Mbps WiFi N bands
- Intelligent traffic shaping
- Pre-encrypted WiFi for your convenience
- All Gigabit wired ports
- USB share port
- High power amplifiers extend wireless coverage
- Compatible with DD-WRT Open Source Firmware***

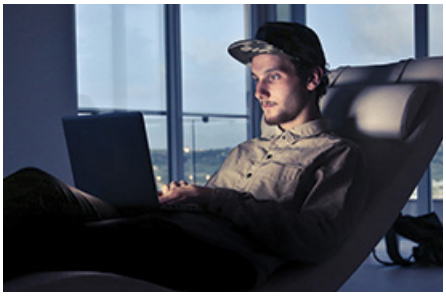
TRENDnet's AC1750 Dual Band Wireless Router with StreamBoost™ Technology, model TEW-824DRU, is built to perform in a busy connected home. It generates two concurrent WiFi networks—a 1,300 Mbps WiFi AC and a 450 Mbps WiFi N network. Qualcomm® StreamBoost™ technology prioritizes low latency gaming and voice streams, shapes network traffic to optimize each connected experience, and graphically displays all connected device/application traffic. Use the Gigabit Ethernet ports and USB share port to further extend an extreme performance digital network.

Optimized Gaming

StreamBoost™ minimizes latency for gaming, video, and voice streams to eliminate stutter and lag caused by high bandwidth traffic such as torrents.

Built For Busy Homes

Concurrent extreme WiFi networks and all Gigabit ports seamlessly network connected devices and high bandwidth streams such as 4K video.



Network Protection Tools

TRENDnet includes tools to help protect your home network including parental controls, isolated guest networks, and pre-encrypted WiFi.

StreamBoost™ Traffic Shaping

Optimized Gaming
Prioritizes latency for gaming and video in order to eliminate stutter and lag caused by network traffic.

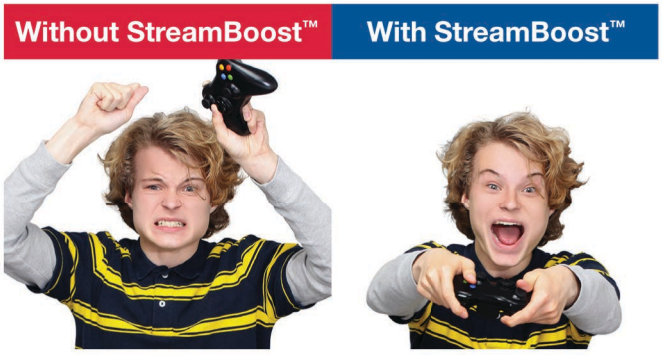
Traffic Shaping
Intelligently and automatically allocates the optimal amount of bandwidth for each network connection.

App + Device Aware
Seamlessly recognizes and manages bandwidth allocation for both applications and hardware devices.

Traffic Mapping
Explore a map of all connected network devices/applications and their respective real-time traffic usage.

Networking Solution

StreamBoost™ Traffic Shaping

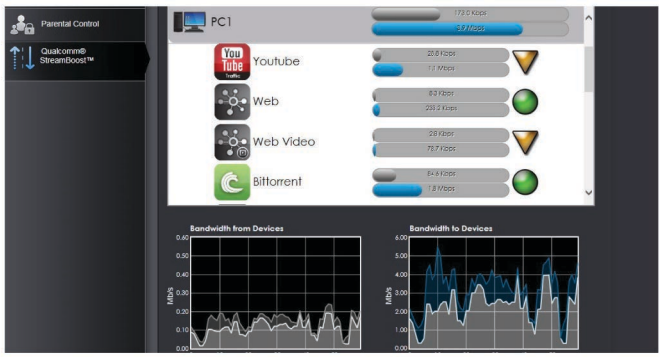


Optimized Gaming

When latency is the difference between winning and losing, Streamboost has your back. It helps eliminate hated stutter and lag with a laser focus on providing the lowest latency possible. When high bandwidth traffic is killing other networks, Streamboost thrives by prioritizing gaming, video, and voice over other non-critical data streams.

Traffic Shaping

StreamBoost dynamically shapes network traffic, delivering an optimized user experience, as applications and devices become active. Out of the Box, Streamboost automatically identifies, classifies, and intelligently manages all traffic. No user management is required. However, users can choose to manually override default device priority.

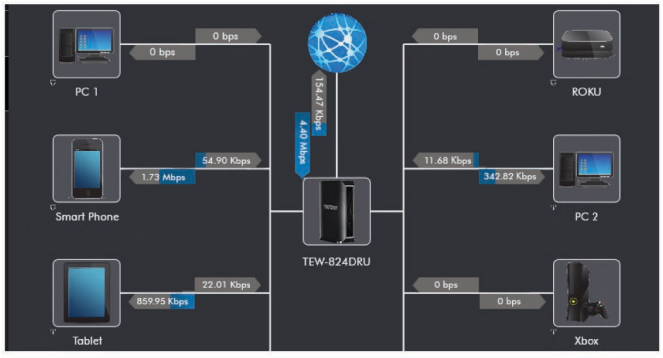


App + Device Aware

With more devices and applications downloading, streaming, and playing than ever before, today's home network needs a smarter way to deliver the best online experience. StreamBoost does just that. Constant updates provide the ability to identify new-to-market applications and devices and maintain an optimized experience as your home network changes.

Traffic Mapping

See your smart phones, tablets, computers, game consoles, and all other connected devices graphically mapped with their respective upload and download bandwidth usage. Select a device such as your computer to see detailed network loading of all of its applications and programs. This powerful network map feature is a great troubleshooting tool.



TEW-824DRU

Easy Setup
Get up and running in minutes with the intuitive guided setup

Simultaneous AC1750 Dual Band
Concurrent high performance 1,300 Mbps WiFi AC + 450 Mbps WiFi N bands

Qualcomm® StreamBoost™ Latency Prioritization
StreamBoost™ prioritizes latency for gaming and voice streams to eliminate stutter or lag caused by other high bandwidth network traffic such as torrent downloads

Qualcomm® StreamBoost™ Traffic Shaping
StreamBoost™ intelligently allocates the optimal amount of bandwidth for each individual device/ application and users can further manually assign device priority

Device/Traffic Mapping
See all connected network devices/applications and their respective real-time network usage and review historical usage data

Pre-Encrypted Wireless
For your convenience the WiFi is pre-encrypted with its own unique password

Wireless Coverage
High performance amplifiers maximize wireless coverage

Gigabit Ports
Gigabit ports support high performance wired connections

USB Share Port
Share content across the network with the USB share port

Guest Network
Create an isolated network for guest internet access only

Parental Controls
Control access to specific websites or types of content

One Touch Connection
Securely connect to the router at the touch of the Wi-Fi Protected Setup (WPS) button

Targeted Beamforming
Increased real-time performance by directing stronger wireless signals to your specific location

Backward Compatible
Compatible with legacy wireless devices

Energy Savings
Embedded GREENnet technology reduces power consumption

Specifications

Standards
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3ab
- IEEE 802.3az
- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.11g
- IEEE 802.11n (2.4 GHz 450 Mbps, 5 GHz up to 450 Mbps)
- IEEE 802.11ac (up to 1300 Mbps)

Hardware Interface
- 4 x Gigabit LAN ports
- 1 x Gigabit WAN port
- 1 x USB 2.0 (Storage FTP, Samba)
- Power switch
- WPS button
- Reset button
- LED indicators

Special Features
- StreamBoost™ automatically identifies and classifies network traffic to maximize bandwidth and speed
- Multi-Language interface: English, French, Spanish, German, Russian
- Pre-encrypted wireless network
- IPv6 support
- 1 guest network per band with option for internet access only
- Up to 2 additional SSIDs per band
- Dynamic DNS support for dyn.com, no-ip.com, and easydns.com
- Samba/FTP server support
- Implicit and Explicit Beamforming

Access Control
- Wireless encryption up to WEP, WPA/WPA2-PSK, WPA/WPA2-RADIUS
- Firewall: NAT, SPI, Virtual Server, Special Applications, Gaming, DMZ Host, allow/deny ping request from internet
- ALG: PPTP/L2TP/IPsec VPN Passthrough, TFTP/FTP/RTSP/SIP/H.323 Passthrough
- Parental (Access) Controls: MAC, URL, IP Filter

Quality of Service
- WMM
- StreamBoost™ Traffic Shaping

Internet Connection Types
- Dynamic IP (DHCP)
- Static IP (Fixed)
- PPPoE (Dynamic IP/Static IP)
- PPTP (Dynamic IP/Static IP)
- L2TP(Dynamic IP/Static IP)
- Russia PPPoE (Dynamic IP/Static IP)
- Russia PPTP (Dynamic IP/Static IP)
- Russia L2TP (Dynamic IP/Static IP)
- IPv6 (Static, Auto-configuration (SLAAC/DHCPv6), Link-Local, PPPoE, 6to4)

Management/Monitoring
- Local/remote web based management
- Upgrade firmware
- Backup/restore configuration
- Internal logging
- Reboot
- Restore to factory defaults
- Ping test

Routing
- Static
- Dynamic (RIP v1/2)

Frequency
- 2.412 - 2.472 GHz
- 5.180 – 5.825 GHz

Modulation
- 802.11b: CCK, DQPSK, DBPSK
- 802.11a/g: OFDM with BPSK, QPSK and 16/64-QAM
- 802.11n: BPSK, QPSK, 16-QAM, 64-QAM with OFDM
- 802.11ac: OFDM with BPSK, QPSK and 16/64/256-QAM

Media Access Protocol
- CSMA/CA with ACK

Antenna Gain
- 2.4 GHz: 3 x 2 dBi (max.) internal; 5 GHz: 3 x 3 dBi (max.) internal

Wireless Output Power
- 802.11a: FCC: 25 dBm (max.) / ETSI: 25 dBm (max.) / IC: 26 dBm (max.) @ 54 Mbps
- 802.11b: FCC: 23 dBm (max.) / ETSI: 21 dBm (max.) / IC: 23 dBm (max.) @ 11 Mbps
- 802.11g: FCC: 27 dBm (max.) / ETSI: 20 dBm (max.) / IC: 27 dBm (max.) @ 54 Mbps
- 802.11n (2.4 GHz): FCC: 27 dBm (max.) / ETSI: 20 dBm (max.) / IC: 27 dBm (max.) @ 450 Mbps
- 802.11n (5 GHz): FCC: 25 dBm (max.) / ETSI: 25 dBm (max.) / IC: 26 dBm (max.) @ 450 Mbps
- 802.11ac: FCC: 25 dBm (max.) / ETSI: 25 dBm (max.) / IC: 26 dBm (max.) @ 1300 Mbps

Receiving Sensitivity
- 802.11a: -65 dBm (typical) @ 54 Mbps
- 802.11b: -83 dBm (typical) @ 11 Mbps
- 802.11g: -65 dBm (typical) @ 54 Mbps
- 802.11n (2.4 GHz): -61 dBm (typical) @ 450 Mbps
- 802.11n (5 GHz): -61 dBm (typical) @ 450 Mbps
- 802.11ac: -51 dBm (typical) @ 1300 Mbps

Wireless Channels
- 2.4 GHz: FCC: 1-11; ETSI: 1-13
- 5 GHz: FCC: 36, 40, 44, 48, 149, 153, 157, 161, 165; ETSI: 36, 40, 44, 48, (52, 56, 60, 64, 100, 104, 108, 112, 116, 132, 136, 140)**

Power
- Input: 100 – 240 V AC, 50 - 60 Hz, 0.8 A
- Output: 12 V DC, 2 A external power adapter
- Consumption: 18 Watts max.

Operating Temperature
- 0 – 40 °C (32 – 104 °F)

Operating Humidity
- Max. 95% non-condensing

Certifications
- CE
- FCC

Dimensions
- 72 x 151 x 191 mm (2.8 x 6.0 x 7.5 in.)

Weight
- 408 g (14.4 oz.)

Warranty
- 3 year limited

Package Contents
- TEW-824DRU
- Quick Installation Guide
- CD-ROM (User's Guide)
- Network cable (1.5 m/5 ft.)
- Power adapter (12 V DC, 2 A)

*Maximum wireless signal rates are referenced from IEEE 802.11 theoretical specifications. Actual data throughput and cover-age will vary depending on interference, network traffic, building materials and other conditions. For maximum performance of up to 1.3 Gbps use with a 1.3 Gbps 802.11ac wireless adapter.
** Due to regulatory requirements, the wireless channels specified cannot be statically assigned, but will be available within the available wireless channels when set to auto.
***The provided open source firmware has no affiliation with, nor was it produced by TRENDnet. Using this firmware requires advanced knowledge and experience with OpenSource code. TRENDnet does not provide support for this firmware. Use of this firmware voids the product warranty. This firmware may damage your product, use at your own risk.

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