



## AC1750 Dual Band Wireless Router with StreamBoost™ Technology

TEW-824DRU (v1.1R)

- 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

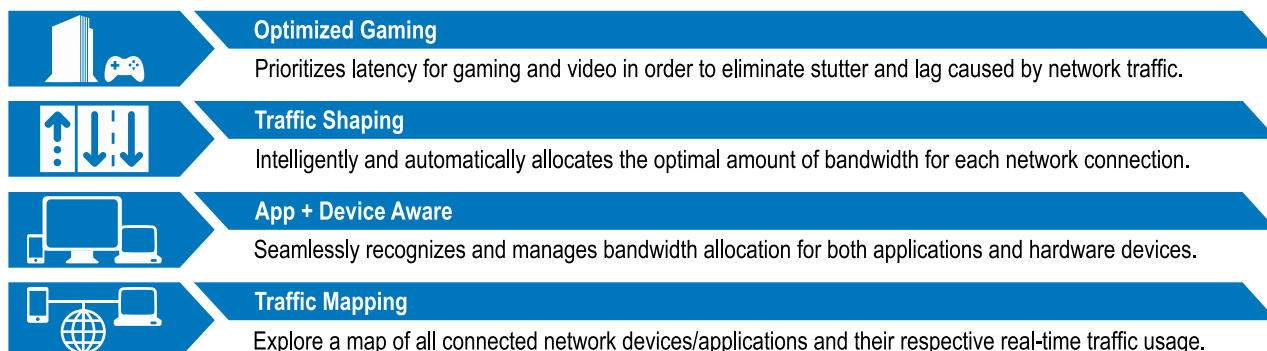
Concurrent extreme WiFi networks and all Gigabit ports seamlessly network connected devices and high bandwidth streams such as 4K video.



## 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



## Networking Solution

4K HD movies



HD Gaming



Music



Surfing



Web chat



E-mail



USB 2.0

WPS

Gigabit

WAN

Power on/off button

Power

## StreamBoost™ Traffic Shaping

Without StreamBoost™

With StreamBoost™



### 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.

Without StreamBoost™

With StreamBoost™

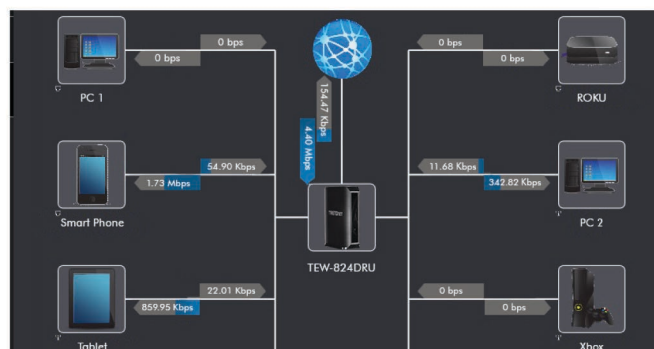


### App + Device Aware

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.





## 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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