## TEW-822DRE

# AC1200 WiFi Range Extender



## User's Guide

TRENDNET®

## TEW-822DRE

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## **Product Overview**



**TEW-822DRE** 

#### **Features**

TRENDnet's AC1200 WiFi Range Extender, model TEW-822DRE, offers extreme wireless coverage to eliminate existing wireless network dead spots. Setup takes minutes with no drivers to install and it stays out of the way by plugging directly into an outlet. Connect to either an existing WiFi N or WiFi AC router and extend concurrent WiFi N and AC networks into an area with low or no wireless.

#### Easy Setup

Quick intuitive setup connects to either a WiFi AC or WiFi N network and adopts existing WiFi settings

#### AC1200 Dual Band

Broadcasts concurrent high speed 867 Mbps WiFi AC + 300 Mbps WiFi N networks

#### Extreme Coverage

Adjustable external antennas, high power amplifiers, and multiple antenna technology produces extreme wireless coverage

#### **Gigabit Port**

Gigabit port extends a high performance connection to a wired device

#### No Clutter

The extender plugs directly into an outlet

#### **Operating Modes**

External switch toggles between Extender (connects to a WiFi network) and Access Point (connects to a wired network) modes

#### *Encrypted Wireless* Supports the latest encryption standards

*Compatibility* Compatible with legacy wireless devices

#### Targeted Beamforming

Increased real-time performance by directing stronger wireless signals to a device's specific location

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\*Maximum wireless signal rates are referenced from IEEE 802.11 theoretical specifications. Actual data throughput and coverage will vary depending on interference, network traffic, building materials and other conditions.

#### Package Contents

TEW-822DRE package includes:

- TEW-822DRE
- Multi-Language Quick Installation Guide
- CD-ROM (User's Guide)

If any package content is missing or damaged, please contact the retail store, online retailer, or reseller/distributor from which the product was purchased.

## **Hardware Features**



OperationSwitch the Operation Mode Switch to Off to<br/>turn off the wireless. Position the switch to<br/>Extender to operate TEW-822DRE in range<br/>extender mode. Position the switch to AP to<br/>work in access point mode.





LED Indicators				
Power	The indicator is solid blue when your range extender is powered on. When this light is off, there is no power to your range extender. The light will also blink when WPS is activated. The light will stop blinking and remain solid blue automatically once WPS process is completed.			
Network	Connect a network cable (Ethernet cable) to your computer for manual configuration.			

Wireless The Wireless LED shows the wireless connection between Range Extender and your wireless router. When it lights with solid blue, the Range Extender established a good wireless connection with your router. When it blinks, it means there are data running through the wireless connection.

**Red Lights**: When wireless connection is weak, the **Wireless LED** is in red. The **Range Extender** can still extend the weak wireless signal in lower speed. It is recommend to relocate your wireless router or **Range Extender** once there's a chance.

**Off:** The Wireless LED will be turned off if there's no wireless connection to your wireless router at all.

## **Application Diagram**



TEW-822DRE is a dual band 802.11ac range extender which can extend your wireless router's range or coverage. Furthermore, it can extend to both 2.4 GHz and 5 GHz bands to the clients. If your router works only on 2.4 GHz or 5G Hz, you can simply extend it to be a dual band network. simply plug the TEW-822DRE at a location in between your wireless router and your computer or mobile device to eliminate the dead spot of connection.

## **Setting Up**

There are two ways of setup: by pushing Wi-Fi Protected Setup (WPS) button or web browser configuration.

#### **WPS Connection**

1. Plug in the TEW-822DRE to a power outlet nearby your wireless router and switch the operation switch to **Extender**.



The power LED indicator will start blinking in blue, it means the system is booting up. When the LED blinking in amber, the TEW-822DRE is ready for setup.

2. Press and release the WPS button on the repeater. The LED will blinking in green, which means the TEW-822DRE has begun WPS pairing.



3. Press and hold the WPS button on the router for 5 seconds to start WPS pairing.



4. The LED will change to solid blue once the WPS connection is established.



5. (Optional) Relocate the TEW-822DRE and plug at a location between wireless router and your computer.

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#### **Web Browser Configuration**

1. Plug in the TEW-822DRE to a power outlet nearby your wireless router and computer, then switch the device on.



The LED indicator will start blinking in red, which means the system is booting up. When the LED blinking in amber, the TEW-822DRE is ready for setup.

2. Open your computer's wireless network settings and search available wireless networks for **TRENDnet737**. No security password is required. The wireless encryption security will be setup in following steps.



#### 0r,

Connect a network cable (not included in the package) from your computer to the TEW-822DRE's network port.



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3. Open the web browser and type **http://tew-822dre** or **http://192.168.10.100** to access the administration page. (See trouble shooting page if you cannot access the administration page.)



Enter administrator login information. (The default user name is **admin** and the password is **admin**.)

Setup Wizard
This wizard is designed to assist you in your Wi-Fi network setup. It will guide you through step-by-step instructions on how to set up your Wi-Fi network and how to make it secure.
Next Cancel

4. Change your administrator password from the factory default setting. Click **Apply** to continue.

Setup Wizard		
Setting New Pas	sword	
New Password		
Verify Password		
	Show Password	
The password mus 0-9, !, @, #, \$)	st be between 8 and 16 characters. (Alphanumeric: a-z, A-Z,	
	Last Next Cancel	

5. Choose manual setting to search and select your wireless router manually.

Setup Wizard		
Wireless Settings		
WPS	<ul> <li>(Using push WPS button to make wireless connection)</li> </ul>	
Manual	• (Manually setup the wireless connection)	
Please select one of th	e configuration methods and then click Next.	
Last Next Cancel		



6. Select the wireless router or access point you want to connect with and then click **Connect**.

Site Survey						
Select your Wireless Network						
SSID	BSSID	Channel	Туре	Encryption	Signal	Select
jaytezz_5G	d8:fe:e3:3e:b1:22	149 (A+N+AC)	АР	WPA2-PSK(AES)	100	•
TrendnetOp	00:14:d1:b1:e1:b4	2 (B+G+N)		WPA2-PSK(AES)	100	•
TrendnetOpWork	00:14:d1:b1:e1:b5	2 (B+G+N)	AP	WPA2-PSK(AES)	96	•
TrendnetSkyN	00:14:d1:c5:7d:44	1 (B+G+N)		WPA2-PSK(AES)		•
	Last	Next		Cancel		

7. Enter the WiFi key and then click **Next**.

	Setup Wizard
Wi-Fi Key	
Wi-Fi Key	Show Password
Please enter the Wi-	Fi key (wireless password) for the wireless connection.
	ast Next Cancel

8. click Next.

Extended Network		
Wireless Network Name (SSID)	myRouter	
You can setup a different SSID to your extended wireless network so you can nominally connect to your AP/Router or the Range Extender. Please enter the wireless network name between 1 and 32 alphabets and numbers if you want to set it differently. Uncheck Use the same network name for the extended network and then click on Next. If you want to leave it the same, simply just leave it with default value and click on Next.		

- 9. TEW-822DRE will reboot to apply the change. The LED will cycle through flashing red, flashing amber, and then turn to solid green once the connection is established.
- 10. (Optional) Relocate the TEW-822DRE and plug at a location between wireless router and your computer.

## Access your Range Extender through the Web Browser

#### **System Management and Default Settings**

The TEW-822DRE has following settings:

User name. a	lamm
Password: a	dmin

#### **Multi-Language**

Select your preferred language in the TEW-822DRE login page.

TEW-822DRE Login		
User Name:	admin	
User Password:	••••	
Language:	English •	
	French German Spanish Russia	

#### **Major Settings**

*Main - Wizard* Run the setup wizard again



## Main - Network Settings

Main	Network Settings
Wizard	
Network Settings	Save Settings Don't Save Settings
System	
Time Settings	IPv4 Network
Wireless	Choose the way to setup your IPv4 access and network range.
	Network Address Dynamic IP (DHCP) V
Status	
	Dynamic IP (DHCP)
Tools	IPv4 Network
	IP Address 192.168.10.100
	Subnet Mask 255.255.255.0
	Gateway Address 0.0.0.0
	Primary DNS Server 0.0.0.0
	Secondary DNS Server 0.0.0.0
	Save Settings Don't Save Settings

#### Main - System

Main	System Settings
Wizard	
Network Settings	Save Settings Don't Save Settings
Time Settings	Device Name
Wireless	You can access this Range Extender with its name directly. Enter "http://deviceName" in browser running on windows or "deviceName.local." in Safari on Mac or iPad.
	Device Name TEW-822DRE
Status	Password
Tools	New Password
	Verify Password
	Show Password
	Save Settings Don't Save Settings

## Main - Time Settings

Main	Time Settings	
Wizard		
System		Save Settings Don't Save Settings
Time Settings	Current Time	
Wireless	Current Date/Time	06/02/2015 10:57:54
	Time Settings	
Status	Enable NTP Server	2
Tools	NTP Server	time.trendnet.com Update Now
	Time Zone	(GMT-08:00) Pacific Time (US/Canada), Tijuana 🔹
	Enable Daylight Saving	2
	Daylight Saving Offset	+1:00 •
	Daylight Saving Dates	Month     Week     Day of Week Time       DST Start     Mar     2nd     Y       DST End     Nov     Y     1st     Y         Sun     Y     2 am     Y
	Set the Date and Tin	ne Manually
	Date And Time	Year 2015 V Month Jun V Day 08 V Hour 15 V Minute 51 V Second 38 V
		Copy Your Computer's Time Settings
		Save Settings Don't Save Settings

## <u>Wireless</u>

#### Site Survey

Search wireless sites.

	Sit	te Surv	/ey			
	Select y	our Wireless	Networ	k		
SSID	BSSID	Channel	Туре	Encryption	Signal	Selec
jaytezz_5G	d8:fe:e3:3e:b1:22	149 (A+N+AC)		WPA2-PSK(AES)	100	•
TrendnetOp	00:14:d1:b1:e1:b4	2 (B+G+N)		WPA2-PSK(AES)	100	•
TrendnetOpWork	00:14:d1:b1:e1:b5	2 (B+G+N)		WPA2-PSK(AES)		•
TrendnetSkyN	00:14:d1:c5:7d:44	1 (B+G+N)		WPA2-PSK(AES)		•
TrendnetOpWork TrendnetSkyN	00:14:d1:b1:e1:b5 00:14:d1:c5:7d:44	2 (B+G+N) 1 (B+G+N) Next	AP AP	WPA2-PSK(AES) WPA2-PSK(AES) Cancel	96 37	•

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#### <u>Status</u>

#### System Information

System reference information.

Main	System Information		
Wireless	System		
	Firmware Version	1 00 Tue 02 Jun 2015	
Status	Time	6/2/2015 10:4:2	
System Information		0/2/2013 10:1.2	
Local Logs	LAN		
Statistics	Device Mode	AP Repeater	
Wireless Client List	MAC Address	d8:eb:97:95:90:ce	
	Connection	Dynamic IP	
Tools	IP Address	192.168.10.100	
	Subnet Mask	255.255.255.0	
	Gateway Address	0.0.0.0	
	2.4GHz Wireless		
	MAC Address	D8:EB:97:95:90:CF	
	SSID	TRENDnet822_2.4GHz_90CE	
	Security Mode	WPA2 Mixed	
	Channel Width	Auto 20/40MHz	
	Channel		
	5GHz Wireless		
	MAC Address	D8:EB:97:95:90:CE	
	SSID	TRENDnet822_5GHz_90CE	
	Security Mode	WPA2 Mixed	
	Channel Width	Auto 20/40/80MHz	
	Channel	40	

#### Local Logs

view Local	Logs
Log Options	
	System Activity Debug Information
log Options	Dropped Packets
	Notice
	Apply Log Options Now
	https://cog/options.now
t List	
Download	
Dominouu	
Download log histor	ry to your computer Download
Log Details :	
Time	Message
1	
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3
Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2
Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3 : xHCI Host Controller
Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus
Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1
Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: irq 42, io mem 0x18040000 bub 1 out 00 USC bub formed
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: irq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: USB hub found
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: irq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: 1 port detected dwc_usb3 dwc_usb3: xHCI Host Controller
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: irq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: 1 port detected dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: inq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: USB hub found hub 1-0:1.0: USB thub found hub 1-0:1.0: I port detected dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 2
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: red USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: irq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: USB hub found hub 1-0:1.0: Lost detected dwc_usb3 dwc_usb3: rHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 2 hub 2-0:1.0: USB hub found hub 2-0:1.0: USB hub found
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: irq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: 1 port detected dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 2 hub 2-0:1.0: 1 port detected hub 2-0:1.0: 1 port detected hub 2-0:1.0: 1 port detected
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: riq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: USB hub found dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 2 hub 2-0:1.0: USB hub found hub 2-0:1.0: USB hub found hub 2-0:1.0: USB hub found hub 2-0:1.0: I port detected usbcore: registered new interface driver usb-storage oktone: Packet Generator for packet performance testino.
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: new USB bus registered, assigned bus hub 1-01.0: 1 port detected dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 2 hub 2-01.0: 1 USB hub found hub 2-01.0: USB hub found hub 2-01.0: USB hub found hub 2-01.0: LST detected usbcore: registered new interface driver usb-storage pktgen: Packet Generator for packet performance testing. Version: 2.74
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U3 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: irq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: 1 port detected dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 2 hub 2-0:1.0: 1 port detected usbcore: registered new interface driver usb-storage pktgen: Packet Generator for packet performance testing. Version: 2.74 u32 classifier
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: irq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: USB hub found hub 1-0:1.0: J port detected dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 2 hub 2-0:1.0: USB hub found hub 2-0:1.0: USB hub found hub 2-0:1.0: USB hub found hub 2-0:1.0: I port detected usbcore: registered new interface driver usb-storage pktgen: Packet Generator for packet performance testing. Version: 2.74 u32 classifier nf_conntrack version 0.5.0 (785 buckets, 3140 max)
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: inq 42, io mem 0x18040000 hub 1-01.0: 1 port detected dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 2 hub 2-01.0: 1 port detected usbcore: registered new interface driver usb-storage pktgen: Packet Generator for packet performance testing. Version: 2.74 u32 classifier nf_contrack version 0.5.0 (785 buckets, 3140 max) ip_tables: (C) 2000-2006 Netfilter Core Team
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U3 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: irq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: USB hub found hub 1-0:1.0: USB hub found hub 2-0:1.0: USB hub found hub 2-0:1.0: I port detected usbcore: registered new interface driver usb-storage pktgen: Packet Generator for packet performance testing. Version: 2.74 u32 classifier nf_conntrack version 0.5.0 (785 buckets, 3140 max) ip_tables: (C) 2000-2006 Netfliter Core Team TCP: cubic registered
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: rq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: USB hub found dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 2 hub 2-0:1.0: USB hub found hub 2-0:1.0: USB hub found hub 2-0:1.0: USB hub found hub 2-0:1.0: USB hub found hub 2-0:1.0: I port detected usbcore: registered new interface driver usb-storage pktgen: Packet Generator for packet performance testing. Version: 2.74 u32 classifier nf_conntrack version 0.5.0 (785 buckets, 3140 max) ip_tables: (c) 2000-2006 Netfilter Core Team TCP:: cubic registered NET: Registered protocol family 10 st: Toy6 new TDV4 tunnellon driver
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: inq 42, io mem 0x18040000 hub 1-0:1.0: 1 port detected dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 2 hub 2-0:1.0: 1 port detected usbcore: registered new interface driver usb-storage pktgen: Packet Generator for packet performance testing. Version: 2.74 u32 classifier nf_contrack version 0.5.0 (785 buckets, 3140 max) ip_tables: (C) 2000-2006 Netfilter Core Team TCP: cubic registered NET: Registered protocol family 10 sit: IPv6 over IPv4 tunneling driver NET: Resistered protocol family 10 sit: Pv6 over IPv4 tunneling driver NET: Resistered protocol family 10
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U3 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: irq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: USB hub found hub 2-0:1.0: USB hub found hub 2-0:1.0: USB hub found hub 2-0:1.0: USB hub found hub 2-0:1.0: I port detected usbcore: registered new interface driver usb-storage pktgen: Packet Generator for packet performance testing. Version: 2.74 u32 classifier nf_conntrack version 0.5.0 (785 buckets, 3140 max) ip_tables: (C) 2000-2006 Netfilter Core Team TCP: cubic registered NET: Registered protocol family 10 sit: IPv6 over IPv4 tunneling driver NET: Registered protocol family 17 [2tp_core: L2TP core driver, V2.0
Jun 2 09:33:55 Jun 2 09:33:55	BusyBox v1.13.4 Do Warm Reset for U3 try Port Reset for U2 dwc_usb3 dwc_usb3: xHCI Host Controller dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 1 dwc_usb3 dwc_usb3: rq 42, io mem 0x18040000 hub 1-0:1.0: USB hub found hub 1-0:1.0: USB hub found hub 1-0:1.0: USB hub found dwc_usb3 dwc_usb3: new USB bus registered, assigned bus number 2 hub 2-0:1.0: USB hub found hub 2-0:1.0: USB hub found for the set of the

#### **Statistics**

Main	Traffic Stati	stics		
Wireless	LAN			
Status	Sent	8998	Received	8898
	TX Packets Dropped		RX Packets Dropped	
System Information	Collisions		Errors	
Local Logs Statistics	2.4GHz Wireless			
Wireless Client List	Sent	728	Received	41849
	TX Packets Dropped		RX Packets Dropped	
Tools	Collisions		Errors	
	5GHz Wireless			
	Sent	337	Received	20142
	TX Packets Dropped		RX Packets Dropped	
	Collisions		Errors	

#### Wireless Client List

List all the wireless clients.

Main	Wireless Clier	nt List		
Wireless				
	2.4GHz Wireless Clients List			
Status	Connected Time	MAC Address		
		NONE		
System Information				
Local Logs	5GHz Wireless Clier	nts List		
Statistics	Connected Time	MAC Address		
Wireless Client List		NONE		
Tools				

#### <u>Tools</u>

#### **Upload Firmware**

Main	Firmware Up	ograde	
Wireless	Firmware Upgrad	e	
Status	Choose File	Choose File No file chosen	Firmware Upgrade
Tools			
Firmware Upgrade			
Backup Settings			
Ping Test			
Email Notification			
Remote Logging			
LED Control			
Logout			

Click **Upload Firmware** on the menu to list associated wireless clients. TRENDnet may periodically release firmware upgrades that might add features or fix problems associated with your TRENDnet model and version. To find out if there is a firmware upgrade available for your device, please check your TRENDnet model and version using the link.

http://www.trendnet.com/downloads/

- 1. If a firmware upgrade is available, download the firmware to your Computer.
- 2. Unzip the file to a folder on your computer.
- 3. Log into the repeater (default http://tew-822dre)
- 4. Click on Administrator and then Upload Firmware.
- 5. Click **Browse** ... and navigate to the folder on your computer in which the unzipped firmware file (.bin) is.
- 6. Located and select it the firmware file.
- 7. Click **Upload**.

#### **Backup Settings**

Main	Backup System Settings	
Wireless	Save System Settings	
Status	Save Settings Save	
Tools	Restore System Settings	
Firmware Upgrade Backup Settings	Load Settings Choose File No file chosen Load	
Ping Test	Restore Factory Default Settings	
Email Notification Remote Logging	Restore Factory Default	
LED Control	System Reboot	
Logout	System Reboot Reboot	

Save Configuration	Click <b>Save</b> to export settings to your
Settings	computer.
Restore	To restore settings previously saved on
Configuration	your computer, click <b>Browse</b> to select a
Settings	configuration file and then click <b>Load</b> to
	import the previous settings.
<b>Restore Factory</b>	Click <b>Restore</b> to restore settings to factory
Default Settings	defaults.
System Reboot	Click Restart to reboot your TEW-
	822DRE.

#### Ping Test

Ping test tool.

Main	Ping Test				
Wireless					
	IPV4 Ping Test				
Status	Host Name or IPv4 Address Ping				
Tools					
	Ping Result				
Firmware Upgrade	Enter a host name or IP address above and click "Ping".				
Backup Settings					
Ping Test					
Email Notification					
Remote Logging					
LED Control					
Logout					

#### Email Notification

Email notification setups.

Main	Email Notification
Wireless	Save Settings Don't Save Settings
Status	
	Enable
Tools	Enable Email Notification
Firmware Upgrade	Email Notification
Backup Settings	The email notification supports only plan text notification.
Ping Test	From Email Address
Email Notification	To Email Address
LED Control	Email Subject
Logout	SMTP Server Address
	SMTP Server Port 25
	Enable Authentication
	Security Type OTLS OSL
	Account name
	Password
	Verify Password Show Password
	Send Mail Now
	Notification
	Send Notification Automatically when the log is full
	Save Settings Don't Save Settings

#### Remote Logging

Remote Syslog.

Main	Syslog Service	Settings		
Wireless			Save Settings	Don't Save Settings
Status				
	Syslog Server			
Tools	Enable Logging To Syslog Server:			
Firmware Upgrade	Syslog Server IP Address:			
Backup Settings				
Ping Test			Save Settings	Don't Save Settings
Email Notification				
Remote Logging				
LED Control				
Logout				

#### LED Control

Control LED indicators.

Main	LED Control	Help		
Wireless				
Status			Save Settings	Don't Save Settings
Tools	LED Disable			
	LED Disable:			
Firmware Upgrade				
Backup Settings			Save Settings	Don't Save Settings
Ping Test				
Email Notification				
Remote Logging				
LED Control				
Logout				

#### Logout

Logout from the system.



#### TEW-822DRE

## **Technical Specifications**

Wireless Modulation:	BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM with OFDM
Antenna : Frequency:	<ul> <li>External antenna</li> <li>FCC: 2.412 - 2.462 GHz, 5.180 - 5.240 GHz, 5.745 - 5.825 GHz</li> <li>ETSI: 2.412 - 2.472 GHz, 5.180 - 5.580 GHz, 5.660 - 5.700 GHz</li> </ul>
Wireless Channels:	<ul> <li>FCC: 1 -11, 36, 40, 44, 48, 149, 153, 157, 161, 165</li> <li>ETSI: 1 - 13, 36, 40, 44, 48, (52, 56, 60, 64, 100, 104, 108, 112, 116, 132, 136, 140)</li> <li>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.</li> </ul>
Data Rate:	<ul> <li>802.11ac: up to 867 Mbps (Auto Fallback)</li> <li>802.11a: up to 54 Mbps</li> <li>802.11n: up to 300 Mbps (Auto Fallback)</li> <li>802.11g: up to 54 Mbps</li> <li>802.11b: up to 11 Mbps</li> </ul>
Output Power:	<ul> <li>802.11a: FCC: 22 dBm (typical), CE: 20 dBm (typical) @ 54 Mbps</li> <li>802.11b: FCC: 20 dBm (typical), CE: 20 dBm (typical) @ 11 Mbps</li> <li>802.11g: FCC: 27 dBm (typical), CE: 20 dBm (typical) @ 54 Mbps</li> <li>802.11n: FCC: 27 dBm (typical), CE: 20 dBm (typical) @ 300 Mbps</li> <li>802.11ac: FCC: 26 dBm (typical), CE: 20 dBm (typical) @ 867 Mbps</li> </ul>
Receiving Sensitivity:	<ul> <li>802.11a: -65 dBm (typical) @ 54 Mbps</li> <li>802.11b: -83 dBm (typical) @ 11 Mbps</li> <li>802.11g: -65 dBm (typical) @ 54 Mbps</li> </ul>

802.11n: -61 dBm (typical) @ 300 Mbps
802.11ac: -51 dBm (typical) @ 867 Mbps

**Encryption:** 64/128-bit WEP, WPA / WPA2-PSK

\*Maximum wireless signal rates are referenced from IEEE 802.11 theoretical specifications. Actual data throughput and coverage will vary depending on interference, network traffic, building materials and other conditions.

#### TEW-822DRE

## Troubleshooting

*Situation:* I typed http://tew-822dre but I am not able to access the unit. What should I do?

#### Solution:

The host name resolution is good for most systems, including Windows, OS X, and iOS. Please enter the IP address (default: 192.168.10.100) if you experience difficulty in accessing the range extender.

Proceed following steps for correct name resolution.

- 1. Turn the TEW-822DRE's operating mode switch to **Extender** or **AP**.
- 2. Reset the device to factory default settings by pushing the reset button for 5 seconds.
- Make sure you have a good wireless connection to the default SSID: TRENDnet822\_5GHz\_xxxx, TRENDnet822\_2.4GHz\_xxxx, or connect to the TEW-822DRE using a network cable. The default wireless password is printed on the device label on same side of the power plug.
- 4. Make sure your laptop/PC is not joined to any network domain.
- 5. Open a browser and type **http://tew-822dre** (You must enter the leading **http://** to resolve the text as a host name)

*Situation:* How do I reset the device to factory default?

#### Solution:

- 1. Use a pin such as a staple to press and hold the reset button at the bottom of the TEW-822DRE for 5 seconds.
- 2. You can also reset from the management page.

*Situation:* I entered **http://192.168.10.100** but I am not able to access the unit. What should I do?

#### Solution:

- 1. Turn the TEW-822DRE's operating mode switch to **Extender** or **AP**.
- 2. Reset the device to factory default settings by pushing the reset button for 5 seconds.
- 3. Make sure you have a good wireless connection to the default SSID: **TRENDnet822\_5GHz\_xxxx**, **TRENDnet822\_2.4GHz\_xxxx**, or connect to the TEW-822DRE using a network cable. The default wireless password is printed on the device label on same side of the power plug.
- 4. Make sure your computer has no other network connections. For example, if you access TEW-822DRE through wireless, disconnect your Ethernet cable.
- 5. Open a browser and enter **http://192.168.10.100**

Situation: How do I make sure my unit is connected to a router or an AP?

#### Solution:

The LED will turn solid blue when the TEW-822DRE is successfully connected to a router or an AP.

*Situation:* How can I access the TEW-822DRE once it is setup?

#### Solution:

You can use its host name (http://tew-822dre) or IP address to access the TEW-822DRE. After repeater setup, the TEW-822DRE will get an IP address from your router (DHCP). Check the DHCP client list on your router if you want to access the TEW-822DRE with its IP address.

## Regulations

#### <u>Federal Communication Commission Interference</u> <u>Statement</u>

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



#### **IMPORTANT NOTE:**

#### FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

Operation of this device is restricted to indoor use only.

#### **Industry Canada**

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### Caution:

the device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

#### Avertissement:

les dispositifs fonctionnant dans la bande de 5150 à 5250MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

#### Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps

## **Limited Warranty**

TRENDnet warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

• TEW-822DRE – 3 Years Warranty

If a product does not operate as warranted during the applicable warranty period, TRENDnet shall reserve the right, at its expense, to repair or replace the defective product or part and deliver an equivalent product or part to the customer. The repair/replacement unit's warranty continues from the original date of purchase. All products that are replaced become the property of TRENDnet. Replacement products may be new or reconditioned. TRENDnet does not issue refunds or credit. Please contact the point-of purchase for their return policies.

TRENDnet shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to TRENDnet pursuant to any warranty.

There are no user serviceable parts inside the product. Do not remove or attempt to service the product by any unauthorized service center. This warranty is voided if (i) the product has been modified or repaired by any unauthorized service center, (ii) the product was subject to accident, abuse, or improper use (iii) the product was subject to conditions more severe than those specified in the manual.

Warranty service may be obtained by contacting TRENDnet within the applicable warranty period and providing a copy of the dated proof of the purchase. Upon proper submission of required documentation a Return Material Authorization (RMA) number will be issued. An RMA number is required in order to initiate warranty service support for all TRENDnet products. Products that are sent to TRENDnet for RMA service must have the RMA number marked on the outside of return packages and sent to TRENDnet prepaid, insured and packaged appropriately for safe shipment. Customers shipping from outside of the USA and Canada are responsible for return shipping fees. Customers shipping from outside of the USA are responsible for custom charges, including but not limited to, duty, tax, and other fees.

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June 22, 2015

TEW-822DRE v1.0R User's Guide V1.0

# TRENDNET®

## **Product Warranty Registration**

Please take a moment to register your product online. Go to TRENDnet's website at http://www.trendnet.com/register

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