



Wireless AC Dual-band USB Adapter

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Chapter 1 Product Overview

The Tenda W900U Wireless AC900 Dual Band Adapter based on IEEE 802.11ac technology delivers next generation WiFi speeds. The device enables multiple HD video streams throughout your home simultaneously. With speed up to 867Mbps (5G) + 300Mbps (2.4G) and dual band technology, the W900U effectively avoids interference, ensuring top WiFi speeds and reliable connections. Unique design makes it easy to use with both laptops and desktops. Plus, securing a wireless connection is fast and simple at a push of the WPS button. The W900U is perfect for upgrading your existing laptop or desktop to 802.11ac.

1.1 Package Contents (For references only)

- > Tenda W900U Wireless AC900 Dual Band Adapter
- CD (with driver and user manual)

1.2 LED Overview

The adapter comes with a status LED, which displays:

- a) a green light while identified and functioning properly.
- b) a blue light while transferring data, which blinks faster at a higher speed (the higher the speed is, the faster it blinks).

1.3 Key Features

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- > Automatically sense network and adjust transmission rate
- 20/40M for 2.4G; 20/40/80M for 5G
- > Comes with 2 operating modes: Infrastructure and Ad-Hoc
- Access secure networks using WEP, WPA or WPA2
- ➤ Wi-Fi Protected Setup[™] (WPS) for easy connection to a wireless network
- Compatible with Windows XP, Vista, Windows7, Windows8 and more

1.4 Applications

The Tenda adapter delivers powerful, fast and reliable wireless access to your desktop or notebook computer.

It is ideal for use by or in:

- corporate staff who want to stay connected to Internet while moving around
- ancient buildings, places rented or for temporary use where wiring is such a big mess, a huge cost or hard to reach
- business or individual always in need of network topology changes
- business or individual who wants to have a wireless network established fast and simple without the mess of wiring

1.5 Before Getting Started

Before installing and using this product, please peruse the entire user guide.

- a) If you have a built-in wireless adapter, please disable it in Device Manager before installing this Tenda adapter.
- b) Also, if you have previously installed a different manufacturer's

adapter or a different model Tenda adapter, make sure the software and driver are uninstalled before installing the new software. Some utilities may cause a conflict with the new software.

1.6 Maintenance

Observe the following to ensure the product continuously stays in good condition.

- Keep the device away from humidity and water
- DO NOT expose the device to corrosive substances (such as acid and alkali, etc)
- > DO NOT expose the device to sunshine or other heat sources
- Contact Tenda technical staff if you are running into problems that you are not able to solve



Chapter 2 Installation Guide

The CD that comes in the package includes both driver and software, which can be installed automatically. This section will walk you through the installation process.

Software install and operation instructions are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.

2.1 Hardware Install

Turn on your computer and insert the Tenda adapter into an available USB port on your computer.



2.2 Software Install

1. If the Found New Hardware Wizard appears, click **Cancel** and then use the quick install CD to install the driver and software.



2. Insert the Tenda Driver CD in your PC's CD-ROM driver. If the CD Autorun function does not automatically start on your computer, double click **Tenda.exe**. When the autorun screen appears, click **Run**.





3. Select the language you want to use and click Next to continue.



4. Check I accept the terms of the license agreement and then click Next.



5. You can either install the standalone driver without Tenda adapter utility or install both driver and Tenda adapter utility.



Setup Type Select the setup type that best :	suits your needs.	
	Select Configuration Tool	
	 Instal driver only Instal driver and VLAN Config Tool 	
InstallShield	<back next=""></back>	Cancel

Note: If you wish to use Windows system built-in wireless utility, you can select the first installation mode; however, if you want to use advanced features like WPS, you must also install the Tenda adapter utility.

6. Click **Install** to install the driver.





7. Wait till the driver is completely auto-installed and then click **Finish** to exit.





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This section will walk you through the configuration process of connecting to a wireless network using your PC's OS built-in wireless utility. To use Windows XP built-in wireless utility, you must first enable the Wireless Zero Configuration service (enabled by default).

3.1 Connect to a Wireless Network --Windows® XP

1. Right-click My Network Places from the desktop and select Properties.



2. As seen below, Wireless Network Connection displays Not Connected. Right click **Wireless Network Connection** and select **View Available Wireless Networks**.

	Wireles Acquirin	s Network Connection 4 no network address. Sh
🚬 (o)	802.11	Disa <u>b</u> le
		View Available Wireless Networks
		Stat <u>u</u> s
		Re <u>p</u> air
		Bridge Connections
		Create <u>S</u> hortcut
		<u>D</u> elete
		Rena <u>m</u> e
		P <u>r</u> operties

3. The utility will display any available wireless networks in your area. If you don't see the network you wish to connect to, click the **Refresh** network list. Click on the network (SSID) you wish to connect to and click the **Connect** button or directly double click it. If you are prompted to provide a security key, simply enter it (case sensitive) exactly as it is on your wireless router or access point and then click **Connect**.



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Note: If the network you selected is not encrypted, you will not see this dialog box requesting a security key.

4. When this screen appears, you have successfully connected to your wireless network and can start surfing Internet.



3.2 Connect to a Wireless Network --Windows® 7

1. Click the wireless icon in your system tray (lower-right corner). The utility will display any available wireless networks in your area. Click on a network (SSID) and click the **Connect** button or directly double-click it. If you don't find the desired wireless network, click the refresh icon (upper-right corner) to update the list.



2. If you are prompted to provide a security key, simply enter it exactly as it is on your wireless router or access point and then click **OK**.



🙀 Connect to a Net	work	x
Type the netwo	ork security key	
Security key:	••••••• Ide characters	
		OK Cancel
		EN 🔺 .👩

3. When **Connected** appears next to the selected wireless network (SSID), you have successfully connected to it. To disconnect from it, view status, or change wireless properties, etc, simply right-click the SSID.

Currently connected to Tenda No Internet acce	: 255	4 3	*
Wireless Network Conn	ection 3	^	
Tenda	Connected	.ul	Ξ
	Disconn	ect	
Tenda		31	
			Ŧ
Open Network an	d Sharing Cen	ter	
тыз сору	OF WITHOWS IS	norge	mum
	EN	•	all

3.3 Connect to a Wireless Network --Windows® 8

1. Click the wireless icon in your system tray (lower-right corner). The utility will display any available wireless networks in your area. Click on a network (SSID) and click the **Connect** button or directly double-click it.

Networks				
Wi-Fi				^
Tenda			.atl	
Tenda_F			.atl	
TendaGJ01			.atl	
	▲	Þ 🏙 🏟	10:18 AM 2/23/2013	

2. If you are prompted to provide a security key, simply enter it exactly as it is on your wireless router or access point and then click **Next**.



Networks	
Tenda	.all
Enter the network securi	ity key
•••••	ب

3. When **Connected** appears next to the selected wireless network (SSID), you have successfully connected to it.

Networks		
Wi-Fi		
Tenda	Connected	.atl
Tenda_F		.atl
Tenda_0		.atl
Tenda_C		.all

⚠ Note:

If the wireless router or AP you connect to via the wireless adapter does not have Internet access, then you will get a Restricted status and a yellow exclamation mark will appear in the wireless icon in your system tray (lower-right corner).



Chapter 4 Tenda UI Guide

If you select Install driver and Tenda WLAN Utility, then both of them will be installed on your PC.

All features on the adapter can be configured and implemented through the Tenda adapter utility (abbreviated to UI).

To start the Tenda UI, select Start-> Tenda-> W900U or directly click W900U shortcut from your desktop.

4.1 Frequency Band Setup

Here you can select the band for the adapter to operate on: 2.4G, 5G or concurrently both 2.4G and 5G.



4.2 Wireless Connection

Wireless Connection displays all available wireless networks in the area and lets you see at a glance MAC address, channel, network mode (a/b/g/n), signal strength, authentication mode, encryption mode and/or WPS authentication of each AP. Also, you can select to connect to the desired wireless network.

Before connecting to a wireless network:

1. Click **Rescan** to update the available wireless network list, select a desired wireless network and then click **Connect**.

							http://www	.tenda.	com.cn	~
Band Settings	SSID									
and the second second	Refres	sh .								
ireless Connection	Connect	SSIC		Channel	Signal	Rssi	Security Status	Band	802.11Mode	
Wireless Status		°T'	TendaGJ01	3	att	-44 dBm	8	2.4G		
		°T°	W1800R_TEST_0221	11	att	-47 d8m	0	2.46	n	
Network Profile		°T°	IPCOM_084005	6	atl.	-51 d8m		2.46		
		°T°	wanderer_2G_test	9	atl	-51 d8m	8	2.46	n	
Help		*1*	OFei_000148	9	att	-52 dBm		2.4G	n	
	9	°1°	Tenda	8	atli	-55 dBm	0.8	2.4G	n	
		°T°	ASUS	1	att	-56 dBm		2.4G	n	
		°T°	0012-2g-Test	11	att	-59 dBm		2.4G	n	
		°T°	Tenda_888888	8	.ull	-59 dBm		2.46	n	
		°P°	Tenda_lugaoping	6	atl.	-59 dBm		2.46	n	
		°T°	NetMASTER.	4	att	-60 dBm	8	2.4G	n	
		°T°	Tenda_000120	11	ati l	-61 dBm	2	2.4G	n	
		°1°	Tenda_C40801	1	.atl	-66 dBm		2.4G	n	
		°1°	Tenda_004428	4	att	-66 dBm		2.4G		
		°¶°	Andy5_G	153	all	-66 dBm		5G		
		191	Yanda Serero	n		10.40-		2.00	-	
	Wreless Con	nection								
		SSID:	Tenda		Security	Mode: WPAP	sk	1		
	MAC M	Idraes-	r8-3a-35-r8-rd-34		Coher	Tune: AFS			Disconnect	

2. If you are prompted to provide a security key, simply enter it exactly as it is on the wireless router or access point you plan to connect to and then click **Next**.

Note: If you check **Save** wireless network upon successful connection, then, after the adapter connects to the network, it automatically saves the network connection information to a profile.

For detailed illustrations of authentication and encryption modes, see below:

WEP: Support 10 or 26 Hex characters; 5 or 13 ASCII characters.

WPA-PSK: Support 8~63ASCII characters; 8~64Hex characters.

WPA2-PSK: Support 8~63 ASCII characters; 8~64 Hex characters.

WPA-PSK/WPA2-PSK: Support 8~63 ASCII characters; 8~64 Hex characters.

\land Note:

Hex characters include numbers of $0 \sim 9$ and letters of $a \sim f$.

ASCII characters include any alphanumeric characters.

4.3 Wireless Status

After you have successfully connected to a wireless network, you can click Wireless Status to view details of the connection, including SSID, MAC address, authentication mode, encryption mode, channel, signal strength, transmission rate of the connected AP, IP address assigned to the adapter, subnet and TX/RX packet statistics, etc.

SSID: T	enda		
Signal Strength:	82%	MAC Address:	c8-3a-35-c8-cd-34
Security Mode:	WPAPSK	IP Address:	192.168.1.137
Cipher Type:	AES	Subnet Mask:	255.255.255.0
Band:	2.4G	TX Packets:	393
Channel:	8	RX Packets:	202
Rssi:	-56 dBm	TX Bytes:	66068
Transmission Speed:	3100 .0 Mbps	RX Bytes:	44151

4.4 Network Profile

Also, you can manually add a profile to connect to a specified wireless network. After the adapter joins the network, it automatically saves the network connection information to a profile, which can be used by adapter utility.

The next time you launch adapter utility, it will automatically connect to the network you previously joined if there's no change in the network information. If you wish to join a hidden network (A hidden network does not broadcast its SSID), you must add a profile to manually connect to it. Fields on screenshot are described below:

iena	d					Shenzhen Te http://www.	enda Technology tenda.com.cn
Band Settings Wireless Connection	Add		Edit	Delet	0	Connect	
Wireless Status Network Profile Help	Connect	Networ	k Profile Name	SSID	Security Status	Network Type	
V1.0.0.2	Informatio Network Pr	n of Conr ofile Nam ame (SSID	ected Wireless Ne e:):	twork	Security Mode: Opher Type:		

Add: Click to create a new wireless network profile.

Delete: Click to remove an existing profile.

Edit: Click to edit a current profile.

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An 802.11 wireless adapter (WNIC) can operate in two modes known as infrastructure mode and ad hoc mode:

Tenda	Shenzhen Tenda 1 http://www.tenda	Technology Co., Ltd a.com.cn
Band Settings		
Wireless Connection	Network Infrastructure -Connect to wireless AP Infrastructure -Connect to wireless AP	~
Wireless Status	Network Ad hoc -Directly connect to PCs Security	
Network Profile	SSID: Cipher Type: None	~
Help		
V1.0.0.2	Back Save	

Infrastructure: In an infrastructure mode network the wireless adapter needs a wireless access point or a wireless router for communication. All wireless nodes in an infrastructure mode network connect to an access point or a wireless router.

Ad-hoc: A wireless ad hoc network does not rely on a preexisting infrastructure, such as routers in wired networks or access points in managed (infrastructure) wireless networks. It typically refers to any set of networks where all devices have equal status on a network and are free to associate with any other ad hoc network device in link range in peer to peer communication mode.

4.4.1 Profile Set Up for Infrastructure Mode

If you plan to connect your wireless adapter to an existing wireless AP or wireless router, please select the Infrastructure mode.

Setting up infrastructure mode for wireless connectivity is not that hard, all we need is to follow below instructions:

1. Click Add and select Infrastructure from the appearing dialog box appear.

2. Specify a profile name and the SSID (wireless network name) you wish to connect.

3. Specify the authentication mode and encryption mode, say, "WPA-PSK" and "AES".

4. Enter the security key and click Save.

Tenda			She http	nzhen Tenda Technology Co., Ltd p://www.tenda.com.cn
Band Settings				
Wireless Connection	Network	Infrastructure -Conne	ct to wireless AP	•
Wireless Status	Network	PROF1	Security	WPAPSK •
Network Profile	SSID:	Tenda	Cipher Type:	AES 🔹
Help	Key:	•••••		
V1.0.0.2		Back	Save	2

Now, you may see the added profile in the list. You can edit or delete it. By clicking **Connect**, you will soon connect to the wireless network specified in the profile.

Tend	a	6		Shenzhen Tend http://www.ter	a Technology Co., Ltd Ida.com.cn
Band Settings					
Wireless Connection	Add	Edit	Del	iete	Connect
Wireless Status	Connect	Network Profile Name	SSID	Security Status	Network Type
Network Profile		PROF1	Tenda	2	¢
Help					
	Informatio	n of Connected Wireless N	etwork		
	Network Pr	ofile Name:		Security Mode:	
V1.0.0.2	Network Na	ame (SSID):		Cipher Type:	

⚠ Note:

If you wish to join a hidden network (wireless AP or wireless router that does not broadcast its SSID), you must add a profile to manually connect to it.

4.4.2 Profile Set Up for Ad Hoc Mode

By using ad hoc mode for communication, each PC must have a wireless adapter for sharing resources. Setting up the Ad Hoc is easy. Simply follow below instructions:

1. Configure a static IP address for each wireless adapter. All PCs on the Ad Hoc network must be configured with static IP addresses manually. For details, see appendix 1 hereof.

2. To add Ad Hoc profile:

- a) Click Add and specify a SSID (wireless network name), say, "Tenda".
- b) Select Ad Hoc as network type.
- c) Select **WEP** and specify a WEP key.

Tenda	r /			Sheni http:/	then Tenda Technology C //www.tenda.com.cn	- ×
Band Settings						
Wireless Connection	Network	Ad hoc -Directly connec	t to PCs		-	
Wireless Status	Network	PROF1	Security	open	•	
Network Profile	SSID:	Tenda	Opher Type:	WEP	•	
Help	Key:	•••••	Default Key:	Key1	*	
			Key Format:	Hex (10 or 26 characters)		
V1.0.0.2		Back	Save	i i		

- d) Click Save .and you will find the profile in profile list.
- e) Select it and click Connect.



Tend	a				Shenzhen T http://www	enda Technology Co., Lt
Band Settings Wireless Connection	Add	Edit	De	lete	Connect	
Wireless Status	Connect	Network Profile Name PROF1	SSID Tenda	Security Status	Network Type	
Help						
	Informatio Network Pr	n of Connected Wireless Ne offie Name: ame (SSID):	ebwork	Security Mode: Cipher Type:		

- f) Search the wireless network from devices on other nodes.
- g) Double-click it, enter a security key if required and then click Connect.



When below screen appears, you have successfully connected to it.



4.5 WPS Settings

If your wireless network supports WPS, you can use WPS to join a wireless network. WPS can easily and quickly create secure wireless connections.

Band Settings Wireless NetWork Select your WPS connection mode Connection Status @ Connect using WPS hardware button	
Wireless Settings Connect using WFS PEC or PDV WIPS Settings Starting a WPS connection in Windows XP will cause the W2C service to be automatically diabled a point and start to be found, however the W2C will be automatically enable upon a successful connection.	nd ed
Help	

There are two ways to join a wireless network using WPS:

- Connect using WPS hardware button: Press the WPS button on the side of the adapter. This applies only to join a PBC encrypted wireless network;
- Connect using WPS PBC or PIN: Join a wireless network from the Tenda adapter utility. This applies to both PBC and PIN encrypted wireless networks.

Follow instructions below:

4.5.1 To join a wireless network using WPS hardware button:

- 1. Enable WPS and PBC on your wireless router. (Press the WPS button on your wireless router or enable PBC from your router's management UI. For details, see the router's User Guide).
- 2. Run Tenda adapter UI and press and hold the WPS button on the side of the adapter for about 2 seconds.
- 3. When below screen appears, you have successfully connected to it.

					http://www.tendacn.com
Band Settings Wireless NetWork	Current connection sta	itus information			
Connection Status	SSID: Security Mode:	Tenda_Wy1fmixtuq WPA-PSK/WPA2-PSK	Signal Strength:	80%	
Wireless Settings	Opher Type:	AES/TKIP	Rssi	-22 dBm	
WPS Settings	Band:	2.4G	Channel:	1	
Help	Transmission Speed:	300.0 Mbps	MAC Address:	00-90-4c-0b-50-15	
	Wireless LAN status inf	formation			
	IP Address: 192.1	68.0.184	Subnet Mask:	255.255.255.0	
	Statistics				
	TX Packets: 155		TX Bytes:	18101	
	RX Packets: 15		RX Bytes:	6577	
				Re	ecount
V1 0 0 6					

4.5.2 To join a wireless network using WPS PBC or PIN from adapter's UI:

1. To join a wireless network using WPS PBC from Tenda adapter UI:

Select WPS Settings-> Connect using WPS PBC or PIN.

Tend	Shenchen Tenda Tachnology Cu., Ltr http://www.landacn.com
Band Settings Wireless NetWork Connection Status Wireless Settings WPS Settings	Select your VIPS connection mode. Connect using VIPS hardware button. Connect using VIPS PIPC or PIN Starting XIPS connection in Nickness TP will cause the VIIC's service to be automatically deabled and in Starting XIPS connection. In Nickness TP will cause the VIIC's service to be automatically deabled and in Starting XIPS connection.
V1.0.0.6	Back Net

Click Next and then select PBC.

Tend	a	Shenzhen Tenda Technolo	gy Co., Ltd
Band Settings Wireless NetWork Connection Status Wireless Settings	select one of the following methods PBC (Push Button Configuration) PB4 (Personal Identification Number)		
WPS Settings Help	 automatically select network to connect If cannot automatically find the WPS AP or connect to it, p 	ease try again, and this time, clear the check box.	
V1.0.0.6		Back	Next

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Note:

- Automatically select network to connect: Automatically select a WPS-capable AP from searched results to join. This field is checked by default. If this field is left unchecked, you must manually select a WPS-capable AP to connect.
- b) If you want to manually select the WPS-capable AP that you wish to join, leave this field unchecked.

Tend	Shenzhen Tenda Technology Co., (http://www.tendacn.com
Band Settings Wireless NetWork Connection Status Wireless Settings	select one of the following methods
WPS Settings Help	automatically anticrimetwork to connect If cannot automatically find the WPS AP or connect to it, please try again, and this time, dear the check box.
V1.0.0.6	Back Net

Click **Next** and follow onscreen WPS instructions to enable WPS-PBC on the AP.



Tend	
icitic	Shenzhen Tenda Technology Co., Ltd http://www.tendacn.com
Band Settings Wireless NetWork	PBC (hush Button Canfiguration)
Connection Status Wireless Settings	Press the PBC button on the WPS AP, and then click Nest. Note
WPS Settings	If the WPS AP does not have a physical button to press, use your browser to open the settings web page for the WPS AP, and then follow the instructions that involve clicking a virtual button.
Help	
V1.0.0.6	Back Net

Then within 2 minutes, enable the WPS on your wireless router and click then **Next**.

Negotiation Process:

Tende	a la	Shenzhen Tenda Technology Co., Ltd http://www.tendacn.com
Wireless NetWork	configuration Stage:	Result
Connection Status	initializing WPS process	Success
Wireless Settings	searching for WPS Access Point	Success
WPS Settings	connecting to Access Point	Success
Help	creating network profile restoring network environment	
	Received message type: (M4) Sending message type: (M5) Received message type: (M6) Sending message type: (M6) Sending message type: (DCM2) 4	~
V1.0.0.6	e	Back Next

Negotiation Completed Successfully:

ICTICK		Shenzhen Tenda Tech http://www.tendacn.	nology Co., Lt 2017
Band Settings			
Wireless NetWork	configuration Stage:	Result	
Connection Status	initializing WPS process	Success	
Wireless Settings	earching for WPS Access Point	Success	
WDS Sortings	Connecting to Access Point	Success	
wir 5 Settings	egotiating Security	Success	
Help	creating network profile	Success	
	restoring network environment	Success	
	Received message type: (M8) Sending message type: (CONE) WPS security negotated. Created a wireless network profile. WPI security negotated. Wireless network environment restored.	-	
	<	``	
V1.0.0.6		Back	blevt

Now, simply click **Next** and you will see the SSID of the wireless network you joined. The WPS-PBC connection is now completed.

Tenda	Sherzhen Tenda Technology Co., http://www.tandaca.com	- ×
Band Settings		
Wireless NetWork		
Connection Status	You are now connected to the WPS network.	
Wireless Settings		
WPS Settings		
Help	SSID (network name): Tenda_Wy1fmixtuq	
V1.0.0.6	Back Finish	1

2. To join a wireless network using WPS PIN from Tenda adapter UI:

Select WPS Settings-> Connect using WPS PBC or PIN.

Tend	a Shenchen Tenda Tech http://www.turkacn.c	nology Co., Ltd
Band Settings Wireless NetWork Connection Status Wireless Settings WPS Settings Help	Select year VIPS connection mode Connect using VIPS includes button Connect using VIPS includes button Connect using VIPS performance Connect using VIPS performance Connection In Vitabious VIP and access the VIPC service to be automatically disabled and ng SSSS (understan relations) in the area to be found, however, the VIPC will be automatically enabled over a successful connection.	
V1.0.0.6	Back	Next

Click Next and then select PIN.

ierie	Shenzhen Tenda Technology Co., http://www.tendacn.com
Band Settings Wireless NetWork Connection Status Wireless Settings	select one of the following methods O FEC (Push Button Configuration) (* FPI (Personal Identification Humber)
WPS Settings Help	$\textcircled{\sc or}$ automatically select network to connect to it, please try again, and this time, clear the check box. If cannot automatically find the WPS AP or connect to it, please try again, and this time, clear the check box.
V1.0.0.6	Back Next

Click **Next** and you will find two available WPS-PIN modes:

1. Enter a PIN into my Access Point or Registrar:



Follow onscreen instructions to copy W900U's PIN to the wireless AP and enable WPS-PIN on the wireless AP.

For example: If you wish to connect to Tenda W1800R, simply copy the PIN to Tenda W1800R and enable WPS-PIN on the Tenda W1800R.



Wireless Home & Edd Basis Marked & Security Advased Warless USB Basis Marked & Edd Warless USB Basis Marked & Edd WPS Marked Warles Security USB USB Warles Security USB USB Varles Security USB USB Varles Security USB USB Varles Security USB USB Varles Construct USB USB WPS Marked Security USB USB Consection Lift USB Mode CPBC @PDN 28651621 Advased Settings Save Cancel	🕀 🧭 http://192.168.0.1/r 🔎	👻 🖹 🖒 🏉 Tenda 11AC Router	×		
Stans Network Security Advaced Wareles U3B Wireless • Home • Edd • Home • Edd • Home • Edd Basic Settings WPS Mode • 240 WPS • 50 WPS • 50 WPS WDS • 240 WPS • 240 WPS • 50 WPS • 50 WPS WDS • 240 WPS • 240 WPS • 50 WPS • 50 WPS Workes Access Centrol • 240 WPS • Trank (8001) • 60 WPS Writes Access Centrol • 240 WPS • 0 Draide @Exable • 800 WPS Advaced Settings • WPS Mode • 0 PRC • 0 PRC Save • Cancel • Save • Cancel	Tenda				
Wireless Mone Date Basic Settings WYPS Mode 240 MYPS 30 MYPS WTS 2.402 MYPS 30 MYPS 2.402 MYPS 30 MYPS WDS 2.402 MYPS 30 MYPS 2.402 MYPS 30 MYPS Workers Access Centrol 2.402 MYPS Consection Linit WYPS Mode WYPS Mode Advanced Settings MYPS Mode WYPS Mode Perce Orgon Percet OOEE Save Cancel Save Cancel Percet OOEE		Status Network	Security Adv	anced Wireless	USB
Basic Settings WYPS Mode W7S 240.075 50.075 WDS 2.400.075 50.075 Workers Access Centrol 7.040, 405.015 Eanlie Workers Access Centrol Romer PN 302.1133 Consections Linit WPS Mode PROC OPIN Remet ODE Advanced Settings Save Cancel Remet ODE	Wireless	🖌 Home 📴 Exit			
Wirdses Security WIPS Mode WPS 2.40 M78 50 M78 WDS 2.40 Kriston 50 M78 Workes Access Control 2.40 Kriston 7 mole, 48 5015 Wardes Access Control Roater IPN 3021333 Consection List WIPS Mode Participation Advanced Settings Save Cancel	Basic Settings				
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VDS 2.40% selection actives/. Owner Network: 2.40% SSID Tendu (MS015 Wardess Access Centrol Docade @Exable Wordess Access Centrol Romer IPN 36271932 Connections List WPS Mode Docade @Exable Advanced Settings Save Cancel	WPS	2.4G WPS		SG WPS	
Guest Network 2 AGES SSD Task, USO3 Warders Access Control Double @Easher Warders Access Control Roards PDN 5027382 Connection Lat WPS Mode OPDC PDN Reard ODE Admaced Settings Save Cancel	WDS	2.4GHz wireless netw	rork		
Wirdess Acons Control Examine Vr.3 Containe Volume Connection List WPS Mode OPBC @PDV 28651024 Advanced Settings Save Cancel	Guest Network	2.4GHz SSID	Tenda_0B5015		
Connection Lat WTPS Mode OPBC @PIN 20051024 Advanced Settings Save Cancel	Wireless Access Control	Router PIN	36271382		
Advanced Settings Save Cancel	Connection List	WPS Mode	OPBC OPIN	28651024	Reset OOB
Save Cancel	Advanced Settings				
			Save (Cancel	

2. Enter the PIN from my Access Point:

First, enable the WPS-PIN on the wireless AP to connect, say, Tenda W1800R.



Second, enter the wireless AP's PIN.

iena	G Sherzhen Tenda Technology Co., L http://www.tendacn.com
Band Settings	PIN (Personal Identiofication Number)
nnection Status	enter a PIN into my Access Point or Registrar enter the PIN from my Access Point
WPS Settings Help	PIN: 36271382 Type the unique 8 digit PIN code that has been assigned to the WPS AP.
	The FPI code is usually printed on a label or sticlar that is attached to the case of the WPS AP. If this in not the case, use your browser to open the settings web page for the WPS AP and look for the PPI code there.
V1.0.0.6	Back Next

And then click **Next** to start WPS-PIN negotiation.

		http://www.tendacn.com	0., 0
Band Settings			
Vireless NetWork	configuration Stage:	Result	
Connection Status	initializing WPS process	Success	
Vireless Settings	searching for WPS Access Point	Success	
WPS Settings	ornnecting to Access Point	Success	
	negotiating Security		
Help	creating network profile		
	restoring network environment		
	Received message type: (M4) Sending message type: (M5) Received message type: (M6) Sending message type: (M7) Received message type: (M8) Sending message type: (ORE)	Ŷ	
	¢	>	

Negotiation Completed:



		http://www.tendacn.com
Band Settings		
Fireless NetWork	configuration Stage:	Result
Connection Status	initializing WPS process	Success
Wireless Settings	searching for WPS Access Point	Success
WPS Settings	connecting to Access Point	Success
wr 5 Seurigs	negotiating Security	Success
Help	creating network profile	Success
	restaring network environment	Success
	Received message type: (M8) Sending message type: (DONE) WPS security negotated. Created a wireless network profile. WPS security negotated. Wirdless network environment restored.	Ĵ
	<	>
		Provide the second s

Now, simply click **Next** and you will see the SSID of the wireless network you joined. The WPS-PIN connection is now completed.



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4.6 Help

Click the **Help** button to display help.

Appendix 1 Config TCP/IP settings on your PC

If you are using Windows XP, do as follows:

1. Click Start > Control Panel > Network and Internet Connections >

Network Connections.



2. Right-click on the Local Area Connection and select Properties.



3. Select Internet Protocol (TCP/IP) and click Properties.

🕹 Local Area Connection Properties 🛛 🔹 💽
General Advanced
Connect using:
WMware Accelerated AMD PCNet Ad Configure
This connection uses the following items:
Install Uninstal Properties
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
$\hfill \hfill $
OK Cancel

4. Select "Use the following IP address".

IP address: Enter 192.168.0.xxx where xxx can be any number between 2 and 253).

Subnet mask: Enter 255.255.255.0

Click OK twice to save your settings.

ternet Protocol (TCP/IP) Prope	rties ?	
ieneral		
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.		
O Obtain an IP address automatically	(
• Use the following IP address:		
<u>IP</u> address:	192.168.0.2	
Subnet mask:	255 . 255 . 255 . 0	
Default gateway:	· · · ·	
Obtain DNS server address autom	atically	
• Use the following DNS server add	resses:	
Preferred DNS server:		
Atemate DNS server:	· · · ·	
	Ad <u>v</u> anced	
	OK Cancel	

If you are using Windows 7, do as follows:

1. Click on Start > Control Panel > Network and Internet > Network and Sharing Center.



2. Click "Change adapter settings".



3. Right-click on the Local Area Connection and select Properties.



4. Select **Internet Protocol Version 4 (TCP/IPv4)** and click **Properties** or directly double-click on **Internet Protocol Version 4 (TCP/IPv4)**.

🕌 Local Area Connection Properties
Networking
Connect using:
PRO/1000 MT Network Connection
Configure
This connection uses the following items:
Ø as Packet Scheduler Ø Bit Far Ahren Sharing for Mosselt Networks Ø + Internet Potocol Version 6 (TCP/IN+6) Ø + Interne
Install Uninstall Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK Cancel

5. Select "Use the following IP address".

Internet Protocol Version 4 (TCP/IPv4) Properties			
General			
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.			
Obtain an IP address automatica	aly		
Use the following IP address:			
IP address:	192.168.0.10		
Subnet mask:	255.255.255.0		
Default gateway:	· · ·		
Obtain DNS server address auto	matically		
Output the following DNS server ad	dresses:		
Preferred DNS server:			
Alternate DNS server:			
Validate settings upon exit	Advanced		
	OK Cancel		

IP address: Enter 192.168.0.xxx where xxx can be any number between 2 and 253).

Subnet mask: Enter 255.255.255.0

Click OK twice to save your settings.



Appendix 2 Glossary

802.11ac: IEEE 802.11ac is a wireless computer networking standard of 802.11, currently under development, providing high-throughput wireless local area networks on the 5 GHz band. Theoretically, this specification will enable multi-station WLAN throughput of at least 1 gigabit per second and a maximum single link throughput of at least 500 megabits per second (500 Mbit/s).

802.11a: 802.11a is an amendment to the IEEE 802.11 specification that added a higher data rate of up to 54 Mbit/s using the 5 GHz band.

802.11b: 802.11b, is an amendment to the IEEE 802.11 wireless networking specification that extends throughput up to 11 Mbit/s using the same 2.4 GHz band.

802.11e: 802.11e is an approved amendment to the IEEE 802.11 standard that defines a set of Quality of Service enhancements for wireless LAN applications through modifications to the Media Access Control (MAC) layer. The standard is considered of critical importance for delay-sensitive applications, such as Voice over Wireless LAN and streaming multimedia.

802.11g: 802.11g is an amendment to the IEEE 802.11 specification that extended throughput to up to 54 Mbit/s using the same 2.4 GHz band as 802.11b.

802.11h: 802.11h, refers to the amendment added to the IEEE 802.11 standard for Spectrum and Transmit Power Management Extensions. It solves problems like interference with satellites and radar using the same 5 GHz frequency band. It was originally designed to address European regulations but is now applicable in many other countries.

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802.11i: 802.11i, implemented as WPA2, is an amendment to the original IEEE 802.11.

802.11j: 802.11j is an amendment to the IEEE 802.11 standard designed specially for Japanese market.

802.11n: 802.11n is an amendment to the IEEE 802.11 standard, which improves network throughput over the two previous standards—802.11a and 802.11g—with a significant increase in the maximum net data rate. 802.11n standardized support for multiple-input multiple-output and frame aggregation, and security improvements, among other features.

IEEE 802.15: IEEE 802.15 is a working group of the IEEE 802 standards committee which specifies Wireless Personal Area Network (WPAN) standards. It includes seven task groups. Task group one is based on Bluetooth technology.

IEEE 802.16: IEEE 802.16 is a series of Wireless Broadband standards authored by the Institute of Electrical and Electronics Engineers (IEEE). Although the 802.16 family of standards is officially called Wireless MAN in IEEE, it has been commercialized under the name "WiMAX" (from "Worldwide Interoperability for Microwave Access") by the WiMAX Forum industry alliance.

802.16a: 802.16a, also known as WiMAX, extends throughput up to 70Mbit/s transmission rate within the distance of 30 miles.

802.20: Delivers 1Mbit/s throughput for wireless MAN (Metropolitan area network).

IEEE 802.1X: IEEE 802.1X is an IEEE Standard for port-based Network Access Control (PNAC). It is part of the IEEE 802.1 group of networking protocols. It provides an authentication mechanism to devices wishing to

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attach to a LAN or WLAN.IEEE 802.1X defines the encapsulation of the Extensible Authentication Protocol (EAP) over IEEE 802 which is known as "EAP over LAN" or EAPOL.

WEP: Wired Equivalent Privacy (WEP) is a security algorithm for IEEE 802.11 wireless networks. Introduced as part of the original 802.11 standard, its intention was to provide data confidentiality comparable to that of a traditional wired network.

WPA: Wi-Fi Protected Access (WPA) and Wi-Fi Protected Access II (WPA2) are two security protocols and security certification programs developed by the Wi-Fi Alliance to secure wireless computer networks. The Alliance defined these in response to serious weaknesses researchers had found in the previous system, WEP (Wired Equivalent Privacy) and intended as an intermediate solution to WEP insecurities.

RSN: The Wi-Fi Alliance refers to their approved, interoperable implementation of the full 802.11i as WPA2, also called RSN (Robust Security Network). RSN, based on 802.1x, is introduced to supersede the security specification, WPA.



Appendix 3 FAQs

Q1: How do I enable the WZC (Wireless Zero Configuration) service in Windows XP or enable WAC (WLAN AutoConfig) in Win dows 7/Win dows 8?

Step1. From your desktop, right-click My Computer and select Manage.

Step2. Select Services and Applications -> Services.

Step3. Double-click Wireless Zero Configuration/ WLAN AutoConfig and then click Start on the appearing window or right click Wireless Zero Configuration/ WLAN AutoConfig and select Start from the pop-up list.

🖴 Computer Management							. 6 🛛		
Ste Action View Window H	elp						_ 8 ×		
◆ → 🗈 🗷 🗗 🔒 🖆	2 🖬 🕨 🗰 🗉 🖦								
Computer Management (Local)	Services								
B CI Fuert Vewer									
A Shared Folders	Wireless Zero Configuration	Name /	Description	Ratus	Startup Type	Log On As	^		
Local Users and Groups		Removable Storage			Manual	Local System			
Performance Logs and Alert-	200 the service	Routing and Remot	Offers rout		Disabled	Local System			
Device Manager	Restart the service	Secondary Logon	Enables st	Started	Automatic	Local System			
🖶 🎒 Storage		Security Accounts	Stores sec	Started	Automatic	Local System			
🕀 🍘 Removable Storage	Description:	Security Center	Monitors s	Started	Automatic	Local System			
Eisk Defragmenter	802.11 adapters	Server	Supports N	Started	Automatic	Local System			
Disk Management		Shell Hardware Det	Provides n	Started	Automatic	Local System			
Services and Applications		Smart Card	Manages a		Manual	Local Service			
bervices		SSDP Discovery Ser	Enables dis	Started	Manual	Local Service			
Control		System Event Notifi	Tracks syst	Started	Automatic	Local System			
in Marchig Service		System Restore Se	Performs s	Started	Automatic	Local System			
		Task Scheduler	Enables a	Started	Automatic	Local System			
		TCP/IP NetBIOS He	Enables su	Started	Automatic	Local Service			
		Telephony Telephony	Provides T		Manual	Local System			
		Teinet	Enables a r		Disabled	Local System			
		Terminal Services	Allows mult	Started	Manual	Local System			
		Themes	Provides u	Started	Automatic	Local System			
		Uninterruptible Pow	Manages a		Manual	Local Service			
		Bulliniversal Plug and	Provides s		Manual	Local Service			
		Volume Shadow Copy	Manages a		Manual	Local System			
		WebClent	Enables WI	Started	Automatic	Local Service			
		Windows Audio	Manages a	Started	Automatic	Local System			
		Windows Firewall/I	Provides n	Started	Automatic	Local System			
		Windows Image Ac	Provides m		Manual	Local System			
		Windows Installer	Adds, mod		Manual	Local System			
		Windows Managem	Provides a	Started	Automatic	Local System	8		
		windows Managem	Provides s		Manual	Local System			
		windows time	Mancans d	scarced	Aucomatic	Local System			
		wred watocarrig	THE SERVIC	Charles	Manual	Local System			
		Bauer Dedemance	Provides a	Skarces	Manual	Local System			
		Source reformance	Creates an	9 arted	Automatic	Local System			
		- Winterstation	Creates an	2460	Procom800	coca system	~		
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Enable WZC in Windows XP

Tile Action Vew Help	🔬 Computer Management – 🗆 💌											
Computer wretening using a VLAV adupter that can support	File Action View Help File Action View Help Compute Management (Local) Compute Management (Local) System Tools Compute Acheduler Compute Ach	Compu Computer Services Computer Services VIAN AutoConfig Start the service Description: The WLANSYC service provides the Logic required to configure, discover, connect to, and discover, forman services the service Description: The WLANSYC service provides the Logic required to configure, discover, computer into a software access defined by EEE 802.11 standards. It also contains the discise to uny our computer wind easily using a WLAN software access pairs of a WLAN software pairs with disc alwapport thin. Stopping or disabiling the WLANsycle service will make al WLAN software pairs a with difference of the software trong recommended that you have trong recommen	Name " Windows Event Collector Windows Event Collector Windows Event Collector Windows Freet Collector Windows Freet Collector Windows Freet Collector Windows Freet Collector Windows Freet Collector Windows Marge Acquisition Windows Marge Acquisition Windows Marge Acquisition Windows Marge Acquisition Windows Marge Regulate Installer Windows Store Service (WS- Windows Store Service (WS- Windows Store Service (WS- Windows Wards (WS- WINdows WS- WS- WINdows Wards (WS- WINdows WS- WS- WS- WS- WS- WS- WS- WS- WS- WS-	Description This service This service Windows FL Optimizes p Provides a c Shares Win Enables inst Windows R Provides a c Provides a c Provides infi Minitains d Enables the WinitTP i The Wired	Actions Services More Actions WLAN AutoConfig More Actions	×						
	<>	Extended Standard	٢	>								
Ktended / Standard /		, <u> </u>										

Enable WLAN AutoConfig in Windows7

Q2: I followed instructions to install the driver but failed.

This can occur if you have already installed other manufacturer's adapter. Drivers of other manufacturer might cause a conflict with the new driver. Please first uninstall it and then check to make sure that oem.inf file is removed from C:\WINDOWS\inf.



Appendix 4 EMC Statement

CE Mark Warning

This is a Class B product in a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

NOTE:

(1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

(2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.

FCC Statement

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 pro-vide reasonable protection against harmful interference when the equipment is operate din a commercial environment. This equipment generates, uses, and can radiate radiofrequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

NOTE:

(1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

(2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.