# TP-LINK®

## **User Guide**

## **Archer T4UH**

AC1300 High Gain Wireless Dual Band USB Adapter



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http://www.tp-link.com

#### **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 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 or more 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.

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.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

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

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

## FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. SAR measurements are based on a 5mm spacing from the body and that compliance is achieved at that distance.

This device is restricted in indoor environment only.

## **CE Mark Warning**

## **C€1588 ①**

### **RF Exposure Information**

This device meets the EU requirements (1999/5/EC Article 3.1a) on the limitation of exposure of the general public to electromagnetic fields by way of health protection.

This device has been tested and meets the ICNIRP exposure guidelines and the European Standard EN 62209-2. SAR is measured with this device at a separation of 0.5 cm to the body, while transmitting at the highest certified output power level in all frequency bands of this device. Carry this device at least 0.5 cm away from your body to ensure exposure levels remain at or below the as-tested levels.

Restricted to indoor use.

## **Canadian Compliance Statement**

This device complies with Industry Canada license-exempt RSSs. 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;
- 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, meme si le brouillage est susceptible d'en compromettre le fonctionnement.

#### Caution:

- 1) 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;
- 2) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;
- 3) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

The high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

DFS (Dynamic Frequency Selection) products that operate in the bands 5250- 5350 MHz, 5470-5600MHz, and 5650-5725MHz.

#### **Avertissement:**

- Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- 2) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant les bandes 5250-5350 MHz et 5470-5725 MHz doit se conformer à la limitation P.I.R.E.;
- 3) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E spécifiée pour l'exploitation point à point et non point à point, selon le cas.

En outre, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Les produits utilisant la technique d'atténuation DFS (sélection dynamique des fréquences) sur les bandes 5250- 5350 MHz, 5470-5600MHz et 5650-5725MHz.

#### **Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment.

## Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé.

## **Industry Canada Statement**

CAN ICES-3 (B)/NMB-3(B)

## **Korea Warning Statements**

당해 무선설비는 운용중 전파혼신 가능성이 있음.

#### **NCC Notice**

#### 注意!

依據 低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性或功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通行;經發現有干擾現象時,應立即停用,並改善至無干擾時方得繼續使用。前項合法通信,指依電信規定作業之無線電信。低功率射頻電機需忍受合法通信或工業、科學以及醫療用電波輻射性電機設備之干擾。減少電磁波影響,請妥適使用。

#### 於 5.25GHz 至 5.35GHz 區域內操作之無線設備的警告聲明

工作頻率 5.250~5.350GHz 該頻段限於室內使用。

#### **BSMI** Notice

安全諮詢及注意事項

- 請使用原裝電源供應器或只能按照本產品注明的電源類型使用本產品。
- 清潔本產品之前請先拔掉電源線。請勿使用液體、噴霧清潔劑或濕布進行清潔。
- 注意防潮,請勿將水或其他液體潑灑到本產品上。
- 插槽與開口供通風使用,以確保本產品的操作可靠並防止過熱,請勿堵塞或覆蓋開口。
- 請勿將本產品置放於靠近熱源的地方。除非有正常的通風,否則不可放在密閉位置中。
- 請不要私自打開機殼,不要嘗試自行維修本產品,請由授權的專業人士進行此項工作。



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## **Safety Information**

- When product has power button, the power button is one of the way to shut off the product; when there is no power button, the only way to completely shut off power is to disconnect the product or the power adapter from the power source.
- Don't disassemble the product, or make repairs yourself. You run the risk of electric shock and voiding the limited warranty. If you need service, please contact us.
- Avoid water and wet locations.

For EU/EFTA, this product can be used in the following countries:

AT	BE	BG	HR	CY	CZ	DK	EE
FI	FR	DE	GR	HU	ΙE	IT	LV
LT	LU	MT	NL	PL	RO	PT	SK
SI	ES	SE	GB	IS	LI	NO	СН

## Explanation of the symbols on the product label

Symbol	Explanation
===	DC voltage
	RECYCLING  This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment.  User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.

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## **Chapter 1 Product Overview**

#### 1.1 Introduction

The TP-LINK Archer T4UH AC1300 High Gain Wireless Dual Band USB Adapter connects your notebook or desktop computer over Wi-Fi to an 11ac or other network for applications such as lag-free video streaming, online gaming, and secure Internet surfing.

#### 1.2 Features

- Supports 802.11ac standard
- Seamlessly compatible with 802.11a/b/g/n/ac products
- ➤ USB 3.0 port
- > Equipped with a USB Cradle for flexible deployment
- Dual Band connections for lag-free HD video streaming and gaming
- Maximum speed of up to 867Mbps for 5GHz network and up to 400Mbps for 2.4GHz network
- Supports ad-hoc and infrastructure mode
- Easy wireless security encryption at a push of the WPS button
- Supports 64/128 WEP, WPA/WPA2, WPA-PSK/WPA2-PSK(TKIP/AES), supports IEEE 802.1x
- Easy Wireless Configuration Utility
- Supports Windows XP/7/8/8.1/10 32/64bit, Mac OS X 10.6 10.11, Linux

#### 1.3 LED Status

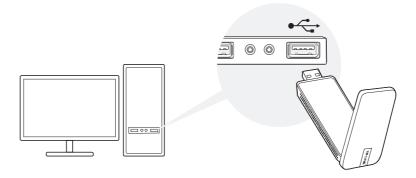
Status	Working Status
Off	The driver has not been installed.  The adapter's radio has been disabled.
Flashing Slowly	The driver has been installed but no data is being transmitted or received.
Flashing Quickly	Data is being transmitted or received.

## **Chapter 2 Connect to a Computer**

Before you begin using your adapter, connect the adapter to your computer.

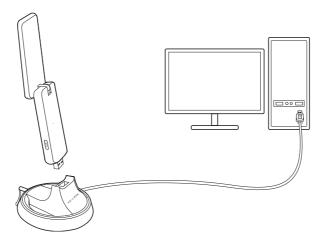
#### **Option 1: Directly**

Insert the adapter into a USB port on your computer directly.



#### Option 2: Via the USB Cradle

Connect the adapter and your computer with the provided USB cradle.



## Note:

- In Windows XP, a Found New Hardware Wizard window will appear when the adapter is detected. Please click Cancel.
- The adapter provides the best performance with a USB 3.0 port and is also compatible with a USB 2.0 or USB 1.1 port.

After connecting your adapter to the computer, please follow the instructions in the appropriate chapter for your operating system: Windows, Mac OS X, Linux.

## **Chapter 3 Windows**

#### 3.1 Install Driver and Utility

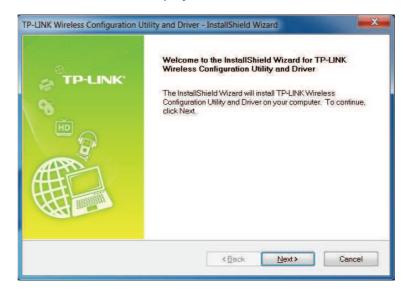
The Setup Wizard will guide you through the installation procedure. We use the procedures in Windows 7 as an example - the procedures may vary slightly for other versions of Windows.

1. Insert the resource CD into your CD drive and run the **Autorun.exe** from the pop-up AutoPlay window. Select **Archer T4UH** and click **Install Driver and Utility** to begin.

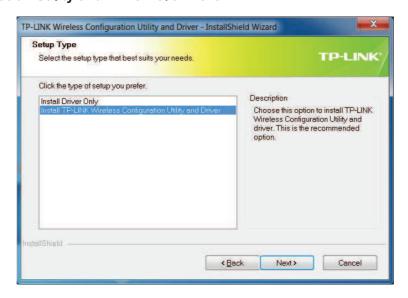


## Note:

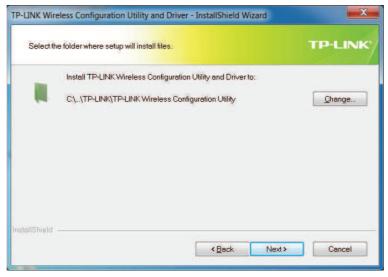
- The CD is included in the package. If your CD does not work or your computer doesn't support the CD, you can also download the driver and utility from the TP-LINK website (<a href="http://www.tp-link.com">http://www.tp-link.com</a>).
- In some operating systems, the CD screen will pop up automatically. Otherwise, run the CD manually.
- 2. The InstallShield Wizard window displays. Click **Next** to continue.



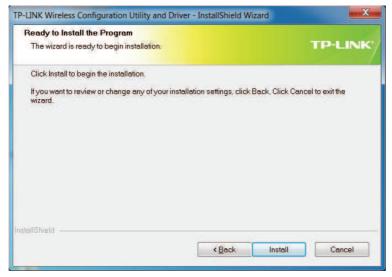
3. Choose a setup type. It is recommended to select **Install TP-LINK Wireless**Configuration Utility and Driver. Click Next.

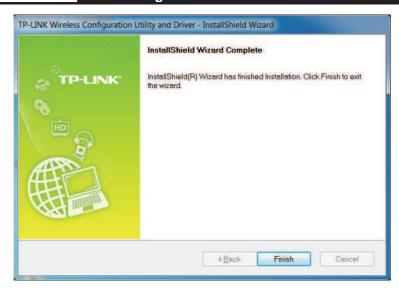


4. If you want to change install location, click **Change** to specify the location for the software installation. Or you can leave it default. Click **Next**.

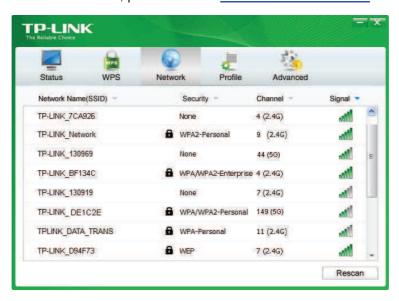


5. Click Install. After a few minutes, the installation completes. Click Finish.





6. TP-LINK Utility pops up after installation. Its icon appears on the desktop as and on the taskbar as You can use the TP-LINK Utility to join a Wi-Fi network with your adapter. For more information, please refer to Join a Wireless Network.



#### 3.2 Join a Wireless Network

There are three options of using the adapter to join a Wi-Fi network.

#### **Option 1: TP-LINK Utility**

TP-LINK Utility lets you easily connect the adapter to a Wi-Fi network and manage the adapter.

#### **Option 2: WPS (Wi-Fi Protected Setup)**

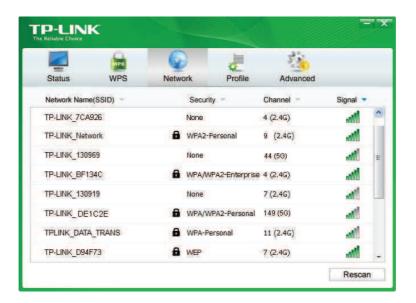
WPS (Wi-Fi Protected Setup) is a network security standard for easily adding computers and other devices to a home network. Use this method if your wireless router or access point supports WPS.

#### **Option 3: Windows Wireless Utility**

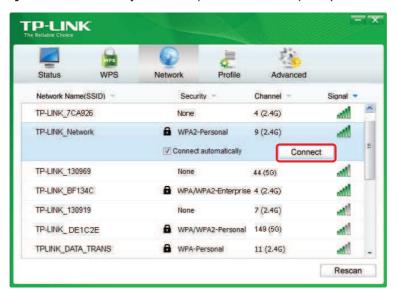
You can use the Windows WLAN Autoconfig service (for Windows 7/8/8.1/10) and the Wireless Zero Configuration service (for Windows XP) to join a Wi-Fi network.

#### 3.2.1 TP-LINK Utility

1. Open TP-LINK Utility . The **Network** screen displays.



Select the network you want to join from the list on this screen and click Connect. If you
want the adapter to automatically connect to the network next time, select the Connect
automatically checkbox. Enter your Wi-Fi password when prompted.



## Note:

If your Wi-Fi network is not displayed in the list, you can try to join it by <u>WPS</u> or by adding a profile in the <u>Profile</u> screen.

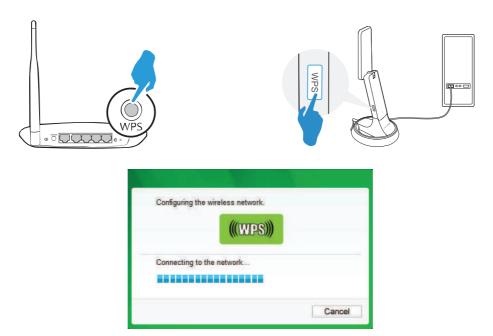
#### 3.2.2 WPS (Wi-Fi Protected Setup)

WPS can be activated via PBC (Push Button Configuration) and PIN code. Please refer to <u>PBC</u> or <u>PIN</u> below.

#### > PBC

#### Option 1

1. Press the **WPS/QSS** button on your router or AP. Within 2 minutes, press and hold the **WPS** button on the adapter until the following screen appears.



2. The following screen indicates a successful connection by WPS. Click **OK**.

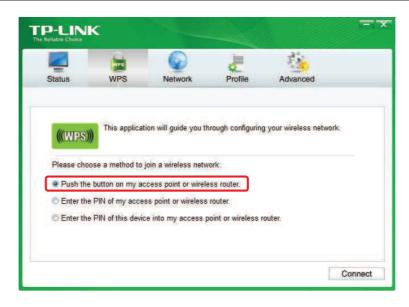


#### Option 2

1. Press the **WPS/QSS** button on your router or AP.



2. Open TP-LINK Utility and click **WPS** tab. Select **Push the button on my access point or wireless router** and click **Connect**.



3. The following screen indicates a successful connection by WPS. Click OK.



#### > PIN

#### **Option 1**

1. Open TP-LINK Utility and click **WPS** tab. Select **Enter the PIN of my access point or wireless router**. Enter the PIN of your router or AP. Click **Connect**.





The default PIN of your router or AP is printed on the product label of your router or AP. If you generated a new PIN for your router, please enter the new one.

2. The following screen indicates a successful connection by WPS. Click **OK**.



#### Option 2

 Open TP-LINK Utility and click WPS tab. Select Enter the PIN of this device into my access point or wireless router. The screen displays a PIN of the adapter, which is generated randomly. Click Connect.



- 2. Log in to the Web Management page of your router or AP. Go to the **WPS** page, enter the PIN of the adapter in the corresponding field and click **Connect**.
- 3. The following screen indicates a successful connection by WPS. Click **OK**.



#### 3.2.3 Windows Wireless Utility

Follow the instructions in the appropriate section below to use your computer system's built-in wireless utility: Windows 7/8/8.1/10, Windows XP.

#### Windows 7/8/8.1/10

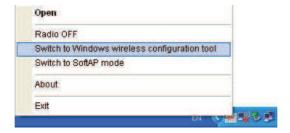
Click or (Network icon) on the taskbar. Select the Wi-Fi network you want to join, and click **Connect**. Enter the network password when prompted.



If you do not want to enter the Wi-Fi password, you can also join a wireless network either by pushing the WPS or QSS button on your router or AP, or entering the PIN of your router when the screen prompts you to do so.

#### Windows XP

1. Right-click [17] (TP-LINK Utility icon) on the taskbar. (If you do not see the icon, click the hidden icons arrow on the system tray.) Select Switch to Windows wireless configuration tool.



Or you can open the TP-LINK Utility, select **Advanced** tab, then select **Use Windows** wireless configuration tool.

 Right-click (Windows XP Wireless Zero Configuration Utility icon) on the system tray, and select View Available Wireless Networks.



3. Select the network you want to join, and click **Connect**. Enter your Wi-Fi password when prompted.

#### 3.3 Management

TP-LINK Utility provides you with an easy way to manage your adapter. It includes the following sections:

Status - View the information of the current Wi-Fi network connection and of the adapter.

**Profile** - Save or manage various connection settings of your Wi-Fi network.

<u>Advanced</u> - Turn on or off the SoftAP mode and power saving mode, switch between TP-LINK Utility and Windows Wireless Utility (for Windows XP only).

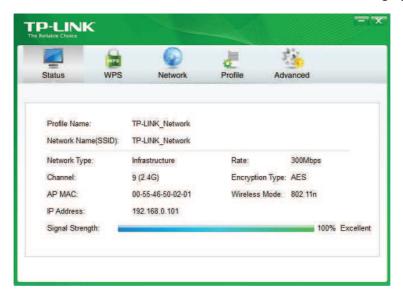
<u>SoftAP</u> - Configure the settings of the network shared by your adapter, and view the IP address of your adapter when it works on SoftAP mode.

About – View your adapter's Utility version and its Driver version.

Open TP-LINK Utility and click the **Status**, **Profile** or **Advanced** tab to manage the corresponding section of your adapter.

#### 3.3.1 Status

You can view the IP address and MAC address of the adapter, the signal strength of the Wi-Fi network, and other information of the network status as shown in the following figure.



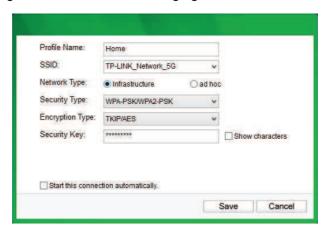
#### 3.3.2 Profile

The **Profile** screen lets you save and manage different Wi-Fi connection settings as profiles so that you can quickly and simply connect to your network. Moreover, you can join a hidden Wi-Fi network that does not broadcast its SSID by adding a profile, provided that you know its wireless settings, such as SSID, security type, and encryption type. For more details, please refer to the instructions below: <u>To add a new profile</u>, <u>To join a Wi-Fi network</u>, <u>To manage an existing profile</u>.



#### > To add a new profile

- 1. Click the **Add** button, and then a new window will open.
- 2. Complete the settings as shown in the following figure, and click **Save**.



**Profile Name** - Enter a name for your profile, such as Home, Office, Coffeehouse. Do not enter the profile name that already exists.

**SSID** - Select your Wi-Fi network from the drop-down list or enter your Wi-Fi network name manually.

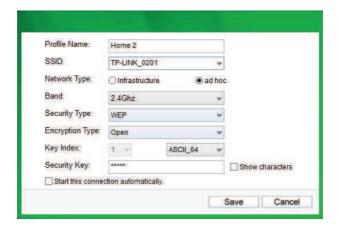
**Network Type** - Select **Infrastructure** if you want to connect to a wireless router or an access point. Select **ad hoc** if you want to connect to another wireless client, such as an adapter.

#### Infrastructure

If you select **Infrastructure**, you are asked to select or enter the corresponding wireless settings, which should be the same as those of your Wi-Fi network.

#### ad hoc

If you select **ad hoc**, you are asked to configure the wireless settings for your network, including choosing the operating frequency band, the security type, the encryption type and setting a security key.



## Note:

As for Key Index, you can select ASCII or Hexadecimal format from the drop-down list.

ASCII 64 - Please enter 5 ASCII characters.

ASCII\_128 - Please enter 13 ASCII characters.

**Hexadecimal\_64** - Please enter 10 Hexadecimal digits (any combination of 0-9, a-f, A-F, excluded space).

**Hexadecimal\_128** - Please enter 26 Hexadecimal digits (any combination of 0-9, a-f, A-F, excluded space).

#### To join a Wi-Fi network

If you want to join a Wi-Fi network that listed in the profile screen, select the profile and click **Connect** button in the bottom right corner.

#### To manage an existing profile

If you want to change the name or the wireless settings of an existing profile, select it and click the **Modify** button in the bottom right corner of the Profile screen, then you can edit the settings of this profile. If you want to delete a profile that you no longer use, select it and click the **Remove** button.

#### 3.3.3 Advanced



**Select wireless configuration tool** - In Windows XP. You can either use TP-LINK Utility or Windows wireless configuration tool. While in other operating systems, since you can use both TP-LINK Utility and Windows wireless configuration tool at the same time, this function is disabled.

**Wireless network adapter switch** - If you've installed several adapters in your computer, you can switch to another adapter among the drop-down list.

**SoftAP mode -** Once **ON** is selected, the adapter will work as an AP.

**Power Save mode** - Once **ON** is selected, the adapter will automatically reduce its power consumption when not being used.

#### 3.3.4 **SoftAP**



After switching to SoftAP mode, the SoftAP icon appears in the utility. Click the **SoftAP** tab, and complete the settings, then click **Apply** for the settings to take effect.



- > **Soft AP mode:** Select **ON** or **OFF** to enable or disable this function.
- > Internet Connecting Share(ICS): Select a network connection that can access to the Internet from the drop-down list. For example, if your computer is connecting to the Internet via an Ethernet cable, you should select the corresponding Local Area Connection so as to share the network with other wireless devices.
- > SSID: Set a name for the wireless network shared by your adapter. The default is SoftAP.
- > Security Type: The security type here is set to be WPA2-PSK which is based on 802.11i and uses AES (Advanced Encryption Standard).
- **Encryption Type:** The encryption type here is set to be AES.
- Security Key: Set a security key for the wireless network that shared by your adapter. It is recommended that you specify another key instead of the default key 12345678. When another wireless device connects to the network shared by your adapter, it will be asked to enter the corresponding security key.
- IP Address: Displays the IP address of the adapter when it works in SoftAP mode. You can also check if the network shared by your adapter is working properly by checking this IP Address. For example, if the IP Address is 0.0.0.0, it means that the Internet connection is failed.

#### 3.3.5 **About**

You can view the adapter's information in the **About** screen, such as the UI version (Utility version) and the Driver version. Right-click [TP-LINK Utility icon) in the system tray and select **About**, then the About screen displays.

