

Network Interface Card User Guide

TLG08UB05

CEC Huada Electronic Design Co., Ltd



Statement

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1 Introduction

1.1 Brief Introduction

TLG08UB05 wireless adapters is developed based on the CMOS chip HED05W01SU with the independence sciential property rights of HED .Using the wireless adapters, mobile office can be achieved for users without networks interrupted, and the networks can also be configured or extended without setup or move the cables by administrators.This kind of wireless adapters roundly support GB15926.11 series standard,the hardware implements WAPI encryption; Completely implement IEEE 802.11 b/g/i standard..

1.2 Product Features

• Configure networks conveniently and speedily

The configuration tool is convenient and easy to use, which is helpful to connect to a wireless network rapidly.

• Improve the security of networks efficiently

The adapter is compatible with IEEE 802.11b/g/i standards and China WAPI standard, and supports muti-security capability, include WAPI, WEP (both 64bit and 128bit), WPA and WPA2

• Excellent performance

The adapter has adopted high performance processor to fulfill the requirements of throughput and capability of load.

• Expedient Chinese-wide configuration as wizard

With the set, the adapter provide graphics configuration sofeware tool in Chinese to assist users to manage and configure equipment apace, and wireless network can be set up breezily without professional knowledge.

1.3 Indicator light Indication

There is a link light on theTLG08UB05 wireless adapter, It's used to indicate the state of data transmission, The detail meanings of the status are as shown in the following table.

Indicator light	status	meanings
Link	Flashing	The adapter is scanning and has not been connected with a
		network or transmitting the data
	On	The adapter is locked on the channel and the connection
		has been established
	Off	The adapter is idle and no data is transmitting.

 Table1-1
 USB wireless adapter indicator light meanings

2 Installation

2.2 System Requirements

The computer which is to be used with the wireless adapters at least need the system requirements as follows:

- Windows XP operating system;
- At least a usb interface;
- With CD-ROM drive;
- With a PentiumIII 850MHz or higher processor

2.3 Install the wireless adapter

Please insert the wireless adapter into the USB interface directly.

Note:

The wireless adapters support hot-plugging, but don't pull out the wireless adpter in order to no data missing, when data is transmitting.

2.4 Driver Installation and Configration sofeware Installation

Note:

Software installation GUI may be different on the computer with different settings, this document introduces the installation as being in windows XP.

The introduction of driver installation and configuration software installation is as follows, the software can check network information, search for wireless networks, and save the configuration. Installation is as follows:

(1) First ,install driver, please insert HED USB wireless adapter.

(2) After the operation system automatically check the wireless adapter, pop-up GUI as follows:Found New Hardware Wizard,Please select the "Install from a list or specific location(Advanced)", and click <next> button.。



Picture 2-1 Found New Hardware Wizard 1

(3) Pop-up GUI as follows, please select"Don't search, I will choose the driver to install", and click <next> button...

Found New Hardware Wizard	
Please choose your search and installation options.	,
\bigcirc <u>S</u> earch for the best driver in these locations.	
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.	
Search removable media (floppy, CD-ROM)	P
Include this location in the search:	
G:\ Browse	
Dop't search Lwill choose the driver to install	
Choose this option to select the device driver from a list. Windows does not guarantee the the driver you choose will be the best match for your hardware.	at
< <u>B</u> ack <u>N</u> ext > Cancel	כ

Picture 2-2 Found New Hardware Wizard 2

(4) Pop-up GUI as follows, please click "Have Disk..." button, and pop-up Install From Disk dialog



Found Nev	w Hardware Wizard		
Select M	Network Adapter	×	
	Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	OK Cancel	e an
		Have	Disk
	< Back	Next> C	Cancel

Picture 2-3 Found New Hardware Wizard 3

(5) Select path from CD-ROM in pop-up dialog box as follows, then click $\rm OK_{\circ}$

Found New Ha	ardware Wizard	
Select Netw Which ne	etwork adapter do you want to install?	
Install F	rom Disk	
(Una	Insert the manufacturer's installation disk, and then OK make sure that the correct drive is selected below. Cancel	and and
	Copy manufacturer's files from:	
	F:\usb Browse	
	< Back Next > Cancel	

Picture 2-4 Found New Hardware Wizard 4

(6) Click <Next> button in pop-up dialog box, ,and begin to copy file, wait for the file copying completely as follows.

Found New Hardware Wizard	
Please wait while the wizard installs the software	
HED05W01SU USB WLAN Adapter	
HED05W01SU.sys To D:\WINDOWS\system32\DRIVERS	-
< Back Next > Cancel	

Picture 2-5 Found New Hardware Wizard 5

(7) Click <Finish> button, and driver installation is finished...



Picture 2-6 The end of Found New Hardware Wizard

Acount:

Please click Continue Anyway button when windows system hint "has not passedWindows Logo testing to verify its compatibility with Windows Xp".

(8) Begin to install configuration software, seach the file that named "AirQuick Utility V1.0.0.msi", and double click the file to be gin to install the file. \circ



Picture2-7 Configuraion software installation 1

(9) Click <next> button,pop-up the next page,select installation path,and then click next until the page is as follows, click Finish to finish installation. From now you can use wireless adapter.



Picture 2-8 Configuraion software installation 2

3 Configure wireless adapter

Users can configure wireless adapter in computer with HED wireless network configuration software after installation finished.Users also can use wireless network configuration tool in Windows XP operation system.Advise using incidental HED wireless network configuration software.

3.1 Choose Wireless Network Connetion

Acount:

Please ignore the chapter if the current operating system is not Windows XP.

Move cursor to the icon of Wireless Network Configuration in the right-down corner of the screen, then click the right key of mouse, will pop-up menu, choose the config tool that user need.

Switch to Wireless Zero Configuration tool Service in Windows XP

If user choose Windows zero configuration, pop-up GUI picture 3-1 as follows.



Picture3-1 Windows XP Configuration Tool

3.2 HED Wireless Network Configuration Tool

Please insure that the configuration tool on use is HED Wireless Network Configuration Tool before the HED Wireless Config Tool is used.

3.2.1 Wireless Network

Run HED Wireless Network Config Tool ,then pop-up GUI as Picture 3-2

AirQuick Win Current Device Link Info Netwo	reless N HEDO rk Manag	SW01SU US	nfig Tool B WLAN Ac	dapter Statics	~	×	
SSID NETCO netgear1 wwhhzz asus netgear NETGEAR MCGS softap0 S	Ch 3 4 4 4 4 5 6 10 can	Authent WPA-Pe WPA/W Open/Pr Open/Pr Open Open/Pr	Signal 71% 81% 71% 85% 25% 65% 71% 55% Connect	BSSID 0810742a674a 001f33b4cb50 0810742a6754 001d60953de0 001b2f4ee916 001b2f560d50 0021272acad4 401122334403 Create Adv	Network.		

Picture3-2 Wireless Network Configuration Tool

1. The interface introduction , every wireless network information field means as follows:

Table3-1 Wireless Network Information Field

	Field	Definition
	Network Name	Wireless network ID, SSID for short.
	Channel	AP work in the Channel.
	Signal Intensity	Signal Intensity when AP work.
	Authenticate Type	AP work on six kind encryption protocol ,include:WEP,AES,TKIP,TKIP+AES,WAPI ,OPEN
	Network MAC Address	Network Physical Address
	Network Mode	Include Adhoc and Infrastructure.
	<scan></scan>	Click <scan>,STA will search for AP around it again,and then display all scaned result 。</scan>

<join></join>	Select a AP in list ,then click <join>, can connect successfully with the AP $_{\circ}$</join>
<start></start>	STA Create Adhoc Network
<disconnect></disconnect>	Disconnet the connected network
<save configuration="" file=""></save>	Save current configuration as a file
<advanced setting=""></advanced>	Click <advance> ,Pop-up Advance Setting Page,User can set many network parameter in this page.</advance>

3.2.2 Connection Status

Select the AP and then Double click it to connect with AP ,and pop-up the status page.

★ AirQuick Wireless Network (Config Tool	×
Current Device HED05W01SU (Link Info Network Manage Certific	JSB WLAN Adapter	
Link Status	Associated	
SSID	NETGEAR	
Network Mode	Infrastructure	
Authenticate Type	Open	
Encryption Mode	no encryption	
TX Rate	54.0Mbps	
Channel	5	
Signal	65%	
IP Address	192.168.1.102	
MAC Address	00-0B-C0-08-44-7D	

Picture3-3 Connection Status

Table3-2 Connection Status

Field	Meanings					
Link Status	Display current link status					
Network Name	Display current network name	ay current network name				
Authenticate Type	Display current network Authenticate Type	ň				
Encryption Mode	Display current network Encryption Mode					
TX Rate	Display current network TX and RX max Rate, Unit is Mbps					
Channel	Display current linked channel					
Signal	Display current linked network signal that through RF receive signal, also can display in dBm fomat.					
IP Address	Display current linked network IP Address					
MAC Address	Display STA MAC Address					

3.2.3 Advance Setting

Advance Setting						×	
Region Selecti 2.4G No	on orth American	~	Clo	se RF wer Save Mode	e		\bigcirc
Work	11g	*	Preamble	Auto	~		Mar.
TX Rate	Auto	~	TX Power	Auto	*		
Fragment Threshold					2346		
RTS/CTS					2347		
	Ok		ancel	Default			

Click <Advance>,pop-up Advance Setting page as follows:

Picture3-4 Advance Setting

Every field in Advance Setting page means in the Table 3-3 as follows. Advise to apply Windows default.

Field	Meanings	
Work Mode	Set wireless network communication protocol, include two mode:802.11b,802.11g	
Rejion Selection	Select rejoin according to user need	
TX Rate	TX Rate for choice: Select "11b" in work mode,this mode has four kinds rate for choice: "1Mbps"、 "2Mbps"、"5.5Mbps"、"11Mbps" Select "11g" in work mode, this mode has twelve kinds rate for choice: "1Mbps"、 "2Mbps"、"5.5Mbps"、"11Mbps"、 "6Mbps", "9Mbps"、"12Mbps"、 "18Mbps"、 "24Mbps"、 "36Mbps"、 "48Mbps"、 "54Mbps",	

Table 3-3 Advance Setting

3.3 Use Wireless Network Configuration Tool of Windows XP own

Acount: :

Please ignore the chapter if the current operating system is not Windows XP

If users want to use Windows XP Wireless Network Connection, Please choose Windows zero configuration menu and the means has been tell off in Chapter 3.1.

Configure network with Wireless Network Connection Tool of Windows XP

(1) Click wireless network icon in the right Window minimum taskbar, pop-up windows as follows:

(9) Wireless Network Connection			
Network Tasks	Choose a wireless network		
nefresh network list	Click an item in the list below to connect to a <u>w</u> ireless network in range information.	or to get more	
Set up a wireless network for a home or small office	((p)) NETCOREO1		
	Control Contro	Ulite	
Related Tasks			
Learn about wireless networking	Security-enabled wireless network (WPA) wwhhzz		
Change the order of preferred networks	Contraction of the security-enabled wireless network		
See Change advanced	((p)) asus		
settings	🖡 Security-enabled wireless network		
	((p)) ^{netgear}	.0	
	Security-enabled wireless network	UUU	
		Connect	





(2) Select AP which you want to connet ,and click <Connect>.

Picture3-16 Wireless Network Property Configuration