

Must-have item for smartphone users

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# **1** About WifiAn-Mini

# A. What is WifiAn-Mini?

WifiAn-Mini is a portable Wi-Fi Router which is USB type and the most compact size among WiFiAn products. WiFiAn-Mini, looking like a small accessory, creates a free and fast Wi-Fi Zone from an internet connected computer by plugging it into the PC's USB port. It also enables the PC to wirelessly share media files with electronic devices such as smart phones and tablet computers etc.

# B. Contents of WifiAn-Mini Package



# C. Operating System & Requirements

# C-1 As a Router

- Recommendation: Window XP(Service Pack3), Vista, Win7 XP Service Pack3: ".(dot) Net Framework 2.0 SP2" which fits in your computer O/S language should be installed first.
- (2) Minimum: Window XP(Service Pack 2).

".(dot) Net Framework 2.0 SP2", "Hotfix KB933579, KB918997, KB917021" should be installed.

# Note: Unfit for use on Win XP 64 bit, Win7 Starter.

# C-2 As a LAN adapter

Win2000, XP, Vista, Win7, Linux, WinCE, Mac

# 2 Features

# A. It creates a free and fast Wi-Fi zone easily

As long as there is an internet-ready computer, WifiAn can create a free and fast Wi-Fi Zone. After WifiAn driver SW is installed with installation CD and WifiAn-Mini device is plugged in the USB port of a PC, smartphone and tablet computer users can use wireless internet service for free instead of pay 3G. It is also available for multi users.

#### B. It is compact

It is super compact router just looking like a small accessory so that it is handy to carry.



[WifiAn-Mini: 0.59\*0.71\*0.28(inch)]

# C. It enables the PC to wirelessly share media files with your smart phone

You can set certain folders in your PC to interact with WifiAn-accessed devices (smart phones etc.). By doing that, you can open the folders immediately on your smart phone without the need to download them. You can view images in PC on your smart phone and even play videos in the way of streaming. In addition, you can wirelessly transfer files in your smart phone to the PC.

# D. It is faster than 3G

It is based on the 802.11 B/g/n so that it provides a data rate up to 150Mbps in a wireless environment. You can enjoy its high speed.

# E. It is easy to get started

Only with one click, all necessary S/W installation is processed automatically. You can start to enjoy free WiFi just right after the installation.

# F. It provides wireless network security

Since it is based on 128-bit encryption, it provides secure wireless network.

# G. It can set an intro web page with your own short messages

An intro web page can be shown to users once when they open a web-site. It can be useful when the WiFi zone host is a shop owner of such as café or restaurant etc. The host can inform any messages about events or ads etc. customers may be interested.



# **3** Installation and Connection

# Step1> Installation of Driver S/W

- ① Insert the enclosed installation CD into your internet-ready PC and click `installation' button.
- ② You can see the installation window.
- ③ Select language.

Select La	nguage for WIFIAN	×
P	Please select the language	e of the installer
	English	•
	ОК	Cancel

4 When it is completed, you could find  $\blacksquare$  of the tray on the right bottom.



# **Step2>** Plugging WifiAn into the USB port

- After installation completed, plug WifiAn into the USB port of your PC.



# Note: Please install Driver S/W first(step1) before connecting WifiAn.

#### Step3> Connecting network automatically

- ① When Driver S/W recognizes that WifiAn is connected to the USB port, network connection works automatically.
- ② Following window appears while network connection progress is working.

# WifiAn User Manual

🛜 WIFIAN ( A	P Mode )	_	×
	Creating W	reless SSID.,	-
	ОК	Option	

③ Network connection progress is completed within about 20 seconds. However it might differ depending on the system.

#### **Step4>** Completion of network connection

When the yellow-green bar reaches to the end of the right side, the window disappears automatically. "W" icon is turned to red like W which means WifiAn is configured as a router. Now, free WiFi zone is created arround the PC.



# Step5> Make sure of finding SSID(name of AP) at your PC

- ① Click W icon then you can see the menu of WifiAn window.
- ② Go to 'Options > Access Point> Config'. Here, you can find the default SSID (name of AP) which is "WIFIAN\_XXXX". (eg. "WIFIAN\_8FE2")

후 WIFIAN			×
Config	Network	Access Control	Infomation
1. Network . Realtek ☑ Auto 2. SSID SSID Passwo Pass	Adapter List RTL8168C(P)/8111C Selection rd Not Use sword "aaaaaaaaa" is	(P) Family PCI-E Giga 8FE2 * O WEP set up in advance on V	bit Ethernet NIC( →
Countr 1: CH	y Region Code 01 ~ 11 →	Channel 2	•
	Apply	C	lose



③ You can change SSID and set password. It is advisable to use for security. Please see chapter 5-A.

**Step6> Make sure of WifiAn access at your device** (smart phone, tablet computer etc.)

① Find the SSID which is the same name you found on WifiAn window at step 5.



- In the case of iPhone: Settings>Wi-Fi>Choose a Network> Select WifiAn\_XXXX
- In the case of Galaxy-Android: Main menu> Settings> Wireless and network> Wi-Fi settings> select WifiAn\_XXXX
- In the case of lap top or other devices: Select WifiAn\_XXXX among the available networks
- ② Select the SSID

## Step7> Get ready

If you finished all steps above then now you can simply access to the internet using free WiFi generated from WifiAn.

# 4 Understanding Tray menu and status

# A. Tray Menu

Click 'W' icon to see the menu

	Switch to Station Mode	1
	View/Hide	
	Exit	
	Language •	
수 있는	Options +	WIFL
ко	🦻 A 漢 🕐 🍹 < 🕅 🛛 💛	7

- Switch to station mode: to change network mode
- View/Hide: to view or hide WifiAn window
- Exit: To exit WifiAn program
- Language: To select language
- Options > Access Point: To set up WifiAn network
- Options >Media Server: To set up media server
- Options >Intro Webpage: To set up intro page

# B. Status by tray icon color

Tray icon informs you 4 different statuses of connection by colors.

- Configured as router, you can use both of internet sharing and media server function.
- Configured as AP, you can use media server function but internet sharing is not possible.
- : Configured as Network Adapter, You can use it as a Wireless Lan Card.
- : Not recognized by PC.



# **5** Options > Access Point

# A. Config

Here, you can change SSID and set password. Also you can adjust country region code and channel

🛜 WIFIAN			×
Config	Network	Access Control	Infomation
1, Network Adapte ⓐ Realtek RTL81 ☑ Auto Seler 2, SSID	er List 68C(P)/8111C ction	:(P) Family PCI-E Gigat	it Ethernet NIC( 👻
(b) SSID	WIFIAN_	.8FE2	
Password	******	*	
O No	t Use	WEP	● WPA(AES)
Password	"aaaaaaaa" is	set up in advance on W	lindows 7,
Country Regi C CH 01 ~ 1 C CH 01 ~ 1 C CH 01 ~ 1 C CH 01 ~ 2 C CH 01 ~ 1 C C C CH 01 ~ 1 C C C C C C C C C C C C C C C C C C C	on Code	Channel 2	•
3: CH 10 ~ 1 4: CH 10 ~ 1 5: CH 01 ~ 1 6: CH 03 ~ 0 7: CH 05 ~ 1	i 0 1 9 1	CI	ose

ⓐ You can choose a certain Network Adapter if you want. (Default: Auto selection)

b you can change SSID and set password.

- **How to change SSID**: Please type any new name you want. You can use either numbers or alphabets. There is no limit to the number of letters to use.

후 WIFIAN			×
Config	Network	Access Control	Infomation
1, Network Ar Realtek R ☑ Auto 3 2, SSID SSID Password	dapter List TL8168C(P)/8111C Selection	(P) Family PCI-E G 8FE2	gabit Ethernet NIC( 🖵
	) Not Use	○ WEP	⊙ WPA(AES)
Passv	vord "aaaaaaaa" is	set up in advance o	n Windows 7,
Country 1: CH 0	Region Code I ~ 11 🛛 👻	Channel 2	-
	Apply		Close

- **To set password**: Please click 'WEP' or 'WPA(AES)' then you can type pass word. You can use either numbers or alphabets.

Config	Network	Access Control	Infomation
1. Network Ac Realtek R	dapter List TL8168C(P)/8111( Selection	C(P) Family PCI-E Gigat	oit Ethernet NIC( 🚽
2, SSID SSID	WIFIAN.	_8FE2	
Password C Passw	) Not Use ord "aaaaaaaa" is	** WEP s set up in advance on V	⊙ WPA(AES) Vindows 7,
Country 1: CH 01	Region Code   ~ 11 🛛 🖵	Channel 2	•
	Apply	С	lose

- In case of WEP, you can use only 5 or 13 letters. You can use WEP password on Windows XP and Vista.
- In case of WPA(AES), you need to use at least 8 letters. You can use WPA password on Windows Vista and 7. Initial password on Win7 is configured as "aaaaaaaaa", and it can be changed.
- © Also you can adjust country region code and channel when it is needed.





# **B.** Network

후 WIFIAN	×
Config	ork Access Control Infomation
a DHCP Config	192,168.3.1
IP SubNot	255.255.255.0 (a)-2
DNS	8.8.8.8
(a)-3	Use DNS of same network
State	Start
DNS Config (If you uncheck 'Use Server with IP addres	W Use WiFIAn DNS (♥) WiFIAn DNS', you can access to Media s only.)
Арріу	Close

Here, if you want, you can set a certain IP among private inner IP band.

ⓐ **DHCP:** Through this function, you can configure DHCP(Dynamic Host Configuration Protocol) to minimize any possible network collisions. However, it is not imperative to adjust the initial value.

(a)-1 IP: '192.168.3.1' is given as the initial IP(Host). It is not imperative to change. However, please bear in mind that if the numbers of the first three section of your private inner IP band is the same with the given IP like '192.168.3.XX', it is advisable to change the first '192.168.3' part like '192.168.4.1'. Otherwise, there might be a network collision.

③-2 SubNet: SubNet defines the number of access to WifiAn and also how to allocate IP to WifiAn connected devices. It is not imperative to change. Initial value is '255.255.255.0' which refers that WifiAn connected devices is automatically set to get IP with new numbers at the last section up to 254 devices. (eg. '192.168.3.2', '192.168.3.3'...'192.168.3.255')

> Host IP 192 168 3.1 Host IP 192 168 3.1 192.168.3.2 192.168.3.3 192.168.3.3 192.168.3.4

> [When WifiAn IP is '192.168.3.1' (Initial value)]

(a)-3 DNS: Initially, it is checked to use DNS of the same network. When you want to use a specific DNS, you need to unckeck this box. (DNS: Domain Name Server)

**WifiAn DNS**: Initially, it is checked to use WifiAn DNS. It is needed when you want to use 'Intro Page' also when you want WiFi users can access to media server by typing 'pc.WifiAn.com' on the internet address bar instead of IP numbers. If you uncheck this, you can access to Media Server with IP address only.

(notice: This function makes users to use intro page and media server easily but cannot avoid a decrease in data rate)

# **C. Access Control**

후 WIFIAN			×
Config	Network	Access Control	Infomation
Access Contro	Disable	Mac Table	
	Delete	Add	
	Apply	Clo	se

You can control access here. You can block or allow certain addresses.

Disable: You do not use 'Access Control' function. (Allow all)
 Allow List: You allow only certain addresses
 Reject List: You block certain addresses

If you want to use access control, choose 'Allow List' or 'Reject List' at (a). Next to that, type certain MAC addresses you intend to block or allow at (b) and click 'Add'. You can see the designated addresses at (c). When you type addresses, do not include '-'.

d 'Mac Table' shows current accessed addresses.



# **D.** Information

Here, you can check the latest version of the current program.

WifiAn updates itself automatically when it is operated but also you can update it manually.



# 6 How to use other functions

# A. Options > Media Server

The function called 'Media Server' enables the PC to wirelessly share media files with your wireless devices such as smart phones, laptops, and tablet PC's.

You can set certain folders in your PC to interact with WifiAn-accessed devices (smart phones etc.). By doing that, you can open the folders immediately on your wireless devices without the need to download them. You can view images in PC on your smar phone and even play videos in the way of streaming. In addition, you can wirelessly transfer files in your smart phone to the PC.

#### (1) Select folders to be shared with wireless devices

- You need to select certain folders in the PC which you want to be shared with WifiAn-accessed devices
- Click W tray menu and go to 'options' > 'Media server'
- You can add/delete certain folders which contain media files at (a). Then you can browse these folders on your smart phone like below.

Media 5	Server (	Conversio	n	
	Auto Start	Port		State :
HTTP	2	80		Work
FTP		21		Sleep
Extension .mkv .htmp	Type video/x-matro application/x-	ska mpegURL	•	Add Remove
Shared Fold	er			Add



#### (2) Conversion setting

At 'options' > 'Media server' > 'Conversion', you can set resolution, bit rate of converted movie and also you can choose whether to use subtitles.



হ WIFIAN ×	
Media Server Conversion	
<ol> <li>Select a resolution of converted movie</li> <li>400 + 240</li> <li>Select a bit rate of converted movie</li> <li>500 K</li> </ol>	
3, Choose whether to use subtitles (Subtitle's format : smi) ☑ Use Subtitles	
Apply Close	

(3) Streaming media files of PC on smart phones

Make your smart phone to access to the folders

- ① Open web browser on the smart phone
- ② Input acquired IP address (Initial value: 192.168.3.1) or 'pc.WifiAn.com' in the address bar. (When you uncheck WifiAn DNS, you can use IP address only) Please see chapter 5-B.
- ③ You can see folders you set on your smart phone.
- ④ You can immediately open text, image, pdf, ppt(Android), music and video files on your smart phone without download.



(4) Upload/download files from smart phone to PC

Set 'FTP' protocol in WifiAn menu activated, first . After running ftp client utility of your smartphone, input IP address of WifiAn (initial value: 192.168.3.1) and access the PC on your smart phone using

ID: wifian / PW: SSID password.

You can upload and download files between PC and smart phones.

Media S	Server (	Conversion	6 (). 	
	Auto Start	Port		State :
HTTP.	2	80	Work	
FTP		21 Sleep		
MIME Type				
Extension	Type			Add
,mkv	video/x-matro	video/x-matroska		
,htmp	application/x**	application/x-mpegURL		Remove
•	· · · · · ·		, "	
Shared Fold	er		_	
				Add
				Remove



# **B.** Options > Intro WebPage

You can set an intro web page with your own short messages.

The function called 'Intro Page' conveys certain notes (messages) to WifiAn wireless network users through the first web-browser they open. It can be useful when the WiFi zone host is a shop owner of such as café or restaurant etc. The host can inform any messages like about events or ads customers may be interested.

- ① Go to W tray menu > Options > Intro Page
- ② Select 'use' button
- ③ Type any messages you want to convey to users in the message box and click 'apply'.
- ④ When users opens web browser on their smart phone, intro page containing your messages is shown as below



# C. WifiAn as a Wireless LAN card (Station mode)

If you select station mode, you can WifiAn as a wireless LAN card.

① Click 'Switch to station mode' on tray menu

	Switch to Station Mode	Ì
	View/Hide	I
	Exit	l
	Language •	l
	Options •	ķ
2	Ci (# 🔍 🔹 🗸 🗕 🛝 🚔 📈	Ÿ

② After you turn the mode as station mode, WifiAn starts searching wireless network and then you can see AP lists. Select AP you want to use.

🛜 WIFIAN	×
Network	Infomation
AP List	Using the windows control
🔒 ezgomap	
🔒 iptime_ENJ-Vdsl	= IIIm.
8	
🔒 WIFIAN_CF20	
🔒 UNION_IS	
WIFIAN_12345	
Scan	Connect

3 When it is station mode, tray icon turns to Green  $\blacksquare$ .



# 7 H/W Specification

	Chip	RTL8188CU
	LED	Link/Activity
	Frequency band	2.412GHz-2.4835GHz
	Wiroloss Signal	- 802.11n: Up to 150Mbps
	Patos	- 801.11g: Up to 54Mbps
	Rates	- 802.11b: Up to 11Mbps
	Wireless Transmit Power	14dBm (MAX EIRP)
	Modulation	OFDM /CCK/16-QAM/64-QAM
	Transmission	- Maximum : 30m
	distance	- Stable : 15m
Wireless		- 135Mbps : -68dBm@10% PER
Spec.	Receive sensitivity	- 108Mbps : -68dBm@10% PER
		- 54Mbps : -68dBm@10% PER
		- 11Mbps : -85dBm@8% PER
	Wireless	- 64/128 bit WEP
	Security	- WPA2(AES)
	Transmission	- Maximum : 30m
	distance	- Stable : 15m
	Number of	- USA , Canada(FCC): 11 channels(2.412GHz-2.462GHz)
	Selectable	- Europe(CE): 13 channels (2.412GHz-2.472GHz)
	Channels	- Japan: 14 channels (2.412GHz-2.4835GHz)
I	nterface	USB2.0 Hi-Speed connector
		- Operating Temperature: 0° to 40° C
Env	vironment	- Storage Temperature: -40° to 70° C
LIN	in on ment	- Operating Humidity: - 10% to 90 % non-condensing
		- Storage Humidity: - 5% to 95% non-condensing

# 8 Trouble Shooting

(Captured images: Version Win 7)

When WifiAn doesn't work normally, you can check in order listed as below.

- (1) Is DNS configured correctly?
- (2) Is H/W recognized correctly? In other words, is the driver installed correctly?
- (3) Is network configured correctly?
- (4) Does ICS(internet connection sharing) service of the WifiAn connected PC work correctly?

Normally, above actions are proceeded automatically but when it does not work automatically, depending on system environments, you may need to set manually. Sometimes ICS service may not be installed even manually due to the security program VPN (Virtual Private Network) in some companies, public offices and financial organizations.

# A. Checking DNS

When the tray icon on the right bottom is red ( $\overline{\mathbf{W}}$ ), it means installation is done correctly. In this case, it is advisable for you to check DNS first.

- Click W tray and go to 'options>access point>network'
- Uncheck 'Use WifiAn DNS' and click 'Apply'
- Now, try again to access the WifiAn network on our Smartphone



Access point > Network



# **B.** Checking Driver Installation

You can check whether the WifiAn driver is installed correctly at "Control Panel > Device Manage > Network Adapters". In case of WifiAn-Mini, you need installation CD while the driver S/W is installed automatically in case of WifiAn-MS when it is plugged into a PC.

# B-1 How to go to "Device Manager" in Win7

The format may differ depending on computer systems.

- a. Go to 'Device Manager' directly: Click 'Start menu' on the left bottom and type 'device manager' on the searching bar (Keep it mind that there is a space between the two words).
- b. Go to 'Device Manager' through Control Panel (view by big or small):
  - Go to Control Panel
  - You can find the 'Device Manager' icon directly then click it.



- c. Go to 'Device Manager' through Control Panel (view by category):
  - Go to Control Panel
  - Click 'Hardware and Sounds'
  - Then you can find 'device manager' under 'devices and printers'

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# **B-2 Checking Driver Setting**

Driver names are as below

 WifiAn-Mini : "Realteck RTL8188 CU Wireless LAN 802.11n USB 2.0 Network Adapter"

In case of Win 7, Miniport driver is installed additionally because each wireless network is controlled by miniport driver

• Miniport: "Microsoft Virtual WiFi Miniport Adapter" (Win7 Only)

(X Each driver name can be followed by # the number of times the driver is installed)



Eile     Action     View     Help       Image: Constraint of the state of the stat
🖃 🚔 WiFiAn_Eng-PC
🕀 📲 Computer
🗄 📺 Disk drives
🕀 📲 Display adapters
E BVD/CD-ROM drives
🗄 🥼 Human Interface Devices
I ← Keyboards
H     H     Mice and other pointing devices
H Monitors
E Provenski state i State Stat
Broadcom NetLink (IM) Gigabit Ethernet
Desitek DTI 8198CLI Wirelege LAN 902 11p LICE 2.0 Network Adapter #10
Realitek RTL0100CO WITEless LAW 802, 111 036 2,0 Network Adapter #10
BAID Controller
E Ports (COM & LPT)
Torrest Sound, video and game controllers
Fr d∎ System devices
🖅 🖶 Universal Serial Bus controllers

[e.g. When WifiAn-Mini is installed]

- a. You can see the driver names under 'network adapters' at 'Device Manager'
- b. The above image shows the status when WifiAn-Mini is plugged into the USB port that the driver is installed correctly.
- c. In case of Mini, you also need to check the version of the driver.
- d. check the version
- Click the right mouse on WifiAn-Mini driver
- 'Go to properties > driver'
- You can see the version date here.

Proper version - Win7 : 7/12/2011, Win XP & Vista : 8/6/2010

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General	Advanced Driv	er Details Powe	u USB 2.0 Netw er Management	ork Adapt [
<u>.</u>	Realtek RTL818 Network Adapte	88CU Wireless LAN r #13	802.11n USB 2.	0
	Driver Provider:	Realtek Semico	nductor Corp.	
	Driver Date:	7/12/2011	Win7	
	Driver Version:	1015.0.712.201	1	
	Digital Signer:	Microsoft Windo Publisher	ows Hardware Co	ompatibility
Dri	ver Details	To view details ab	out the driver file	s.
Upd	ate Driver	To update the driv	er software for th	is device.
<u>B</u> oll	Back Driver	If the device fails a back to the previo	after updating the usly installed driv	edriver, roll er.
	<u>D</u> isable	Disables the selec	ted device.	
<u></u>	Jninstall	To uninstall the dri	ver (Advanced).	
			ок	Cancel

Realtek RTL 8188CU Wireless LAN 802.11n USB 2.0 N 🕐 🔀
General Advanced Driver Details Power Management
Realtek RTL8188CU Wireless LAN 802.11n USB 2.0 Network Adapter
Driver Provider: Realtek Semiconductor Corp.
Driver Date: 8/6/2010 Win XP, Vista
Driver Version: 1008.0.806.2010
Digital Signer: Microsoft Windows Hardware Compatibility Publ
Driver Details To view details about the driver files.
Update Driver To update the driver for this device.
<u>Roll Back Driver</u> If the device fails after updating the driver, roll back to the previously installed driver.
Uninstall To uninstall the driver (Advanced).
OK Cancel

e. In case driver was installed wrong or different version was installed, you should update the driver with proper version.



📲 Device Manager	
<u>File Action View H</u> elp	
🗈 📻 Disk drives	
🛨 📲 Display adapters	
DVD/CD-ROM drives	
Himan Interface Devices	
IDE ATA/ATAPI controllers	
⊞ — Ceyboards	
Mice and other pointing devices     Mice and other pointing devices	
🕀 🖳 Monitors	
🔃 💽 Network adapters	
🔄 🕼 Other devices	
802.11n WLAN Adapter	
RAID Controller	
Trots (COM & LPT)	
Processors	
🗄 🛒 Sound, video and game controllers	
🕂 📲 System devices	
🗐 🖶 Universal Serial Bus controllers	
	•



[When the driver date is not 2010-08-06]

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To find the proper drive and update it, please follow the below steps.

- Click 'Update Driver'
- Click 'Browse my computer for driver software'
- Click 'let me pick from a list of device drivers on my computer
- Then the driver software will be installed





Select Netwo	ork Adapter	
Eli ins	ick the Network Adapter that matches your hardwar stallation disk for this feature, click Have Disk.	e, then click OK. If you have an
Show cor	mpatible hardware	
Network Ac	dapter: RTL8188CU Wireless LAN 802.11n USB 2.0 Network A	kdapter
		User Disk
This drive	rver is digitally signed. e why driver signing is importan <u>t</u>	Have Disk
		Next Can
late Driver So	oftware - Realtek RTL8188CU Wireless LAN 802	.11n USB 2.0 Network Adapter #10
late Driver So	oftware - Realtek RTL8188CU Wireless LAN 802 Driver Software - Realtek RTL8188CU Wireless L	.11n USB 2.0 Network Adapter #10 AN 802.11n USB 2.0 Network Adapter #
late Driver So Update D Windows has	oftware - Realtek RTL8188CU Wireless LAN 802 Driver Software - Realtek RTL8188CU Wireless L s successfully updated your driver software	.11n USB 2.0 Network Adapter #10 AN 802.11n USB 2.0 Network Adapter #
late Driver Sc Update D Windows has	oftware - Realtek RTL8188CU Wireless LAN 802 Driver Software - Realtek RTL8188CU Wireless L s successfully updated your driver software finished installing the driver software for this device	11n USB 2.0 Network Adapter #10 AN 802.11n USB 2.0 Network Adapter # :e:
late Driver So Update D Windows has Windows has <u>Rea</u>	oftware - Realtek RTL8188CU Wireless LAN 802 Driver Software - Realtek RTL8188CU Wireless L s successfully updated your driver software finished installing the driver software for this device altek RTL8188CU Wireless LAN 802.11n USB 2.0 Net	11n USB 2.0 Network Adapter #10 AN 802.11n USB 2.0 Network Adapter # :e: work Adapter_
Jate Driver Sd Update D Windows has Windows has	oftware - Realtek RTL8188CU Wireless LAN 802 Driver Software - Realtek RTL8188CU Wireless L s successfully updated your driver software finished installing the driver software for this devic altek RTL8188CU Wireless LAN 802.11n USB 2.0 Net	11n USB 2.0 Network Adapter #10 AN 802.11n USB 2.0 Network Adapter # :e: work Adapter_
Jate Driver So Update D Windows has Windows has	oftware - Realtek RTL8188CU Wireless LAN 802 Driver Software - Realtek RTL8188CU Wireless L s successfully updated your driver software finished installing the driver software for this devic altek RTL8188CU Wireless LAN 802.11n USB 2.0 Net	11n USB 2.0 Network Adapter #10 AN 802.11n USB 2.0 Network Adapter # :e: work Adapter
late Driver So Update D Windows has Windows has	oftware - Realtek RTL8188CU Wireless LAN 802 Driver Software - Realtek RTL8188CU Wireless L s successfully updated your driver software finished installing the driver software for this device altek RTL8188CU Wireless LAN 802.11n USB 2.0 Net	11n USB 2.0 Network Adapter #10 AN 802.11n USB 2.0 Network Adapter # :e: work Adapter_
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# C. Checking Network Configuration

When you can find the installed driver for WifiAn on Device Manager, it means the PC recognizes the WifiAn as hardware. Thus, to make it run normally, network should also be set correctly. You can set network at 'Network Connections'.

You need to check below lists at Network connections.

- Whether the Miniport driver is activated. (although you can check correctly installed Miniport Driver at 'device manager', sometimes it is not seen at Network connections'
- (2) Whether the current internet connected Network Adapter is allowed to share with WifiAn adapter(In case of Win 7, it is Miniport driver)
- (3) Whether the adapter is selected correctly on WifiAn program. (at Options > Access Point > Confi. > Network Adapter List)

## C-1 How to go to 'Network Connections'

Go to Control Panel > Network and Internet > Network and Sharing Center > Changing Adapter Settings. You can refer below captured images.



11 View network status and tasks Connect to a network System and Security View network computers and devices Add a wireless device to the network Network and Internet HomeGroup Hardware and Sound Choose homegroup and sharing options Programs **Internet Options** User Accounts and Family Safety Change your homepage Manage browser add-ons Delete browsing history and cookies Appearance and Personalization Clock, Language, and Region Ease of Access

[Click 'Network and Sharing Center']





[You can see Network Connections]

# **C-2 Network Setting Status**



# WifiAn User Manual

🗲 🕞 🗣 🔹 Network and Internet 🔹 N	Network Connections •	- 🖾	Search Network Connections	
Organize 🔻			855	- 🗆 🛛
Name *	Status	Device Name		Connectivity
Local Area Connection	Network, Shared	Broadcom NetLink (TM) Gigabit	Ethernet	Internet acces
Mireless Network Connection 21 (2)	Not connected	Realtek RTL8 188CU Wireless L	AN 802.11n USB 2.0 Netwo	
aff] Wireless Network Connection 22	WIFIAN_4784	Microsoft Virtual WiFi Miniport A	Adapter #11	Internet acces



You can check network setting status at 'Network connections' as the above image.

- (1) You can see the WiFi Miniport is on the device name list. It means the driver is installed correctly.
- (2) You can see the status of the current internet connected adapter(1) is as 'Network, shared'. Also, you can see its connectivity is 'internet Access'. It means
  1) network adapter is allowed to share with 3 network adapter.
- (3) The status of ② Network adapter is as 'not connected' because it uses Miniport Adapter ③.
- (4) Connectivity of Miniport Adapter (3) is as 'Internet Access' because it is shared with (1).

If ① network adapter is not shared with, you need to make it to be shared with ③ manually. Please see C-3.

# C-3 How to set network sharing

Please follow the below steps.

- Select ① Network Adapter (Local area collections) and click right mouse.

- Go to 'Properties' > 'Sharing'

- Check 'Allow other network users to connect through this computer's internet connection.

- At 'Home Networking Connection', check the WifiAn network adapter ③





# C-4 When there is other network adapters besides WifiAn network adapter.

WifiAn program has to select a internet connected network adapter automatically. However, sometimes, there is a possibility that a wrong network adapter is chosen. In this case, you need to set it manually.

# WifiAn User Manual

후 WIFIAN						×
Config	Net	work	Access Co	ntrol	Infomation	
1. Network Realtek Ø Auto 2. SSID	Adapter Li: RTL8168C o Selection	st (P)/8111C ]	(P) Family PCI-	E Gigabit	Ethernet NIC(	¥
SSID		WIFIAN_	.8FE2			
Passwo	rd	******	*			
	Not Us	e	• WEP		⊙ WPA(AES	0
Pass	sword "aaa	iaaaaa" is	set up in advan	ce on Wir	ndows 7,	
Countr 1: CH	ry Region ( 01 ~ 11	Code T	Channel 2		•	
	Apply			Clo	se	

To check the chosen network adapter.

- Please Click W tray and go to 'Options>Access Point>Config'

- You can see which network adapter is being selected on 'Network Adapter List'

When it is not the internet connected network adapter, you need to uncheck 'Auto Selection' and select it manually.

## C-5 When the WifiAn connected PC is a laptop.

There might be a collision between an embedded wireless network adapter and WifiAn network adapter when you use a laptop as the host PC. If you use wired internet you need to set the embedded network adapter as 'disable'.

How to set

 Please, go to 'Control Panel > Network and Internet > Network and Sharing Center > Changing Adapter Settings'

- Select the embedded wireless network adapter and click right-mouse.

- Then, click 'Disable'





# D. Checking ICS setting

WifiAn is operated by using ICS(Internet Connection Sharing) service Window provides. Thus, ICS should be set as 'started'.

## **D-1 To check ICS status**

- Go to 'Control Panel > Administrative Tolls > Services' or
- 'Control Panel > System and Security > Administrative Tolls > Services' or
- Type 'services.msc' on program searching bar on start menu (see below image)



## Then, you can check ICS status.

	Q 📑 🛛 🖬 🕨 🔳 II ID					
Services (Local)	🔕 Services (Local)					
	Internet Connection Sharing (ICS)	Name 🔺	Description	Status	Startup Type	Log ( 🔺
	Stop the service Restart the service Description: Provides network address translation,	Health Key and Certificate Management HomeGroup Listener HomeGroup Provider Human Interface Device Access KE and AuthIP IPsec Keying Modules	Provides X Makes local Performs n Enables ge The IKEEX	Started	Manual Manual Manual Manual Manual	Loca Loca Loca Loca Loca
	addressing, name resolution and/or intrusion prevention services for a home or small office network.	Interactive services betection Internet Connection Sharing (ICS) IP Helper IPsec Policy Agent KtmRm for Distributed Transaction C Link-Layer Topology Discovery Mapper Media Center Extender Service	Provides n Provides n Provides tu Internet Pr Coordinate Creates a Allows Med	Started Started Started	Manual Automatic Automatic Manual Manual Disabled	Loca Loca Netw Netw Loca Loca

[Status of ICS: Started]

When it is not as 'started' you need to change it.

# D-2 To configure ICS as 'started'

- Double click on the 'Internet Connection Sharing (ICS)'
- Then click 'Start' button

	SharedAccess
Display name:	Internet Connection Sharing (ICS)
Description:	Provides network address translation, addressing, name resolution and/or intrusion prevention services
Path to executal C:\Windows\Sy	ole: stem32\svchost.exe + netsvcs
Startup typ <u>e</u> :	Automatic
Help me configu	re service startup options.
Service status:	Stopped
<u>S</u> tart	Stop Bause Besume
	the start parameters that apply when you start the service
You can specify from here.	

If the status does not turn to 'Started' although you click the 'start' button, you need to check status of 'Telephony'.

# **D3 To check Telephony**

- Go to 'Dependences' tab
- Then you would see 'Telephony' is one of dependencies.

ternet (	Connection Sharing (ICS) Properties (Local Computer)	
General	Log On Recovery Dependencies	
Some s groups. depend	ervices depend on other services, system drivers or load order If a system component is stopped, or is not running properly, ent services can be affected. Connection Sharing (ICS)	
<u>This ser</u>	rvice depends on the following system components:	
E S	Base Filtering Engine	
	Network Connections	
Į.	Co. Secure Socket Tunneling Protocol Service	
The fol	owing system components depend on this service:	
	No Dependencies>	

Normally, Telephony should be working automatically but sometimes it can be blocked by some security programs. In this case, you need to set it as 'started'.



## D4 To configure Telephony as started

- Go to 'Services'
- Find 'Telephony'
- If its status is not 'started', then click right mouse and click 'start'.



# E. Environments that WifiAn service is limited

WifiAn service could be limited in below environments.

- Sometimes, it can be blocked by security programs in financial institutions, public offices and some companies. (Virus or firewall programs at you personal PC does not matter to use WifiAn)

-When a company use VPN(Virtual private network), if the host PC of the VPN doesn't use ICS. (Usually in case of groupware)

- When a security program, which had been installed in the past, still act at 설정 프로세서, after it was deleted because only its application was deleted, blocks ICS configuration. In his case, you need to delete this process through Task Manager after that, block the processes at 'msconfig > Window Startup'

- Win7 Starter version doesn't support ICS. (Often in case of Netbook)



## FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation are subject to the following two con-ditions:

- (1) this device may not cause harmfulinterference, and
- (2) this device must accept any in-terference received, including interference that may cause undesired operations.

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

#### FCC Radiation Exposure Statement:

The output power from the device is below the threshold for requiring RF exposure evaluation and may be used in portable conditions within 20cm of the body.

#### Caution:

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.

