Ralink Utility User Guide/PC/MAC

Connecting through Ralink Utility

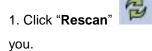
Before you can access the Ralink Utility, please connect the Powerlink USB adapter to your computer, and disable your previous WiFi adapter which is built-in on your computer.

Clicking the Ralink icon in your desktop will bring up the utility main window. Users can find the surrounding AP signal in the list. You can use the advanced tab to configure other advanced features provided by Ralink's wireless NIC.



3.2 Steps to add wireless signal with Ralink Utility for one time use

This section will lead you to link your wireless signal with your PL-18N. Please follow the **Figure 3-1** in adding the signal, and **Figure 3-2** to set up Authentication and Encryption



: Click on Rescan to search for all wireless signals near

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SSID		digiage M6DDK	50	2 6 b 6 b	9 († 9 0 1	78% 68%
Rate	IP Address	PESWirelessOntario			<mark>9</mark> 0 1	37%
Channel	Mask	premiertek premiertek_guest		3 [b] 3 [b]	90101 90101	100% 100%
<u>N</u>		SMC		11 🚺	ğ	42%
	/	WiFiRSU_dc	\$	9 🚺	901	31%
		WiFiRSU_e4	Ø	8 🕒	<mark>9</mark> 🛈 E	100%



2. Select your **desire SSID you want to connect**: Double Click the highlighted SSID to go to the Profile Settings. See **Figure 3-2** and **Figure 3-3**

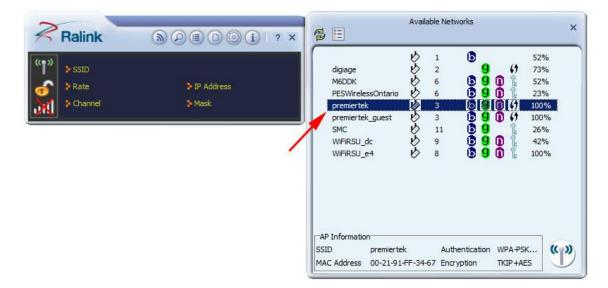


Figure 3-2

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Ralink		₫ 🗄	Available	Networks		×
SSID Rate Channel	Profile Settings ×	078407536713 digiage M6DDK PESWirelessOntario premiertak		1 D Authenticat	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	

Figure 3-3

3. Under the Profile Settings, if there is password and security for SSID you chose, please following the steps to set up the Authentication and Encryption (You need to know the security type and password). See **Figure 3-4**

	Available Networks	×
SSID Rate IP Address Channel Mask Profile Settings × Authentication WPA2-PSK Encryption AES	1 1	0
	AP Information SSID premiertek Authentication WPA-PSK MAC Address 00-21-91-FF-34-67 Encryption TKIP+AES	•

Figure 3-4

4. When you have input all correct info for security, it should appear like **Figure 3-5**.

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Figure 3-5

3.3 Steps to add wireless signal with Ralink Utility for future use

1. Click "Profile Setting" and click Add to Profile

: This part will help your

wireless adapter memorize the signal and password for your future use. See

Figure 3-6, Figure 3-7 and Figure 3-8

SSID Rate	premiertek 72.2 Mbps 3 (2422 MHz)	 IP Address Mask 	192.168.0.200 255.255.255.0	ø	digiage M6DDK PESWirelessOntario premiertek premiertek_guest SMC	0000000	2 6 3 3 11	69 69 69	0000 0000	68% 73% 18% 100% 100% 42%	
	Profile List	t	×	î l	WiFiRSU_dc	\$	9	69 69		63% 100%	
+ × 🕑 😰	* Ø				WiFiRSU_e4	¢	0		ΨE	100 /8	

Figure 3-6

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Ralink		× 🔁 🗄						
* *	▶ IP Address ▶ Mask Profile Settings	 078407536713 digiage M6DDK PESWirelessOntari premiertek premiertek_guest SMC WiFiRSU_dc WiFiRSU_e4 	, 9999999999999	1 6 2 6 3 3 11 9 8		000	63% 26% 23% 78% 18% 100% 100% 37% 31%	
		AP Information SSID premier MAC Address 00-21-4		Aut	hentication	WPA-		.«

Figure 3-7

Ralink	(A) (D) (B) ? ×	1	Available Networks	×
SSID Rate Channel	► IP Address ► Mask Profile Settings	078407536713 digiage M6DDK PESWirelessOntario premiertek premiertek_guest SMC WiFIRSU_dc WiFIRSU_e4	ジャン 1 シャン 1 シャン 1 シャン 1 シャン 1 シャン 1 シャン 2 シャン 2 シャン 2 シャン 2 シャン 4 シャン 4	78% 73% 18% 100%
	1	AP Information SSID premierte MAC Address 00-21-91	k Authentication WPA- FF-34-67 Encryption TKIP+	

Figure 3-8

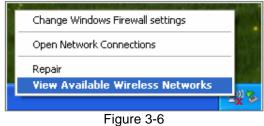
3.4 Connecting with Microsoft Zero Configuration (XP only)

1. After specifying the Microsoft Zero Configuration tool to configure your wireless

network, right click on the icon with a system tray as below. Select "View

available wireless Networks" to specify your wireless network.

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2. The tool shows the available wireless networks. Select your network SSID to connect with like **Figure 3-7**.

^{((†))} Wireless Network Connec	ion	
Network Tasks	Choose a wireless network	
😴 Refresh network list	Click an item in the list below to connect to a wireless network in ran information.	nge or to get more
Set up a wireless network	((Q)) RalinkInitialAP	
	Unsecured wireless network	
Related Tasks	((Q)) AP1	
(j) Learn about wireless	Unsecured wireless network	
networking	((Q)) AlbertY-200	
Change the order of preferred networks	Becurity-enabled wireless network (WPA)	
🍄 Change advanced	((Q)) ⁹⁹	
settings	Unsecured wireless network	
	((Q)) APPA	
	Unsecured wireless network	
	((Q)) ¹⁸¹	
	Country-enabled wireless network	util 🥃
	Figure3-7	

 If your wireless Network has encryption enable, you will be ask to enter the password like Figure 3-8. Please enter your wireless password at "Network key" section twice and click "Connect" to confirm.

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etwork Tasks	Choose a wireless network	
🛃 Refresh network	list Click an item in the list below to connect to a wireless network in information.	range or to get more
😃 Set up a wireless	network negg-mac	
for a home d	reless Network Connection	
i) Learn shout	ne network 'Solida2' requires a network key (also called a WEP key or WPA key) twork key helps prevent unknown intruders from connecting to this network. ype the key, and then click Connect.	. 4
oreferred ne	etwork key:	
Change adv settings	Connect	ncel
1	To connect to this network, click Connect. You migh additional information.	it need to enter
	((၀ူ)) ^{negg–guest}	
		Connect

4. If your wireless Network does not contains encryption, select the intended access point and click "**Connect**". Then click "**Connect Anyway**" like Figure 3-9

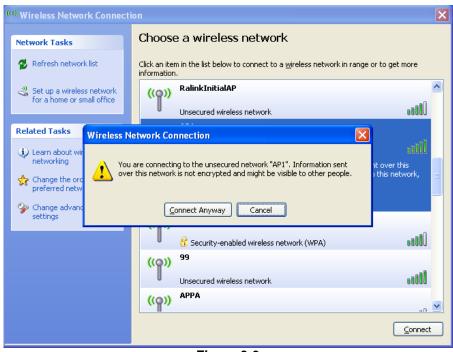


Figure 3-9

5. Once completed, you should see like **Figure 3-10** as your computer is now "**Connected**" with your wireless Network.

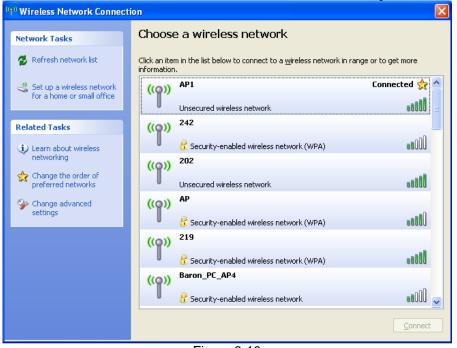
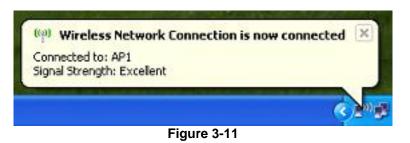


Figure 3-10

6. You should see the pop-up window on your low right hand corner indicate the connected status. As shown in **Figure 3-11**



3.5 Connecting with Mac OS

The Connection Utility can also help you connect through Mac OS.

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0		_	W	ireless	Utility			
	Profile Link	Status	Site Surve	ey St	atistics	Advance	d WPS	About
				AP Lis	it) 			
_	SSID	В	SSID	Signal	Channel	Authentic	Encrypt	Network Type
	SENAOWL	00-02-6	5F-53-0C-9	100	1	Unknowr	WEP	Infrastructure
	200PM_WPATKI	00-02-6	5F-50-9F-EF	86	2	Unknowr	WEP	Infrastructure
	200PM_WPA2AE	06-02-6	5F-50-9F-EF	86	2	WPA2-PS	AES-CC	Infrastructure
	200PM WEP 12:	0A-02-6	5F-50-9F-EI	86	2	Unknowr	WEP	Infrastructure
W	Cert. 53F70	00-02-6	6F-53-F7-0	39	3	Unknowr	Not Use	Infrastructure
onne	ected <>	·*- ;53F7(08_1		RESCAN	N C	3 DNNECT	3 ADD PROFILE

Figure 3-13

- 1. Upon opening the Wireless Utility program, first click open "Site Survey"
- 2. Select your desired AP signal under the AP List. You can further search the signal by clicking "**RESCAN**"
- After selecting the AP signal, you can select either "CONNECT" or "ADD PROFILE"
 - CONNECT: This is for connecting only once which best use for places other than your regular use areas such as coffee shop, libraries, and etc.
 - ADD PROFILE: This is for adding the signal into your most common use list. Once wireless adapter plug-in, the utility will automatically connect to the profile.

Profile Name P	ROF2	SSID Dino	Net	
Syst	em Configuration	Authentication & Se	curity	
Power Saving Mode	SSID Channel	Authentication Enci	votion	work-Type
• CAM (Const	antly Awake Mode)	O Power Saving M	ode	
Network Type	802.11 Ad Hoc	 Tx Power Channel 	100 1 •	
☑ RTS Threshold	0		O ²³	47 2347
✓ Fragment Thres	old 256		O ²³	46 2346
	ОК	CANCEL		

Figure 3-14

- 4. Once click Profile, you will be prompt to ask for your personal settings such as "System Configuration" and "Authentication & Security".
 - You have the choice to select "Authentication & Security" and enter the password for connecting to the signal.



Please make sure that your settings for Authentication & Security are the same as

your Wireless Router's setting

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1107110			Junistic		
	System (Configuration	Authenticatio	on & Security	
Authentica	tion Type	Open			•
Encryption	Type	NONE	Select	t WEP here	•
WPA Pre-S	nared Key				
Box					
⊙ Key#	1 Hexade	ecimal 💌			
◯ Key#	2 ASCII	•		Enter WEP	7
◯ Key#	3 Hexade	ecimal 💌		Password Here	
	4 Hexade	cimal 🔹			7
	4 Hexade	cimal 🔹			7

Figure 3-15

- 5. For **WEP**, Select **Open** or **Shared** from the **Authentication Type**'s drop-down list.
 - Then select WEP from Encryption's drop-down list.
 - WEP Key: Type a character string into the field.
 - For 64-bit enter 5 alphanumeric or 10 hexadecimal characters.
 - For 128-bit enter 13 alphanumeric or 26 hexadecimal characters.
 - Click on the OK button to save the changes.

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Profile Name	PROF2			SSID	DinoNet	
C	System C	onfigur	ation	Authenticatio	on & Security	
Authenticatio	on Type	WPA-	PSK			
Encryption T	ype	TKIP				
WPA Pre-Sha	red Key					
Box						
• Key#1	Hexade	cimal	•	0987654321		
◯ Key#2	ASCII		•	abcdef		
◯ Key#3	Hexade	cimal	-			
◯ Key#4	Hexade	cimal	v			

Figure 3-16

- 6. For WPA or WPA2, please select from Authentication's drop-down list.
 - Select **TKIP** or **AES** from **Encryption**'s drop-down list.
 - WPA Preshared key: Enter a pass phrase which is between 8 and 32 characters long.
 - Click on the **OK** button to save the changes.
 - Show **Password** check box. If you want to make sure the accuracy of password you type, click the Show Password box to check it.

Trouble Shooting

This chapter provides solutions to problems that may occur during the installation and operation of PL-18N. Read the descriptions below to solve your problems.

1. The PL-18N does not work properly.

Reinsert PL-18N into your PC's USB slot.

Right click on My Computer and select Properties. Select the device manager and click on the Network Adapter. You will find PL-18N if it is installed successfully.

If you see the yellow exclamation mark, the resources are conflicting. You will see

the status of PL-18N. If there is a yellow question mark, please check the

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following:

Make sure that your PC has a free IRQ (Interrupt ReQuest, a hardware interrupt on a PC.) Make sure that you have inserted the right adapter and installed the proper driver. If PL-18N does not function after attempting the above steps, remove it and do the following: Uninstall the driver software from your PC.

Restart your PC and repeat the hardware and software installation as specified in this User Guide.

2. I cannot communicate with the other computers linked via Ethernet in the Infrastructure configuration.

Make sure that the PC to which PL-18N is associated is powered on.

Make sure that PL-18N is configured on the same channel and with the same security options as with the other computers in the Infrastructure configuration.

3. What should I do when the computer with PL-18N installed is unable to connect to the wireless network and/or the Internet?

Check that the LED indicators for the broadband modem are indicating normal activity. If not, there may be a problem with the broadband connection.

Check that the LED indicators on the wireless router are functioning properly. If not, check that the AC power and Ethernet cables are firmly connected.

Check that the IP address, subnet mask, gateway, and DNS settings are correctly entered for the network.

In Infrastructure mode, make sure the same Service Set Identifier (SSID) is specified on the settings for the wireless clients and access points.

In Ad-Hoc mode, both wireless clients will need to have the same SSID. Please note that it might be necessary to set up one client to establish a BSS (Basic Service Set) and wait briefly before setting up other clients. This prevents several clients from trying to establish a BSS at the same time, which can result in multiple singular BSSs being established, rather than a single BSS with multiple clients associated to it.

Check that the Network Connection for the wireless client is configured properly. If Security is enabled, make sure that the correct encryption keys are entered on both PL-18N and the access point.

4. I can't find any wireless access point / wireless device in Network tab.

- Click Rescan for few more times and see if you can find any wireless access point or wireless device.
- Please move closer to any known wireless access point.

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- Ad-hoc function must be enabled for the wireless device you wish to establish a direct wireless link.
- Please adjust the position of PL-18N and click Rescan button for few more times. If you can find the wireless access point or wireless device you want to connect by doing this, try to move closer to the place where the wireless access point or wireless device is located.

5. Nothing happens when I click Launch configuration utilities

- Please make sure PL-18N is inserted into your computer's USB port. If the Ralink configuration utility's icon is black, PL-18N is not detected by your computer.
- Reboot the computer and try again.
- Remove PL-18N and insert it into another USB port.
- Remove the driver and re-install.

6. I can not establish connection with a certain wireless access point

- Click Connect for few more times.
- If the SSID of access point you wish to connect is hidden (nothing displayed in SSID field in Network tab), you have to input correct SSID of the access point you wish to connect.
- You have to input correct pass phrase / security key to connect an access point with encryption.
- The access point you wish to connect only allows network cards with specific MAC address to establish connection. Please go to About tab and write the value of Physical Address down, then present this value to the owner of access point to add the MAC address of your PL-18N to owner's access point's list.

7. The network is slow / having problem when transferring large files

- Move closer to the place where access point is located.
- Enable Wireless Protection in Advanced tab.
- Try a lower TX Rate in Advanced tab.
- Disable Tx Burst in Advanced tab.
- Enable WMM in WMM tab if you need to use multimedia / telephony related applications.
- Disable WMM Power Save Enable in WMM tab.
- There could be too much people using the same radio channel. Ask the owner of the access point to change the channel number.

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For questions, please visit our website www.premiertek.com