

Wireless Travel Router / Portable Access Point

Model number: WR1001

User's Manual

1 Profile

1.1 Abstract

The wireless AP WP1001 with the smart, streamline and cute appearance apply to work in the family, hotel, bar and dormitory which integrates such functions as wireless AP, PPPoE AP and USB wireless network card, and it also provide you a relaxed wireless environment any time.

The wireless AP is compliant with the wireless standard IEEE802.11b/g and supports by the MIMO technology, and it reaches a wireless transmission rate of 54Mbps, supports the Flow Control Protocol IEEE802.3x and Flow Control for high-speed data transmission, and performs the function to change the wireless network SSID, channel or password by programming.

There is a small slide switch on the frame of AP which designed as a shift key between wireless AP and wireless network card to confirm these two functions.

1.2 Agreement of Network Parameters

- Compliant with the standards of IEEE 802.11g and IEEE 802.11b
- Support USB1.1 and USB2.0
- Support USB general commands, class commands, and custom commands
- Support USB Suspend Mode for low power consumption
- Compatible with the protocol IEEE802.3u
- Support the Flow Control Protocol IEEE802.3x
- Compatible with the protocols of IEEE802.11
- Support the WEP encryption function of IEEE802.11
- A wireless transmission rate of 54Mbps, supported by MIMO technology
- With the Easy-to-use configuration and monitoring program
- Support wireless roaming technology to ensure efficient wireless connection
- Compatible with OS: Windows 2000/XP/XP64/7/Vista/Vista64

/Android/win CE/Mac

2 Product Specifications

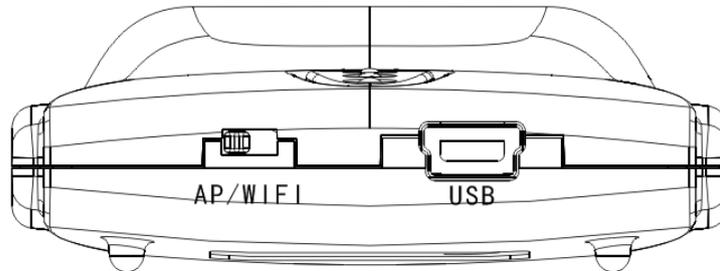
2.1 Technical Specifications

Standards and Protocols	IEEE 802.11g IEEE 802.11b PPPOE CSMA/CA
Bus Type	USB1.1, USB 2.0
Antenna Type	Built-in Antenna
Working Frequency Range	2.4~2.4835GHz
Transmission Rate	11g: 54/48/36/24/18/12/9/6M (self-adapting)
	11b: 11/5.5/2/1M (self-adapting)
Working Channel	Channel 3, 6, 9, 11
Spread Spectrum Technology	DSSS (Direct Sequence Spread Spectrum)
Data Modulation	OFDM/CCK/16-QAM/64-QAM
Sensitivity @PER	54M: -68dBm@10% PER 11M: -85dBm@8% PER 6M: -88dBm@10% PER 1M: -90dBm@8% PER
RF Power	20dBm (Max.)
LED Indicator	Power/LAN/WLAN
Reset Key	Long press for over 3s to clear the password you've set.
AP/WIFI Shift Key	Shift between wireless AP and wireless network card
Power Adapter	5V500mA
Dimension	86*56*20 mm
Weight	50g
Accessories	Adapter, USB Cable, Net Cable, Manual, CD
Environmental Conditions	Working Temperature: 0°C~40°C Storage Temperature: -40°C~70°C Working Humidity: 10%~95% (no condensation)
OS Compatible	Windows 2000/XP/XP64/7/Vista/Vista64/CE/Android/Mac

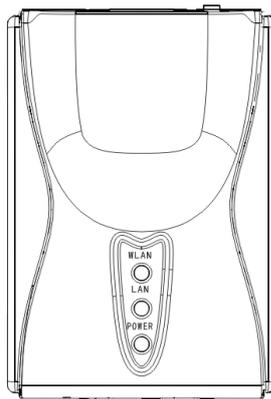
3 Operating Instructions

3.1 Wireless AP Mode---built your own wifi network

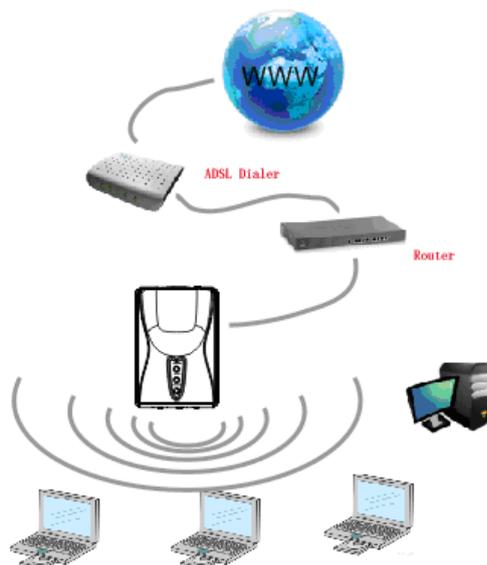
A) Make sure the button [AP/Wi-Fi] is located at “AP” as below:



B) Supply power with DC adaptor to mini USB port of the device; You will see the power indicator is remaining on and WLAN indicator is twinkling (try to reconnect if not).



C1: Connect this device to your LAN with network cable, you will see the LAN indicator twinkling.



Congratulations

You already done the setting now, you can find the AP name "Supereal-*****" and get online wirelessly with your laptop, cell phone (with wifi), iPad, E-book, Internet radio...just go enjoy it without any more setting! Except three reasons:

- 1, Very few people will connect this device directly to modem, but incase if you are, please following the chapter "C2" below.
- 2, If you want to set a password for the wifi net, please following chapter "D"
- 3, You want use this device as an USB wireless network card, see chapter 3.2

C2: Connect the attached network cable with the LAN interface of the ADSL MODEM to wireless network, with the LAN indicator twinkling. Although the wireless network is already connected, it only indicates the connection between the computer and WP 1001. You must dial up to get online to the wireless network. If done that, then you can get online to the wireless network.

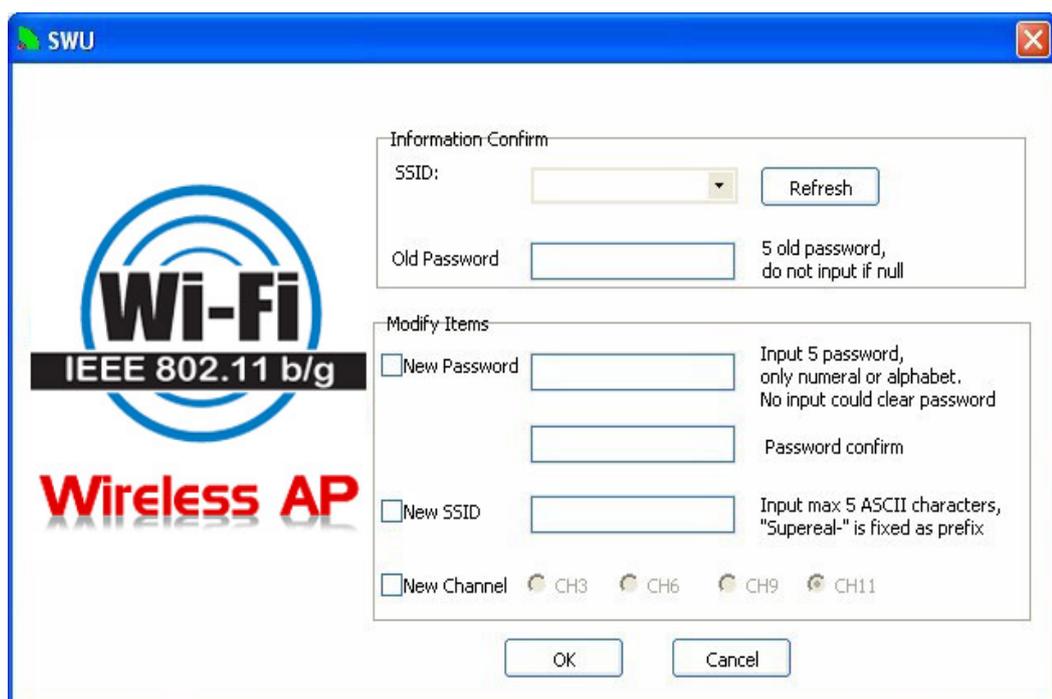




Dialing up to connect the network as above, with the window "Connection --Broadband Connection", please enter the user name and password provided by your ISP and then click *Connect* to get online.

D) Safety Control

1. Use the attached network cable to connect WP 1001 with the computer, and also connect the power adaptor ; insert the attached compact CD to your CD-ROM driver, copy the folder "AP Software" to your computer, double click the Application "SWU" in this folder



2. Refresh the SWU page, and you will see "SuperReal-*****" which means WP1001 working properly.

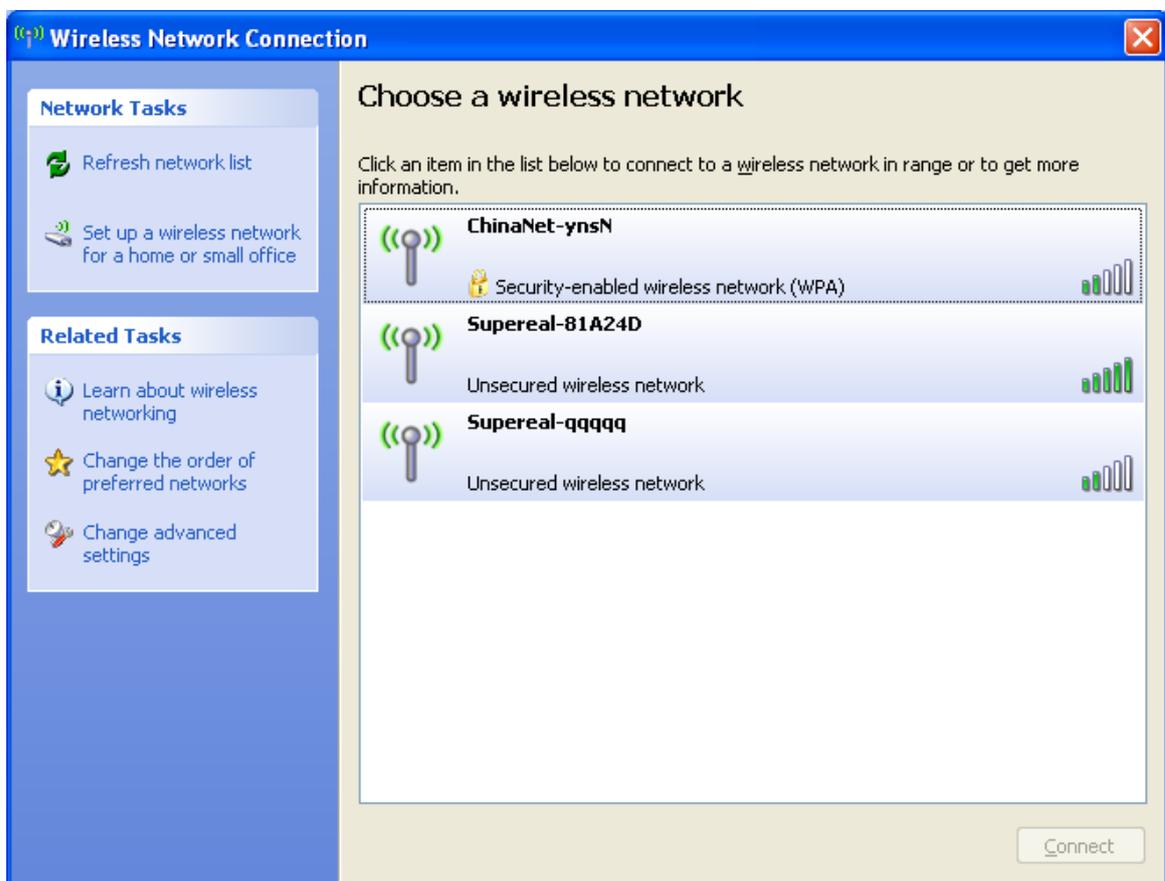
3. Tick optional box "Change Name" and input a new name in the longer box to change the SSID of the wireless network ("SupeReal-" is not subject to any change).

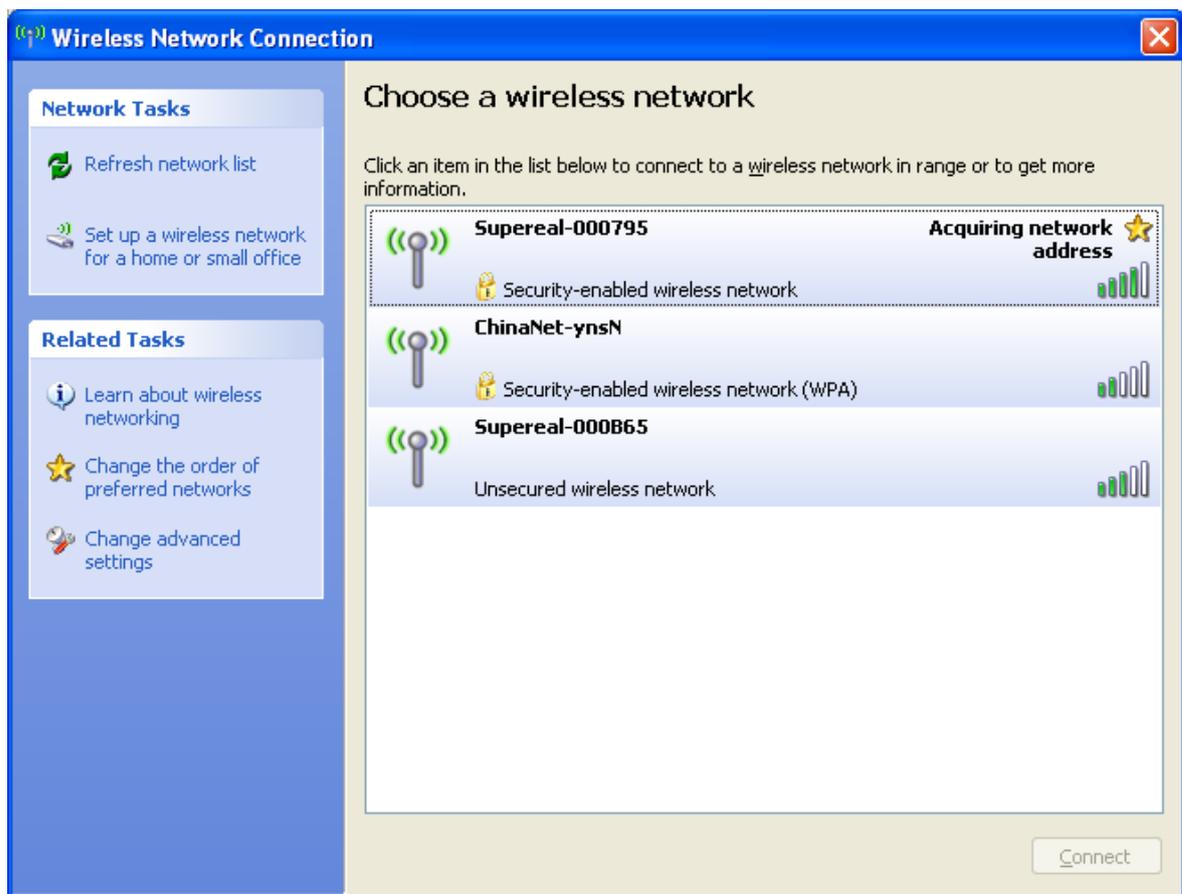
4. Tick optional box "Change Password" and input a new password comprising with 5 digits. The default password is null. If you forget your password, please long press the key [RESET] more than 3s to restart the device, and will clear the password has been set before and getting it back to null. Then you can set a new password again.

5. Tick the box before "Change Channel", and you can select a relatively idle channel.

The settings above will not be changed under a new environment. Just leave them there unless you forget the password.

E) Click the wireless network icon  on the bottom right corner of the desktop to enter the page "Wireless Network Connection", refresh the networks list to find "SupeReal-*****" with the safety wireless network, click "Connect" to enter a new window, input the new password in "Network Key", confirm the new password again, and then click "Connect" to get online with your personal safety wireless network.

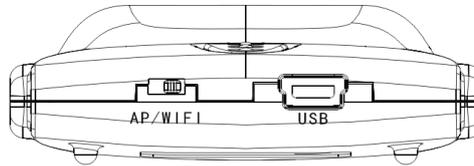




3.2 USB wireless network adaptor mode

For users who want to use it as wireless net card for computer:

- A)** Make sure the key [AP/ Wi-Fi] is located at Wi-Fi as below:



- B)** Connect the device to your computer with USB cable
- C)** Install the Ralink Wireless LAN Driver from the attached CD , and WP1001 will service as wireless network card.

Annex

1. What are wireless signals affected by?

- 1) Walls in the house with a limited space are the major barriers, as WLAN applies the wireless microwave frequency band. The key feature of microwave is nearly linear transmission, with terrible diffraction ability. Therefore, the wireless device behind the barrier receives weak signals or even no signal.
- 2) Physical barriers not only obstruct the wireless microwave signals, but also absorb the electromagnetic energy to generate weak current for leakage. So the floor with reinforced fabric is the major metal barrier for wireless signals in the house. It is almost impossible for the wireless signal to penetrate this barrier. Even if so, the signal is too weak.
- 3) The working frequency compliant with the standard IEEE 802.11b/g (2.4GHz). Most industrial equipments support this working frequency, like microwave oven, Bluetooth device, cordless telephone, or refrigerator. In case of any strong magnetic field nearby, the wireless network will be disturbed.
- 4) When two or more wireless devices work in the same environment, there could be channel conflicts or wireless signal cross-talks.
- 5) Such strong signal interference sources as radio transmitter, welding machine, electric car or high-voltage power transformer within 100m away from the wireless device or cable network may also greatly interfere with the wireless signals or devices.
- 6) The weather may influence the wireless signals outdoor. Wireless signals are usually weakened obviously in stormy or cloudy days and transmitted farther in sunny days.

2. How can we improve the signal transmission quality?

- 1) Select the best location to lay the wireless AP as described below:
 - First, it should be high enough to overcome the barriers and reduce the dead signal area.
 - Second, it should allow direct signal transmission without walls acting as barriers. It is better that the wireless AP is visible to the wireless client in your room.
- 2) Change the channel to reduce wireless cross-talks. Note: There should be at least 5 channels between your wireless signal transmitting channel and other people's.
- 3) Reduce the interference from household appliances to smooth the signals. Lay the wireless AP away from those appliances.

3. Preparation of Peer-to-peer (or Cross) Network Cable

- 1) Hold RJ45 (crystal head) to keep its clips downward, flat side upward, head outward, and opening towards you. Then we number the 8 holes from left to right respectively 1, 2, 3, 4, 5, 6, 7, and 8.
2. Unpack one end of the twisted-pair jacketed and take any two strands (there are four strands) out of the four (one strand in orange white and orange, and the other in green white and green). Insert the four wires into the hole 1, 2, 3, and 6 of RJ45 in order, thereinto, 1+2 in a strand (1: orange white; 2: orange) and 3+6 in the other strand (3: green white; 6: green). Unpack the other end of the twisted-pair jacketed and take out two strands (there are four strands) exactly same as the previous two. Insert the four wires into the hole 1, 2, 3, and 6 of RJ45 in order, thereinto, 1+2 in a strand (1: green white; 2: green) and 3+6 in the other strand (3: orange white; 6: orange). That is, the second end is connected in a reverse way. All wires form two overlapped crosses. (The hole 4, 5, 7, 8 are respectively for wires in blue, blue white, brown white, and brown, with two ends connected in the same way).