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**WL-5470AP**

*Wireless Access Point*

## User's Manual



# Declaration of Conformity

We, Manufacturer/Importer

**OvisLink Corp.**

**5F., NO.6, Lane 130, Min-Chuan Rd.,  
Hsin-Tien City, Taipei County, Taiwan**


Declare that the product

**Wireless AP**

**WL-5470AP**

**is in conformity with**

In accordance with 89/336 EEC-EMC Directive and 1999/5 EC-R & TTE Directive

<u>Clause</u>	<u>Description</u>
■ EN 300 328 V1.6.1 (2004-11)	Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission equipment operating in the 2.4GHz ISM band And using spread spectrum modulation techniques; Part 1 : technical Characteristics and test conditions Part2 : Harmonized EN covering Essential requirements under article 3.2 of the R&TTE Directive
■ EN 301 489-1 V1.5.1 (2004-11)	Electromagnetic compatibility and Radio spectrum Matters (ERM);
■ EN 301 489-17 V1.2.1 (2002-08)	Electromagnetic compatibility(EMC) standard for radio equipment and Services; Part 17 : Specific conditions for wideband data and HIPERLAN equipment
■ EN 50371	Generic standard to demonstrate the compliance of low power Electronic and electrical apparatus with the basic restrictions related to human exposure to electromagnetic field (10MHz – 300GHz) -General public
■ EN 60950-1:2001/ A11:2004	Safety for information technology equipment including electrical business equipment
■ CE marking	

Manufacturer/Importer



Albert Yeh

Vice President

Signature :  
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## WL-5470AP CE Declaration Statement

Country	Declaration	Country	Declaration
<b>cs</b> Česky [Czech]	OvisLink Corp. tímto prohlašuje, že tento WL-5470AP je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.	<b>lt</b> Lietuvių [Lithuanian]	Šiuo OvisLink Corp. deklaruoja, kad šis WL-5470AP atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
<b>da</b> Dansk [Danish]	Undertegnede OvisLink Corp. erklærer herved, at følgende udstyr WL-5470AP overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.	<b>nl</b> Nederlands [Dutch]	Hierbij verklaart OvisLink Corp. dat het toestel WL-5470AP in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
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<b>en</b> English	Hereby, OvisLink Corp., declares that this WL-5470AP is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.	<b>pl</b> Polski [Polish]	Niniejszym OvisLink Corp oświadcza, że WL-5470AP jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
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**5F, No.6 Lane 130,**  
**Min-Chuan Rd, Hsin-Tien City,**  
**Taipei, Taiwan, R.O.C.**

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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 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.

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

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

## **FCC RF Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

For product available in the Europe market, only channel 1~13 can be operated. Selection of other channels is not possible.

## **CE Statement**

Hereby, OvisLink Corp. declares that this device is in compliance with the essential requirement and other relevant provisions of the R&TTE Directive 1999/5/EC.

## **CE Mark Warning**

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

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# Table of Contents

INTRODUCTION .....	1
FEATURES.....	2
PARTS, NAMES, AND FUNCTIONS.....	3
FACTORY DEFAULT SETTINGS.....	5
<i>WL-5470AP</i> .....	5
HARDWARE CONNECTION .....	6
ABOUT THE WIRELESS OPERATION MODES.....	7
ACCESS POINT MODE .....	8
CLIENT MODE (INFRASTRUCTURE) .....	9
CLIENT MODE (AD-HOC) .....	10
BRIDGE MODE .....	11
WDS MODE .....	12
UNIVERSAL MODE.....	13
WISP ( CLIENT ROUTER) MODE.....	14
WISP + UNIVERSAL MODE.....	15
GW MODE .....	16
CONFIGURATION .....	17
MODE.....	18
AP MODE SETTING.....	19
Security.....	20
<i>Advanced Settings</i> .....	24
CLIENT MODE SETTING.....	28
BRIDGE MODE SETTING .....	30
WDS MODE SETTING.....	32
UNIVERSAL MODE SETTING.....	34
WISP (CLIENT ROUTER) MODE SETTING.....	36
WISP + UNIVERSAL MODE SETTING.....	39
GW MODE SETTING .....	41
STATUS .....	43
TCP/IP .....	46
REBOOT .....	48
OTHER .....	49

# Introduction

- **WL-5470AP** is world's most popular multi-function access point. It features an impressive total of 8 wireless multi-function modes that are not available in normal access point. In addition, the ACK timeout and RSSI feature makes it suitable for long distance application. From ordinary AP application to Hotspot and WISP usage, you will find the WL-5470AP is the device you want.
- **WL-5470AP** is an IEEE802.11b/g compliant 11 Mbps & 54 Mbps Ethernet Wireless Access Point. The Wireless Access Point is equipped with two 10/100 M Auto-sensing Ethernet ports for connecting to LAN and also for cascading to next Wireless Access Point.
- **WL-5470AP** provides 64/128bit WEP encryption, WPA-PSK, WPA2-PSK and IEEE802.1x which ensures a high level of security to protect users' data and privacy. The MAC Address filter prevents the unauthorized MAC Addresses from accessing your Wireless LAN. Your network security is therefore double assured. The web-based management utility is provided for easy configuration that your wireless network connection is ensured to be always solid and hassle free.

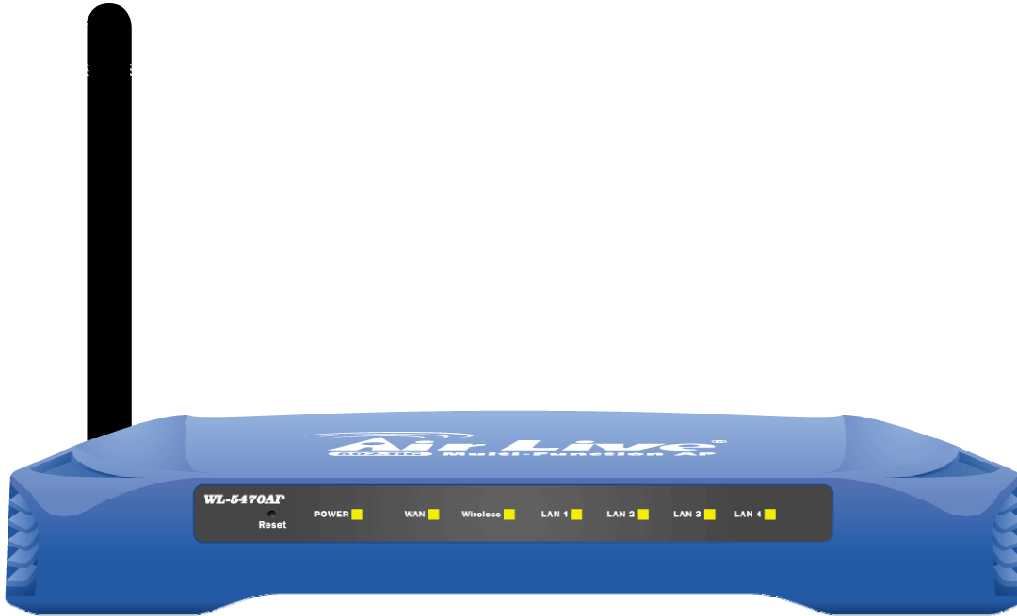


# Features

1. 4x100Mbps LAN ports for Wireless AP cascade.,2MB flash,16MB SDRAM.
2. TX output power is limited to 20dBm (EU), 23dBm (FCC), up to 25dBm (South America).
3. **AP , Client, Bridge ,WDS, Universal** mode.
4. **WISP Client Router, WISP+ Universal, Gateway** mode.
5. Allows WEP 64/128 bit.
6. Support WPA-PSK, WPA2-PSK encryption.
7. Support data rate automatic fallback.
8. Automatic channel selection.
9. Client access control.
10. Supports 802.1x/Radius client with EAP-TLS, TKIP, AES encryption.
11. Supports IAPP.
12. Adjustable Tx power, Tx rate, and SSID broadcast.
13. ACK Timeout , Watch dog function.
14. Web interface management.
15. Support System event log and statistics.
16. MAC filtering (For wireless only).

# Parts, Names, and Functions

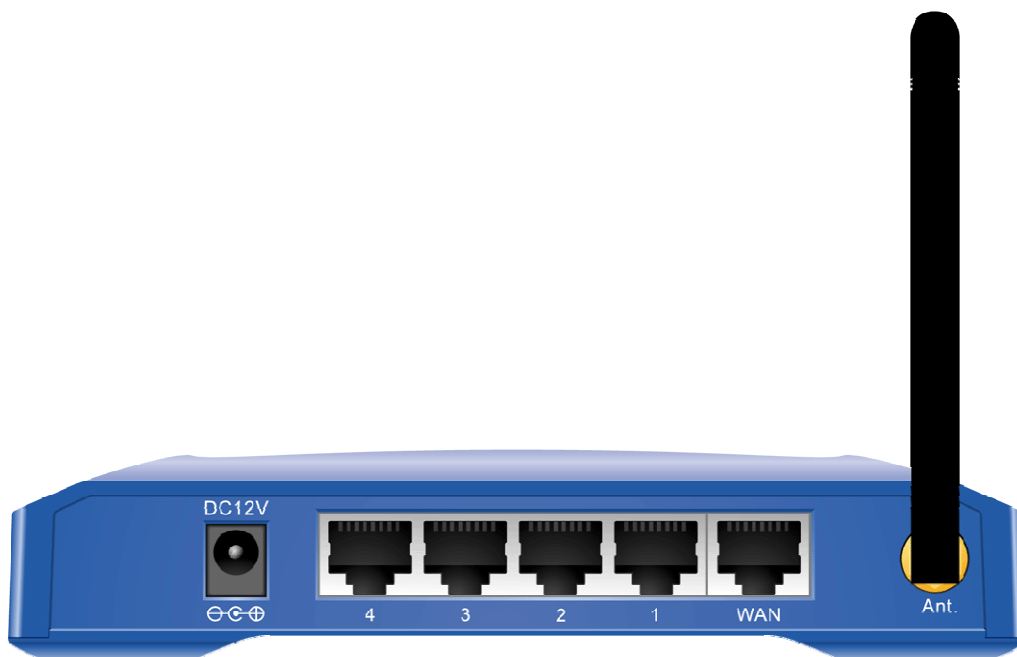
## 1. Front Panel: LED Indicators



LED	Function	Color	Status	Description
<b>Power</b>	Power indication	Green	On	Power is being applied to this product.
<b>WAN</b>	WAN port activity	Green	Blinking	The WAN port is link.
<b>Wireless</b>	Wireless activity	Green	Solid	The wireless function is ON.
			Blinking	Sending or receiving data via wireless.
<b>LAN 1</b>	Link activity	Green	Blinking	An active station is connected to the corresponding LAN port.
<b>LAN 2</b>				
<b>LAN 3</b>				
<b>LAN 4</b>				
<b>Reset</b>	Reset	Button		Press over 3 seconds to reboot this device. Press for over 10 seconds to restore factory settings. Performing the Factory Reset will erase all previously entered device settings.

**Table 1: LED Indicators**

## 2. Rear Panel: Connection Ports



Port	Functions
DC 12V	Connects the power adapter plug.
LAN 1	Connects inside network group.
LAN 2	
LAN 3	
LAN 4	
WAN	Connects inside network group or outside internet.
Ant.	Connects antenna.

**Table 2: Connection Ports**

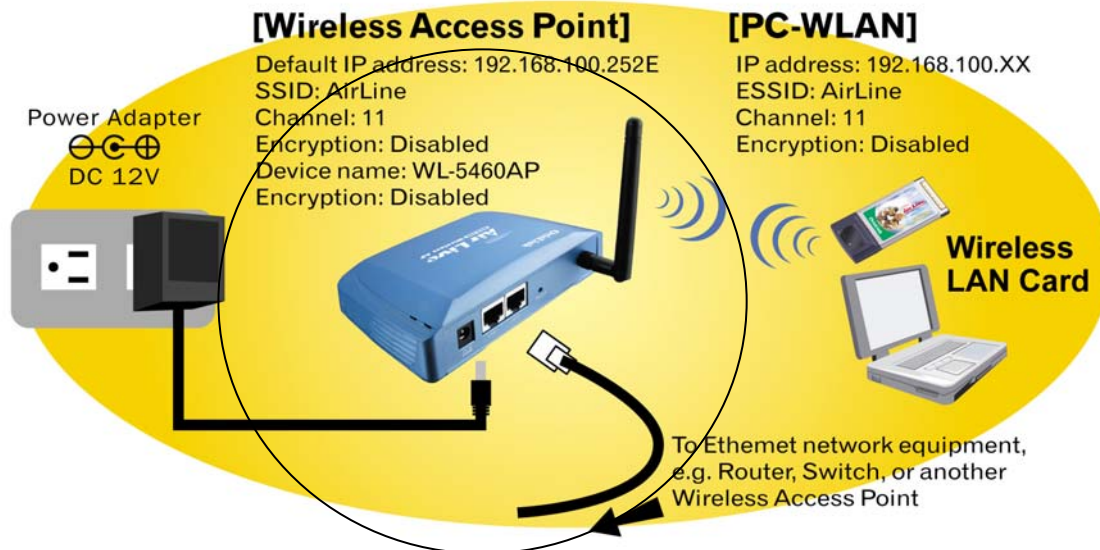
## Factory Default Settings

Setting	Wireless Access Point
Device Name	<b>WL-5470AP</b>
SSID	Default value: <b>airlive</b>
Channel	Default value: <b>11</b> in the USA/Canada market; Default value: <b>13</b> in the Europe market
WEP	Default value: <b>Disabled</b>
IP Address	Default value: <b>192.168.100. 252</b>
DHCP Server	<ul style="list-style-type: none"> <li>In <b>AP</b>, <b>Client</b>, and <b>GW</b> mode, the default DHCP Server is <b>disabled</b>, Please set your PC's IP to the same subnet as the AP to access the AP.</li> <li>In <b>WISP</b>, mode, the default DHCP server is <b>enabled</b>. Please restart your PC to renew the IP address.</li> </ul>
DHCP Server IP Range	192.168.100.100~192.168.100.200

**Table 3: Default Setting**

# Hardware Connection

Note: Before you starting hardware connection, you are advised to find an appropriate location to place the Access Point. Usually, the best place for the Access Point is at the center of your wireless network, with line of straight to all your wireless stations. Also, remember to adjust the antenna; usually the higher the antenna is placed the better will be the performance.



1. Connect to your local area network: connect an Ethernet cable to one of the Ethernet port.
2. (LAN1 to LAN4) of this Wireless Access Point, and the other end to a hub, switch, router, or another wireless access point.
3. Power on the device: connect the included AC power adapter to the Wireless Access Point's power port and the other end to a wall outlet.

## • **Check the LED:**

The Power and LAN # LED should be ON. LAN# LED will even blink if there is traffic.

The Link/Act LED will be on in static when associated with a station and blink whenever this AP receives data packets in the air.

If the Status LED glows after self-test, it means the Wireless Access Point fails on self test. Please ask your dealer for technical support.

4. Please make sure your computer IP is in the same subnet as the AP (i.e. 192.168.100.x).
5. please make sure your computer has wireless network adapter installed.
6. Open the web browser and enter <http://192.168.100.252/>.

## About the Wireless Operation Modes

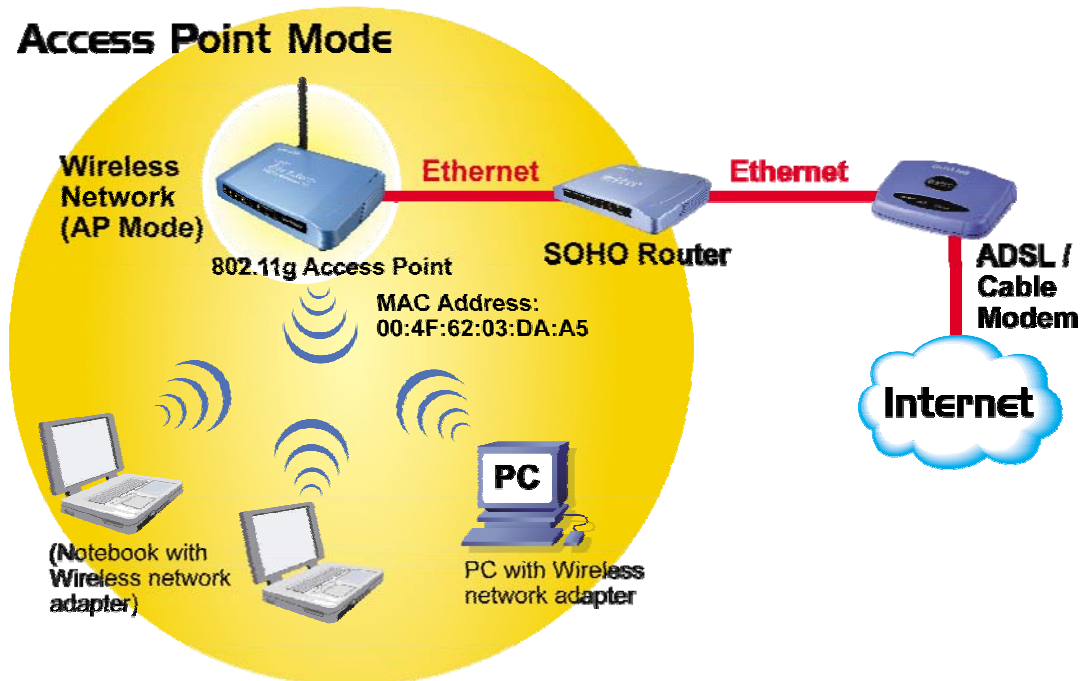
The WL-5470AP v2 device provides all 7 modes of wireless operational applications with:

- 1 **Access Point Mode.**
- 2 **Client Mode.**
- 3 **Bridge Mode.**
- 4 **WDS Mode.**
- 5 **Universal Mode.**
- 6 **WISP (Client Router) Mode.**
- 7 **WISP + Universal Mode.**
- 8 **GW Mode**

This device is shipped with configuration that is functional right out of the box. If you want to change the settings in order to perform more advanced configuration or even change the mode of operation, you can use the web-based utility provided by the manufacturer as described in the following sections.

## Access Point Mode

When acting as an access point (default setting), this device connects all the stations (PC/notebook with wireless network adapter) to a wired network. All stations can have the Internet access if only the Access Point has the Internet connection. See the sample application below.



To set the operation mode to “Access Point”, please go to “Mode →AP” and click the **Setup** button.

WLAN Access Point

Mode | Status | TCP/IP | Reboot | Other

### Wireless Mode

<input checked="" type="radio"/> AP	<input type="button" value="Setup"/>	Access Point.
<input type="radio"/> Client	<input type="button" value="Setup"/>	Client-Infrastructure / Client Ad-Hoc.
<input type="radio"/> Bridge	<input type="button" value="Setup"/>	Bridge.
<input type="radio"/> WDS Repeater	<input type="button" value="Setup"/>	WDS Repeater.
<input type="radio"/> Universal Repeater	<input type="button" value="Setup"/>	Universal Repeater.
<input type="radio"/> WISP	<input type="button" value="Setup"/>	WISP.
<input type="radio"/> WISP + Universal Repeater	<input type="button" value="Setup"/>	WISP + Universal Repeater.
<input type="radio"/> GW	<input type="button" value="Setup"/>	AP + GATEWAY.

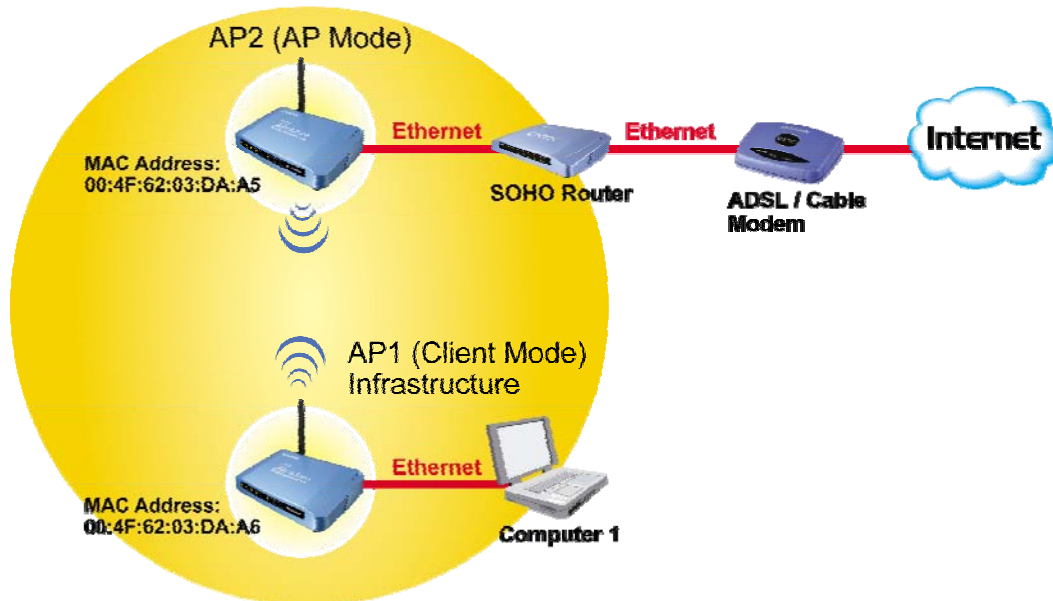
*This page is used to setup different wireless mode.*

## Client Mode (Infrastructure)

If set to Client (Infrastructure) mode, this device can work like a wireless station when it's connected to a computer so that the computer can send packets from wired end to wireless interface.

Refer to the illustration below. This station (AP1 plus the connected computer 1) can associate to another Access Point (AP2), and then can have the Internet access if the other Access Point (AP2) has the Internet connection.

### Client Mode (Infrastructure)



To set the operation mode to “**Client (Infrastructure)**”, Please go to “**Mode → Client**” and click the **Setup** button.

In the “**Network Type**” field, select as “**infrastructure**” for configuration.

The screenshot shows the 'Air Live' WLAN Access Point configuration page. The 'Wireless Mode' section is expanded, showing a list of modes with radio buttons and 'Setup' buttons. The 'Client' mode is selected.

Mode	Status	TCP/IP	Reboot	Other
AP	<input type="radio"/>			Access Point.
Client	<input checked="" type="radio"/>			Client-Infrastructure / Client Ad-Hoc.
Bridge	<input type="radio"/>			Bridge.
WDS Repeater	<input type="radio"/>			WDS Repeater.
Universal Repeater	<input type="radio"/>			Universal Repeater.
WISP	<input type="radio"/>			WISP.
WISP + Universal Repeater	<input type="radio"/>			WISP + Universal Repeater.
GW	<input type="radio"/>			AP + GATEWAY.