OvisLink

www.ovislink.com.tw

AirLive WL-5430AP

Wireless Access Point

User's Guide

1.0 Introduction

This document is the user's manual for the OvisLink AirLive WL-5430AP.

1. Quick Start

The default IP address of the **AirLive WL-5430AP** is 192.168.0.10. The login is "admin" and password is "ovislink".

1. Connect an antenna to the SMA connector closer to the LEDs. Note that there are two SMA connectors on the board. The SMA connector closer to the LEDs is required. It is optional to connect an antenna to the other connector

2. Connect the **AirLive WL-5430AP** to a PC using an Ethernet cable.

3. Plug in the 12V power supply.

4. Make sure the PC has a IP address on the 192.168.0.xxx subnet, such as 192.168.0.100.

5. Open your web browser and navigate to 192.168.0.10.

6. Type "admin" for the login field and "password" for the password.

7. The default out-of-box operating mode is Access Point (AP) mode. To switch to Repeater, P2P, PMP or Client mode, go to the Mode page and select the desired mode. Click Apply. The board will reboot into the desired mode.

8. After the board reboots, go to the Mode page and click Setup. Configure the applicable properties for that mode, such as security, SSID, channel, etc.

9. The AirLive WL-5430AP should now be ready to use.

3. Operating Modes

This section provides an overview of the All-into-1 operating mode.

3.1 Introduction to Operating Modes

3.1.1 Traveler's AP Mode

By default, the out-of-box operational mode is Access Point (AP) Mode (or Traveler's AP Mode). When the system is reset to the default manufacturing settings, the operating mode reverts to AP Mode. In AP Mode, the system functions as a standard AP, where wireless clients connected to the AP can then connect to other wireless clients or to the wired network. For example, when traveling to a hotel that has high-speed internet access, the user can connect to the Internet through the AP which is connected to an Ethernet cable in the room (see Figure 1).

The **AirLive WL-5430AP** acts only as a ISO Layer 2 bridge and does not act as a DHCP server. Therefore, it does not supply dynamic IP addresses and relies instead on the network to supply them.



3.1.2 Repeater Mode

A repeater is placed between an AP and a client to extend the distance between the two WLAN devices. Functioning as a repeater, the **AirLive WL-5430AP** connects to both a client card as an AP and to another AP. Two repeater modes are available in the All-into-1: • WDS Repeater:

WDS Repeaters connect as APs to other APs using the WDS link and MAC address to identify one another.

• Universal Repeater:

Universal Repeaters connect as child clients to parent APs using the SSID to connect.

Figure 2 shows an example of a Repeater network with two **AirLive WL-5430AP** Repeaters connected to a **AirLive WL-5430AP**, with each Repeater allowing wireless clients to associate.



3.1.2.1 WDS Repeaters

Wireless Distribution System (WDS) functionality is an industry standard wireless AP mode (repeater) that enables wireless bridging in which WDS APs communicate with one another using a WDS link. In typical repeater applications, APs connecting to other APs equipped with WDS functionality must also support WDS. Typically, repeaters will not function properly with other APs that are not equipped with WDS. Figure 3 shows an example of a WDS Repeater network with **AirLive WL-5430AP** Repeaters in Parent/Child configurations with other Repeaters.



3.1.2.2 Universal Repeaters

When configured as a Universal Repeater, the **AirLive WL-5430AP** allows connectivity to APs that are not equipped with WDS. Figure 4 shows an example of a WDS Repeater network.



3.1.3 Point-to-Point (P2P) Mode

Two **AirLive WL-5430AP** devices, each in Point-to-Point (P2P) Mode, establish a wireless connection between two wired networks, as shown in Figure 5. The two **AirLive WL-5430AP** devices operating in P2P Mode do not allow client associations.

To configure the **AirLive WL-5430AP** devices to establish a P2P wireless bridge, ensure the following:

1. Enter the MAC address of P2P-2 device in the P2P MAC address field in the P2P-1 device.

2. Enter the MAC address of P2P-1 device in the P2P MAC address field in the P2P-2 device.



3.1.4 Point-to-Multipoint (PMP) Mode

An **AirLive WL-5430AP** device operating in Point-to-Multipoint (PMP) Mode wirelessly connects two or more wired networks, as shown in Figure 6. The root **AirLive WL-5430AP** device (LAN1) operates in PMP Mode, while the other **AirLive WL-5430AP** devices (LAN2, LAN3) must operate in P2P Mode.

When operating in PMP Mode, the **AirLive WL-5430AP** device does not allow client associations.

The user must enter the MAC addresses (up to six) of each P2P device into the PMP system table of Remote AP MAC addresses.



3.1.5 Client Mode

When set to Client Mode, the **AirLive WL-5430AP** device associates with an AP within its range.

Figure 7 shows the Client Mode **AirLive WL-5430AP** operating as a wireless client in infrastructure mode.

Figure 8 shows the Client Mode AirLive WL-5430AP joined with another Client Mode AirLive WL-5430AP device in an Ad-Hoc network.

The Client behaves like a normal wireless client.



4. Wireless Security Support

The AirLive WL-5430AP supports wireless encryption as shown in Table1.

Table 1: Wireless Security

Mode	WEP	WPA-PSK	WPA2	WPA/WPA2 Mixed
AP	Yes	Yes	Yes	Yes
Repeater (WDS)	Yes	No	No	No
Repeater (Universal)	Yes	Yes	No	No
P2P	Yes	No	No	No
РМР	Yes	No	No	No
Client (Infrastructure)	Yes	Yes	No	No
Client (Ad-Hoc)	Yes	No	No	No

5. Mode Selection

The first step in using the **AirLive WL-5430AP** is selecting the operating mode. The default operating mode is AP Mode.

To view the web page for the device, open a web browser and enter 192.168.0.10 (default IP address of the device) as the URL. The default username is "admin" and the default password is "password." Figure 9 shows the page displayed once logged in.

To select a mode, click the Mode tab. Click the radio button next to the desired mode and click the Apply button. The device will reboot in the selected mode. After the board reboots, click the Setup button to begin configuring the device.

The "What's This?" button opens a popup window with a brief description of each mode.

Figure 9: Mode Page



6. AP Setup

6.1 Basic Setup

To configure the **AirLive WL-5430AP** in AP Mode, select AP from the Mode page (Figure 9), allow the board to reboot, and click the AP: Setup button. Figure 10 and Table 2 show the basic AP Mode setup options.

Figure 10:AP Setup Page

🏄 WL-5430AP - Microsoft Inter	temet Explorer	_8×
File Edit View Favorites	es Tools Help	18
← Back - → - 🙆 🙆 🙆	🚮 😡 Search 🝙 Favorites 🛞 Media 🎯 🔂 - 🎒 🖾 📄 📖	
Address 🙆 http://www.msn.co	n.com/	✓ ♂Go Links »
OvisLin The Total Networking Solution	utions 🔊 🖗 🔊	
Mode State	atus Admin LAN	
Currently Running Current Setup	•Client Mode •AP Mode •Repeater Mode •P2P Mode •PMP Mode •Client Mode •AP Mode •Repeater Mode •P2P Mode •PMP Mode	
MODE	E 🔿 802.11b 🔿 802.11g 🖲 Mixed	
SSID	○ 802.11b ○ 802.11g ④ Mixed	
AutoLink	k OvisLink	
Boost Mode	e 💿 Disable 🔘 Enable	_
Broadcast SSID	D 💿 Disable 🔘 Enable	
Channel	O Disable 💿 Enable	
410.000	Channel 6 💌	
Security	y ○ Disable ④ WEP ○ WPA ○ WPA2 Setup	
Advanced Settings	S WPA & WPA2 Mixed Mode	
Access Filter	Setup	
	Setup	
	Apply Cancel	
		-
e		🖉 Internet

Table	2:
-------	----

Field	Description
Mode	Selects 802.11g/b mode: 802.11g only, 802.11b only, or Mixed
SSID	Wireless Network Name
AutoLink	When AutoLink is enabled, the configuration utility automatically patches the MAC Address to the SSID. This enables the client card to generate a profile of the AP connected to with AutoLink. To change the SSID, uncheck the AutoLink radio button and change the SSID. Then, recheck the AutoLink radio button to continue.
Boost Mode	When used with Marvell client cards, Boost Mode enhances throughput an additional 30% at 54 Mbps, and extends the additional throughput at 2x the original 54 Mbps range. The result is a relative throughput improvement of up to 300 feet.
SSID Broadcast	Enable/disable the SSID broadcast feature.
Channel	Selects the channel
Security	Select Disable, WEP, WPA, WPA2, WPA/WPA2 Mixed mode security. Select the option, and click the Setup button. Default: Disable Security.
Advanced Settings	Click Setup to configure advanced settings.
Access Filter	Click Setup to configure the access filter

6.2 Security Setup

To enable security, select the desired security mode (WEP or WPA) from the AP setup page and click Setup to enter the keys.

Figure 11: WEP Configuration

🚈 WL-5430AP:WEP - Microso	ft Internet Explorer	
WEP Authentication Type WEP Length	 Open Shared Key WEP-64 WEP-128 	
Mode Passphrase	● HEX ○ ASCII	Generate Clear
Key 1 Key 2 Key 3	*****	
Key 4 Default TX Key	Key 1 Key 2 Key Apply	r 3 🔿 Key 4

The following tables describe the security setup options in more detail.

Table 3: AP Mode — WEP Configuration

Field	Description
Authentication Type	Choose Open or Shared Key
WEP Length	Select WEP encryption key length: 64 bits or 128 bits.
Mode	Selects the WEP key format, ASCII or Hex
Passphrase	Passphrase used to generate the WEP keys. Click the Generate button to generate the keys. Click the Clear button to clear the Passphrase field.
Key 1-4	WEP keys. Entered in the format specified by the WEP Length and Mode fields.
Default Tx key	Select default WEP key from Keys 1-4.

Figure 11: WPA Configuration

🕗 WL-5430AP:WEP - Micros	oft Internet Explorer	- 🗆 ×
WPA		
WPA Data Encryption	ТКІР 🛩	
Authentication Method	💿 PSK (Pre-Shared keys) 🦳 802.1X	
WPA Passphrase	******	
Group Re-Key Time (seconds)	86400	
	Apply Close	

Table 4: AP Mode — WPA Configuration

Field	Description
WPA Data	Select AES or TKIP.
Encryption	
Authentication	Select Pre-Shared Key (PSK) or 802.1X.
Method	
WPA	WPA key provided by the user.
Passphrase	Click the Clear button to clear the Passphrase field
Group Re-Key	Group Re-Key interval (seconds)
Time	

Figure 12: WPA2 Configuration

🖉 WL-5430AP:WEP - Microso	ft Internet Explorer	
WPA2		
WPA2 Data Encryption	AES 🐋	
Authentication Method		
WPA2 Passphrase	*****	
Group Re-Key Time (seconds)	86400	
	Apply Close	

Table 5: AP Mode — WPA2 Configuration

Field	Description
WPA2 Data	Select AES.
Authentication Method	Select Pre-Shared Key (PSK) or 802.1X.
WPA2 Passphrase	WPA2 key provided by the user. Click the Clear button to clear the Passphrase field
Group Re-Key Time	Group Re-Key interval (seconds)

Figure 13: WPA/WPA2 Mixed Configuration

🚈 WL-5430AP: WEP - Microso	ft Internet Explorer	<u>-0×</u>
WPA & WPA2 Data Encryption WPA2 Data Encryption Authentication Method	TKIP V AES V O PSK (Pre-Shared keys)	802.1X
WPA Passphrase	*****	Clear
WPA2 Passphrase Group Re-Key Time (seconds)	86400 Apply Close	Clear

Table 6: AP Mode — WPA/WPA2 Mixed Configuration

Field	Description
WPA Data	Select AES or TKIP.
Encryption	
WPA2 Data	Select AES.
Encryption	
Authentication	Select Pre-Shared Key (PSK) or 802.1X.
Method	
WPA	WPA key provided by the user.
Passphrase	Click the Clear button to clear the Passphrase field
WPA2	WPA2 key provided by the user.
Passphrase	Click the Clear button to clear the Passphrase field
Group Re-Key	Group Re-Key interval (seconds)
Time	

6.3 Advanced Settings

Access the Advanced Settings page by clicking the Advanced Settings: Setup button from the AP Mode setup page (Figure 10). The Advanced Settings page allows configuration of advanced Radio settings and range extension of the **AirLive WL-5430AP** in AP Mode by linking it to up to two repeaters. See Figure 14 and Table 7.

Figure 14: Advanced Settings

🚈 WL-5430AP:WEP - Microsoft	Internet Explorer	
Beacon Interval	100 (msec, range: 20~1000, default: 100)	
RTS Threshold	2347 (range: 256~2347, default: 2347)	
DTIM Interval	2 (range: 1~255, default: 2)	
Protection Mode	💿 Disable 🔿 Enable	
Transmit Rate	Auto 💌	
Preamble Type	🛇 Short 💿 Long 🔿 Auto	
Connect Repeater	🔿 Disable 💿 Enable	
	Repeater MAC Address 00:4F:66:00:00:01	
	Repeater MAC Address 00:00:00:00:00	
	Apply Close	

The following table describes the setup options in detail.

Table 7: AP Advanced Settings

Field	Description
Beacon Interval	Beacon interval (in milliseconds)
RTS Threshold	RTS threshold (Bytes)
DTIM Interval	DTIM interval
Protection Mode	Allows user to force 802.11g protection (RTS/CTS) mode off.
Transmit Rate	Selects the transmit rate: Auto or a fixed rate
Preamble Type	Selects short preamble, long preamble, or Auto
Connect Repeater	Enable/Disable the use of a Repeater (WDS Repeater mode only).

Repeater MAC	MAC address for each Repeater. Up to two Repeaters
Address	may be connected.

6.3.1 Connect Repeater

Up to two Repeaters may be connected. If a Repeater is used with the AP:

- 1. Go to the Advanced Settings page.
- Select Enable for the "Connect Repeater" field.
 Enter the MAC address for each Repeater in the "Repeater MAC Address" field.

6.4 Access Filter

Click the Access Filter: Setup button from the AP Mode setup page (Figure 10) to access the Access Filter page. The Access Filter page allows the user to configure the AP to allow or deny association to itself based on the MAC address of the client. Up to 32 MAC addresses can be added to the list. Figure 15 and Table 8 detail the options.

Figure 15: Access Filter

SOAF. WEF - MICIOSOIT	nternet Explorer	<u>.</u>
MAC Filtering Filter Mode	 Enable Disable Only deny PCs with M. Only allow PCs with M. 	AC listed below to access this device
Filter List	1 00:00:00:00:00:00	17 00:00:00:00:00
	2 00:00:00:00:00:00	18 00:00:00:00:00:00
	3 00:00:06:00:00:00	19 00:00:00:00:00:00
	4 00:00:00:00:00:00	20 08:00:00:00:00:00
	5 00:00:00:00:00:00	24 00:00:00:00:00:00
	6 00:00:00:00:00	22 00:00:00:00:00
	7 00:00:00:00:00:00	23 00:00:00:00:00:00
	8 00:00:00:00:00	24 00:00:00:00:00
	9 00:00:00:00:00	25 00:00:00:00:00:00
	10 00:00:00:00:00:00	26 00:00:00:00:00
	11 00:00:00:00:00	27 00:00:00:00:00:00
	12 06:00:00:00:00:00	28 00:00:00:00:00
	13 00:00:00:00:00:00	29 00:00:00:00:00
	14 00:00:00:00:00:00	30 00:00:00:00:00
	15 00:00:00:00:00:00	31 00:00:00:00:00
	16 00:00:00:00:00	32 00:00:00:00:00

Settings

The following table describes the setup options in detail.

Table 8: AP Access Filter Settings

Field	Description	
MAC filtering	Enables/Disables MAC filtering mode	
Filter Mode	Provides the option to allow or deny clients with MAC addresses listed	
Filter List	Up to 32 MAC addresses can be listed.	
MAC addresses	List of MAC addresses to filter	

7. Repeater Setup

To configure the **AirLive WL-5430AP** in Repeater Mode, select Repeater from the Mode page (Figure 9), allow the board to reboot, and click the Repeater: Setup button. Figure 16 and Table 9 show the Repeater Mode setup options.

• To select a Repeater Mode, choose WDS Repeater or Universal Repeater in the Repeater Type field.

• To set up a WDS Repeater, enter the MAC address of the Parent AP/Router (to be connected to the Repeater) in the Parent MAC Address field. To link an additional repeater, check the Enable Linked

Repeater box and enter the MAC address of the additional repeater in the field provided. • To set up a Universal Repeater, enter the SSID of the Parent AP in the Parent SSID field.

7.1 WDS Repeater

WDS is a wireless AP mode (repeater) that enables wireless bridging where WDS APs communicate with one another. APs connecting to other APs equipped with industry standard WDS functionality must also support WDS.

Figure 16: WDS Repeater Mode Setup

🕘 WL-5430AP - Microsoft Intern	et Explorer	
File Edit View Favorites	Tools Help	
← Back + → + 🛞 🙆 🙆	🖞 🔞 Search 🕋 Favorites 🞯 Media 🎯 🖏 - 🎒 🗐 🗐 🚉	
Address 🙆 http://192.168.0.10/	repeater.asp	▼ 🖓 Go Links ≫
OvisLin The Total Networking Solution		
Mode Statt		
Currently Running Current Setup	•Client Mode •AP Mode •Repeater Mode •P2P Mode •PMP Mode •Client Mode •AP Mode •Repeater Mode •P2P Mode •PMP Mode	
NOTE Repeater Type Parent SSID Channel Parent MAC Address	Please note that all repeater settings are duplicated from Access Point settings. If you need to make changes please do so below. If these changes are applied, they will also be duplicated when you choose to active the Access Point. WDS Repeater What's This? Channel 6 Channel 6 Cha	
MODE SSID	○ 802.11b ○ 802.11g ③ Mixed OuisLink	
AutoLink Broadcast SSTD	O Disable C Enable	
Security	Olisable WFP WPA Setup	
Advanced Settings	Setup	
Access Filter	Setup Apply Cancel	-
ê		

7.2 Universal Repeater

Universal Repeaters allow connectivity to APs that are not equipped with WDS.

Figure 17: Universal Repeater Mode Setup

🚈 WL-5430AP - Microsoft Interr	et Explorer	_8×
File Edit View Favorites	Taols Help	10 I
← Back × → • 🛞 🙆 🙆	🖞 😡 Search 📓 Favorites 🛞 Media 🧭 🛃 🚽 🗐 🗐 🗒	
Address 🛃 http://192.168.0.10	/repeater.asp	✓ C→Go Links →
OvisLin The Total Networking Solution Mode Statu	k mu vs Admin LAN	
Currently Running	•Client Mode •AP Mode •Repeater Mode •P2P Mode •PMP Mode	
Current Setup	•Client Mode •AP Mode •Repeater Mode •P2P Mode •PMP Mode	
NOTE Repeater Type Parent SSID Channel Parent MAC Address	Please note that all repeater settings are duplicated from Access Point settings. If you need to make changes please do so below. If these changes are applied, they will also be duplicated when you choose to active the Access Point. Universal Repeater What's This? Channel 6 Enable Linked Repeater	
MODE SSID AutoLink Broadcast SSID Security Advanced Settings Access Filter	 802.11b 802.11g Mixed OvisLink Disable Enable Disable WEP WPA Setup Setup Cancel 	
		Thternet

Table 9: Repeater Setup

Field	Description	
Repeater Type	Select WDS Repeater or Universal Repeater.	
Parent SSID	Wireless Network Name of parent Repeater. NOTE : Only applies to Universal Repeater mode.	
Channel	Selects the channel	
Parent MAC Address	MAC address of Parent AP/Router to which this Repeater is connected. NOTE: Only applies to WDS Repeater mode.	
Mode	Selects 802.11g/b mode: 802.11g only, 802.11b only, or Mixed	

SSID	Wireless Network Name.	
AutoLink	Enable/disable the AutoLink feature. When AutoLink is enabled, the configuration utility automatically patches the MAC Address to the SSID. This enables the client card to generate a profile of the AP connected to with AutoLink. To change the SSID, uncheck the AutoLink radio button and change the SSID. Then, recheck the AutoLink radio button to continue.	
Broadcast SSID	Enable/disable the SSID broadcast feature.	
Security	Select Disable, WEP, or WPA security. Select the option, and click the Setup button to enter the key(s) for WEP or WPA.	
Advanced Settings	Click Setup to configure advanced settings.	
Access Filter	Click Setup to configure the access filter	

7.3 Security Setup

To enable security, select the desired security mode (WEP or WPA) from the Repeater Mode setup page (Figure 16) and click the Setup button to enter the keys. The following tables describe the security setup options in more detail.

Table 10: WEP Setup

Field	Description		
WEP Length	Selects the WEP key length: 64 bits or 128 bits.		
Mode	Selects the WEP key format, ASCII or Hex		
Passphrase	Passphrase used to generate the WEP keys. Click the Generate button to generate the keys. Click the Clear button to clear the Passphrase field.		
Key 1-4	WEP keys		
Default Tx key	Selects the default WEP key (1-4)		

Table 11: WPA Setup

Field	Description
Authentication Method	Select PSK mode
Passphrase	WPA key
Group Re-Key Time	Group Re-Key interval (seconds)

7.4 Advanced Settings

Access the Advanced Settings page by clicking the Advanced Settings: Setup button from the Repeater Mode setup page (Figure 16). The Advanced Settings page allows the user to

configure advanced Radio settings for the Repeater. Figure 18 and Table 12 detail the options.

Figure 18: Repeater Mode — Advanced

WL-5430AP: Advanced Settin	gs – Microsoft Internet Explorer	-IIX
Beacon Interval:	100 (msec, range: 20~1000, default: 100)	
RTS Threshold:	2347 (range: 256~2347, default: 2347)	
DTIM Interval:	2 (range: 1~255, default: 2)	
Protection Mode:	💿 Disable 🔘 Enable	
Transmit Rate:	Auto 🖌	
Preamble Type:	🔿 Short 🖲 Long 🔿 Auto	
	Apply Close	

Table 12: Repeater Advanced Settings

Field	Description
Beacon Interval	Beacon interval (in milliseconds)
RTS Threshold	RTS threshold (Bytes)
DTIM Interval	DTIM interval
Protection Mode	Allows user to force 802.11g protection (RTS/CTS) mode off.
Transmit Rate	Selects the transmit rate: Auto or a fixed rate
Preamble Type	Selects short preamble, long preamble or Auto

7.5 Access Filter

Click the Access Filter:Setup button from the Repeater Mode setup page (Figure 16) to access the Access Filter page. The Access Filter page allows the user to configure the Repeater to allow or deny association to itself based on the client's MAC address. Up to 32 MAC addresses can be added to the list.

The Repeater Mode Access Filter webpage is identical to the one for AP Mode. See Figure 15 for reference. Table 13 details the options.

Table 13: Repeater Access Filter Settings

Field	Description
MAC filtering	Enables/Disables MAC filtering mode
Filter Mode	Provides the option either to allow or deny clients with the MAC addresses listed.
Filter List	Up to 32 MAC addresses can be listed.
MAC addresses	List of MAC addresses to filter

8. Point-to-Point (P2P) Setup

8.1 Basic Setup

To configure the **AirLive WL-5430AP** in P2P Mode, select P2P from the Mode page (Figure 9), allow the board to reboot, and click the P2P: Setup button. Figure 19 and Table 14 describe the P2P Mode setup options.

To set up the P2P bridge, the user must enter the MAC address of the other P2P bridge to be connected to this P2P bridge in the AP MAC Address field of the P2P Mode setup page.

Figure 19: P2P Setup

🎒 WL-5430AP - Microsoft Interi	et Explorer	
File Edit View Favorites	Tools Help	10 C
🖛 Back 🔹 🤿 🔹 🛃	👌 🐼 Search 🕋 Favorites 🎯 Media 🏈 🛃 🖌 🎒 🗃 🗐 🔣	
Address 🙆 http://192.168.0.10	p2p.asp	▼ 🖓 Go Links ≫
OvisLin The Total Networking Solution	ns	
Mode State	s Admin LAN	
Currently Running Current Setup	•Client Mode •AP Mode •Repeater Mode •P2P Mode •PMP Mode •Client Mode •AP Mode •Repeater Mode •P2P Mode •PMP Mode	
NOTE	Please note that all P2P settings are duplicated from Access Point settings. If you need to make changes please do so below. If these changes are applied, they will also be duplicated when you choose to active the Access Point.	
AP MAC Address	00:4F:66:00:00:01	
MODE	○ 802.11b ○ 802.11g ④ Mixed	
Channel	Channel 6	
Security	O Disable ③ WEP Setup	
Advanced Settings	Setup	
	Apply Cancel	
E		📄 📄 💕 Internet

Table 14: P2P Setup

Field	Description
AP MAC Address	MAC address of the P2P bridge that this bridge is connected to
Mode	Selects 802.11g/b mode: 802.11g only, 802.11b only, or Mixed
Channel	Selects the channel

Security	Selects the option to disable security or to use WEP security. If using WEP, click the Setup button to enter the key(s).
Advanced Settings	Click Setup to configure advanced settings.

8.2 Security Setup

To enable security, select WEP from the setup page and click Setup to enter the keys. The following tables describe the security setup options in more detail.

Table 15: WEP Setup

Field	Description
WEP Length	Selects the WEP key length: 64 bits or 128 bits.
Mode	Selects the WEP key format, ASCII or Hex
Passphrase	Passphrase used to generate the WEP keys. Click the Generate button to generate the keys. Click the Clear button to clear the Passphrase field.
Key 1-4	WEP keys
Default Tx key	Selects the default WEP key (1-4)

8.3 Advanced Settings

Access the Advanced Settings page by clicking the Advanced Settings:Setup button from the P2P Mode setup page (Figure 19). The Advanced Settings page allows the user to configure advanced Radio settings.Figure 20 and Table 16 detail the options.

Figure 19: P2P Mode— Advanced Settings



Table 16: P2P Advanced Settings

Field	Description
RTS Threshold	RTS threshold (Bytes)
DTIM Interval	DTIM interval
Protection Mode	Allows user to force 802.11g protection (RTS/CTS) mode off.
Transmit Rate	Selects the transmit rate: Auto or a fixed rate
Preamble Type	Selects short preamble, long preamble or Auto

9. Point-to-Multipoint (PMP) Setup

9.1 Basic Setup

To configure the **AirLive WL-5430AP** in PMP Mode, select PMP from the Mode page (Figure 9), allow the board to reboot, and click the PMP: Setup button. Figure 20 and Table 17 describe the PMP Mode setup options.

To set up the PMP bridge, the user must enter the MAC address(es) of the P2P bridge(s) to be connected to this PMP bridge in the AP MAC Address field(s) of the PMP Mode setup page. Up to six MAC addresses can be entered.

Figure 20: PMP Setup

🏄 WL-5430AP - Microsoft Inten	net Explorer	
File Edit View Favorites	Taols Help	(B)
+ Beck → → 🛞 🙆 🙆	🖞 🐼 Search 🚡 Favorites 🎯 Media 🧭 🛃 🚽 🗃 📃 📖	
Address 🛃 http://192.168.0.10	/pmp asp	▼ 🖉 Go Links »
OvisLin The Total Networking Solution Mode Statu	Admin LAN	<u></u>
Currently Punning		
Current Setun	*Chent Mode *AP Mode *Repeater Mode *P2P Mode *PMP Mode *Client Mode *AP Mode *Repeater Mode *P2P Mode *PMP Mode	
NOTE	Please note that all PMP settings are duplicated from Access Point settings. If you need to make changes please do so below. If these changes are applied, they will also be duplicated when you choose to active the Access Point.	
Remote AP	10	
Connection Mode	2 gar	
AP1 MAC Address	00:00:00:00:00	
AP2 MAC Address	00:00:00:00:00	
AP3 MAC Address	00:00:00:00:00	
AP4 MAC Address	00:00:00:00:00	
AP5 MAC Address	00:00:00:00:00	
AP6 MAC Address	00:00:00:00:00	
MODE	○ 802.11b ○ 802.11g ④ Mixed	
Channel	Channel 6 💙	
Security	O Disable 💿 WEP Setup	
Advanced Settings	Setup	
	Apply Cancel	
	and a second of	
2 1		
2		1 I Manuelle

Table 17: PMP Setup

Field	Description
Remote AP Connection Mode	Default is Static.
AP MAC Address (1-6)	MAC address(es) of the P2P bridges that are connected to this PMP bridge

Mode	Selects 802.11g/b mode: 802.11g only, 802.11b only, or Mixed
Channel	Selects the channel
Security	Selects the option to disable security or to use WEP security. If using WEP, click the Setup button to enter the key(s).
Advanced Settings	Click Setup to configure advanced settings.

9.2 Security Setup

To enable security, select WEP from the setup page and click Setup to enter the keys. The following tables describe the security setup options in more detail.

Table 18: WEP Setup

Field	Description
WEP Length	Selects the WEP key length: 64 bits or 128 bits.
Mode	Selects the WEP key format, ASCII or Hex
Passphrase	Passphrase used to generate the WEP keys. Click the Generate button to generate the keys. Click the Clear button to clear the Passphrase field.
Key 1-4	WEP keys
Default Tx key	Selects the default WEP key (1-4)

9.3 Advanced Settings

The Advanced Settings page allows you to configure advanced Radio settings. The following table describes the setup options in detail.

Table 19: PMP Advanced Settings

Field	Description
RTS Threshold	RTS threshold (in bytes)
DTIM Interval	DTIM interval
Protection Mode	Allows user to force 802.11g protection (RTS/CTS) mode off.
Transmit Rate	Selects the transmit rate: Auto or a fixed rate
Preamble Type	Selects short preamble, long preamble or Auto

10. Client Mode Setup

10.1 Basic Setup

To configure the **AirLive WL-5430AP** in Client Mode, select Client from the Mode page (Figure 9), allow the board to reboot, and click the Client: Setup button. Figure 21 and Table 20 describe the Client Mode setup options.

Figure 21: Client Bridge Setup

🚈 WL-5430AP - Microsoft Interr	et Explorer					
File Edit View Favorites	Tools Help					
← Back 🛞 🙆 🖆	🖞 🔞 Search 📷 Favorites 🎯 Media 🚳 🖏 🖆 🥶 📰 🗐 📖					
Address 🙆 http://192.168.0.10/	client.asp					
OvisLin The Total Networking Solution						
Mode Statu	is Admin LAN					
Currently Running Current Setup	•Client Mode •AP Mode •Repeater Mode •P2P Mode •PMP Mode •Client Mode •AP Mode •Repeater Mode •P2P Mode •PMP Mode					
Station Mode	© 802.11b					
MAC Cloning Mode	◉ Disabled ○ Enabled					
SSID	OvisLink Site Survey					
Operation Mode	Operation Mode O Ad-Hoc O Infrastructure					
Channel	Channel 6 💟					
Security	O Bisable ○ WEP ○ WPA ○ WPA2 Setup Setup					
Preamble Type	○ Short					
Transmit Rate	Auto 💌					
	Apply Cancel					
	*					
ē	e e e e e e e e e e e e e e e e e e e					

Table 20: AP Setup

Field	Description
Station Mode	Selects 802.11g/b mode: 802.11b only or 802.11g/b
MAC Cloning Mode	Enable MAC Cloning Mode. This clones all the MAC addresses of devices connected to the Ethernet (wired) port to a single MAC address sent out wirelessly to an AP or Repeater
SSID	Wireless Network Name. You can enter it directly in this field or click the Site Survey button to select from a list of available networks.

Table 20: AP Setup (Continued)

Field	Description
Operation Mode	Selects Ad-Hoc or Infrastructure mode
Channel	Selects the channel (Ad-Hoc network only)
Security	Selects the option to disable security or to use WEP or WPA security. If using WEP or WPA, click the Setup button to enter the key(s).
Preamble Type	Selects short or long preamble
Transmit Rate	Selects the transmit rate: a fixed rate or Auto

10.2 MAC Cloning

To enable MAC cloning mode, go to the MAC Cloning field on the LAN page and select Enabled. MAC cloning clones all the MAC addresses of the devices connected to the Ethernet (wired) port to a single MAC address sent out wirelessly to an AP or Repeater.

10.3 Client Mode — Site Survey

Clicking the Site Survey button brings up the Site Survey page, which displays the available Access Points and Ad-Hoc networks in the neighborhood. The user then selects the AP or Ad-Hoc network to join. Figure 22 and Table 21 describe the options.

Figure 22: Client Mode — Site Survey

	SSID	Security	Channel	Signal %	Network Type
1	WMU-9000	Disabled	1	61%	Infrastructure
C	WL-5420	WEP Enable	1	38%	Infrastructure
C	WL-1120	Disabled	1	32%	Infrastructure
Э	WL-8000	Disabled	1	47%	Infrastructure
0	802.11g	WEP Enable	3	68%	Infrastructure
0	802.11b	Disabled	6	25%	Infrastructure
0	WMU-9000	WEP Enable	6	55%	Infrastructure
0	WL-5420	Disabled	7	17%	Infrastructure
0	WL-1120	WEP Enable	6	5%	Infrastructure
0	WL-8000	WEP Enable	11	38%	Infrastructure
0	802.11g	Disabled	11	67%	Infrastructure
0	802.11b	WEP Enable	9	72%	Infrastructure
0	1.2.2.1	WEP Enable	11	11%	Infrastructure
0		WEP Enable	6	1%	Infrastructure

 Table 21: Client Mode — Site Survey

Field	Description
SiteSurvey table	Lists the available Access Points and Ad-Hoc networks. To select a wireless network to join, click its radio button.
Scan	Start the Site Survey Scan process.
Join	Select a wireless network. Click the Join button to associate the client bridge with the selected AP/node or Ad-Hoc network.
Close	Close the Site Survey page.

11. Status Page

The status page reports relevant status information for the device, for both the Ethernet and wireless interfaces.

Figure 22: Status Page

🛃 WL-5430AP - Microsoft Inten	net Explorer			_ 문 ×	
File Edit View Favorites	Tools Help				
← Back - → - 🕲 🚯 🙆	🖞 🔕 Search 🕋 Favorite	s @Media 🎯 🗳 🎒 🖬 🗐 📖			
Address 🙆 http://192.168.0.10	/ap_status.asp			▼ 🖉 Go Links ≫	
OvisLin The Total Networking Solution Mode Statu	ons Is Admin	LAN			
Currently Running Current Setup	•Client Mode •AP M •Client Mode •AP M	ode •Repeater Mode •P2P Mode ode •Repeater Mode •P2P Mode	*PMP Mode *PMP Mode		
Ethernet	(00:4F:66:00:00	: 01)			
	IP Address:	192.168.0.10			
	Subnet Mask:	255 . 255 . 255 . 0		_	
	Gateway:	0.0.0.0			
	Link:	Up, 100 Mbps			
Wireless (00:4F:66:00:01)					
	SSID:	OvisLink			
	Channel:	6			
	Coexistence:	802.11b/g Mixed			
	Encryption Function:	Required			
	Link:	Up, Auto rate			
	Station List				
ê				🦉 Internet	

12. Admin Page

The admin page lets you upgrade the device's firmware or change the password.

Figure 23: Admin Pag

File Edit View Favorites Tools Help	10
🖶 Back	
Address 🙆 http://192.168.0.10/ap_admin.asp 🔽 🔗 Go	Links »
OvisLink The Total Networking Solutions	Ŀ
Mode Status Admin LAN	
Currently Running • Client Mode • AP Mode • Repeater Mode • P2P Mode • PMP Mode Current Setup • Client Mode • AP Mode • Repeater Mode • P2P Mode • PMP Mode	
FW Version 5in1_SDK_2.32.4.0(Dec 14 2004 18:13:19) Bootloader: 0.0.0.5	
FW Upgrade	
New Password	
Reconfirm	
Password	
Apply Cancel	
	¥

12.1 Firmware Upgrade

To upgrade the firmware, click the Browse button and select the image file. Click Apply to upgrade.

12.2 Update Password

To change the password, enter the new password in the New Password and Reconfirm Password fields and click Apply.

13. LAN Page

The LAN page lets you set the device's IP address. The device can be configured to use an automatic (DHCP) address or a fixed IP address.

The default IP address is 192.168.0.10.

When the device is in Client mode, the LAN page also provides the MAC cloning option. It is important that before you configure the **AirLive WL-5430AP** device (regardless of the mode it is in) to Automatic IP, you should know how to determine the **AirLive WL-5430AP** device's IP address from the device it is connected to.

Figure 24: LAN Page

