

WLAN 11b Access Point

User's Manual

Terminology

ANSI	American National Standards Institute
AP	Access Point
ССК	Complementary Code Keying
CSMA/CA	Carrier Sense Multiple Access/ Collision Avoidance
CSMA/CD	Carrier Sense Multiple Access/ Collision Detection
DHCP	Dynamic Host Configuration Protocol
DSSS	Direct Sequence Spread Spectrum
FCC	Federal Communications Commission
FTP	File Transfer Protocol
IEEE	Institute of Electrical and Electronic Engineers
IP	Internet Protocol
ISM	Industrial, Scientific and Medical
LAN	Local Area Network
MAC	Media Access Control
NAT	Network Address Translation
NT	Network Termination
PSD	Power Spectral Density
RF	Radio Frequency
SNR	Signal to Noise Ratio
SSID	Service Set Identification
ТСР	Transmission Control Protocol
TFTP	Trivial File Transfer Protocol
WEP	Wired Equivalent Privacy
WLAN	Wireless Local Area Network



INFORMATION TO USER

Product Name: X-Micro WLAN 11b Access Point **Model Name:** XWL-11BARG

1.1 FCC INFORMATION

FCC 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.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The 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 instruction, may cause harmful interference to radio communication. However, there is no grantee that interference will not occur in a particular installation. If this equipment dose 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.

Notice: The Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification not expressly approved by the party responsible could void the user's authority to operate the device.

1.2 REGULATORY INFORMATION

X-Micro WLAN Access Point must be installed and used in strict accordance with the manufacturer's instructions. This device complies with the following radio frequency and safety standards.

USA - Federal Communications Commission (FCC)

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference that may cause undesired operation.

Europe - R&TTE Directive

This device complies with the specifications listed below

- ETS 300-826 General EMC requirements for Radio equipment.
- ETS 300-328 Technical requirements for Radio equipment.

• EN60950 SAFETY REQUIREMENTS FOR RADIO EQUIPMENT

The channel identifiers, channel center frequencies, and regulatory domains of each 22-MHz-wide channel are shown in following Table.

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			MAX. OUT POWER	
COUNTRY		CHANNELS	INDOOR	OUTDOOR
Spain	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
France	2400-2454 MHz	1-8	< 100 mW EIRP	< 100 mW EIRP
France	2454-2483.5 MHz	9-13	< 100 mW EIRP	< 10 mW EIRP
Italy	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
UK	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Netherlands	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Germany	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Austria	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Belgium	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Switzerland	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Luxemburg	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Russia	2400-2483.5 MHz	1-13	<10 mW EIRP	<10 mW EIRP
Ireland	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Portugal	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Norway	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Denmark	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Finland	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Iceland	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Greece	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Lichtenstein	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP
Sweden	2400-2483.5 MHz	1-13	< 100 mW EIRP	< 100 mW EIRP

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1. Introduction

X-Micro WLAN 11b Access Point is a portal that can act as the connection point between the Ethernet CSMA/CD protocol and the wireless CSMA/CA protocol. The Access Point can be easily integrated into your existing wireless network. In large installations, the roaming functionality provided by multiple Access Points allows wireless users to move freely throughout the facility while maintaining seamless, uninterrupted access to the network.

This document describes the steps required for the initial IP address assign and other AP configuration. The description includes the implementation of the above steps.

Notice: It will take about 25 seconds to complete the boot up sequence after powered on X-Micro WLAN 11b Access Point; all LEDs are blank while booting except the Power LED, and after that the WLAN Activity LED will be flashing to show the WLAN interface is enabled and working now.

1.1 Package contents

The package of X-Micro WLAN 11b Access Point includes the following items,

- ✓ X-Micro WLAN 11b Access Point
- \checkmark The AC to DC power adapter
- \checkmark The Documentation CD

Product Name	X-Micro WLAN 11b Access Point
Standard	802.11b(Wireless), 802.3(10BaseT), 802.3u(100BaseT)
Data Transfer Rate	11Mbps(Wireless), 100Mbps(Ethernet)
Modulation Method	DBPSK/ DQPSK/ CCK
Frequency Band	2.4GHz – 2.497GHz ISM Band, DSSS
RF Output Power	< 17 dBm
Receiver Sensitivity	11Mbps better than 8% PER @ -78 dBm
Operation Range	30 to 300 meters (depend on surrounding)
Antenna	External Antenna
LED	Power, Active (WLAN), Act/Link (Ethernet)
Security	64 bit/ 128 bit WEP, MAC address filtering
LAN interface	One 10/100BaseT with RJ45 connector
Power Consumption	7.5V DC Power Adapter

1.2 Product Specifications

Dimension	120 * 75 * 34 mm
Operating Temperature	$0-50^{\circ}$ C ambient temperature
Storage Temperature	-20 - 70°C ambient temperature
Humidity	5 to 90 % maximum (non-condensing)

1.3 Product Features

- Complies with IEEE 802.11b standard for 2.4GHz Wireless LAN.
- Supports 11Mbps data transfer rate with automatic fallback to 5.5M, 2M and 1Mbps.
- > Supports bridging function between wireless and wired Ethernet interfaces.
- Supports 64-bit and 128-bit WEP encryption/decryption function to protect the wireless data transmission.
- Supports IEEE 802.3x full duplex flow control on 10/100M Ethernet interface.
- Supports DHCP client for Ethernet LAN interface auto IP address assignment.
- Supports clone MAC address function.
- Supports WEB based management and configuration.
- 1.4 Top Panel Description



Figure 1 -X-Micro WLAN 11b Access Point Top Panel

LED Indicator	State	Description
1. Power LED	On	X-Micro WLAN 11b AP is powered on.
ሪ	Off	X-Micro WLAN 11b AP is powered off.
2. WLAN Activity LED	Flashing	Data is transmitting or receiving on the antenna.
((•))	Off	No data is transmitting or receiving on the antenna.
3. LAN LINK/ACT LED	Flashing	Data is transmitting or receiving on the LAN interface.
品	Off	No connection is established on LAN interface.

1.5 Rear Panel Description



Figure	2 –	X-Micro	WLAN	11b Acce	ss Point	Rear	Panel

Interfaces	Description		
1. Reset	Push continually the reset button 5 seconds to reset the configuration		
	parameters to factory defaults.		
2. Power	The power jack allows an external DC +7.5 V power supply connection.		
	The external AC to DC adaptor provide adaptive power requirement to the		
	WLAN AP.		
3. LAN	The RJ-45 socket allows LAN connection through a Category 5 cable.		
	Support auto-sensing on 10/100M speed and half/ full duplex; comply with		
	IEEE 802.3/ 802.3u respectively.		
4. Antenna	The Wireless LAN Antenna.		

2 Installation

2.1 Hardware Installation

Step One: Place X-Micro WLAN 11b Access Point to the best optimum transmission location.

The best transmission location for your X-Micro WLAN 11b Access Point is usually at the geographic center of your wireless network, with line of sign to all of your mobile stations.

Step Two: Connect X-Micro WLAN 11b Access Point to your wired network. Connect X-Micro WLAN 11b Access Point by category 5 Ethernet cable to your switch/ hub/ router/ xDSL modem or cable modem. A straight-through Ethernet cable with appropriate cable length is needed.

Step Three: Supply DC power to X-Micro WLAN 11b Access Point. Use only the AC/DC power adapter supplied with X-Micro WLAN 11b Access Point; it may occur damage by using a different type of power adapter. The hardware installation finished.

2.2 Software Installation

There are no software drivers, patches or utilities installation needed, but only the configuration setting. Please refer to chapter 3 for software configuration.

3 Software configuration

There are web based management and configuration functions allowing you to have the jobs done easily.

X-Micro WLAN 11b Access Point is delivered with the following factory default parameters.

Default IP Address: 192.168.1.254 Default IP subnet mask: 255.255.255.0 WEB login User Name: <*empty*> WEB login Password: <*empty*>

- 3.1 Prepare your PC to configure X-Micro WLAN 11b Access Point For OS of Microsoft Windows 95/ 98/ Me:
 - Click the *Start* button and select *Settings*, then click *Control Panel*. The *Control Panel* window will appear.
 Note: Windows Me users may not see the Network control panel. If so, *select* View all Control Panel options on the left side of the window
 - 2. Move mouse and double-click the right button on *Network* icon. The *Network* window will appear.
 - 3. Check the installed list of *Network Components*. If TCP/IP is not installed, click the *Add* button to install it; otherwise go to step 6.
 - 4. Select *Protocol* in the *Network Component Type* dialog box and click *Add* button.
 - Select *TCP/IP* in *Microsoft* of *Select Network Protocol* dialog box then click OK button to install the TCP/IP protocol, it may need the Microsoft Windows CD to complete the installation. Close and go back to *Network* dialog box after the TCP/IP installation.
 - 6. Select *TCP/IP* and click the *properties* button on the *Network* dialog box.
 - 7. Select *Specify an IP address* and type in values as following example.
 - ✓ IP Address: 192.168.1.1, any IP address within 192.168.1.1 to 192.168.1.253 is good to connect the Wireless LAN Access Point.
 - ✓ IP Subnet Mask: 255.255.255.0
 - 8. Click OK and reboot your PC after completes the IP parameters setting.

For OS of Microsoft Windows 2000, XP:

- Click the *Start* button and select *Settings*, then click *Control Panel*. The *Control Panel* window will appear.
- 2. Move mouse and double-click the right button on Network and Dial-up Connections

icon. Move mouse and double-click the *Local Area Connection* icon. The *Local Area Connection* window will appear. Click *Properties* button in the *Local Area Connection* window.

- 3. Check the installed list of *Network Components*. If TCP/IP is not installed, click the *Add* button to install it; otherwise go to step 6.
- 4. Select *Protocol* in the *Network Component Type* dialog box and click *Add* button.
- Select *TCP/IP* in *Microsoft* of *Select Network Protocol* dialog box then click OK button to install the TCP/IP protocol, it may need the Microsoft Windows CD to complete the installation. Close and go back to *Network* dialog box after the TCP/IP installation.
- 6. Select *TCP/IP* and click the *properties* button on the *Network* dialog box.
- 7. Select *Specify an IP address* and type in values as following example.
 - ✓ IP Address: 192.168.1.1, any IP address within 192.168.1.1 to 192.168.1.253 is good to connect the Wireless LAN Access Point.
 - ✓ IP Subnet Mask: 255.255.255.0
- 8. Click OK to completes the IP parameters setting.

For OS of Microsoft Windows NT:

- Click the *Start* button and select *Settings*, then click *Control Panel*. The *Control Panel* window will appear.
- 2. Move mouse and double-click the right button on *Network* icon. The *Network* window will appear. Click *Protocol* tab from the *Network* window.
- 3. Check the installed list of *Network Protocol* window. If TCP/IP is not installed, click the *Add* button to install it; otherwise go to step 6.
- 4. Select *Protocol* in the *Network Component Type* dialog box and click *Add* button.
- Select *TCP/IP* in *Microsoft* of *Select Network Protocol* dialog box then click OK button to install the TCP/IP protocol, it may need the Microsoft Windows CD to complete the installation. Close and go back to *Network* dialog box after the TCP/IP installation.
- 6. Select *TCP/IP* and click the *properties* button on the *Network* dialog box.
- 7. Select *Specify an IP address* and type in values as following example.
 - ✓ IP Address: 192.168.1.1, any IP address within 192.168.1.1 to 192.168.1.253 is good to connect the Wireless LAN Access Point.
 - ✓ IP Subnet Mask: 255.255.255.0
- 8. Click OK to completes the IP parameters setting.

3.2 Connect to X-Micro WLAN 11b Access Point

Open a WEB browser, i.e. Microsoft Internet Explore, then enter 192.168.1.254 on the URL to connect X-Micro WLAN 11b Access Point.

3.3 Management and configuration on X-Micro WLAN 11b Access Point

3.3.1 Status

This page shows the current status and some basic settings of the device, includes system, wireless and TCP/IP configuration information.



Screenshot - Status

Item	Description		
<u>System</u>			
Alias Name	It shows the alias name of X-Micro WLAN 11b Access Point.		
Uptime	It shows the duration since X-Micro WLAN 11b Access Point is powered on.		
Firmware version	It shows the firmware version of X-Micro WLAN 11b Access Point.		
Wireless configuration	<u>2n</u>		
SSID	It shows the SSID of X-Micro WLAN 11b Access Point.		

	The SSID is the unique name of X-Micro WLAN 11b
	Access Point and shared among its service area, so all
	devices attempts to join the same wireless network can
	identify it.
Channel Number	It shows the wireless channel connected currently.
WEP	It shows the status of WEP encryption function.
Associated Clients	It shows the number of connected clients (or stations,
	PCs).
BSSID	It shows the BSSID address of X-Micro WLAN Access
	Point.
	BSSID is a six-byte address.
LAN configuration	
Attain IP Protocol	It shows how X-Micro WLAN 11b Access Point gets the
	IP address. The IP address can be set manually to a fixed
	one or set dynamically by DHCP server.
IP Address	It shows the IP address of X-Micro WLAN 11b Access
	Point.
Subnet Mask	It shows the IP subnet mask of X-Micro WLAN 11b
	Access Point.
Default Gateway	It shows the default gateway setting for the outgoing data
	packets.
MAC Address	It shows the MAC address of X-Micro WLAN 11b
	Access Point.

3.3.2 Wireless Basic Settings

This page is used to configure the parameters for wireless LAN clients that may connect to your Access Point. Here you may change wireless encryption settings as well as wireless network parameters.

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X-MICRO	WLAN Acce	ess Point	
≠ Site contents: ∎ Status	Wireless Ba	sic Settings	
Section Settings	This page is used to confi Access Point. Here you m 	gure the parameters for wireless LAN clients which may connect to your nay change wireless encryption settings as well as wireless network parameters.	
Access Control	Alias Name:	X-Micro WLAN 11b Access Point	
Statistics	Disable Wireles	ss LAN Interface	
Upgrade Firmware	: CII22	X-Micro	
Password	Channel Number:	11 💌	
	Associated Clients:	Show Active Clients	
	Apply Changes	Reset	
ē)			

Screenshot - Wireless Basic Settings

Item	Description
Alias Name	It is the alias name of X-Micro WLAN 11b Access Point.
	The alias name can be 32 characters long.
Disable Wireless LAN	Tick on to disable the wireless LAN data transmission.
Interface	
SSID	It is the wireless network name. The SSID can be 32
	bytes long.
Channel Number	Select the wireless communication channel from
	pull-down menu.
Associated Clients	Click the Show Active Clients button to open Active
	Wireless Client Table that shows the MAC address,
	transmit-packet, receive-packet and transmission-rate for
	each associated wireless client.
Apply Changes	Click the <i>Apply Changes</i> button to complete the new
	configuration setting.
Reset	Click the <i>Reset</i> button to abort change and recover the
	previous configuration setting.

3.3.3 Wireless Advanced Settings

These settings are only for more technically advanced users who have a sufficient

knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.

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Site contents: Status Wineless Advanced Settings Advanced Settings Security Access Control TCP/IP Settings Statistics Upgrade Firmware Save/Reload Settings Password	WLAN Access Point Wireless Advanced Settings These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Access Point. Authentication Type: C Open System C Shared Key C Auto Fragment Threshold: 2346 (256-2346) RTS Threshold: 2347 (0-2347) Beacon Interval: IOO (20-1024 rns) Data Rate: Auto Preamble Type: C Long Preamble C Short Preamble Broadcast SSID: © Enabled C Disabled	
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Screenshot - Wireless Advanced Settings

Item	Description					
Authentication Type	Click to select the authentication type in <i>Open System</i> ,					
	Shared Key or Auto selection.					
Fragment Threshold	Set the data packet fragmentation threshold, value can be					
	written between 256 and 2346 bytes. Refer to 4.10 What					
	is Fragment Threshold?					
RTS Threshold	Set the RTS Threshold, value can be written between 0					
	and 2347 bytes. Refer to 4.11 What is RTS (Request To					
	Send) Threshold?					
Beacon Interval	Set the Beacon Interval, value can be written between 2					
	and 1024 ms.					
	Refer to 4.12 What is Beacon Interval?					
Data Rate	Select the transmission data rate from pull-down menu.					
	Data rate can be auto-select, 11M, 5.5M, 2M or 1Mbps.					
Preamble Type	Click to select the <i>Long Preamble</i> or <i>Short Preamble</i>					
	support on the wireless data packet transmission. Refer to					

	4.13 What is Preamble Type?			
Broadcast SSID	Click to enable or disable the SSID broadcast function.			
	Refer to 4.14 What is SSID Broadcast?			
Apply Changes	es Click the <i>Apply Changes</i> button to complete the new			
	configuration setting.			
Reset	Click the <i>Reset</i> button to abort change and recover the			
	previous configuration setting.			

3.3.4 Wireless Security Setup

This page allows you setup the WEP security. Turn on WEP by using encryption keys could prevent any unauthorized access to your wireless network.



Screenshot - Wireless Security Setup

Item	Description			
Enable WEP Security	Click the check box to enable WEP security function.			
	Refer to 4.9 What is WEP?			
Key Length	Select the WEP shared secret key length from pull-down			
	menu. The length can be chose between 64-bit and			
	128-bit (known as "WEP2") keys.			
	The WEP key is composed of initialization vector (24			
Key Lengin	menu. The length can be chose between 64-bit and 128-bit (known as "WEP2") keys. The WEP key is composed of initialization vector (24			

	bits) and secret key (40-bit or 104-bit).		
Key Format	Select the WEP shared secret key format from pull-down		
	menu. The format can be chose between plant text		
	(ASCII) and hexadecimal (HEX) code.		
Default Tx Key	Set the default secret key for WEP security function.		
	Value can be chose between 1 and 4.		
Encryption Key 1	Secret key 1 of WEP security encryption function.		
Encryption Key 2	Secret key 2 of WEP security encryption function.		
Encryption Key 3	Secret key 3 of WEP security encryption function.		
Encryption Key 4	Secret key 4 of WEP security encryption function.		
Apply Changes	Click the <i>Apply Changes</i> button to complete the new		
	configuration setting.		
Reset	Click the <i>Reset</i> button to abort change and recover the		
	previous configuration setting.		

WEP encryption key (secret key) length:

Length Format	64-bit	128-bit		
ASCII 5 characters		13 characters		
HEX	10 hexadecimal codes	26 hexadecimal codes		

3.3.5 Wireless Access Control

If you enable wireless access control, only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When this option is enabled, no wireless clients will be able to connect if the list contains no entries.

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Site contents: Status Status Basic Settings Advanced Settings Security Access Control TCP/IP Settings Statistics Upgrade Firmware Save/Reload Settings Password Password Password Statistics Delete All Reset Statistics Reset Reset Reset Reset Reset	X-MICRO	WLAN Access Poi	int				
Writeless If you enable wireless access control, only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When this option is enabled, no wireless clients will be able to connect if the list contains no entries. Image: Security Access Control Image: TCP/IP Settings Statistics Image: Statistics Image: Security Image: Security MAC Address: Comment: Image: Security MAC Address: Comment: Image: Security Access Control List: Image: Security MAC Address: Comment: Image: Security Access Control List: Image: Security MAC Address Image: Security Comment: Image: Security MAC Address Image: Security Comment: Image: Security Comment	Site contents: Status	Wireless Access Co	ontrol				
Access Control TCP/IP Settings Statistics Upgrade Firmware Save/Reload Settings Password Apply Changes Reset Current Access Control List: MAC Address Current Access Control List: MAC Address Comment Ou20ed:84:5e:6b Craig's NB Ou20ed:84:5e:92 Eddie's PC Delere Selected Delere All Reset Set Statistics Reset	WHEESS Basic Settings Advanced Settings Security	 Status Vincies Basic Settings Advanced Settings Advanced Settings If you enable wireless access control, only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When this option is enabled, no wireless clients will be able to connect if the list contains no entries. 					
MAC Address: Comment: Apply Changes Reset Apply Changes Reset Current Access Control List: MAC Address Comment Select 00:20:ed:84:5e:6b Craig's NB 00:20:ed:84:5e:92 Eddie's PC Delete Selected Delete All Reset 予充成	CP/IP Settings	Enable Wireless Access Cont	rol				
Current Access Control List: MAC Address Comment Select 00.20:ed:84:5e:6b Craig's NB □ 00.20:ed:84:5e:92 Eddie's PC □ Delete Selected Delete All Reset	Save/Reload Settings	MAC Address:	Comment:				
MAC Address Comment Select 00:20:ed:84:5e:6b Craig's NB □ 00:20:ed:84:5e:92 Eddie's PC □ Delete Selected Delete All Reset		Current Access Control List:					
00-20-ed:84:5e:6b Craig's NB □ 00-20:ed:84:5e:92 Eddie's PC □ Delete Selected Delete All Reset		MAC Address	Comment	Select			
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Screenshot - Wireless Access Control

Item	Description					
Enable WEP Security	Click the check box to enable wireless access control.					
	This is a security control function; only those clients					
	registered in the access control list can link to X-Micro					
	WLAN 11b Access Point.					
MAC Address	Fill in the MAC address of client to register X-Micro					
	WLAN 11b Access Point access capability.					
Comment	Fill in the comments for the registered client.					
Apply Changes	Click the Apply Changes button to register the client to					
	new configuration setting.					
Reset	Click the <i>Reset</i> button to abort change and recover the					
	previous configuration setting.					
Current Access	It shows the registered clients that are allowed to link to					
Control List	X-Micro WLAN 11b Access Point.					
Delete Selected	Click to delete the selected clients that will be access					
	right removed from X-Micro WLAN 11b Access Point.					
Delete All	Click to delete all the registered clients from the access					
	allowed list.					
Reset	Click the <i>Reset</i> button to abort change and recover the					

previous configuration setting.

3.3.6 LAN Interface Setup

This page is used to configure the parameters for local area network that connects to the LAN port of your Access Point. Here you may change the setting for IP address, subnet mask, DHCP, etc.



Screenshot - LAN Interface Setup

Item	Description				
IP Address	If the DHCP Client function is disabled, fill in the IP				
	address of X-Micro WLAN 11b Access Point.				
Subnet Mask	If the DHCP Client function is disabled, fill in the subnet				
	mask of X-Micro WLAN 11b Access Point.				
Default Gateway	If the DHCP Client function is disabled, fill in the defau				
	gateway for out going data packets.				
DHCP Client	Select to enable or disable the DHCP client function from				
	pull-down menu.				
802.1d Spanning Tree	Select to enable or disable the IEEE 802.1d Spanning				
	Tree function from pull-down menu.				
Clone MAC Address	Fill in the MAC address that is the MAC address to be				

cloned.

	Clone MAC address is designed for your special			
	application that request the clients to register to a server			
	machine with one identified MAC address.			
	Since that all the clients will communicate outside world			
	through X-Micro WLAN 11b Access Point, so have the			
	cloned MAC address set on the wireless LAN access			
	point will solve the issue.			
Apply Changes	Click the <i>Apply Changes</i> button to complete the new			
	configuration setting.			
Reset	Click the <i>Reset</i> button to abort change and recover the			
	previous configuration setting.			

3.3.7 Statistics

This page shows the packet counters for transmission and reception regarding to wireless and Ethernet networks.

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Upgrade Firmware	File-of LAN	Sent Packets	490		
Save/Reload Settings	Edicilie	Received Packets	495		
	Refresh				
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Screenshot - Statistics

Item	Description
Wireless LAN	It shows the statistic count of sent packets on the wireless
Sent Packets	LAN interface.

Wireless LAN	It shows the statistic count of received packets on the
Received Packets	wireless LAN interface.
Ethernet LAN	It shows the statistic count of sent packets on the
Sent Packets	Ethernet LAN interface.
Ethernet LAN	It shows the statistic count of received packets on the
Received Packets	Ethernet LAN interface.
Refresh	Click the refresh the statistic counters on the screen.

3.3.8 Upgrade Firmware

This page allows you upgrade the Access Point firmware to new version. Please note, do not power off the device during the upload because it may crash the system.



Screenshot - Upgrade Firmware

Item	Description
Select File	Click the <i>Browse</i> button to select the new version of web
	firmware image file.
Upload	Click the Upload button to update the selected web
	firmware image to X-Micro WLAN 11b Access Point.
Reset	Click the <i>Reset</i> button to abort change and recover the

previous configuration setting.

3.3.9 Save /Reload Settings

This page allows you save current settings to a file or reload the settings from the file that was saved previously. Besides, you could reset the current configuration to factory default.



Screenshot - Save/Reload Settings

Item	Description
Save Settings to File	Click the <i>Save</i> button to download the configuration
	parameters to your personal computer.
Load Settings from	Click the <i>Browse</i> button to select the configuration files
File	then click the Upload button to update the selected
	configuration to X-Micro WLAN 11b Access Point.
Reset Settings to	Click the <i>Reset</i> button to reset the configuration
Default	parameter to factory defaults.

3.3.10 Password Setup

This page is used to set the account to access the web server of Access Point. Empty user name and password will disable the protection.

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X-MICRO	WLAN Access Point	
	Password Setup	
Virtualization Statistics Virgence Settings Advanced Settings Security Advanced Settings Statistics Upgrade Firmware Save/Reload Settings Password	This page is used to set the account to access the web server of Access Point. Empty user name and password will disable the protection.	
	User Name:	
	New Password:	
	Apply Changes Reset	
2 完成		

Screenshot – Password Setup

Item	Description
User Name	Fill in the user name for web management login control.
New Password	Fill in the password for web management login control.
Confirmed Password	Because the password input is invisible, so please fill in
	the password again for confirmation purpose.
Apply Changes	Clear the User Name and Password fields to empty,
	means to apply no web management login control.
	Click the Apply Changes button to complete the new
	configuration setting.
Reset	Click the <i>Reset</i> button to abort change and recover the
	previous configuration setting.