

Product name: Wireless Solution

Trade name: RF iLink

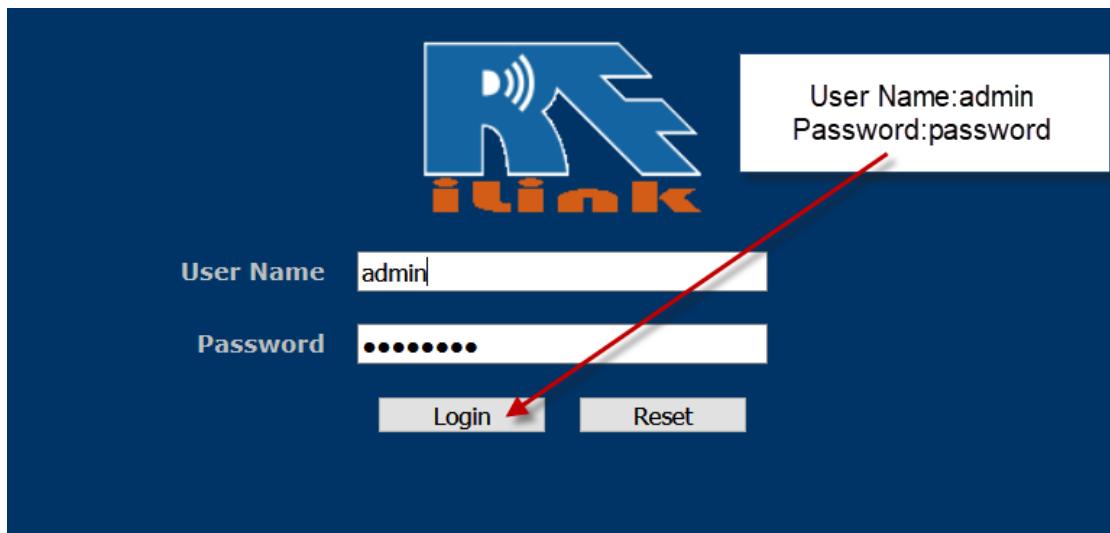
Model no.: YJ-AP515923DPK-W

user's manual

MiniOS

User Manual

V1.3.9RC77



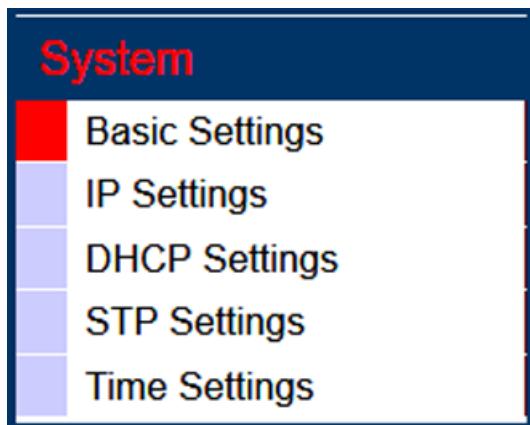
The default setting for User Name and Password are admin and password.

The default IP is 10.10.10.10

Information	
Status	
MAP	
System	
Wireless	
Management	
Logout	
Information	
General Information	
Device Name	DEVICE014BA8
Device Uptime	00:00:41
Firmware Version	MiniOS v1.5.0RC10
Firmware Build Time	Nov 8 2019 10:41:32
Product Key	XQOGS-S45XP-ZVDNA-ABAXZ
License	Level S (p1)
Hardware Version	K7
CPU	560 MHz AR9344
Network Information	
IP Address	10.10.10.10
Subnet Mask	255.255.255.0
Gateway Address	0.0.0.0
DHCP Server	
DHCP Server	Disabled
IP Pool Starting Address	10.10.10.20
IP Pool Size	50
Wireless Network	
MAC Address	00:22:c3:01:4b:a8
Frequency Band	5725 MHz ~ 5850 MHz
Operation Mode	Base Station
Network Name	Wireless
Frame Schedule Policy	As soon as possible
Channel Bandwidth	20MHz
Channel Frequency	5755,000 MHz
TX Data Rate(SS)	SS BPSK 1/2 ~ SS 64QAM 5/6
TX Data Rate(DS)	SS BPSK 1/2 ~ DS 64QAM 5/6
Coverage Range	1 Km
Wired Network 1	
MAC Address	00:22:c3:01:4b:a9
Speed	Link Down
Wired Network 2	
MAC Address	00:22:c3:01:4b:aa
Speed	1000.0 Mbps

Information Page:

User can see the General, DHCP Server, Wireless and Wired Network information



System>Basic Setting

System > Basic Setting
The setup has been applied.

Device Settings

Device Name	DEVICE0121E0
VLAN(802.1Q)	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Management VLAN ID (1-4094)	1

Ethernet 1

Data Rate	10/100/1000M Auto Negotiation
	10/100/1000M Auto Negotiation
	10M Full Duplex
	10M Half Duplex
	100M Full Duplex
	100M Half Duplex

Ethernet 2

Data Rate	10M Full Duplex
	10M Half Duplex
	100M Full Duplex
	100M Half Duplex

GPS Coordinates

Obtain current position from GPS

Latitude:	N	0	0	0.00	"
Longitude:	E	0	0	0.00	"
Altitude:	0.00	m			

Buttons: Apply, Cancel

User can change the device name enable or disable VLAN, and obtain current position from GPS.

System>IP Settings

System > IP Settings

IP Address	<input checked="" type="radio"/> Manual <input type="radio"/> DHCP
IP Address	10.10.10.11
IP Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
Primary DNS Server	0.0.0.0
Secondary DNS Server	0.0.0.0

Apply **Cancel**

The current IP Address is set to 10.10.10.11. Or just get the IP address from DHCP Server.

System > IP Settings

IP Address	<input type="radio"/> Manual <input checked="" type="radio"/> DHCP
IP Address	192.168.173.102
IP Subnet Mask	255.255.255.0
Default Gateway	192.168.173.1
Primary DNS Server	192.168.173.1
Secondary DNS Server	0.0.0.0

Apply **Cancel**

System>DHCP Settings

System > DHCP Settings

DHCP Server

Enable Disable

IP Pool Starting Address: 10.10.10.20

IP Pool Size: 50

Lease Time: 1 day

Primary DNS Server: None 8.8.8.8

Secondary DNS Server: None 8.8.4.4

Static DHCP

Index	MAC Address	IP Address	
	MAC : 00:00:00:00:00:00	IP : 0.0.0.0	Add

Apply Cancel

Currently this device is set to Base Station and obtains the IP from another DHCH Server; The DHCP Server for this device was in disable status.

System>STP Settings (Spanning Tree Protocol)

System > STP Settings

Bridge Function

Ageing Time (2-300): 15 seconds

Spanning Tree Protocol (STP)

Enable Disable

Bridge Priority (0-65535): 32768

Hello Time (1-10): 2 seconds

Max Age (6-40): 20 seconds

Forward Delay (4-30): 15 seconds

Apply Cancel

System>Time Settings

System > Time Settings

Current Time

Current Time: Wed 2018/12/05 09:04:07

Time Zone: (GMT-08:00) Pacific Time (US & Canada); Tijuana

Adjust for Daylight Saving Time

GPS Time Setting

Synchronize time with GPS

Internet Time Setting

Synchronize with an Internet time server

Time Server: 128.138.141.172

Time Server Port: 123

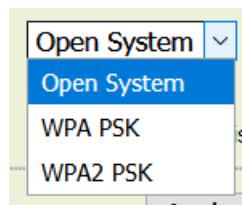
1. Base Station :

Wireless Bridge Parameters	
Operating Mode	Base Station
Wireless Network Name	Wireless
Broadcast Wireless Network Name	Enabled
Beacon Interval Time (40~1000)	100 ms
Maximum Association Stations (1~128)	128
Frame Schedule Policy	As soon as possible

The SSID for this Wireless Network is "Wireless" and the SSID is set in Broadcast enable status.

Basic Parameters	
RF Bandwidth	20MHz
Channel / Frequency	5755MHz
TX Power	max
Robust Mode	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

1.1 Wireless 1 > Security Settings(TKIP,AES)



Wireless 1 > Security Settings

Network Authentication	WPA PSK
Data Encryption	TKIP
WPA Pre-shared Key (PSK)	<input type="text"/>
Isolate Connected CPEs	<input checked="" type="radio"/> Enable <input type="radio"/> Disable

Apply Cancel

Wireless 1 > Security Settings

Network Authentication	WPA2 PSK
Data Encryption	AES
WPA Pre-shared Key (PSK)	<input type="text"/>
Isolate Connected CPEs	<input checked="" type="radio"/> Enable <input type="radio"/> Disable

Apply Cancel

1.2 Wireless 1 > Access Control

Add or delete Allow or delete MAC Address.

Wireless 2 > Access Control

Access Control Mode: Turn Off

Available Devices	Allow Listed Devices
<input type="checkbox"/> MAC Address	<input type="checkbox"/> MAC Address
<input type="checkbox"/> 00:22:c3:01:21:e1	

Other Devices

Add Delete

Allow Listed Devices Deny Listed Devices

Allow Listed Devices	Deny Listed Devices
<input type="checkbox"/> MAC Address	<input type="checkbox"/> MAC Address

1. CPE: (Customer Premise Equipment) is either to connect a Base Station or Bridge AP Radio mode. (Ex. To connect Base Station)

Wireless 1 > Radio Settings

MAC Address	00:22:c3:01:21:e0	Select CPE mode to connect a Base Station
Radio Frequency (RF)	<input checked="" type="radio"/> Enable <input type="radio"/> Disable	
Select Wireless Profile	Profile1	
Wireless Bridge Parameters		
Operating Mode	CPE	
Wireless Network Name	Wireless	
<input checked="" type="checkbox"/> Only Base Station	00:22:c3:01:22:20	Site Survey
Frame Schedule Policy	As soon as possible	
Basic Parameters		
RF Bandwidth	20MHz	
TX Power	max	
Robust Mode	<input type="radio"/> Enable <input checked="" type="radio"/> Disable	

2.1: Site Survey (Find the Base Station Radio to connect)

Wireless 1 > Radio Settings > Site Survey

Base Station List: 3 (count)			Base Station (Wireless) is connected				
	Index	Network Name	MAC Address	Channel	Encryption	RSSI	Coverage / Distance (GPS Coordinates)
<input type="radio"/>	1	██████████	██████████	██████████	██████████	██████████	0 Km
<input type="radio"/>	2	██████████	██████████	██████████	██████████	██████████	0 Km
<input checked="" type="radio"/>	3	Wireless	00:22:c3:01:22:20	2432.000MHz	None	-63dBm	1 Km

Status: connected to BS 00:22:c3:01:22:20, channel 2432.000MHz

Rescan Connect Back

2.2: Information

Please check the connection status from the Information page. The connection is working now.

Wireless Network 1	
MAC Address	00:22:c3:01:21:e0
Frequency Band	2202.000 MHz ~ 2732.000 MHz
Operation Mode	CPE
Network Name	Wireless
Frame Schedule Policy	Managed
Channel Bandwidth	20MHz
Channel Frequency	Auto
TX Data Rate(SS)	SS BPSK 1/2 ~ SS 64QAM 5/6
TX Data Rate(DS)	SS BPSK 1/2 ~ DS 64QAM 5/6
Coverage Range	Auto

Read the following instructions to make a Point to Point AP Bridge connection.

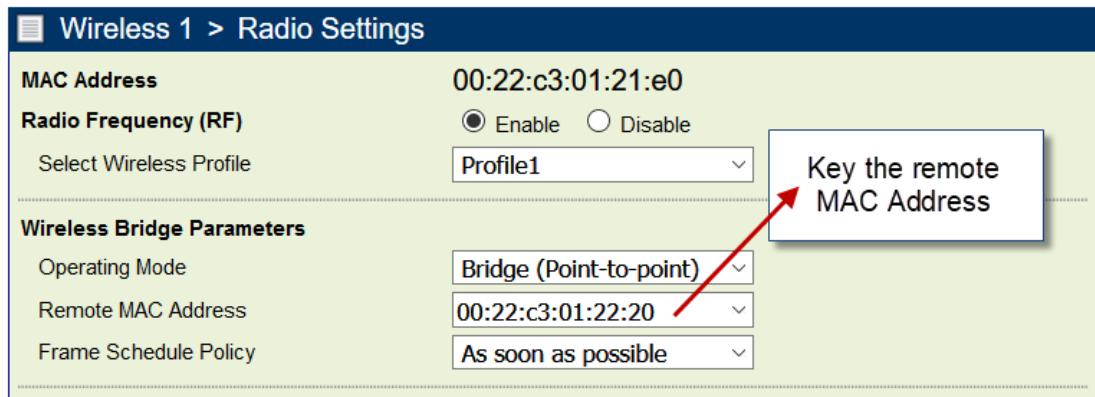
3.1 Point 1 (Point-to-Point)

Wireless 1 > Radio Settings

MAC Address	00:22:c3:01:22:20
Radio Frequency (RF)	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Select Wireless Profile	Profile1 <input type="button" value="Change Name"/>
Wireless Bridge Parameters	Key the remote MAC Address Operating Mode: Bridge (Point-to-point) Remote MAC Address: 00:22:c3:01:21:e0 Frame Schedule Policy: As soon as possible

Type the remote site MAC Address

3.2 Point 2 (Point-to-Point)



Type the remote site MAC Address

3.3 Check the link status:

Information

- Status
- MAP
- System
- Mesh
- Wireless 1
- Wireless 2
- Management
- Logout

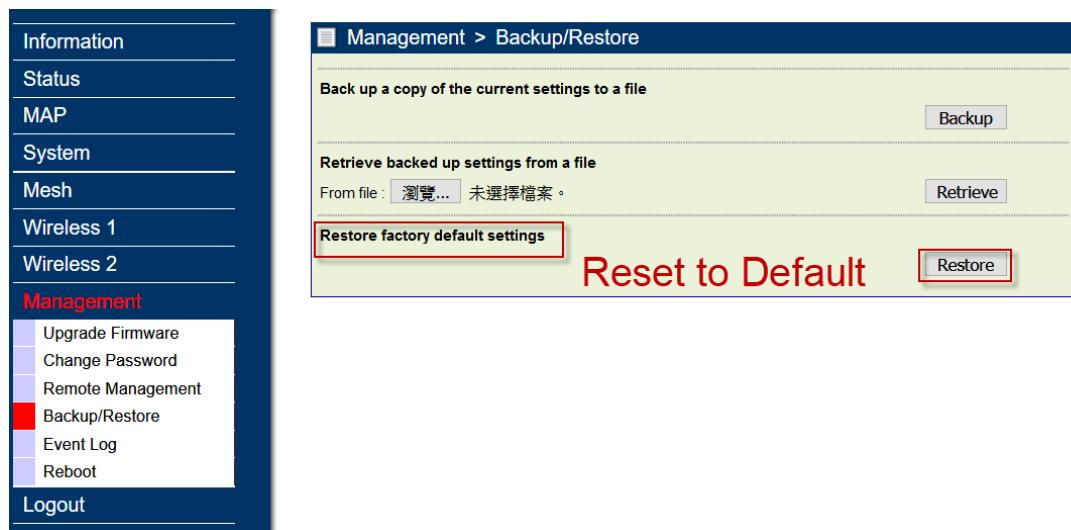
Topology

Index	IP address	MAC Address	Firmware Version	Wireless Networks	Channel BW	RTS
1	10.10.10.10	00:22:c3:01:21:e0	MiniOS v1.3.9RC77	P2P, 2432MHz, "" P2P, 5020MHz, ""	20MHz 20MHz	2346 2346
2	10.10.10.11	00:22:c3:01:22:20	MiniOS v1.3.9RC77	P2P, 2432MHz, "" P2P, 5020MHz, ""	20MHz 20MHz	2346 2346

Links: << IP address Site Name

Index	From Site	To Site	Channel MHz	Network Name	Tx Rate Mbps	Rx Rate Mbps	Tx RSSI dBm	Rx RSSI dBm
1	10.10.10.10	10.10.10.11	5020		52	78	-45	-49
2	10.10.10.10	10.10.10.11	2432		13	39	-64	-63

Backup/Restore



Management > Backup/Restore

Back up a copy of the current settings to a file

Backup

Retrieve backed up settings from a file

From file : 未選擇檔案。

Retrieve

Restore factory default settings

Reset to Default

Restore

The system will take about 40 seconds to restore factory default settings

System configuration has been changed, you have to login again.

Please wait **36** seconds for system rebooting...

Federal Communication Commission Interference Statement

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.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

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

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

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

「低功率電波輻射性電機管理辦法」第十二條：

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

「低功率電波輻射性電機管理辦法」第十四條：

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。

前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

應避免影響附近雷達系統之操作。

高增益指向性天線只得應用於固定式點對點系統。