

Product name: Wireless Solution

Trade name: RF iLink


Model no.: YJ-AP515923DPK-W

user's manual

MiniOS

User Manual

V1.3.9RC77



User Name:admin
Password:password

User Name

Password

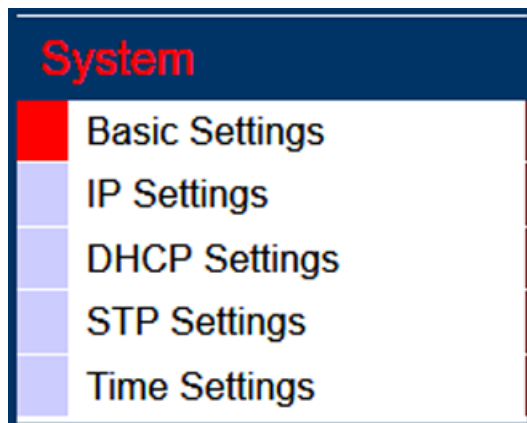
The default setting for User Name and Password are admin and password.

The default IP is 10.10.10.10

Information	Information
Status	General Information
MAP	Device Name
System	Device Uptime
Wireless	Firmware Version
Management	Firmware Build Time
Logout	Product Key
	License
	Hardware Version
	CPU
	Network Information
	IP Address
	Subnet Mask
	Gateway Address
	DHCP Server
	DHCP Server
	IP Pool Starting Address
	IP Pool Size
	Wireless Network
	MAC Address
	Frequency Band
	Operation Mode
	Network Name
	Frame Schedule Policy
	Channel Bandwidth
	Channel Frequency
	TX Data Rate(SS)
	TX Data Rate(DS)
	Coverage Range
	Wired Network 1
	MAC Address
	Speed
	Wired Network 2
	MAC Address
	Speed

Information Page:

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

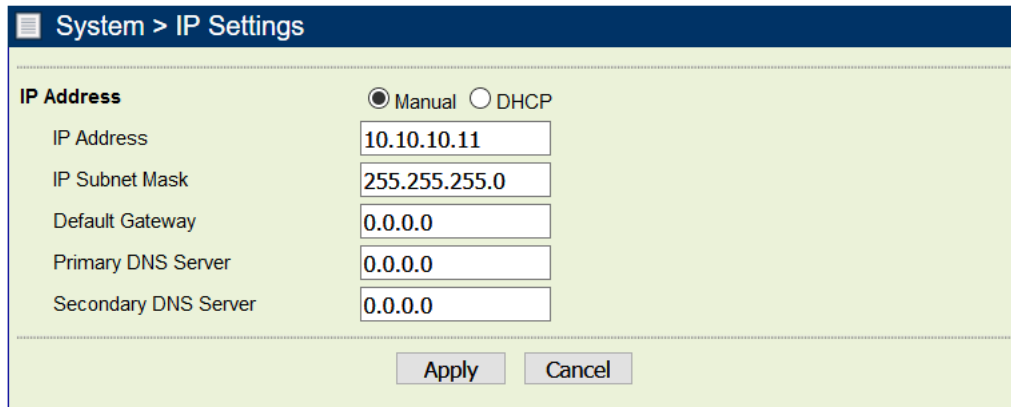


System>Basic Setting

A screenshot of the "System > Basic Setting" configuration page. The page has a dark blue header with a menu icon and the text "System > Basic Setting". Below the header is a green banner that says "The setup has been applied." in green text. The main content area is divided into four sections: "Device Settings", "Ethernet 1", "Ethernet 2", and "GPS Coordinates".
- "Device Settings" includes fields for "Device Name" (DEVICE0121E0), "VLAN(802.1Q)" (radio buttons for Enable and Disable, with Disable selected), and "Management VLAN ID (1-4094)" (1).
- "Ethernet 1" includes a "Data Rate" dropdown menu showing "10/100/1000M Auto Negotiation".
- "Ethernet 2" includes a "Data Rate" dropdown menu showing "10M Full Duplex", "10M Half Duplex", "100M Full Duplex", and "100M Half Duplex".
- "GPS Coordinates" includes a checkbox "Obtain current position from GPS" (checked), and fields for "Latitude" (N 0 0 0.00), "Longitude" (E 0 0 0.00), and "Altitude" (0.00 m).
At the bottom of the page are "Apply" and "Cancel" buttons.

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

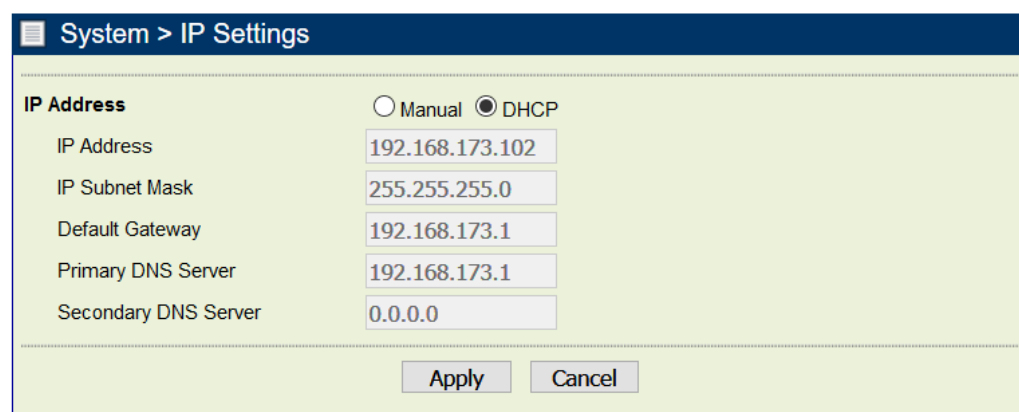
System>IP Settings



The screenshot shows the 'System > IP Settings' window. At the top, there is a title bar with a menu icon and the text 'System > IP Settings'. Below the title bar, the 'IP Address' section is visible. It has two radio buttons: 'Manual' (which is selected) and 'DHCP'. Below the radio buttons, there are five text input fields: 'IP Address' (containing '10.10.10.11'), 'IP Subnet Mask' (containing '255.255.255.0'), 'Default Gateway' (containing '0.0.0.0'), 'Primary DNS Server' (containing '0.0.0.0'), and 'Secondary DNS Server' (containing '0.0.0.0'). At the bottom of the window, there are two buttons: 'Apply' and 'Cancel'.

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
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

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



The screenshot shows the 'System > IP Settings' window. At the top, there is a title bar with a menu icon and the text 'System > IP Settings'. Below the title bar, the 'IP Address' section is visible. It has two radio buttons: 'Manual' and 'DHCP' (which is selected). Below the radio buttons, there are five text input fields: 'IP Address' (containing '192.168.173.102'), 'IP Subnet Mask' (containing '255.255.255.0'), 'Default Gateway' (containing '192.168.173.1'), 'Primary DNS Server' (containing '192.168.173.1'), and 'Secondary DNS Server' (containing '0.0.0.0'). At the bottom of the window, there are two buttons: 'Apply' and 'Cancel'.

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
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

System>DHCP Settings

The screenshot shows the 'System > DHCP Settings' window. It has a title bar with a menu icon and the text 'System > DHCP Settings'. The main area is divided into two sections. The first section, 'DHCP Server', contains radio buttons for 'Enable' and 'Disable' (selected), a text field for 'IP Pool Starting Address' with value '10.10.10.20', a text field for 'IP Pool Size' with value '50', a dropdown for 'Lease Time' with value '1 day', and two pairs of dropdown and text fields for 'Primary DNS Server' (None, 8.8.8.8) and 'Secondary DNS Server' (None, 8.8.4.4). The second section, 'Static DHCP', features a table with headers 'Index', 'MAC Address', and 'IP Address'. Below the table, there are input fields for 'MAC' (00:00:00:00:00:00) and 'IP' (0.0.0.0), followed by an 'Add' button. At the bottom are 'Apply' and 'Cancel' buttons.

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 DHCP Server; The DHCP Server for this device was in disable status.

System>STP Settings (Spanning Tree Protocol)

The screenshot shows the 'System > STP Settings' window. It has a title bar with a menu icon and the text 'System > STP Settings'. The main area is divided into two sections. The first section, 'Bridge Function', contains a text field for 'Ageing Time (2-300)' with value '15' and the unit 'seconds'. The second section, 'Spanning Tree Protocol (STP)', contains radio buttons for 'Enable' and 'Disable' (selected), a text field for 'Bridge Priority (0-65535)' with value '32768', and three text fields for 'Hello Time (1-10)' (2), 'Max Age (6-40)' (20), and 'Forward Delay (4-30)' (15), all with the unit 'seconds'. At the bottom are 'Apply' and 'Cancel' buttons.

Bridge Function

Ageing Time (2-300) 15 seconds

Spanning Tree Protocol (STP)

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 TimeWed 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 Server128.138.141.172

Time Server Port123

Apply

Cancel

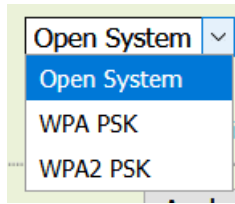
1. Base Station :

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)

Isolate Connected CPEs ☒ Enable ☐ Disable

Wireless 1 > Security Settings

Network Authentication WPA2 PSK ▾

Data Encryption AES ▾

WPA Pre-shared Key (PSK)

Isolate Connected CPEs ☒ Enable ☐ Disable

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

☐ MAC Address

☐ 00:22:c3:01:21:e1

Other Devices

Add

Allow Listed Devices

☐ MAC Address

Allow Listed Devices

☐ MAC Address

Deny Listed Devices

☐ 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

Radio Frequency (RF): ☒ Enable ☐ Disable

Select Wireless Profile: Profile1

Wireless Bridge Parameters

Operating Mode: CPE

Wireless Network Name: Wireless

☒ 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: ☐ Enable ☒ 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

"Wireless" SSID is connected to this Wireless 1 CPE.

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 Change Name
Wireless Bridge Parameters	
Operating Mode	Bridge (Point-to-point)
Remote MAC Address	00:22:c3:01:21:e0
Frame Schedule Policy	As soon as possible

Key the remote MAC Address

Type the remote site MAC Address

3.2 Point 2 (Point-to-Point)

Wireless 1 > Radio Settings

MAC Address

00:22:c3:01:21:e0

Radio Frequency (RF)

☒ Enable ☐ Disable

Select Wireless Profile

Profile1

Wireless Bridge Parameters

Operating Mode

Bridge (Point-to-point)

Remote MAC Address

00:22:c3:01:22:20

Frame Schedule Policy

As soon as possible

Key the remote MAC Address

Type the remote site MAC Address

3.3 Check the link status:

Information

Status

MAP

System

Mesh

Wireless 1

Wireless 2

Management

Logout

Topology

Refresh

Status: Enabled

Group ID: MiniNET

Nodes: <<

Show ☐ Site Name ☒ MAC Address

Show ☐ GPS Coordinates ☒ Wireless Network

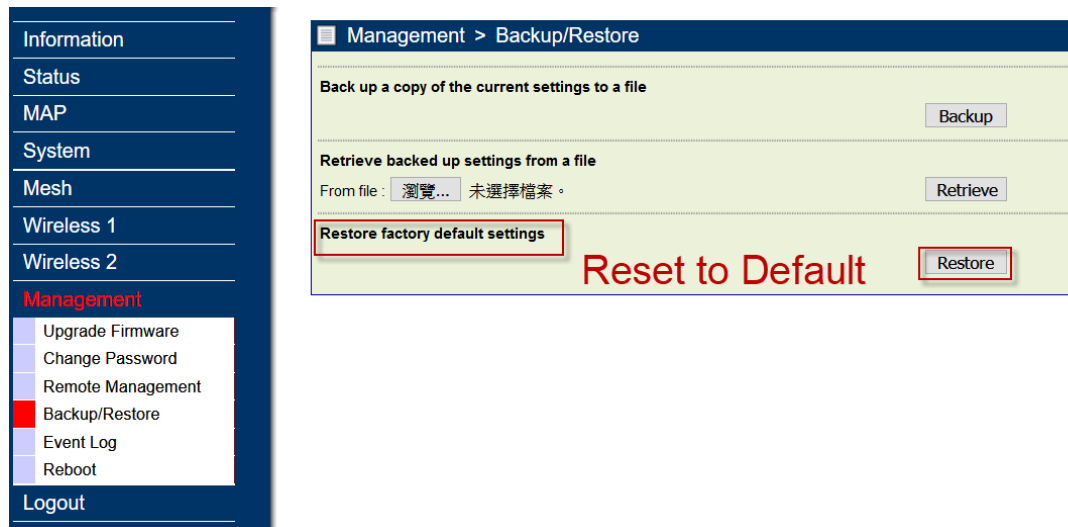
Index	IP address	MAC Address	Firmware Version	Wireless Networks	Channel BW	RTS
1	10.10.10.10	00:22:c3:01:21:e0	MiniOS v1.3.9RC77	P2P, 2432MHz, "" P2P, 5020MHz, ""	20MHz 20MHz	2346 2346
2	10.10.10.11	00:22:c3:01:22:20	MiniOS v1.3.9RC77	P2P, 2432MHz, "" P2P, 5020MHz, ""	20MHz 20MHz	2346 2346

Links: <<

Show ☒ 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



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。