

User Manual

IPD-WIFI WIFI Kit



Designed and manufactured by Austin Hughes

FC CE  REACH

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Legal Information

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Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. We are not liable for any injury or loss that results from the use of this equipment.

Safety Instructions

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

- Unplug equipment before cleaning. Don't use liquid or spray detergent; use a moist cloth.
- Keep equipment away from excessive humidity and heat. Preferably, keep it in an air-conditioned environment with temperatures not exceeding 40° Celsius (104° Fahrenheit).
- When installing, place the equipment on a sturdy, level surface to prevent it from accidentally falling and causing damage to other equipment or injury to persons nearby.
- When the equipment is in an open position, do not cover, block or in any way obstruct the gap between it and the power supply. Proper air convection is necessary to keep it from overheating.
- Arrange the equipment's power cord in such a way that others won't trip or fall over it.
- If you are using a power cord that didn't ship with the equipment, ensure that it is rated for the voltage and current labelled on the equipment's electrical ratings label. The voltage rating on the cord should be higher than the one listed on the equipment's ratings label.
- Observe all precautions and warnings attached to the equipment.
- If you don't intend on using the equipment for a long time, disconnect it from the power outlet to prevent being damaged by transient over-voltage.
- Keep all liquids away from the equipment to minimize the risk of accidental spillage. Liquid spilled on to the power supply or on other hardware may cause damage, fire or electrical shock.
- Only qualified service personnel should open the chassis. Opening it yourself could damage the equipment and invalidate its warranty.
- If any part of the equipment becomes damaged or stops functioning, have it checked by qualified service personnel.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
 - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
 - Repair or attempted repair by anyone not authorized by us.
 - Any damage of the product due to shipment.
 - Removal or installation of the product.
 - Causes external to the product, such as electric power fluctuation or failure.
 - Use of supplies or parts not meeting our specifications.
 - Normal wear and tear.
 - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

Regulatory Notices Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in business, industrial and commercial environments.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment. 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 or more of the following measures:

- Re-position 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.

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Part I. Overview

< 1.1 > Package Content



WIFI Kit (IPD-WIFI)

- Antenna x 1
- USB wireless adapter x 1
- Magnetic stand with 1M antenna wire x 1

Unpacking

The equipment comes with the standard parts shown on the package contents. Check and make sure they are included and in good condition. If anything is missing, or damage, contact the supplier immediately.

< 1.2 > Technical Specification

IPD-WIFI Wireless Specification	
IEEE Standards	IEEE 802.11a / b / g / n / ac
Operating Frequencies	2.4GHz~2.4835GHz / 5.15GHz~5.85GHz
Modulation	<ul style="list-style-type: none">• 802.11b : CCK, DQPSK, DBPSK• 802.11a/g : 64-QAM, 16-QAM, QPSK, BPSKz• 802.11n : 64-QAM, 16-QAM, QPSK, BPSK• 802.11ac : 256-QAM, 64-QAM, 16-QAM, QPSK, BPSK BT, 8DPSK, $\pi/4$DQPSK, GFSK
Wireless Data Rate	<ul style="list-style-type: none">• 802.11b : 1, 2, 5.5, 11 Mbps• 802.11a/g : 6, 9, 12, 18, 24, 36, 48, 54 Mbps• 802.11n : HT20 reach up to 72.2Mbps, HT40 reach up to 150Mbps• 802.11ac : VHT20 reach up to 86.7Mbps, VHT40 reach up to 200Mbps, VHT80 reach up to 433.3Mbps
Security	<ul style="list-style-type: none">• WPA2 - Personal• WPA2 - Enterprise

Part II. Hardware Connection

< 2.1 > Antenna + USB Wireless Adaptor

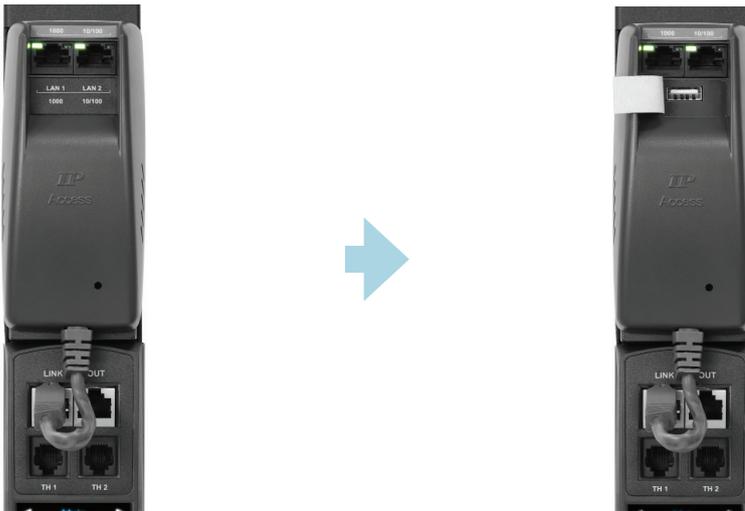
Step < 1 >

- Inset and screw the antenna to the USB wireless adaptor. Fix the antenna in place & lift it up.



Step < 2 >

- Take out the membrane from the PDU dongle, and the WIFI USB port will be found.



Step < 3 >

- Connect the USB wireless adaptor (with antenna) to PDU dongle



< 2.2 > Antenna + USB Wireless Adaptor + Magnetic Stand with Antenna Wire

Step < 1 >

- Inset and screw the antenna to the magnetic stand, and fix the antenna in place.
- Inset and screw the 1M antenna wire to USB wireless adaptor, and fix the adapter in place.



Step < 2 >

- Take out the membrane from the PDU dongle, and the WIFI USB port will be found.



Step < 3 >

- Connect USB wireless adapter to PDU dongle.
- Affix the magnetic stand (with antenna) to the desirable area of rack.



Part III. WIFI Network Configuration

< Preparation >

- Make sure the network meet the security WPA2 - Personal or WPA2 - Enterprise.
- PDU dongle IPD-03-S is well connected to the iPDU and powered on.
- Login IPD-03-S web UI via LAN 1/ LAN 2 to configure the WIFI network.



3rd party WIFI kit is not compatible to InfraPower.

Make sure IPD-WIFI has been used for the WIFI network connection.

< 3.1 > Wifi Static IP setting

Step 1. Click “ Scan Wifi “ to search the available WiFi network

Network

LAN 1 settings		LAN 2 settings	
DHCP :	OFF ▾	DHCP :	OFF ▾
IPv4 address :	192.168.11.1	IPv4 address :	192.168.0.2
IPv6 address :	::ffff:c0a8:b01/120	IPv6 address :	::ffff:c0a8:1/120
Subnet mask :	255.255.255.0	Subnet mask :	255.255.255.0
Gateway :	192.168.11.254	Gateway :	192.168.0.254

Enable automatic failover :

WiFi settings

ESSID : NONE ▾

Security : None ▾

DHCP : ON ▾

IPv4 address : not available

IPv6 address : not available

Subnet mask : not available

Gateway : not available

DNS

Manually configure DNS server :

Primary DNS : 8.8.8.8

Secondary DNS : 0.0.0.0

Step 2. Select the appropriate network from the pull down menu of “ ESSID “

Network

LAN 1 settings

DHCP : OFF

IPv4 address : 192.168.11.1

IPv6 address : ::ffff:c0a8:b01/120

Subnet mask : 255.255.255.0

Gateway : 192.168.11.254

LAN 2 settings

DHCP : OFF

IPv4 address : 192.168.0.2

IPv6 address : ::ffff:c0a8:1/120

Subnet mask : 255.255.255.0

Gateway : 192.168.0.254

Enable automatic failover :

WiFi settings

ESSID : NONE

Security : 37F

DHCP : Austin-Hughes ADServer

IPv4 address : Austin-Hughes User

IPv6 address : Austin-hughes Guest

Subnet mask : JTF3G6RHT7

Gateway : Oracle

DNS

Manually configure DNS server :

Primary DNS : Oracle_5G

Secondary DNS : RnDTest_2.4G

Step 3. Select the security type (NONE / WPA2-Personal / WPA2-Enterprise)

LAN 1 settings

DHCP : OFF

IPv4 address : 192.168.11.1

IPv6 address : ::ffff:c0a8:b01/120

Subnet mask : 255.255.255.0

Gateway : 192.168.11.254

LAN 2 settings

DHCP : OFF

IPv4 address : 192.168.0.2

IPv6 address : ::ffff:c0a8:1/120

Subnet mask : 255.255.255.0

Gateway : 192.168.0.254

Enable automatic failover :

WiFi settings

ESSID : Austin-Hughes ADServer

Security : None

DHCP : None

IPv4 address : WPA2-Personal

IPv6 address : WPA2-Enterprise

Subnet mask : not available

Gateway : not available

DNS

Manually configure DNS server :

Primary DNS : 8.8.8.8

Secondary DNS : 0.0.0.0

Part III. WIFI Network Configuration

Step 4. Enter “ Username “ (For security type : WPA2-Enterprise ONLY)

Network

LAN 1 settings
DHCP :
IPv4 address :
IPv6 address :
Subnet mask :
Gateway :

LAN 2 settings
DHCP :
IPv4 address :
IPv6 address :
Subnet mask :
Gateway :

Enable automatic failover :

WiFi settings
ESSID :
Security :
Username :
Password :
DHCP :
IPv4 address :
IPv6 address :
Subnet mask :
Gateway :

DNS
Manually configure DNS server :
Primary DNS :
Secondary DNS :

Step 5. Enter “ Password “

Step 6. Select “ DHCP “ to “ OFF “. Default is “ ON “

Step 7. Enter “ IPv4 address “ , “ IPv6 address “ , “ Subnet mask “ , “ Gateway “ & Click “ Apply “ to finish the above settings.

< 3.2 > Wifi DHCP setting

Step 1. Click “ Scan Wifi “ to search the available Wifi network

Network

LAN 1 settings		LAN 2 settings	
DHCP :	OFF ▾	DHCP :	OFF ▾
IPv4 address :	192.168.11.1	IPv4 address :	192.168.0.2
IPv6 address :	::ffff:c0a8:b01/120	IPv6 address :	::ffff:c0a8:1/120
Subnet mask :	255.255.255.0	Subnet mask :	255.255.255.0
Gateway :	192.168.11.254	Gateway :	192.168.0.254

Enable automatic failover :

WiFi settings

ESSID :	NONE ▾	<input type="button" value="Scan Wifi"/>
Security :	None ▾	
DHCP :	ON ▾	
IPv4 address :	not available	
IPv6 address :	not available	
Subnet mask :	not available	
Gateway :	not available	

DNS

Manually configure DNS server :

Primary DNS :	8.8.8.8
Secondary DNS :	0.0.0.0

Part III. WIFI Network Configuration

Step 2. Select the appropriate network from the pull down menu of “ ESSID “

Network

LAN 1 settings

DHCP : OFF

IPv4 address : 192.168.11.1

IPv6 address : ::ffff:c0a8:b01/120

Subnet mask : 255.255.255.0

Gateway : 192.168.11.254

LAN 2 settings

DHCP : OFF

IPv4 address : 192.168.0.2

IPv6 address : ::ffff:c0a8:1/120

Subnet mask : 255.255.255.0

Gateway : 192.168.0.254

Enable automatic failover :

WiFi settings

ESSID : NONE

Security : NONE

DHCP : NONE

IPv4 address : NONE

IPv6 address : NONE

Subnet mask : NONE

Gateway : NONE

DNS

Manually configure DNS server :

Primary DNS : NONE

Secondary DNS : NONE

Buttons: Apply, Cancel, Scan Wifi

Step 3. Select the security type (NONE / WPA2-Personal / WPA2-Enterprise)

Network

LAN 1 settings

DHCP : OFF

IPv4 address : 192.168.11.1

IPv6 address : ::ffff:c0a8:b01/120

Subnet mask : 255.255.255.0

Gateway : 192.168.11.254

LAN 2 settings

DHCP : OFF

IPv4 address : 192.168.0.2

IPv6 address : ::ffff:c0a8:1/120

Subnet mask : 255.255.255.0

Gateway : 192.168.0.254

Enable automatic failover :

WiFi settings

ESSID : Austin-Hughes ADServer

Security : None

DHCP : None

IPv4 address : not available

IPv6 address : not available

Subnet mask : not available

Gateway : not available

DNS

Manually configure DNS server :

Primary DNS : 8.8.8.8

Secondary DNS : 0.0.0.0

Buttons: Apply, Cancel, Scan Wifi

Step 4. Enter “ Username “ (For security type : WPA2-Enterprise ONLY)

Network

LAN 1 settings

DHCP : OFF

IPv4 address : 192.168.11.1

IPv6 address : ::ffff:c0a8:b01/120

Subnet mask : 255.255.255.0

Gateway : 192.168.11.254

LAN 2 settings

DHCP : OFF

IPv4 address : 192.168.0.2

IPv6 address : ::ffff:c0a8:1/120

Subnet mask : 255.255.255.0

Gateway : 192.168.0.254

Enable automatic failover :

WiFi settings

ESSID : Austin-Hughes ADServer

Security : WPA2-Enterprise

Username : NONE

Password :

DHCP : ON

IPv4 address : not available

IPv6 address : not available

Subnet mask : not available

Gateway : not available

DNS

Manually configure DNS server :

Primary DNS : 8.8.8.8

Secondary DNS : 0.0.0.0

Step 5. Enter “ Password “

Step 6. Select “ DHCP “ to “ ON “. Default is “ ON “

Step 7. Click “ Apply “ to finish the above settings.

Step 8. Select “ Firmware “ from the left navigation pane



Part III. WIFI Network Configuration

Step 9. Record the “ MAC address “ of the Wifi kit

Firmware

Device information

Device : IP Dongle PPS-03s
Firmware version: IPD-03-FW-v2.0
Hardware revision: 2.0

LAN 1 information

IPv4 address : 192.168.1.67
IPv6 address : ::ffff:c0a8:b01/120
MAC address : 20:0A:0D:60:01:9F

LAN 2 information

IPv4 address : 192.168.0.1
IPv6 address : ::ffff:c0a8:1/120
MAC address : 20:0A:0D:60:01:9E

Wifi information

IPv4 address : 192.168.1.210
IPv6 address : ::ffff:c0a8:2/120
MAC address : 20:0A:0D:60:01:F0

Upgrade firmware

File path :

Warning : Upgrading firmware may take a few minutes,
please don't turn off the power or press the reset button.

Step 10. Assign an IP address of the Wifi kit from your DHCP server.

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