WES4 Series

Model # WES4-AX-BF
9 dBi Directional WES4 Single Transceiver

Introduction
This document provides basic info for wireless set up.

⬚ **Use the camera application on your smart device to scan the code to access more info on the WES4 Series.**

General Information
Your product may be custom configured with the service code "KBC-PRE-CONF" or "WES4-SETUP". In those cases, refer to all provided pre-set configuration documentation in the box.

Inspect all contents upon receipt. Claims and discrepancies must be reported within 1 week of original product shipment from KBC.

System Contents

Pole mount kit, qty 1

WES4-AX-BF radio with integrated antenna

Note: WES4-AX-BF is powered via 802.3af PoE or passive 48V PoE. It will not be supplied with injectors.

Contact Us Now:
KBC Networks is committed to product and customer support.

⬚ (949) 503-3470
Mon-Fri 6a-5p Pacific / 9a-8p Eastern

⬚ Support by SMS and IM coming soon

⬚ info@kbcnetworks.com

⬚ www.kbcnetworks.com

⬚ kbcnetworks.com/WES4

⚒ 2-year repair warranty

⚡ 802.3af or passive 48V PoE needed

⬚ Power box enclosure available to power/connect camera(s) and wireless

☀ Solar and other remote power solutions can also be used to power the WES4 unit – use KBC-VE-DC/DC-48M or ESUGS4-G1-L-B

⬚ Item missing? Check contents below and report within 1-week

Qty	Description
1	WES4-AX-BF RF module with integrated directional antenna
1	Wall/pole mount bracket assembly kit including:
	1 - Pole clamp bracket
	1 - Bracket body *(L/R swivel piece)*
	2 - Connecting pieces *(up/down alignment clamps)*
	1 - 50mm, 1.98" long 1/4" hex bolt
	2 - ¼" hex nuts
	1 - 27mm, 1.06" long ¼" hex bolt
	2 - Flat washers 15mm. 0.59"
	2 - Locking washers 10mm, 0.39" long
	1 - U bolt
	2 - ¼" lock washers

Out of the Box Pre-set Configurations
The WES4-AX-BF is pre-set as an APHost. If you need it be set as a Client you will need to access the interface and change its mode and save & apply.

Parameter	Setting
LAN IP Address	192.168.1.202
GUI User ID	admin
GUI Password	password
Mode	Access Point WDS
SSID	KBC_WES4
Pre-shared Key	11111111
Channel/Frequency	149 (5.745 GHz)
Chan Spectrum Width	20/40 MHz
MAC-Filter	Disabled
TX Power Output	Max
Antenna Gain	9

Mounting Instructions:
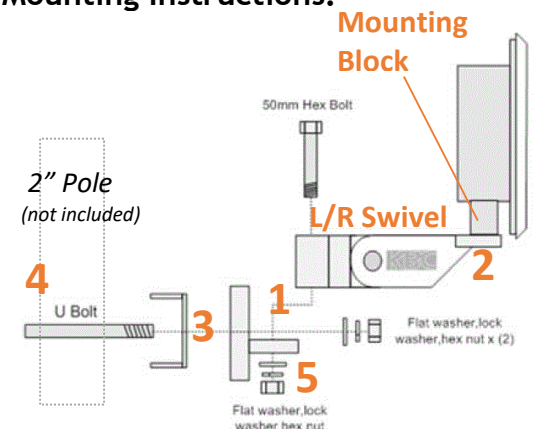
1. Attach L/R Swivel to Up/Down alignment piece using Hex bolt and ¼" hex nut and lock washer.
2. Remove screws from WES4 mounting block and use to secure to L/R Swivel
3. Place flat back against mount assembly.
4. Insert U-bolt through the holes of the pole mount bracket and mount ass'y so that the U side wraps around the pole.
5. Attach and tighten nuts and washers.

WES4 Status Indicators (Left to Right)

1. Power
   - 🟢 Power applied.
   - ⭕ No power to unit. Ensure that the unit is connected to PoE or passive 48V PoE

2. ETH1 - Ethernet link activity
   - 🟢 Link activity established
   - ★ Link activity from WES4 to connected Ethernet device or across wireless link.
   - ⭕ No link to LAN connected device.

Note: *If ETH1 LED is not on, check/replace Ethernet cable.*

3. N/A – Not Used

4. S1 – Weak RF signal if no other LEDs
   - 🟢 Connected to mate WES4
   - ⭕ No RF link to mate WES4

5. S2 – Weak RF signal if no S3/S4 LEDs
   - 🟢 Connected to mate WES4
   - ⭕ RF link is poor or no connection

6. S3 – Mediocre RF signal if no S4 LED
   - 🟢 Connected to mate WES4
   - ⭕ No RF link; or alignment is needed

7. S4 – Ideal RF signal
   - 🟢 Ideal connection to mate WES4
   - ⭕ No RF link; or alignment is needed
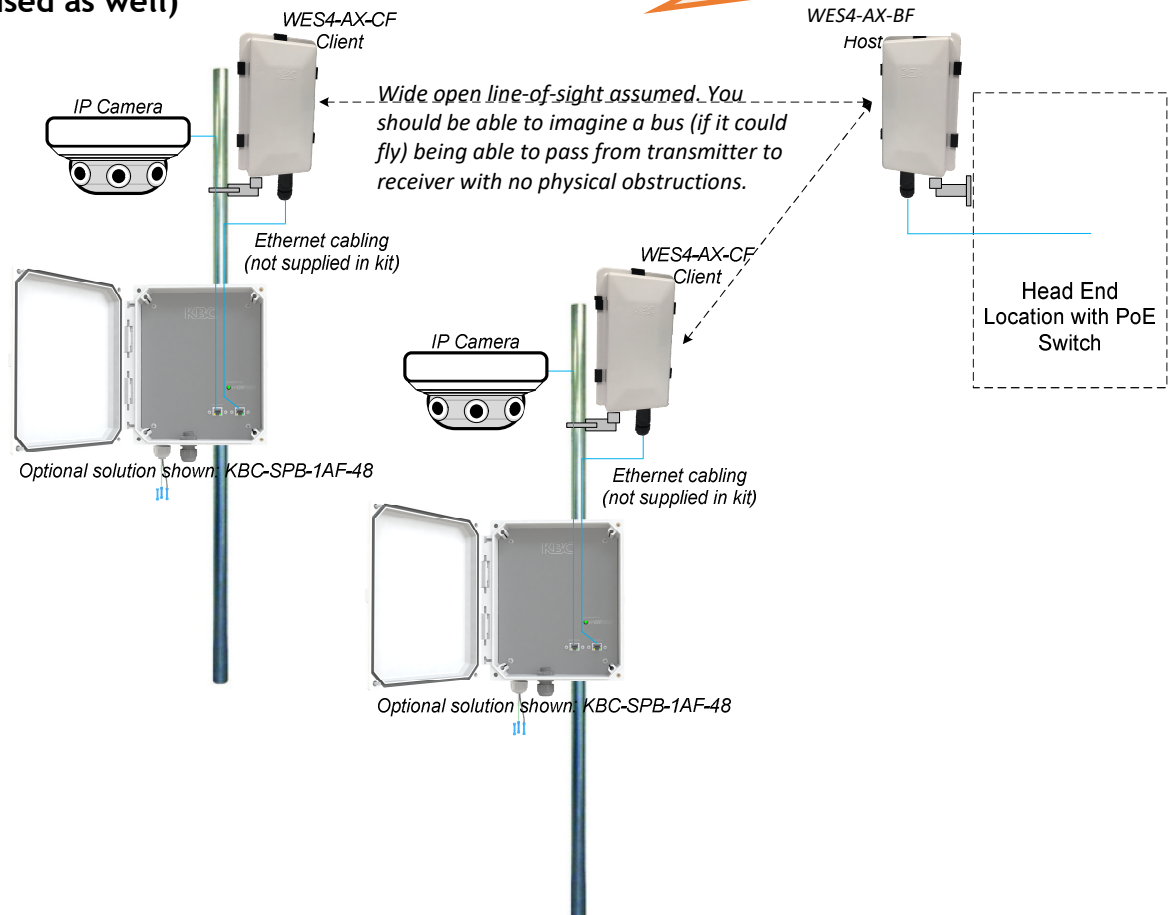
★   Flashing LED
●   Solid LED
⭕   LED off

Note: *If any of the RSSI LEDs are not lighting up, check line-of-sight and/or improve antenna alignment.*

Do you have line-of-sight?

The RF signal expands as it travels. Long range transmission of constant streaming video requires clear line-of-sight between wireless antenna locations.
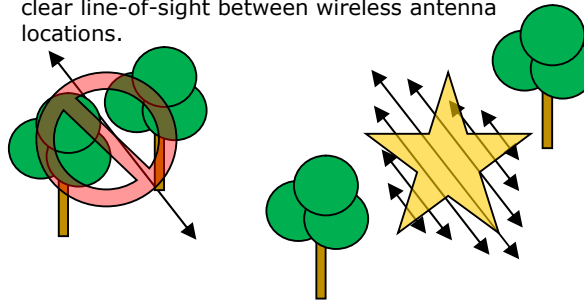
Example System Line Diagram with Optional SPB Power Boxes (other variations are available and could be used as well)

IP Camera

WES4-AX-CF
Client

Wide open line-of-sight assumed. You should be able to imagine a bus (if it could fly) being able to pass from transmitter to receiver with no physical obstructions.

WES4-AX-BF
Host

Ethernet cabling
(not supplied in kit)

WES4-AX-CF
Client

IP Camera

Head End Location with PoE Switch

Optional solution shown: KBC-SPB-1AF-48

Ethernet cabling
(not supplied in kit)

Optional solution shown: KBC-SPB-1AF-48

Anything not operating as it ought to?

Contact KBC at info@kbcnetworks.com to obtain an RA for repair. We will need the unit model, serial number and problem stated. Please provide a return shipping address and we will return it to you via FedEx Ground.

Example shown: KBC-SPB-1AF-48 for one standard PoE IP camera and WES4 antenna. Other power box options available:
1 camera, PoE+ up to 35W: KBC-SPB-1AT-48
1~4 cameras/IP devices: KBC-SPB-4AF-48
1 HPoE Camera up to 70W: KBC-SPB-HPoE-48
Coming soon: 802.3bt compliant PoE++ output