How to Set up WDS Bridge on a ENH-500 (P2P)
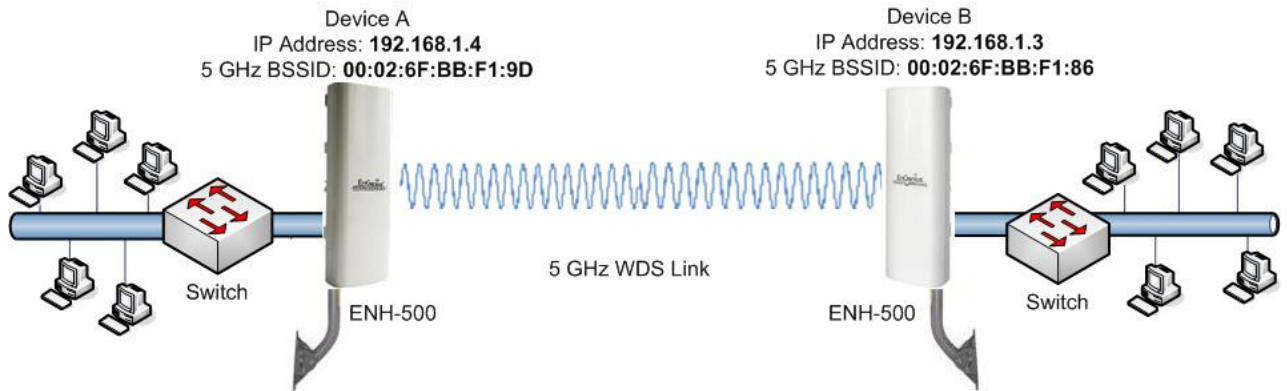
Point-to-Point WDS Bridge should have a physical topology similar to the picture below:

Device A
IP Address: **192.168.1.4**
5 GHz BSSID: **00:02:6F:BB:F1:9D**

Device B
IP Address: **192.168.1.3**
5 GHz BSSID: **00:02:6F:BB:F1:86**

Switch

5 GHz WDS Link

ENH-500

ENH-500

Switch

Please note that in order for the settings to save on this unit you need to click save/apply under the save/reload option under Status.

Step #1:

Note the MAC address under the wireless MAC address field for each unit.

Step #2:

Change the IP address of each unit to be in the same subnet as your network, outside the DHCP scope

Step #3:

Change the mode of operation to WDS Bridge.

Step #4:

Set the channels to be the same on all units in the WDS link.

Step #5:

Here is WDS link settings of device A with the Wireless MAC address of device B in the MAC address field.

Step #6:

Here is device B WDS link settings page with Device's A wireless MAC address entered.

Step #7:

To test the link ping across the link

Step #8:

Your ping should have zero packet loss

Optional:

If you want encryption on your WDS link, then select the encryption method under the security drop down menu, then the WEP key or WPA passphrase. Note the unit will revert to G speeds when using WEP, N speeds is only supported by AES. This has to match on both units if you chose to enable it on one unit:

If you have trouble with your WDS Bridge link then try changing both units channel HT from 40 Mhz to 20 Mhz.

If you are still experiencing problems with your WDS link, then try changing to a non-DFS channel, and then lastly try changing the band of the units from A/N to A only.

Use the following chart to determine non DFS channels. Use the FCC column.

Please keep in mind if using the 5GHz band that channels 52-140 are UNI –2 channels which radar systems commonly operate on. There is an FCC mandated function called DFS that automatically changes the channel of any 5GHz WiFi radio including any and all EnGenius radios if radar is detected as to avoid interference to radar systems.

The best channels to use are 34-48 and 149-165.

Frequency Band	Channel ID	FCC (GHz)	ETSI (GHz)	MKK (GHz)	SG (GHz)	ASIA (GHz)	TW (GHz)
Lower Band (36 = default)	34	—	—	5.170 [1]	—	—	—
	36	5.180	5.180	—	5.180	—	—
	38	—	—	5.190	—	—	—
	40	5.200	5.200	—	5.200	—	—
	42	—	—	5.210	—	—	—
	44	5.220	5.220	—	5.220	—	—
	46	—	—	5.230	—	—	—
	48	5.240	5.240	—	5.240	—	—
Middle Band (52 = default)	52	5.260	5.260	—	—	—	5.260
	56	5.280	5.280	—	—	—	5.280
	58	5.300	5.300	—	—	—	5.300
	60	5.320	5.320	—	—	—	5.320
H Band	100	—	5.500	—	—	—	—
	104	—	5.520	—	—	—	—
	108	—	5.540	—	—	—	—
	112	—	5.560	—	—	—	—
	116	—	5.580	—	—	—	—
	120	—	5.600	—	—	—	—
	124	—	5.620	—	—	—	—
	128	—	5.640	—	—	—	—
	132	—	5.660	—	—	—	—
	136	—	5.680	—	—	—	—
	140	—	5.700	—	—	—	—
Upper Band (149 = default)	149	5.745	—	—	5.745	5.745	5.745
	153	5.765	—	—	5.675	5.675	5.675
	157	5.785	—	—	5.785	5.785	5.785
	161	5.805	—	—	5.805	5.805	5.805
ISM Band	165	5.825	—	—	5.825	—	5.825

Note 1: Channel 34 is the default channel for Japan