

RadioLabs Point to Point Bridge Instructions for the GS5000



Your GS5000 Bridge System allows you to extend the size of your wireless network by connecting two GS5000 units as a bridge. In this simple example, we'll connect two GS5000 antennas to

create an extended wireless bridge. You may use these same steps to add additional bridges for greater coverage.* For easy configuration, we recommend configuring all components in close proximity before deploying them to their final positions.

You will be powering the antenna with a Cat5 cable and a POE injector. You can connect the POE injector to the antenna via the Cat 5 cable now. Now plug in the power supply to the injector and connect your computer to the injector as well. You will use this setup to configure the settings for each GS5000 unit.



*Note: For multiple client application please see the settings in the advanced users manual. Remember that each layer of bridges takes about half of your total network speed, so avoid configuring daisy-chains more than 4 bridges long. A star-pattern is always better, with a central router serving multiple bridges.

Your first step will to be to make sure that your PC is configured to "Use The Following IP Address" i.e. 10.10.10.10.

For Windows XP:

- 1. Disable internal WiFi Card, go to
 - a. Control Panel
 - b. Network Connections
 - c. Wireless connection
 - d. Right Click on your wireless card and Select Disable

2. To set a Static IP on your PCs LAN connection, go to....

- a. Control Panel
- b. Network Connections
- c. LAN connection
- d. Right Click your LAN port that the RJ-45(cat5) Ethernet cable is plugged into, select Properties
- e. Select Internet Protocol TCP/IP, then select Properties

3. Use following IP Address[10.10.10.10] Subnet mask 255.255.255.0. Do not use the IP Address 10.10.10.254 as that is the default IP Address of the GS5000

For Windows Vista:

1. Disable internal WiFi Card

- a. Network and Sharing Center
- b. Manage Network Connections
- c. Wireless Network Connection
- d. Right Click on your wireless card
- e. Select Disable

2. To set a Static IP on your PCs LAN connection Control Panel

- a. Network and Sharing Center
- b. Manage Network Connections
- c. Select your LAN connection then Right Click
- d. Select Properties
- e. Select Internet Protocol Version 4 (TCP/IPv4), then select Properties

3. Use following IP Address[10.10.10.10] Subnet mask 255.255.255.0. Do not use the IP Address 10.10.10.254 as that is the default IP Address of the GS5000

To set up your static IP address for MAC:

1.From the Apple menu, select System Preferences.

a.Click the Network icon.

2.Configure your network settings.

•In Mac OS X v10.5:

A. Select Ethernet.

B. From the Configure drop-down list, select Manually.

•In Mac OS X v10.4:

A. Select Built-in Ethernet.

- B. Click the Configure button.
- C. Select the TCP/IP tab.
- D. From the Configure IPv4 drop-down list, select Manually.

3. In the IP Address text box, type the IP address [10.10.10.10]

4. In the Subnet Mask text box, type your subnet mask 255.255.255.0

Do not use the IP Address 10.10.10.254 as that is the default IP Address of the GS5000

Once you have a static IP Address connect your computer to the POE injector and open a web browser (i.e. Internet Explorer, Mozilla) and in the address field, enter 10.10.10.254. This is the default IP address of your GS5000.



close all	Access Point Status	
<mark>ink</mark> Operation Mode	Let's take a look at the status of R	alink SoC Platform.
Internet Settings	System Info	
Wireless Settings	SDK Version	3.2.0.0 (Oct 30 2009)
Administration	System Up Time	21 hours, 9 mins, 53 secs
	System Platform	RT2880 with IC+ PHY
	Operation Mode	Bridge Mode
	Internet Configurations	
	Connected Type	DHCP
	WAN IP Address	10.10.10.254
	Subnet Mask	255.255.255.0
	Default Gateway	
	Primary Domain Name Server	192.168.1.5
	Secondary Domain Name Server	168.95.1.1
	MAC Address	00:0C:43:D0:AD:F9
	Local Network	
	Local IP Address	10.10.10.254
	Local Netmask	255.255.255.0
	MAC Address	00:0C:43:D0:AD:F9

The Web-Based Configuration Utility for the GS5000 will open. The first two things we need to do is write down the Mac Address of this unit and also change the IP Address. You can do both on the same page, click on Internet Settings then LAN. In the first field will be listed the GS5000's IP Address, change this to 10.10.10.253. On the same page is also listed your MAC address, write this down along with your new IP address.

Now connect the other GS5000 to your computer and type in its IP address(10.10.254) and click on the wireless

tab on the left side menu, and then select Basic . Under Wireless Distribution System(WDS) section change the WDS Mode to Bridge Mode. You can now enter the MAC Address of the first unit into the AP MAC Address field. Make a note of the channel that you've chosen, because the other end of the bridge will need to be on the same channel. Click Apply . Your GS5000 will reboot in 30-60 seconds (keep an eye on the WiFi light when it starts blinking again your GS5000 is reset).

After the GS5000 resets click on Internet Settings then LAN. Now write down the second units Mac address.

Now you want to connect back to the first GS5000 and type in its IP address in your address bar (10.10.10.253) and click on the wireless tab on the left side menu, and then select Basic . Under Wireless Distribution System(WDS) section change the WDS Mode to Bridge Mode. You can now enter the MAC Address of the second unit into the AP MAC Address field. Make sure you have selected the same channel as the other end of your bridge. Click Apply . Your GS5000 will reboot in 30-60 seconds (keep an eye on the WiFi light when it starts blinking again your GS5000 is reset).

BSSID		00:0C:43:D0:AD:F9	
Frequency (Channel)		5180MHz (Channel 36) 🕶
Wireless Distribution System(WDS)			
WDS Mode		Bridge Mode 👻	
Phy Mode		ССК -	
EncrypType		NONE -	
AP MAC Address		00:0C:43:D0:AD:89	
AP MAC Addres			
AP MAC Address			
AP MAC Address			
HT Physical Mode			
Operating Mode		Mixed Mode O Green Field	
Channel BandWidth		© 20 @ 20/40	
Guard Interval		Long Auto	
MCS		Auto 👻	
Reverse Direction Gra	nt(RDG)	Disable Enable	
Extension Channel		5200MHz (Channel 40) 👻	
Aggregation MSDU(A-	ISDU)	Disable Enable	
Auto Block ACK		🖲 Disable 🔘 Enable	
Decline BA Request		🖲 Disable 🔘 Enable	
Other			
HT TxStream		1 -	
HT RxStream		1 •	

The two GS5000 Bridge units are now linked by a wireless bridge. Open your browser and enter the second GS5000's IP address in the address bar (10.10.10.254) You now should be able to access the Web-Based Configuration Utility of the second GS5000 wirelessly via the first GS5000.

If you have an internet source plugged into the other GS5000's POE Injector you can set your computers IP Address back to Obtain automatically and should now be able to access the internet from the bridged GS5000.

To set your IP Address back to "Obtain An IP Address Automatically" you follow the steps on page 1 or 2 depending on which method you used when setting you IP Address up with a Static Address.