

# RadioLabs

Wireless And Beyond

O2Link High Power Router & O2Point High Power Access Point  
Universal Repeater Instructions



**Please read these instructions before attempting to configure or deploy the O2Link or O2Point unit(s)**

Thank you for purchasing a RadioLabs O2Link High Power Wireless Router or O2Point High Power Wireless Access Point. This document will guide you through configuring your O2Link/O2Point individually as a stand-alone wireless repeater.

The RadioLabs O2 series wireless networking products allow multiple different operation modes and can be configured to act as almost any part of a wireless network or WLAN and can be easily integrated into an existing networking. The following instructions detail how to configure the O2Link/O2Point as a non-routing wireless repeater or “range extender”. This function is best used when the O2Link/O2Point is being integrated into an existing network of non-O2 devices or when an existing wireless signal needs to be strengthened for rebroadcast to weaker wireless devices.

Using the O2Link/O2Point as a universal repeater only requires a single unit. You do not need both the O2Link and the O2Point.

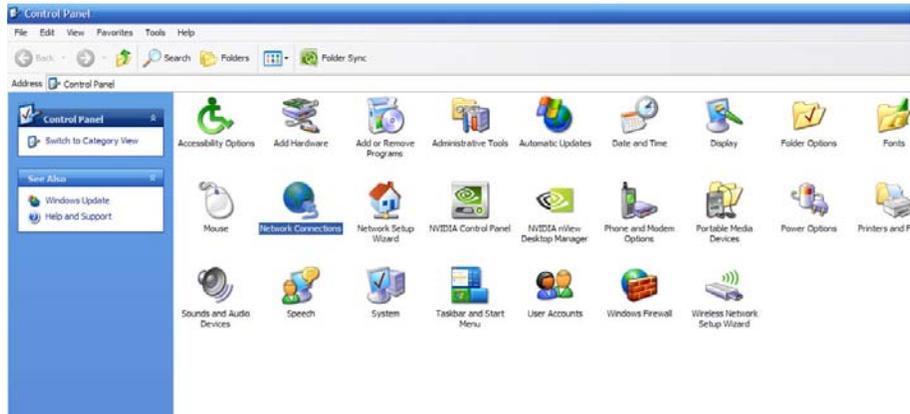
These instructions are only for use with the O2Link High Power Wireless Router (ITEM # RL54GXP) and O2Point High Power Access Point (ITEM# O2POINT). If you have purchased a Point to Point Wireless Bridge, please refer to the O2 Bridge Instructions, available at our downloads page:

<http://www.radiolabs.com/support/downloads.php>

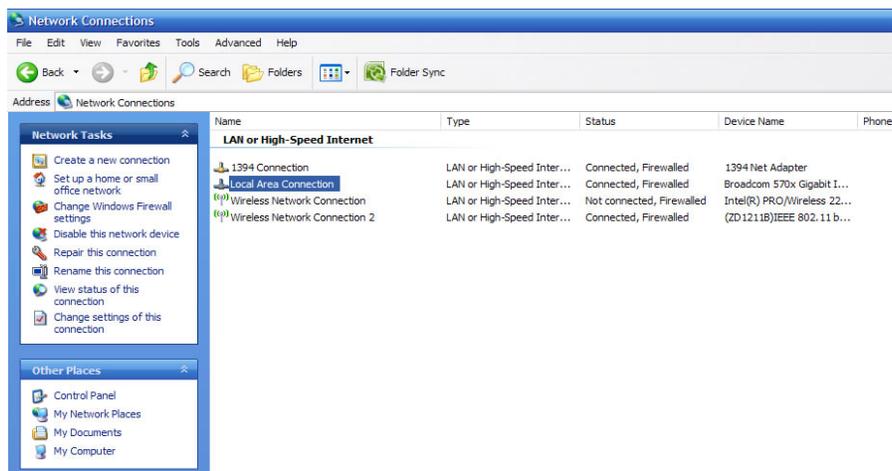
Before configuring your O2Link/O2Point, you will need to disable your internal wireless card or Airport (if applicable) and set a static or “unchanging” IP address.

## Windows

*XP: Open Start Menu and select Control Panel*



*Select Network Connections (if unavailable, select show “Classic view”)*



*Vista: Select Start Menu/Windows Logo > Network > Network and Sharing Center > Manage Network Connections*

*Windows 7: Select Start Menu/Windows Logo > Network > Network and Sharing Center > Change Adapter Settings*

**Once you can view your system’s network connections, right click on “Wireless Network Connection” and select “Disable”.**

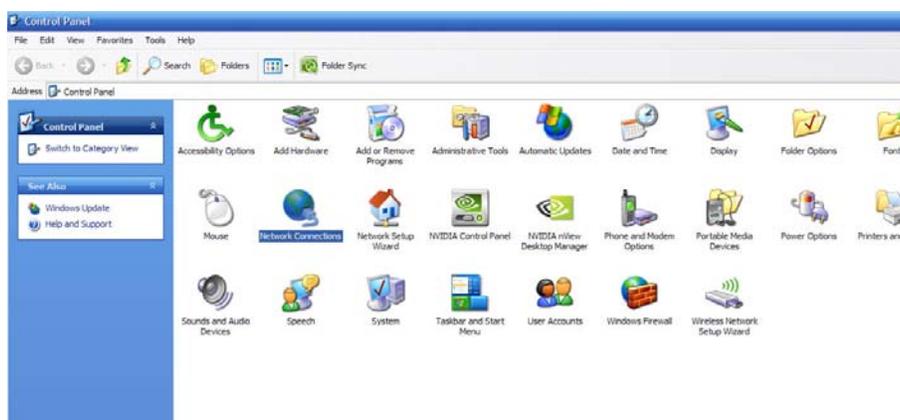
### Macintosh OS X

Select the Airport Status Icon  (upper right hand corner of screen) and select “Turn Airport Off”

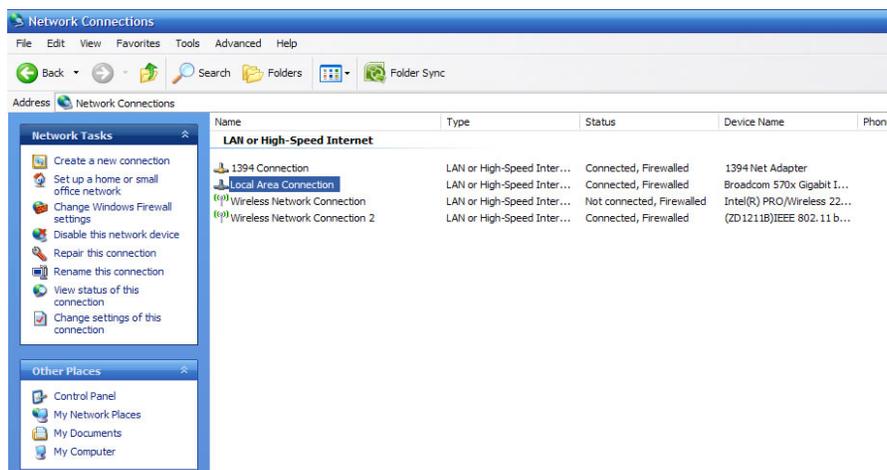
When logging into the O2Link/O2Point to configure the unit, you will need to have a Static IP address on your PC/MAC's Ethernet Adapter.

### Windows

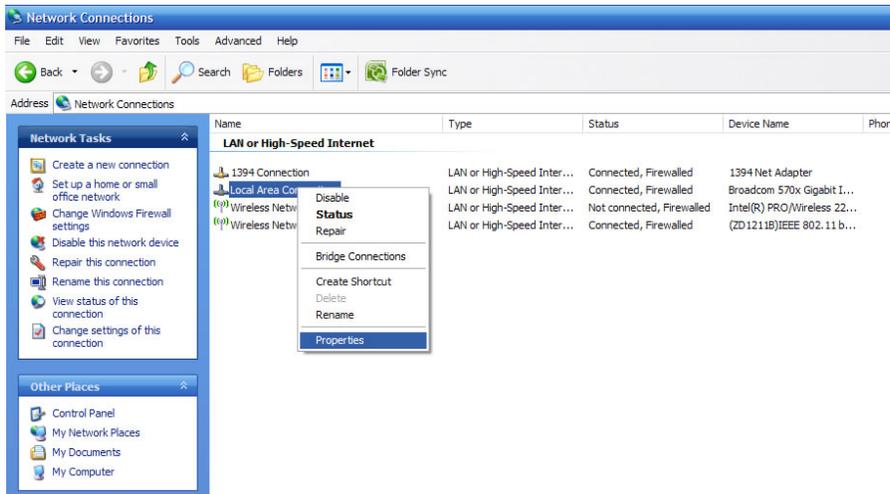
*XP: Open Start Menu and select Control Panel*



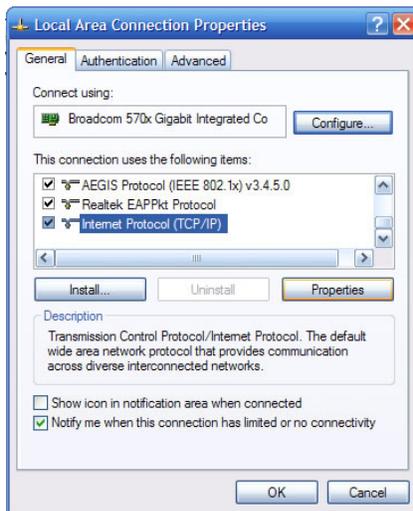
*Select Network Connections and right click “Local Area Connection”*



### Select Properties



Select Internet Protocol (TCP/IP) or Internet Protocol (IPv4) and click Properties



Select “Use The Following IP Address” and Enter 192.168.1.10 into the IP Address field and 255.255.255.0 into the subnet mask field



Select “OK” and select “Close” on the Local Area Connection properties window.

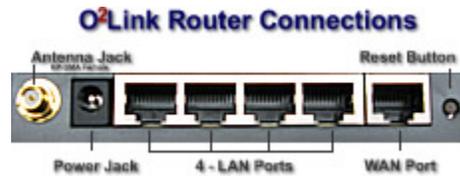
Vista: Start Menu/Windows Logo > Control Panel > Network and Sharing Center > Manage Network Connections > right click “Local Area Connection” and follow instructions from page 5.

Windows 7 : Start Menu/Windows Logo > Control Panel > Network and Sharing Center > Change Adapter Settings > right click “Location Area Connection and follow instructions from page 5.

Once you have configured your O2Link or O2Point, you will need to follow these steps again and select “Obtain an IP address automatically”

Now your system is ready to configure the O2Link or O2Point as a universal repeater

Using the included Ethernet cable, connect the Ethernet port of your computer to either the single port of the O2Point or any of the 4 LAN ports of the O2Link

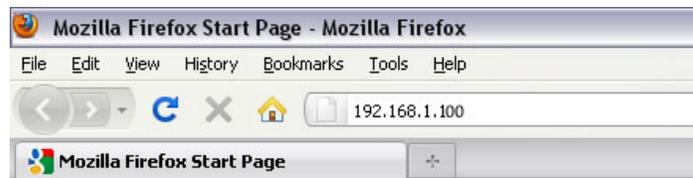


Do not connect to the WAN port, this will not allow configuration

To access the configuration page of your O2Link/O2Point, open a web browser (Internet Explorer, Mozilla FireFox, Safari, etc.) and enter the IP address of your specific unit into the address bar.

O2Link High Power Router : 192.168.1.1

O2Point High Power Access Point : 192.168.1.100



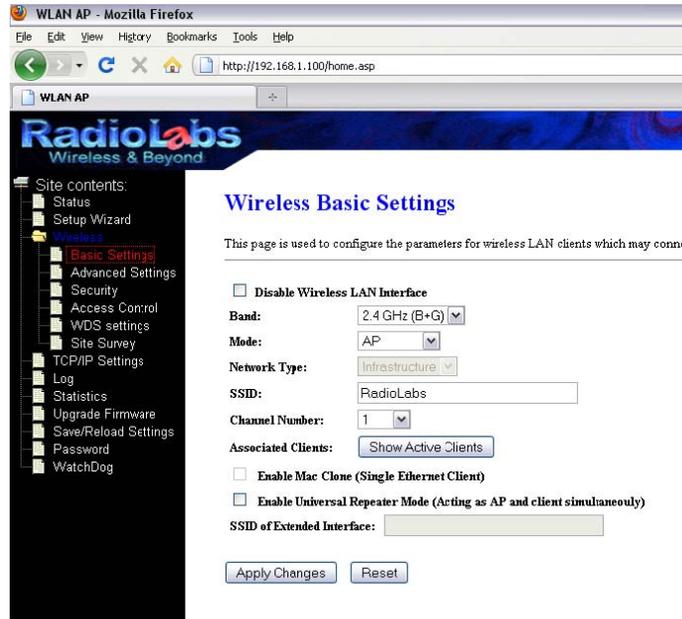
These screenshots show configuring an O2Point, however, the procedure is identical when configuring an O2Link.

Once you have entered the correct IP address for your unit, the status screen for the unit should appear

The screenshot shows the 'Access Point Status' page in a Mozilla Firefox browser. The browser title is 'WLAN AP - Mozilla Firefox' and the address bar shows 'http://192.168.1.100/home.asp'. The page features the 'RadioLabs Wireless & Beyond' logo and a navigation menu on the left. The main content area displays the 'Access Point Status' with a table of system and configuration details.

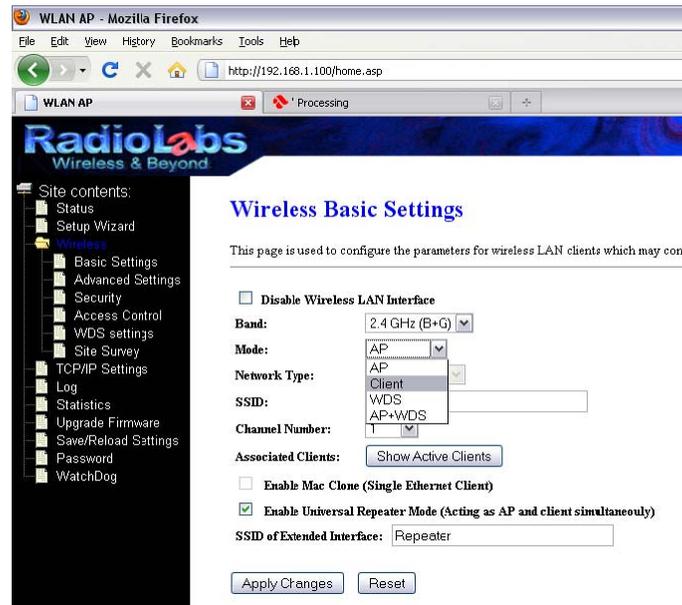
System	
Uptime	0day:0h:3m:3s
Firmware Version	a1.4.2.X
Wireless Configuration	
Mode	AP
Band	2.4 GHz (B+G)
SSID	RadioLabs
Channel Number	1
Encryption	Disabled
BSSID	00:02:72:89:36:a1
Associated Clients	0
TCP/IP Configuration	
Attain IP Protocol	Fixed IP
IP Address	192.168.1.100
Subnet Mask	255.255.255.0
Default Gateway	0.0.0.0
MAC Address	00:02:72:89:36:a1

Select “Wireless” and “Basic Settings” to view the basic configuration page of your O2 Unit.

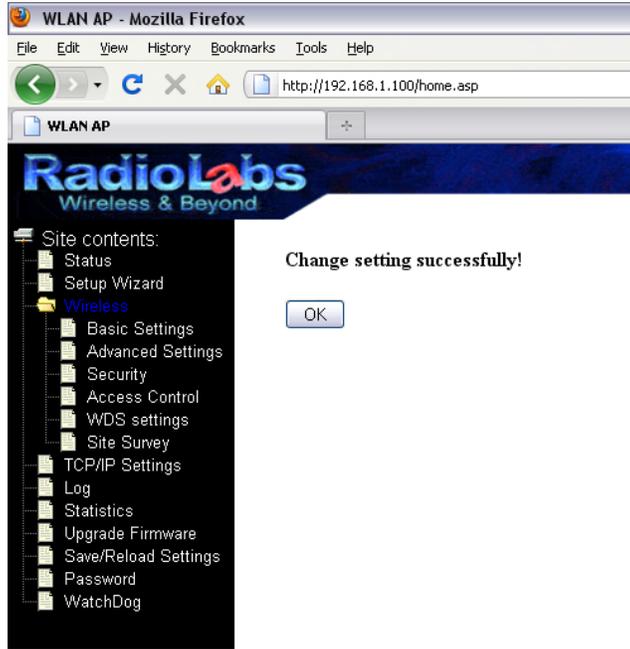


Select the Mode as “Client”, check the “Enable Universal Repeater Mode”.

By default, the unit will re-broadcast the same SSID or network name of the original wifi signal. If you wish to rebroadcast your own different SSID or network name, enter the name into the “SSID of Extended Interface” field.



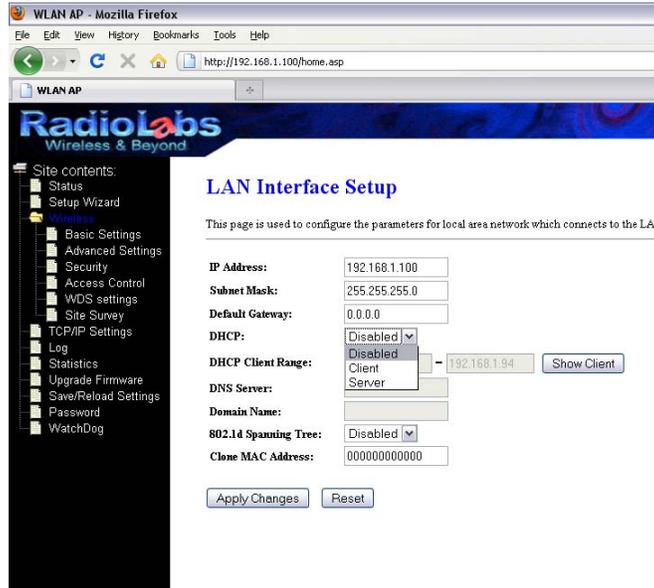
Select "Apply Changes" and click "OK"



*(O2Link Router only)*

Select "TCP/IP Settings" > "LAN Interface" and select DHCP as "Disabled"

Click "Apply Changes" and "OK"



If the signal you are repeating is not encrypted or secured, skip this step.

If the Wifi signal or wireless network you are connecting to is encrypted or password protected, you will need to enable the wireless security function with the same encryption type and password to allow proper connectivity.

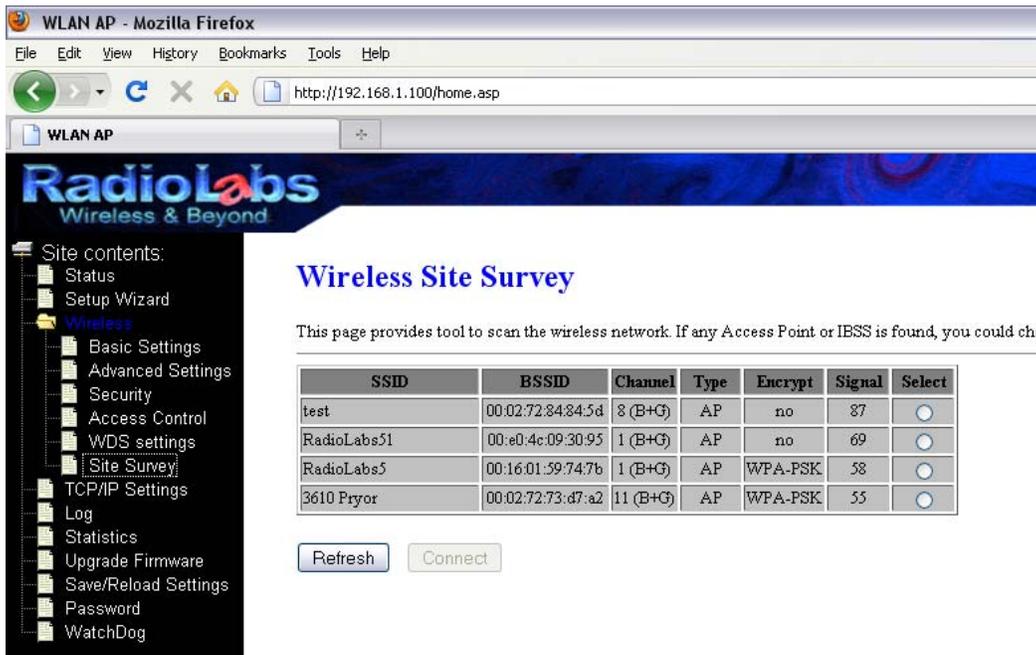
Select “Wireless” and “Security”. Here you can select the encryption type, pre-authentication type and pre-shared key. The encryption type needs to be exactly the same as the network the O2Link/O2Point will be repeating.



Select “Wireless” and “Site Survey”. Select “Refresh”

This will show a list of available networks within range of your O2Link/O2Point. Generally, a signal at 30% and above will allow a stable connection. If you are unable to pick up any signal or if you’re unable to keep a stable connection, try repositioning the unit with the least amount of obstructions between the wifi source and your O2 unit.

Select the network you would like to repeat and clicking “Connect”



If the settings are correct and enough signal is available, the next screen will display “Connect Successful” and the procedure is finished. You can now re-enable your wireless connection and connect to the repeated signal.

*If you select “OK”, you will be returned to the “Wireless Site Survey” page.  
You can now disconnect the Ethernet cable from your computer and the O2 device.*



*If the encryption key or type is incorrect, the next screen will read “Encryption Type Mismatch”. You will need to recheck your security settings and try again. If the signal you are repeating is unencrypted, you need to make sure that your encryption type is set to “None” before connecting.*

*Your O2Link or O2Point is now acting as a client and access point simultaneously. You can connect wirelessly to the repeated signal or connect via the Ethernet cable to access the internet.*