

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)

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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 nonrouting 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 theO2Point.

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

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

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Windows

XP: Open Start Menu and select Control Panel



Select Network Connections (if unavailable, select show "Classic view")

Network Connections					
File Edit View Favorites Tools	Advanced Help				
😋 Back 🝷 🕥 - 🎓 🔎 S	earch 😥 Folders 💷 🛛 🔞 Fold	er Sync			
Address 🔕 Network Connections					
	Name	Туре	Status	Device Name	Phone
Network Tasks 🏾 🕆	LAN or High-Speed Internet				
Create a new connection Create a new connection Create a home or small office network Conge Windows Firewall settings Consection Repart this connection Repart this connection	1394 Connection 1004 Area Connection 1019 Weeless Network Connection	LAN or High-Speed Inter LAN or High-Speed Inter LAN or High-Speed Inter LAN or High-Speed Inter	Connected, Firewalled Connected, Firewalled Not connected, Firewalled Connected, Firewalled	1394 Net Adapter Broadcom 570x Gigabit I Intel(R) PRO/Wrieless 22 (ZD 12118)IEEE 802.11 b	
Other Places *					
My Network Places					

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".



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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"

S Network Connections					
File Edit View Favorites Tools	Advanced Help				
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Address 🔕 Network Connections					
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🔄 Create a new connection	1394 Connection	I AN or High-Speed Inter	Connected Firewalled	1394 Net Adapter	
Set up a home or small	Local Area Connection	LAN or High-Speed Inter	Connected, Firewalled	Broadcom 570x Gigabit I	
Change Windows Firewall	((p)) Wireless Network Connection	LAN or High-Speed Inter	Not connected, Firewalled	Intel(R) PRO/Wireless 22	
settings	((p)) Wireless Network Connection 2	LAN or High-Speed Inter	Connected, Firewalled	(ZD 1211B)IEEE 802.11 b	
Disable this network device					
Repair this connection					
Rename this connection					
 View status of this connection 					
Change settings of this connection					
Other Places					
🚱 Control Panel					
My Network Places					
My Documents					
😨 My Computer					

Select Properties

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

Local Area Connec	tion Properties	2
General Authentication	Advanced	
Connect using:		
Broadcom 570x G	igabit Integrated Co	Configure
This connection uses th	e following items:	
AEGIS Protoco	I (IEEE 802.1x) v3.4	4.5.0
Realtek EAPP	t Protocol	
Internet Protoc	ol (TCP/IP)	
<		>
Install	Uninstall	Properties
Description		
Transmission Control wide area network pri across diverse interco	Protocol/Internet Protocol that provides onnected networks.	otocol. The default communication
Show icon in notifica	tion area when con	nected
V Nouly me when this o	connection has limite	ed of his connectivity
		OK Cancel

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

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P address autor	natically				
owing IP addres	ss:				
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ay:		×.	3	2	
6 server address	s automatically	/			
owing DNS sen	ver addresses	:			
5 server:					
Server:			÷	-	
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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

<u>F</u> ile	Edit	⊻iew	History	<u>B</u> ookmarks <u>T</u> ools <u>H</u> elp	
<		- C	X	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



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

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< > - C × 🏠	http://192.168.1.100/hor	ne.asp
WLAN AP	+	
Radiola	bs	
Wireless & Beyon	d	
Site contents: Status Statup Wizard	Wireless Ba	sic Settings
Basic Settings	This page is used to co	mfigure the parameters for wireless LAN clients which may cor
Advanced Settings	Disable Wireless	s LAN Interface
WDS settings	Band:	2.4 GHz (B+G)
Site Survey	Mode:	AP 💌
Log	Network Type:	Infrastructure V
Statistics	SSID:	RadioLabs
Save/Reload Settings	Channel Number:	
Password WatchDog	Associated Clients:	Show Active Dirents
	Enable Mac Clor	te (Single Ethernet Client)
	Enable Universal	l Repeater Mode (Acting as AP and client simultaneouly)
	SSID of Extended inte	rrace:

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.

WLAN AP - MOZILLA FIFETOX	
Eile Edit View History Bookmarks Tools Help	
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WLAN AP ÷	
Radio Lobs Wireless & Beyond	A PRIME
Status Status Status Setup Wizard Withers Wireless Security This page allows you setup the with	Setup reless security. Turn on WEP or WPA by using Encryption Keys o
Advanced Settings Advanced Settings Advanced Settings Access Control WDS settings Use 802.1x Authentication WDS settings Use 802.1x Authentication Mode: TCP/IP Settings WPA Cipher Suite: Statistics Upgrade Firmware Pre-Shared Key: Password Enable Pre-Authentication	Set WEP Key • WEP 64bits WEP 128bits • Enterprise (RADIUS) • Personal (Pre-Shared Key) M TKIP AES • TKIP AES • Passphrase
Authentication RADIUS Server:	Port 1812 IP address Password
Note: When encryption WEP is se Apply Changes Reset	ilected, you must set WBP key value.

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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.