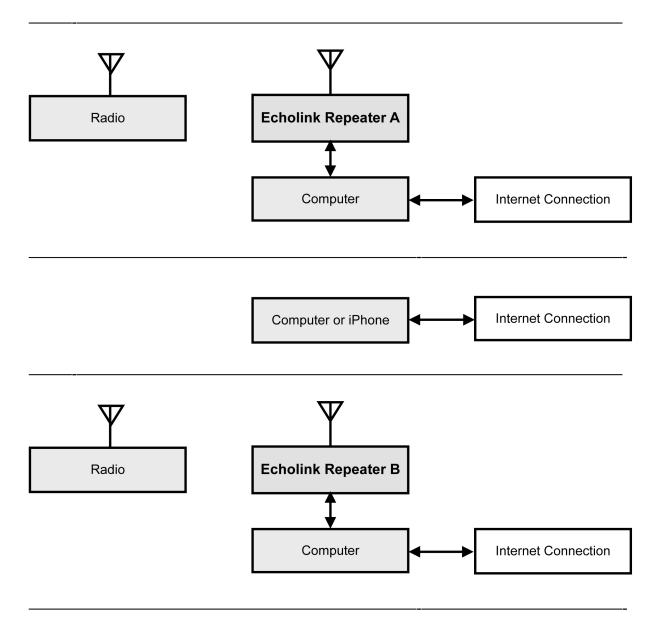
Echolink and IRLP

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Echolink



EchoLink makes it possible for amateur radio stations to connect to a repeater anywhere in the world via the internet. The technology uses streaming audio. Echolink was developed by Jonathan Taylor, K1RFD, in early 2002. Connections to be made between Echolink connected; stations, or from computer to station, or from an iPhone to a station or repeater.

The first step is to register your callsign at www.echolink.org to be authenticated. Then, download the PC software from www.echolink.org. Install the software in your computer or iPhone. A list of repeaters

will appear on the computer or iPhone screen. Software for the Mac is available from http:// echomac.sourceforge.net.

W1AW (ARRL) is also present on the list of active EchoLink stations. However, W1AW is listed as "BUSY" since this connection is used for the conference server. Therefore, DO NOT connect to W1AW. To listen, you must connect to W1AWBDCT (node 501433).

The Apple Airport series router does not support port triggering. It will need to be configured manually to forward to a Mac's IP address.

Step 1. On the mack, go to System Preferences / Network / Advanced / TCP/IP - and find the IPv4 address. On the PC, go to Control Panel / Network Connections. Double click on Network Connections. Click on Support or Details and copy the IP Address. **NOTE: each computer used, will have a different IPv4 address. Consequently, if computers are changed, the IPv4 address must be change in the router. Only one IPv4 address can be used in the router. The iPhone appears to work with any configuration.**

Step 2. Open Airport Utility.

Step 3 . Go to the network tab, Select Port Mapping, click the + sign to add a port mapping and name it EchoLink.

Step 4. Add Public UDP ports: 5198, 5199

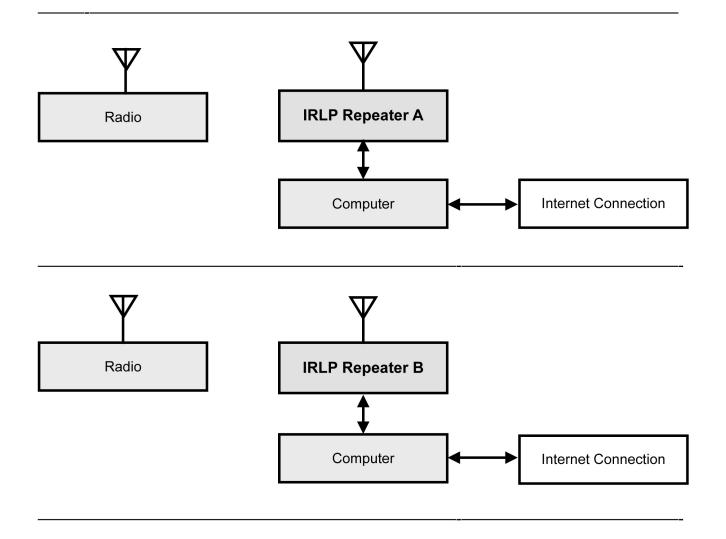
Step 5. Add Private UDP Ports: 5198, 5199

Step 6. Add Public TCP Ports: 5200

Step 7. Add Private TCP Ports: 5200

Step 8. Change the Private IP Address to the IPv4 address found in Step 1.

120000000000			Firewall Entry Type:	IPv4 Port Mapping	
Router Mode:	DHCP and NAT	\$			
DHCP Range:	10.0.1.2 to 10.0.1.200		Description:	Echolink	
DHCP Reservations:	Description IP Addres	ss ^	Public UDP Ports:	5198, 5199	
			Public TCP Ports:	5200	
			Private IP Address:		
	+ -	Edit	Private UDP Ports:	5198, 5199	
Port Settings:	Description	Туре	Private TCP Ports:	5200	
	Echolink	IPv4			
	+ -	Edit			
Enable Access Control:	Timed Access Control			Cance	el
	Network Options				



IRLP is a internet-connected collection of radios and repeaters that was invented by David Cameron VE7LTD in Canada in 1997. The official information web page is at http://www.irlp.net. Each repeater, or group of amateur radio repeaters, is connected to the Internet. The technology uses streaming audio. This technology is similar to Echolink except it is RF to RF, not computer to repeater. Basically is simply connects repeaters together via the internet. An operator connects to repeater via RF the same way as regular repeater operation, with the exception of a sysop using DTMF tones to turn IRLP on or off.

Operators within the radio range of a local node are able to use DTMF tone generators to initiate a node-to-node connection with any other available node in the world. Each node has a unique 4 digit node number in the range of 1000-8999. To find the status of a repeater can be found at http:// status.irlp.net. Many repeaters have Echolink and IRLP connections. IRLP runs on Linux.

W1AW (ARRL) operates its own IRLP node (4292) on 147.425 MHz (Simplex). This node is in operation primarily for EMCOMM use. However, the node is usually monitored during daily regular visitor operating times. The node is non-operational during regular broadcast times.