



# Echolink for Amateur Radio

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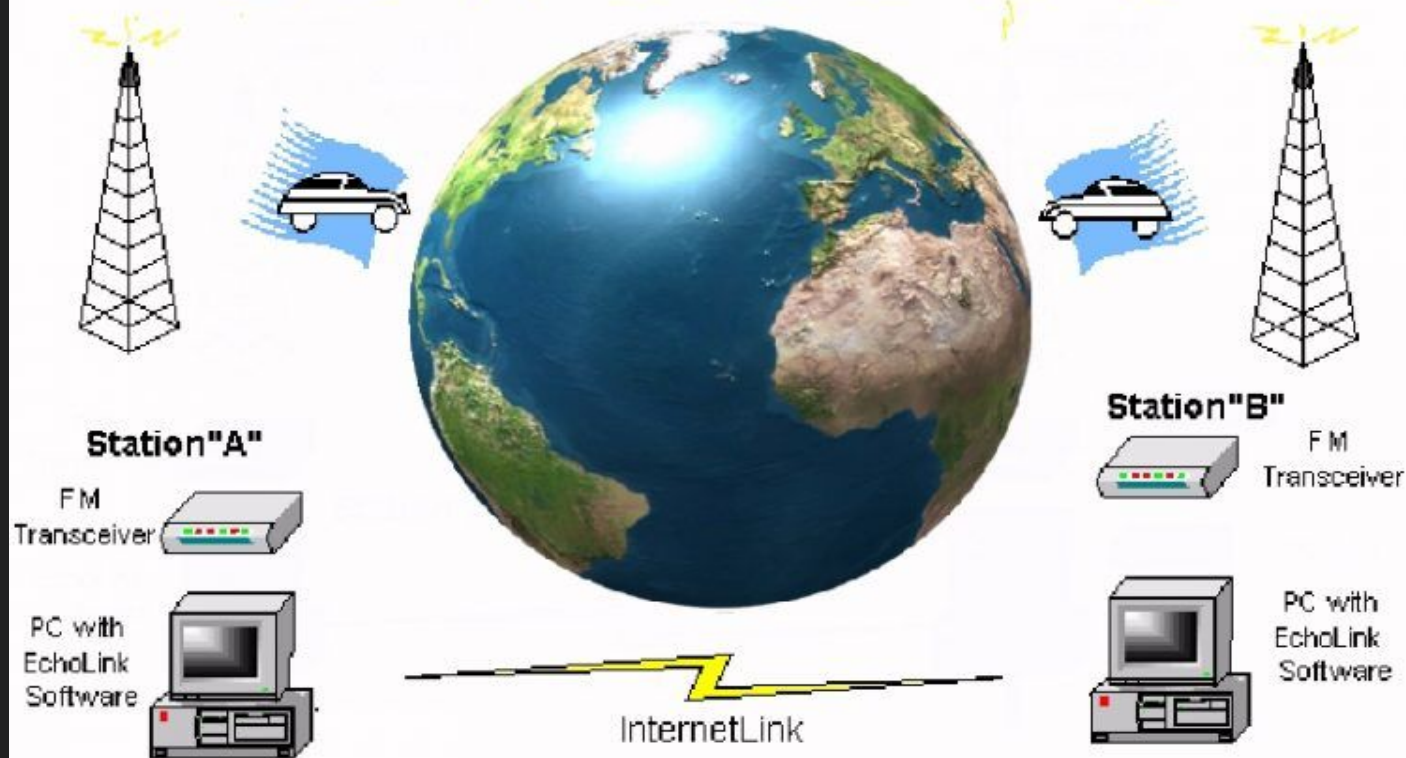
# What is Echolink?

Echolink is a system that provides VoIP communication gateways to Amateur repeaters and simplex stations worldwide.

The software & service are free to use.

Similar to Yaesu's Wires-X & IRLP (Internet Radio Linking Project).

# ECHOLINK



# Port Forwarding / DHCP Reservation

To avoid connection issues, UDP ports 5198 & 5199 should be forwarded to whichever device you're using. TCP port 5200 as outgoing only, if your device's firewall blocks it.

Use DHCP address reservation for IP management if your device will be outside your home network, in the long-run this is easier and ensures proper port forwarding. Otherwise set a static IP within your PC/device's settings.

Port Forwarding Help: <https://portforward.com/router.htm>

More info: <http://www.echolink.org/firewall-friendly.htm>

# Getting Echolink - Registering

On your Windows PC get Echolink from <http://echolink.org/download.htm>

No computer? It's available in the Apple and Google Play app store's.

Once installed, open Echolink and login like you've done this before, just don't forget the password you chose! They'll email you with follow-up instructions to validate your callsign/email.

Interfacing a radio and PC will require a Signalink USB device, West Mountain Radio's RigBlaster, or a number of other devices, even home-brew designs are available online.

# Echolink Authentication...

Scan your amateur license, photograph it, or fax it for proof of licensure.

-The FCC provides through the ULS a PDF copy of your license, it's free.

You can also donate \$1 with credit card in lieu of uploading anything.

More information:

<http://echolink.org/authentication.htm>

<http://echolink.org/validation/>

[http://echolink.org/validation\\_docs.htm](http://echolink.org/validation_docs.htm)

# Echolink Node Types

- Direct User (K1BQY) - Internet enabled smart phone or Internet enabled computer with speaker and microphone.
- Echolink enabled repeater (K1BQY-R) - Audio feed of the repeater is received by Echolink node & relayed onto the echolink system, and vice-versa.
- Echolink enabled simplex link (K1BQY-L) - Audio feed of a simplex radio.

\*The -L & -R distinction is good to know, as operating is different for each.

You can have your callsign validated for all 3 types, if linking a repeater remotely, you must use the remote station's callsign.

# What's a conference?

Sort of like a big party line, audio streams in from all the various connected nodes, users, and other conferences. Echolink sorts it out to prevent doubling.

Conferences are usually used for specific topics, and are distinguished from other nodes with asterisks around their name. I.e: \*CONF\*

Live list sorted by user count:

[http://echolink.g4eid.co.uk/status/all\\_conferences.html](http://echolink.g4eid.co.uk/status/all_conferences.html)



EchoLink - K1BQY-R

File Edit Station Tools View Help

5,666 stations on naeast.echolink.org (11% are busy)

Station	Stat	Time	Location	Node
K0VQ-R	On	12:26	Cortez, CO	236973
K0VRC-R	On	13:25	Ely, MN, USA	197840
K1BLU-R	On	10:53	Lakewood, CA [0/20]	242618
<b>K1BQY-R</b>	On	14:25	K1FS Presque Isle, ...	286970
K1DED-R	On	14:25	Hooksett	511025
K1IMD-R	On	14:23	Eastern LI NY	93225
K1LNK-R	On	14:28	Knoxville, TN USA	710449
K1MRA-R	On	14:23	Weston, MA 442.700	4136
K1MUJ-R	On	14:27	Brooklyn, CT. 147.225	47825
K1PBO-R	On	14:30	CAPE COD Dennis, ...	20024
K1PQ-R	On	14:26	Sebec, ME	896607

Index View Explorer View

[Not in QSO]  
Last connection: K1BQY

Ready

3:16 78%

K1BQY-R

K1BQY-R

K1FS Presque Isle, ME

Station K1BQY-R  
Located in Caribou, Maine.  
Linked to K1FS repeater.  
146.730 -  
Presque Isle, Maine USA.  
NET: Monday's 8pm EST

TRANSMIT

END

# DTMF commands

Command	Description	Default
Connect	Connects to a station on the Internet, based on its node number.	num
Connect by Call	Connects to a station on the Internet, based on its callsign.	C+call+#
RandomFavNode	Selects an available node (of any type) at random from Favorites	1
RandomFavConf	Selects a conference server at random from the Favorites List	21
Disconnect	Disconnects the most recent station currently connected.	#
Disconnect All	Disconnects all stations.	##
Reconnect	Re-connects to the station that most recently disconnected.	9
Status	Announces the callsign of each station currently connected.	8
Play Info	Plays a brief ID message.	*

# Some notes..

K1BQY-R has a 90 second transmit timer, and supports 8 connections.

-This is a total of users/links/repeaters/conferences or combination.

-A log file is kept of all connection's made and DTMF received.

Echolink provides a chatbox allowing text, links, and images to be shared amongst the node participants.

Next to DTMF an internal web server is provided for remote administration.

## System Log

```
2019-04-01 23:07:31 DTMFCommand 25
2019-04-02 12:09:22 Verifying K5000          Bill 44.190.9.222
2019-04-02 12:09:24 Connect K5000          Bill 853240 44.190.9.222
2019-04-02 12:10:08 Disconnect K5000 Peer requested disconnect
2019-04-02 13:33:34 Verifying K1WLJ         Bill 44.190.9.225
2019-04-02 13:33:35 Connect K1WLJ         Bill 29557 44.190.9.225
2019-04-02 13:33:50 Disconnect K1WLJ Peer requested disconnect
2019-04-02 13:38:08 Connect K1WLJ         Bill 297112 44.190.9.225
2019-04-02 13:38:24 Disconnect K1WLJ Peer requested disconnect
2019-04-02 14:18:05 Connect TA2MOU         Murat 933528 44.137.75.246
2019-04-02 14:18:55 Disconnect TA2MOU Peer requested disconnect
2019-04-02 15:23:02 Disconnect K5TUX-L Peer requested disconnect
2019-04-02 20:35:41 DTMFCommand 4D
2019-04-03 10:13:28 Verifying K1BQY         Bryan 44.190.12.82
2019-04-03 10:13:30 Connect K1BQY         Bryan 349007 44.190.12.82
2019-04-03 10:18:12 Disconnect K1BQY Peer requested disconnect
```

Find:

Find

Clear...

Close

# Lastly..

Everything you'd ever want to know (and don't) about Echolink has been very nicely documented on their webpage @ <http://echolink.org>

Thank you, and hope to hear you on the air or Echolink!

73 de K1BQY