

A Short Tutorial on Using Echolink from your mobile by VA3TS

Most of the instructions you read are about accessing the echolink system of repeaters using a laptop and a usb mic and some software. This article will lean towards using the echolink system from your mobile transceiver using DTMF tones.

The only required equipment is of course your radio and a DTMF mic, luckily these are common and the steps to use them are documented in your radio's manual.

A little background. EchoLink is a computer-based Amateur Radio system distributed free of charge that allows radio amateurs to communicate with other amateur radio operators using Voice over IP (VoIP) technology on the Internet for at least part of the path between them. It was designed by Jonathan Taylor, a radio amateur with call sign K1RFD.

The system allows reliable worldwide connections to be made between radio amateurs, greatly enhancing Amateur Radio's communications capabilities. In essence it is the same as other VoIP applications (such as Skype), but with the unique addition of the ability to link to an amateur radio station's transceiver. Thus, any low-power handheld amateur radio transceiver which can contact a local EchoLink node (a node is an active EchoLink station with a transceiver attached) can then use the Internet connection of that station to send its transmission via VoIP to any other active EchoLink node, worldwide. No special hardware or software is required to relay a transmission via an EchoLink node.

In our case the Echolink node is the VE3OSR repeater and has had this facility for some time although it is usually operated by remote stations connecting to VE3OSR via the internet.

The instructions in this article can also be used by anyone with an internet connection and the appropriate equipment, but they would need to register their callsign to do it. To connect with your radio, the system assumes you are an



EchoLink Link Status
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Show All Links
 Show Links Near:
 Deg Min
 Latitude: North
 Longitude: West
 Show Links Near:
 Grid Square:
 Show Links Near:
 City: State/Prov (if any) [n/a] Country: United States

Figure 1

Google Earth View (requires Google Earth software) [\[More Info\]](#)

All Links (Online only)
 As of: 02/08/2019 23:52 UTC
 Showing Results: 1 To 100 Of 2113 Jump to page: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

Call	Description	Node	Latitude	Longitude	Grid Square	Freq (Mhz)	Tone (Hz)	Pwr (W)	Haat (ft)	Ant	Last Status	Comment	Last Update (UTC)
2E0EVP-R	Rotherham England [1/20]	917690	53°25.96' N	1°21.81' W	IO93hk	.000		0	10	0dB omni	Online	On @ 2343 [1/20]	2/8/2019 23:43
2E0RVV-L	Elston, England [0/20]	854631	53°01.40' N	0°51.84' W	IO93na	430.025	77.0	1	40	6dB omni	Online	On @ 2340 [0/20]	2/8/2019 23:40
2E0UKH-L	[0/10]	571873	0°00.00' N	0°00.00' E	JJ00aa	.000		4	10	5dB omni	Conn	000/000 On @ 2339 [0]	2/8/2019 23:39
2E0XVX-L	UK-Cluster HUB [0/100]	579534	52°29.26' N	0°55.69' W	IO92ml	.000		4	160	4dB SW	Conn	000/000 On @ 0112 [0]	2/8/2019 23:42
2E1SKY-L	WORLDHUB TEXAS [0/20]	199513	0°00.00' N	0°00.00' E	JJ00aa	.000		0	10	0dB omni	Online	On @ 2344 [0/20]	2/8/2019 23:44
2M0EJT-L	Allstar Node [0/5]	252097	55°00.86' N	3°14.74' W	IO85ja	.000		4	160	4dB SW	Conn	000/000 On @ 1602 [0]	2/8/2019 23:47
4F7FDM-L	Mandaue City	242646	10°00.00' N	123°00.00' E	PK10ma	144.720	88.5	16	40	3dB omni	Online	On @ 2341	2/8/2019 23:41
400UKO-R	Lovcen, Cetinje, MNE	971568	42°23.95' N	18°49.11' E	JN92ji	438.675		16	40	7dB omni	Online	On @ 2343	2/8/2019 23:43
400VBA-R	Bjelasica, Berane, MNE (1)	971571	42°51.05' N	19°40.70' E	JN92uu	145.700	77.0	16	40	7dB omni	Conn	=400VKO-R 2342	2/8/2019 23:42
400VKO-R	Lovcen, Cetinje, MNE (2)	971575	42°23.95' N	18°49.11' E	JN92ji	145.675		16	40	6dB omni	Online	On @ 2342	2/8/2019 23:42
4X1ZQ-L	P.Tikva 145.275+pl (2)	583322	32°06.23' N	34°52.23' E	KM72kc	145.275	91.5	9	10	0dB omni	Conn	=425SL at 2339	2/8/2019 23:39
4Z1JZ-R	KM72OR93 Haifa Rep. R12	169676	32°42.59' N	35°13.59' E	KM72or	144.700	91.5	16	640	4dB omni	Online	On @0054	2/8/2019 23:49
7L1GVP-L	In Conference *TSQLJP*	217328	35°40.76' N	140°17.04' E	QM05dq	430.760	88.5	4	20	2dB omni	Conn	=EL-CONF at 2339	2/8/2019 23:39
7L4ICI-L	In Conference *JH7GLZ*	127072	35°48.90' N	130°24.00' E	PM95st	438.440	110.9	4	20	5dB omni	Conn	=EL-CONF at 2344	2/8/2019 23:44

amateur radio operator so the registration step is not required.

So first things first, lets see which repeaters around the world are using echolink and therefore I can connect to. To display the Echolink Status click on this link <http://www.echolink.org/links.jsp>

The echolink status screen (Figure 1) will be displayed and its quick to see all kinds of stations all over the world. You can also display the listing by different parameters like country or grid. The red arrow in the figure points to a nice feature if you have Google Earth installed on your computer.

To download Google Earth go here <https://www.google.com/earth/versions/#download-pro>

Figure 2 has a screen shot of google earth showing a part of Ontario with the Echolink capable stations shown. The normal view is a globe with echolink nodes placed worldwide. Just click on any pushpin and the node number will be displayed. You can move or rotate the globe with your mouse.

Google Earth can also be used with rig control programs like DXlab to show visually the station you are working as well as the path. This can be very interesting when showing the shack to guests.

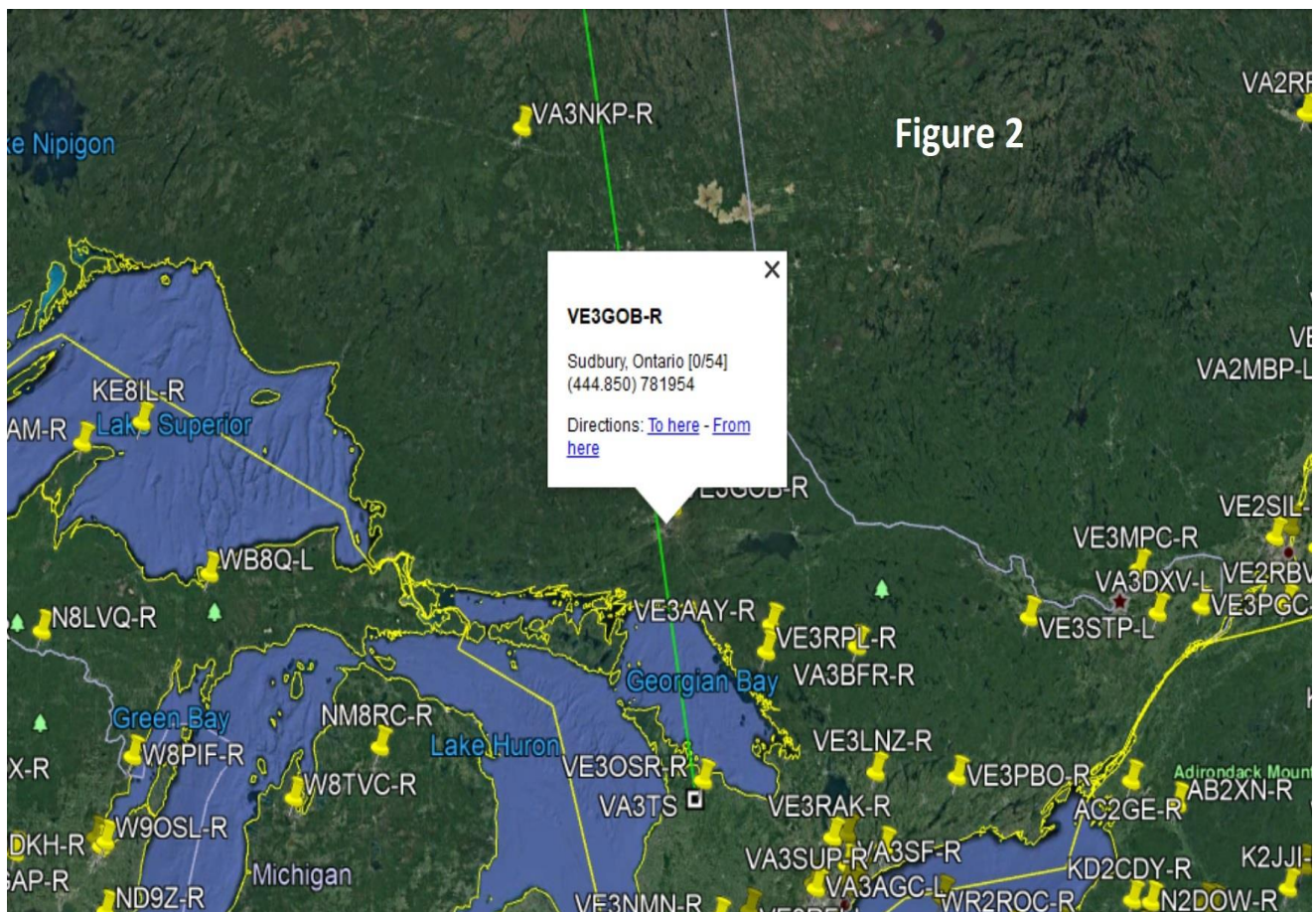


Figure 3 below lists the easy commands to send with your radio. Just pick a node number from the echolink page or from the Google Earth globe. Common courtesy says we should ID our station, then send the DTMF sequence (starting with the prefix CC) and wait for the other end to acknowledge.

You then key up and give your callsign to whomever may be listening on the other end. To end the connection simply key up and send # and of course ID again.

Figure 3

Command	Description	Default
Connect	Connects to a station on the Internet, based on its node number. Each node number must begin with a prefix of CC	CC+num
Disconnect	Disconnects the station that is currently connected. If more than one station is connected, disconnects only the most-recently-connected station.	#

Connect

The default for the Connect command is to simply enter the 4- 5-, or 6-digit node number to which you wish to connect. To prevent interference with other DTMF functions, a special prefix CC is added before the node number. This is sent all at the same time ie: CC12345

Entering Node Numbers

To enter a node number (for the Connect or Query by Node commands), enter the 4-, 5-, or 6-digit node number. If the specified node is not among the stations currently logged on, EchoLink will say "NOT FOUND".

http://www.echolink.org/Help/dtmf_functions.htm