

## INSTRUCTIONS TO USE NONBH-R ECHOLINK CROSS-LINKED REPEATER SYSTEM NODE NUMBER 235978

For licensed hams, EchoLink® opens up new possibilities for communicating around the world with other amateurs. In Sierra Vista AZ five fulltime repeaters on 2m, 1.25m, 70cm, 33cm and 23cm link you to any of thousands of other stations WORLDWIDE over the Internet using my station and internet connection. All you need is a transceiver with a DMTF keypad. That's it. You use the DMTF tones to do all connecting, queering, and disconnecting. There are several different ways you can use EchoLink. By far, the easiest is if you know the node # you want to connect with. However, this sheet will show you how to connect with just a callsign. Contact me at [n0nbh@cox.net](mailto:n0nbh@cox.net) with any questions or comments. My website at <http://members.cox.net/n0nbh> provides the links you need. I will even setup shortcuts for you if you have a station you talk to frequently. Don't worry about errors and mistakes - that's the way we learn!

If you have a computer and want to find all the stations currently active, connected to the internet as follows:

- Connect to <http://www.echolink.org>
- Select "Current Login" to see who is currently on (just record the node# of the station you want to talk to)
- Select "Link Status" to see what links and repeaters are up in the area of interest

If you are ready to connect to your station, do not have a computer, or are mobile follow these instructions:

1. Tune your transceiver to:
  - 2m repeater on 147.360 plus offset with 100 Hz PL
  - 1.25m repeater on 224.96 minus offset with 100 Hz PL (PL is currently disabled)
  - 70 cm repeater on 449.825 minus offset with 100 Hz PL
  - 33cm repeater on 927.9125 minus offset with 100 Hz PL
  - 23 cm repeater on 1282.500 minus offset with 100 Hz PL (PL is currently disabled)
2. Announce your callsign and that you are connecting to an EchoLink patch
3. Connect to the station you want (easiest way is by node number)
  - If you know the numeric node number enter using your keypad. You will hear that it is attempting to connect, and will hear if successful or not. If connected, then just talk. Remember to announce your callsign as you are over the air.
    - ◆ As a test, enter "9999". This connects you to the test server. Anything you say will be recorded and replayed to you.
  - When done, press "#" to disconnect. Don't worry, I have a timeout set so if it does not take, it will timeout. No harm, no foul.
  - Announce you callsign and that you are clear of EchoLink
  - That's it. It is that simple.

Don't know the node number and no access to the internet? You can also connect to random stations, the last station connected, or even query or connect to a callsign or node. See the table below for all commands.

Command	Description	DMTF
Connect	Connects to a station on the Internet, based on its node number.	Enter node
Connect by Call	Connects to a station on the Internet, based on its callsign.	C+call+#
Random Node	Selects an available node (of any type) at random, and tries to connect to it.	00
Random Link	Selects an available link or repeater (-L or -R) at random, and tries to connect to it.	01
Random Conf	Selects a conference server at random, and tries to connect to it.	02
Random User	Selects an available single-user station at random, and tries to connect to it.	03
Disconnect	Disconnects the station that is currently connected. If more than one station is connected, disconnects only the most-recently-connected station.	#
Disconnect All	Disconnects all stations.	##
Reconnect	Re-connects to the station that most recently disconnected.	09
Status	Announces the callsign of each station currently connected.	08
Play Info	Plays a brief ID message.	*
Query by Call	Looks up a station by its callsign, and reads back its node number and status.	07+call+#
Query by Node	Looks up a station by its node number, and reads back its callsign and status.	06+num

Using a callsign is more difficult than using the node number. You have to enter a callsign using the numeric keypad as follows:

- A=21 | B=22 | C=23 | D=31 | E=32 | F=33 | G=41 | H=42 | I=43 | J=51 | K=52 | L=53 | M=61 | N=62 | O=63 | P=71 | Q=11 | R=72 | S=73 | T=81 | U=82 | V=83 | W=91 | X=92 | Y=93 | Z=12 | number= add a 0 (so 1=10, 2=20, etc) |
- So, as an example:
  - To query NONBH (status and node #), you would enter this on your DMTF keypad: 07 62 00 62 22 42 #
  - To connect to NONBH, you would enter this on your DMTF keypad: C 62 00 62 22 42 #

### 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.

### Entering Node Numbers

To enter a node number (for the Connect or 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 repeat the entered number and say "NOT FOUND".

### Entering Callsigns

To enter a callsign (for the Connect by Call or by Call commands), press two digits for each letter and number in the callsign (see above). When finished, end with the pound key (#). Callsigns need not be entered in full. If a partial callsign is entered, EchoLink will find the first match among the stations currently logged on. If no match is found among the stations currently logged on, EchoLink will say "NOT FOUND".

**My only wish is that you use this node. Tell your friends. It is up 24/7, so please feel free to use it. Mistakes, well they are expected. We all learn from them. And as far as I am concerned, that's what amateur radio is all about. 73 all de Paul N0NBH**