W1AKS Repeater Echolink Access
147.135/147.735 (PL 100)
Echolink Node Identifier - 600646.   Rev C

The W1AKS Repeater Echolink System

The W1AKS repeater sits atop of Mt. Uncannonuc in Goffstown, New Hampshire at a 1280 feet ASL. The repeater is a Hamtronics REP-200 with a 25 watt output at the duplexers. The antenna is of an Omni design with a gain of a 3db. The Echolink controller is an AMI-2 - All Mode Interface manufactured by ILINKBOARDS – WB2REM.

New Hampshire Radio Active in Disaster Incidence Operations (NHRADIO) established this repeater system to accommodate the needs of New Hampshire ARES. Anyone with a valid Amateur Radio License is welcome to use the system, however, ARES is considered its primary user and therefore ARES and Public Service operations will take precedence.

Contact Al, K1AKS at al@nhradio.org

What is Echolink and how do I sign up?

EchoLink opens a world of new communications possibilities by joining Amateur Radio stations over the Internet. Since the Internet is a shared, public resource, security is naturally a very important part of the system. EchoLink® software allows licensed Amateur Radio stations to communicate with one another over the Internet. The Echolink program allows worldwide connections to be made between stations through like Echolink equipped linked repeaters, or from computer to station. Additional information on Echolink in general may be found elsewhere on the www.arrl-nh.org site.

Those who are interested, but not familiar with Echolink operations should visit www.echolink.org . To use Echolink from your computer, you will need to download the Echolink software available from this same site. This program runs on Microsoft Windows and is free of charge. See Accessing Echolink from Your Computer below for further details

Each new user of EchoLink must provide proof of license before access is granted. This is to ensure that only licensed Amateurs have access to the system, and to ensure that each user is using a valid call-sign that he or she is authorized to use. This is explained in detail at www.echolink.org/validation

Each Repeater and individual station is assigned an Identification node number. W1AKS has been assigned 600646. It is necessary to know the node number you wish to connect to (much like you need to know someone's e-mail address). To find nodes for other stations/repeaters, visit www.echolink.org/logins/jsp –or-   go to http://www.echolinkmap.org .

This second site allows you to locate Echolink nodes using a clickable map however; not all active Echolink repeaters appear to be listed.

Accessing the Echolink Node From Your 2-Meter Radio

The W1AKS/R on the 147.135/147.735 (PL 100) can be accessed with any 2 meter radio with PL and DTMF capability.

The following information describes how by using DTMF codes you can access the Echolink gateway node from your radio and connect to another Echolink equipped repeater or station.

The following DTMF tones are "currently" programmed into the W1AKS repeater system. Other commands may be added later.

Echolink gateway will respond to the following commands:

Remember: You <u>must</u> disconnect from any linked stations once your QSO is completed by using the # command. The Echolink controller will acknowledge that you have been disconnected.

Command	Description	DTMF Code
Connect	Connects to a station on the internet, based on its node number. The node numbers can be 4, 5 or 6 digits.	nnnnnn
Disconnect	Disconnects the station that is currently connected. If more than one station is connected, a single # only disconnects the most-recently-connected station.	#
Disconnect All	Disconnects all stations that are currently connected.	# #
Play Information	Plays a brief ID message and connect status.	*

To establish an Echolink connection, perform the following steps:

1. It is recommended that you first identify yourself on the repeater by simply saying: This is X1XXX bringing up Echolink.
2. You can determine the status of the Echolink gateway by first keying a " * " DTMF tone. The gateway node will respond with status information if connected and to whom.
3. Using your DTMF pad, key the four or five digit station code for the station or repeater that you wish to link to.
4. After a few seconds, the Echolink node will respond with a "Connected" message if the link was successful.
5. If the link was not successful, key a " # " to disconnect the gateway node.
6. Following a successful connection, announce your presence on the linked repeater or station.
7. During a QSO using linked repeaters, let the 147.135/147.735 repeater **tail drop completely** before transmitting.
8. At the end of the QSO, disconnect the link by keying a " # " DTMF tone. The Echolink gateway will respond with confirmation that the link has been disconnected.

Accessing Echolink From Your Computer

1. Review and understand the Echolink tool bar so that you may connect and disconnect stations with ease.
2. Verify that you have a microphone properly connected to your computer and the microphone input volume level is properly adjusted.
3. Select a station or repeater to link to from the displayed Echolink station link.
4. Once connected, use the Enter key or spacebar or other transmit key that you may have configured to toggle between transmit and receive.
5. Remember to disconnect the link when you are done with your QSO.
6.

Web Links of Interest

Echolink	www.echolink.org
Echolink Node Maps	www.echolinkmap.org
Echolink Yahoo Discussion Group	http://groups.yahoo.com/group/echolink
I-link	www.aacnet.net
KB2REM PC boards and kits	www.ilinkboards.com
Internet Radio Linking Project (IRLP)	http://www.irlp.net
e-QSO	http://www.eqso.org

ENJOY !