



Chelmsford Amateur Radio Society

Introduction to EchoLink

EchoLink is a popular and flexible system that links analogue FM gateways (aka nodes) or repeaters via the internet using Voice over IP (VoIP).

It can be used by any FM radio with a DTMF keypad/microphone or (if you are licensed/registered) can also enable contacts to be initiated via the internet (by PC, smartphone app etc). The ease of access makes it one of the lowest cost of all the digitally-linked voice modes and ideal for new licensees.

EchoLink was created by Jonathan Taylor, K1RFD. See www.echolink.org for his "Introduction to EchoLink", software download, User's Guide, and FAQs.

There is a worldwide network of nodes/repeaters so a low power handheld can be used to make international contacts when other means may not be possible.

Some systems also provide for multiple users via conferencing facilities, with AMSAT and JOTA among the applications

So in summary the possible options are

- Radio-Radio
- Internet-Radio / Radio-Internet
- Conferencing: Single to Multiple

Local facilities

In the UK all gateways require CTCSS and NBFM as well as the appropriate frequency (similar to FM repeaters). Systems on 144 MHz have permits to be on air 24/7. For lists/maps see www.ukrepeater.net

Locally there is the Essex Repeater Group node:-

Call	Frequency	CTCSS	Node
MB7IDA	145.3375 MHz	110.9 Hz	265297

Radio Use: The most common keypad commands are below:-

Command	Enter	Action
Connect by Node	Node No.	Connects to specified station via internet.
Connect by Callsign	MicC+Callsign+#	Connects to specified station via internet.
Random Node	00	Connects to any free Node at random.
Random Link	01	Connects to any Link or Repeater at random.
Random Conference	02	Connects to a Conference Server at random.
Random User	03	Connects to a Single User station at random.
Node Query	06+Node No	Reads back Callsign and status.
Call Query	07+Callsign+#	Reads back Node No and status.
Status Request	08	Reads back Callsigns of all connected stations.
Reconnect	09	Re-establish recently disconnected station.
EchoLink Test	9999	Connects to the EchoLink Test Server
Identity Request	*	Plays back ID message.
Disconnect	#	Disconnects most recently connected station.
Disconnect All	##	Disconnects all stations.

First time users may wish to connect to the test server (node 9999) to check their access setup and audio levels (it play back your own audio). More information regarding current online nodes and Internet access by computer, tablet or smartphone can be found on www.echolink.org.