

## TECHNICAL ARTICLE

### VK4PQ-R Townsville Echolink Node 956580

You may have heard some strange noises on the Local Townsville 2M repeater VK4RAT of late, sometimes an automated digital voice announcing VK4PQ, and now a morse code ident of VK4PQ, what does this mean ?

Well it means that when you hear my station ident on the repeater then I have connected my Echolink test connection to the repeater and people outside of Australia can connect to my node and call CQ on the Local 2M repeater or call a local ham; or local hams can call stations overseas or within Australia by following the procedure below..

#### A brief How To - DTMF Commands

The on-air commands are standard defaults as delivered with the original software install.

Command	Description	DTMF
Connect	Connects to a node or station, based on its station number (num) .	num
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

#### - Making the Call

As with all VOIP modes – the following steps need to be taken BEFORE initiating a connection –

- 1 – ASSESS ! Will your signals be heard well by the local repeater you are using. DTMF hates static.
- 2 – LISTEN ! Make sure the frequency is not in use.
- 3 – IDENTIFY ! Transmit your callsign and advise that you are about to make a VOIP assisted call.
- 4 – DIAL ! Enter the DTMF number (101377) in a regular and confident sequence – don't fuddle !
- 5 – CONNECT ! Hopefully you will connect to the distant node. Remember there is some group delay between pressing your PTT button and the distant node keying up. Allow a second or so on key-up before speaking clearly and distinctly. Transmit your callsign and city of origin and the fact that you are calling on ECHOLINK. Then make your call, either to a particular station or to all stations.

#### - Finishing the Call

Hopefully you will link up and have a satisfying conversation. At the end of the call remember ....

- 6 – Issue the Disconnect command (#) and...
- 7 – Thank the Listeners for their co-operation.

#### - Baofeng DTMF Tone Setting

Do this command string on your Baofeng to get your tones to go right –

**Menu > 1 > 6 > Menu > 0 > Menu > Exit**

The setting should work with 95% of Baofeng handhelds.

#### - Linked Stations and Radio Nets

Remember to leave around a 3 second gap before your turn to transmit to allow for network lag. Net Controllers can call linked stations in first when establishing a net list, to give those stations a chance to be part of the net.

**TECHNICAL ARTICLE (cont.)****VK4PQ-R Townsville Echolink Node 956580 – A brief How To - Station Numbers**

The best places to look up Echolink Node numbers

- if you are on your PC or smartphone, list of active nodes within the Echolink application.

- if you are on radio, look up station numbers at <http://www.echolink.org/links.jsp>

search for a node list by position, grid square or place name.

Here is an example list of some of the station numbers for links, conferences and test nodes.

**Test**

Name	Description	Number
ECHOTEST	Echolink Audio Test Server	9999

**Conferences**

Name	Description	Number
29MHZ-FM	29MHz FM Conference	2945
ALARA	Australian Ladies Amateur Radio Association	286905
AMSAT	Amateur Radio Satellite Conference	101377
AUSSIE	Australian Conference	95092
DODROPIN	Do Drop In Conference	355800
DX-LINK	World Wide DX Link	356937
HAM	WIA News Conference	896385
HI-GATE	Echolink <> IRLP 9250 Conference Bridge	357564
IRELAND	Donegal Conference	2605
ISLAND	Pacific Islands Conference	894359
JOTA-365	Jamboree On The Air Conference	480809
JAPANESE	Learn Japanese – Young and Old Beginner	414166
JR7JAW	Japan Ragchew Conference	279627
MASONS	Masonic Gathering	83055
NASA	NASA Spaceflight Mission Audio	13599
OPENIRLP	openirlp.net Conference	302324
PAPA	PAPA system SE Calif Conference	445578
QRP	Low Power DX Conference	140904
REACT	US Emergency Communications Conference	109779
RUSSIA	Russian Reflector	196189
SCAN_USA	Scan International Conference	189657
TECHLINK	Boring Technical Talk Conference	9229
TECHTALK	Boring Technical Talk Conference	43220
TRAC	Disaster Net Server	309716
USA	Echolink <> IRLP 9369 Conference Bridge	181517
VK3JED	VK Drivetime Net	42840
VKEMCOMM	Australia Emergency Communications	270177
WORLD	Echolink <> IRLP 9251 Conference Bridge	479886
WW-MARA	World Wide Emergency Communication Nets	173882
ZL1VK	New Zealand Conference	65001

**Links and Repeaters – QLD/TAS**

Area	Station	Number
Brisbane	VK4RBN-R	888046
Bundaberg	VK4MOD-L 147.500	274596
Caboolture	VK4QD-R	314599
Blackwater	VK4SM-L	965605
Dalby	VK4NRL-R	209093
Gympie	VK4GYM-R	636656
Hervey Bay	VK4RHB-R	527138
Ipswich	VK4RKP-R	7878
Maryborough	VK4TPT-L 145.350	314599
Moranbah	VK4DA-L	375266
Redcliffe	VK4RC-R	446666
Rockhampton	VK4RAR-R	108959
Sunshine Coast	VK4WIS-R VHF	316084
Sunshine Coast	VK4RY-R UHF	552566
Toowoomba	VK4DAK-R	69580
Townsville	VK4PQ-R	956580
Townsville	VK4ZZ-R	48140
Hobart	VK7RAD-R	331193

Thanks and enjoy, watch out for Kerry's ALLSTAR node information.

De: VK4PQ Peter @ Kelso.