

## TECHNICAL ARTICLE



### VK4TUB Townsville AllStar Link Node 47640

You may have heard some strange stations on the Local Townsville 70CM repeater VK4RAT of late, sometimes an automated digital voice announcing VK4TUB, and the time every hour. This is all part of an AllStar Link Node normal operation and will happen whether or not the node is linked.

Want to get connected to a node or hub ? Operators both inside and outside of Australia can connect to the VK4TUB Node and put out a general call on the VK4RAT 70cm repeater or specifically call a local ham. Likewise, local hams can call stations world-wide 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. However \*71 which is disconnect all nodes is not available by default as using this command can disconnect all nodes linked up on the network and would make you very unpopular. There is no limit to the number of nodes you can connect but common sense should prevail here.

**Please be aware if you are using a Baofeng radio there is no guarantee that the DTMF tones will be correct. So don't be surprised if you get no response. The command string to fix this is detailed below.**

Command	Description	DTMF
<b>Connect</b>	Connects to a node using *3 followed by the node number. example *328600 will get you into Darwin	<b>*3</b>
<b>Disconnect</b>	Disconnects a node from the repeater. Example *128600 will disconnect you from the Darwin Node i.e. *1 followed by the node number	<b>*1</b>
<b>Node Status</b>	Sending *70 will give you feedback as to where or if the node is connected, telling you both the current node number and the number of the node you connected to. Example 47640 connected to 28600	<b>*70</b>
<b>Time</b>	Sending command *81 responds with the electronic lady telling you the current time.	<b>*81</b>

#### - 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 (*\*128600*) in a regular and confident sequence – don't fiddle !
- 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 at least 3 seconds before key up and wait 2 seconds before speaking, its not hard and good radio procedure even on a local repeater.

Transmit your callsign and city of origin and the fact that you are calling on All Star, 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 *\*1 and the number of the node example \*128600*
- 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.)****VK4TUB Townsville AllStar Link Node 47640****- Station Numbers**

The best place to look up AllStar Link Node and Hub numbers is at <https://allstarlink.org/nodelist.php>

To check which AllStar Link Nodes and Hubs are active surf to <http://stats.allstarlink.org/>

Here is an example list of some of the hub and node numbers.

**Hubs**

Call	Description	Number
VK3JED	International Rag Chew Hub	27154
K6JSI	WIN Hub Los Angeles	2560
UK	Manchester Hub	27000
VK7RTV	NW Tassie Hub echo152375	27328
XRF044A	XRF044 Hub Norfolk UK echo350389	27370
K5NX	IRLP0700 Bridge Hub	27378
VE2BFW	RedditNet Hub	27391
W2FUV	W2FUV Hub Morrisville PA	2774
KF6FM	SwRRC Cal Hub	28010
ZS5PMB	MARC Hub echo244279	28052
DARWIN	VK8MT DataCentre Hub	28600
VK6NEWS	VK6RX Hub Perth	42719
4F2RV	Santiago City Hub Philippines	29298
ZL1OE	Kiwi Hub	42098
ALASKA	KR1STO Hub	46450
K0KN	Kansas Super Hub echo 309554	2210
WN3A	TECH Hub Valley Forge echo83883	2323
KB8ZGL	XRF004 Hub Grand Rapids	2363
KB3BSA	SCOUT Hub	27047
UKHUB	UK Virtual Server	27066
HAWAII	Honolulu Hub echo505286	27084
JOTAUK	1st Helsby JOTA Hub GB0HSG echo869566	27105
XRF901	N1DOT DSTAR Transcoder	28064
EKOSTAR	NG2F Echolink Transcoder echo630036	28065

**Nodes**

Area	Station	Number
Brisbane	VK4RKP	2134
Sunbury	VK3TKK echo463186	27183
Otago	ZL4CEL echo450465	27222
Melbourne	VK3JD echo493376	27526
Mackay	VK4DW	27973
Port Lincoln	VK5ZEA	27871
Dural	VK2ZAG	27840
Renmark	VK5LV	28077
Wyee	VK2HK	28593
Perth	VK6ZGN	28608
Parkes	VK2BLR echo523923	28845
Auckland	ZL1OE	29023
Lismore	VK2CXX echo59333	29990
Gympie	VK4RCM	40973
Bendigo	VK3EME	44099
Townsville	VK4TUB echo834965	47640
Toowoomba	VK4IL	43561
Goulburn	VK2KS	42164
Lavington	VK2BFC echo388642	42219
Port Kennedy	VK6RX irlp9444	42688
Geraldton	VK6MP	43804
Palmerston Nth	ZL2GZ	45212
Kalgoorlie	VK6JB	47066

If you have questions I can be contacted on email [kermck@gmail.com](mailto:kermck@gmail.com)  
cheers de Tubby/VK4TUB