

## **DDRCi EchoIRLP User Guide**

**IRLP # 6958**

**Echolink # 69580**

Current as at 8<sup>th</sup> April 2014

The DDRCi EchoIRLP node is accessible via the DDRC 2M repeater on 146.750Mhz (negative offset) - VK4RDD. No CTCSS tones are required to access the repeater and the EchoIRLP node. The node computer/radio is located remotely from the 2M repeater. The link is obtained via a direct RF feed between the IRLP Node and 2M Repeater.

The QTH of the VK4RDD 2M repeater provides fantastic coverage. The repeater is located on the Great Dividing Range and can be heard as far as Brisbane, the Gold and Sunshine Coasts and extends west from Toowoomba.

During the hours of **10pm – 5am** (local), the node is disabled to conserve the repeater solar batteries. During this time, no EchoIRLP calls will not be able to made or received. At all other times, every effort will be made to maintain a fully operational node. There may be some periods when the node may be “offline”, due to maintenance requirements. If there are any problems with the node during this time, matters can be brought to the node owners attention via this link: <http://status.irlp.net/index.php?PSTART=12&nodeid=6958>

You have access to both Echolink and IRLP through this node and repeater. Instructions as to how to use the Echolink and IRLP sections are below.

### **NODE STATUS**

To check the current status of the node:

<http://status.irlp.net/index.php?PSTART=11&nodeid=6958>

For a list of IRLP nodes : <http://status.irlp.net/index.php>

For a list of Echolink nodes : <http://echolink.org/links.jsp>

To use the system you need a radio with DTMF capabilities, and you need to have a good signal into the repeater. Once you have met these requirements you are nearly set to go. Your next step is to listen to the repeater to make sure the node or repeater is not in use, then JUMP RIGHT IN!

### **Operating IRLP node 6958**

Please make sure you listen carefully to the voice prompts so you know what is happening.

To find the Node number of a particular IRLP node, check the IRLP status page. Every node is listed here, with its node number - <http://status.irlp.net/index.php>.

To access an IRLP node from this node, simply send the Node Number request via DTMF.

Eg: to access the Vancouver 1000 node, simply DTMF “**1000**”.

To disconnect, simply DTMF “**73**”.

### **Operating ECHOLINK Node 69580**

To find a conference, link or user on the Echolink system, click <http://echolink.org/links.jsp>

To call an Echolink node, you must prefix the Echolink node number with a star (\*). This is telling the computer that you wish to connect to the Echolink side of the node, and not the IRLP side. Whilst a (\*) is required to connect to the Echolink network, it is NOT required to disconnect from Echolink.

Eg: To connect to the Ireland Conference, simple DTMF “ \* **2605**”.

To disconnect, simply DTMF “**73**” (No star required to disconnect).

Remember to speak slowly and clearly over the EchoIRLP system as you will want the other station to hear you clearly. You may not always have the clearest signal into the repeater, nor signal thru the Internet.

## **Rules for using EchoIRLP node 6958(I)/69580(E)**

These 'Rules' have been adopted by the entire EchoIRLP community, to ensure that you, the user, gets the most from the facilities. If you cannot abide by these simple "DOs and DONTs", please do not use the system.

- 1. PAUSE....** The EchoIRLP network works best when there are plenty of pauses. Pause before making a contact, pause before dialing a node, pause between TX/RX and pause before disconnecting. Typically 3-4 seconds is an acceptable pause between QSO's
- 2. ALWAYS LISTEN** on the repeater first to make sure a QSO is not in progress or the system is not linked to another IRLP Node or Reflector.
- 3. IDENTIFY YOURSELF** before sending DTMF codes and trying to use the IRLP Node.
- 4. LEAVE A 2-3 SECOND PAUSE BETWEEN OVERS** to allow the remote node to unkey and thus reset the timeouts on the remote repeaters, and to allow other users to call in. Even if you are talking to another local amateur, if an EchoIRLP link is active, leave longer than normal pauses. If the node is connected to a reflector, this is especially important, since there can be upwards of 30 nodes connected at once.
- 5. DO NOT LINK AND UNLINK A REMOTE NODE WITHOUT SAYING ANYTHING.** This REALLY annoys people on the other end, and is a very good way to get yourself a BAD reputation. If you have no intention of calling anyone, DON'T ESTABLISH A LINK!
- 6. USE PHONETICS** when giving your callsign and name over the link. The EchoIRLP system is an International network, and some overseas stations are not used to understanding us "Aussies". You will appreciate the need for using phonetics after a few contacts with overseas stations.
- 7. REMEMBER:** Everything you do whilst the link is active, can be heard to the wider IRLP community around the world. If there is nothing nice to say, either don't say it at all, or make sure the link is down!
- 8. You are responsible for making the link, please be kind enough to terminate the link when finished.** Either send the "73" command, or hand over responsibility to another party. No one likes a dead link....
- 9. DON'T MENTION IRLP CODES** when talking to other amateurs via the EchoIRLP system. Most nodes around the world are open, however some nodes around the world may have local access restrictions, and need a special pre-access code to be able to use the system. If someone asks you for information regarding their local IRLP system, please tell them to find the local repeater owner, node owner or club to get further information.
- 10. See rule 1- its important!**

## **Assistance/Troubleshooting**

If the link appears to be ACTIVE and NO ONE is using the link, please announce yourself over the air and listen. If the link is active you can check what node you are connected too by sending a DTMF "#0". If the link is CLEARLY not in use, you can disconnect the node by sending DTMF "73".

There have been reports of "apparent" problems with the quality of the link between nodes. The trouble could be due to numerous reasons. If the quality of the link is poor, one possible solution could be to terminate the connection, and reconnect (after a 30 second break or at another time). The "echo" problem is quite evident when users connect into the Echolink system via a mobile phone connection. Problems typically display due to the mobile connection not being quick enough or in a poor phone reception area.

For any other questions, feel free to ask over the air. If the matter is urgent or not to be discussed over the air, you can contact the node owner via this form <http://status.irlp.net/index.php?PSTART=12&nodeid=6958>. Please provide either your email address or phone number if you are seeking a reply.

## **Equipment Details**

For the Techies out there ... The EchoIRLP node is running on a Raspberry Pi computer with an 8GB SD card attached. The node is connected to the internet via an ADSL2+ connection.

The Radio equipment is a Phillips FM900, 5 watts out into simple VHF whip. We have kept the link radio only running 5W due to the proximity to the repeater and to keep the longevity of the radio - as this node (we hope) will be running for a while to serve Greater Toowoomba Area.

## **Scripts**

As you can appreciate, for the EchoIRLP node to work completely automated or via an "On-Demand" function, there are many scripts that are required for this to happen. Scripts will be made available to the public when we can upload a copy to a suitable website, however in the mean time, if you would like to view a copy of a particular script or function of a script, please email the [Node Owner](#) with the details as requested.

Much time and effort has gone into the development of the scripts. Credit is given when the script has been obtained from an external source – linux is a universal language and whilst it "should" work on your particular system, some modification may be required.

## **News**

Node 6958 will re-broadcast the latest WIA News Bulletin, as well as QNews.

- The WIA and QNews Weekly Bulletins' will be broadcast every Sunday Morning starting at 2300UTC.
- The QNews Bulletin will be broadcast every Sunday Evening starting at 0900UTC

The node also downloads the latest editions of the VK5, VK6, VK7 local news as well as the latest Newsline, RSGB, ARRL and NZART when they become available. Access to these broadcasts are available via a "Play On Demand" facility, via a discrete DTMF command. If you would like to hear a broadcast at your convenience or on a regular schedule, please contact [DDRCi](#) OR [Node Owner](#)

An Automatic Callbacks system follows most broadcasts. Please allow the system to seek your callback details for recording and submission to the relevant news broadcaster. Participation in the callback system is a great way to advise the news broadcasting provider of where you heard the news and your Callsign/QTH combination.

## **Severe Weather Warning Broadcast**

In light of recent events over the past years, we have made available a Severe Weather Warning Broadcast Service. The EchoIRLP node continually checks the internet and at pre-programmed times, will broadcast the text version of any relevant warnings for the local area. The warnings could be anything from Flood, River, Severe Wind/Rain/Weather and/or Thunderstorms – that could or are likely to affect the local broadcast area.

*The weather information obtained should only be used as a guide. The information provided is NOT designed to replace any official warnings as given by the relevant emergency departments. It is to be used for information purposes only.*

## Nets

The Toowoomba EchoIRLP node has the ability to participate in nets that are held on another Echolink or IRLP nodes as well as IRLP Reflectors or Echolink Conferences.

The node regularly connects to IRLP Reflector **9558** to host its Sunday Morning 2M net (0000UTC) on as well as mid-week "Rag-chews" with other clubs and members.

The reason that IRLP Reflector was chosen is the ability to cross-link with Echolink. If an IRLP node is not available to an external user to connect to REF9558, external users can connect via Echolink to **\*VK3JED\*** which will connect into the IRLP Reflector 9558 Cross-Linked Reflector/Conference.

If you would like to connect to the net, you can via:

IRLP Reflector **9558**

OR

Echolink Conference **\*VK3JED\***

The DDRCi 2M net will be hosted on the Reflector at 0000UTC every Sunday Morning. Days and Times will be published on the DDRCi Website for additional nets/ragchews.

*\*\* Prior Permission has been granted to the DDRCi and Node 6958 to use Reflector 9558 from the Reflector owner.*

## **Comments & Suggestions**

We are always open to suggestions, if there is anything that you would like to see/hear more/less of, want to seek clarification or make a suggestion, please let us know, as this node is for YOU. We want you to use this node and make the experience enjoyable and memorable. You can either send the DDRC or node owner an email with your comments and suggestions.

[DDRCi](#) OR [Node Owner](#)

## **Acknowledgements**

Installing and maintaining an IRLP node takes a bit of work that is not immediately apparent to you, the end user. A number of people have made significant contributions to the Darling Downs Amateur Radio Club IRLP project. Thanks go to John VK4TJ and John VK4ZJE for the technical assistance regarding the link radio and interface with the repeater and Dave VK4LED for providing the EchoIRLP hardware, computer, link radio, UPS, electricity and internet connection.

Darling Downs Radio Club - <http://ddrci.webs.com/>

VK4RDD (146.750Mhz) – EchoIRLP

Echolink: 69580

IRLP: 6958

# APPENDIX 1

## SPEED DIAL LIST FOR TOOWOOMBA ECHOIRLP NODE 6958(I)/69580(E)

List Updated 8<sup>th</sup> April 2014

*Access to this node is available via the DDRCi 2M repeater (VK4RDD) on 146.750MHz.*

*These "Speed Dials" are set up to make it easier for you to use/access information on the node. If you would like a specific node added to the list, please contact the node owner.*

#61 – Connect to Random Echolink or IRLP Node

#62 – Connect to Random IRLP Node

#63 – Connect to Random Echolink Node

#22 – Connect to Reflector 9558 (Hosts the local net for the area)

#50 – Connect to Gold Coast Repeater (VK4RBT)

#51 – Connect to Brisbane Repeater (VK4RBN)

#52 – Connect to Port Macquarie Repeater (VK2ZCW)

#53 – Connect to Dalby Repeater (VK4RET)

### On-Demand Weather Related Information

To check the weather at a particular postcode – simply DTMF a # followed by the Postcode for the location you are requesting.

Example – Toowoomba Weather = DMTF “ #4350 “

### On-Demand News Broadcast

RESERVED