

# IRLP Operating Guidelines Page

courtesy Kitchener-Waterloo ARC  
Node 241 & 242  
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Thanks to IRLP, Amateur Radio is receiving a new breath of life through his Internet Radio Linking Project. Many repeaters around the world that were next to empty are now alive and well with radio amateurs now speaking with other hams around the world.

As with any new technology, it does take some time to adopt to operating procedures that differ from conventional FM repeater use. This work in progress can serve as a guideline for those wishing to use their local IRLP enabled repeater node.

## PLEASE NOTE:

*The following guidelines may differ from those provided by your local node operator. These notes are only a guideline and at no time should take precedence over the wishes of your local node sponsor.*

## COMMON MODES

There are two connection modes for an IRLP connection. Direct one-to-one or, one-to-many via a Reflector.

Direct connect is just like it sounds where repeater (node) "A" connects direct with node "B". With this type of link the two nodes are interconnected and no other IRLP connections are possible. While repeaters "A" and "B" are connected, anyone attempting to connect with either node will be told by a recording that - *"The node you are calling is currently connected to callsign"* however all local traffic on each repeater will be heard on the other repeater as well.

While Direct Connect is preferred for a city to city chat, the most common type of connection in use today is via the Denver Reflector (Ref2). A reflector is a Linux computer that is not connected to any radio but rather sits on lots of internet bandwidth capable of allowing many repeaters to be inter-connected together by streaming the received audio back to all other connected stations. At any given time there are usually 6 to 10 repeaters around the world interconnected via this Reflector. You can always check which stations are connected to the reflector by visiting <http://status.irlp.net> and looking for nodes connected to REF 2.

## REFLECTOR USE

With reflector use the first thing we must all remember is to leave a gap between transmissions. Having said that this is a good time to list the three main rules when connected to a reflector:

1. *Pause*
2. *Pause*
3. *Pause*

Due to the slight increase in delays created by multiple Tone Squelch radios in the links between the repeater and IRLP link radio, a slight change in our normal operating procedures is required with IRLP.

By leaving a pause between transmissions it .....

- *allows users on other nodes a chance to check in.*
- *allows other nodes time to send touch-tone commands to drop their node.*

***The most important guideline to remember is leaving a pause after pressing the PTT button as well as between transmissions.***

## REFLECTOR ROUND TABLES

Round tables are conversations involving more than 2 parties. Unlike a net a roundtable requires some organization to keep the conversation thread passing in an orderly fashion from party to party. Do not become intimidated if a group grows and, if mobile, do not be overly concerned if you are unable to remember all or any callsigns. Just try and remember the call and or name of the next station that you pass it to. If you are listening and wish to break into a conversation, let a cycle go by so you know the participating station are then announce your callsign during one of the "pauses". You should be recognized and then when finished with your transmission be sure to specify who you are turning it over to. If you do not specify a station to pick up the connection chaos will result as 2 or more stations may try to talk at once.

## ANNOUNCING YOUR PRESENCE

Announcing you are looking for a QSO or acknowledging someone else's call differs from your local repeater were you usually just give your call. With IRLP your transmission is now being heard on many repeaters around the world and others may not just be sure what your intentions may be.

To resolve this it is a good idea to give your callsign (*phonetically*) along with your name and your QTH and state you are monitoring for a call. Many listeners are mobile and may only pick out your prefix, your name or possibly just your QTH.

### ESTABLISHING A CONTACT

When you hear a station that you wish to speak with always identify who your call is meant for. It is not a good idea to simply state your call but rather your call and your intentions.

**Scenario:** Several stations including a DX station **complete** a QSO and you wish to contact the DX station.

**Action:** *VK3xxx this is Joe K9xxx in Kalamazoo Michigan.* By doing this rather than just IDing with your call, you leave no question who you wish to speak with. A simple ID many times goes unanswered as neither station knows who you are calling.

### BREAKING INTO A QSO

When an existing conversation is underway and the topic of conversation is of interest, just give your callsign between breaks and the next station to take it should acknowledge you and bring you into the QSO. **PLEASE** do not break into an existing QSO because you want to work one of them. This is poor ham radio etiquette and on HF would result in a severe chastisement :-)

### NETS ON A REFLECTOR

Nets on a reflector without prior approval of the Reflector manager are highly frowned on and will no doubt be quickly challenged by someone. A roundtable can sometimes be construed as a net so be somewhat careful if a group gets to large as it tends to monopolize the reflector.

If any wishes to organize a reoccurring net or use a reflector for a special purpose such as the Scouts annual JOTA weekend (Jamboree On The Air), they need to contact the reflector custodians.

REF	Contact	REF	Contact
0	David VE7LTD	4	Daniel VE2NWT
1	Randy VE3RWN	5	Pete VK2YX
2	Nate WY0X	921	Jim WW4M
3	Chris VE5BAR	931	Art VE9ACP

### MAKING A DIRECT CONNECTION

First of all listen on your local machine for at least 15 -30 seconds before transmitting and then ask if the repeater is currently in use. Assuming all is clear, **identify your self** and give the node name or number you wish to call . Example: *"VE3xyz for the Sydney node"* - - then enter the ON code for the node and release your PTT. Your local repeater should come up with a carrier as it waits for the connection to be authenticated. This can take a few seconds of dead-air so don't be concerned. When the connection is confirmed, the voice ID of the destination node will be transmitted back to you as well as your nodes voice ID to the other repeater.

**NOTE:** If your node is already connected to another node or reflector, a greeting will play saying; - *"your node is currently connected to...ID of the connection"*) *In this case confirm if anyone desires the connection to remain up before dropping by using the OFF code..*

Once connected and after hearing the confirming voice ID, **wait** at least 15 seconds before transmitting as.....

- *The repeater may be in use, and your entry may have occurred between transmissions.*
- *The voice ID of your node is longer than the voice ID of their node, and the connection is not made until the ID is fully played.*
- *Their computer may be slower, and hence take longer to process the connection than yours.*

Press and hold the microphone PTT for a second and then announce your presence and your intention such as you are calling someone specifically or just looking for a QSO with another ham in that city.

If no response is heard, announce your call and your intent to drop the link and then touch- tone in the OFF code. *Not a good idea to transmit touch-tone commands without first giving your call-sign. Not only is this courteous it is a regulatory issue in some countries who may be connected to the reflector.*

Some nodes are configured so you cannot connect to them if that repeater is active. In this case you will receive the message *"The node you are calling is being used locally"* If you receive this message wait 5 or 10 minutes and then try again.

If you stay connected to a node and there is no activity on your repeater for 4 minutes, the connection will time out and automatically disconnect with a voice ID disconnect message on both nodes.

### CONNECTING TO THE REFLECTOR

As above, listen to your local machine for local use and then announce your intention for the Reflector before keying the ON command. When you hear the confirmation ID always WAIT at least 15 seconds before transmitting as you are most likely now connected with many repeaters and a QSO could be in progress. If after 15 seconds you hear nothing, identify yourself and indicate you are listening to the Reflector from "*City and, Prov./State, Country*". *With the world wide IRLP activity your local repeater now has world wide coverage thus the suggestion to better detail your QTH.*

Don't be in a hurry to hear someone come back to you. You may have to do a bid of pleading from time-to-time to un-lodge someone from whatever they are currently involved with.

By default, connections to the reflectors now time out with no activity however many node owners set this period for a long period so it is not unusual for repeaters with minimal traffic to stay connected to the Reflector for extended periods of time. When or if the node times out from a Reflector connection a standard time-out greeting will precede the timeout saying, "*Activity time out ... Reflector xxx, link off*"

*If you are new to IRLP you should always consult with your local node sponsor to confirm the local guidelines on reflector connections in your area.*

If you hear or wish to engage in a prolonged rag-chew on your local repeater (*long discussion of a local nature*) out of courtesy to other node listeners drop the reflector.

### ERROR MESSAGES

From time-to-time you may receive error messages when attempting to connect with a node or reflector. The most common ones are:

#### **"The node you are calling is not responding, please try again later"**

*This is caused by a loss of internet connectivity to one end of the call attempt.*

#### **"BEEP Error- The call attempt has timed out, the connection has been lost"**

*This error occurs when a node is OFF-LINE. Some nodes such as in the UK use dial-up connections and then, only for short periods. Also there may be temporary net or node problems.*

#### **"The Connection Has Been Lost"**

*If the internet connection drops, this error message will be heard. I found this out when I accidentally kicked out my network cable while working around the node computer.*

### DO'S and DON'TS

In summary then a few do's and don'ts

- **DO** pause between transmissions to let other in or others to enter DTMF command.
- **DO** identify before sending DTMF command tones.
- **DO** hold your microphone PTT for about 1 second before talking to allow all systems time to rise.
- **DO NOT** rag-chew on your local repeater while connected to the reflector.
- **DO** pause for 10 seconds or when entering the reflector before talking.
- **DO NOT** start or plan a Net without pre-authorization from the [reflector owner](#)

### SUNDAY NETS

Every other Sunday an IRLP net is held inviting check-ins from around the world which is an excellent chance to hear IRLP at its best. To participate in the net there must be a local net controller for your node otherwise you will only be able to monitor.

A few guidelines which will be enforced by the Central Net Controller will be

- *Do not connect your local node to the net during net times unless someone is acting as a local net controller.*
- *Do not make calls directly to other stations during the net.*
- *Above all NO local conversations during the net while connected to the reflector.*
- *Do not attempt a call unless your local net controller has you as a pre check-in.*
- *Disconnect our node if any local interference is present.*
- *Keep your check-in short and to the point. Remember that several hundred others may be waiting for a chance to check-in as well.*

Check the [Official IRLP Net web page](#) at for details on schedules

## IRLP QSLing

Many users of IRLP express desires to exchange QSL cards. With many IRLP users not being on HF they may have never considered having QSL cards printed. Now here is a new Internet technology for you to easily exchange QSL cards.



To: VE3SY This confirms our 2-way FM QSO  
Date: April 17, 2001 Time: 14:30 UTC  
Band: 70cm UR Sigs: 59  
Thanks very much for the prompt QSL. This is the first I have received since being licenced  
*(see thumbnail of mine here)* to the eQSL web site. This graphic is then used to automatically generate all of your outgoing cards with the contact info like we see on Chris's card above.

eQSL is a new electronic QSL service that allows you to custom design your own card which is then formatted with your contact info and automatically sent to your contact. (see the card that I received from Chris VK6TNC from Morley, Western Australia.)

While this eQSL generated card is plain, you are able to create your custom card from many graphical templates provided or upload your own graphic (see thumbnail of



The eQSL service is free supported by some advertising and private donations.

Of course there is nothing like getting a real QSL card via the bureau or direct. If sending cards direct your remember that your local postage is not valid outside of your country so include a US dollar bill or an IRC to cover return postage.

## OTHER TIPS

Do you have any suggestions on improving this help page? If so please contact Paul Cassel VE3SY [irlp@kwarc.org](mailto:irlp@kwarc.org)

The return button below will return you to the page that you linked from and feel free to link to this page.

Enjoy IRLP and **pass the word.**

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**Denver IRLP Reflector 2 bandwidth provided free of charge by**



**Ontario IRLP Reflector 1 bandwidth provide free of charge by**



**Australia IRLP Reflector 5 bandwidth provide free of charge by**

