



Website: <https://irn.radio>

INTERNATIONAL RADIO NETWORK NEWSLETTER

NOVEMBER 2025

Email: irnhamradio@gmail.com

Welcome

Welcome to another newsletter from the International Radio Network.

I hope everyone is doing well and beginning to feel the excitement of the festive season, that is so fast approaching us. The shops here in Scotland are now full of Christmas decorations and festive foods, and the background music played in many public places is now dominated by Christmas tunes. It will probably be the same wherever you are.

It is hard to believe that it is this time of year again. The year 2025 just seems to have flown by. We are presently making plans for the New Year's Eve Net to welcome 2026. The previous NYE Nets have been great, and this year we are hoping to run the Net for a full 24 hours, from 1200 UTC on the 31st December 2025, to 1200 UTC on the 1st January 2026. The Net Schedule is already filling up, but there are still some Net Control slots available (and logger slots). If you would like to help out with this year's NYE event, please email me direct at gm0uub@gmail.com and we can look at what opportunities are still available. All support is most welcome, and participating is a lot of fun as well.



In this edition of the Newsletter, we again recognise and celebrate the IRN having thousands of members from all around the world, enjoying our multimode links on analogue and digital connections. However, unlike other ham radio Networks, the IRN enjoys engaging with many unlicensed radio enthusiasts, providing connections on Zello and Teamspeak that have no RF links, allowing unlicensed members to communicate with each other and learn about ham radio etiquette and procedures. We have an article below that explores the journey to the exciting world of amateur radio, and how the IRN is here to help.

Also included in this newsletter is another brilliant contribution from Doug VE3XDB. This month, Doug provides us with some fantastic advice on how to monitor and improve our audio quality while using Allstar.

We welcome contributions from all members for our future newsletters and details can be found at the end about how to send in your own contributions and suggestions.

We also welcome contributions to the **IRN Facebook page**. We love to read about equipment reviews and your own experiences, special events held in your area, club activities, as well as personal stories about what is going on with you and yours, interesting things you are up to,

and we do always welcome pictures of your pets. We do love our critters on the IRN. If you are not already a member of the Facebook Group, then here is the link to join.....

<https://www.facebook.com/groups/1245420475608672>

Now an update on our new Station Manager – Odin, our fox red Labrador – Odin is now over 6 months old, 25kg and growing around a Kilo every week!

Training is going very well – I can report that Helen and I do everything that Odin demands of us! But seriously, he is doing very well and eager to please. His recall is very good and we are confident to let him run free off the lead now.

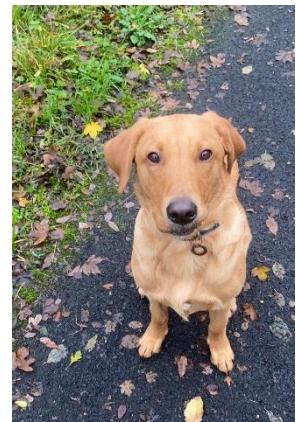
Here are a couple more pictures of Odin, and please remember to send in pics of your critters for future newsletters and/or post them on our Facebook group.



Enjoy the newsletter, and sending best wishes to all members of the IRN.

73

Graham M Matthews, GM0UUB
President, International Radio Network



The Wonderful World of Amateur Radio: The Path to an Exciting Hobby

As technology advances, we sometimes forget the sheer joy of simple communication. For radio enthusiasts, amateur radio, also referred to as ham radio, represents a time-honoured tradition that continues to thrive. If you are considering diving into this rewarding hobby, obtaining an amateur radio license is *normally* the first step.

However, the International Radio Network has, for many years, encouraged and supported non-licensed members on their journey, for however far they might want to take the hobby. Essentially, the IRN has 2 main platforms, one with various analogue and digital options, connected and transmitting through linked Networks, nodes, repeaters and gateways located around the world. This can only be used by licensed hams, so we have another platform that can be used by licensed and non-licensed members.

This other platform consists of Teamspeak and Zello channels that we can link together, and they are not linked to anything that produces RF, or transmitted radio signals, and can be used by both licensed and non-licensed members. We can also link up with other similar Networks, such as our permanent links with ZMR, and our linking with Network Radios group for some of our regular nets.

This allows non-licensed members to operate and communicate with other radio enthusiasts around the world, while learning about ham radio procedures and etiquette along the way. We hold regular nets and invite members to use the system at any time for general QSOs, or general connections and conversations.

We do celebrate when a non-licensed member achieves their own license and ham callsign. However, we always absolutely appreciate all our members whether they choose to go for the amateur radio test or not.

For those that do want to explore further and get their ham license, here are some things you might consider when getting started....

What is Amateur Radio?

Amateur radio is a service that uses designated radio frequencies for non-commercial exchange of messages, experimentation, self-training, and emergency communication. It is not just a hobby, it is a community of diverse individuals who share a passion for technology, communication, and public service.

Why Get an Amateur Radio License?

1. Legislation and Safety: Operating a radio transmitter without a license can result in hefty fines and potential legal troubles. A license ensures you are familiar with the rules, ensuring safe and proper operation.

2. Access to Designated Radio Frequencies: The amateur radio bands are only accessible to licensed operators. Supported by a wide range of frequencies, you can connect with others locally and globally, operating on several different modes.
3. Personal Achievement: The licensing process provides a foundation in radio theory, electronics, and operating techniques. This knowledge is invaluable for personal growth and can even lead to career opportunities in technology and telecommunications.
4. Community Connection: Joining the ranks of licensed amateurs opens the door to an even bigger and vibrant community. Whether you join local clubs or participate in online forums, you will meet fellow enthusiasts who share your passion.

The Licensing Process

To obtain an amateur radio license, you must pass an examination that covers basic radio theory, regulations, and operating practices and procedures. Here is a breakdown of the steps involved:

1. Choose Your Class or Level: In many countries, amateur radio licenses come in classes, or levels, which could include (depending on your location in the world) titles such as Foundation, Technician, Intermediate, General, Full and Extra classes. Each class allows access to different frequencies and modes.
2. Study the Material: Plenty of resources are available, including books, online courses, and study groups. In lots of cases, getting in touch with a local amateur radio club can be very helpful, with many clubs offering courses and study support.
3. Take the Exam/Test: Once you feel prepared, find a local testing location or register for an online exam. Many amateur radio clubs offer exams, as well as additional support.
4. Receive Your Call Sign: After passing the exam, you will receive a unique callsign that identifies you to other operators. You might find that you can choose or personalise your callsign, depending on your location in the world.

Some Practical Tips for New Hams

- Start Simple: Begin with a handheld transceiver to learn the ropes before investing in more elaborate equipment. If you have local repeaters, introduce yourself and you might find some great people that will assist and guide you moving forward.
- Experiment and Explore: Experiment with antennas, modes of communication (like SSB, FM, and digital modes), and more to find what fascinates you the most. Some people even fall in love with CW (morse code). You never know what 'bug' might hit you as you explore this fascinating hobby.
- Engage with the Community, Local and Worldwide: Attend local club meetings, participate in field days, consider volunteering for emergency communications, develop skills,

communicate on your chosen modes, and make new friends around the world. Ham radio is a fantastic hobby that brings people around the world together. And there are always opportunities to learn more and explore the many options available as part of the hobby.

Have fun, and enjoy the wonderful world of amateur radio.

Graham GM0UUB

Improving Audio Quality on Allstarlink: A Quick Guide for Operators

By Doug Behl VE3XDB

Many operators on Allstarlink have experienced the frustration of overdriven audio, which can significantly impact communication quality. To ensure clear and effective transmissions, it's essential to take the time to properly set up your transmitted audio. Here's a straightforward guide to help you achieve optimal audio quality.

Before making any adjustments, ensure that you are using proper microphone technique. Here is some excellent guidance, taken from the Allstarlink Manual: ***"Note that for proper mic technique you should talk no closer than 2 to 3 inches (5 - 10 cm) from the microphone, and it should be held at an angle to minimize pops/plosives."***

1. Check Parrot Nodes

Use the parrot nodes 55553 or 40894 to test your audio. These nodes allow you to hear your own transmission, making it easier to identify any issues with audio quality. Listen for clipping or overdriven audio, and heed the feedback provided by both these nodes! The volume level of your transmission should be about the same as the automated voice providing feedback on your audio quality. Read on for additional details and specific techniques for effective use of the parrot nodes.

2. Set Up Using the ASL Menu

I spoke with someone recently, who was accessing the IRN using their Allstarlink node, but were unaware of how to set the audio settings! Here is a quick guide to help.

- If you are using SimpleUSB or USBradio, audio levels can be set from asl-menu. If you are using DAHDI/pseudo, the audio levels can only be set on your device.
- To set the audio, open a terminal and log into the menu using “sudo asl-menu”

```
ve3xdb@node529932-raspib: ~
1) Select active USB device
2) Set Rx Voice Level using display (currently '650')
3) Set Transmit A Level (currently '860')
4) Set Transmit B Level (currently '0')
5) Toggle RX Boost (currently 'disabled')
6) Toggle Pre-emphasis (currently 'disabled')
7) Toggle De-emphasis (currently 'disabled')
8) Toggle Echo Mode (currently 'disabled')
9) Flash (Toggle PTT and Tone output several times)
10) Toggle PL Filter (currently 'enabled')
11) Toggle PTT mode (currently 'ground')
12) Change Carrier Freq (currently 'usbinvert')
13) Change CTCSS Freq (currently 'no')
14) Change RX On Delay (currently '0')
15) Change TX Off Delay (currently '0')
16) Print Current Parameter Values
R) View Rx Audio Statistics
S) Swap Current USB device with another USB device
T) Toggle Transmit Test Tone/Keying (currently 'disabled')
V) View COS, CTCSS and PTT Status
W) Write (Save) Current Parameter Values
Q) Exit Menu

Please enter your selection now: [ ]
```

- Select “1 Node Settings”
- Select “1 Allstar Node Setup Menu”
- Select “1 Update node 12345” – select the correct number to update your active node
- Select “8 Interface Tune CLI”. You should now see a screen that looks something like the image on the right.
- Connect to Allstarlink node number 55553 while testing your audio. While connected to 55553, you will receive feedback on your audio as you make adjustments.
- Select option 2) on the Interface Tune menu.
- Hit PTT and speak into the mic at a normal level, keeping the mic at a proper distance from your face, and at a slight angle. Adjust levels until ***your average audio level is at about 3Khz, and peaks do not go significantly past 5Khz***, as shown on the RX VOICE DISPLAY. The 55553 parrot should also be giving you feedback indicating that your audio levels are “about right”.
- Keep tweaking until desired result is achieved. You can make adjustments without disconnecting from 55553. The levels will change as you make each adjustment, and you will receive audio feedback with every test transmission.
- When you are satisfied with the level, hit enter to return to the main menu. **Select W to write the new values**, then 0 to exit the menu. Disconnect from node 55553.
- That’s it! In most situations, this should ensure that your transmitted audio is perfect!

```

ve3xdb@node529932-raspis:~ 
C) Toggle Pre-emphasis (currently 'disabled')
D) Toggle De-emphasis (currently 'disabled')
E) Toggle Echo Mode (currently 'disabled')
F) Flash (Toggle PTT and Tone output several times)
G) Toggle PL Filter (currently 'enabled')
H) Toggle PTT mode (currently 'ground')
I) Change Carrier Freq (currently 'usbinvert')
J) Change CTCSS From (currently 'no')
K) Change RX On Delay (currently '0')
L) Change TX Off Delay (currently '0')
P) Print Current Parameter Values
R) View Rx Audio Statistics
S) Swap Current USB device with another USB device
T) Toggle Transmit Test Tone/Keying (currently 'disabled')
V) View COS, CTCSS and PTT Status
W) Write (Save) Current Parameter Values
0) Exit Menu

Please enter your selection now: 2
RX VOICE DISPLAY:
V -- 3KHz          V -- 5KHz
Channel 529932: Current setting on Rx Channel is 650
Enter new value (0.999, or CR for none): 

```

3. ***Adjust Mic Gain or Audio Levels on your radio or other device***

If you’re not using SimpleUSB or USBradio in Allstarlink, you many not be able to make the same adjustments in Allstarlink, so you will need to make the adjustments to the audio levels on your device. There are many ways to connect, so it’s difficult to comment on particular situations, but the steps are similar to those outlined above:

- Connect to Allstarlink node 55553 or 40894.
- Using the proper mic technique as noted above, make a test transmission.
- Adjust your audio level/mic gain until you get feedback that your audio is “about right” or “perfect”, and the playback of the audio is clear, and at a level similar to the level of the automated voice providing the feedback.

4. ***Back Off on the Mic!***

One of the simplest yet most effective tips is to maintain a proper distance from the microphone. Speaking too closely can cause overdriven audio, so try to back off a bit to achieve a more natural sound. Too far away, and you might not be heard, or sound like you are in an echo chamber. Some tips:

- Don’t use VOX! I was discussing audio levels with someone, and he mentioned that he had to speak loudly and hold the mic close to his face to make VOX work! His audio was overdriven and unpleasant. Use PTT and make the proper adjustments. The other person will be very grateful, and you’re more likely to have others engage with you on the network.
- Find the right distance for you, depending on your voice and your equipment. I hold the mic approximately one hand’s width away from my face when

speaking, and receive good feedback. It depends on your voice, so made adjustments and use the Parrot nodes or seek honest feedback from other users on the network.

- If you're "popping your p's" try holding your microphone, radio or other device at slight angle from your face. Again, test and get feedback on the position that works best for you.
- Use Allstarlink nodes 55553 or 40894 to test your audio. Adjust your position until you get feedback that your audio is "about right" or "perfect", the playback of the audio is clear, you hear no "popping p's", and your audio is at a level similar to the level of the automated voice providing the feedback.

By following these steps, operators can significantly improve their audio quality on Allstarlink, leading to clearer communications and a better experience for everyone involved. Taking the time to set up your transmitted audio is a small effort that can make a big difference in your interactions on the International Radio Network. Enjoy the network!

Reference:

Allstarlink Manual – USB Audio Interfaces - <https://allstarlink.github.io/adv-topics/usbinterfaces/>



Mission <p>The International Radio Network's mission is to promote the amateur radio hobby to those interested in radio communications. We welcome licensed and non-licensed operators, giving those with an interest the opportunity to gain experience in radio communications, theory, technology and fellowship.</p> <p>The International Radio Network has been in existence for many years and has a considerable number of licensed amateur radio operators from all around the world. We also welcome unlicensed radio enthusiasts and short wave listeners to our membership, many of which go on to achieve their own amateur radio license.</p>	Membership and Getting Connected <p>If you are not already a member of the IRN, it is free and easy to do so. Just visit our website www.irn.radio and click on 'Register'. Follow the instructions and we will be delighted to include your Amateur Radio Callsign on our database, and if you are not licensed, we will provide you with an IRN Callsign/Number. Licensed members have full access to all our connections, and non-licensed members have access to the connections that have no RF links.</p> <p>Importantly, to be 'trusted' on our Zello channels, or to be given 'talk permissions' on the Teamspeak platform, you must register using the above link on the website.</p>
Purpose, Aims and Objectives <p>To provide a reliable radio Network for the use by licensed radio amateurs, offering a range of methods and modes of communication, including analogue and digital modes</p> <p>To build partnerships and connections with other amateur radio Groups and Networks</p> <p>To provide regular nets, special events and other activities that promote the use of the Network and for the benefit and enjoyment of its members and users</p> <p>To welcome unlicensed members and provide them with support to learn about the amateur radio hobby, ham radio etiquette and encourage them to apply for their own amateur radio license</p> <p>To provide unlicensed members with a reliable platform on which to communicate and experience ham radio practice, with NO RF connection</p> <p>To ensure that the Network is a safe and family-friendly place at all times, and take quick action where that is threatened in any way</p> <p>To experiment with new technologies and modes of amateur radio operating.</p>	IRN Nets <p>Several of our nets are open to all operators, and may be heard on 'International Radio Network Channel' and 'ZMR 851.065' on Zello and the 'IRN QSO and Nets Channel' on TeamSpeak 3. They are:</p> <p>IRN Sunday net – first and last Sunday of every month, 8:00pm Eastern, 1:00am Monday UK time, hosted by Barry 8WAR717. Watch Facebook for updates to the schedule.</p> <p>Friendship net - every Monday, 5:00pm Eastern, 10:00pm UK time with regular Net Controller VE6DCV Dave.</p> <p>Coffee net - every Wednesday, 5:00pm Eastern, 10:00pm UK time with regular Net Controller 11IRN610 Shorn.</p> <p>The following net is accessible only to licensed operators, as it is a multimode net that connects to licensed only platforms and RF. We have a permanent connection with the Extended Freedom Network so you can also use any of their links to connect with the IRN</p> <p>KB1 Multimode net - every Friday, 4:00pm Eastern, 9:00pm UK time with regular Net Controllers MM7HQS Helen, GM0UUB Graham and GW8S2L Dave.</p> <p>For full details of the Nets and connections, please visit https://www.irn.radio/nets</p>
IRN Administration Team <p>Graham M Matthews GM0UUB - President, Ralph Streb K8TCP, Doug Behl VE3XDB, Helen Matthews MM7HQS, Bruce Lenton M0UKB, Gareth Steele G0WUR, Dave Phillips GW8S2L, Gareth Jackson M6IGJ. Contact members of the admin team at https://irn.radio/contact or by email at irnhamradio@gmail.com.</p>	
Invitation for Contributions and Contact Information <p>We invite all members to add content to the Newsletters, to share personal stories, technical information, equipment reviews, radio-related jokes or fun-facts, other hobbies and interests, and anything else that would be of interest to our members. For example, personal stories about what got you into the radio hobby are always interesting. You can also email us with any questions, comments or ideas.</p> <p>Contact us at https://irn.radio/contact or by email at irnhamradio@gmail.com.</p>	