

# Is it Ham Radio?

One of the recurring “issues” in the ham radio world is the question of whether technology  $\backslash x \backslash$  is ham radio or not. It's often framed as a black and white question and loaded with moral and prescriptive tones.

My view is that:

1. It's not black and white, and
2. The outcome only affects my own level of interest and doesn't say anything about what others should be doing.
3. It also has nothing to do with whether the mode is analog or digital, voice, CW, or text.

To me, the degree to which something is ham radio depends on how much (or little) ham RF it uses. Here are a few examples to illustrate my point (there's many many more).

## Simplex and Repeaters



- 2m simplex, stand-alone repeaters, and RF linked repeaters are close to 100% ham radio.
- I could nit pick and further sub-divide these in terms of how self-reliant they are (solar vs grid power for example), but that's a different axis.

## Echolink



Echolink starts muddying the water a bit.

- When someone uses their phone to connect to an Echolink node via the internet, which then connects to a repeater via RF, half of the conversation is via RF and the other half is over the internet.
- But when two people use their phones to send each other text messages or have a phone-to-phone conversation, then Echolink acts just like any other internet chat app. Sure you need a license to use the app, but the whole conversation still takes place over the internet.

## IRLP



IRLP is a bit similar to Echolink but with more RF:

- When used to connect two (or more) repeaters together, most of the heavy work is via RF.
- But if someone has their own IRLP node at home and uses it to connect to other repeaters, then it's a short step away from having an IRLP app on a phone that connects directly to the other repeater and do away with one of the radios.

## DMR



DMR can fall almost everywhere on this continuum.

- When used in simplex or via a stand-alone (or RF connected) repeater, there's little difference with FM (other than it needs to be registered using the internet, which could push it a bit to the right).
- When repeaters are linked together (via the internet), then it's close to IRLP.
- When people use their own hotspots, then it's close to personal IRLP simplex nodes.
- Finally, there's an app called [DroidStar](#) (that I haven't tried yet), that allows access to the DMR network straight from an internet connected phone. It's not as bad as Echolink-to-Echolink conversations, but it's

getting pretty close.

## AREDN



So far I've only discussed voice modes so it might be tempting again to think this is an Analog / Digital divide. But it really isn't. AREDN allows multiple computers to connect to each other over the 2.4GHz and 5.6GHz microwave bands. When used over RF, AREDN is as much ham radio as 2m simplex. But when tunnelled over the internet, then it isn't. But tunnelling isn't a bad thing. Most of us on the AREDN network right now are tunnelling while we learn the system and get ready to pivot over to RF.

## Conclusion

Reasonable people can disagree where different technologies fall on the spectrum, but my main points are that:

"Is it ham radio?":

- Is not a yes/no question.
- Has nothing to do with whether something is analog or digital (P2P packet is as far left as FM simplex to me)
- And isn't prescriptive of what other hams should do with the hobby.

For me, it's only one of the factors that contributes to whether I'm interested in something or not; but it's not the only one: Currently, I'm not interested in investing hundreds of dollars into a DMR radio and a hotspot, but I'll give the (free) DroidStar app a try (what have I got to lose?).