

signal strength & audio for FM

When giving signal reports for an FM station, differentiate between signal strength and audio. Reports should always be accurate. It leads to confusion when one person says your signal is "good" and another reports a problem.

A station with a weak signal will be noisy and difficult to copy. The best you can get with FM is to have a "full quieting" signal. Once a station is full quieting, increasing the power won't make any difference. Traditionally, RST is used not used for FM. Plain language reports are recommended.

https://en.wikipedia.org/wiki/Plain_language_radio_checks

When you are on a repeater, everyone will have the same signal strength on the output as it is the repeater's transmitter that you are listening too. When on simplex, signal strength will be that of the station you are talking with.

What can you do when someone tells your signal is noisy? If you aren't already on your "high power" setting, you could try increasing the power. If you are already up on high power, you can try moving. This easy to do if you are on an HT, but impossible with a fixed antenna, short of going up a ladder and re-locating it! If it's a directional antenna, you could try turning it. That takes care of signal strength. What about audio?

A station with low audio (low deviation) will be difficult to copy whether they have a good signal or not, but if you have a weak signal and low audio, it can be almost impossible to copy. When communicating with two or more people, it can be quite annoying to have to keep turning the volume up or down if one station has significantly more or less deviation than the other one. Too much deviation will be distorted. Too little will be quiet.

If someone tells you your audio is low (deviation on an FM signal) all you can do is turn up the mic-gain (if your radio has one) or make sure it is set to WIDE if you only have a WIDE/NARROW deviation setting, or you can talk louder or closer to the mic. Just like you don't want to be too far from the mic, you also don't want to be too close. Starting about 10 cm from the mic and talking across it rather than straight into it, and at a normal level would be a good start.

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73 Keith VE7GDH