

# Radi-O Receiver Basics

## A beginners guide to using a VK3YNG “sniffer” for Fox-Or events

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- How do I hold it?** Hold the receiver (also called a “sniffer”) using the handgrip and with the antenna elements vertical. This is the best orientation to hear the transmitters whose antennae are also vertical and it is also the safest way to swing it around especially when others are nearby.
- How do I turn it on?** Turn it on and off by pushing the M button. Note that it will turn itself off if it doesn't hear a transmitter for 10 minutes.
- What are all these buttons?** The receivers have been set on the correct frequency and mode and most of the buttons and programming features have been disabled to ensure settings are not changed by accident. Buttons 1 to 6 will still recall different frequencies from memories, so avoid touching them. If in doubt simply turn the unit off and on again and it will reset to the correct frequency.
- What's that tone?** You will hear a tone coming from the speaker. The pitch of this tone is proportional to the strength of the signal being received – the higher the pitch, the stronger the signal. Because the antenna is directional, as you swing it around through 360 degrees you will hear the pitch rise and fall when in range of a transmitter. All you have to do is run in the direction of the highest pitch.
- How do I know I'm hearing the transmitter?** The transmitters all emit a warbling tone so that you can easily distinguish it from other sounds from the speaker. It is important that you try to find the sample Fox-Or control located near Registration prior to doing an event so you know what a transmitter sounds like.
- What's the number display for?** As you get closer to the transmitter the display will indicate a higher number – 0 when far away through to 5 or more when you are less than a metre away from it. As the range number gets higher the receiver internally turns down its sensitivity so you can still distinguish a direction to the transmitter. If it doesn't receive the transmitter for 5 seconds it will decrease the range and become more sensitive automatically. It's therefore important to swing it faster than the 5 seconds it takes to change ranges so all your readings are from the same range. If you don't, the receiver might become more sensitive near the end of the swing and you may think the transmitter is in the wrong direction as a result.
- When do I turn it on?** To maximise battery life, leave the receiver off until you believe you are at or near the edge of the circle shown on the map (the transmitters are not powerful enough to transmit more than about this distance, depending on terrain) so there's no point having it on outside the circle. Turn it off again when you find the transmitter.
- What if I can't hear the transmitter?** If you don't hear the transmitter at the circle boundary, head towards the centre of the circle or higher ground and try again.
- What are “reflections”?** The radio signal from the transmitter is a form of light and can sometimes bounce off metal fences and even hills as though they were mirrors, so even though you are following a peak in pitch, check occasionally that you are following the direct path to the transmitter and not a reflection by swinging the antenna through a full circle and then choosing the highest pitch.