



tags@wildlifecomputers.com  
WildlifeComputers.com  
+1 (425) 881-3048

8310 154th Ave NE, Suite 150  
Redmond, WA, 98052 USA

# ICOM IC-R30 RECEIVER SET-UP INSTRUCTIONS

1. Turn the receiver to "On" using the left-side power button.
2. Set the screen view to "Single View" and "A" band.
  - a. Hold the [MAIN/DUAL] button down for one second to toggle between the single and dual channel views.
  - b. Set to "Single View"—only displays a single frequency on the screen. Select "A" band by pressing the [MAIN/DUAL] button to display "A" band on the top left of the screen.
3. Set "Squelch" to "Open" using the button on the left side.
  - a. Hold the "SQL" button down and rotate the top dial to [SQUELCH:OPEN], then release.
4. Adjust the volume using the buttons on the left side.
5. Set the receiver to "VFO" mode (do not set to "Memory" mode).
  - a. Press the [VFO/MR] button to toggle between modes. "Incorrect Memory Mode" displays "MR" in the center of the screen. In the correct VFO mode, the VFO symbol is **not** displayed on the screen.
6. Set the tuning step to 0.1 kHz.
  - a. Press the TS button and rotate the dial to 0.1 kHz, press "Enter."
7. Tune to Argos frequency 401.679 MHz.
  - a. Press the [F-INP] button to clear the screen and type in 401.679 on the keypad.
    - b. Do not press ENTER**—if the menu appears, the "CLEAR" button will clear it.
8. Set the mode.
  - a. Press the [MODE] button and rotate the dial to "LSB," press "Enter." "LSB" will be displayed below the "A" band in the top left of the screen.
9. Start with "RF Gain" set to "Max."
  - a. Press the [QUICK] button to expose the drop-down menu. Rotate the dial to "RF Gain." Press "Enter." Rotate the dial to "RFG MAX." Press "Enter."
10. Start with the "Attenuator" set to "OFF."
  - a. Press the [QUICK] button to expose the drop-down menu. Rotate the dial to "ATT." Press "Enter." Rotate the dial to "OFF." Press "Enter."
11. Adjust the frequency to the desired tone.
  - a. When tracking a tag, use the dial to tune the receiver above or below 401.679 MHz to your desired tone.



# IC-R30 RECEIVER - CONTINUED

## Tracking Tips

Radio tracking and locating a tag requires a level of skill that comes with experience. Tracking a stationary tag on land is quite different from tracking a drifting tag from a boat. For this reason, Wildlife Computers highly recommends practicing these tracking techniques before attempting the real thing. This will ensure familiarity with the receiver, demonstrating what to listen for and how to change settings such as RF GAIN, Attenuation and Volume as you get nearer the tag.

The receiver has independent RF Gain and volume controls that are distinctively different. Think of RF Gain as the “sensitivity” of the receiver, and volume as the loudness. As the RF Gain/sensitivity is reduced, the volume may need to be increased.

Use a 400 MHz UHF directional Yagi antenna connected to the receiver. We also recommend using headphones or earphones to reduce external noise and increase the chances of hearing a weak signal. The receiver has a mono 3.5 mm headphone socket.

When searching for a lost tag, if you have GPS or Fastloc® quality locations, start in the area of the last known location. If you have Argos quality locations, filter all the Class 3 (or best) quality locations from the past 24 hours, plot them on a map and start at an averaged location between those points. Take into account that it is more difficult to determine a starting point for a tag drifting at sea than for a tag washed up and stationary on a beach. Start with the maximum receiver RF Gain set to RFGMAX, and Attenuators OFF. Search in a slow 360° sweep with the Yagi antenna horizontal to the ground while listening for the bearing with the strongest signal. Rotate the antenna 90°, (perpendicular to the ground) and repeat the 360° search. Continue until you can determine a definite direction with the strongest signal and move in that direction. You can now narrow the search arc from 360° to between 60 and 90° and still maintain directionality of the strongest signal, all the time moving towards it.

Be aware that a signal reflected off a physical structure like a building or cliff can provide a false bearing. Regularly move position several meters and continue tracking to reduce reflected signals.

Directionality will become difficult to determine as the signal strength “swamps” the receiver and all directions sound equally strong. At this point, there are three options to regain directionality; reduce RF GAIN, activate the Attenuator, or both (usually in that order). Spend time scanning 360° while changing RF GAIN steps (RFGMAX – RFG1). Often the signal strength on one particular RFG step will provide the best directionality.

If you reach a point where RF GAIN is set to the minimum and you still cannot determine tag directionality, activate the internal Attenuator to further reduce the signal strength. The internal Attenuator has four settings; OFF, ATT1, ATT2, and ATT3. Each setting reduces the receiver sensitivity to enable better directionality when getting closer to the transmitter. ATT3 and RFG1 settings provide the maximum attenuation for tracking when getting closer to a tag.

When a tag is extremely close and strong, unplugging the coaxial cable completely and walking around with just the receiver and listening for the strongest signal will help pinpoint the tag.

To Learn More Call: +1 (425) 881-3048 or Email: [tags@wildlifecomputers.com](mailto:tags@wildlifecomputers.com)