

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

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

ALINCO DJ-X11T RECEIVER SET-UP INSTRUCTIONS

First-Time Set-Up of the Alinco DJ-X11T

- 1. Hold down the side [POWER–See Figure 1] key for one second.
- 2. Press [MAIN–See Figure 2] for one second. This will change the display to a single channel.
- 3. Use the keypad to enter 401.680. Press Enter [ENT].
- 4. Press the top [FUNC] button. "F" will appear in the top left corner of the display.
- 5. Press [STEP]. Rotate the top left rotary knob (1-See Figure 3) to select "100 Hz." Press [FUNC].
- 6. Press [FUNC]. Press [MODE]. Rotate the top left knob (1) to select "LSB." Press [FUNC].
- 7. Press down once on the left rotary knob (1). Rotate the knob until the main squelch is set to "0." Press the knob again.
- 8. Press [FUNC]. Press [GAIN]. Rotate the knob to select "1" (Max Gain). Press [FUNC].
- 9. Press [FUNC]. Press [ATT]. Rotate the knob to select "Off" (No Attenuation). Press [FUNC].

The receiver is now set up for maximum sensitivity and long-range tracking. Notes:

- Keylock is enabled if the [FUNC] button is held down for one second. Repeat to unlock. •
- If incorrect buttons are keyed, turn power off and on to reset the receiver.





Figure 2



Figure 1

Figure 3

Tracking Wildlife Computers Tags—Post-Receiver Set-Up

- 1. Turn on the receiver using the POWER key on the side of the unit.
- 2. Assemble the directional Yagi antenna and connect the coax cable. Do not attach the in-line attenuator. It is recommended to use this only if it becomes difficult to find the tag (see step 5 below). Screw the antenna cable into the receiver.
- 3. Adjust the volume using the bottom of the left rotary knob (2-See Figure 3).
- 4. When a signal is detected, use the left rotary knob (1) to alter the frequency for your preferred beep tone.
- 5. Follow the tracking tips below. When searching for a distant tag, use the default maximum gain setting (Max=1) with the attenuator "Off." As the signal strength increases and it becomes difficult to directionally find the tag, use [FUNC] ATT to reduce the receiver gain (Min=10) and add "Low" or "High" attenuation. Now, you will want to insert the attenuator in-line at the coax cable connection to the antenna.
- 6. From then on, use the [FUNC] GAIN to reduce the receiver's sensitivity; 1 is the most sensitive and 10 is the least sensitive. Note: there is a major sensitivity change between steps 4 and 5.

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 them in a real-life scenario. 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 closer to the tag. The receiver has RF Gain and Volume controls that are distinctively different. Think of RF Gain as the "sensitivity" of the receiver and volume as the loudness. 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. Start with the maximum receiver RF Gain set to 1 and the Attenuators set to 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. Ideally, narrow the search arc from 360° to between 60° and 90° and still maintain directionality of the strongest signal, all while moving towards it.

Be aware that if a signal reflects off a physical structure like a building or cliff, you may receive a false bearing. Change your position by moving several meters and continue tracking to reduce reflected signals.

Directionality will become difficult to determine as the signal strength "swamps" the receiver. There are a few ways to regain directionality. First, insert the in-line coaxial cable attenuator and set the internal attenuator to HIGH. Next, reduce the Gain (Min. gain=10). These steps may need to be implemented in stages as the tag signal becomes stronger.

Spend time scanning 360° while changing GAIN steps. Often the signal strength on one particular step will provide the best directionality. If the GAIN is set to Min. (10) and all the attenuation is added and the tag directionality still cannot be determined, try unplugging the coaxial cable completely and walking around with just the receiver to listen for the strongest signal to help pinpoint the tag.