

Before proceeding to the troubleshooting steps below it will be vital to start with checking the power supply:

- Check battery: Verify all connection points are proper, clean and show no sign of corrosion.
- Load Test: Have the batteries Load Tested at an automotive part store or marine dealer. Load testing is very helpful in determining if the battery is the cause of some issues.

Keep in mind the accuracy and responsiveness with which the i-Pilot controls your boat is highly dependent upon many variables:

- Ratio of motor thrust to boat weight. The effect of this is excessive thrust on a smaller boat can cause i-Pilot to over correct. Not enough thrust on a large boat can cause i-Pilot to respond slowly.
- Wind. Excessive wind and/or current can reduce i-Pilot's positioning accuracy.
- GPS signal strength. The greater number of GPS signal bars the greater the accuracy. As voltage at the motor lowers the GPS will become less accurate or drop out completely.

1. i-Pilot BT remote displays "RF error"
  - a. This is a fatal error in the remote and it will need to be replaced.
2. Boat doesn't seem to keep close enough to the recorded Spot-Lock location:
  - a. Verify voltage at the trolling motor
  - b. Check for weeds, fishing line, or other debris behind the prop.
3. Spot Lock or other i-Pilot/i-Pilot Link Features will not engage; the motor emits an "error tone"
  - If a GPS signal is not available the i-Pilot cannot engage.
    - a. Verify a clear view of sky, check the GPS signal on the i-Pilot or i-Pilot Link remote.
    - b. The GPS controller is voltage dependent, if you do not have a signal it may be due to reduced power reaching the motor, load test the trolling motor batteries and check the connections.
    - c. Many features will not engage if the motor is stowed.
4. Spot Lock or other i-Pilot/i-Pilot Link Features disengage unexpectedly. This is usually accompanied by a series of beeps from the motor.
  - a. Check for anything that might restrict foot pedal movement. Any command from the foot pedal overrides and will disengage i-Pilot functions.
  - b. i-Pilot/i-Pilot link is voltage sensitive, check the connections between the batteries and the motor and have the batteries load tested.
5. The motor is making erratic steering corrections while in AutoPilot, Spot-Lock or Track
  - a. Verify voltage at the trolling motor
  - b. Keep all ferrous metallic objects away from the i-Pilot Controller (top head), this includes anchors, metal framework, etc.
  - c. If using Advanced AutoPilot, try changing the AutoPilot mode to Legacy AutoPilot. (Tell them how to do this??)

6. overshoots the recorded Spot-Lock location or keep close enough to the recorded Spot-Lock location
  - a. I-Pilot/i-Pilot Link is voltage sensitive, check the connections between the batteries and the motor and have the batteries load tested.
  - b. Check for weeds or other debris wrapped around and under the prop.
  - c. Verify proper GPS signal. The GPS signal strength indicator on the i-Pilot/i-Pilot Link remote should show at least 1 bar.
  - d. Verify the heading sensor is properly installed and has gone through the calibration and offset procedures.
  - e. Adjust the boat scale on the i-Pilot/i-Pilot Link remote. Ideal installation for a trolling motor is to have the proper amount of thrust for the size of the boat. If the motor thrust is not properly matched to the boat size it can cause overshooting the Spot-Lock location.
    - i. For an installation where the motor thrust is undersized for the boat, increase boat scale
    - ii. For an installation where the motor thrust is oversized for the boat, decrease boat scale.
7. Erratic Steering in AutoPilot.
  - a. Load Test the Battery and check all connections. A drop in voltage to the motor will cause the heading information to be inaccurate and will cause erratic steering in either AutoPilot Mode.
  - b. Try changing the AutoPilot mode. Advanced mode (default) tracks to a series of imaginary points on the line the motor was pointed when AutoPilot was engaged, this will have you arrive at a distant point you were aiming at, but along the way the motor will point in other directions. Legacy Mode strictly uses the compass to maintain the motor heading.
8. The i-Pilot/i-Pilot Link GPS-based features drop out when the motor speed setting is increased
  - a. I-Pilot/i-Pilot Link is voltage sensitive, check the connections between the batteries and the motor and have the batteries load tested.
9. The heading sensor calibration failed
  - a. The heading sensor needs to be in a place where it is not subject to magnetic interference. Ensure that the heading sensor is mounted at least 24 inches from magnetic or ferrous materials or anything that may create magnetic interference. This includes: base of the trolling motor, anchors, metal railings, speakers, radios, and trolling motor battery wires. It must be mounted on a flat, horizontal surface with the arrow on the heading sensor parallel to the boat's keel. It should also have a line of sight to the trolling motor.