Electronics: Interference And Trouble Shooting

Eric Prey & Mike Webb

Throughout this series Mike Webb and I have helped you select, set up, fine tune and understand your electronics. By now hopefully you have been able to get your boat on the water and apply what you have learned in these articles. If you have used your graph for deep fishing you have probably notice some form of interference on your screen. Depending on how your boat and electronics are wired the degree of interference you experience will vary greatly, older poorly wired boats experience the greatest interference. In this article Mike and I will go through some simple steps, tips and tricks to eliminating as much interference as possible.

The first thing you need to understand is where the interference is coming from; if you have any other electronic device running off of your boat's 12 / 24 / 36 volt system it has the potential to create interference. The following will generate interference:

- Another depth finder on your boat must be shut off; the two signals will interfere with each other and create a great deal of interference.
- When another device in your boat turns on (i.e. livewell pump, bilge pump, etc..) if you experience interference that particular device likely has a loose ground connection that needs attention.
- You will notice interference when you are close to another boat, the sonar signal from the other boats is causing interference and you will need to turn the sensitivity down on your graph.
- Trolling motor interference is the most common cause of interference. There are several steps to take to eliminate trolling motor interference.
    - Make sure that the trolling motor is properly grounded.
    - Trolling motor should run off of a separate power source than the unit. Use 2 different power sources if possible. Running the electronics off of the cranking battery is standard.
    - Make sure power cables are on different sides of the boat.
    - When using skimmer transducer on motor, use a piece of rubber or rubber sleeve under the transducer.
    - Use RFI (Radio Frequency Interference) blocks, one on the transducer cable, and one on power cable. Make sure to get the RFI blocks as close as possible to the unit.
    - Ground the foot-control pin on the trolling motor to the negative terminal of the trolling motor battery.
    - Ground the Transducer Band to the trolling motor ground.

Trouble shooting your graph is a relatively simple proposition; most issues that can are caused by the user can be corrected by simply resetting to factory pre-sets and then making adjustments from there. Many performance issues stem from incorrect adjustments made by the user.

Beyond those there area few issues that will require repair or replacement of the unit or some of its components:

- Poor signal quality: generally a transducer issue. If you are using the graph for deep fishing with the sensitivity above 80% expect a transducer to loose some of it's effectiveness in nine to fifteen months.
- Temp flashes 32 degrees: Most likely the sensor in the transducer has failed; swap heads with another unit to be sure, if it works with the other head take to a repair center, if it does not switch the transducer.
- Loss of power: blown in-line fuse, blown circuit fuse, loose connection in power or ground. Possibly loose connection in head, take to a repair center.

Tip of the Month

Note the location of your GPS antenna versus the location of the transducer. The way points marked by your GPS are marked at the antenna not at the head or the transducer. If there is a significant distance between the two make sure to be aware of it when looking for marked brush piles, ledges etc. If you are installing a GPS / Sonar combo try to install the antenna close to the transducer to alleviate this problem.

Eric Prey is a Professional Angler and Coast Guard Licensed Fishing Guide. Annually Eric competes in over 30 Regional Tournaments, conducts over 150 guided fishing trips and writes over twenty published fishing articles. His knowledge of both techniques and technology make him a trusted source of information regarding fishing techniques and marine electronics.