

Inside SeaSonde

What do those Blinking Lights mean anyways.

No need to swear; all the real diagnostics are in software on the computer. The lights are to let you know that at least something is happening with the receiver or transmitter.

On AWGIII Receivers: (newer receivers. Many have optional GPS unit)

At power on, Green, Yellow, Red are all on and should quickly change state probably faster than you can see. If they stay on, it may mean that the AWGIII module is not working or it cannot communicate with the Front Panel board, or the Front Panel board is no longer working.

Green light will flash when the AWGIII module is going through its power up cycle. It will turn to a steady on when the AWGIII is up and running.

Yellow light will flash when the computer is communicating with the receiver by the USB line. This communication happens when the computer recognizes that there is a USB device, and when SeaSondeController or SeaSondeAcquisition are talking to the receiver.

Red light will flash when the +5VDC supply is below 4.7V.

On DC Powered Receiver the Red light will flash when the +5VDC is low or the DC Supply is low. When the DC Supply is below 25V then the Front Panel board will turn off power to all the other modules. When the DC Supply rises again, it will turn power back on to the modules.

On AWGII Receivers:

Green light is always on when power is applied and the +5VDC supply is working.

Yellow will flash when the computer is communicating with the receiver over the USB line. This communication happens when the computer recognizes that there is a USB device, and when SeaSondeController or SeaSondeAcquisition talk to the receiver.

Red light will turn on when the receiver's data buffer is full. This happens when SeaSondeAcquisition is not running or is not fast enough to keep up with data. When not fast enough, you might see the light turn on only for a short period. If SeaSondeAcquisition is not running and the red light does not turn on after about 30 seconds, then the receiver probably needs to be repaired.

On Transmitters with one Light:

Green light is on when the Transmitter is powered on and its +28VDC supply is working.

On Transmitters with three Lights:

At power on, Green, Yellow, Red are all on and should quickly change state probably faster than you can see. If they stay on, it may mean that transmitter's Front Panel board is no longer working.

Green light is on when the Transmitter is on and its +28VDC supply is working.

Yellow light shows the state of the transmit control line from the receiver. This signal tells the transmitter when to transmit. In normal SeaSonde operation this line is pulsing with the Blanking interval. The yellow light on the transmitter should normally be blinking. When the Receiver's transmit watch is tripped or the transmit control line is forced off, then the yellow light will be off. Only during testing, when the transmit control is forced on and the transmit watch is not tripped, then the yellow light will be steady on. In field operations

Red light is used to indicate power supply problems. It will start blinking when the +28VDC supply drops below +22V. The red light will be on when the Front Panel board +5V regulator from the +28V supply drops below +4.7V (This will probably be very uncommon as at this point the Transmitter has probably gone completely off line)