

This guide will step you through troubleshooting the GPS receiver via NavCom's StarUtil GUI program.

Problem - GPS Receiver's LEDs all illuminate, but can not communicate with one or more ports.

- ✓ The three possible causes for this condition:
 - Power supply
 - Software corruption
 - Hardware malfunction
 - Failed MMC card
 - Failed IOP card
 - Failed IOP oscillator
 - Failed GPS engine
- ✓ Power supply
 - Some of the older model power supplies are known to provide the correct voltage, but insufficient current. If the older model power supply is in use (see picture below), please contact NavCom Tech Support for a replacement unit.
<http://www.navcomtech.com/Contact/ContactSupport.cfm>



- If the unit is powered via a variable power supply or a power supply not provided by NavCom, verify the power supply is providing the same or better power as the module provided by NavCom.
 - Power requirements are 10 to 30VDC, 2 amps
- If the model in use is operating on a battery supply
 - Ensure the battery is fully charged
 - Exchange battery with a known good battery
 - Replace the battery pack

✓ Software Corruption

- Verify the software version on your computer prior to reloading software in the receiver. [NavCom Technology - Release Notes](#)
 - Contact NavCom Tech Support for software, if necessary. <http://www.navcomtech.com/Contact/ContactSupport.cfm>
- If the software becomes corrupt, the software can be reloaded on the unit. Please contact NavCom Tech Support for a current release software. <http://www.navcomtech.com/Contact/ContactSupport.cfm>
- If new software was being loaded to the unit at the time of corruption, and the load failed, try reloading the software several times.

Use StarUtil to upload the software. Sometimes the Install program doesn't connect with the receiver at the appropriate baud rate when all LEDs are lit.

- Using StarUtil, hard-set the com port to 19200 (turn off Autobaud).
- Turn the receiver off.
- Open StarUtil's software upload function.
- Load IOP software first; start the upload, then turn the receiver back on.
 - During the first 3 seconds, the receiver listens to the com port at 19200. This allows the controller to take over. If the upload program is running, it will take over the receiver and load the software. It will take about 20 minutes to do the upload if you are able to gain control. Do the same for the GPS and LBM software after loading the IOP software. If the software does not load (after several attempts) then the unit will need to be returned for repair.
- Use these linked guides:
 - Navigation Software Upload <http://www.navcomtech.com/Support/Download/TS%20-%20Navigation%20Software%20Upload.pdf>
 - IOP Software Upload <http://www.navcomtech.com/Support/Download/TS%20-%20IOP%20Software%20Upload.pdf>
 - Rest To Factory Default <http://www.navcomtech.com/Support/Download/TS%20-%20Factory%20Default%20Configuration-%20Reset.pdf>
 - Format MMC memory (erases logged data, if any); refer to page 39 (7-36) http://www.navcomtech.com/Support/Download/96-310008-3001RevE_StarUtil.pdf

✓ Hardware malfunction

- If the above procedures do not correct the receiver performance the receiver may have a hardware failure in either the IOP or GPS engine boards. The unit will need to be returned to the factory for evaluation and or repair. Please contact NavCom Tech Support for a current release software. <http://www.navcomtech.com/Contact/ContactSupport.cfm>