



The specifications for all GPS tracking products manufactured by do not exceed the 250-milliamp/Hour draw. If vehicles are sitting idle for extended periods - 4-5 days or more, then the GPS receiver may pull the vehicle battery down. If this is the case, we recommend enabling the sleep timer, which will automatically turn the unit off after a specified time. When the vehicle unit senses ignition, it will turn itself back on. In sleep mode The G4Echo system draws no power at all. To set the timer, read chapter 3 of the BlueADL guide on the support page.

If you have the older TMGPS System, only serial numbers that began with an F can be put into sleep mode. In sleep mode version F drops to approx 90ma/hr draw.

If a battery is dying overnight from a 250ma charge, then it is defective or at end of life. If the battery is seeing a higher level of discharge - it may, however, still be related to our units. A problem we have seen before is related to installation.

The cable that connects to these units has a foil shield on TMGPS models. When the cable jacket is cut back to expose the wires, it is very easy to nick the insulation of the wires inside the jacket. If the foil shield touches one of these nicks, it can cause excessive current draw, ultimately draining the vehicle's battery. This problem can be easily corrected by tearing out some of the foil shield to get it away from the cut end of the cable.

It is not possible for GPS Vehicle units to drain a good battery overnight. If you look at the vehicle battery specs, you will see a specification called "Reserve Capacity" (RC). This spec is the number of minutes the battery can deliver a 25 Amp current and still have sufficient capacity to start the vehicle. The average lowest rated batteries have a RC of 80 minutes.

$$25 \text{ Amps} \times 80 \text{ minutes} = 2000 \text{ Amp minutes}$$

$$2000 \text{ A min} / 0.25 \text{ Amps} = 8,000 \text{ minutes.}$$

$$8,000 \text{ min} / 60 \text{ min/Hr} = 133 \text{ Hr}$$

$$133 \text{ Hr} / 24 \text{ Hr/Day} = 5.5 \text{ days}$$

Therefore, a GPS unit will take more than 5 days to drain a good battery with 80 minutes Reserve Capacity. Most batteries have significantly higher RC numbers. You can run through the equations above with the RC rating of the battery you are using to determine how long the battery should be lasting for them.

## TESTING

With the vehicle off, and all accessories (except the GPS) off, disconnect the negative lead of the battery, and connect an ammeter between the battery and the negative cable. The reading shown will be the current draw of a parked vehicle. If the reading is greater than 180ma, then connect the battery back, and put the ammeter in the 12v line feeding the GPS unit. If the readings do not match, then something other than the GPS is drawing the power.

Take the current reading from the battery lead, and run it through the equations above. This will give you an idea how long the battery should last in the parked vehicle. If the number is substantially longer than the vehicles are sitting overnight, then you know that something else is being left on to drain the battery.