



## Battery charging modes for the SR560 & SR570

There are 3 lead acid batteries in the SR560 and SR570. Two batteries are wired in parallel for positive voltage (supplies voltage to the analog and digital circuits). One battery is wired for negative voltage (supplies voltage to the analog circuit only).

It's normal for the rear panel to heat up during charging (the regulators are supplying current to the batteries and are heat sunked to the chassis). You might also hear a humming noise from the transformer.

There are separate battery charging circuits for positive and negative. The two LED's on the rear panel show the charging modes: Charge (fast) and Maintain (slow charge or trickle charge)

If the red LED is on (Charge), and the yellow one (Maintain) is off, then both the plus and minus battery voltages are below 11.3V (when plugged in) and both charging circuits are in fast charge mode (+/-15.5V applied to the batteries). The instrument will remain in fast charge mode until the voltage at the batteries is above 12.3V and then switch to maintain mode.

If the Charge LED is off, and the Maintain LED is on, then both the plus and minus battery circuits are in maintain mode (13V applied to the batteries).

If both LED's (charge and maintain) are on, then either the positive or negative is in fast charge and the other is in maintain charge. Normally the positive takes longer to charge up then the negative because the positive is two batteries in parallel.