

Battery Connector

The Tattletale comes supplied with a 5 inch long battery strap which connects to a 9 volt transistor radio battery. These straps may not survive many disconnections. To replace the strap, solder the wire from the larger of the two battery strap terminals to the pad marked positive on the Tattletale. *Be careful! the regulator is **not** protected from reverse voltages!*

J1 - Power Connector

J1 is a socket for three .025" square pins which carries the two battery connections as well as regulated 5 volts to add-on boards. It is a socket to minimize the possibility of accidentally shorting BAT+ to ground when an add-on board is not attached. There is no current limiting on BAT+, so be careful; you can destroy etches by shorting BAT+ to BAT-, or destroy the board by shorting it to REG5V.

BAT-	negative side of the battery and Tattletale ground
BAT+	positive side of the battery
REG5V	voltage regulator output, also appears at J7 and J6

Supply Range

Models II and III are designed to operate from a battery stack with a voltage output in the range of 6 to 10 volts. Operation from supplies greater than 10 volts will cause a non-catastrophic failure of the A-D converter's multiplexer and will exceed the power dissipation rating of the regulator's pass element if the board's REG5V is shorted to ground. If you wish to run the Tattletale from a 12 volt nominal supply, use a zener diode to drop the voltage into the 6-10 volt range of the regulator. No efficiency is lost because the linear regulator throws the excess voltage away anyway.

Current Drain

The Tattletale's current drain is a strong function of the program. The current drain is low while waiting for a command, because the Tattletale drops into sleep mode while waiting for a character from its UART. Disconnect the RS-232 interface cable from the Tattletale when it is not in use, as the interface drivers add about 1-2 mA.

Mode	Model II	Model III
GOTO loop	24 mA	9 mA
SLEEP	3.0 mA	1.5 mA
HYB	---	200 μ A
QUIT	---	100 μ A
CALL assem. routine in RAM	70 mA*	13 mA

* The Model II's regulator will not support this drain for more than 50 ms without activating its current limit. Time intensive user assembly language routines should be loaded into the designated area in the 6303Y's RAM.