

Cycle Analyst Data Logging to Memory Card with Sparkfun's Logomatic

Data logging from the Cycle Analyst to an SD memory card can be accomplished by using the Logomatic v2 device available from Sparkfun Electronics (www.sparkfun.com). The Logomatic uses the same serial 0-5V communication protocol as the CA and therefore no USB or RS232 converter is required.

Power Supply

The Logomatic requires a separate power supply (3.6 - 7.5V) capable of providing 80mA continuous current and CANNOT be powered from the 5V bus on the Cycle Analyst. Attempting to do so would result in a loss of data and likely a non-functioning Cycle Analyst. The power source for the Logomatic must be provided by either a separate lithium cell, a series stack of 4 NiMH or NiCd cells or a separate DC power source.

Data

The **Tx** pad on the Cycle Analyst can be wired directly to the **RXIO** pad on the Logomatic and their GND pads should also be connected if the Logomatic power source GND is isolated from the Cycle Analyst and the main battery's negative terminal. Shielded cable can be used to protect data integrity. Care should be taken to not short the Tx signal of the Cycle Analyst to GND while powered on as doing so can destroy the Tx pin on the Cycle Analyst's microprocessor.

Configuration

The default Logomatic v2 settings (automatic UART mode, 9600 baud rate) are compatible with the Cycle Analyst. It should be noted however, that the SD card must be formatted using the FAT16 file system.

Find more information and see what others are doing over at the Endless-Sphere message board. <http://endless-sphere.com/forums/viewtopic.php?f=2&t=14397>

