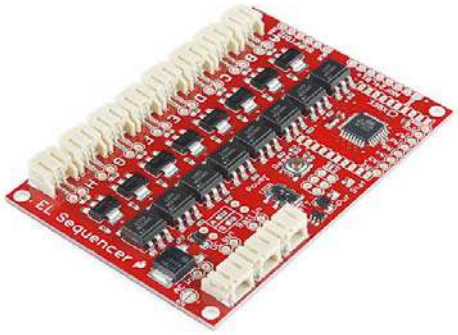
sparkfun

SparkFun EL Sequencer

COM-11323 ROHS

★★★★☆ 4



Description: We've heard you, and made a number of improvements to our EL Sequencer. The new version adds zero-crossing optoisolated triacs for noise-free operation and full isolation between the AC and DC sides, and includes a 1.5A adjustable linear regulator to supply regulated DC to an external inverter (not included).

The SparkFun EL Sequencer is a board that contains an Arduino-compatible microcontroller, and circuitry for controlling up to eight strands of electroluminescent wire. EL wire is flexible plastic cord that glows brightly when high-voltage AC is applied to it. It's available in numerous colors (see the related products below), runs cool, and requires very little current, but can be difficult to work with because of the high-voltage requirements. The EL Sequencer can safely switch high-voltage AC on and off, allowing you to easily create animated displays or whatever else your imagination can come up with.

In addition to this board, you will need an inverter (a component that generates the high-voltage AC needed by EL wire), EL wire/tape/panels, and a 5V FTDI BOB or cable to load your own programs. The board also has headers for XBee and NRF24L01+ radio modules for wireless projects. SparkFun carries two inverters, a

3V-input version that can drive a few feet of EL wire, and a 12V-input version capable of driving dozens of feet of EL wire. Choose the one appropriate to your power source and driving requirements. See the tutorial below.

Nate has used EL wire to make amazing interactive costumes; check out his Heartbeat Straitjacket and demo video.

Note: The initial run of the board contains a silkscreen error; the FTDI “black” and “green” labels are reversed. If you’re plugging an FTDI BOB into the board, it goes in right-side-up as you’d expect.

Features:

- ATmega 328p running at 8MHz, with Arduino bootloader
- Eight opto-isolated, zero-crossing EL control channels
- Headers for XBee and NRF24L01+ for optional wireless control
- No library needed - control is as easy as turning a LED on and off
- Integrated 1.5A linear regulator (LM317) to supply regulated DC power to external inverter
- Linear regulator preset to 3.3V, but can be changed via PTH resistors, or bypassed entirely
- Can be powered by a 3.7V Lipo battery (using 3V inverter), or an external 3.3V to 16V supply (using 3V or 12V inverter)
- 5V FTDI BOB or cable required for reprogramming, not included
- External EL inverter required, not included