Creating special effects with the Arduino is fun and easy. By remixing four basic discrete components, you can build two interactive light sequencer devices within an hour and a half. The electronic concepts discussed in the previous chapters will be applied in this chapter along with new items to be discussed. Additional remix techniques in electronics prototyping and software development will be explained in this chapter as well. The required parts are pictured in Figure 3-1.

**Parts List**

- Arduino Duemilanove or equivalent
- LED bar display
- 2 × 8 330Ω DIP resistor IC
- 10K trimmer potentiometer
- 10K resistor
- Small solderless breadboard
- 22AWG solid wire
- Digital multimeter
- Oscilloscope (optional)
- Electronic tools
Remix Revisited

As discussed in Chapter 2, the two devices in this chapter illustrate a design technique whereby a new product evolves from a simpler design. This remix design technique allows product designers and developers to get to market quicker without a major tear-up to the BOM. Figures 3-2 and 3-3 show system block diagrams for two interactive light sequencer devices. Also, the software code(sket) used in the two interactive electronic devices will allow lighting sequence operation of the LED bar display, either by manual or automatic methods of human control.

**Tip**  Analogous to remix in hardware design is code reuse for software development. We say modified, you say recycled!

![Figure 3-2. Systems block diagram for an interactive light sequencer device](image-url)