

Experiment 23-

Simple Infrared Transmitter

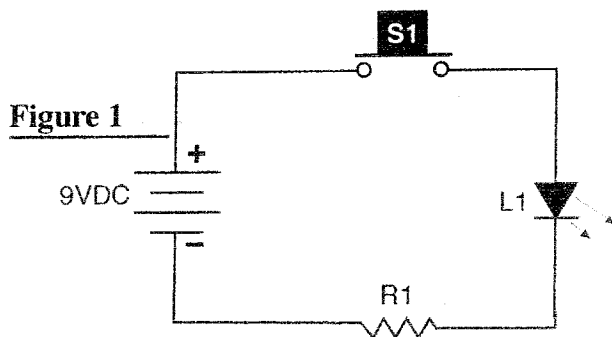
In this experiment you will build a simple infrared transmitter that you can use in connection with the on/off remote control switch of experiment 22.

This infrared transmitter uses a simple circuit made up of a 9V battery, a pushbutton (S1), a resistor (R1), and an infrared LED (L1). When pushbutton S1 is pressed, the current flows in the circuit turning LED L1 on. Of course, you will not see

the LED lighting up, as it emits an infrared light that human eyes can not see. Figure 1 shows the schematic of the circuit of this experiment.

Procedure:

- Build the circuit shown in figures 1 and 2. When done, verify that the circuit has been properly assembled per figure 2, and connect a fresh 9V battery to the snap.
- Test this transmitter with the On/Off remote control receiver switch of experiment 22.



IMPORTANT NOTE: Build this project so that the LED extends over the end of the protoboard as shown below.

Parts List:

R1: 220 Ω Resistor (Red, Red, Brown)

L1: Infrared LED (Clear LED)

S1: Pushbutton Switch

Misc.: Battery snap, breadboard, and wires.

