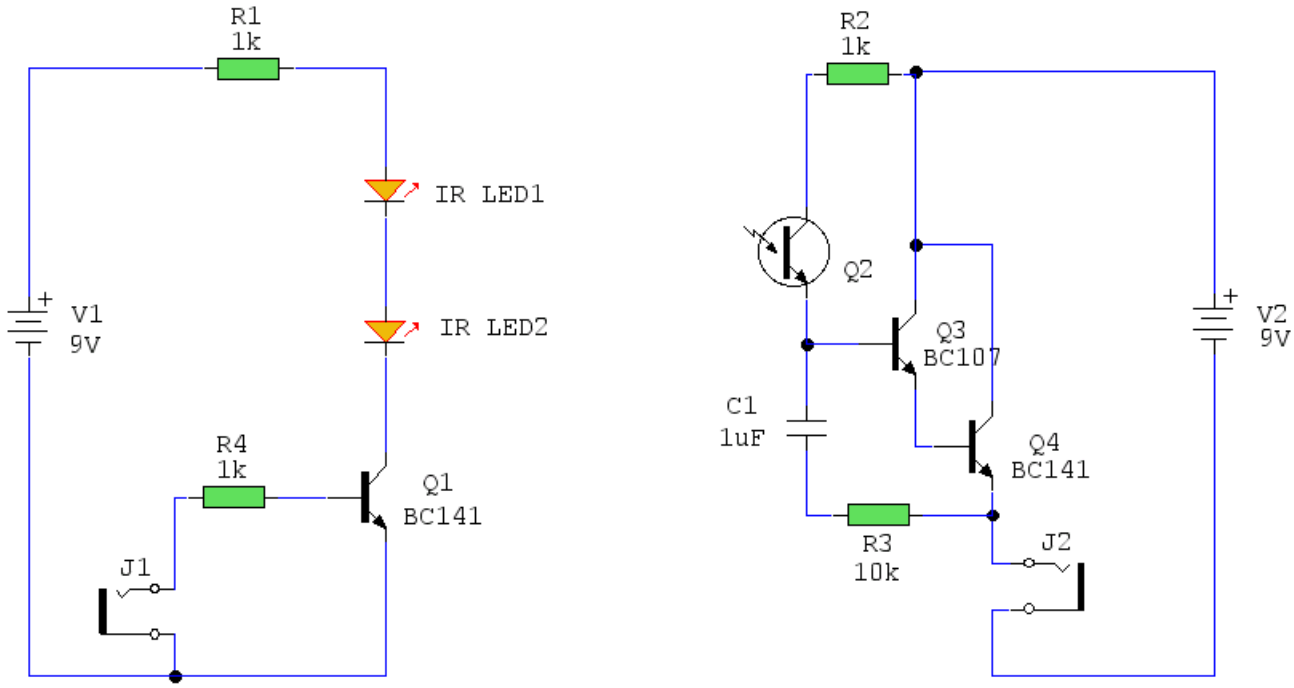
IR Link

Description:

A basic Imfra Red Link for audio communication for distances upto 3 metres.



Notes:

In his circuit Milan has created a basic Infra Red transmitter and receiver. The transmitter comprises a single amplifying stage driving two series connected IR LEDS. The input source is connected to J1. Please note that the device will pass a small DC current through it and also directly bias the transistor. A suitable device is therefore a high output crystal microphone. These can produce high output voltages up to 1 Volt but this will be reduced by the transistors low input impedance.

The receiver is three stages, the first stage being a phototransistor. Stages two and three form a high gain darlington emitter follower, the bias for the whole stage derived through R2 and the phototransistor itself. C1 and R3 form a filter to reduce interference from flourescent lighting and other hum sources. The output is via Jack J2. Note also that the output device will pass a small DC current so a medium impedance loudspeaker or hwadphones are a good choice here.