

IR Remote (#29122) Spin Demo



Please note: This demo was created to support the 2013 National microMedic Contest kits, which are no longer available.

The Infrared Receiver allows your project to decode infrared commands sent to it by a modulated infrared source. In other words, the sensor can read signals sent to it by an infrared TV remote, or other similar source. This demonstration program simply uses the Parallax Serial Terminal program to print codes received by a universal remote programmed to send data on the Sony SIRC infrared protocol.

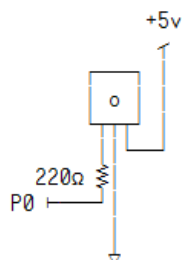
Demonstration Part Requirements

- (1) Propeller Board of Education
- (1) Infrared Receiver
- (1) 220 ohm resistor
- (2) Jumper Wires

Connections

The connection diagram below shows how to connect the infrared receiver to one of the Propeller's I/O pins. The diagram can also be found in the source code file "IR Remote Control DEMO.spin".

=== IR Receiver Connection Diagram ===



In this demo, the Parallax Serial Terminal only displays the raw value of the code it receives. For each line, there are two pieces of information that say the same thing in two different ways - the first number is the hexadecimal value of the code received and the second number is the binary representation of that code. In the screenshot above, the codes listed are the codes received for the "1", "2", "3", "4", and "5" key on the universal remote. Within the **CON** section of the "IR Remote Control DEMO.spin" program, there is a section that enumerates named constants for each button on the remote control.

The infrared receiver can receive information from any infrared source as long as it is modulated on a carrier wave with a frequency of around 38 kHz. If you are crafty, you can write your own Propeller firmware to correctly interpret commands from just about any infrared remote control.