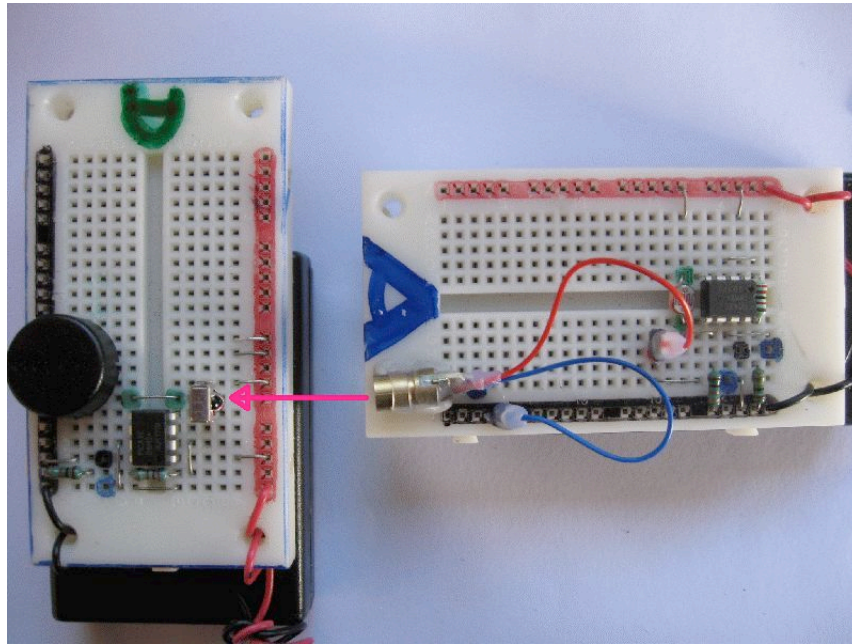


Ideas Generator ~ Irout Irin



- A \$1:70 Laser Module has been used to transmit irout modulated red light to an Ird Rx demodulator decoder module
- What are the advantages / disadvantages of using a laser module over Ird LED's ?
- How wide is the beam width of the Tx and the Rx device at either end ?
- An Ird LED or 2 in series could be used to make a completely 'invisible beam'
- A power transistor could be used with 1 or 2 Ird LED to massively increase the range. Sun, or ights 'Flooding' the Ird Rx decoder is usually the limiting factor. Keep shaded !
- PWMOut can be used to generate a fixed pulse width of Ird light modulated at 38kHz.
- Pulsin can be used to detect the WIDTH of this pulse. Pulse width could represent data
- The Ird Rx decoder OP data pin is normally HIGH. It will respond by pulsing momentarily to a ONLY when when Pulsed 38kHz modulated light bursts of a few mS.
- The OP pin will NOT change state if a constant beam of 38kHz or Ird light is applied
- Picaxe are Sony TV Ird compatible. They internally Modulate (Irout) and can decode (Irin) the Sony SIRC Irout protocol
- SIRC is a 7 bit data communications protocol. The 7 bits are enough to transmit simple data or a single variable. Invisible Single byte txt messaging could be invented
- Full conventional serial data cold be modulated ONTO a steady 38kHz 'carrier' generated by pin 2 using a transistor. The Ird Rx module would then output TNNN polrity serial data
- The Irin and Irout commands are much better that the Infrout and Infrain2 commands
- The Irin command has a [timeout] option that can prevent the command from stopping and 'hanging' the program until valid Irin data is received and decoded

Need more ideas ? Examples ? Help ? Inspiration ?

- ALWAYS read and research Manual 2 in the Help Section of the picaxe programmer to get detailed examples, sample code and circuits of how to use the instructions used
- Refer to other Word.doc templates that use the above commands to extend these ideas
- Use the bright Sparks Forum to ask for further tips and ideas
- Test your thinking by SHARING your ideas with others. This often leads to a break though that will take your project to a new level :)