

Re: one channel radio frequency help

Source: <http://sci.tech--archive.net/Archive/sci.electronics.design/2007-04/msg02765.html>

- *From:* joseph2k <quiettechblue@xxxxxxxx>
 - *Date:* Sun, 15 Apr 2007 09:22:56 GMT
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Gary Tait wrote:

"robot guy" <huntin4jesus@xxxxxxxx> wrote in
<news:1175634612.259231.224850@p77g2000hsh.googlegroups.com>:

Only problem is that the I don't know what was causing the device to only respond to a certaing rate of speed from the flashing led. It was all pre manufactured into a little sugur cube sized box

You had, likely, a typical IR reciever module from a VCR os the like. The simply detect the presence of an IR signal oscillating at around 40 Khz, and activate (pull to ground) the output pin at the presence of the 40Khz IR signal. Your 555 was blinking the IR LED at the set frequency for that module. A typical IR remote would modulate that carrier by turning it on and off in the data pattern the remote creates.

RF remotes are similar, in that instead of a 40 Kz carrier on an IR LED, the data pattern is directly modulates the transmitter. In theory, you could do the the same, by gating an RF carrier, and detecting its presence, but that is less than ideal. You should encode it, and depending on the application, you should have a self error checking code.

If you can bother you can find chips that do both the transmit and receive functions for IR or RF remotes. They are typically marketed in transmit – receive pairs. There are usually inexpensive ceramic resonators to generate master clock frequencies for both parts.

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JosephKK

Gegen dummheit kampfen die Gotter Selbst, vergebens.

—Schiller

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