

# Issues Connecting PIR Motion Detector with RF Transmitter

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Saeedk9574



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Hi everyone,

I'm working on a wireless motion detector using a PIR sensor ([BISS0001](#)) and an RF transmitter. Both circuits work fine when tested separately, but when connected together, the system behaves unpredictably. Specifically, the output of the PIR sensor stays high or intermittently blinks.

To clarify:

- The PIR sensor outputs a high signal when motion is detected, as expected.
- The RF transmitter works when manually activated, sending the signal correctly.

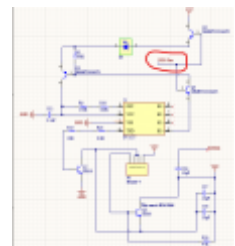
For the PIR circuit, I used the schematic from the [BISS0001](#) datasheet. For the RF transmitter, I took the design from an RF remote control board. I used a multimeter to identify the connections and then replicated the circuit on my board, replacing the pushbutton with a transistor (Q4 in the schematic).

I would appreciate any suggestions or guidance on how to properly integrate these circuits without causing interference or erratic behavior.

Thanks in advance!

## Attachments

- [Screenshot 2024-11-14 092523.png](#)  
32.3 KB Views: 11
- [Screenshot 2024-11-14 092416.png](#)  
56.7 KB Views: 11



Hi Saeed,

Can you explain how you expect this section of your circuit to work.

Considering that PIR Vo 0V > +3V.?

E

Attached an actual BIS module circuit diagram.



[ericgibbs said:](#)

Hi Saeed,

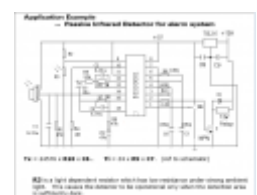
Can you explain how you expect this section of your circuit to work.

Considering that PIR Vo 0V > +3V.?

E

Attached an actual BIS module circuit diagram.[View attachment 335764](#)

[View attachment 335762](#)



Thanks for your reply, I know I have made a mistake in the vout of [BISS0001](#). But I do not how I should connect its output to the transmitter to transmit signal. when PIR detects a motion there is a 5v signal in the out put of [BISS0001](#). I supposed, if I connect this 5v to the base of an NPN transistor (Q4) it must work. In addition, I used another NPN (Q5) to boost 5v signal and also for seeing

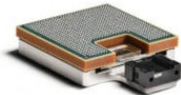
detection I used Q6 and D2. Which seems I was totally wrong.  
Probably I should remove Q2, Q4, Q5 and Q6, but I do not know what circuitry is correct to turn on the transmitter by the Vout of BISS0001.  
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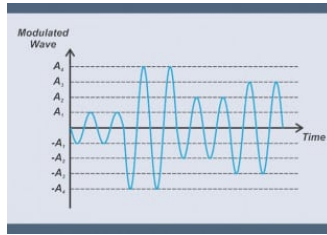
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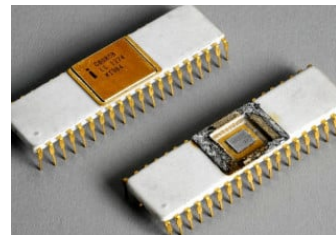
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