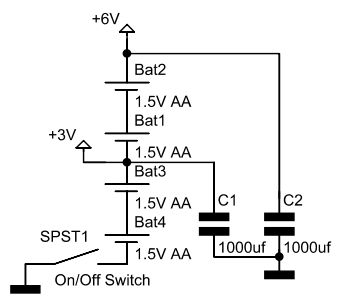
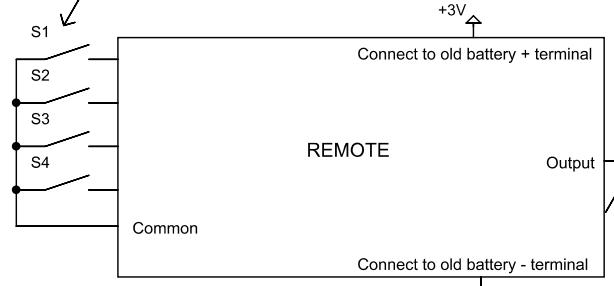


1

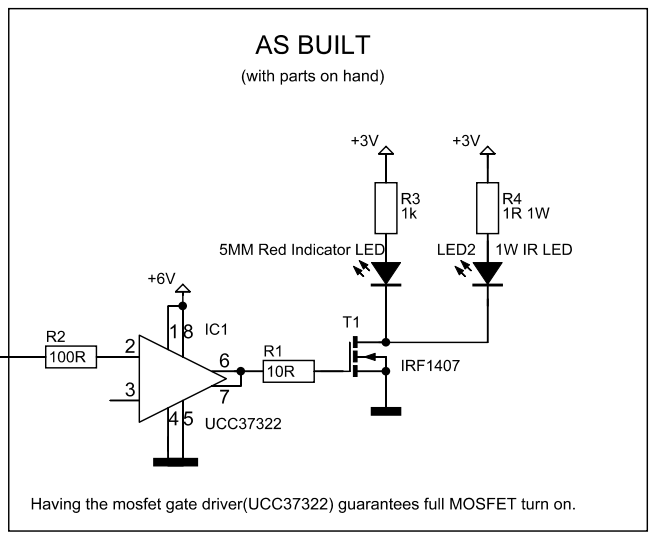
The switches on most remotes are arranged in a grid configuration. If you follow one common trace carefully you will see where it meets up with the switch contacts, use the trace on the other side of the switch contact for one of the individual switch wires. You need to find 4 separate switches that your one common wire connects to (assuming you only want 4 switches).



2AA batteries were used to provide 3V for the remote and IR LED. Another two AA batts in series provide the 6V necessary to power the MOSFET drive IC required for driving non logic level MOSFETs



The output connection on the remote must be found by following the trace back from the IR LED. Some remotes drive the LED directly from the controller IC, I don't have experience with these so try and find one where the trace goes to a small transistor. Then one trace from the transistor (the Base/Gate) will go back to the controller IC. You need to cut this trace with a razor blade and the side coming directly from the controller IC becomes your output.

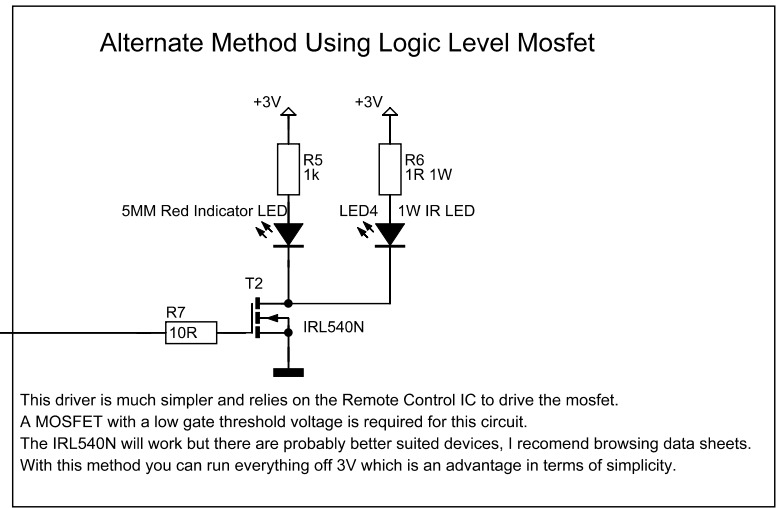


Having the mosfet gate driver(UCC37322) guarantees full MOSFET turn on.

Use one or the other

2

3



This driver is much simpler and relies on the Remote Control IC to drive the mosfet. A MOSFET with a low gate threshold voltage is required for this circuit. The IRL540N will work but there are probably better suited devices, I recommend browsing data sheets. With this method you can run everything off 3V which is an advantage in terms of simplicity.

IR LED NOTE

The resistor in series with the IR 1W LED can be adjusted depending. On my remote I didnt use any resistor and rely on the short pulse waveforms and internal resistance of the batteries to limit current(this is not really recommended;)

Modifications		Date	Name	Description	Page no.
Date	Name	04/06/2008	Created	High Power IR Remote	
					Pages
<i>Chester Lowrey</i>				Schematic no.	

4