

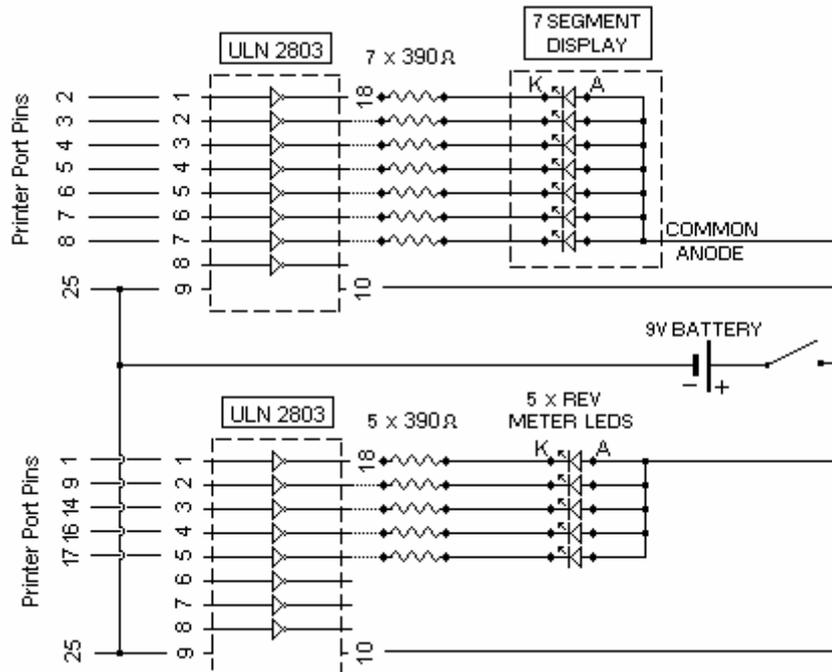
## Gear Indicator with Rev Meter

To make the Gear Indicator with rev meter you will need the parts below. I have included the [www.rapidonline.com](http://www.rapidonline.com) part numbers. You will also need some wire! I used 12 core alarm wire which has 12 differently coloured cores which is handy (but you will need to run 13 wires between the 25 pin plug and the gear indicator.) The box looks good but is too small to fit either the battery or the switch in it so it may be worth getting a bigger one if you want to do that.



RapidOnline.com part no.	Part description	Quantity
57-0204	C/A SUPER RED 1IN LED DISPLAY (RC)	1
77-1105	NON ROHS DPST MINIATURE ROCKER SWITCH	1
77-0146	NON ROHS 25 WAY BLACK D CONNECTOR COVER	1
15-0110	25 WAY SOLDER LUG PLUG (RC)	1
18-0082	PP3 BATTERY CLIP 150MMLEAD KEYSTONE233RC	1
56-0960	5 SEGMENT RED LED ARRAY (RC)	1
82-0668	ULN2803A OCTAL DARLINGTON DRIVER (RC)	2
30-3325	MIN.ABS BOX 74 X 29 X 49MM (RC)	1
34-0585	95 X 127MM MATRIX BOARD (RE)	1
?	390 OHM RESISTORS	12

Here is the circuit diagram for my GI:



You can connect the 7 segment LEDs up in any order to pins 2-8 on the parallel port and define the display for each gear in the config.txt file in the GI program. I wired segment a to pin 2, segment b to pin 3 etc for simplicity. Check the datasheet for your 7 segment display to find out which pins light which segments.

Any questions give me an email: nick (dot) a (dot) aronson (at) gmail (dot) com  
Good luck! ☺

Updated 26<sup>th</sup> October, 2008: Corrected circuit diagram. Pin 10 should be connected to +9V.