RS-232 AIS Alarm Circuit

http://nordkyndesign.com/collision-avoidance-at-sea-ais-alarm-project/

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Bill of Materials

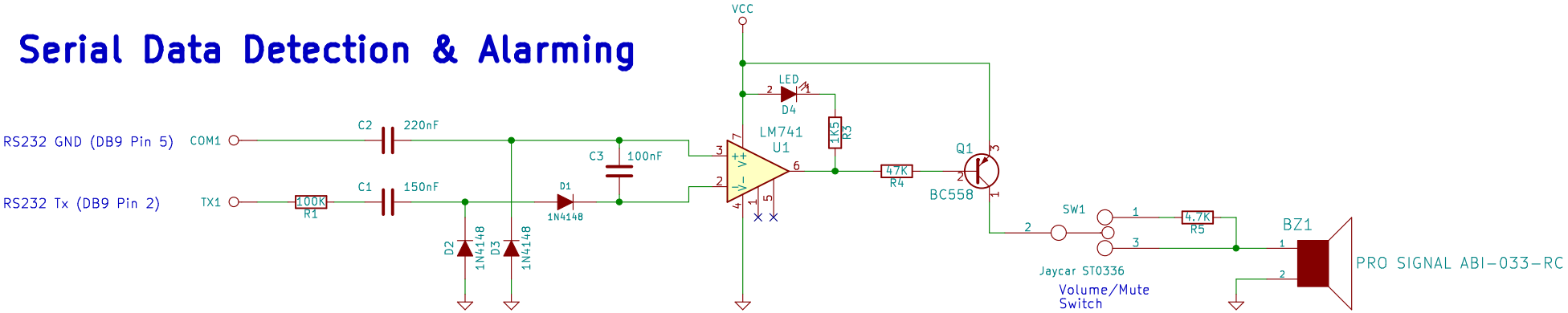
BZ1	Piezo buzzer PRO SIGNAL ABI-033-RC	
C1	150nF	
C2	220nF	
C3	100nF	
C4	1uF / 25V tantalum preferred	
C5	4.7uF / 25V tantalum preferred	
D1	1N4148	
D2	1N4148	
D3	1N4148	
D4	LED 3mm red	
D5	LED 3mm green	
Q1	BC558 or equivalent	
R1	100K	
R2	8.2M	
R3	1.5K	
R4	47K	
R5	4.7K	
R6	68K	
R7	1.5K	
SW1	Miniature toggle switch SPDT On-Off-On Jaycar ST0336	Alarm volume / Mute
SW2	Miniature toggle switch SPST Jaycar ST0335	Power
U1	LM741	
U2	LMC555CN	Any 555 also acceptable

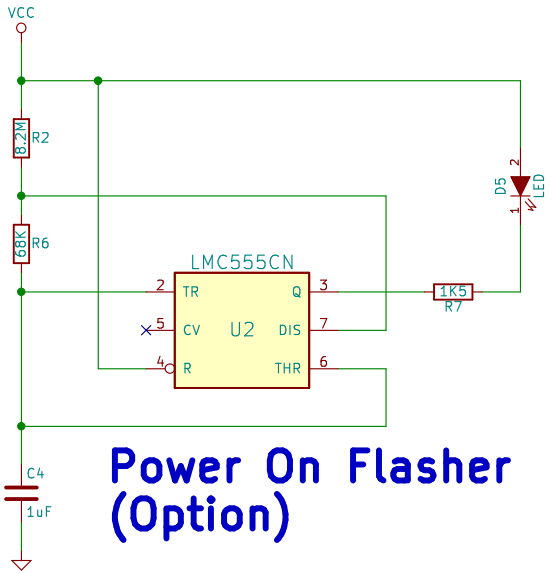
If the power-on green LED is not required, U2, R2, R6, R7, C4 and D5 can be left out altogether.

Circuit Board Connections

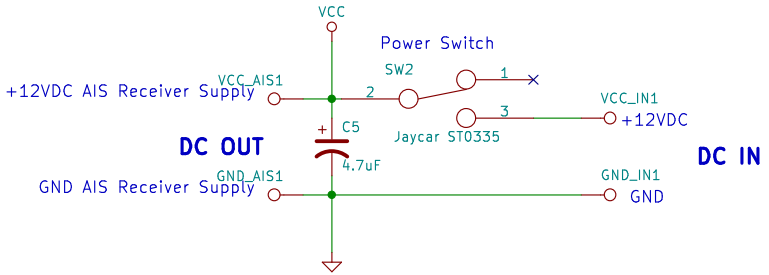
Description	Pad
Ground common (NEG)	GND
RS-232 Common (receiver pin 5)	COM
RS-232 Tx (receiver pin 2)	TX
Switched supply to AIS receiver	+12V AIS
Fused supply +12VDC	+12V BAT

Serial Data Detection & Alarming





Power On Flasher (Option)

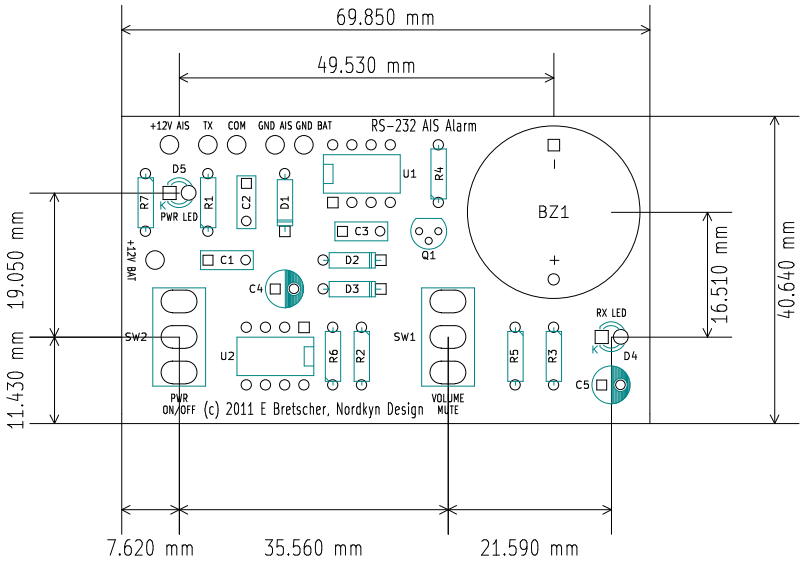


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Title: RS-232 AIS DATA ALARM

Size: A4	Date: 8 Nov 2011	**Rev: 0**
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Title: RS-232 AIS DATA ALARM CIRCUIT		
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