

Catch Me Parts List

Part	Supplier	Part no		URL	Cost per	Qty \$100+	Notes	Original manufacturer and part number
	Battery Holder and alternatives		Note					
Recommended 9V PCB Mount battery holder	Altronics	S5048		https://www.altronics.com.au/p/s5048-9v-battery-holder-pcb-mount/	1.15	\$0.95	Part number on the holder is BH-9VPC, there are many different supplier of this in Australia. Also seen it at Jaycar and Radio parts	
Notes 1)	PCB Mount 9V battery holders are available from other suppliers with different pin spacing, the board can accommodate pins spacing from 12 to 14.5 mm							
2)	The holes for the PCB mount are slotted to accomodate different pin spacings - the only holder i have tried is the Altronics one with a spacing of 12.5mm							
3)	You can also use a 9V battery holder with leads, just use the same holes as the PCB mount holder and stick it on slightly overlapping the back of the ON/OFF switch							
	Use 2mm double sided tape to hold the battery holder on to the board regardless of the type used, to take the strain off the pins when the board is held and when the b							
Notes	Use double sided tape to hold the battery holder on to the board regardless of the type used, to take the strain off the pins when the batteries are replaced							
Double sided tape	Have a look at Repco, or Supercheap Auto or the following. 19-24mm wide, tape 2mm thick (may have to use 2 - 1mm layers). But you only need a 10mm long section so 1 roll goes a long way			http://www.handyhardware.com.au/double-sided-adhesive-tapes/ T1A is what I use, 2M long (will do 200 Kits), 24mm wide and 2mm thick \$8 for a role.	0.04	0.04		
LED	Ledsales	5MM_DIFF_RED	Red colour	https://www.ledsales.com.au/index.php?main_page=product_info&cPath=148_152_154_252&products_id=2229	0.20	0.12		
	Any other 5mm LED (20ma) LED will work, but these are diffused and easier to see night and day.							
Resistors	NOTE: Hole spacing on the PCB for the resistors is 10mm, so only use 1/4w resistors as these have a 6.8 mm b							
	Also use the brown coloured carbon film 5% resistors not the blue/green 2% as its easier to see the colours against the brown background							
R1 and R4	10K	Need 2 of these per board	can get these for a few cents each in bulk	https://www.altronics.com.au or https://au.element14.com	0.12	0.06		
R2	10M				0.06	0.03		
R3	100K				0.06	0.03		
R5	470 ohms				0.06	0.06		
Note	Recommend using ¼ carbon film as it is easier to see the difference in the colour bands than on the metal film							

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555 Timer	Element 14	NE555P		https://au.element14.com/texas-instruments/ne555p/timer-single-precision-dip8-0/dp/3006909?st=ne555	\$0.57	\$0.56		
8 Pin IC Socket	Element 14			https://au.element14.com/multicomp/spc15494/dip-socket-8pos-2row-2-54mm-th/dp/2668408?st=8%20pin%20ic%20socket	\$0.22	\$0.22		
Switches	Digikey	B3F-4000	need 2 of these	https://www.digikey.com.au/en/products/detail/omron-electronics-inc-emc-div/B3F-4000/63961	\$1.58	\$1.26		
Capacitor	Element 14	MC0805B224K500 A5.08MM	0.22uf 50V Multilayer ceramic	https://au.element14.com/multicomp/mc0805b224k500a5-08mm/cap-0-22-f-50v-10-x7r/dp/2395774?CMP=i-55c5-00001622	0.16	\$0.09		
	Use the Multiilayer ceramic rather than an electrolytic or green cap etc, as they are small, cheap and fit the board nicely							
Transistor	Element14	BC557		https://au.element14.com/multicomp/bc557b/transistor-pnp-45v-100ma-to-92/dp/1574384?CMP=i-55c5-00001622	0.26	0.15		
Potentiometer 1M, single turn finger adjust	Element 14	3386F-1-105TLF	Not recommended as they cost \$3.52 each or \$2.45 per 100	https://au.element14.com/bourns/3386f-1-105tlf/trimmer-1m/dp/9354603				
Better option	Aliexpress	3386F-1-105TLF		https://www.aliexpress.com/item/32783054938.html?spm=a2g0o.9042311.0.0.27424c4dc3sTRo	\$0.23	\$0.23		
Kapton Tape	Altronics	1 roll will do about 300 kits	Check ebay, may be able to get it cheaper	https://www.altronics.com.au/p/t2976a-36mm-x-33m-high-temperature-polyimide-tape/	\$0.10	\$0.10		
Board	JLPCB				\$1.75	\$1.20		
Mylar bags	eBay			https://www.ebay.com.au/itm/100-x-Silver-Clear-Tough-Mylar-Stand-up-Bags-Zip-Lock-Reseal-Ziplock-Bag-13x18cm/222619551314	\$0.18	\$0.18		
Battery	eBay	30 Pack	Cheapest I could find	https://www.ebay.com.au/itm/262632889208?epid=1708133431&hash=item3d2623db78:g:7asAAOSw2gxY0inz	\$1.27	\$1.27		

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				Total - Cheapest prices	\$8.00	\$6.55		

Part	
Recommended 9V PCB Mount battery holder	
Notes 1)	
2)	
3)	
Notes	
Double sided tape	
LED	
Resistors	
R1 and R4	
R2	
R3	
R5	
Note	

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8 Pin IC Socket	
Switches	
Capacitor	
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Potentiometer 1M, single turn finger adjust	
Better option	
Kapton Tape	
Board	
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Battery	

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