

LDR Theremin parts list

Part	Supplier	Part no		URL	Single unit cost	Qty 100+	Note	Alternative	Original manufacturer and part number
	Battery Holder		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								
	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 w								
555 Timer	Element 14			https://au.element14.com/texas-instruments/ne555p/timer-single-precision-dip8-0/dp/3006909?st=ne555	,42	\$0.32			
8 Pin IC Socket	Element 14			https://au.element14.com/amphenol-icc-fci/dilb8p-223tlf/dip-socket-8pos-2row-2-54mm-th/dp/2668407	\$0.19	\$0.14		order in qty of 100 only	
Speaker	Core Electronics	COM-11089	15 mm spacing on the board to accommodate this one	https://core-electronics.com.au/speaker-pcb-mount.html	3.15	2.93		This one sounds better than the other 2	
	Element 14	Cheaper Speaker Alternative		https://au.element14.com/multicomp/mcabs-201-rc/speaker-8-ohm-0-15w-pcb-pins/dp/2361100		0		\$3.17 each or \$1.84 per 50+	PCB Mount
	Core Electronics			https://core-electronics.com.au/thin-speaker-0-5w.html				\$1.50 each or \$1.39 per 50+	Speaker with wires - needs to be glued or cable tied in.
	Can also use a speaker with leads, (max 40mm diameter) as there are holes in the board for speakers with Leads, and you can use 2.5mm - 200mm length cable ties through the 4 holes to hold it in, the cable ties fit under the battery holder on the rear.								
Resistors			Cost						
R1	100 ohm 5% ¼ watt		Need 1 of these	https://au.element14.com/multicomp/mcf-0-25w-100r/res-100r-5-250mw-axial-carbon/dp/9339043?st=100%20ohm	0.02	0.02			
R2	4.7K ohm 5% ¼ W		Need 1 of these	https://au.element14.com/multicomp/mcf-0-25w-4k7/res-4k7-5-250mw-axial-carbon-film/dp/9339540	0.03	0.03			
R3	1k ohm 5% 1/4W		Need 1 of these	https://au.element14.com/multicomp/mccfr0w4j0102a50/resistance-1kohm/dp/1652634?st=1000%20ohm	0.02	0.02			

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Note	Recommend using ¼ carbon film as it is easier to see the difference in the colour bands than on the metal film, except for R1 - should be ½ W								
Capacitor					30 cents each				
C1 - 10uf	Element 14	ECA-1CM100		https://au.element14.com/multicomp/mcrh25v106m5x11/cap-10-f-25v-20/dp/1902913?st=10uf	0.07	0.05			
C2 - 100nf	Element 14			https://au.element14.com/multicomp/mcfyu6104z6/cap-0-1-f-50v-y5v/dp/9411887?st=100nf	\$0.41	\$0.15			
LDR	Element 14	NSL 19M51		https://au.element14.com/advanced-photonix/nsi-19m51/light-dependent-resistor-550nm/dp/3168335	\$1.60	\$0.82			
Switches									
On/Off switch	Element 14	B3F-4000		https://au.element14.com/search?st=b3f-4000	\$0.84	\$0.84			
Battery	Officeworks	20 pack	Cheapest I could find	https://www.officeworks.com.au/shop/officeworks/p/varta-high-energy-9v-alkaline-batteries-12-pack-va49224111	\$4.93	\$1.67			
Board					\$2.00	\$1.66		Price varies greatly on quantity ordered and Board colour.	
					\$14.41	\$9.60			
Double sided tape	Have a look at Repco, or Superchaep Auto			19mm wide, 2mm thick (may have to use 2 - 1mm layers). But you only need a 10mm long section so 1 roll goes a long way					