D. C	Beredeller	Value Quantity	y Dat sheet or Part Link	Sant Carl Estand	
Reference	Description	Value Quantit	y Dat sneet or Part Link AllExpress 1/7/25cm 5 Section Metal Full-Channel Am Fm Radio Antenna Telescopic Antenna Rotating Antenna Aerial M2.5	Part Cost Extende	ed
			https://www.aliexpress.us/item/3256806492066394.html?spm=a2g0o.productlist.main.37.68f2hfX1hfX12G&algo_pvid=18e0ab00-315a-4151-bd1b-13307e4b242b&algo_exp_id=18e0ab00-315a-4151-bd1b-13307e4b24b&algo_exp_id=18e0ab00-315a-4151-bd1b-13307e4b24b&algo_exp_id=18e0ab00-315a-4151-bd1b-13307e4b24b&algo_exp_id=18e0ab00-315a-4151-bd1b-13307e4b24b&algo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4151-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4150-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4150-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4150-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4150-bd1b-1300e4balgo_exp_id=18e0ab00-315a-4150-bd1b-1300e4balgo		
			bd1b-13307e4b242b-		
			36&pdp_ext_f=%78%22order%22%3A%2225%22%2C%22eval%22%3A%221%22%7D&pdp_npi=4%40dis%21USD%212.29%211.24%21%21%2116.60%218.96%21%40%2112000037992135363%21sea%21		
			US%21 ² 927 ⁰ 003445%21X&curPageLogUid=uOVDvnEgydBL&utparam-url=scene%3Asearch%7Cquery_from%3A		
			eBay for the ATT		
AE1	Antenna 3" – 8 5/8", 5 Segment, Dia. 5mm (.198")	Ant 3", 5mm	0 + Red Enamel 26 AWG Wire Wrap	\$1.30	\$0.00
AE1 Option	ATT 5000 Cordless phone antenna	6mm Dia 3" antenna	1 eBay as low as \$3 each	\$3.00	\$3.00
BT1	6v Battery Pack - Optional	4 AA Batteries	$All express: https://www.allexpress.us/item/3256805289292980.html?spm=a2g0o.order_list_order_list_main.40.22231802R5bMTh\&gatewayAdapt=glo2usa$	\$1.24	\$0.00
BT1,BT2	6v battery pack holder or 9v Battery Clip	3D Printed	2 For 6V BT1 is for a 4 - AA battery pack	\$0.50	\$1.00
BT2	Optional - DD0315NA -6v Buck converter	DD0315NA	1 For driving -6 voltes when not using a second battery pack. Aliexpress	\$2.68	\$2.68
	V. II	V 000 10	All Electronics, Yellow Metallized polyester film radial capacitors. 22n or 22 nf desired022uf	40.00	40.04
C1,C3,C6	Yellow .022uf Dummy Capacitor (22n)	Y .022uf Dummy	3 AllExpress	\$0.07	\$0.21
C2,C4	White .001uf Dummy Capacitor (10n)	W .001uf Dummy	All Electronics, White Metallized polyester film radial capacitors. Marking 10n desired, .001uf 2. All Express	\$0.23	\$0.46
C5	Mylar Capacitor	0.1uf	Z MILLS JUSTESS 1 MILCS JUSTESS FOR Mylar	\$0.10	\$0.40
C7	Electrolytic Capacitor - Blue	4.7uf	1 Mouser	\$0.10	\$0.10
C8	Ceramic Disk Capacitor	220pf	1 Mouser	\$0.10	\$0.10
C9	Mylar/MLCC Capacitor	.0027uf	1 AllExpress/Mouser	\$0.02	\$0.02
C10	Mylar/MLCC Capacitor	.047uf	1 Amica, AllExpress, Mouser	\$0.20	\$0.02
C11,C12,C13	Electrolytic Capacitor	1uf	1 anieco, ancapiess, woosei	\$0.10	\$0.20
C14	MLCC Capacitor	0.33uf	3 Mouser 1 Mouser	\$0.10	\$0.30
C15,C17	MLCC Capacitor .01 or .1uf	0.01uf	1 Mouser 2 Mouser	\$0.17	\$0.17
C15,C17	Electrolytic Capacitor - Black	10uf	z Mouser 1 Mouser	\$0.10	\$0.20
D1,D2,D3,D4,D5,D6		10ut 1N914	1 Mouser 6 Mouser	\$0.10	\$0.10
	Signal Diode		6 Mouser 5 Mouser, Lighthouse LED, All'Express		
D7,D8,D9,D10,D11	Red LED	Ultra Bright Red, 5MM		\$0.25	\$1.25
D12	Rectifier Diode EMF Pickup coil	1N4001 3D Printed	1 Any source 1 32 gauge. 36 AWG Preferred 32g 0.11 per ft @ 120'	\$0.10	\$0.10 \$1.35
L1 L2		Hand Made	1. 32 gauge. 36 AWO Preferred 3.2g 0.11 perft @ 1.20 1 22AWG - 0.6438mm 0.0253", Copper Mire 0.65mm	\$1.35	\$1.35 \$1.00
LS1	Dummy Coil Right Side Speaker 2030mm, 8 ohm, 1.5 Watt	20x30x0.4mm 1Watt	1 22AWG U.6438mm U.0255*, Copper Wire U.65mm 1 AllExpress. https://www.allexpress.us/interp/3256807204066808.html?spm=a2g0o.detail.pcDetailTopMoreOtherSeller.3.6110wxlLvxlLOW&gps-id=pcDetailTopMoreOtherSeller&scm=1007.40050.3544901	\$1.00 \$0.75	\$1.00
R1					
	1/4w Resistor	270k - 1M 1M	1 Any source, Resistor selection based on E-Field sensitivity. Can use 1M with PWM modification 2 Any source	\$0.10	\$0.10
R7,R15	1/4w Resistor		F	\$0.10	\$0.20
R2,R22	1/4w Resistor	22k	2 Any source	\$0.10	\$0.20
R3	1/4w Resistor	91k	1 Any source	\$0.10	\$0.10
R4	1/4w Resistor	9.1k	1 Any source	\$0.10	\$0.10
R5	1/4w Resistor	1k	1 Any source	\$0.10	\$0.10
R6,R8,R18,R20	1/4w Resistor	10k	4 Any source	\$0.10	\$0.40
R9,R11,R12,R13,R16,R23	1/4w Resistor	100k	6 Any source	\$0.10	\$0.60
R10	1/4w Resistor	10M	1 Any source	\$0.10	\$0.10
R14	1/4w Resistor	3.3M	1 Any source	\$0.10	\$0.10
R17	1/4w Resistor	2.2M	1 Any source	\$0.10	\$0.10
R19	1/4w Resistor	3.9-15k	1 Any source, 3.9k for 1.5v scale/15k for 3V scale/6.8k with PWM modification and 3v scale	\$0.10	\$0.10
R21	1/4w Resistor	1.8k	1 Any source	\$0.10	\$0.10
R24	1/4w Resistor	1.2k	1 Any source	\$0.10	\$0.10
R25	1/4w Resistor	33	1 Any source	\$0.10	\$0.10
R26	1/4w Resistor (Optional, for 3v scale)	1.5k	1 Any source	\$0.10	\$0.10
			Mouser Electronics, https://www.mouser.com/ProductDetail/Bourns/3386H-1-104LF?qs=m2uG%2FFdTAPVxro77x9HS0w%3D%3D		
RV1,RV2	Variable resistor. 3326/3386 F or P series	100k	2 Jameco https://www.jameco.com/z/3386P-1-104LF-JVP-Jameco-ValuePro-1-2-Watt-3-8-Square-Trimming-Potentiometer-100k-Ohm_43027.html (\$0.99)	\$0.99	\$1.98
			PT15NV02-502A		
RV3	1k/5k ohm, Variable resistor (PT15 Series)	5k	1 Included with VU meter or Jameco for PT15 Black Pot	\$0.30	\$0.30
SW1	SW_Coded_EECO_2700	EECO 276133M	1 eBay, A Variety of switches are supported.	\$15.00	\$15.00
SW2	SW_DIP_x04, Flat or Piano	SW_DIP_x04	1 Mouser, https://www.mouser.com/ProductDetail/CTS-Electronic-Components/195-4MS?qs=hDoPxpGr7ldwh3tetBsCOg%3D%3D	\$0.92	\$0.92
SW3,SW4,SW5	SW_Push. 6x6x5mm SPST	Tactile Switches,6X6	3 Mouser, AliExpress	\$0.40	\$1.20
			Mouser, C&K E201MD1AQE (\$15.46) or E-Switch 100DP1T1B1M6QE (\$4.35)		
			https://www.mouser.com/ProductDetail/CK/E201MD1AQE?qs=c89up6qpALNEJs%2FyQ1km0A%3D%3D		
L			https://www.mouser.com/ProductDetail/E-Switch/100DP1T1B1M6QE?qs=wUXugUrL1qxY%252BYjsepFRcA%3D%3D	4.	
SW6	SW_DPDT		1 7mm MTS-202C3 AliExpress (Chrome casing \$1.18)	\$15.46	\$15.46
U1	TL084ACN	TL084ACN	1 Mouser	\$0.74	\$0.74
U2	ATtiny85-20P	ATtiny85-20P	1 Mouser	\$1.66	\$1.66
U3	DF Player PCB	MP3-TF-16P	1 AliExpress. MP3-TF-16P Blue LED. Do not use MP3-TF-16P V3.0 w/ red LED. Too slow. Original DF Player Mini, Blue LED and DF Player Mini V0.5.1, Red LED also work.	\$3.00	\$3.00
U4	7805 To-220	L78N05	0 Minimum 500ma output. w/ 9v source	\$0.35	\$0.00
U7	LF50CDT TO-252/DPAK	LF50CDT	1 Minimum 500ma output. w/ 6v source need LDO, LF50CDT Mouser https://www.mouser.com/ProductDetail/511-LF50CDT-TR	\$0.35	\$0.35
U5	LM3914N	LM3914N	1 AllExpress	\$0.20	\$0.20
	Meter Element				
	Decibel Measurement on AC Voltage Range Analog				
	Multimeter Tester for ACDC 1000V500m A/Voltmete	er			
	Ammeter Ohmmeter Meter Volt				
VU1	Requires a 3D printed base	MF-110A	1 AllExpress, https://www.aliexpress.us/item/3256807924391371.html?spm=a2g0o.order_list.order_list_main.10.52c81802ReQv2H&gatewayAdapt=glo2usa	\$3.71	\$3.71
VU1_BASE	3D Printed Base for MF-110 Meter element		1	\$1.20	\$1.20
MS-M3	Mechanical screw, Battery Holder	M3 x 6mm	4 AllExpress	\$0.03	\$0.12
MS-8	Mechanical Standoff, Battery Holder	M3-10mm	4 AliExpress	\$0.14	\$0.56
	Antenna Coil, 26 AWG (.415mm)				
Wire	Red enameled wire. 2 layers of wire wrap.	26 AWG	Amazon, AliExpress, Jameco		\$0.00
	EMF Pickup Coil				
Wire	36 AWG wire, 350 turns ~ 70'	36 AWG	Amazon, AliExpress		\$0.00
			Jameco: 24 AWG 10 Color Stranded Wire Kit Assortment		
Wire	Rainbow wire	24 AWG	https://www.jameco.com/z/UL-1007-10C5-Jameco-ValuePro-24-AWG-10-Color-Stranded-Wire-Kit-Assortment_2187876.html		\$0.00
1	L2 Coil (22 AWG, 0.6438mm 0.0253")				
Wire	~ 50" of solid 22 AWG copper wire	22 AWG	Used a strand from 10AWG stranded cable		\$0.00

\$62.69