

Noisebox rev3 materials list
2016-08-01 John Sullivan - IDMIL

Item #	Description	Vendor	Item ID	Cost/Unit	Quant	Cost/Instr.	Notes	Use
Processing								
1	Raspberry Pi 3	RobotShop	RB-Ras-12	CAD 51.99	1	CAD 51.99	Have at least 4 at IDMIL... enough to start	Core processor
2	Teensy 3.2	RobotShop	RB-Pjr-04	CAD 25.38	1	CAD 25.38		Sensor processing and filtering
3	Battery 5V 2.4A	Abra	BAT-PB-01	CAD 39.94	1	CAD 39.94		Wireless power supply
4	Sensor I/O cape	in house	Ivan		1			Sensor I/O
5	WiFi dongle	Abra	PI-WIFI-M	CAD 10.57	1			Wireless communication
6	microSD card 8gb	Abra	BBB-8GB-10	CAD 13.93	1	CAD 13.93		RPi storage
Sensors and controls								
7	Buttons - mom (power)	Abra	PBS-33MM-B	CAD 2.09	1	CAD 2.09	50K 2 gang (not in stock). Check part #.	RPi soft shutdown
8	LED - Power (Blue)	Abra	LED-5B	CAD 1.11	1	CAD 1.11		Power indicator (optional)
9	Switch - Power	Abra	COM-11155	CAD 2.10	1	CAD 2.10		Power supply switch (after soft shutdown)
10	Buttons (voice on - grn)	RobotShop	RB-Spa-674	CAD 2.50	1	CAD 2.50		Voice(s) on
11	Buttons (voice off - red)	RobotShop	RB-Spa-324	CAD 2.50	1	CAD 2.50		Voice(s) off
12	Linear SoftPot - 200mm	Digikey	905-1051-ND	CAD 16.66	1	CAD 16.66		Dynamic pitch control
13	Analog accelerometer	RobotShop	RB-lte-11	CAD 3.77	1	CAD 3.77		Motion acquisition
14	Knob (volume)	Digikey	PDB182-E42C	CAD 2.70	1			Volume knob
Sound output								
15	USB sound card OPTION 1	Abra	1475-ADA	CAD 6.93	1	CAD 6.93		Audio I/O
16	Stereo Class-D amp	RobotShop	RB-Dfr-419	CAD 7.56	1	CAD 7.56		Audio amplifier
17	Speaker 4Ω 3W	Abra	1314-ADA	CAD 2.73	2	CAD 5.46		Audio output
18	3.5mm TRS male OPTION 2	Abra	867-ADA	CAD 4.13	1	CAD 4.13		Audio cable - sound card to amp
19	USB powered speakers	Abra	1363-ADA	CAD 13.93	1			Alternative to Option 1 but not as good
Hardware, cables, accessories								
20	Acrylic housing	in house	Ivan		1		misc bulk hardware; 3pack for 17.95 misc bulk hardware; 10 pack = \$2.31 misc bulk hardware misc bulk hardware misc bulk hardware; 5 pack = \$6.93 misc bulk hardware misc bulk hardware misc bulk hardware; 25 pack = \$2.09 misc bulk hardware; 25 pack = \$1.39 misc bulk hardware; 25 pack = \$1.39 misc bulk hardware	Instrument body
21	USB cable panel mount	Abra	937-ADA	CAD 5.53	1	CAD 5.53		Panel mount battery charging port
22	Ethernet cable panel mount	Abra	909-ADA	CAD 6.85	1	CAD 6.85		Panel mount ethernet port
23	Protoboard (3pk)	Abra	571-ADA	CAD 5.83	1	CAD 5.83		Wiring hub
24	headers male 1x40 (10pk)	RobotShop	RB-Cyt-53	CAD 0.23	3	CAD 0.69		Wiring connections
25	headers female 1x40 (1pk)	RobotShop	RB-Cyt-58	CAD 0.44	1	CAD 0.44		Wiring connections - Teensy
26	headers female 2x20 (1pk)	Abra	1037-POLOLI	CAD 1.75	1	CAD 1.75		RPi to cape connector
27	Button quick connect wires (5pk)	Abra	1152-ADA	CAD 1.39	1			Button wiring connectors
28	JST connectors	Abra	PRT-09749	CAD 1.53	4			Button wire to protoboard
29	2.5mm standoffs (4pack set)	Abra	1952P	CAD 1.95	1			Mounting hardware
30	M2.5 spacers (25pk)	Abra	1975P	CAD 0.08	4	CAD 0.33		Mounting hardware
31	M2.5 Machine hex nut (25pk)	Abra	1967P	CAD 0.06	4	CAD 0.22		Mounting hardware
32	M2.5 Machine screw (25pk)	Abra	1968P	CAD 0.06	4	CAD 0.22		Mounting hardware
33	LED holder	Abra	LMH-1	CAD 0.15	1			Mounting hardware

TOTAL INSTRUMENT COST: CAD 207.93