

CLASS:	1NMCT5
NAME:	Brandse
FIRSTNAME:	Robbe
Assembly Name :	Sensonizer
Assembly Revision :	v0.4
Approval Date :	03-Apr-19
Part Count :	0
Total Cost :	147,81 €

Part #	Part Name	Description	Revision	Qty	Supplier
1	Raspberry Pi 3 model B	Raspberry Pi to control the entire system + other necessities	1	1	<a href="https://nl.aliexpress.com/item/Originele-Raspberry-Pi-3-Model-B-Plus-UK-Gemaakt-Kit-">https://nl.aliexpress.com/item/Originele-Raspberry-Pi-3-Model-B-Plus-UK-Gemaakt-Kit-</a>
2	SoftPot Membrane Potentiometer - 500mm	Pressure sensor that returns position value	1	1	<a href="https://www.sparkfun.com/products/8681">https://www.sparkfun.com/products/8681</a>
3	Force Sensitive Resistor - Long	Pressure sensor that returns how hard it is being pressed	1	1	<a href="https://www.sparkfun.com/products/9674">https://www.sparkfun.com/products/9674</a>
4	Arduino Leonardo	Read sensors, send MIDI signals (HID capable)	1	1	<a href="https://store.arduino.cc/leonardo">https://store.arduino.cc/leonardo</a>
5	Gyroscoop Accelerometer Sensor MPU-9250	Sensor that measures angle (to change pitch bend)	1	1	<a href="https://nl.aliexpress.com/i/32964162632.html?spm=a2g0z.search0301.3.2.5734338cEYvpkQ&amp;ws_ab_test=searchweb0_0,s">https://nl.aliexpress.com/i/32964162632.html?spm=a2g0z.search0301.3.2.5734338cEYvpkQ&amp;ws_ab_test=searchweb0_0,s</a>
6	LCD screen	Screen for displaying information	1	1	<a href="https://opencircuit.nl/Product/10150/16x2-Karakters-lcd-">https://opencircuit.nl/Product/10150/16x2-Karakters-lcd-</a>
7	Weerstanden Set	To use in the circuit, in the end i only used 2 x 10k $\Omega$ resistors	3	1	<a href="https://www.tinytronics.nl/shop/nl/componenten/weerstanden/10%CF%89-1m%CF%89-">https://www.tinytronics.nl/shop/nl/componenten/weerstanden/10%CF%89-1m%CF%89-</a>
8	breadbord kabels	To use in the circuit	2	1	<a href="https://www.amazon.com/Breadboard-Jumper-Wire-75pcs-pack/dp/B0040DF10M">https://www.amazon.com/Breadboard-Jumper-Wire-75pcs-pack/dp/B0040DF10M</a>
9	breadbord	To test the circuit	2	1	<a href="https://nl.aliexpress.com/item/Free-Shipping-MB-102-MB102-Breadboard-830Point-">https://nl.aliexpress.com/item/Free-Shipping-MB-102-MB102-Breadboard-830Point-</a>
10	Protoboard	Final version of the circuit	2	1	<a href="https://nl.aliexpress.com/item/10Pcs-DIY-Prototype-Paper-PCB-Protoboard-5-">https://nl.aliexpress.com/item/10Pcs-DIY-Prototype-Paper-PCB-Protoboard-5-</a>
11	Plywood	1m x 1m x 90mm (I got mine from my dad's work)	3	1	<a href="https://www.hubo.be/nl/p/multiplex-wbp-244x122-cm-8mm/12500.html">https://www.hubo.be/nl/p/multiplex-wbp-244x122-cm-8mm/12500.html</a>

Total 11 parts

Revision3



also available from	Unit Cost	Max Cost	Real Cost
<a href="https://www.kiwi-electronics.nl/board-and-kits/raspberry-pi-3-model-b-">https://www.kiwi-electronics.nl/board-and-kits/raspberry-pi-3-model-b-</a>	49,31	49,31	49,31
<a href="https://www.active-robots.com/softpot-membrane-potentiometer-">https://www.active-robots.com/softpot-membrane-potentiometer-</a> <a href="https://www.conrad.nl/p/intelink-fsr408-druksensor-02-n-tot-20-n-l-x-b-x-h-6223-x-">https://www.conrad.nl/p/intelink-fsr408-druksensor-02-n-tot-20-n-l-x-b-x-h-6223-x-</a>	23,95	23,95	23,95
<a href="https://www.conrad.nl/p/intelink-fsr408-druksensor-02-n-tot-20-n-l-x-b-x-h-6223-x-">https://www.conrad.nl/p/intelink-fsr408-druksensor-02-n-tot-20-n-l-x-b-x-h-6223-x-</a>	20,95	20,95	20,95
<a href="https://www.conrad.be/p/arduino-development-board-">https://www.conrad.be/p/arduino-development-board-</a> <a href="https://www.banggood.com/nl/CJMCU-262-6DOF-6-Axis-Accelerometer-Gyroscope-Motion-Sensor-">https://www.banggood.com/nl/CJMCU-262-6DOF-6-Axis-Accelerometer-Gyroscope-Motion-Sensor-</a>	18,00	21,60	21,60
<a href="https://www.banggood.com/nl/CJMCU-262-6DOF-6-Axis-Accelerometer-Gyroscope-Motion-Sensor-">https://www.banggood.com/nl/CJMCU-262-6DOF-6-Axis-Accelerometer-Gyroscope-Motion-Sensor-</a>	1,34	1,34	1,34
<a href="https://www.banggood.com/nl/5V-2004-20X4-204-">https://www.banggood.com/nl/5V-2004-20X4-204-</a>	2,95	2,95	2,95
<a href="https://www.eleshop.nl/set-weerstand-e12.html">https://www.eleshop.nl/set-weerstand-e12.html</a>	5,00	9,13	9,13
<a href="https://www.prolech.nl/webshop/test-componenten/detail/1250/#">https://www.prolech.nl/webshop/test-componenten/detail/1250/#</a>	5,56	5,56	5,56
<a href="https://nl.aliexpress.com/item/Breadboard-830-Point-Solderless-PCB-Bread-">https://nl.aliexpress.com/item/Breadboard-830-Point-Solderless-PCB-Bread-</a>	1,78	1,78	1,78
<a href="https://nl.aliexpress.com/item/20-Stks-partij-5x7-4x6-">https://nl.aliexpress.com/item/20-Stks-partij-5x7-4x6-</a>	1,24	1,24	1,24
<a href="https://www.gamma.be/nl/assortiment/multiplex-boardout-122x61cm-12mm">https://www.gamma.be/nl/assortiment/multiplex-boardout-122x61cm-12mm</a>	10,00	10,00	10,00
			<b>147,81 €</b>