

	The components	Distributor	Catalog number	Quantity required for one SPIRO system
	<b>Borgs nest</b>			
1	Raspberry pi 3B+	<a href="#">Amazon</a>	358-RPI3-MODBP-BULK	1
2	Power supply 5V 2.5A, micro USB	<a href="#">Mouser</a>	358-1101001000045	1
3	Adafruit tb6612 h-bridge dc-stepper motor driver breakout board	<a href="#">Mouser</a>	485-2448	1
4	Unipolar stepper motor Nema17, 12V, 0.35A	<a href="#">Mouser</a>	485-324	1
5	Power adapter 12V 3A wih with 2.1 power plug	<a href="#">Amazon</a>		1
6	Female DC connector 5.5 x2.1mm	<a href="#">Amazon</a>		1
7	SparkFun MOSFET Power Control Kit	<a href="#">Mouser</a>	474-COM-12959	1
8	Green LED strip 12V (sic! it should be possible to cut the strip in 5cm segments!)	<a href="#">Mouser</a>	828-OVQ12S30G7	1 meter
9	90 degree connectors for 8 mm LED strip + terminal LED strip connector	<a href="#">Amazon</a>		4 corners 1 terminal connector
10	2-Pin 3.5 mm Pitch PCB Mount Screw Terminal Connector	<a href="#">Mouser</a>	710-691214110002S	1
11	Jumper cables 10 cm Female to female (Dupont wires)	<a href="#">Amazon</a>		20
12	SD Memory Card Class 10 (32Gb or more)	<a href="#">Amazon</a>		1
13	Heat shrink tubes, diameter 1 mm and 2 mm	<a href="#">Amazon</a>		5 cm of each
14	Wire end ferrules, 0,5 mm2, not insulated	<a href="#">Amazon</a>		20
15	Colored AWG 28 wires	<a href="#">Amazon</a>		ca 3 m
	<b>Structural parts</b>			
16	Aluminium profile T2020, <b>black</b>	<a href="#">Amazon</a>		1x 30cm for the vertical rail 1x ca 34 cm for the horizontal rail 2x ca 8cm for each leg 2x 14 cm for the LED frame mounting
17	2020 Aluminium Profile Slot Cover black	<a href="#">Banggod</a>		1 m
18	635zz - R-1950ZZ - 5972K263 Miniature Ball Bearings Bearing	<a href="#">Amazon</a>		3
19	Rigid shaft coupling M5 to M5	<a href="#">Amazon</a>		1
	<b>Camera</b>			
20a	Raspberry Pi Camera v2 8 MP	<a href="#">Mouser</a>	485-3099	1
20b	Arducam with motorized focus	<a href="#">Uctronics</a>	B0122	1
21	Flex cable	<a href="#">Amazon</a>		25-30 cm
22	Coiled Cable Protection	<a href="#">Amazon</a>		ca 1 m
	<b>Microswitch</b>			
23	Mini microswitch	<a href="#">Reichelt elektronik</a>	MAR 1050.5202	1
	<b>Screws</b>			
24	M2 x 25mm, button head			4
25	M2 hex nuts			4
26	M2.5 x 12mm, button head			2
27	M2.5 x 12mm, flat head countersunk, black			2
28	M2.5 x 8mm, flat head countersunk			8
29	M2.5 hex nuts			12
30	M3 x 12 mm, button head, hex socket, black			8
31	M3 x 20mm, flat head countersunk			4
32	M3 hex nuts			8
33	M5 x 8 mm, flat head countersunk, black			1
34	M5 x 8 mm screw, button head, hex socket, black			27
35	M5 x 11-12 mm , button head, hex socket, black. Lifehack: use M5x16 and print a 5mm tall washer			6
36	M5 x 12 mm, countersunk			4
37	M5 x 16 mm screw, button head, hex socket, black			3
38	M5 bolt x 20mm, hexagonal head			1
39	M5 x16mm bolt, hex head			4
40	M5 T-nuts for T2020 aluminium profile			32
41	M5 hex nuts			3
42	M5 washer, OD 10mm, flat			6
42	M5 slide-in bracket for T2020 aluminium profile			3
	<b>Plastic for the 3D printer</b>			
44	PLA filament matt black	<a href="#">3Dprinthings</a>	Matteforge Pro Filament PLA 1.75 mm - NEW, black	ca 1.7 kg
45	PLA filament milky white	<a href="#">Amazon</a>	Sunlu, PLA+, 1.75 mm, milky white/semi-transparent	ca 100 g
	<b>Tools</b>			
46	Wire stripper suitable for AWG 28 wires	<a href="#">Amazon</a>		
47	Ferrule crimper suitable for 0.5 mm2 ferrules	<a href="#">Amazon</a>		
48	Soldering iron & solder	<a href="#">Amazon</a>		
49	Screw drivers for M2, M2.5 and M3 (cross and flat head)			
50	Allen keys for M5 & M3			
51	A saw to cut aluminium profiles			
52	Super glue			200 ul
53	Forceps			
	<b>Recommended accessories</b>			
54	Flat Ethernet cable	<a href="#">Amazon</a>		1, required length must be estimated on place