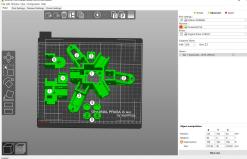
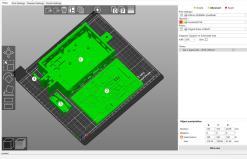
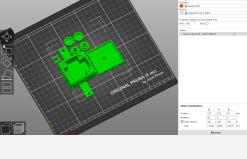
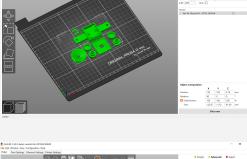
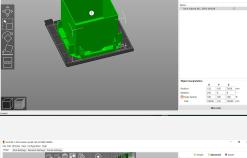
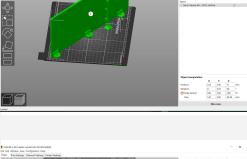
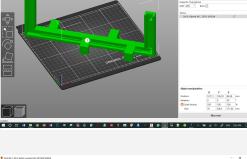
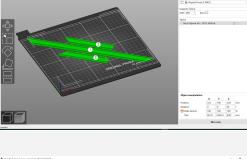
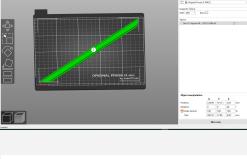
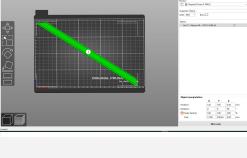
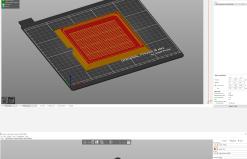
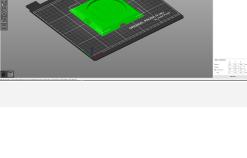


Table S2. Structural parts of SPIRO for 3D printing

stl files	Components	Object positioning in the slic3r program	Parameters for printing	Type of filament	Amount of filament, g	Estimated printing time, h
					Total amount of black matt PLA = 1685 g	Total estimated time of printing = 159.5 h
					Total amount of milky white PLA = 75 g	
	set 1 1. Motor hub 2. 2x bearing guides 3. 1x bearing guide with the mount for the mini microswitch switch 4. Mini microswitch house 5. Mini microswitch pin (tiny tick) 6. Holder for the vertical rail 7. Holder for the LED frame rail 8. 2x bottom for a thumb screw 9. 2x cap for a thumb screw	Rotation <u>X axis: 90</u> <u>Y axis: 0</u> <u>Z axis: 0</u>	Print setting: 0.20 mm (Normal) Supports: on build plate only Brim: no Infill: 20%	Black matt PLA	135	13
	set 2 1. Birds nest 2. Lid for the birds nest 3. Lid for the DC connector 4. Holder for the SparkFun MOSFET power control kit	Rotation <u>X axis: 0</u> <u>Y axis: 0</u> <u>Z axis: 0</u>	Print setting: 0.20 mm (Normal) Supports: on build plate only Brim: no Infill: 20%	Black matt PLA	210	18.5
	set 3a 1. Camera house for Arducam 2. Lid for the camera house 3. 2x bottom for a thumb screw 4. 2x cap for a thumb screw 5. Stabilizer for the camera	Rotation <u>X axis: 90</u> <u>Y axis: 0</u> <u>Z axis: 0</u>	Print setting: 0.20 mm (Normal) Supports: on build plate only Brim: no Infill: 20%	Black matt PLA	50	5
	set 3b 1. Camera house for pi camera 2. Lid for the camera house 3. 2x bottom for a thumb screw 4. 2x cap for a thumb screw 5. Stabilizer for the camera 6. Focusing tool	Rotation <u>X axis: 90</u> <u>Y axis: 0</u> <u>Z axis: 0</u>	Print setting: 0.20 mm (Normal) Supports: on build plate only Brim: no Infill: 20%	Black matt PLA	25	3
	set 4 1. Cube. The rotating stage with holder for Petri plates	Rotation <u>X axis: -90</u> <u>Y axis: 0</u> <u>Z axis: 0</u>	Print setting: 0.20 mm (Normal) Supports: on build plate only Brim: no Infill: 20%	Black matt PLA	380	28.5
	set 5 1. The right half of the light screen	Rotation <u>X axis: 0</u> <u>Y axis: 90</u> <u>Z axis: 50</u>	Print setting: 0.20 mm (Normal) Supports: everywhere Brim: yes Infill: 50% Ignore the comment detected toolpath outside the print volume	Black matt PLA	260	23
	set 6 1. The left half of the light screen	Rotation <u>X axis: 0</u> <u>Y axis: -90</u> <u>Z axis: 50</u>	Print setting: 0.20 mm (Normal) Supports: on build plate only Brim: yes Infill: 50% Ignore the comment detected toolpath outside the print volume	Black matt PLA	230	20.5
	set 7 1. The right half of the LED frame	Rotation <u>X axis: 0</u> <u>Y axis: 0</u> <u>Z axis: 50</u>	Print setting: 0.20 mm (Normal) Supports: everywhere Brim: yes Infill: 20% Ignore the comment detected toolpath outside the print volume	Black matt PLA	140	14
	set 8 1. The left half of the LED frame	Rotation <u>X axis: 0</u> <u>Y axis: 0</u> <u>Z axis: 50</u>	Print setting: 0.20 mm (Normal) Supports: everywhere Brim: yes Infill: 20% Ignore the comment detected toolpath outside the print volume	Black matt PLA	130	12.5
	set 9 1. Left diffusor 2. Bottom left diffusor 3. Bottom right diffusor	Rotation <u>X axis: 0</u> <u>Y axis: 0</u> <u>Z axis: 50</u>	Print setting: 0.20 mm (Normal) Supports: none Brim: yes Infill: 30%	Semi-transparent milky PLA	35	2.5
	set 10 1. Top diffusor	Rotation <u>X axis: 0</u> <u>Y axis: 0</u> <u>Z axis: 40</u>	Print setting: 0.20 mm (Normal) Supports: none Brim: yes Infill: 30%	Semi-transparent milky PLA	20	1.5
	set 11 1. Right diffusor	Rotation <u>X axis: 0</u> <u>Y axis: 0</u> <u>Z axis: 50</u>	Print setting: 0.20 mm (Normal) Supports: none Brim: yes Infill: 30%	Semi-transparent milky PLA	20	1.5
	set 12 1. Seed plating guide for 12 cm square plates	Rotation <u>X axis: 0</u> <u>Y axis: 0</u> <u>Z axis: 0</u>	Print setting: 0.10 mm (Detail) Supports: none Brim: no Infill: 20%	Black matt PLA	70	15
	set 13 1. Seed plating guide for 9 cm round plates	Rotation <u>X axis: 0</u> <u>Y axis: -90</u> <u>Z axis: 0</u>	Print setting: 0.10 mm (Detail) Supports: none Brim: no Infill: 20%	Black matt PLA	55	10