BOM Table

Part No.	Part Name	Quantity	Category	Cost/$	Source
1	Arduino Uno	1	Micro controller	23.5	Amazon
2	Arduino UNO USB Data Sync Cable	1	Patch cable	7.9	Amazon
3	MegaMoto board	1	Motor Driver	44.99	Robot Power
4	Switch	1	Plastic	0.8	Amazon
5	Eppendorf Tube	12	Polypropylene	1.8	Eppendorf
6	Multicolored Dupont Wire	1	Connection	6.98	Amazon
7	AC-DC 24V Adapter Power Supply	1	Power Input	19.99	Amazon
8	Infrared Reflective Sensor	1	Sensor	1.99	Amazon
9	Silicone Wire 18AWG	1	Copper wire for connection	2.28	Amazon
10	Mini Fuse	1	Fast Blow Glass Fuses	0.59	Amazon
11	Rotor SS-6058	1	SciSpin mini rotor	33.4	SCIQUIP
12	Rotor Cap	1	PLA	2	3D Printing Lab UCL
13	Sample Holder-2tubes	1	PLA	3	3D Printing Lab UCL
14	Sample Holder-4tubes	1	PLA	3	3D Printing Lab UCL
15	Sample Holder-6units	1	PLA	3	3D Printing Lab UCL
16	Small Metric Screws	20	M3-16mm	0.39	Amazon
17	Zinc Plated Hex Socket Head Screws	6	M4-25mm	0.59	Amazon
18	Adaptive Bottom Plate (130*90*6mm)	1	(Cast Al Plate)	12.9	UCL Workshop
19	Back accses panel	1	Main Structure Back	8.9	UCL Workshop
20	Bottom cover	1	Cover Plate for assembly	7.8	UCL Workshop
21	bottom plate	1	Bottom Plate for assembly	7.8	UCL Workshop
22	Side Plate	2	Side Plate for assembly	14.6	UCL Workshop
23	Top Cover	1	Top Cover for Guard	15.4	UCL Workshop
24	Top motor plate	1	Motor Plate for for assembly	12.9	UCL Workshop
			Total Cost = 236.5$		

Links for Consumptions

Arduino UNO: Amazon.com: Arduino Uno REV3 [A000066] : Electronics

Arduino Data Sync Cable: Amazon.com: 3M Arduino UNO USB Data Sync Cable for Arduino Mega 2560 Rev 3 R3 Microcontroller : Electronics

MegaMoto For Arduino: Robot Power Products - MegaMoto Motor Control Shield for Arduino

Mini Rocker Switch: Amazon.com: DaierTek Mini Rocker Switch 12V 20A T85 2 Pin SPST Small ON Off Switch 120V 10A ON and Off Rocker Toggle KCD1 Switch Pre-Wired Black for Automotive, Car -10Pack : Sports & Outdoors

Multicolored Dupont Wire: Amazon.com: ELEGOO 120pcs Multicolored Dupont Wire 40pin Male to Female, 40pin Male to Male, 40pin Female to Female Breadboard Jumper Ribbon Cables Kit Compatible with Arduino Projects : Electronics

AC-DC 24V Adapter Power Supply: Amazon.com: Onerbl 24V AC/DC Adapter Compatible with Polk DYS602-240250W P/N DYS602-240250-12B02B DYS602-240250-15714A DC24V 2.5A 60W 24VDC 24.0V Switching Mode Power Supply Cord Cable Battery Charger Mains PSU : Electronics

IR Sensor: WWZMDiB 3Pcs 3.3-5V TCRT5000 Infrared Reflective Sensor IR Photoelectric

Switch Barrier Line Obstacle Avoidance Module Tracing Sensor Tracing Module for Arduino Smart Car Robot: Amazon.com: Industrial & Scientific

18 AWG Silicon wire: Super Soft 2 Pin Black Red Silicone Cable 28awg 26 24 22 20 18 16 14 12awg 10awg 8awg High Temperature Resistant Copper Wire (18 AWG, 5): Amazon.com: Tools & Home Improvement

Fast Blow Glass Fuses: BOJACK Mini Fuse 3.6x10 mm 2.5 A 2.5 amp 125 V 125 Volt 0.14x0.39 Inch F2.5AL125V Fast Blow Glass Fuses(Pack of 10 Pcs): Amazon.com: Tools & Home Improvement

Rotor SS-6058: SciSpin Mini Microfuge | Mini Centrifuges & Microcentrifuges (sciquip.co.uk)

Eppendorf 1.5 mL Tube: https://www.eppendorf.com/gb-en/Products/Laboratory-Consumables/Tubes/Eppendorf-Safe-Lock-Tubes-p-0030120086

Formlab SLA Resin: https://formlabs.com/uk/store/materials/black-resin/