

Mobile Networks and Internet of Things

SolarMax

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List of materials

Table 1: Complete list of materials used in the project, including the respective identification for the elements used in the Fritzing diagrams of Figure 1.

Identification		Component	Quantity
	1	Solar Cell 12V 250mA	1
2	A - Above B – Below	Servo MG996R 180° 11kg/cm	2
3	A – LDR sensors B – Voltage divider	Protoboard 70x90mm	2
	4	LDR 5528 VT90N2 5mm	4
5	A – LDR sensorsB – Voltage divider	Resistance 10K 1/4W	7
6	A – Servo above B – Servo below	Step-down LM2596 10W	2
	7	Battery Ni-MH 12V 800mAh AA - BNRA	1
8		Mini Digital Voltmeter Red LED	1
9		Switch ON/OFF Black 15A 250V	1
	10	DC male 5.5x2.1x10mm	1
11		DC female 5.5x2.1mm	1
12		Unipolar ON-OFF Pressure Switch	1
13		Arduino UNO WiFi Rev2	1
Additional material		Jumper wires M/M 30cm	9
		Screws M1x10mm	2
		Screws M1.4x16mm	6
		Screws M2x20mm	9
		Screws M3x6mm	6
		Screws M3x14mm	6
		Screws M4x25mm	4
		Nuts M1.4	4
		Nuts M2	1
		Nuts M3	10
		Nuts M4	4
		Washer M1	2
		Washer M1.4	4
		Spacers M3	4
		UHU patafix deco	-
		Lexman Loudspeaker cable 2x1 1.5mm ²	-
		Black copper wire 1x0.5mm ²	-
		Red copper wire 1x0.5mm ²	-
		3D-printed parts	7
		Cellphone/tablet device and cable	1

Fritzing diagram

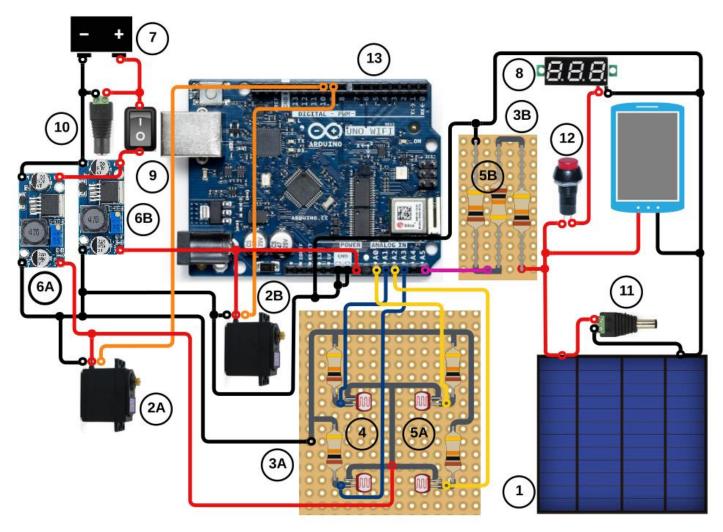


Figure 1: Fritzing diagram of the hardware connections performed with the materials identified in Table 1.