PRO MODEL | FULL RGB *Typical Build*

Index	Quantity	Description	Vendor	Vendor Part Number	Unit Price	Extended Price USD	Notes
1	1	Arduino Pro Micro (micro USB conn) ATmega32u4	-	-	3.75	3.75	
2	1	MacroKeyboard v2.x PCB	Ryan	-	5.00	5.00	
3	11	Cherry Mx Switch, Blue, RGB SPST-NO	-	-	0.95	10.43	3
4	11	CHERRY MX KEYCAP - Clear or Windowed	-	-	0.95	10.45	
5	2	Rotary Encoder w/ Switch	DigiKey	987-1398-ND	0.78	1.56	
6	2	Knob for Rotary shaft, 6mm dia	ebay	-	0.65	1.30	
7	1	CONN JACK STEREO 3.5MM R/A	DigiKey	CP1-3524NG-ND (or CP1-3523N	0.74	0.74	
8	1	SWITCH TACTILE SPST-NO 0.05A 12V (6x6mm)	DigiKey	679-2443-ND	0.30	0.30	
9	0	CAP KEYSWITCH SQUARE BLACK for 6x6mm switch (OPTIONAL)	DigiKey	450-1829-ND	0.12	-	
10	2	1x12 Header 0.1" pitch	DigiKey	S6100-ND	0.69	1.38	
11	0	Diode, small signal. SOD-123 (OPTIONAL)	DigiKey	1N4148W-13FDICT-ND	0.18	-	1
12	1	RES 330 OHM 5% 1/4W 1206	DigiKey	RMCF1206JT330RCT-ND	0.03	0.03	
13	13	SK6812 MINI-E Addressable RGB LED 5V	AliExpress	https://www.aliexpress.com/ite	0.50	6.50	2
14	1	3D Printed Case - Custom-	Ryan?	-	0.48	0.48	
15	1	LCD 4x20 with i2c backpack (or any i2c LCD)	-	-	4.00	4.00	
16	1	Potentiometer 5K Ohm (the big kind, like a volume knob)	ebay	-	1.00	1.00	
17	1	Screw Terminal, 3 Pos, 5mm pitch	ebay	-	0.75	0.75	
					total cost	47.67	

As Cheap as Possible, No Keyboard switches

Index	Quantity	Description	Vendor	Vendor Part Number	Unit Price	Extended Price USD	Notes
1	1	Arduino Pro Micro (micro USB conn) ATmega32u4	-	-	3.75	3.75	
2	1	MacroKeyboard v2.x PCB	Ryan	-	5.00	5.00	
3	11	SWITCH TACTILE SPST-NO 0.05A 24V (12x12mm)	DigiKey	450-1158-ND	0.33	3.63	4
4	11	CAP TACTILE ROUND BLACK	DigiKey	679-2315-ND	0.21	2.31	
5	2	Rotary Encoder w/ Switch	DigiKey	987-1398-ND	0.78	1.56	
6	2	Knob for Rotary shaft, 6mm dia	ebay	-	0.65	1.30	
7	0	CONN JACK STEREO 3.5MM R/A	DigiKey	CP1-3524NG-ND (or CP1-3523N	0.74	—	
8	1	SWITCH TACTILE SPST-NO 0.05A 12V (6x6mm)	DigiKey	679-2443-ND	0.30	0.30	
9	0	CAP KEYSWITCH SQUARE BLACK for 6x6mm switch (OPTIONAL)	DigiKey	450-1829-ND	0.12	—	
10	0	1x12 Header 0.1" pitch	DigiKey	S6100-ND	0.69	—	
11	0	Diode, small signal. SOD-123 (OPTIONAL)	DigiKey	1N4148W-13FDICT-ND	0.18	—	1
12	0	RES 330 OHM 5% 1/4W 1206	DigiKey	RMCF1206JT330RCT-ND	0.03	—	
13	0	SK6812 MINI-E Addressable RGB LED 5V	AliExpress	https://www.aliexpress.com/ite	0.50	—	2
14	0	3D Printed Case - Custom-	Ryan?		0.48	—	
15	0	Potentiometer 5K Ohm (the big kind, like a volume knob)	ebay	-	1.00	—	
16	0	Screw Terminal, 3 Pos, 5mm pitch	ebay	-	0.75	—	
17	0	LCD 4x20 with i2c backpack (or any i2c LCD)	-	-	4.00	—	
					total cost	17.85	

Notes:

1 Optional; solder bypass jumper pads if not using anti-ghosting diodes.

2 Haven't found a reliable supplier for this part. Check datasheet before buying!

3 Any compatible keyboard switch will work. Can sub for non- transparent body if not backlighting with LEDs

4 Use generic tac switch, not Omrom (locating holes arent drilled for the Omrom nubs)