

Bill of Materials for ES21 - 10-Stage Sequencer [4mm] Full Kit V0.0

Item	Description	Qty	Designator	Package
	HARDWARE			
1	M3 Thumbscrew	2		-
			NB: Construct-A-Rack	
2	M3 x 6mm Bolt PH	2		-
			NB: Doefper Compatible Rails	
	PANEL			
3	ES21 - 10-Stage Sequencer Front Panel A	1		-
	KITS			
4	ES21 - 10-Stage Sequencer [4mm] Hardware Kit V0.0	1		-
5	ES21 - 10-Stage Sequencer PCB Set V0.0	1		-
6	ES21 - 10-Stage Sequencer Component Kit V0.0	1		-

Bill of Materials for ES21 - 10-Stage Sequencer Component Kit V0.0 - Column1

Item	Description	Qty	Designator	Package
	CONNECTOR			
1	IDC16 RA Box Header	1	J6	2.54MM
			NB: See Build Notes	
	SWITCH			
2	SPDT PB PCB RA [ON-MOM]	1	S1	-

Bill of Materials for ES21 - 10-Stage Sequencer Component Kit V0.0 - Column3

Item	Description	Qty	Designator	Package
	CONNECTOR			
1	IDC16 RA Box Header	1	J6	2.54MM
			NB: See Build Notes	
2	1x2 Pin 20mm Header	5	D1, D2, D3, D4, D5	2.54MM
	OPTO-ELECTRONIC			
3	3mm Yellow LED	5	D1, D2, D3, D4, D5	2MA

Bill of Materials for ES21 - 10-Stage Sequencer Component Kit V0.0 - Main Board

Item	Description	Qty	Designator	Package
	CAPACITOR			
1	10nF 63V Polyester	1	C102	RAD-0.2
2	10nF 5% Ceramic, Medium K	1	C303	RAD-0.2N
3	100nF Ceramic Capacitor	1	C103	RAD-0.2N
4	220nF 63V Polyester	1	C101	RAD-0.2
5	10uF 35V Electrolytic	2	C301, C302	RB-D5.0-P2.0
	CONNECTOR			
6	IDC16 Receptacle	3	J101, J201, J202	-
7	IDC16 Box Header	1	J301	2.54MM
8	14-pin IC Socket 0.3inch	1	U102	DIP-14
9	16-pin IC Socket 0.3inch	1	U101	DIP-16
	DIODE			
10	6V8 5% 500mW	1	D501	DIODE-0.3
11	1N4148	14	D101, D102, D103, D104, D201, D202, D203, D204, D205, D206, D207, D208, D209, D210	DIODE-0.3
	INDUCTOR			
12	Ferrite Bead - 0.45uH 7A	1	L301	-
	LOGIC			
13	CD4017 - Decade Counter/Divider	1	U101	DIP-16
	RESISTOR			
14	5 x 10K Commoned Resistor Network	2	RN201, RN202	SIP-6
15	Do Not Fit	3	R105, R106, R107	-
16	330R 1% 0.5W Metal Film	10	R202, R204, R206, R208, R210, R212, R214, R216, R218, R220	AXIAL-0.4
17	1K0 1% 0.5W Metal Film	2	R304, R305	AXIAL-0.4
18	2K2 1% 0.5W Metal Film	1	R301	AXIAL-0.4
19	10K 1% 0.5W Metal Film	5	R101, R108, R112, R113, R114	AXIAL-0.4
20	15K 1% 0.5W Metal Film	1	R303	AXIAL-0.4
21	100K 1% 0.5W Metal Film	1	R302	AXIAL-0.4

Bill of Materials for ES21 - 10-Stage Sequencer Component Kit V0.0 - Main Board

Item	Description	Qty	Designator	Package
RESISTOR - continued				
22	220K 1% 0.5W Metal Film	7	R102, R103, R109, R110, R115, R116, R117	AXIAL-0.4
23	1M0 1% 0.5W Metal Film	3	R104, R111, R118	AXIAL-0.4
TRANSISTOR				
24	2N3904 NPN Transistor	10	Q201, Q202, Q203, Q204, Q205, Q206, Q207, Q208, Q209, Q210	TO-92
UNITS				
25	Panther - IDC16 - 24cm	1	J301	-

Bill of Materials for ES21 - Comparator Component Kit V0.0

Item	Description	Qty	Designator	Package
	CONNECTOR			
1	Strip Line Header - 7-way	2		2.54MM
	LINEAR			
2	LM339 - Quad Comparator	1		-
	PCB			
3	ES21 - Comparator Fixer PCB V0.0	1		-
	RESISTOR			
4	100K 1%	3		0805

Bill of Materials for ES21 - 10-Stage Sequencer [4mm] Hardware Kit V0.0 - Column 2

Item	Description	Qty	Designator	Package
	OPTO-ELECTRONIC			
1	3mm Clear Lens Mount	5	D1, D2, D3, D4, D5	-

Bill of Materials for ES21 - 10-Stage Sequencer [4mm] Hardware Kit V0.0 - Column 3

Item	Description	Qty	Designator	Package
	OPTO-ELECTRONIC			
1	3mm Clear Lens Mount	5	D1, D2, D3, D4, D5	-

Bill of Materials for ES21 - 10-Stage Sequencer PCB Set V0.0

Item	Description	Qty	Designator	Package
	PCB			
1	ES21 - 10-Step Sequencer Support Board V0.2	3		-
2	Panther LED Carrier PCB V0.0	10		-
3	ES21 - 10-Stage Sequencer PCB V0.3	1		-
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