

Bill of Materials for ES15 - Smooth & Stepped Generator Full Kit V0.0

Item	Description	Qty	Designator	Package
	<b>HARDWARE</b>			
1	M3 Thumbscrew	4		-
			NB: Construct-A-Rack	
2	M3 x 6mm Bolt PH	4		-
			NB: Doefper Compatible Rails	
	<b>MODULE</b>			
3	Passive 3.5mm Splitter	2		-
	<b>PANEL</b>			
4	ES15 - Smooth & Stepped Generator Front Panel A	1		-
	<b>KITS</b>			
5	ES15 - Smooth & Stepped Generator PCB Set V0.0	1		-
6	ES15 - Smooth & Stepped Generator Hardware Kit V0.0	1		-
7	ES15 - Smooth & Stepped Generator Component Kit V0.0	1		-

Bill of Materials for ES15 - Smooth & Stepped Generator Component Kit V0.0 - Column 1

Item	Description	Qty	Designator	Package
	<b>CONNECTOR</b>			
1	IDC16 RA Box Header	1	J101	2.54MM

Bill of Materials for ES15 - Smooth & Stepped Generator Component Kit V0.0 - Column 2

Item	Description	Qty	Designator	Package
	<b>CONNECTOR</b>			
1	IDC16 RA Box Header	1	J201	2.54MM
	<b>HARDWARE</b>			
2	9mm Earth Tag	1	PANEL_GND2	-
	<b>POTENTIOMETER</b>			
3	50KB LIN - 18T Spline	4	P1, P2, P3, P4	ALPHA 16MM

Bill of Materials for ES15 - Smooth & Stepped Generator Component Kit V0.0 - Column 3

Item	Description	Qty	Designator	Package
	<b>CONNECTOR</b>			
1	IDC16 RA Box Header	1	J301	2.54MM
	<b>OPTO-ELECTRONIC</b>			
2	3mm Red/Green LED	2	LED1B, LED3B	-



Bill of Materials for ES15 - Smooth & Stepped Generator Component Kit V0.0 - Main Board

Item	Description	Qty	Designator	Package
<b>CAPACITOR</b>				
1	47pF 5% Ceramic	2	C102, C202	RAD-0.2N
2	100pF 5% Ceramic	1	C501	RAD-0.2N
3	1nF 63V Polyester	2	C401, C402	RAD-0.2
4	100nF Ceramic Capacitor	12	C603, C604, C605, C606, C607, C608, C609, C610, C611, C612, C613, C614	RAD-0.2N
5	100nF 63V Polyester	1	C101	RAD-0.2
6	220nF 63V Polyester	1	C201	RAD-0.2
7	10uF 35V Electrolytic	2	C601, C602	RB-D5.0-P2.0
<b>CONNECTOR</b>				
8	IDC16 Receptacle	4	J101, J201, J301, J401	-
9	IDC16 Box Header	1	J401	2.54MM
10	8-pin IC Socket 0.3inch	3	U103, U201, U501	DIP-8
11	14-pin IC Socket 0.3inch	2	U102, U202	DIP-14
12	16-pin IC Socket 0.3inch	1	U101	DIP-16
<b>DIODE</b>				
13	1N4148	8	D101, D102, D201, D202, D401, D402, D403, D501	DIODE-0.3
<b>LINEAR</b>				
14	LM13700 - Dual OTA	1	U101	DIP-16
15	TL072 Dual JFET Opamp	2	U103, U201	DIP-8
16	LM741 - GP Opamp	1	U501	DIP-8
17	LM3900 - Quad Norton Amplifier	2	U102, U202	DIP-14
<b>INDUCTOR</b>				
18	Ferrite Bead - 0.45uH 7A	2	L601, L602	-
<b>RESISTOR</b>				
19	100R 1% 0.5W Metal Film	2	R109, R209	AXIAL-0.4
20	330R 1% 0.5W Metal Film	2	R106, R206	AXIAL-0.4
21	1K2 1% 0.5W Metal Film	3	R108, R208, R504	AXIAL-0.4
22	3K3 1% 0.5W Metal Film	5	R113, R213, R503, R505, R506	AXIAL-0.4

Bill of Materials for ES15 - Smooth & Stepped Generator Component Kit V0.0 - Main Board

Item	Description	Qty	Designator	Package
	<b>RESISTOR - continued</b>			
23	10K 1% 0.5W Metal Film	4	R107, R207, R501, R502	AXIAL-0.4
24	15K 1% 0.5W Metal Film	4	R304, R306, R410, R411	AXIAL-0.4
25	33K 1% 0.5W Metal Film	9	R101, R102, R103, R201, R202, R203, R303, R404, R409	AXIAL-0.4
26	82K 1% 0.5W Metal Film	4	R305, R309, R412, R415	AXIAL-0.4
27	100K 1% 0.5W Metal Film	4	R301, R401, R403, R406	AXIAL-0.4
28	470K 1% 0.5W Metal Film	2	R110, R210	AXIAL-0.4
29	680K 1% 0.5W Metal Film	1	R405	AXIAL-0.4
30	820K 1% 0.5W Metal Film	2	R104, R205	AXIAL-0.4
31	1M0 1% 0.5W Metal Film	4	R105, R111, R204, R211	AXIAL-0.4
32	1M5 1% 0.5W Metal Film	3	R308, R408, R414	AXIAL-0.4
33	2M2 1% 0.5W Metal Film	2	R112, R212	AXIAL-0.4
34	2M7 1% 0.5W Metal Film	4	R302, R307, R402, R413	AXIAL-0.4
35	4M7 1% 0.5W Metal Film	1	R407	AXIAL-0.4
	<b>TRANSISTOR</b>			
36	J201 JFET	2	Q101, Q201	TO-92
37	PN4250 PNP Transistor	2	Q301, Q401	TO-92
	<b>TRIMPOT</b>			
38	20K 25T Cermet VTrim	2	P301, P401	3296W
	<b>UNITS</b>			
39	Panther - IDC16 - 24cm	1	J401	-















Bill of Materials for ES15 - Smooth & Stepped Generator PCB Set V0.0 - Main Board

Item	Description	Qty	Designator	Package
	PCB			
1	ES15 - Smooth & Stepped Generator PCB P0.0	1	PCB1	-
	End of document			