

Bill of Materials for ES37 - Quantizer [4mm] Full Kit P0.1
Column 1 [ES37 - Quantizer Component Kit]

Item	Description	Qty	Designator	Package
	CAPACITOR			
1	10nF 5% Ceramic	9	C401, C402, C403, C404, C405, C406, C407, C408, C410	RAD-0.2N
2	100nF Ceramic	1	C409	RAD-0.2N
	CONNECTOR			
3	16-pin IC Socket 0.3inch	1	U401	DIP-16
4	5-way 0.1inch Straight Header	1	J405	2.54MM
5	1x4 Pin 16mm Header	1	S401	-
6	IDC12 RA Box Header	1	J407	-
7	1x4 Pin 9mm Header	4	J401, J402, J403, J404	2.54MM
	LOGIC			
8	CD4051 - Single 8-channel Multiplexer	1	U401	DIP-16
	RESISTOR			
9	15K 1% 0.5W Metal Film	1	R415	AXIAL-0.4
10	33K 1% 0.5W Metal Film	9	R402, R404, R406, R408, R409, R410, R411, R412, R414	AXIAL-0.4
11	43K 1% 0.5W Metal Film	1	R413	AXIAL-0.4
12	100K 1% 0.5W Metal Film	4	R401, R403, R405, R407	AXIAL-0.4
13	4 x 47K Commoned Resistor Network	1	RN401	SIP-5
	SWITCH			
14	SPDT PCB RA [ON-OFF-ON]	1	S401	7103
	TRANSISTOR			
15	2N3904 NPN Transistor	1	Q401	TO-92

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Column 2 [ES37 - Quantizer Component Kit]

Item	Description	Qty	Designator	Package
CAPACITOR				
1	82pF 5% Ceramic	4	C502, C504, C506, C508	RAD-0.2N
2	10nF 63V Polyester	4	C501, C503, C505, C507	RAD-0.2
3	100nF Ceramic	5	C509, C510, C511, C512, C513	RAD-0.2N
CONNECTOR				
4	16-pin IC Socket 0.3inch	1	U501	DIP-16
5	1x4 Pin 16mm Header	1	S501	-
6	8-pin IC Socket 0.3inch	2	U502, U503	DIP-8
7	IDC12 RA Box Header	1	J506	-
8	1x4 Pin 9mm Header	4	J501, J502, J503, J504	2.54MM
LINEAR				
9	LF353 - Dual JFET Opamp	2	U502, U503	DIP-8
LOGIC				
10	CD4051 - Single 8-channel Multiplexer	1	U501	DIP-16
RESISTOR				
11	330R 1% 0.5W Metal Film	4	R502, R504, R506, R508	AXIAL-0.4
12	15K 1% 0.5W Metal Film	1	R511	AXIAL-0.4
13	22K 1% 0.5W Metal Film	4	R501, R503, R505, R507	AXIAL-0.4
14	33K 1% 0.5W Metal Film	1	R510	AXIAL-0.4
15	43K 1% 0.5W Metal Film	1	R509	AXIAL-0.4
SWITCH				
16	SPDT PCB RA [ON-OFF-ON]	1	S501	7103
TRANSISTOR				
17	2N3904 NPN Transistor	1	Q501	TO-92

Main [ES37 - Quantizer Component Kit]

Item	Description	Qty	Designator	Package
	CAPACITOR			
1	82pF 5% Ceramic	2	C101, C203	RAD-0.2N
2	220pF 5% Ceramic	2	C201, C202	RAD-0.2N
3	10nF 5% Ceramic	1	C317	RAD-0.2N
4	100nF Ceramic	7	C305, C306, C311, C312, C313, C314, C315	RAD-0.2N
5	10uF 35V Electrolytic	2	C301, C302	RB-D5.0-P2.0
6	10uF 35V Tantalum	1	C316	RB-D7.5-P5.0
	CONNECTOR			
7	16-pin IC Socket 0.3inch	4	U102, U103, U104, U201	DIP-16
8	8-pin IC Socket 0.3inch	2	U202, U203	DIP-8
9	Jumper Shunt	1	JP102	2.54MM
10	1x3 Pin 9mm Header	1	JP102	2.54MM
11	IDC10 Box Header	1	J301	2.54MM
12	IDC12 Receptacle	2	J302, J303	2.54MM
13	14-pin IC Socket 0.3inch	1	U101	DIP-14
	DIODE			
14	LM336 - 2V5	1	D301 NB: Remove Pin 1 [lower]	TO-92
	LINEAR			
15	LM311 - Comparator	1	U202	DIP-8
16	LF353 - Dual JFET Opamp	1	U203	DIP-8
17	TLC7524 - 8-bit D/A Converter	1	U201	DIP-16
	INDUCTOR			
18	Ferrite Bead - 5A	2	L301, L302	AXIAL-0.3
	LOGIC			
19	CD4520 - Dual Binary Up-Counter	3	U102, U103, U104	DIP-16
20	CD4093 - Quad 2-input NAND Schmitt trigger	1	U101	DIP-14

