

ES37 - Quantizer Full Kit

Item	Description	Qty	Designator	Package
	HARDWARE			
1	M3 x 10mm Bolt PH	2		-
2	M3 x 6mm Bolt PH	2		-
	KITS			
3	ES37 - Quantizer PCB/Panel Set P0.1	1		-
4	ES37 - Quantizer Hardware Kit P0.1	1		-
5	ES37 - Quantizer Component Kit P0.1	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	IDC12 RA Box Header	1	J407	-
5	1x4 Pin 16mm Header	1	S401	-
6	5-way 0.1inch Straight Header	1	J405	2.54MM
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

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	IDC12 RA Box Header	1	J506	-
6	1x4 Pin 16mm Header	1	S501	-
7	8-pin IC Socket 0.3inch	2	U502, U503	DIP-8
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 Tantalum	1	C316	RB-D7.5-P5.0
6	10uF 35V Electrolytic	2	C301, C302	RB-D5.0-P2.0
	CONNECTOR			
7	16-pin IC Socket 0.3inch	4	U102, U103, U104, U201	DIP-16
8	IDC10 Box Header	1	J301	2.54MM
9	1x3 Pin 9mm Header	1	JP102	2.54MM
10	Jumper Shunt	1	JP102	2.54MM
11	8-pin IC Socket 0.3inch	2	U202, U203	DIP-8
12	14-pin IC Socket 0.3inch	1	U101	DIP-14
13	IDC12 Receptacle	2	J302, J303	2.54MM
	DIODE			
14	LM336 - 2V5	1	D301	TO-92
			NB: Remove Pin 1	
	LINEAR			
15	TLC7524 - 8-bit D/A Converter	1	U201	DIP-16
16	LM311 - Comparator	1	U202	DIP-8
17	LF353 - Dual JFET Opamp	1	U203	DIP-8
	INDUCTOR			
18	Ferrite Bead - 0.45uH 7A	2	L301, L302	AXIAL-0.3
	LOGIC			
19	CD4093 - Quad 2-input NAND Schmitt trigger	1	U101	DIP-14
20	CD4520 - Dual Binary Up-Counter	3	U102, U103, U104	DIP-16

Main [ES37 - Quantizer Component Kit]

Item	Description	Qty	Designator	Package
	RESISTOR			
21	330R 1% 0.5W Metal Film	1	R206	AXIAL-0.4
22	6K8 1% 0.5W Metal Film	1	R301	AXIAL-0.4
23	15K 1% 0.5W Metal Film	2	R201, R202	AXIAL-0.4
24	33K 1% 0.5W Metal Film	1	R101	AXIAL-0.4
25	41K2 1% 0.5W Metal Film	1	R302	AXIAL-0.4
26	47K 1% 0.5W Metal Film	1	R205	AXIAL-0.4
27	82K5 1% 0.5W Metal Film	1	R304	AXIAL-0.4
28	100K 1% 0.5W Metal Film	1	R102	AXIAL-0.4
29	280K 1% 0.5W Metal Film	1	R303	AXIAL-0.4
30	3M3 1% 0.5W Metal Film	1	R203	AXIAL-0.4
	TRIMPOT			
31	50K 25TV Cermet	1	P301	T93YA
	UNITS			
32	Panther - IDC16-10 - 24cm	1	J301	-

Bill of Materials for ES37 - Quantizer Full Kit P0.1
Column 1 [ES37 - Quantizer Hardware Kit]

Item	Description	Qty	Designator	Package
	CONNECTOR			
1	3.5mm Mono PCB Socket - Blue	4	J401, J402, J403, J404	-
2	3.5mm Mono PCB Socket - Red	1	J406	-

Column 2 [ES37 - Quantizer Hardware Kit]

Item	Description	Qty	Designator	Package
	CONNECTOR			
1	3.5mm Mono PCB Socket - Green	4	J501, J502, J503, J504	-
2	3.5mm Mono PCB Socket - Red	1	J506	-

