



## EQ73 Parts list (1)

Reference	Value	Qty	Description	Marking	Dim (2)	Manuf.
R52, R53	47R	2	Resistor 1%, 1/4W	YEL-VIO-BLK-GLD-BRN		
R45, R46	180R	2	Resistor 5%, 1/2W			
R23, R24	220R	2	Resistor 1%, 1/4W	RED-RED-BRN-BRN or RED-RED-BLK-BLK-BRN		
MP73 optional gain compensation	560R	1	Resistor 1%, 1/4W	GRN-BLU-BRN-BRN		
R6, R9	620R	2	Resistor 1%, 1/4W	BLU-RED-BLK-BLK-BRN		
R33, R43	820R	2	Resistor 1%, 1/4W	GRY-RED-BLK-BLK-BRN		
R59	1K2	1	Resistor 1%, 1/4W	BRN-RED-BLK-BRN-BRN		
R21	1K8	1	Resistor 1%, 1/4W	BRN-GRY-BLK-BRN-BRN		
R56	2K2	1	Resistor 1%, 1/4W	RED-RED-BLK-BRN-BRN		
R3, R28, R38	3K3	3	Resistor 1%, 1/4W	ORG-ORG-BLK-BRN-BRN		
R47	3K3	1	Resistor 5%, 1/2W	ORG-ORG-BLK-BRN-BRN		
R2, R32, R42	3K6	3	Resistor 1%, 1/4W	ORG-BLU-BLK-BRN-BRN		
R34, R44	3K9	2	Resistor 1%, 1/4W	ORG-WHT-RED-BRN or ORG-WHT-BLK-BRN-BRN		
R17	4K7	1	Resistor 1%, 1/4W	YEL-VIO-BLK-BRN-BRN		
R4, R7, R8	5K1	3	Resistor 1%, 1/4W	GRN-BRN-RED-BRN or GRN-BRN-BLK-BRN-BRN		
R10, R11	6K2	2	Resistor 1%, 1/4W	BLU-RED-BLK-BRN-BRN		
R14, R18, R19	6K8	3	Resistor 1%, 1/4W	BLU-GRY-BLK-BRN-VIO		
R16	7K5	1	Resistor 1%, 1/4W	VIO-GRN-BLK-BRN-BRN		
R15	8K2	1	Resistor 1%, 1/4W	GRY-RED-RED-BRN or GRY-RED-BLK-BRN-BRN		
R13, R20, R22, R55, R58	10K	5	Resistor 1%, 1/4W	BRN-BLK-BLK-RED-BRN		
R12	12K	1	Resistor 1%, 1/4W	BRN-RED-BLK-RED-BRN		
R60	15K	1	Resistor 1%, 1/4W	BRN-GRN-BLK-RED-BRN		
R48, R50	22K	2	Resistor 1%, 1/4W	RED-RED-ORG-BRN or RED-RED-BLK-RED-BRN		
R27, R37	27K	2	Resistor 1%, 1/4W	RED-VIO-ORG-BRN or RED-VIO-BLK-RED-BRN		
R26, R36, R51	39K	3	Resistor 1%, 1/4W	ORG-WHT-BLK-RED-BRN		
R49	56K	1	Resistor 1%, 1/4W	GRN-BLU-ORG-BRN or GRN-BLU-BLK-RED-BRN		
R1, R5, R25, R35, R54	100K	5	Resistor 1%, 1/4W	BRN-BLK-BLK-ORG-BRN		
R29, R39	120K	2	Resistor 1%, 1/4W	BRN-RED-BLK-ORG-BRN		
R30, R31, R40, R41	180K	4	Resistor 1%, 1/4W	BRN-GRY-BLK-ORG-BRN		
R57	1M	1	Resistor 1%, 1/4W	BRN-BLK-GRN-BRN or BRN-BLK-BLK-YEL-BRN		
RZ1...RZ44	4M7	44	Resistor 5%, 1/4W	YEL-VIO-GRN-GLD		
C57, C65	47p-100V	2	Capacitor Ceramic		R2.5	
C27	150p-100V	1	Capacitor Film	150	R2.5	Wima
C81, C82, C83, C84, C85, C86	470p-100V	6	Capacitor Ceramic	471	R5	
C26, C58, C66	470p-100V	3	Capacitor Film	470	R2.5	Wima
C32, C59, C67	680p-100V	3	Capacitor Film	680	R2.5	Wima
C29, C62, C70	1n-100V	3	Capacitor Film	1000	R5	Wima
C31	3n3-100V	1	Capacitor Film	3300	R5	Wima

C10, C11, C33	4n7-100V	3	Capacitor Film	<b>4700</b>	R5	Wima
C8, C9	6n8-100V	2	Capacitor Film	<b>6800</b>	R5	Wima
C6, C7, C24, C35, C36	10n-100V	5	Capacitor Film	<b>0.01 or 10n</b>	R5	Wima
C12, C13, C25	15n-100V	3	Capacitor Film		R5	Wima
C4, C5, C37, C38	22n-100V	4	Capacitor Film		R5	Wima
C2, C3	33n-100V	2	Capacitor Film		R5	Wima
C14, C15, C39, C40	47n-100V	4	Capacitor Film		R5	Wima
C73, C75, C77	100n-100V	3	Capacitor Ceramic			
C16, C17, C18, C19, C20, C21, C41, C42, C43, C52, C53	100n-100V	11	Capacitor Film	<b>104</b>	R5	Wima
C50, C51	220n-100V	2	Capacitor Film		R5	Wima
C22, C23	330n-100V	2	Capacitor Film	<b>u33</b>	R5	Wima
C48, C49	470n-100V	2	Capacitor Film		R5	Wima
C46, C47	1u-63V	2	Capacitor Film	<b>1u</b>	R5	Wima
C44, C45	2.2u-63V	2	Capacitor Film	<b>2.2u</b>	R5	Wima
C28, C30, C34	NC	3	not connected			
C80	1u-50V	1	Capacitor Electro Low ESR, 105°			
C56, C64	10u-25V	2	Capacitor Tantale		R2.5	
C1	22u-16V	1	Capacitor Tantale		R2.5	
C60, C63, C68, C71, C74, C76, C78, C79	33u-35V	8	Capacitor Electro Low ESR, 105°		D5R2	
C61, C69	100u-25V	2	Capacitor Electro Low ESR, 105°		D6.3R2.5	
C72	100u-63V	1	Capacitor Electro Low ESR, 105°		D6.3R2.5	
C54, C55	330u-25V	2	Capacitor Electro Low ESR, 105°		D8R3.5	
L1	VTB9050	1	Inductor			Carnhill
L2	VTB9043	1	Inductor			Carnhill
D1, D2	1N4004	2	Rectifier diode	<b>1N4004 or 1N4005</b>		
D3, D4, D5, D6, D7, D8	1N914	6	Signal diode	<b>914 or 4148</b>		
D9	Red/Green	1	2 colors LED, 2 pins			
Q1, Q2, Q3, Q4, Q5, Q6	BC184C	6	NPN small signal transistor	<b>184C</b>		
U1	78L24	1	Positive voltage regulator 24V	<b>78L24</b>		
U2	78L15	1	Positive voltage regulator 15V	<b>78L15</b>		
U3	79L15	1	Negative voltage regulator 15V	<b>79L15</b>		
U4	TL074CN	1	Quad Op-Amp	<b>TL074CN</b>		
SW1, SW2, SW5	2 x 6 pos	3	Rotary switch 2 x 6			
SW4	1 x 12 pos	1	Rotary switch 1 x 12			
SW3, SW6	DPDT	2	Min toggle switch vertical on/off/on			
CN2, CN3	20 pins	2	IDC box header 2x10			
	20 pins	4	Ribbon cable socket 2x10			
CN8a, CN8b		2	DIL 2.54 header 2x8pins			
		2	Ribbon cable socket 2x8			
	14 pins	1	IC socket			
	16 pins	2	Relay socket			
CN1		1	SIL 2.54 connector 3 pins male			
MP73 link		1	SIL wire connector 3pins female + contacts			

CN4a, CN5a, CN6a, CN7a		4	DIL 2.54 socket 2x10 pins		
CN4b, CN5b, CN6b, CN7b		4	DIL 2.54 header 2x10pins 90°		
TP1, TP2, TP3, TP4, TP5, TP6, TP7		7	Test pin		D1
P1, P3	10KA	2	Lin potentiometer 16mm with center detent		Omeg
P2	47KA	1	Lin potentiometer 16mm with center detent		Omeg
		3	6mm/4mm shaft adapter		
		3	4mm/3mm shaft adapter		
	47mm	3	3mm shaft		
RL1, RL2		2	Relay DPDT 24V		
Main, switches, pots		1	PCB		
Knob		4	Wing short knob 15mm, grey, nut		D15-6
Cap		1	Cap 15mm red		D15
Knob		3	Knob 10mm red, screw		D21-6.35
Cap		3	Cap 10mm red		D21
		1	EQ73 front pannel		
Front pannel assembly	M3x8	4	Black screw countersunk		
PCB assembly	M3x6	18	Screw pan head		
PCB assembly	M3	4	Metal washer		
PCB assembly	M3	6	Shakeproof washer		
PCB assembly	M3	4	Self locking nut		
PCB assembly		2	Metal bracket		9.5x9.5
PCB assembly	M3x15	2	Spacer fem/fem		
PCB assembly	M3x25	3	Spacer fem/fem		
Ribbon cable	16 cond	1			5 cm
Ribbon cable	20 cond	2			8 cm
Link cable	2 cond+sh	1	Shielded cable		20 cm
Link cable	D6mm	1	Heat shrink sleeve		3cm
<b>Option EB (electronically balanced I/O)</b>					
Rc3, Rc4	22R	2	Resistor 1%, 1/4W	RED-RED-BLK-GLD-BRN	
Rac3, Rac4	47R	2	Resistor 1%, 1/4W	YEL-VIO-BLK-GLD-BRN	
Ra1, Ra2	100R	2	Resistor 1%, 1/4W	BRN-BLK-BLK-BLK-BRN	
Rc1	866R	1	Resistor 1%, 1/4W		
Rc2	1K2	1	Resistor 1%, 1/4W		
Rac1, Rac2	3K6	2	Resistor 1%, 1/4W	RED-YEL-BLK-BRN-BRN	
Ra5, Ra6	10K	2	Resistor 1%, 1/4W	BRN-BLK-BLK-RED-BRN	
Ra3, Ra4, Ra7	100K	3	Resistor 1%, 1/4W	BRN-BLK-BLK-ORG-BRN	
Ca7, Ca8, Cc1	47p-100V	3	Capacitor Ceramic	470	R2.5
Ca1, Ca2	100p-100V	2	Capacitor Ceramic	101	R5
Ca9, Cac1, Cac2, Cc4, Cc5, Cc6, Cc7	33u-35V	7	Capacitor Electro Low ESR, 105°		D5R2
Cc2, Cc3	100u-25V	2	Capacitor Electro Low ESR, 105°		D6.3R2.5
Ca3, Ca4, Ca5, Ca6	100u63V	4	Capacitor Electro Low ESR, 105°		D6.3R2.5
Uac1	NE5532AN	1	Dual low noise Op-Amp	5532	
Uc1	THAT1646	1	Line driver		That
Uac1, Uc1 sockets	8 pins	2	IC socket		

Option TX (Transformer I/O)					
Rd1	12R	1	Resistor 1%, 1/4W	BRN-RED-BLK-GLD-BRN	
Rd12	47R	1	Resistor 5%, 1/2W	YEL-VIO-BLK-GLD ( BRN RED )	
Rd13	180R	1	Resistor 1%, 1/4W	BRN-GRY-BRN-BRN or BRN-GRY-BLK-BLK-BRN	
Rd4	820R	1	Resistor 5%, 1/2W	GRY-RED-BLK-BLK-BRN	
Rb1	1K	1	Resistor 1%, 1/4W	BRN-BLK-BLK-BRN-BRN	
Rd8, Rd11	1K2	2	Resistor 1%, 1/4W	BRN-RED-BLK-BRN-BRN	
Rd3	1K5	1	Resistor 1%, 1/4W	BRN-GRN-RED-BRN or BRN-GRN-BLK-BRN-BRN	
Rd5	2K2	1	Resistor 1%, 1/4W	RED-RED-BLK-BRN-BRN	
Rd2	2K7	1	Resistor 1%, 1/4W	RED-VIO-BLK-BRN-BRN	
Rd9, Rd14	3K3	2	Resistor 1%, 1/4W	ORG-ORG-BLK-BRN-BRN	
Rd10	18K	1	Resistor 1%, 1/4W	BRN-GRY-BLK-RED-BRN	
Rd6	56K	1	Resistor 1%, 1/4W	GRN-BLU-ORG-BRN or GRN-BLU-BLK-RED-BRN	
Rd7	68K	1	Resistor 1%, 1/4W	BLU-GRY-BLK-RED-BRN	
Cd6	220p-100V	1	Capacitor Film	220	R2.5 Wima
Cd8	330p-100V	1	Capacitor Film	330	R2.5 Wima
Cb1	1n5-100V	1	Capacitor Film	1500	R5 Wima
Cd7	4n7-100V	1	Capacitor Film	4700	R5 Wima
Cd4	10n-100V	1	Capacitor Film	0.01 or 10n	R5 Wima
Cd5	10u-25V	1	Capacitor Tantale	10	R2.5
Cd12, Cd13	33u-35V	2	Capacitor Electro Low ESR, 105°		D5R2 Nichicon
Cd3, Cd9	100u-25V	2	Capacitor Electro Low ESR, 105°		D6.3R2.5
Cd10	330u-25V	1	Capacitor Electro Low ESR, 105°		D8R3.5
Cd11	330u-35V	1	Capacitor Electro Low ESR, 105°		
Cd1, Cd2	1000u-25V	2	Capacitor Electro Low ESR, 105°		
Pd1	5K	1	Trimmer pot	502	
Dd1	1N4004	1	Rectifier diode	1N4004 or 1N4005	
Qd1, Qd2	BC184C	2	NPN small signal transistor	184C	
Qd3	2N6488	1	NPN power transistor	2N6488	
Ud1	LM317	1	Positive voltage regulator	LM317T or TS317	
Qd3 heatsink	13 K/W	1	Heatsink TO220		
Ud1 heatsink	21 K/W	1	Heatsink TO220		
TPd1, TPd2, TPd3		3	Test pin		D1
Tb1	VTB9046	1	Line input transformer 10K/600		Carnhill
Td1	VTB1847	1	Line output transformer		Carnhill
Input transfo. assembly	SK5468	2	PCB		
Input transfo. assembly		2	SIL 2.54 header 13 pins 90°		
Input transfo. assembly		2	Nylon washer		
Output transfo. assembly	M3x30	4	Screw pan head		
Output transfo. assembly	M3	4	Self locking nut		

(1) Data can be changed without notice(2) Rx : spacing between leads or pins=x, Dx : diameter=x, Lx : Pot spindle length=x, Dimensions in mm unless differently stated

Schematic Rev 1.2PCB Rev 1.2

Last modified : 08/07/2012



## V12V2 Parts list (1)

All the components in this list are included in the kit  
Tous les composants de cette liste sont inclus dans le kit

Reference	Value	Qty	Description	Marking	Dim (2)	Manuf.
C2, C4	100n-100V	2	Capacitor ceramic	104 or 100n	R5	
C1, C3	33u-35V	2	Capacitor Electro Low ESR, 105°		D5R2	
CN1	20pins	1	Female socket DIL			
CN2	26pins	1	IDC box header			
U1	78L15	1	Positive voltage regulator TO92			
U2	79L15	1	Negative voltage regulator TO92			
		2	Nylon spacer 10mm			
	M3x6	2	Screw pan head			
	26 cond.		Ribbon cable		16cm	
	26 pins	2	IDC Cable Socket			
in/out connect		2	Flexible wire 0.5mm2, Blue		8cm	
in/out connect		2	Flexible wire 0.5mm2, Red		8cm	
Main PCB		1	PCB		237x126	

(1) Data can be changed without notice

(2) Rx : spacing between leads or pins=x, Dx : diameter=x, Lx : Pot spindle length=x, Dimensions in mm unless differently stated

(1) Les donnée peuvent être modifiées sans préavis

(2) Rx : distance entre les pattes=x, Dx : diamètre=x, Lx : longueur axe du potentiomètre=x, Dimensions en mm sauf mention contraire

Last modified : 01/12/2011