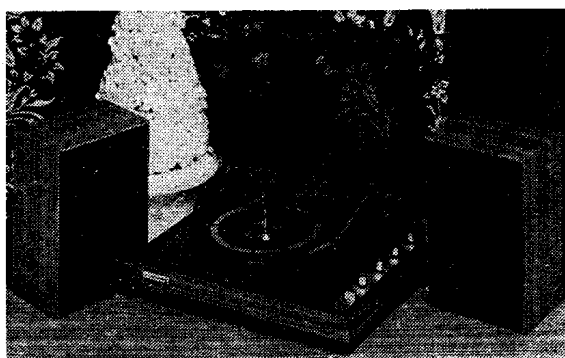




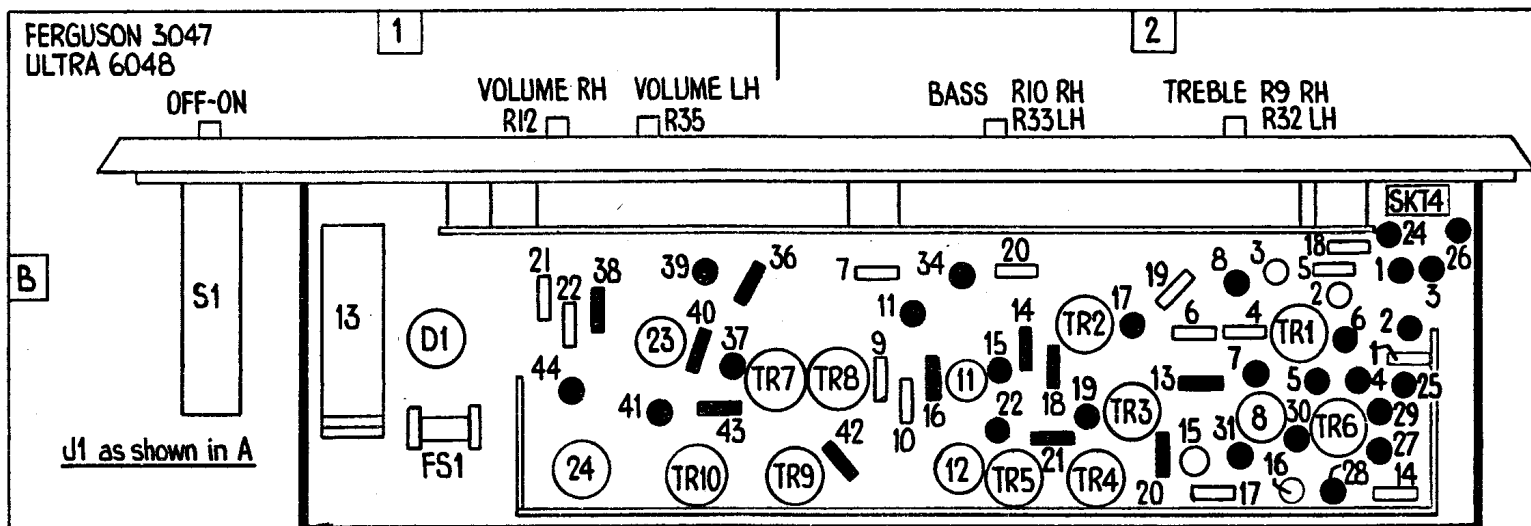
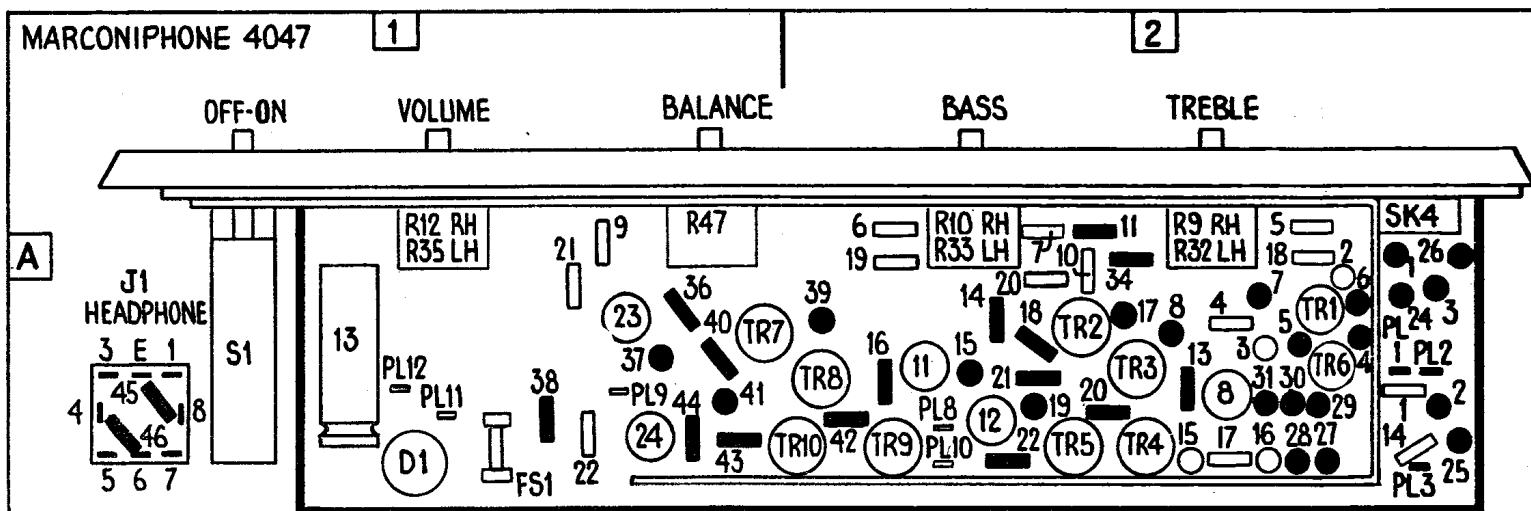
MARCONIPHON FERGUSON 3047 ULTRA 6048 Stereo record player

2051



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IE 4047 7

ERT SERVICE CHART

2051

Marconiphone 4047

THE Marconiphone 4047, Ferguson 3047 and Ultra 6048 stereo record players are similar in design and circuitry, except for rotary controls with separate balance control on the Marconiphone model. Slider controls are used on the Ferguson and Ultra models.

All models incorporate the BSR C129R record changer with an 18.5V overwind on the motor to provide the amplifier AC supply.

Mains
240V 50Hz.

Fuse
800mA.

Transistors

TR1	BC154 or BC187
TR2	BC213L, BC 153 or BC186
TR3	U3832/1 or BC107
TR4	AC128
TR5	AC176
TR6	BC154 or BC187
TR7	BC213L, BC153 or BC186
TR8	U3832/1 or BC107
TR9	AC128
TR10	AC176

Rectifier
W-01

Pilot lamp
28V capless

Output
2W per channel

Loudspeaker impedance
15ohm

Cartridge
SC10H1

Styli
Turnover type ST16

Manufacturer
Thorn Consumer Electronics Ltd, 284 Southbury Road, Enfield, Middlesex EN1 1TJ. 01-366 1155.

Service Departments
London: PO Box 121, Lea Valley Trading Estate, Edmonton, N18 3BP. 01-807 3060, spares only: 01-807 0791.

Manchester: Thorn House, Derby Street, Cheetham, Manchester 8. 061-832 2499.

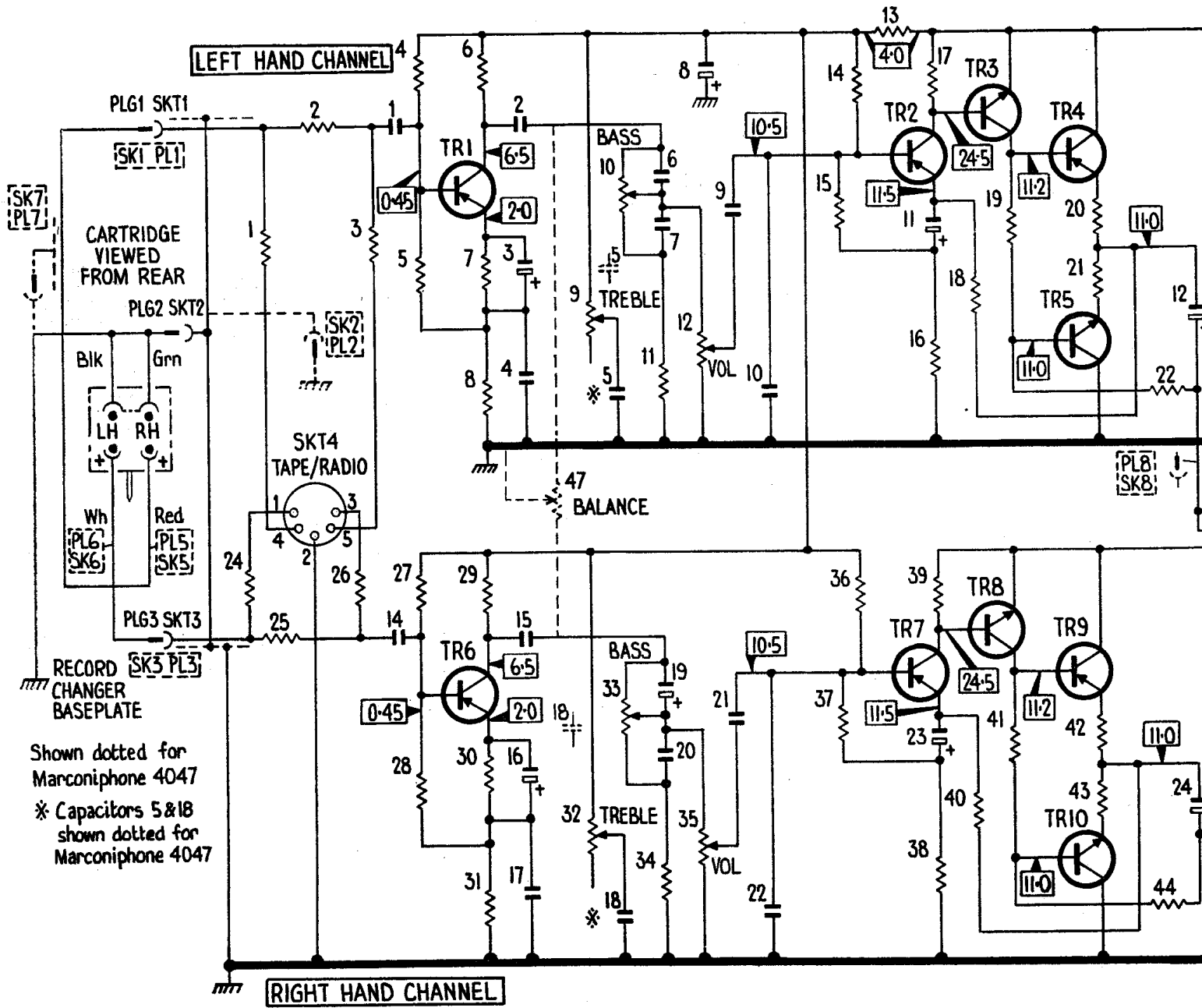
Glasgow: 155 Shieldhall Road, Glasgow SW1. 041-882 4512.

Dismantling

Removal of chassis

Remove the top cover, lock the motor board with the transit screws and secure the pickup to its rest with the clip provided. Pull off control knobs. Invert the cabinet

R	1 24	2 25	3 26	4 27	5 28	6 29	7 30	8 31	9 32	10 33	11 34	12 35	13 36	14 37	15 38	16 39	17 40	18 41	19 42	20 43	21 44	22 44	
C			1 14	2 15	3 16	4 17	5 18	6 19	7 20	8 21	9 22	10 22	11 23										
L																							



Shown dotted for Marconiphone 4047
 * Capacitors 5 & 18 shown dotted for Marconiphone 4047

and insert a suitable prop under one edge to avoid damage to the changer mechanism.

Remove the base cover to obtain access to the fuse and the chassis assembly. Release the three screws securing the amplifier assembly to the control panel and withdraw the amplifier from the cabinet within the limit of the leads.

Two earthing leads are connected to the printed circuit board, one is secured under the On/Off switch fixing nut, along with the mains earth, and the other, at the opposite end of the board is plugged on to a tag on the control panel. Ensure that these leads are connected on completion of repair before refitting the amplifier.

Removal of record changer

Remove the cabinet base cover, unplug the pickup leads from the baseplate and unsolder the motor leads from the tag panel.

Screw the transit screws fully in and prise off the swivel clips to remove the washers. Remove the record changer from the cabinet.

Stylus replacement

Place the indicator flag in the 78 position and gently prise out the stylus. After replacement ensure that the stylus arm is properly engaged within the V-shaped fork of the cartridge.

Cartridge replacement

Note the plug-on connections at the rear of the cartridge before disconnection. Carefully, to avoid damage or bending, prise off the carrier trim, using a thin bladed knife, to obtain access to the cartridge fixing screw. After replacing the cartridge, refit the trim, if necessary, using a small dab of adhesive.

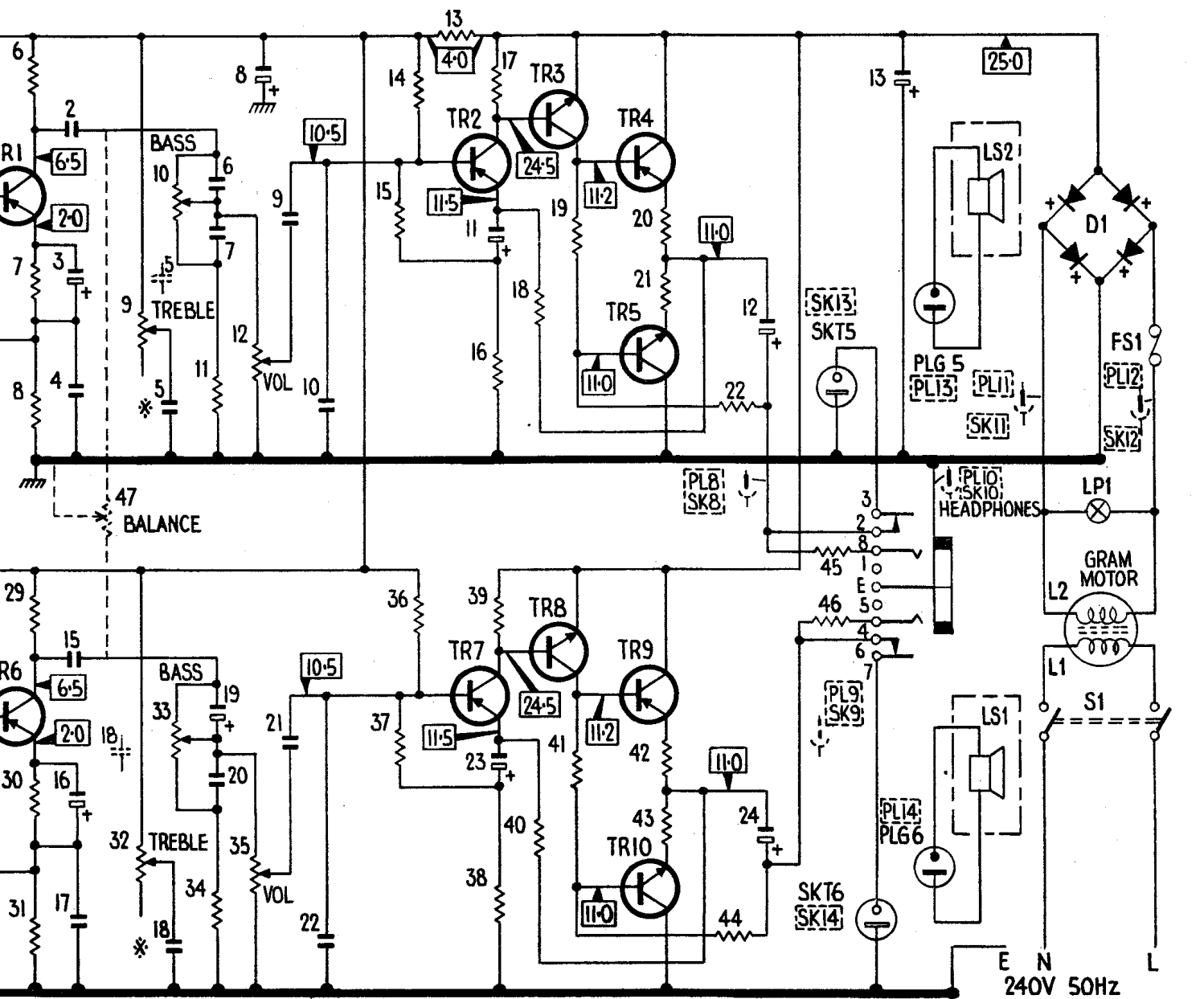
Service Notes

Voltages indicated on the circuit diagram were measured using a 20,000ohm/volt meter. They are negative with respect to the positive chassis line except where otherwise indicated.

The resistance of the motor windings L1 and L2 are 420ohm and 5.50ohm respectively.

RESISTORS			R27
R1	1M	A2, B2	R28
R2	1M	A2, B2	R29
R3	10K	A2, B2	R30
R4	1M8	A2, B2	R31
R5	220K	A2, B2	R32
R6	47K	A2, B2	R33
R7	5K6	A2, B2	R34
R8	2K7	A2, B2	R35
R9	47K log	—	R36
R10	47K lin	—	R37
R11	2K2	A2, B2	R38
R12	47K log	—	R39
R13	6K8	A2, B2	R40
R14	150K	A2, B2	R41
R15	330K	A2, B2	R42
R16	10	A2, B2	R43
R17	1K2	A2, B2	R44
R18	1K	A2, B2	R45
R19	15	A2, B2	R46
R20	2.2	A2, B2	R47
R21	2.2	A2, B2	CAPA
R22	680	A2, B2	C1
R24	1M	A2, B2	C2
R25	1M	A2, B2	C3
R26	10K	A2, B2	C4

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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 The indicator flag in the 78 position
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Service Notes
 As indicated on the circuit dia-
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 positive chassis line except where
 indicated.
 Resistance of the motor windings L1
 re 420ohm and 5.50ohm respect-

RESISTORS		CAPACITORS	
R1	1M A2, B2	C1	47n A2, B2
R2	1M A2, B2	C2	4µ7 35V A2, B2
R3	10K A2, B2	C3	6µ8 35V A2, B2
R4	1M8 A2, B2	C4	22n A2, B2
R5	220K A2, B2	C5	68n A2, B2
R6	47K A2, B2	C6	22n A2, B2
R7	5K6 A2, B2	C7	100n A2, B2
R8	2K7 A2, B2	C8	220µ 25V
R9	47K log —	C9	220n A2, B2
R10	47K lin —	C10	1n A2, B2
R11	2K2 A2, B2	C11	220µ 16V
R12	47K log —	C12	470µ 16V
R13	6K8 A2, B2	C13	2500µ 30V
R14	150K A2, B2	C14	47n A2, B2
R15	330K A2, B2	C15	4µ7 35V A2, B2
R16	10 A2, B2	C16	6µ8 35V A2, B2
R17	1K2 A2, B2	C17	22n A2, B2
R18	1K A2, B2	C18	68n A2, B2
R19	15 A2, B2	C19	22n A2, B2
R20	2.2 A2, B2	C20	100n A2, B2
R21	2.2 A2, B2	C21	220n A1, B1
R22	680 A2, B2	C22	1n A1, B1
R23	10 A2, B2	C23	220µ 16V
R24	1M A2, B2	C24	470µ 16V
R25	1M A2, B2		
R26	10K A2, B2		
R27	1M8 A2, B2		
R28	220K A2, B2		
R29	47K A2, B2		
R30	5K6 A2, B2		
R31	2K7 A2, B2		
R32	47K log —		
R33	47K lin —		
R34	2K2 A2, B2		
R35	47K log —		
R36	150K A1, B1		
R37	330K A1, B1		
R38	10 A1, B1		
R39	1K2 A2, B1		
R40	1K A1, B1		
R41	15 A1, B1		
R42	2.2 A2, B2		
R43	2.2 A1, B1		
R44	680 A1, B1		
R45	180 A1		
R46	180 A1		
R47	100K lin —		