

RATA UPGRADE DATA SHEET

Quad 306 Upgrade

STAGE 1

Wiring

- Replace mains cable with 8TC Kimber Powerkord
- Replace internal mains wiring with Kimber 4TC
- Replace input fuse FS1 with 5A circuit breaker
- Replace output cable from PCB to speaker sockets with Kimber 4TC
- Replace signal input cable with Kimber PSB

STAGE 2

Power Supply

- Replace D12 in each channel with 4 x 50SQ100 Schottky diodes
- Replace C10, C11 with RATA Slit foil 4,700uF 63v, and bypass each with 5uF + 0.01uF Kimber Kaps

STAGE 3

Resistor Replacements per channel

R1	562R	HOLCO	H8
R2	22K1		H8
R3	3K3		H2
R4	3K3		H2
R5	3K3		H2
R6	121K		H8
R7	22K1		H8
R9	33R2		H8
R10	3K32		H2
R11	47R		H8
R12	332R		H8
R14	332R		H8
R14A	1K		H8
R15	3K32		H8
R16	332R		H8
R26	10R		H8
R28	10K		H8
R29	9K09		H8
R30	2K21		H8
R31	2K21		H8
R33	2M21		H2
R34	10K		H8
R35	10K		H8

Capacitor Upgrades per channel

C1	330pF	Suflex
C2	0.1uF	200v Kimber Kap
C3	0.68uF	450v Kimber Kap
C4	180pF	Suflex
C5	330pF	Suflex
C6	330pF	Suflex
C7	Retain and bypass with 0.01uF Kimber Kap	
C8	47pF	Suflex
C9	0.047uF	450v Kimber Kap

COMPONENT LISTPart No Price Total

Stage 1

1 x 3 ft 8TCM Powerkord	39.210	54.22	54.22
0.5m PSB	39.106	8.25	4.13
0.5m 4TC	39.102	15.58	7.79
1 x 5A 240v circuit breaker	31.108	15.00	<u>15.00</u>

81.14

Stage 2

2 x 4,700uF RATA Slit Foil	14.105	10.50	21.00
8 x 50SQ100 Schottky diodes	23.101	3.00	24.00
2 x 5uF 200v Kimber Kap	13.110	11.48	22.96
2 x 0.01uF 600v Kimber Kap	13.133	3.24	<u>6.48</u>

74.44

Stage 3

1 x 562R H8 HOLCO	17.135	0.48	0.48
1 x 22K1 H8	17.167	0.48	0.48
5 x 3K32 H2	17.237	0.48	2.40
1 x 121K H8	17.177	0.48	0.48
1 x 22K1 H8	17.167	0.48	0.48
1 x 33R2 H8	17.110	0.48	0.48
1 x 47R5 H8	17.112	0.48	0.48
3 x 332R H8	17.130	0.48	1.44
1 x 1K H8	17.139	0.48	0.48
1 x 10R H8	17.102	1.50	1.50
3 x 10K H8	17.160	0.48	1.44
1 x 9K09 H8	17.159	0.90	0.90
2 x 2K21 H8	17.146	0.48	0.48
1 x 2M21 H2	17.275	0.95	0.95

1 x 0.047uF 450v Kimber Kap	13.117	3.37	3.37
1 x 0.1uF 200v Kimber Kap	13.102	3.37	3.37
1 x 0.68uF 450v Kimber Kap	13.127	4.98	4.98
1 x 0.01uF 600v Kimber Kap	13.133	3.24	3.24
3 x 330pF Suflex	15.118	2.50	7.50
1 x 180pF Suflex	15.115	2.50	2.50
1 x 47pF Suflex	15.108	2.50	<u>2.50</u>

x 2 39.93
79.86

TOTAL PARTS 235.44

TOTAL LABOUR 100.00

335.44

VAT 58.70

TOTAL 394.14

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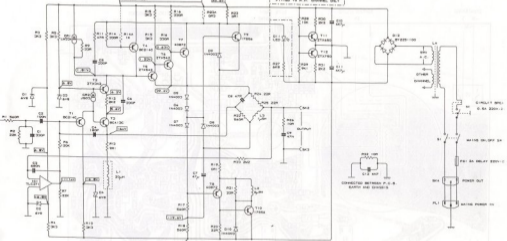
Prices correct at January 1993
See current catalogue for
prices in force

RATA

RUSS ANDREWS TURNTABLE ACCESSORIES
EDGE BANK HOUSE, 3 KILMERIGH, KENDAL, CUMBRIA LA9 9NS
TELEPHONE: 06326 (053 963) 217

SHIELD WIRE AND PIN BETWEEN
 TO GROUND EITHER TO COMPENSATE FOR
 TOLERANCES IN OUTPUT DEVICES
 ALTERNATIVELY RES MAY BE FITTED
 AS SHOWN

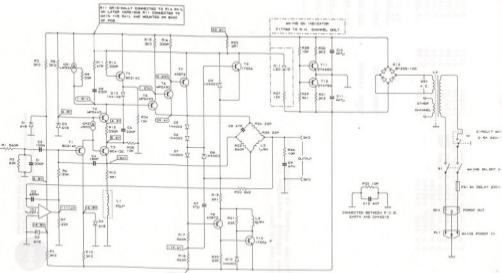
SHIELD OR INDICATOR
 FITTED TO P.I. CHANNEL ONLY



P.C.B. DPC, No M12890-2

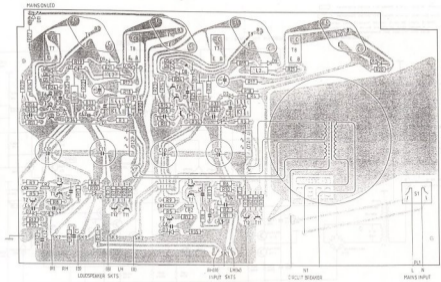
WAVE MEASUREMENTS
 ALL VOLTAGE MEASUREMENTS ARE TYPICAL AND WERE
 TAKEN WITH A BIASING SUPPLY OF 50V USING A
 THOMSON 1000 DIGITAL METER, WITH 50 INPUT SIGNAL
 RESISTORS USING THE PROBE W.R.T. THE I/O PINS
 RESISTORS USING THE PROBE W.R.T. P.O.B. GROUND

- MEASURED USING THE PROBE W.R.T. THE I/O PINS
- MEASURED USING THE PROBE W.R.T. P.O.B. GROUND



P.C.B. BRO. No. M12890-0

- VOLTAGE MEASUREMENTS**
- ALL VOLTAGE MEASUREMENTS ARE TIPICAL AND WERE TAKEN WITH A 50V RMS SUPPLY OF 50V 50/60 Hz
 - TABLE 100H DIGITAL METERS WITH NO INPUT SIGNAL
 - MEASURED USING 100 OHM PROBES R.I.A. TUBE 110 P.C.B.
 - MEASURED USING 100 OHM PROBES R.I.A.T. P.C.B. EARTH



Notes:
 1. Components are to be placed on the back of the board unless otherwise specified.
 2. Components are to be placed on the front of the board unless otherwise specified.
 3. Components are to be placed on the top of the board unless otherwise specified.
 4. Components are to be placed on the bottom of the board unless otherwise specified.