

# PARTS MANIFEST for ACOUSTIC, MODEL 450 - LEAD/BASS AMPLIFIER

Home Music Recording Studio - Rev 1.2 - Last Updated: Thursday, 19 January 2023

This parts manifest has been reproduced from scans of original documents. These contained some errors. While typos and some nomenclature have been corrected or adjusted, please bear in mind that this document was first created in the 1970s and some terminology may appear less than clear. It is highly recommended to proceed with caution when replacing parts, please refer and/or compare to original components wherever possible.

## Recommended Component or Part Replacements

1. All electrolytic capacitors will (*by C2023*) be in the realm of 50 years old, which may lead to unstable chemistry and/or leakage. Refer to prepared **Electrolytic Capacitor Replacement List** at end of document (Page 6 of 6).
2. The original ¼" jacks/sockets are exceptionally tight on modern ¼" (6mm) TS & TRS plugs. Might be worth replacing these just to save on aggravation and avoid breaking off jammed 6mm plugs (*based on experience*).
3. Between the outer faceplate of the Graphic EQ and the Sliding Potentiometers mounted to the Circuit Board, there **once was** a thin ( $\approx 4\text{mm} / \frac{1}{8}"$ ) sheet of foam plastic with slits, to keep dust out of the sliders. This rotted away years ago to a lumpy powder, *some of which may now be in the sliders*. This should be replaced, preferably with a more stable/durable material like **Felt** and the Sliding Potentiometers cleaned and/or replaced if contaminated, unable to be cleaned and excessively noisy.

## PARTS LIST - MODEL 450 - CHASSIS WIRING - SCHEMATIC 1447A

Sch. Reference	Description	Part Number
T 501	Transformer, Supply	560015
BR501	Bridge Rectifier	480019
C 501	Capacitor, .02uf U.L.	155001
<b>C 503</b>	<b>Capacitor, 7800uF, Electrolytic, 100V</b>	153013
L 501	Choke, 3.0 mH	180010
P 501	AC Line Cord	600054
F 501	Fuse, 7A Pigtail	510031
F 502	Fuse, 5A SB	510005
J 501	Jack, N/closed	210003
J 502	Jack, N/closed	210003
J 503	Jack, Footwitch	210027
J 504	Jack, Line Out	210002
J 505	Jack, Accessory In/Out	210039
J 506	AC Outlet (US / Standard)	210052
J 507	Jack, Speaker Out	210002
J 508	Jack, Speaker Out	210002
J 509	Jack, Booster Out	210002
S 501	Switch, BRT (Bright)	510017
S 502	Switch, Power On/Off	510016
S 503	Switch, Ground Reverse ( <i>Don't Use!</i> )	510017
S 504	Switch, Lead/Bass	510017
R501	Resistor, 4K7, 1/2W	476247
R502	Resistor, 4K7, 1/2W	476247
R503	Resistor, 680R, 1/2W	476168
R504	Resistor, 33K, 1/2W	476333

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PARTS LIST - MODEL 450 - GRAPHIC EQ ASSEMBLY 830025 - SCHEMATIC 14478

Sch. Reference	Description	Part Number
PCB 3	Printed Circuit Board	170044
Q 301	Transistor, NPN, 2N2484	480023
Q 302	Transistor, NPN, 2N2484	480023
Q 303	Transistor, NPN, 2N2484	480023
Q 304	Transistor, NPN, 2N4248	480032
L 301	Inductor, 1.5H	180002
L 302	Inductor, 1.5H	180002
L 303	Inductor, 750mH	180005
L 304	Inductor, 375mH	180004
L 305	Inductor, 375mH	180004
C 301	Capacitor, 0.1uf, Mylar, 100v	152015
C 302	Capacitor, 100pf, Ceramic, 1KV	151003
C 303	Capacitor, 3.3uf, Tantalum	154007
C 304	Capacitor, 0.82uf, Mylar, 250V	152030
C 305	Capacitor, 0.39uf, Mylar, 250V	152028
C 306	Capacitor, 0.10uf, Mylar, 250V	152026
C 307	Capacitor, 0.01uf, Mylar, 250V	152031
C 308	Capacitor, 100pf, Ceramic, 1KV	151003
C 309	Capacitor, 68pf, Ceramic, 1KV	151002
C 310	Capacitor, 470pf, Ceramic, 1KV	151006
C 311	Capacitor, 50uf, Electrolytic, 50V	153005
C 312	Capacitor, 0.01uf, Mylar, 100V	152031
R 301	Resistor, 220K, 1/2 watt	476422
R 302	Resistor, 470K, 1/2 watt	476447
R 303	Resistor, 10K, 1/2 watt	476310
R 304	Resistor, 5K6, 1/2 watt	476256
R 305	Slide potentiometer, 50K	475039
R 306	Slide potentiometer, 50K	475039
R 307	Slide potentiometer, 50K	475039
R 308	Slide potentiometer, 50K	475039
R 309	Slide potentiometer, 50K	475039
R 310	Resistor, 470R, 1/2 watt	476147
R 311	Resistor, 330R, 1/2 watt	476133
R 312	Resistor, 470R, 1/2 watt	476147
R 313	Resistor, 470R, 1/2 watt	476147
R 314	Resistor, 270R, 1/2 watt	476127
R 315	Resistor, 6K8, 1/2 watt	476268
R 316	Resistor, 18K, 1/2 watt	476318
R 317	Resistor, 5K6, 1/2 watt	476256
R 318	Resistor, 4K7, 1/2 watt	476247
R 319	Resistor, 47K, 1/2 watt	476347

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## PARTS LIST - MODEL 450 - POWER AMP CIRCUIT BOARD ASSEMBLY 830029 - SCHEMATIC 1447A

Sch. Reference	Description	Part Number
PCB 4	Printed Circuit Board	170051
Q 401	Transistor, PNP, 2N4248	480032
Q 402	Transistor, PNP, 2N4248	480032
Q 403	Transistor, NPN, MJE 341	480039
Q 404	Transistor, PNP, with Heatsink	480041
Q 405	Transistor, NPN, with Heatsink	480040
Q 406	Transistor, NPN, Driver, Negative	480037
Q 407	Transistor, NPN, Driver, Positive	480037
Q 408	Transistor, NPN,	480037
Q 409	Transistor, NPN,	480037
Q 410	Transistor, NPN,	480037
Q 411	Transistor, NPN,	480037
Q 412	Transistor, PNP, 2N4248	480032
Q 413	Transistor, NPN, MPS A06	480038
Q 414	Transistor, NPN, Regulator, 40409	480006
Q 415	Transistor, NPN, Bias, MPS A06	480038
CR401 - 407	Diode, 1N914	480005
CR408 - 409	Diode, 1N4003, (170045 bd Only)	480028
CR410 - 411	Diode, 1N4003	480028
CR412	Diode, Zener, 1N4754, HW39B	480022
C 401 - 402	Capacitor, 0.47uf, Mylar, 100V	152029
C 403	Capacitor, 100uf, Electrolytic, 50V	153006
C 404	Capacitor, 10uf, Electrolytic, 50V	153002
C 405	Capacitor, 22uf, Electrolytic, 50V	153004
C 406 - 407	Capacitor, 470pf, Ceramic, 500V	151006
C 408	Capacitor, 0.1uf, Mylar, 250V	152026
C 409	Capacitor, 2000uf, Electrolytic, 80V	153023
C 410 - 411	Capacitor, 330pf, Ceramic, 500V	151005
C 412	Capacitor, 0.01uf, Mylar, 250V	152031
C 413	Capacitor, 4.7uf, Electrolytic, 50V	153015
C 414 - 415	Capacitor, 220uf, Electrolytic, 50V	153008
C 416	Capacitor, 470pf, Ceramic, 500V	151006
C 417	Capacitor, 330pf, Ceramic, 500V	151005
R 401	Resistor, 4K7, 1/2 watt	476247
R 402 - 403	Resistor, 100K, 1/2 watt	476410
R 404	Resistor, 2K2, 1/2 watt	476222
R 405	Resistor, 47K, 1/2 watt	476347
R 406	Trimpot, 10K, (170045 board only)	475047
R 407	Resistor, 47K, 1/2 watt	476347
R 408	Resistor, 18K, 1/2 watt	476318
R 409	Resistor, 10K, 1/2 watt	476310
R 410	Resistor, 2K2, 1/2 watt	476222
R 411	Resistor, 1K, 1/2 watt	476210
R 412	Resistor, 100K, 1/2 watt	476410
R 413	Resistor, 150R, 1/2 watt	476115
R 414	Resistor, 100K, 1/2 watt	476410
R 415	Resistor, 33R, 1/2 watt	476333
R 416	Trimpot, 100R, (170045 board only)	475045
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Sch. Reference	Description	Part Number
R 417	Resistor, 1K5, 1/2 watt	476215
R 418	Resistor, 3K3, 1/2 watt	476233
R 419 - 422	Resistor, 100R, 1/2 watt	476110
R 423	Resistor, 1R, 1/2 watt	478001
R 424 - 425	Resistor, 1R, 3 watt	464910
R 426 - 429	Resistor, 0.24R, 7 watt	461005
R 430 - 431	Resistor, 0.1R, 7 watt	461004
R 432	Resistor, 47R, 5 watt	463047
R 433	Resistor, 0.03R, 5 watt	463730
R 434 - 435	Resistor, 1K, 1/2 watt	476210
R 436 - 437	Resistor, 2K2, 1/2 watt	476222
R 438	Resistor, 560R, 5 watt	463156
R 439	Resistor, 4K7, 2 watt	472247
R 440	Resistor, 150R, 1/2 watt	476115
R 441 - 442	Resistor, 47K, 1/2 watt	476347
R 443 - 444	Resistor, 3K9, 1/2 watt	476239
R 445	Resistor, 680R, 1/2 watt	476168

## PARTS LIST - MODEL 450 - PREAMP ASSEMBLY 830023 - SCHEMATIC 1447A

Sch. Reference	Description	Part Number
PCB 1	Printed Circuit Board	170043
Q 101	Transistor, NPN, 2N2484	480023
Q 102	Transistor, PNP, 2N4248	480032
Q 103	Transistor, NPN, 2N2484	480023
Q 104	FET, N-Channel, 2N5457	480024
Q 105	FET, P-Channel, 2N4360	480033
Q 106	Transistor, NPN, 2N2484	480023
Q 107	Transistor, PNP, 2N4248	480032
Q 108	Transistor, NPN, 2N2484	480023
Q 109	Transistor, PNP, 2N4248	480032
Q 110	FET, N-Channel, 2N5457	480024
Q 111	FET, P-Channel, 2N4360	480033
CR 101 - 103	Diode, 1N914	480005
L 101	Inductor, 6H	180007
C 101	Capacitor, 0.47uf, Mylar, 100V	152029
C 102	Capacitor, 68pf, Ceramic, 1KV	151002
C 103	Capacitor, 0.001uf, Ceramic, 500V	151008
C 104	Capacitor, 0.47uf, Mylar, 100V	152029
<b>C 105 - 106</b>	<b>Capacitor, 10uf, Electrolytic, 50V</b>	153002
C 107	Capacitor, 0.47uf, Mylar, 100V	152029
C 108	Capacitor, 0.1uf, Mylar, 100V	152015
C 109	Capacitor, 22pf, Ceramic, 1KV	151001
C 110	Capacitor, 0.47uf, Mylar, 100V	152029
C 111	Capacitor, 0.047uf, Mylar, 100V	152013
C 112	Capacitor, 0.47uf, Mylar, 100V	152029
<b>C 113</b>	<b>Capacitor, 1uf, Electrolytic, 50V</b>	153001
C 114	Capacitor, 0.47uf, Mylar, 100V	152029
C 115	Capacitor, 0.005uf, Ceramic, 500V	151012
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Sch. Reference	Description	Part Number
C 116	Capacitor, 1uf, Electrolytic, 50V	153001
C 117	Capacitor, 100pf, Ceramic, 1KV	151003
C 118	Capacitor, 4.7uf, Electrolytic, 50V	153015
C 119	Capacitor, 0.022uf, Mylar, 100V	152009
C 120	Capacitor, 0.012uf, Mylar, 100V	152007
C 121	Capacitor, 0.01uf, Mylar, 100V	152006
C 122	Capacitor, 4.7uf, Mylar, 100V	152029
C 123	Capacitor, 4.7uf, Electrolytic, 50V	153015
C 124 - 125	Capacitor, 1uf, Electrolytic, 50V	153001
C 126	Capacitor, 0.22uf, Mylar, 75V	152019
C 127	Capacitor, 1uf, Tantalum, 35V	154004
R 101	Resistor, 47K, 1/2 watt	476347
R 102	Resistor, 22K, 1/2 watt	476322
R 103	Resistor, 9.1M, 1/2 watt	476591
R 104	Resistor, 6K8, 1/2 watt	476268
R 105	Resistor, 470K, 1/2 watt	476447
R 106	Resistor, 10K, 1/2 watt	476310
R 107	Resistor, 560R, 1/2 watt	476156
R 108	Resistor, 10K, 1/2 watt	476310
R 109	Resistor, 330R, 1/2 watt	476133
R 110 - 111	Resistor, 15K, 1/2 watt	476315
R 112	Potentiometer, 100K, Dual	475044
R 113	Resistor, 2K2, 1/2 watt	476222
R 114	Resistor, 10K, 1/2 watt	476310
R 115	Resistor, 560K, 1/2 watt	476456
R 116	Resistor, 82K, 1/2 watt	476382
R 117	Resistor, 47R, 1/2 watt	476047
R 118	Resistor, 100K, 1/2 watt	476410
R 119	Resistor, 22K, 1/2 watt	476322
R 120	Resistor, 33K, 1/2 watt	476333
R 121	Resistor, 4K7, 1/2 watt	476247
R 122	Resistor, 47K, 1/2 watt	476347
R 123	Resistor, 2K2, 1/2 watt	476222
R 124 - 125	Resistor, 1M, 1/2 watt	476510
R 126	Potentiometer, 100K, Log	475040
R 127	Resistor, 1M, 1/2 watt	476510
R 128	Resistor, 10K, 1/2 watt	476310
R 129	Resistor, 220K, 1/2 watt	476422
R 130	Resistor, 56K, 1/2 watt	476356
R 131	Resistor, 68K, 1/2 watt	476368
R 132	Resistor, 2K2, 1/2 watt	476222
R 133	Resistor, 1K2, 1/2 watt	476212
R 134	Resistor, 3K3, 1/2 watt	476233
R 135	Potentiometer, 50K, w/Step	475043
R 136	Resistor, 3K3, 1/2 watt	476233
R 137	Resistor, 5K6, 1/2 watt	476256
R 138	Potentiometer, 50K, w/Step	475043
R 139	Resistor, 5K6, 1/2 watt	476256
R 140	Resistor, 3K3, 1/2 watt	476233
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Sch. Reference	Description	Part Number
R 141	Potentiometer, 50K, w/Step	475043
R 142	Resistor, 3K3, 1/2 watt	476233
R 143	Resistor, 22K, 1/2 watt	476322
R 144	Resistor, 100K, 1/2 watt	476410
R 145	Resistor, 2K2, 1/2 watt	476222
R 146	Resistor, 470K, 1/2 watt	476447
R 147	Resistor, 47K, 1/2 watt	476347
R 148	Resistor, 4K7, 1/2 watt	476247
R 149	Resistor, 6K8, 1/2 watt	476268
R 150	Resistor, 180R, 1/2 watt	476118
R 151	Resistor, 2K2, 1/2 watt	476222
R 152	Resistor, 1K, 1/2 watt	476210
R 153	Resistor, 100K, 1/2 watt	476410
R 154	Resistor, 220K, 1/2 watt	476422
R 155	Potentiometer, 500K, Log	475041
R 156	Resistor, 47K, 1/2 watt	476347

## ACOUSTIC MODEL 450 – ELECTROLYTIC CAPACITOR & TS/TRS JACK REPLACEMENT LIST - SCHEMATIC 1447A

Sch. Reference	QTY	Description	Original Part Number
C 113, C 116, C 124 - 125	4	Capacitor, 1uf, Electrolytic, 50V	153001
C 118, C 123, C 413	3	Capacitor, 4.7uf, Electrolytic, 50V	153015
C 105 - 106, C 404	3	Capacitor, 10uf, Electrolytic, 50V	153002
C 405	1	Capacitor, 22uf, Electrolytic, 50V	153004
C 311	1	Capacitor, 50uf, Electrolytic, 50V (EQ Board, could use 47uf)	153005
C 403	1	Capacitor, 100uf, Electrolytic, 50V	153006
C 414 - 415	2	Capacitor, 220uf, Electrolytic, 50V	153008
C 409	1	Capacitor, 2000uf, Electrolytic, 80V	153023
C 503	1	Capacitor, 7800uF, Electrolytic, 100V	153013
J 501, J 502	2	Jack, Input 1 Low, Input 2 High, Normally Closed (Mono / TS)	210003
J 503	1	Jack, Footwitch (Stereo / TRS <i>unswitched!</i> )	210027
J 505	1	Jack, Accessory In/Out, Normally Closed T to R (Stereo / TRS)	210039
J 504, J 507, J508, J 509	4	Jack, Line Out, Speaker Out x 2, Booster Out (Mono / TS)	210002

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