

Paradise Phono Preamp - R3

Bill of material, R3, 25.7.2012

Value	Quant	Components	Comment
0.1u	1	C93	Capacitor
10uF 16V	3	C101, C201, C205	Polarized Capacitor (Radial)
10uF 25V	1	C105	Polarized Capacitor (Radial)
10	2	R104, R204	Power resistor 3W
100uF 16V	4	C100, C103, C200, C203	Polarized Capacitor (Radial)
10k	1	R1b	Resistor Metal Film RM10
100k	1	R1	Trimpot 10 turns 5x2.5 adjust from top
100	2	R110, R210	Resistor Metal Film RM10
10k	4	R19, R20, R30, R36	Resistor Metal Film RM10
120	8	R3, R4, R7, R8, R14, R37, R38, R39	Resistor Metal Film RM10
120	2	R27, R29	Power resistor 3W
147k	2	R9a, R9b	RIAA network resistor, e.g. Dale RN65
18k2	2	R18a, R18b	RIAA network resistor, e.g. Dale RN65
1k	2	R10, R11	Resistor Metal Film RM10
1k2	2	R102, R202	Resistor Metal Film RM10
1k8	4	R101, R101b, R201, R201b	Resistor Metal Film RM10
1M	1	R48	Resistor Metal Film RM10
1N4004	2	D101, D201	General purpose Diode
1uF	9	C5, C6, C7, C8, C9, C10, C11, C104, C204	Foil cap 1uF / 40V+, all optional except C5, C104, C204
220	2	R13, R15	Resistor Metal Film RM10
2k	2	R106, R206	Trimpot 10 turns 5x2.5 adjust from top
33	8	R2, R21, R22, R23, R24, R25, R26, R28	Resistor Metal Film RM10
330	6	R100, R103, R105, R200, R203, R205	Resistor Metal Film RM10
3k3	2	R108, R208	Resistor Metal Film RM10
4.7	1	R12	Resistor Metal Film RM10
150k	2	R43a, R43b	Resistor Metal Film RM10
47	2	R107, R207	Resistor Metal Film RM10
4700uF 16V	4	C3a, C3b, C4a, C4b	Panasonic SMD electrolytic cap, d=16 RM=7.5

150k	2	R43a, R43b	Resistor Metal Film RM10
680	2	R109, R209	Resistor Metal Film RM10
6800uF 6.3V	4	C6a, C6b, C7a, C7b	Panasonic SMD electrolytic cap, d=16 RM=7.5
82	1	R5	Resistor Metal Film RM10
BC327	18	Q2, Q3, Q10, Q11, Q12, Q15, Q16, Q17, Q18, Q22, Q25, Q26, Q29, Q49, Q50, Q202, Q204, Q205	PNP Bipolar Transistor, match for HFE
BC337	18	Q1, Q4, Q5, Q6, Q7, Q8, Q9, Q13, Q14, Q24, Q30, Q31, Q32, Q51, Q52, Q102, Q104, Q105	NPN Bipolar Transistor, match for HFE
1uF CER	9	C901, C901_1, C901_2, C902, C902_1, C902_2, C903, C903_1, C903_2	SMD cap, footprint 1206, solder on bottom side of the PCB. These caps are optional.
SK482	1	HS1	heatsink Fischer SK482SA / 75mm
J310	5	Q90, Q91, Q92, Q107, Q207	n-channel JFET, J109 will work as well
K170	3	Q97, Q98, Q99	n-channel JFET; J107 will work but has different pinout
LED	24	L101, L102, L103, L104, L105, L106, L107, L108, L109, L110, L111, L112, L201, L202, L203, L204, L205, L206, L207, L208, L209, L210, L211, L212	LED 3mm
Multicap	8	C1a, C1b, C1c, C1d, C1e, C1f, C2a, C2b	33.3nF and 11nF foil cap for RIAA network
220	1	R18c	value tbd, estimated to be 220 Ohm. Put 0 Ohm if NEUMANN not req~d.
NMOS	1	Q206	n-channel Power MOSFET, e.g. FQPF20N06 (Fairchild), IRF610 (IR)
NPN	2	Q201, Q203	NPN Power Amplifier, e.g. D44H11, FJP(F)5200
OPA134	1	U1	Precision Operational Amplifier
PMOS	1	Q106	p-channel Power MOSFET, e.g. FQPF11P06 (Fairchild), IRF9610 (IR)
PNP	2	Q101, Q103	PNP Power Amplifier, e.g. D45H11, FJP(F)1943
X	2	R104b, R204b	Resistor Metal Film RM10
ZD 12V	2	D1, D2	Zener Diode DO204