

GYRAF AUDIO GYRATEC IX MIC PREAMP:

- COMPONENTS LIST -

RESISTORS - 5% 1/4W U.O.N.

R1,101	6K8	1%	PHANTOM FEED
R2,102	6K8	1%	PHANTOM FEED
R3,103	4K7		LINE ATT.
R4,104	4K7		LINE ATT.
R5,105	470R		LINE ATT.
R6,106	1M		Rin STAGE1
R7,107	47K		G LIFT V1A
R8,108	2K2		G LIFT V1A
R9,109	47K		Ra, V1A *note:updated!
R10,110	47K		FEEDBACK
R11,111	1K		MAXGAIN
R12,112	1M		DC DISCHARGE
R13,113	680R		SET GAIN
R14,114	1K2		SET GAIN
R15,115	2K2		SET GAIN
R16,116	4K7		SET GAIN
R17,117	12K		SET GAIN
R18,118	100K		SET GAIN
R19,119	82K		SET ATT.
R20,120	22K		SET ATT.
R21,121	10K		SET ATT.
R22,122	5K6		SET ATT.
R23,123	1M		Rin STAGE2
R24,124	680R		Rk STAGE2
R25,125	47K		Ra STAGE2
R26,126	47K		ATT.SERIES R
R27,127	1M		DC DISCHARGE
R28,128	1M		Rin SRPP
R29,129	470R		Rk SRPP (SET Ic)
R30,130	1K5		Rak SRPP
R31,131	1K	2W	PSU STAB
R32,132	10K		OUTPUT LOAD
R33	470R	2W	SLOW START
R34	100K	2W	SET V HT
R35	470R		SET V HT
R36	47R		SET V HT
R37	470R	2W	PSU FILTER
R38	(was 100R)		N/A in this version
R39	100R		T1 PROTECT
R40	2K2		ZENER LOAD
R41	22K		SET PR1 RANGE
R42	10K		P48 LOAD
R43	N/A		
R44,144	10K		OUTPUT LOAD
R45,145	1K		GATE STOPPER, V2A

----- RESISTORS, SORTED BY TYPE -----

RESISTORS - 5% 1/4W METAL FILM:

47R X 1  
100R X 1  
470R X 5  
680R X 4  
1K X 4  
1K2 X 2  
1K5 X 2  
2K2 X 5  
4K7 X 6

5K6 X 2  
10K X 7  
12K X 2  
22K X 3  
47K X 8  
82K X 2  
100K X 2  
220K X 2  
1M X 10

PRECISION RESISTORS:

6K8 1% 1/4W X 4  
(FOR PHANTOM FEED)

POWER RESISTORS:

470R 2W X 2  
1K 2W X2  
100K 2W X 1

(CHECK THIS LIST - NOT SURE ALL IS COUNTED..)  
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POTS:

P1,101 47KB (LOG) POT, 6MM "OUTPUT LEVEL"  
PR1 10K TRIMMER 5x10MM OR 5x2MM TRIM 48V

CAPACITORS:





C1	N/A	
C2,102	220nF 250V POLYESTER	INPUT DC BLOCK
C3,103	470nF 250V POLYESTER	INTERSTAGE V1A-V1B
C4,104	1u5 250V POLYESTER	OUTPUT DC DECOUPLING V1B
C5,105	470nF 250V POLYESTER	STAGE1 OUTPUT
C6,106	68p 50V CERAMIC	BW LIMITING
C7,107	10u 63V POLYESTER	GAIN DC DECOUPLING
C8,108	10nF POLYESTER	LOWCUT FREQ (HIGH)
C9,109	22nF POLYESTER	LOWCUT FREQ (LOW)
C10,110	220nF 250V POLYESTER	SRPP INPUT DC BLOCK
C11,111	470u16V RAD.EL.LYT	SRPP CATHODE SHUNT
C12,112	100n 63V POLYESTER	SRPP CATHODE SHUNT
C13,113	4U7 250V POLYESTER	SRPP OUTPUT CAP
C14	100u 350V RAD.EL.LYT	HT RAW STAB (CAN BE LARGER..)
C15	100u 350V RAD.EL.LYT	HT OUT STAB (CAN BE LARGER..)
C16	1000u 25V RAD.EL.LYT	12V HEATER RAW STAB
C17	1000u 25V RAD.EL.LYT	12V HEATER RAW STAB
C18	1000u 25V RAD.EL.LYT	12V HEATER RAW STAB
C19	10u 35V RAD.EL.LYT	IC2 STAB
C20	100u 63V RAD.EL.LYT	P48 RAW STAB
C21	100u 63V RAD.EL.LYT	V ZD STAB
C22	100u 63V RAD.EL.LYT	T1 Vb STAB
C23	10u 63V RAD.EL.LYT	P48 STAB
C24	10u 35V RAD.EL.LYT	12V HEATER STAB
C25,125	10u 250V RAD.EL.LYT	HT NOISE FILTER
C26	47u 63V RAD.EL.LYT	TRIPLER P48
C27	47u 63V RAD.EL.LYT	TRIPLER P48
C28	47u 63V RAD.EL.LYT	TRIPLER P48
C29	47u 63V RAD.EL.LYT	TRIPLER P48

TUBES:

V1 ECC82 - 5814 - 12AU7A INPUT STAGE  
V2 ECC82 - 5814 - 12AU7A OUTPUT STAGE

SOCKETS: 4x B9A VALVE SOCKETS FOR PCB MOUNTING

SEMICONDUCTORS:

D1	N/A	
D2	1N4007	PROTECT IC1
D3	ZD39  W	PROTECT IC1
D4	ZD39  W	PROTECT IC1
D5	ZD39  W	PROTECT IC1
D6	ZD56  W	REF. P48
D7,107	1N4148	RELAY SUPPRESS
D8	1N4007	TRIPLER P48
D9	1N4007	TRIPLER P48
D10	1N4007	TRIPLER P48
D11	1N4007	TRIPLER P48
D12	1N4007	TRIPLER P48
D13	1N4007	RECT. 12V HEATER
D14	1N4007	RECT. 12V HEATER
D15	1N4007	RECT. 12V HEATER
D16	1N4007	RECT. 12V HEATER
D17	1N4007	RECT. 245V HT
D18	1N4007	RECT. 245V HT
D19	1N4007	RECT. 245V HT
D20	1N4007	RECT. 245V HT

IC1	TL783	REG. 245V HT
IC2	78S12	REG. 12V HEATER
T1	TIP121	REG. 48V PHANTOM

MAGNETICA:

TR1	OEP A262-A3E	INPUT TRANSFORMER
(OR)	LL1528	INPUT TRANSFORMER
TR2	OEP A262-A2E	OUTPUT TRANSFORMER
(OR)	LL5402	OUTPUT TRANSFORMER

IF USING OEP TRANSFORMERS, USE THE SCREENING CANS!!

POWER TRANSFORMERS, for 220V-Countries:

First:	220V:15+15V /30VA TOROID	PSU 220V mains to 15VAC
Second:	220V:12+12V /30VA TOROID	PSU 15VAC to 220VAC *note:updated!

OR - if you're in a 110V mains area:


First:	110+110:15+15V/ 30VA TOROID	PSU 220V mains to 15VAC
First:	110+110:12+12V/ 30VA TOROID	PSU 15VAC to 220VAC *note:updated!

SWITCHES:

SW1,101	3-POS ROTARY SWITCH	"INPUT SELECT" - Preferably MBB
SW2,102	12-POS ROTARY SWITCH, SET TO 11	"GAIN" - Preferably MBB
SW3,103	3-POS ROTARY SWITCH	"LOW CUT" - Preferably MBB
SW4,104	3-POS ROTARY SWITCH, SET TO 2	"PHASE" - Preferably BBM
SW5	MAINS ROTARY SWITCH	"POWER" - Like RS Components #316-800

RY1,101	12V 2xCO RELAY	"LINE SELECT" Like "Omron G5V-2 12VDC"
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MISC:

	21x30cm Pre-sensitized PCB - main board.
1	10x16cm Pre-sensitized PCB - control boards.

J1 6.3MM SWITCHED PANEL JACK  
LA1 12V 50mA LIGHT - "POWER ON" INDICATION  
F1 1AT FUSE  
IEC POWER INLET, FUSED  
2x XLR, 3PIN, CHASSIS, FEMALE - FOR INPUT  
2x XLR, 3PIN, CHASSIS, MALE FOR OUTPUT  
4x LARGE KNOBS, 6mm OR 1/4"  
6x SMALL KNOBS, 6mm OR 1/4"  
2x TO-220 ISOLATION SETS FOR PSU REGULATORS.  
5x M3x10mm THREADED SPACERS FOR MOUNTING THE PCB.  
HARDWARE FOR MOUNTING THE TOROIDS.  
ONE NICE FRONT PANEL LAMP HOLDER, 12V/50Ma.  
SOME WIRE FOR MOUNTING.  
A 19" 2u MOUNTING CASE.

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