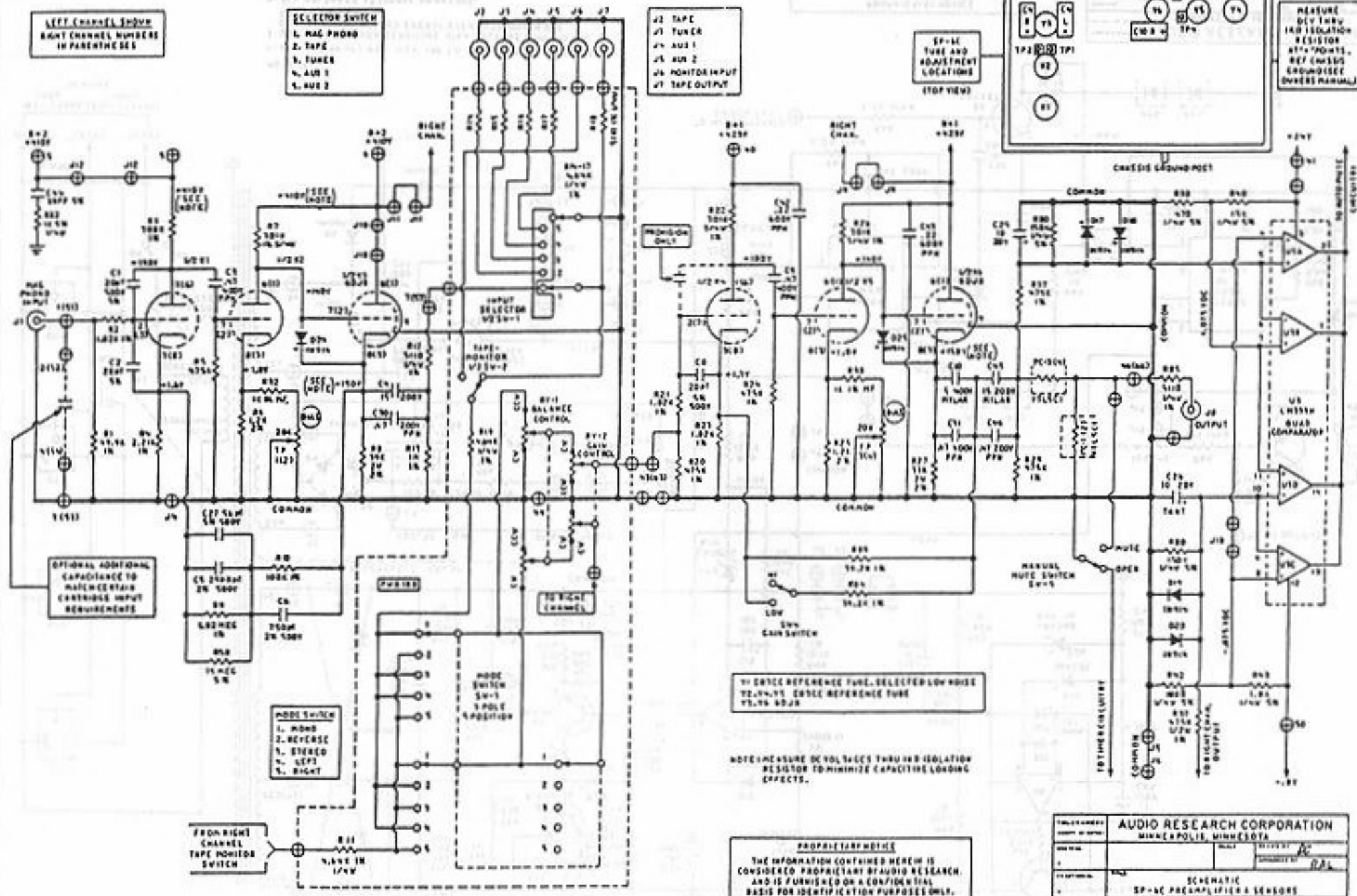


# Audio Research SP-6C (1)

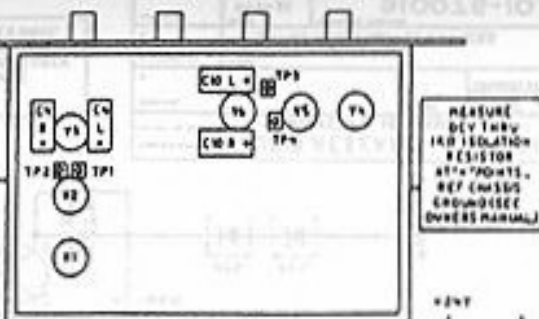


LEFT CHANNEL SHOWN  
RIGHT CHANNEL NUMBERS  
IN PARENTHESES

**SELECTOR SWITCH**  
1. MAG PHONO  
2. TAPE  
3. TUNER  
4. AUX 1  
5. AUX 2

J2 TAPE  
J1 TUNER  
J4 AUX 1  
J5 AUX 2  
J6 MONITOR INPUT  
J7 TAPE OUTPUT

SP-6C  
TUBE AND  
ADJUSTMENT  
LOCATIONS  
(TOP VIEW)



MEASURE DC VOLTAGE  
THRU ISOLATION  
RESISTOR  
AT \* POINTS.  
REF. CHASSIS  
GROUND (SEE  
OWNER MANUAL)

OPTIONAL ADDITIONAL  
CAPACITANCE TO  
MAINTAIN STAIN  
CONTROLS INPUT  
REQUIREMENTS

**MODE SWITCH**  
1. MONO  
2. REVERSE  
3. STEREO  
4. LEFT  
5. RIGHT

FROM RIGHT  
CHANNEL  
TAPE MONITOR  
SWITCH

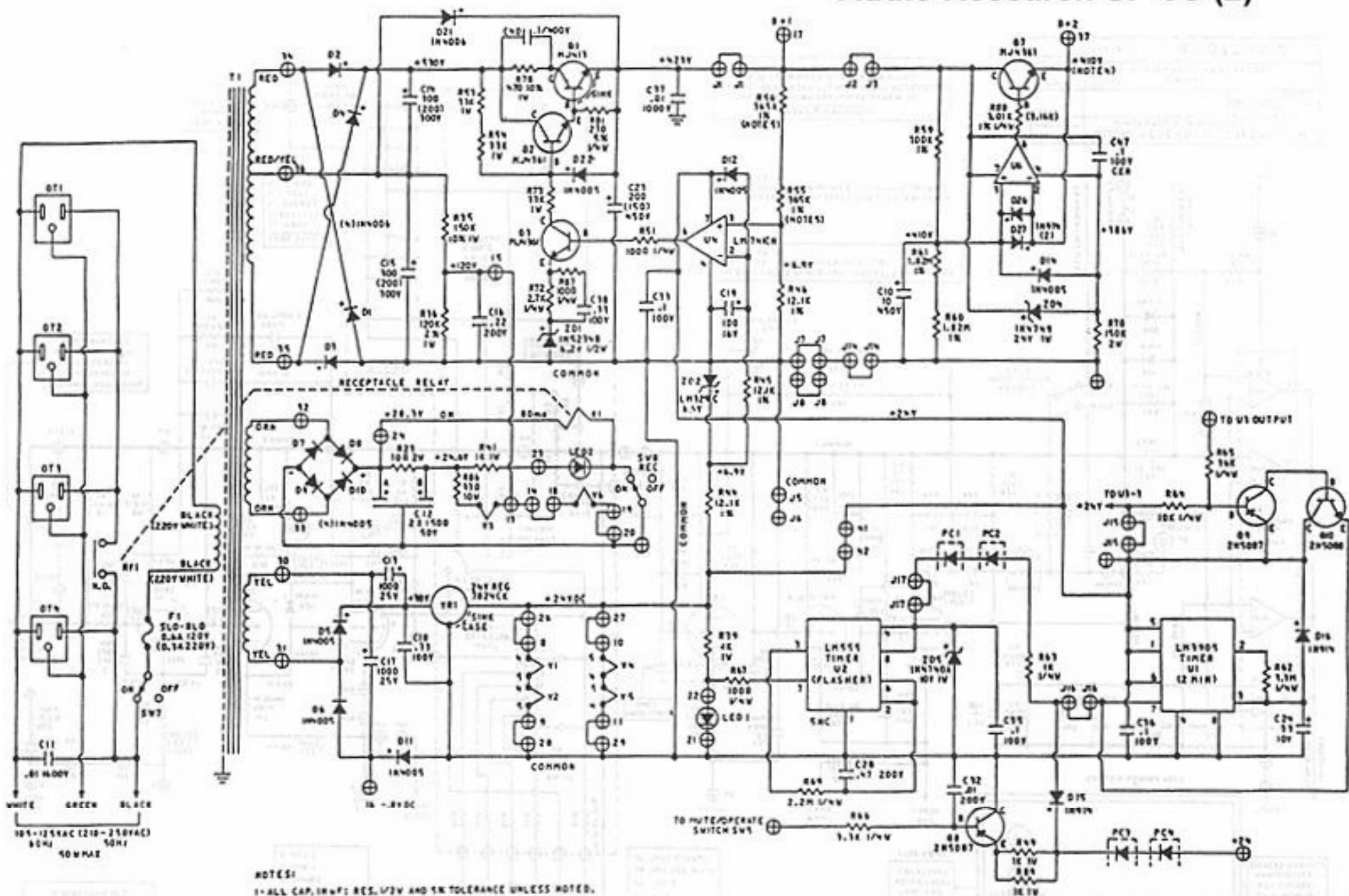
T1 6X45 REFERENCE TUBE, SELECTED LOW NOISE  
T2, T3, T5 6X55 600K REFERENCE TUBE  
T4, T6, T8, T9

NOTE: MEASURE DC VOLTAGES THRU ISOLATION  
RESISTOR TO MINIMIZE CAPACITIVE LOADING  
EFFECTS.

**PROPRIETARY NOTICE**  
THE INFORMATION CONTAINED HEREIN IS  
CONSIDERED PROPRIETARY TO AUDIO RESEARCH,  
AND IS FURNISHED ON A CONFIDENTIAL  
BASIS FOR IDENTIFICATION PURPOSES ONLY.

AUDIO RESEARCH CORPORATION MINNEAPOLIS, MINNESOTA	
DATE: 7-1-61	REVISED BY: JCL
SCHEMATIC SP-6C PREAMPLIFIER & SENSORS	
910077-10 A	

# Audio Research SP-6C (2)



- NOTES:
- 1- ALL CAP, 1W/1/2W RES, 1/2W AND 5% TOLERANCE UNLESS NOTED.
  - 2- USE CAUTION WHEN SERVICING HIGH VOLTAGE COMPONENTS. CONTACT WITH STORED ENERGY EVEN WITH POWER OFF COULD BE LETHAL.
  - 3- ALL VOLTAGES AT 120VAC 60/50 Hz LINE.
  - 4- MEASURE DC VOLTAGES THRU 1KΩ ISOLATION RESISTOR TO MINIMIZE CAPACITIVE LOADING EFFECTS.
  - 5- R75 OR R76 MAY BE 2W FOR PROPER 8" WITH SOME ZOD.

**PROPRIETARY NOTICE**  
 THE INFORMATION CONTAINED HEREIN IS CONSIDERED PROPRIETARY BY AUDIO RESEARCH AND IS FURNISHED ON A CONFIDENTIAL BASIS FOR IDENTIFICATION PURPOSES ONLY.

AUDIO RESEARCH CORPORATION MINNEAPOLIS, MINNESOTA			
DATE	REVISED BY	APPROVED BY	
	JC	DL	
TITLE SCHEMATIC SP-AC POWER SUPPLY & TIMERS			
DATE	REVISION NUMBER		
7-1-81		910076-10 A	

## SP-6C PARTS LIST

## SP-6C PARTS LIST

COMPONENT	QUAN.	DESCRIPTION	VALUE	RATING	TOL.	ARC PART NO.	COMPONENT	QUAN.	DESCRIPTION	VALUE	RATING	TOL.	ARC PART NO.
Y1,2,4,5	4	ECC83/12AX7A				32000700	R63,82	2	Carbon	1K	1/4W	5%	41100302
Y3,6	2	6DJ8				32001100	R64	1	Carbon	10K	1/4W	5%	41100402
D1-4,21	5	1N4006		800V		30502200	R65	1	Carbon	36K	1/4W	5%	41360402
D5-12,14,22	10	1N4005		600V		30500400	R66	1	Carbon	3.3K	1/4W	5%	41330302
D15-20,24,25	12	1N914		100V		30500900	R69	1	Carbon	2.2Meg	1/4W	5%	41220602
ZD1	1	1N5234B Zener		6.2V	1/2W	30502100	R70	1	Carbon	150K	2W	5%	41150505
ZD2	1	LM329CZ Ref.		6.9V		31000700	R72	1	Carbon	2.7K	1/4W	5%	41270302
ZD4	1	1N4749 Zener		24V	1W	30502500	R78	1	Carbon	470Ω	1W	1%	40470204
ZD5	1	1N4740A Zener		10V	1W	30500300	R80	2	Carbon	150K	1/4W	5%	41150502
LED1,2	2	LED Green				34300100	R81	1	Carbon	270Ω	1/4W	5%	41270202
Q1	1	MJ413 Transistor				30003601	R83,84	4	Metal Film	39.2K	1/2W	1%	42392403
Q2,7	2	MJ4361 Transistor				30004400	R86	1	Wirewound	33Ω	10W	5%	43330102
Q3	1	MJ4361 Transistor				30004401	R88	1	Metal Film	3.01K	1/4W	1%	42301302
Q8,9	2	2N5087 Transistor				30003000	C1,2,8	6	Dipped Mica	20pF	500V	5%	57200100
Q10	1	2N5088 Transistor				30003100	C3,9,30,31	8	Polypropylene	.47μF	400V	20%	53470506
RV1	1	Balance Control	100K	Lin Taper	10%	45100525	C4,45	4	Polyester	15uF	200V	20%	53150700
RV2	1	Gain Control	100K	Log Taper	10%	45100523	C5	2	Dipped Mica	2500pF	500V	2%	57250301
VR1	1	MC7824CK Voltage Reg.	24V	1A		31001200	C6	2	Dipped Mica	750pF	500V	2%	57750201
U1	1	LM3905H IC Timer				31000900	C10	2	Polyester	5uF	400V	10%	53500602
U2	1	LM555CN IC Timer				31000800	C11	1	Polyester	.01uF	1600V	10%	53100403
U3	1	LM339N IC QuadComparator				31001090	C12	1	Electrolytic	2x1500uF	50V		50150900
U4,6	2	LM741CN IC Op Amp				31000400	C13,17	2	Electrolytic	1000uF	(25V)40V		50100904
PC1-4	4	VTLS01 Photo Coupler		100V		34400100	C14,15	2	Electrolytic	300uF	300V		50300800
TP1-4	4	Trim Pot.	20K	Lin Taper	1%	45200412	C16	1	Polyester	.22uF	200V	10%	53220501
R1	2	Metal Film	49.9K	1/2W	1%	42499403	C18,38	2	Ceramic Monolythic	.33uF	100V	20%	52330500
R2,21,23	4	Metal Film	1.82K	1/2W	1%	42182303	C19	1	Electrolytic	100uF	16V		50100801
R3	2	Wirewound	300K	2/10W	1%	43300501	C23	1	Electrolytic	(150)200uF	450V		50200801
R4	2	Metal Film	2.21K	1/2W	1%	42221303	C24	1	Dipped Tantalum	33uF	10V	10%	51330700
R5,20,24,29,37	10	Metal Film	475K	1/2W	1%	42475503	C25,26	2	Dipped Tantalum	10uF	20V	10%	51100700
R6,25	4	Metal Film	1.2K	1/2W	2%	46120301	C27	2	Dipped Mica	56pF	500V	5%	57560100
R7,22,26	6	Metal Film	301K	3/4W	1%	42301504	C28	1	Polyester	.47uF	200V	10%	53470504
R8	2	Metal Film	39K	2W	2%	46390401	C29	1	Electrolytic	10uF	450V		50100702
R9,60,61	4	Metal Film	1.82Meg	1/2W	1%	42182603	C32	1	Ceramic Monolythic	.01uF	200V	10%	52100400
R10,59	3	Metal Film	100K	1/2W	1%	42100503	C33,35,36,47	4	Ceramic Monolythic	.1uF	100V	10%	52100500
R11,14-17,19	10	Metal Film	4.64K	1/4W	1%	42464302	C37	1	Ceramic Disc	.01uF	1000V	GMV	52100401
R12,18,85	6	Metal Film	511Ω	1/4W	1%	42511202	C40	1	Polyester	.1uF	400V	10%	53100502
R13	2	Metal Film	1.0Meg	1/2W	1%	42100603	C42,43	2	Polypropylene	.22uF	600V	10%	53220505
R27	2	Metal Film	33K	2W	2%	46330401	C44	1	Dipped Mica	39pF	500V	5%	57390100
R30,32	4	Metal Film	1K	1/2W	1%	42100303	C46	2	Polypropylene	.47uF	200V	20%	53470507
R33	1	Carbon	10Ω	2W	5%	41100105	F1	1	Slo-Blo 120V	0.6A	250V		34500220
R35	1	Carbon	150K	1W	10%	40150504			220V	0.3A	250V		34500120
R36	1	Metal Film	120K	1W	2%	46120501	T1	1	Transformer		120V		60003402
R38	1	Carbon	47Ω	1/4W	5%	41470402			Transformer		220V		60003406
R39,41,49,89	4	Carbon	1K	1W	5%	41100304	OT1-4	4	AC Receptacle				23200500
R40	1	Carbon	15K	1/4W	5%	41150402	SW1	1	Input Selector Switch		2Pole5Pos		24001000
R42	1	Carbon	180Ω	1/4W	5%	41180202	SW2	1	Tape Monitor Switch		DPDT Gold		24100400
R43	1	Carbon	1.8K	1/4W	5%	41180302	SW3	1	Mode Switch		3Pole5Pos		24100700
R44-46	3	Metal Film	12.1K	1/2W	1%	42121403	SW4	1	Gain Switch		DPDT Slide		24100100
R50	2	Carbon	15Meg	1/2W	5%	41150703	SW5	1	Mute-Operate Switch		DPDT Gold		24100400
R51,67,87	3	Carbon	100Ω	1/4W	5%	41100202	SW7,8	2	On-Off Switch		DPDT Silver		24000700
R53,54,73	3	Carbon	33K	1W	5%	41330404	K1	1	Relay 24V		SPST N.O.		64100300
R55,56	2	Metal Film	365K	1/2W	1%	42365503	J1-16	16	Phono Jack				23201000
R62	1	Carbon	3.3Meg	1/4W	5%	41330602							