

30960 Electronics Replacement Components & Hardware

Power Supply Board

Ampex		Replacement				
Part No.	Value	Ampex Description	Part Number	Price	Comments	Source
C16 A	15 uF	350 vdc electrolytic	C-ET22-350	1.69	Replacement is 22 uF axial	AES
B	15 uF	450 vdc electrolytic	C-ET22-350	1.69	Replacement is 22 uF axial	AES
C	20 uF	450 vdc electrolytic	C-ET22-450-105	2.10	Replacement is 22 uF axial high temp	AES
D	75 uF	450 vdc electrolytic	C-ET100-450	4.62	Replacement is 100 uf	AES
C26	20 uF	450 vdc electrolytic	C-ET22-450-105	2.10	Replacement is 22 uF axial high temp	AES
C27	.02 uF, +80%, -20%	500 v disc ceramic	C-SD02-600	0.87	600 v Orange Drop Polyester	AES
C28	4000 uF	15 vdc electrolytic	140-XRL25V4700	1.26	Replacement is 4700 uF, 25 volt radial	Mouser
C29	.01 uF	1,000 V fixed ceramic	75-5GAS10	0.49	Vishay/Sprague 1,000 V fixed ceramic	Mouser
C30	.01 uF	1,000 V fixed ceramic	75-5GAS10	0.49	Vishay/Sprague 1,000 V fixed ceramic	Digi-Key
R54	1500 Ohm, 2 Watt	Power resistor	282-1.5K	0.19	5% metal oxide standard size	Mouser
R55	1500 Ohm, 2 Watt	Power resistor	282-1.5K	0.19	5% metal oxide standard size	Mouser
	0.5 Ohm	5 W wirewound power	280-CR5-0.5	0.39	For AC Filament Voltage	Mouser
	1.0 Ohm	5 W wirewound power	280-CR5-1.0	0.39	For AC Filament Voltage	Mouser
	1.6 Ohm	5 W wirewound power	280-CR5-1.6	0.39	For AC Filament Voltage	Mouser
	1.8 Ohm	5 W wirewound power	280-CR5-1.8	0.39	For AC Filament Voltage	Mouser
	2.0 Ohm	5 W wirewound power	280-CR5-2.0	0.39	For AC Filament Voltage	Mouser
	2.2 Ohm	5 W wirewound power	280-CR5-2.2	0.39	For AC Filament Voltage	Mouser
	2.4 Ohm	5 W wirewound power	280-CR5-2.4	0.39	For AC Filament Voltage	Mouser
	3.0 Ohm	5 W wirewound power	280-CR5-3.0	0.39	For AC Filament Voltage	Mouser
	3.3 Ohm	5 W wirewound power	280-CR5-3.3	0.39	For AC Filament Voltage	Mouser
	3.6 Ohm	5 W wirewound power	280-CR5-3.6	0.39	For AC Filament Voltage	Mouser
	3.9 Ohm	5 W wirewound power	280-CR5-3.9	0.39	For AC Filament Voltage	Mouser
	4.0 Ohm	5 W wirewound power	280-CR5-4.0	0.39	For AC Filament Voltage	Mouser
	5.0 Ohm	5 W wirewound power	280-CR5-5.0	0.39	For AC Filament Voltage	Mouser
	6.0 Ohm	5 W wirewound power	280-CR5-6.0	0.39	For AC Filament Voltage	Mouser
	7.5 Ohm	5 W wirewound power	280-CR5-7.5	0.39	For AC Filament Voltage	Mouser
	10.0 Ohm	5 W wirewound power	280-CR5-10.0	0.39	For AC Filament Voltage	Mouser
R-60	0.5 Ohm	10 W wirewound power	280-CR10-0.5	0.55	For selenium replacement	Mouser
R-60	1.0 Ohm	10 W wirewound power	280-CR10-1.0	0.55	For selenium replacement	Mouser
R-60	1.6 Ohm	10 W wirewound power	280-CR10-1.6	0.55	For selenium replacement	Mouser
R-60	1.8 Ohm	10 W wirewound power	280-CR10-1.8	0.55	For selenium replacement	Mouser
R-60	2.0 Ohm	10 W wirewound power	280-CR10-2.0	0.55	For selenium replacement	Mouser
R-60	2.2 Ohm	10 W wirewound power	280-CR10-2.2	0.55	For selenium replacement	Mouser
R-60	2.4 Ohm	10 W wirewound power	280-CR10-2.4	0.55	For selenium replacement	Mouser
R-60	3.0 Ohm	10 W wirewound power	280-CR10-3.0	0.55	For selenium replacement	Mouser
R-60	3.3 Ohm	10 W wirewound power	280-CR10-3.3	0.55	For selenium replacement	Mouser
R-60	3.6 Ohm	10 W wirewound power	280-CR10-3.6	0.55	For selenium replacement	Mouser
R-60	3.9 Ohm	10 W wirewound power	280-CR10-3.9	0.55	For selenium replacement	Mouser

Repro Board

Ampex		Replacement				
Part No.	Value	Ampex Description	Part Number	Price	Comments	Source
C14	.02 uF, +80%, -20%	500 v disc ceramic	C-SD02-600	0.87	600 v Orange Drop Polyester	AES
C15	750 pF +/- 5%	500 v fixed mica	C-SM250	0.85	250, in parallel with 500, dipped silver mica	AES
			C-SM500	1.09	500, in parallel with 250, dipped silver mica	AES
C17	.15 uF, 20%	400 v tubular	75-715P600V0.15	1.47	600 v Orange Drop Polyester	Mouser
C18	.02 uF, +80%, -20%	500 v disc ceramic	C-SD02-600	0.87	600 v Orange Drop Polyester	AES
C19	.02 uF, +80%, -20%	500 v disc ceramic	C-SD02-600	0.87	600 v Orange Drop Polyester	AES
C20	150 pF, +/- 20%	500 v disc ceramic	5982-15-500V150	0.81	Epoxy dipped Silver Mica	Mouser
C21	.02 uF, +80%, -20%	500 v disc ceramic	C-SD02-600	0.87	600 v Orange Drop Polyester	AES
C22	.1 uF, +80%, -20%	50 v disc ceramic	C-SD1-600	1.42	600 v Orange Drop Polyester	AES
R25	330K, 1/2 W	10%	273-330K	0.08	1% Metal Film	Mouser
R26	470K, 1/2 W	10%	273-470K	0.08	1% Metal Film	Mouser
R27	330K, 1/2 watt	+/- 1%	273-330K	0.12	1% Metal Film	Mouser
R29	10 meg, 1/2 watt	10%	293-10M	0.08	5% Carbon Film	Mouser
R33	10 meg, 1/2 watt	10%	293-10M	0.08	5% Carbon Film	Mouser
R34	220K, 1/2 watt	10%	273-220K	0.12	1% Metal Film	Mouser
R37	1M, 1/2 W	10%	293-1M	0.08	5% Carbon Film	Mouser
R39	1M, 1/2 W	10%	293-1M	0.08	5% Carbon Film	Mouser
R42	220K, 1/2 watt	10%	273-220K	0.12	1% Metal Film	Mouser
R43	220K, 1/2 watt	10%	273-220K	0.12	1% Metal Film	Mouser
R44	1M, 1/2 W	10%	293-1M	0.08	5% Carbon Film	Mouser
R45	1M, 1/2 W	10%	293-1M	0.08	5% Carbon Film	Mouser
R75	680K, 1/2 W	10%	273-680K	0.12	1% Metal Film	Mouser

Record Board

Ampex Part No.	Value	Ampex Description	Replacement Part Number	Price	Comments	Source
C1	.15 uF, 20%	400 v tubular	75-715P600V0.15	1.47	600 v Orange Drop Polyester	Mouser
C2A	10 uF	350 vdc electrolytic	C-ET10-350	1.05	Axial	AES
B	20 uF	450 vdc electrolytic	C-ET22-450-105	2.10	Replacement is 22 uF axial high temp	AES
C	10 uF	450 vdc electrolytic	C-ET10-450	1.28	Axial	AES
C3	.02 uF, +80%, -20%	500 v disc ceramic	C-SD02-600	0.87	600 v Orange Drop Polyester	AES
C4	.02 uF, +80%, -20%	500 v disc ceramic	C-SD02-600	0.87	600 v Orange Drop Polyester	AES
C5	.02 uF, +80%, -20%	500 v disc ceramic	C-SD02-600	0.87	600 v Orange Drop Polyester	AES
C6	.0047 uF, 5%	100 v Polyester Film	140-PF2A472J	0.12	For 30750 & 30950 Record EQ	Mouser
C7	.0012 uF, 5%	100 v Polyester Film	140-PF2A122J	0.12	For 30750 & 30950 Record EQ	Mouser
C8	.02 uF, 5%	400 v tubular	C-SD02-600	0.87	600 v Orange Drop Polyester	AES
C9	.02 uF, +80%, -20%	500 v disc ceramic	C-SD02-600	0.87	600 v Orange Drop Polyester	AES
C10	.47 uF, +/-20%	400 v paper	C-PD47-400	2.46	Orange Drop Polypropylene	AES
C11	.0047 uF, 5%	100 v Polyester Film	140-PF2A472J	0.12	For 30750 Record EQ	Mouser
C12	.0022 uF, 5%	100 v Polyester Film	140-PF2A222J	0.12	For 30750 Record EQ	Mouser
R1	100K, 1/2 W	10%	273-100K	0.12	1% Metal Film	Mouser
R6	100K, 1/2 W	10%	273-100K	0.12	1% Metal Film	Mouser
R8	1M, 1/2 W	10%	293-1M	0.08	5% Carbon Film	Mouser
R10	100K, 1/2 W	10%	273-100K	0.12	1% Metal Film	Mouser
R14	330K, 1/2 W	10%	273-330K	0.12	1% Metal Film	Mouser
R15	1M, 1/2 W	10%	293-1M	0.08	5% Carbon Film	Mouser
R18	120K, 1/2 W	10%	273-120K	0.12	1% Metal Film	Mouser
R20	1M, 1/2 W	10%	293-1M	0.08	5% Carbon Film	Mouser
R31	68K, 1/2 W	10%	273-68K	0.08	For 30750 & 30950 Record EQ	Mouser

Other

Ampex Part No.	Value	Ampex Description	Replacement Part Number	Price	Comments	Source
C24	.0047 uF, +/-2%	500 v tubular ceramic	P10466-ND	0.38	250 V Type TS Ceramic Disc	Digi-Key
C25	.0047 uF, +/-2%	500 v tubular ceramic	P10466-ND	0.38	250 V Type TS Ceramic Disc	Digi-Key
5F1	1/2 Amp fuse	3AG SLO-BLO 1/2 amp	576-0313500H	0.93	Littelfuse H313500 - Electronics fuse	Mouser
5F2	3 Amp fuse	3AG fast acting 3 amp	576-0312003H	0.21	Littelfuse H312003 - Transport fuse	Mouser
		Fuse Holder	441-FH001	1.39	Eagle	Mouser
	GE47	VU meter lamp	P-47	0.10	Need two	AES
		22 pF	5982-15-500V-22	0.55	5% Epoxy dipped Silver Mica	Mouser
		47 pF	5982-15-500V-47	0.55	5% Epoxy dipped Silver Mica	Mouser
		56 pF	5982-15-500V-56	0.55	5% Epoxy dipped Silver Mica	Mouser
		68 pF	5982-15-500V-68	0.56	5% Epoxy dipped Silver Mica	Mouser
		82 pF	5982-15-500V-82	0.56	5% Epoxy dipped Silver Mica	Mouser
		100 pF	5982-15-500V-100	0.56	5% Epoxy dipped Silver Mica	Mouser
		360 pF	5982-15-500V-360	1.15	5% Epoxy dipped Silver Mica	Mouser
		1000 pF	5982-15-500V-1000	1.85	5% Epoxy dipped Silver Mica	Mouser
R24	500 Ohm, 2 W	Bias calibration pot	28-435	0.32	Repl is 500 Ohm, 1/2 W V mount trim pot	MCM
R12	250K Ohm, 1/2 W	Record level calibration pot	28-503	0.32	Repl is 250K Ohm, 1/2 W H mount trim pot	MCM
		Shoulder washer			For phones jack	Mouser
		Solder Lug	534-7311	0.14	Nr. 4 Solder lug	Mouser
		Solder Lug	534-7312	0.14	Nr. 6 Solder lug	Mouser
		3 lug terminal strip	P-0301H03	0.39	For bias calibration pot replacement	AES
		5 lug terminal strip	P-0501H	0.55	For selenium rectifier replacement	AES
CR-1	3 Amp, 100 V	1N5401 silicon rectifier	512-1N5401	0.19	For selenium replacement - Need two	Mouser
		Nr. 8 Fiber washers	534-3372	0.06	Need 2. For silicon rectifier mounting	Mouser
		Pointer knob	5164-1400	1.11	Exact Daka-Ware replacement	Mouser
		Small skirted knob	4104 w/ 2 screws	6.98	Exact Daka-Ware replacement	Davies Molding
		Large skirted knob	4107AR	4.00	Exact Daka-Ware replacement	Davies Molding
		AC Line Cord	173-53101	2.45	3 wire grounding, 18 ga, NEMA 5-15P	Mouser
		Hubbell 2 wire AC receptacle	6C616	16.56	HBL7467, 2 wire flanged, NEMA ML-1P	Grainger
		Hubbell 2 wire AC Plug	1X998	17.91	HBL7464V, 2 wire plug, NEMA ML-1R	Grainger
		Hubbell 3 wire AC Receptacle	5C798	16.58	HBL7595, 3 wire flanged, NEMA ML-2P	Grainger
		Hubbell 3 wire AC Plug	6C625	19.25	HBL7593, 3 wire plug, NEMA ML-2R	Grainger
		RECORD LEVEL pot	53C1-100KZ	14.30	Clarostat 100K	Online Comp.com
		PLAYBACK LEVEL pot	53C1-250KZ	14.30	Clarostat 250K	Online Comp.com
		Board edge connectors	61455-2	0.25	AMP	AMP
4S-5		Power switch	691-110-73	4.23	Carling SPST bat handle toggle switch	Mouser
V1	12AX7	12AX7	T-12AX7EH	10.95	Electro-Harmonix	AES
V2	12AT7	12AT7	T-12AT7-G-EI-EL	10.95	EI Elite Gold Pins	AES
V3	12AX7	12AX7	T-12AX7EH	10.95	Electro-Harmonix	AES
V4	12AX7	12AX7	T-12AX7EH	10.95	Electro-Harmonix	AES
V5	12AU7	12AU7	T-12AU7-G-EI-EL	10.95	EI Elite Gold Pins	AES

V6	12AU7	12AU7	T-12AU7-G-EI-EL	10.95	EI Elite Gold Pins	AES
V7	6X4	6X4	T-6X4_EZ90	5.30		AES
		Ceramic tube socket	P-ST9-222	2.95	9 pin min ceramic PC mount tube socket	AES
		9 pin min. tube shield	P-SS9-325	1.95	9 pin miniature tube shield	AES
		VU Meter Glass		1.60	2-1/8" x 4" Simpson 142 VU meter glass	Hardware Store
		Teflon Tubing	708-5018	58.78	Alpha TFT 250 Teflon Tubing, 100 ft. roll	Allied
		PS Board Repair Material	276-1396 A	4.29	6" x 8" Perfboard	Radio Shack
		15/32-32 Switch Ring (2)	534-1459	0.47	5/8" knurled	Mouser
		Circuit Board Stand-off washers	534-3372	0.06	.375" OD fiber washer	Mouser
		Circuit Board Stand-off grommets		0.25	.5" OD, .25" ID, .25 deep rubber grommet	Hardware Store
		3/8-32 Control Nut	534-1456	0.20	1/2" hex	Mouser

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