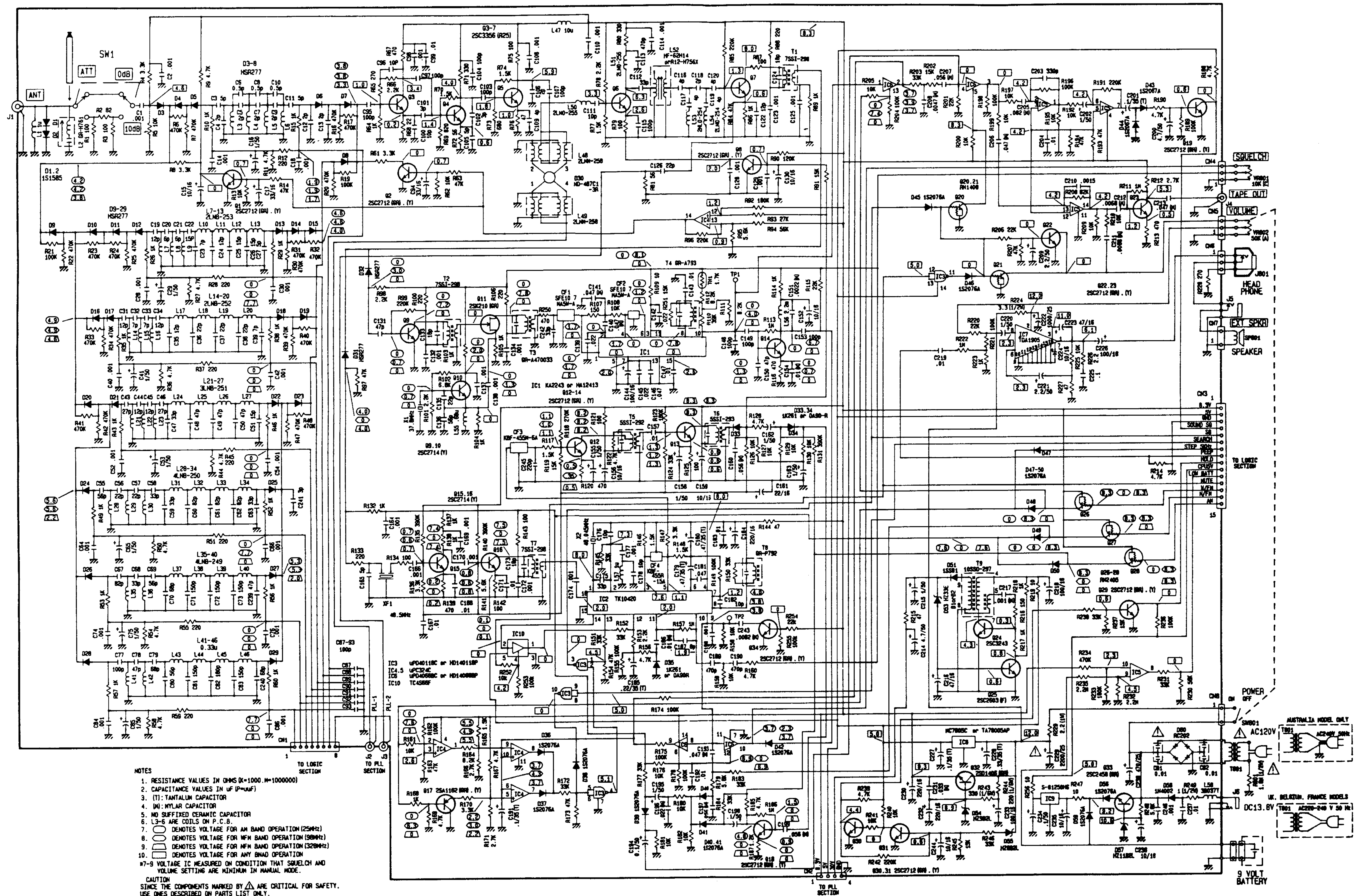
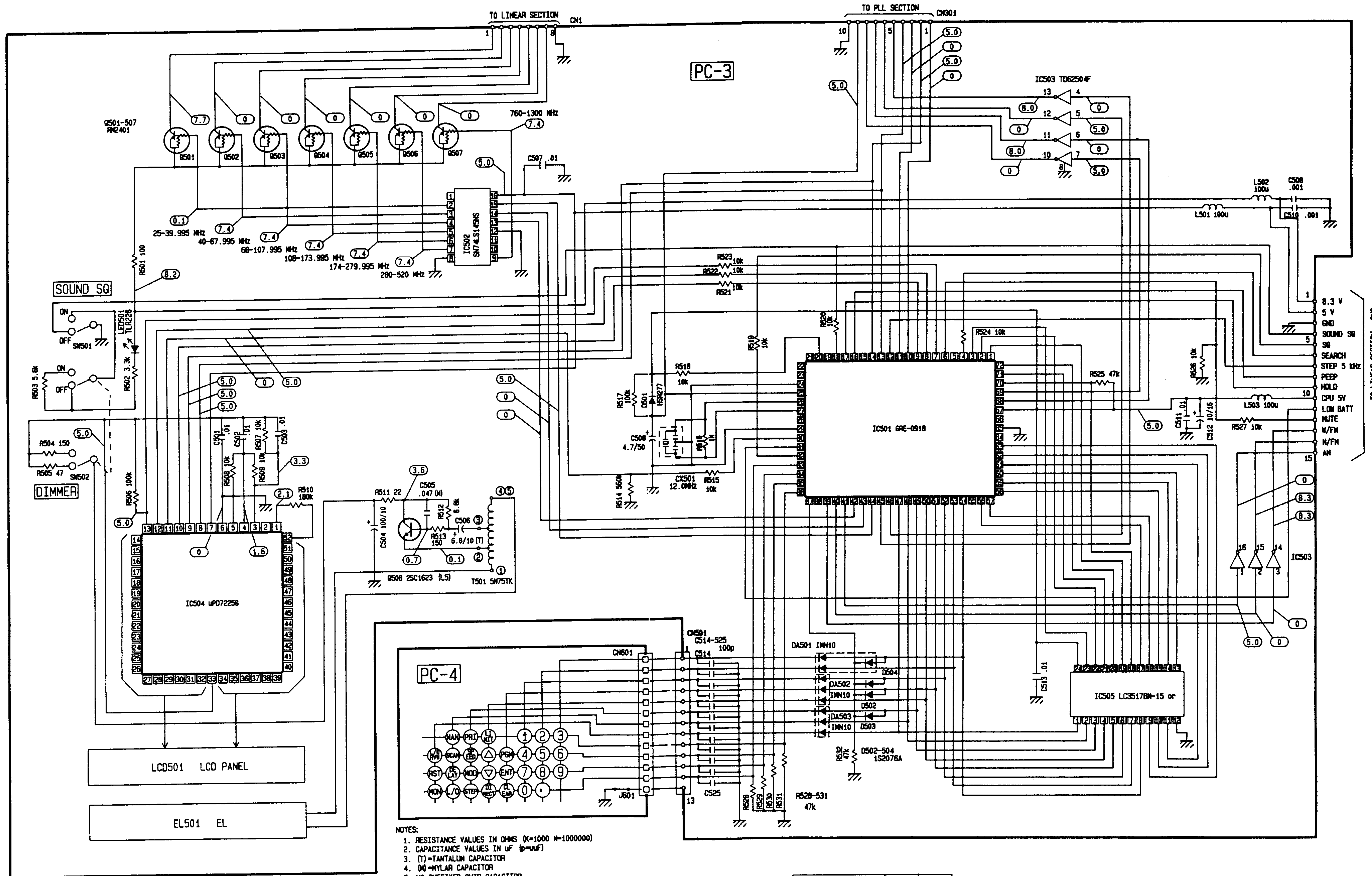


SCHEMATIC DIAGRAM (LINEAR SECTION)



- NOTES**
1. RESISTANCE VALUES IN OHMS (K=1000, M=1000000)
 2. CAPACITANCE VALUES IN UF (P=PF)
 3. (T): TANTALUM CAPACITOR
 4. (M): MYLAR CAPACITOR
 5. NO SUFFIXED CERAMIC CAPACITOR
 6. L3-6 ARE COILS ON P.C.B.
 7. DENOTES VOLTAGE FOR AM BAND OPERATION (250KHZ)
 8. DENOTES VOLTAGE FOR NFM BAND OPERATION (300KHZ)
 9. DENOTES VOLTAGE FOR WFM BAND OPERATION (320KHZ)
 10. DENOTES VOLTAGE FOR ANY BAND OPERATION
 - 11-9 VOLTAGE IC MEASURED ON CONDITION THAT SQUELCH AND VOLUME SETTINGS ARE MINIMUM IN MANUAL MODE.
- CAUTION**
SINCE THE COMPONENTS MARKED BY Δ ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

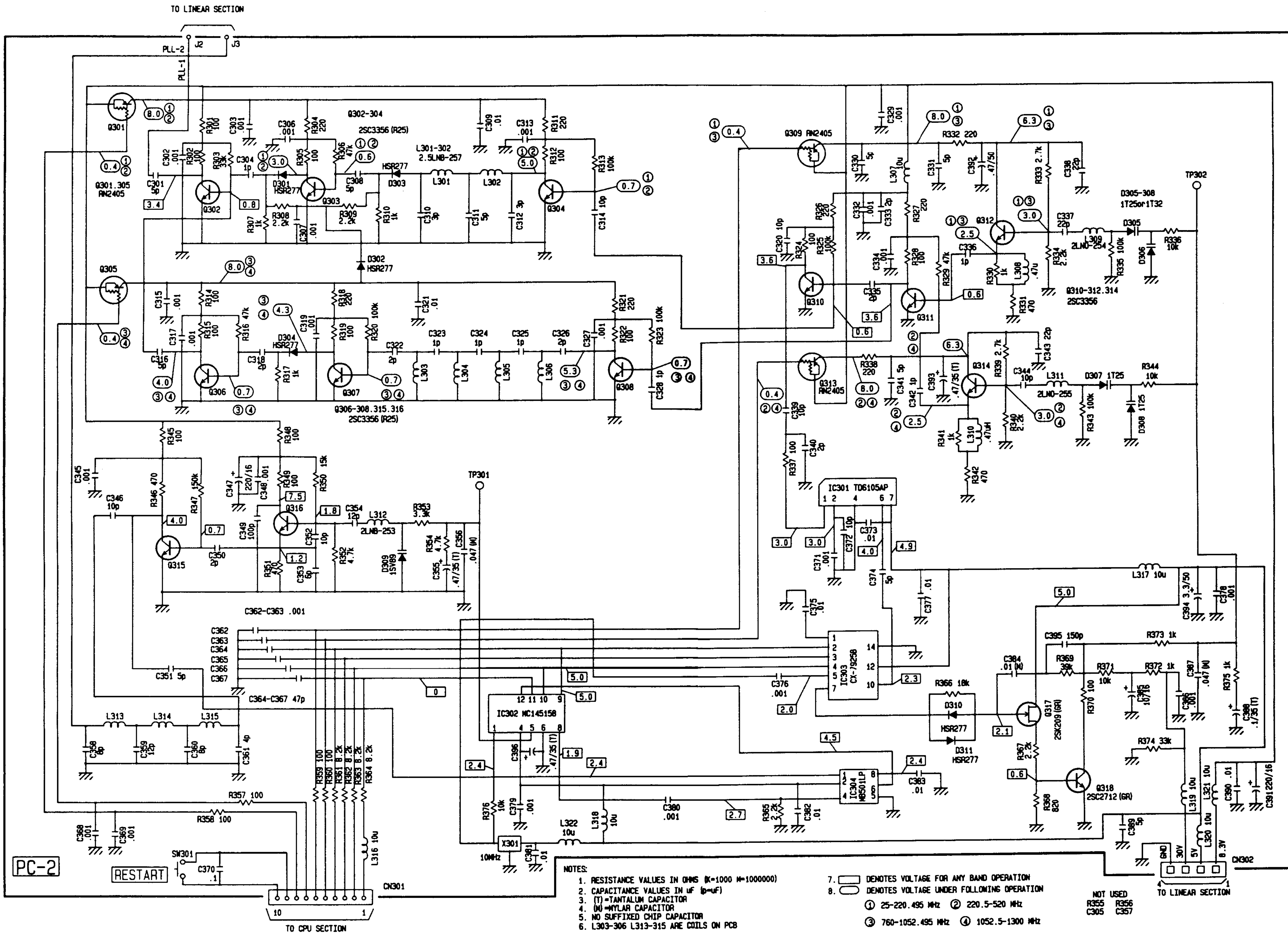
SCHEMATIC DIAGRAM (CPU SECTION)



- NOTES:
1. RESISTANCE VALUES IN OHMS (K=1000 M=1000000)
 2. CAPACITANCE VALUES IN uF (p=puF)
 3. (T) = TANTALUM CAPACITOR
 4. (M) = MYLAR CAPACITOR
 5. NO SUFFIXED CHIP CAPACITOR
 6. () DENOTES VOLTAGE UNDER FOLLOWING CONDITION
 CH1 VHF LO BAND AT 25 MHz AM MANUAL OPERATION.
 VOLTAGE AT MINIMUM AND SQUELCH ON.

	D502	D504
USA CANADA MODELS	USE	NOT USE
AUSTRALIA UK	NOT USE	USE
BELGIUM FRANCE MODELS	NOT USE	USE

SCHEMATIC DIAGRAM (PLL SECTION)



200-0145 PROGRAMMABLE SCANNER

Faxback Doc. # 30383

To order parts call 1-800-843-7422 or visit your local RadioShack store.

Reference #	Cat.No.	Description	NP Part #
	11318532	DIODE 1N4002 RECT 600V.1A	1N4002
	11319530	DIODE 1S1585 GEN PURP	1S1585
	11319563	1S2076A	
Q17	10511665	USE 2SA1162GR	1TD0119
	10511665	1TD0119	
Q3 Q4 Q5 Q6 Q7 Q302	10511707	XSTR 2SC3356-R24 SI BIPOL	1TD0127
Q303 Q304 Q306 Q307	10511707	CASE STYLE SOT23	1TD0127
Q308 Q310 Q311 Q312	10511707		1TD0127
Q314 Q315 Q316 Q508	10511707		1TD0127
Q508	10511764	XSTR 2SC1623L5 CHIP	1TD0139
	10511764	1TD0139	
Q317	10514107	XSTR 2SK209GR FET N-CH	1TD0553
Q9 Q10 Q15 Q16	10515435	XSTR 2SC2714Y SI UHF/	1TD0689
Q17	10511665	XSTR 2SA1162GR LOW PWR AM	2SA1162GR
	10511665	2SA1162GR	
	11332251	2SC2458	
	11332343	2SC2603	
	11334075	2SD1406	
Q3 Q7 Q302 Q303 Q304		USE 1TD0127	2TR1071
Q306 Q307 Q308		REPLACED BY 1TD-0127	2TR1071
		REPAVED BY 1TD0127	2TR1071
	11389301	CASE STYLE 14 PIN DIP	4066BCN
	10871663	16 PIN SURFACE MOUNT	74LS145
19	10538270	ANTENNA,TELESCOPIC 5	A0123
	10538270	SCREW IN BASE	A0123
	10906600	IC,AN7805 VOLT REGULATOR	AN7805
T5	10557874	COIL,INTERMEDIATE	CA0532
	10557874	SQUARE CAN TYPE	CA0532
T6	10557882	COIL,DETECTOR 455KHZ	CA0533
	10557882	SQUARE CAN TYPE	CA0533
T1 T2 T7	10558849	COIL	CA0865
	10558849	SQUARE CAN TYPE	CA0865
T9	10558856	COIL,DC/DC CONVERTOR	CA0871
T4	10559508	COIL,QUARATURE 7MHZ	CA1213
	10559508	GREEN	CA1213
T8	10559516	COIL,QUARATURE 455KHZ	CA1214

	10559516 BLUE	CA1214
L2	10559524 COIL,TRAP 609.5MHZ	CA1216
	10559524 SQUARE CAN TYPE	CA1216
L13 L312	10559532 COIL,BAND PASS FILTER	CA1219
L7 L8 L9 L10 L11 L12	10559532 280MHZ-520MHZ	CA1219
	10559532 3 TURN	CA1219
L14 L15 L16 L17 L18	10559540 COIL,BAND PASS FILTER	CA1220
L19 L20	10559540 174MHZ-279.995MH	CA1220
	10559540 SPRING TYPE AIR CORE 6	CA1220
T3	10567519 COIL,10.7MHZ	CA7246
	10567519 ORANGE	CA7246
L318 L319 L322	10568483 COIL,10UH	CA9828
L47 L307 L316 L317	10568483 RADIO FREQUENCY CHOKE	CA9828
CF3	10569069 FILTER,CERAMIC	CB0143
CF4	10569077 FILTER,CERAMIC	CB0144
L1 L57	10571438 COIL,CHOKE 1UH	CB2117
C113 C189 C190	470PF +-5 50V CER	CD471JJBC
C70 C79 C240	68PF +-5 50V CER	CD680JJBCB
	PACKAGE OF 5	CD680JJBCB
C101 C102 C241 C310	10575645 CAP CER 50V 3PF +-.25PF	CDA030CJBC
C312	10575645 CASE 0805 PACKAGE OF 5	CDA030CJBC
C3 C11 C27 C105 C165	10575678 CAP CER 50V 5PF +-.25PF	CDA050CJBC
C301	10575678 CASE 0805 PACKAGE OF 5	CDA050CJBC
C187 C358 C360	10575702 CAP CER 50V 8PF +-.5PF	CDA080DJBC
	10575702 CASE 0805 PACKAGE OF 5	CDA080DJBC
C6 C8 C10	10575728 .5PF +-.25PF 50V CER	CDA0X5CJBC
	10575728 CASE 0805 PACKAGE OF 5	CDA0X5CJBC
C1 C2 C14 C18 C28 C30	10575793 CAP CER 1000PF +-10 50V	CDA102KJBC
C108 C110 C114 C123	10575793 CASE 0805 PACKAGE OF 5	CDA102KJBC
C125 C128 C129 C132	10575793	CDA102KJBC
C134 C137 C138 C164	10575793	CDA102KJBC
C166 C169 C170 C172	10575793	CDA102KJBC
C174 C177 C188 C246	10575793	CDA102KJBC
C302 C303 C306 C307	10575793	CDA102KJBC
C313 C315 C317 C319	10575793	CDA102KJBC
C327 C329 C332 C334	10575793	CDA102KJBC
C40 C42 C52 C64 C66	10575793	CDA102KJBC
C74 C76 C84 C86 C98	10575793	CDA102KJBC
C167 C168 C171 C183	10575843 CAP CER .01UF +-10 50V	CDA103KJBC
C192 C204 C219 C237	10575843 CASE 0805 PACKAGE OF 5	CDA103KJBC
C375 C377 C381 C382	10575843	CDA103KJBC
C383 C390 C501 C502	10575843	CDA103KJBC
C503 C507 C511 C513	10575843	CDA103KJBC

C99 C143 C147 C157 10575843 CDA103KJBC
 C370 10575892 .1UF +80-20 25V CER CDA104ZFBC
 10575892 CASE 0805 PACKAGE OF 5 CDA104ZFBC
 C2 C25 C26 C51 10575983 15PF +-5 50V CER CDA150JJBC
 10575983 CASE 0805 PACKAGE OF 5 CDA150JJBC
 C43 C46 10576239 CAP CER 27PF +-5 50V CDA270JJBC
 10576239 CASE 0805 PACKAGE OF 5 CDA270JJBC
 C112 10576288 33PF +-5 50V CER CDA330JJBC
 C47 C58 C59 C63 C68 10576288 CASE 0805 PACKAGE OF 5 CDA330JJBC
 C203 10576304 330PF +-5 50V CER CDA331JJBC
 10576304 CASE 0805 PACKAGE OF 5 CDA331JJBC
 C150 C239 10576379 47PF +-5 50V CER CDA470JJBC
 C48 C49 C50 C78 C131 10576379 CASE 0805 PACKAGE OF 5 CDA470JJBC
 C60 C61 C62 C67 10576627 CAP CER 50V 82PF +-5 CDA820JJBC
 10576627 CASE 0805 PACKAGE OF 5 CDA820JJBC
 C178 10577369 10PF +-.5PF 50V CER CDR100DJBC
 C96 C100 C111 C176 10577369 CASE 1206 PACKAGE OF 5 CDR100DJBC
 C103 C104 C107 C115 10577385 100PF +-5 50V CER CDR101JJBC
 C148 C149 C153 C349 10577385 CASE 1206 PACKAGE OF 5 CDR101JJBC
 C514 C515 C516 C517 10577385 CDR101JJBC
 C518 C519 C520 C521 10577385 CDR101JJBC
 C522 C523 C524 C525 10577385 CDR101JJBC
 C77 C87 C88 C89 C90 10577385 CDR101JJBC
 C91 C92 93 C95 C97 10577385 CDR101JJBC
 C124 C133 C173 10577518 18PF +-5 50V CER CDR180JJBC
 10577518 CASE 1206 PACKAGE OF 5 CDR180JJBC
 C245 10577534 220PF +-5 50V CER CDR221JJBC
 10577534 CASE 1206 PACKAGE OF 5 CDR221JJBC
 C139 C142 C145 10577567 22000PF +-10 50V CER CDR223KJBC
 10577567 CASE 1206 PACKAGE OF 5 CDR223KJBC
 C55 C69 C80 C136 10577757 56PF +-5 50V CER CDR560JJBC
 10577757 CASE 1206 PACKAGE OF 5 CDR560JJBC
 X2 10592095 CRYSTAL,TC-43 48.045MHZ CX0552
 X301 10595304 CRYSTAL,10MHZ 4PIN CX1019
 CX501 10596534 RESONATOR,CERAMIC CX1241
 13 10603827 COVER,BATTERY COMPARTMENT DB0094
 12 10608560 BOX,BATTERY DB0741
 D51 10621985 DIODE 1SS81-FI DX0072
 DA501 DA502 DA503 10625770 DIODE IMN10 MULTI ARRAY S DX1522
 D10 D11 D12 D13 D14 10626265 DIODE HSR277 CHIP SI DX1684
 D15 D16 D17 D18 D19 10626265 DX1684
 D20 D21 D22 D23 D24 10626265 DX1684
 D25 D26 D27 D28 D29 10626265 DX1684

D3 D4 D5 D6 D7 D8 D9	10626265		DX1684
D304 D310 D311 D501	10626265		DX1684
D31 D32 D301 D302 D303	10626265		DX1684
D30	10626299	DIODE QUAD ND487C1-3R SI	DX1690
	10626299	FLAT ROUND 4 LEAD	DX1690
D60	10626323	DIODE RC202 RECT SI	DX1693
D305 D306 D307 D308	10626331	DIODE VARACTOR SI	DX1697
D309	10626349	DIODE VARACTOR SI	DX1698
D54	10627289	DIODE ZN HZ9B2L	DX2009
	10638500	LEG WITH RUBBER	F0147
	11390648	CASE STYLE 16 PIN DIP	HA12413
62	10652725	HOLDER,LCD	HB0323
J1	10720209	JACK,ANTENNA	J0085
J6	10720704	JACK,DC POWER	J0171
J4	10720720	JACK,TAPE OUT	J0173
J2 J3	10724086	JACK,ANTENNA	J0638
	10724086		J0638
J5	10731511	JACK,3.5MM	J1821
CN7 CN8	10731891	CONNECTOR,2 PIN MALE	J4051
CN4 CN5 CN6	10732378	CONNECTOR,3 PIN MALE	J5678
14	10740520	STORE STOCK UNDER 270-324	JE0213
CN1	10741361	CONNECTOR,8 PIN MALE	JE0722
CN3	10744035	CONNECTOR,15 PIN MALE	JE1632
23	10760148	KNOB,VOLUME/SQUELCH	K1918
	10760148	SILVER	K1918
24	10760155	KNOB,SOUND SQUELCH/DIMMER	K1919
	10760155	LIGHT GRAY	K1919
22	10788107	KEY,TOP GRAY	KC0038
LED501	10794782	LED	L1535
	10882512	CASE STYLE 14 PIN DIP	LA6324
EL501	10800050	ELECTROLUMINESCENT,LCD	LB0040
	10800050	BULB FOR LCD	LB0040
LCD501	10800068	LCD,DISPLAY 40PIN	LB0041
	10880839	CASE STYLE 24 PIN DIP	LC3517
	NLA	MB0000X	
	10900975	CASE STYLE 14 PIN DIP	MC14011BCP
	10822948	MANUAL SERVICE 20-145	MS2000145
	10844876	XEROX COPY	MU2000145
IC304	10876498	IC,MB501LVP-G BIPOLAR	MX1335
	10876498	CASE STYLE 8 PIN DIP	MX1335
IC502	10879286	IC,SN74LS145 NS BIPOLAR	MX1714
	10879286	REPLACED BY 74LS145	MX1714
IC10	10880854	IC,TC4S66F BIPOLAR SO 5 (MX1899

	10880854	5 PIN CHIP		MX1899
	10880995	USE AN7805		MX1917
IC501	10885275	IC,GRE-0918 C-MOS CPU		MX2529
	10885275	SURFACE MOUNT		MX2529
IC9	10889566	IC,S81250HG REGULATOR		MX3171
	10889566	3 PIN TRANSISTOR TYPE		MX3171
IC302	10894624	IC, MC145158		MX4014
	10894624	CASE STYLE 16 PIN DIP		MX4014
IC2	10903672	IC TK10420 DIP16 T FM IF		MX5880
	10903672	CASE STYLE 16 PIN DIP		MX5880
IC303	10908457	IC,CX7925B PRESCALER		MX6977
	10908457	PHASE LOCKED LOOP		MX6977
IC301	10910883	IC,TD6105AP		MX7477
	10910883	CASE STYLE 7 PIN SIP		MX7477
IC504	10910925	IC,UPD7225G00		MX7481
	10910925	SURFACE MOUNT		MX7481
IC503	10937712	IC,TD62504F XISTER ARRAY		MY0031
	10937712	SURFACE MOUNT		MY0031
R243	10940872	330 5% 1/6W CBF RES		N0159ECCC
	10940872	PACKAGE OF 10		N0159ECCC
R217 R218	10941334	1K 5% 1/6W CBF RES		N0196ECCC
	10941334	PACKAGE OF 10		N0196ECCC
R109 R219 R247 R256	10945962	10 5% 1/10W MLG RES		NDA0063EDG
	10945962	CASE 0805 PACKAGE OF 5		NDA0063EDG
R505	10946192	47 5% 1/10W MLG RES		NDA0099EDG
R76 R144 R215 R227	10946192	CASE 805 PACKAGE OF 5		NDA0099EDG
R2	10946267	82 5% 1/10W MLG RES		NDA0122EDG
	10946267	CASE 0805 PACKAGE OF 5		NDA0122EDG
R1 R3 R75 R79 87 R121	10946341	100 5% 1/10W MLG RES		NDA0132EDG
R125 R134 R142 R143	10946341	PACKAGE OF 10		NDA0132EDG
R301 R302 R305 R312	10946341			NDA0132EDG
R314 R315 R319 R322	10946341			NDA0132EDG
R324 R328 R337 R345	10946341			NDA0132EDG
R348 R349 R357 R358	10946341			NDA0132EDG
R359 R360 R370 R501	10946341			NDA0132EDG
R12 R28 R37 R45 R51	10946564	220 5% 1/10W MLG RES		NDA0149EDG
R133 R304 R311 R318	10946564			NDA0149EDG
R326 R327 R332 R338	10946564			NDA0149EDG
R55 R59 R88 R100 R106	10946564			NDA0149EDG
R213	10946697	470 5% 1/10W MLG RES		NDA0169EDG
R67 R116 R120 R139	10946697	CASE 0805 PACKAGE OF 5		NDA0169EDG
SUB	10946697			NDA0169EDG
R187	10946929	1.2K 5% 1/10W MLG RES		NDA0199EDG

10946929 CASE 0805 PACKAGE OF 5 NDA0199EDG

R166 R171 R212 R333 10947083 2.7K 5% 1/10W MLG RES NDA0224EDG

R339 10947083 CASE 0805 PACKAGE OF 5 NDA0224EDG

R170 10947158 3.3K 5% 1/10W MLG RES NDA0230EDG

R4 R8 R61 R136 R147 10947158 CASE 0805 PACKAGE OF 5 NDA0230EDG

R54 10947356 4.7K 5% 1/10W MLG RES NDA0247EDG

R9 R11 R27 R36 R44 R50 10947356 CASE 0805 PACKAGE OF 5 NDA0247EDG

R503 10947448 5.6K 5% 1/10W MLG RES NDA0257EDG

R95 R141 R179 R248 10947448 CASE 0805 PACKAGE OF 5 NDA0257EDG

R102 R512 10947505 6.8K 5% 1/10W MLG RES NDA0262EDG

10947505 CASE 0805 PACKAGE OF 5 NDA0262EDG

R366 10947802 18K 5% 1/10W MLG RES NDA0303EDG

10947802 CASE 0805 PACKAGE OF 5 NDA0303EDG

R115 R201 R206 R220 10947885 22K 5% 1/10W MLG RES NDA0311EDG

R254 10947885 CASE 0805 PACKAGE OF 5 NDA0311EDG

R110 R369 10948016 39K 5% 1/10W MLG RES NDA0330EDG

10948016 CASE 0805 PACKAGE OF 5 NDA0330EDG

R14 R63 R84 R97 R154 10948107 47K 5% 1/10W MLG RES NDA0340EDG

R163 R173 R193 R194 10948107 CASE 0805 PACKAGE OF 5 NDA0340EDG

R207 R306 R316 R329 10948107 NDA0340EDG

R525 R528 529 R530 10948107 NDA0340EDG

R531 R532 10948107 NDA0340EDG

R174 R175 R178 R189 10948230 100K 5% 1/10W MLG RES NDA0371EDG

R19 R21 R149 R155 R162 10948230 CASE 0805 PACKAGE OF 5 NDA0371EDG

R196 R198 R204 R221 10948230 NDA0371EDG

R236 R253 R255 R313 10948230 NDA0371EDG

R320 R323 R325 R335 10948230 NDA0371EDG

R343 R506 R517 10948230 NDA0371EDG

R92 R123 R233 R510 10948354 180K 5% 1/10W MLG RES NDA0387EDG

10948354 CASE 0805 PACKAGE OF 5 NDA0387EDG

R242 10948404 220K 5% 1/10W TFN RES NDA0396EDG

R85 R96 R99 R191 10948404 CASE 0805 PACKAGE OF 5 NDA0396EDG

R514 10948560 560K 5% 1/10W MLG RES NDA0429EDG

10948560 CASE 0805 PACKAGE OF 5 NDA0429EDG

R113 R157 R186 R211 10948651 1M 5% 1/10W MLG RES NDA0445EDG

R222 R516 10948651 CASE 0805 PACKAGE OF 5 NDA0445EDG

R127 R129 R130 R158 10949154 10K 5% 1/10W MLG RES NDB0281EDG

R159 R161 R176 R180 10949154 CASE 1005 PACKAGE OF 5 NDB0281EDG

R181 R182 R192 R195 10949154 NDB0281EDG

R197 R199 R200 R205 10949154 NDB0281EDG

R209 R210 R225 R240 10949154 NDB0281EDG

R241 R252 R336 R344 10949154 NDB0281EDG

R371 R376 R507 R508 10949154 NDB0281EDG

R5 R13 R62 R108 R126	10949154	NDB0281EDG
R509 R515 R518 R519	10949154	NDB0281EDG
R520 R521 R522 R523	10949154	NDB0281EDG
R524 R526 R527	10949154	NDB0281EDG
R10 R15 R26 R29 R35	10950202 RES MLG 1/10W 1K 5%	NDR0196EDG
R114 R132 R137 R138	10950202 CASE 1206 PACKAGE OF 5	NDR0196EDG
R168 R223 R307 R310	10950202	NDR0196EDG
R317 R330 R341 R372	10950202	NDR0196EDG
R373 R375	10950202	NDR0196EDG
R38 R43 R46 R49 R52	10950202	NDR0196EDG
R53 R56 R57 R60 R64	10950202	NDR0196EDG
R86 R89 R103 R104 R105	10950202	NDR0196EDG
R308	10950301 RES MLG 1/10W 2.2K 5%	NDR0216EDG
R66 R78 R98 R101 R153	10950301 CASE 1206 PACKAGE OF 5	NDR0216EDG
VR801	10976728 POT,SQUELCH 10K	P8029
VR802	10983237 POT,WITH SWITCH VOLUME	PC0006
	10983237 50K (A)	PC0006
	11380409 CASE STYLE SC70	RN1408
	11380425 CASE STYLE SC70	RN2405
SW1	11063724 SWITCH,SLIDE ATTENUATOR	S3627
SW501 SW502	11073590 SWITCH,PUSH	SD0096
SW301	11073749 SWITCH,TACT RESET	SD0114
	11073749 TACT RED	SD0114
SP801	11081627 SPEAKER,8 OHM 1 WATT	SP0034
	11081627 3" DIAMETER	SP0034
T801	11097169 TRANSFORMER,POWER	TA0790
T501	11100708 TRANSFORMER,INVERTOR 5PIN	TB0245
	11393402 CASE STYLE 16 PIN DIP	TDA1905
	(FF) W0000X	
26	11120961 CORD,POWER AC 6 FOOT	W0906
	11120961 FLAT BLACK	W0906
26	11120961 USE W0906	WB0006
	11120961 REPLACED BY W0906	WB0006
10	11140738 PCB ASSY,KEYBOARD	XB2447
11	11146008 PCB ASSY,HEAD PHONE JACK	XB3153
9	PCB ASSY,LOGIC/DISPLAY	XB3154
5	11187689 CABINET ASSY,BOTTOM GREY	Z2839
	11187689 WITH FEET	Z2839
4	11187770 CABINET,TOP GREY PLASTIC	Z2856
21	11193414 ESCUTCHEON ASSY,FRONT	Z3655
	11193414 WITH WINDOW LCD	Z3655

(This list was generated on 03/04/2003)

