

# 69 DC 980/02.





























Check	SK				Setting of controls	
FM-Mute	FM	98 MHz, 1 mV				0 dB (775 mV)
		No signal				≤ -24 dB
26 dB - SNR	FM	98 MHz, 6 μV, Δf = 22.5				0 dB (775 mV)
						without mod.
	MW	999 kHz, 30 μV				0 dB (775 mV)
						without mod.
	LW	207 kHz, 56 μV				0 dB (775 mV)
						without mod.
Demodulated FM-levels	FM	98 MHz, 1mV, Δf = 22.5 kHz f mod. = 1 kHz				60 mV ± 1 dB
Demodulated AM-levels	MW	999 kHz, 1mV 1kHz, 30% AM				120 mV ± 1 dB
Cross talk	FM	98 MHz, 2 mV stereo signal, (L + R)			 +	L  0 dB (775 mV)
		98 MHz, 2 mV stereo - R				R
SDS/10 dB Crosstalk	FM	98 MHz, 2 mV stereo signal, (L + R)			 +	L  0 dB (775 mV)
		98 MHz, 2 mV stereo - R				R
SDK-sensitivity	FM + INFO	98 MHz, 60 μV, Δf = 22.5 kHz, f mod. = 1 kHz + SK + BK + DK				<b>INFO SK</b> in display, Radio mode override CD mode when INFO "on".

# PHILIPS

# DC-980















## 7.1 ALIGNMENT TABLE

For more information see general information "General alignment procedures for car radio"

Alignment	SK					
Quadrature detector	FM	98 MHz, 10 $\mu$ V $\Delta f = 75$ KHz			L303 L304	 align for symmetrical distortion on sine wave
$\alpha$ -3 dB	FM	93 MHz f mod. = 1 KHz $\Delta f = 22.5$ KHz				 0 dB (775 mV)
					VR103	 -3 dB
FM search level	FM	98 MHz, 40 $\mu$ V f mod = 1 KHz $\Delta f = 22.5$ KHz			VR102	 0 V, 5 V pulse
Stereo separation	FM	98 MHz, 2 mV stereo signal L only			VR105	L  - R  maximum separation
SDS (10dB cross talk)	FM	98 MHz, 150 $\mu$ V stereo signal L only			VR106	L  - R  = 10dB separation
AM-search level	MW	999 KHz, 40 $\mu$ V f mod = 1 KHz			VR201	 0.7 V DC $\pm$ 0.1

## 7.2 CHECK TABLE

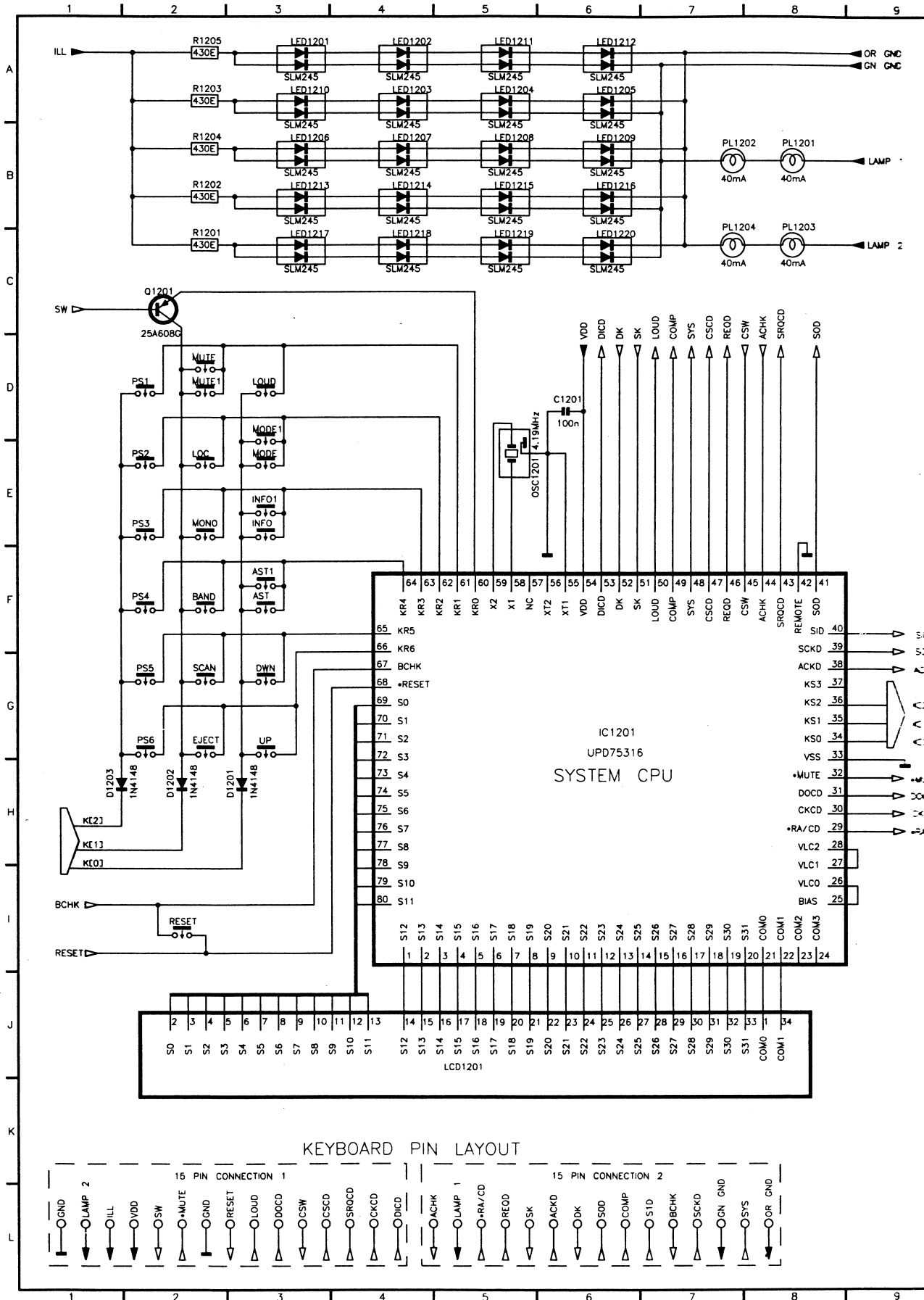
For more information see general information "General alignment procedures for car radio"

Check	SK				Setting of controls	
VC-FM	FM			87.5 MHz		 1.2 $\pm$ 0.1 V DC
				108 MHz		 $\leq$ 8 V DC
VC-MW	MW			522 KHz		 1.2 $\pm$ 0.1 V DC
				1620 KHz		 7.9 $\pm$ 0.2 V DC
VC-LW	LW			153 KHz		 1.0 $\pm$ 0.1 V DC
$\alpha$ - 3 dB	FM	98 MHz $\Delta f = 22.5$ KHz fmod = 1 KHz				 0 dB (775 mV)
						 -3 dB

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### 6.5 AM TUNER & KEYBOARD SCHEMATIC

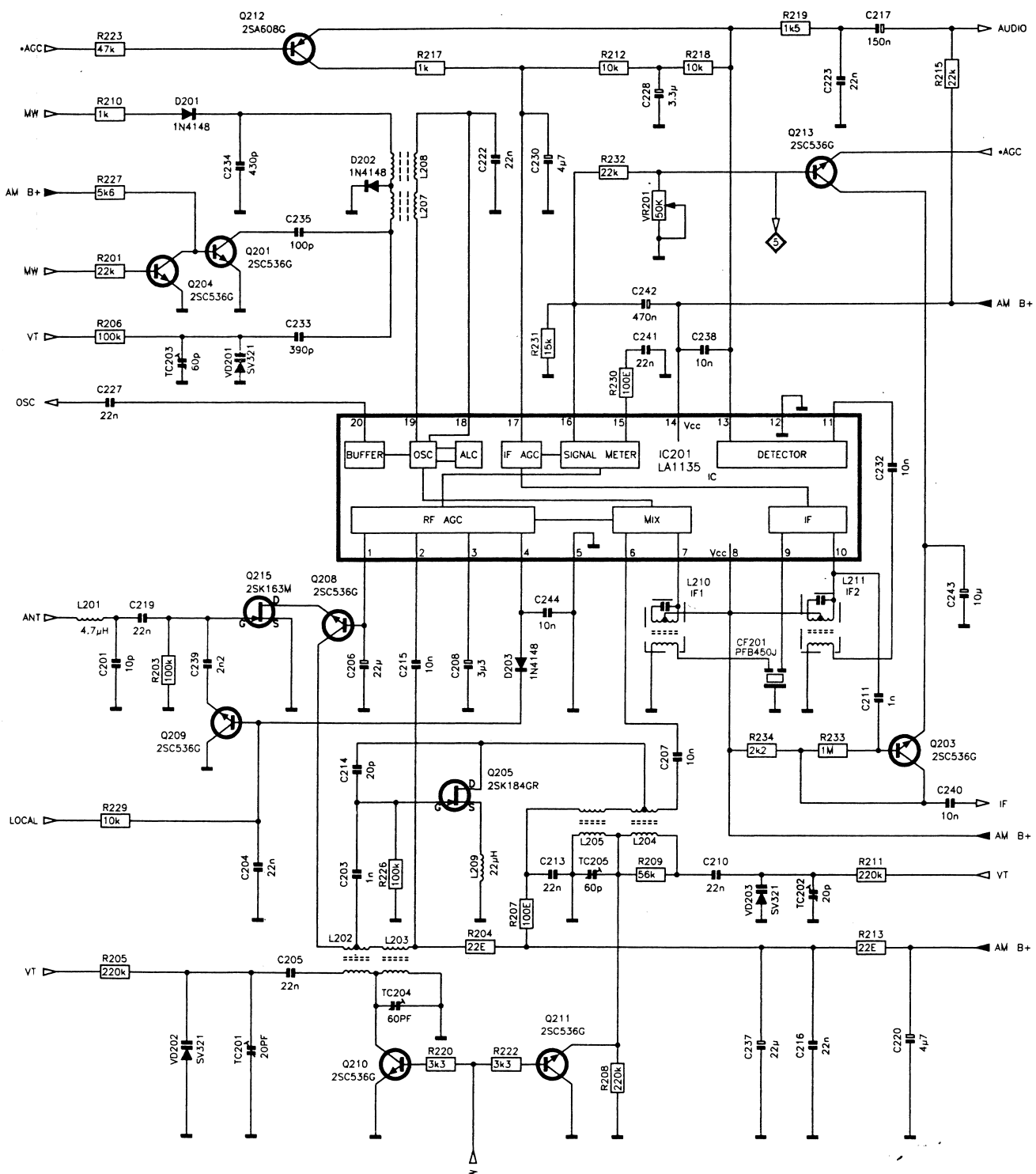
AST	F3	C206	G13	C216	J17	C230	B15	C240	H18	D1203	H1	INFO	E3	LED1203	A4	LED1211	A5
AST1	F3	C207	G16	C217	A18	C232	E18	C241	D16	D201	B11	INFO1	E3	LED1204	A5	LED1212	A6
BAND	F2	C208	G14	C219	F11	C233	D12	C242	C16	D202	B13	L201	F11	LED1205	A6	LED1213	B3
C1201	D6	C210	H16	C220	J18	C234	B12	C243	F18	D203	G14	L207	C14	LED1206	B3	LED1214	B4
C201	G11	C211	G18	C222	B14	C235	C12	C244	F15	DWN	G3	L208	B14	LED1207	B4	LED1215	B5
C203	H13	C213	H15	C223	B17	C237	J17	CF201	F16	EJECT	C2	LCD1201	J5	LED1208	B5	LED1216	B6
C204	H12	C214	H13	C227	D11	C238	D16	D1201	H3	IC1201	G6	LED1201	A3	LED1209	B6	LED1217	C3
C205	H12	C215	G14	C228	B16	C239	G12	D1202	H2	IC201	E16	LED1202	A4	LED1210	A3	LED1218	C4



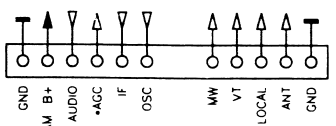
CS 35 093

LED1219	C5	MUTE1	D2	PS3	E2	Q205	H14	R1201	C2	R205	I11	R213	I18	R226	H13	RESET	I2	VD201	D12
LED1220	C6	OSC1201	E5	PS4	F2	Q209	F13	R1202	B2	R206	D11	R215	B18	R227	B11	SCAN	G2	VD202	J11
LOC	E2	PL1201	BB	PS5	G2	Q209	G11	R1203	A2	R207	I15	R217	A14	R229	H11	TC201	J12	VD203	I17
LOUD	D3	PL1202	B7	PS6	G2	Q210	J13	R1204	B2	R208	J15	R218	A16	R230	D15	TC202	I17	VR201	C16
MODE	E3	PL1203	C8	Q1201	C2	Q211	J15	R1205	A2	R209	H16	R219	A17	R231	D15	TC203	D11		
MODE1	D3	PL1204	C7	Q201	C12	Q212	A12	R201	C11	R210	B11	R220	J14	R232	B15	TC204	I13		
MONO	E2	PS1	D2	Q203	G18	Q213	B17	R203	G11	R211	H18	R222	J14	R233	G17	TC205	H15		
MUTE	D2	PS2	E2	Q204	C12	Q215	F12	R204	I14	R212	A15	R223	A11	R234	G17	UP	G3		

10 11 12 13 14 15 16 17 18 19

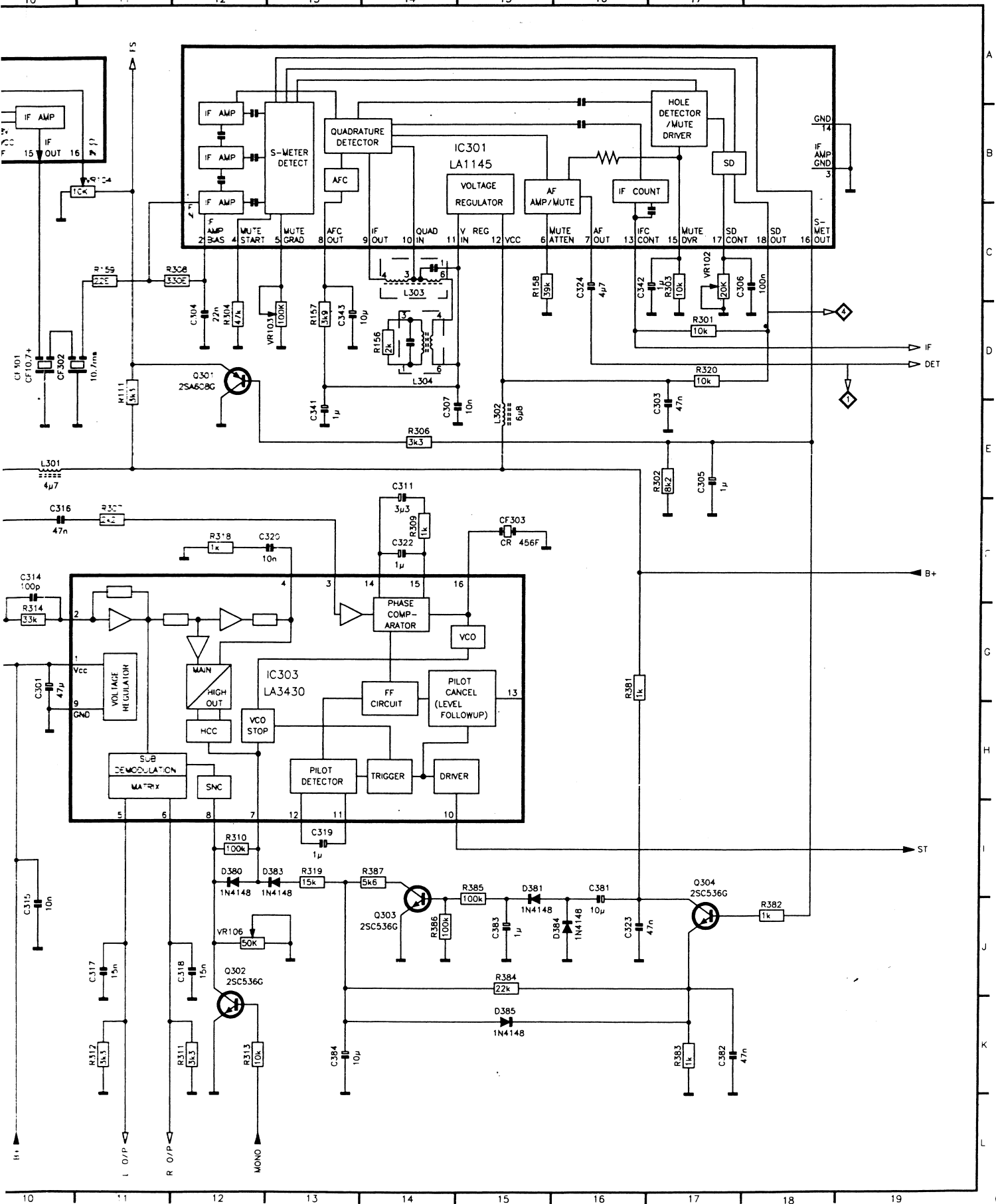


AM PIN LAYOUT



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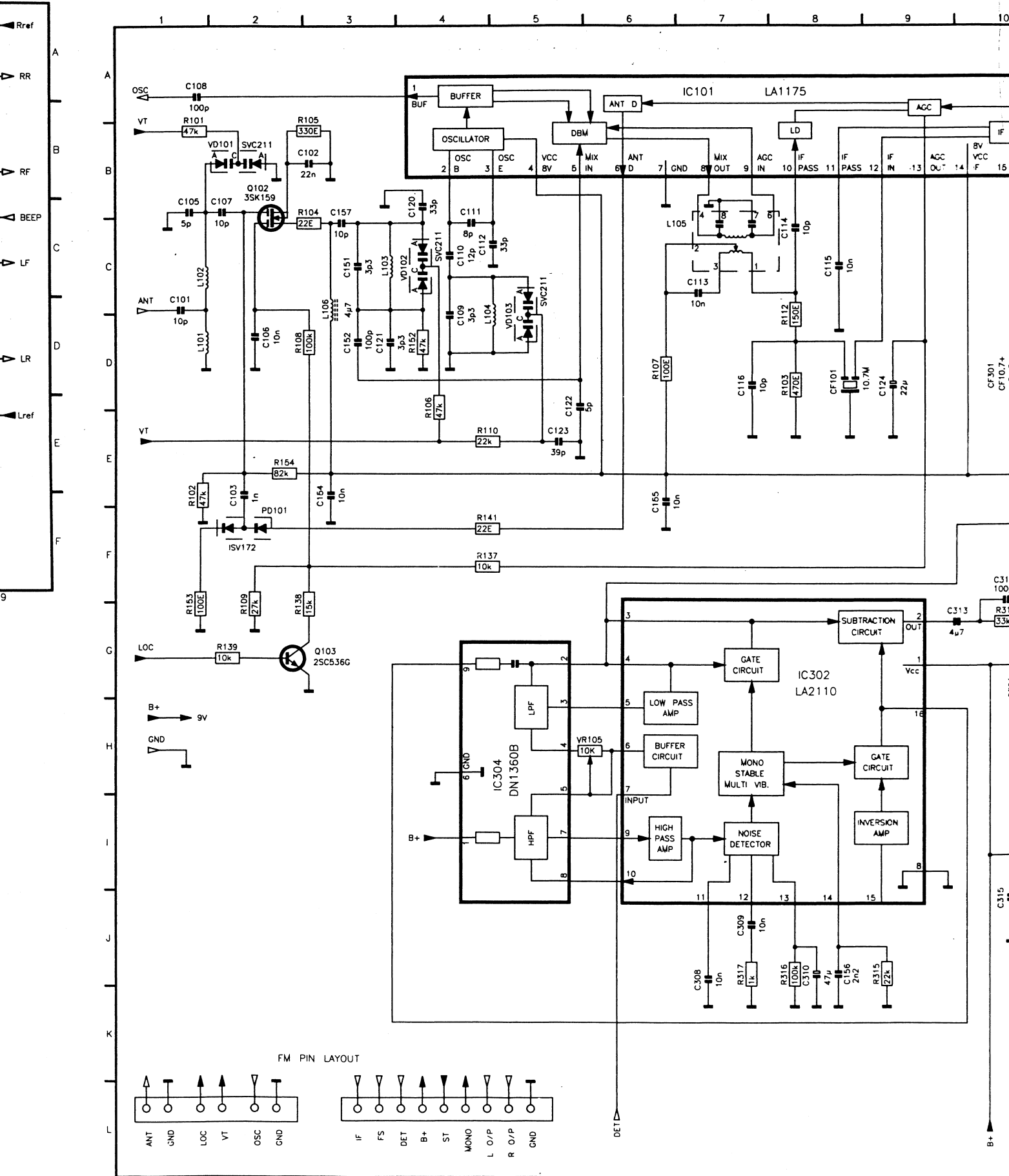
KC303	G'3	Q'02	B2	R101	B1	R107	D6	R137	F4	R154	E2	R302	E17	R309	F14	R315	J9	R381	G16	R387	I14	VR104	B11
KC304	H5	Q'03	G3	R102	E1	R108	D2	R138	G2	R156	D14	R303	E17	R310	I12	R316	J8	R382	G18	R387	B1	VR105	H5
L106	C6	Q301	D12	R103	D8	R109	G2	R139	G2	R157	D13	R304	D12	R311	K12	R317	J7	R383	K17	VD102	C4	VR106	J12
L303	C14	Q302	J12	R104	B2	R110	E4	R141	F4	R158	C15	R306	E14	R312	K11	R318	F12	R384	J15	VD103	D5		
L304	D'4	Q303	J14	R105	B2	R111	E11	R162	D4	R159	C11	R307	F11	R313	K12	R319	I13	R385	I15	VR102	C17		
PD101	F2	Q304	I17	R106	E4	R112	D8	R163	G1	R301	D17	R308	C11	R314	G10	R320	D17	R386	J14	VR103	D13		



CS 35 092

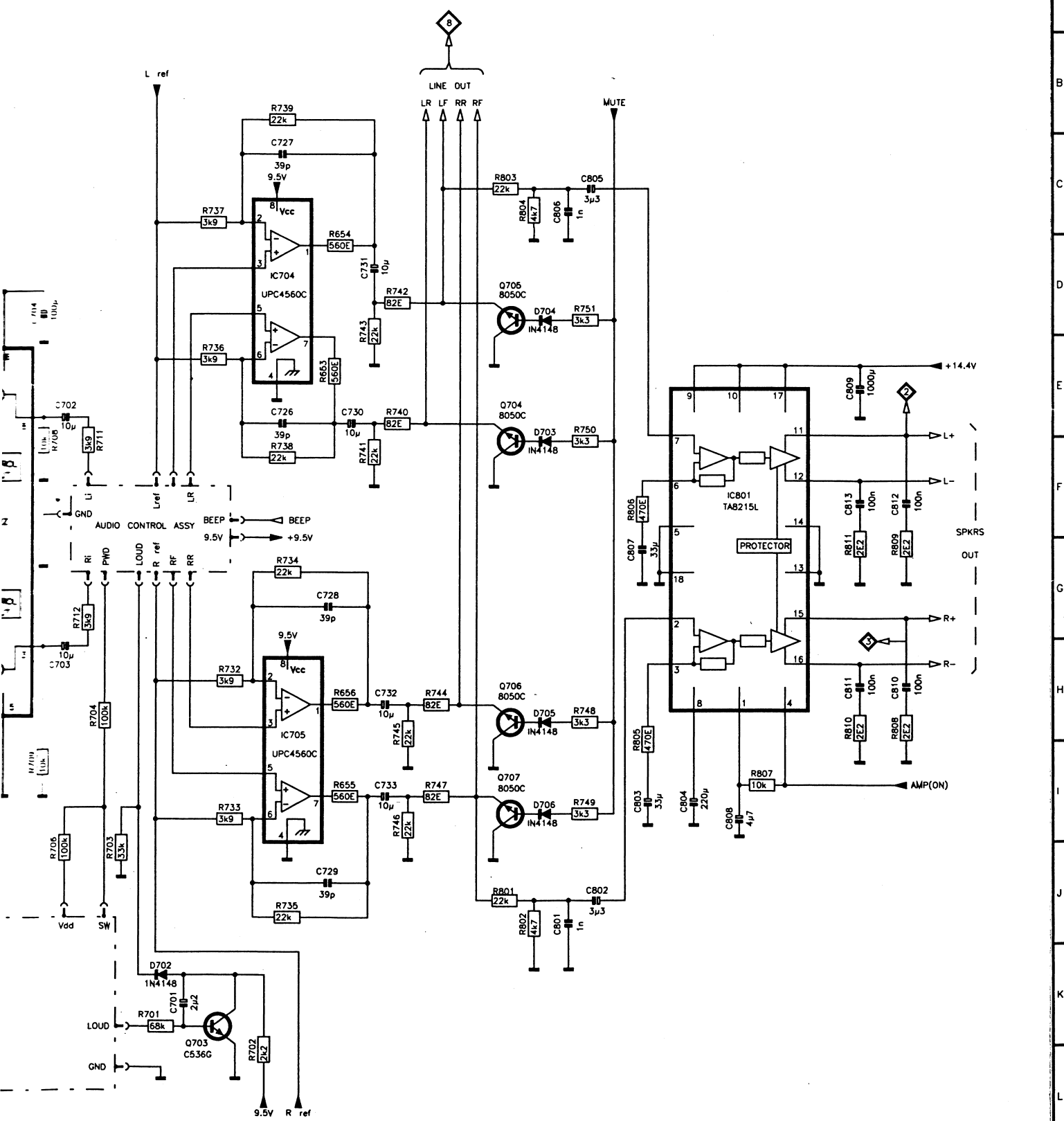
# 6.4 FM TUNER SCHEMATIC

C101	C1	C108	A1	C114	C8	C123	E5	C156	J8	C306	C17	C313	G9	C319	I13	C342	C16	CF101	D8	D383	I12	IC3
C102	B2	C109	D4	C115	C8	C124	D9	C157	B3	C307	E14	C314	F10	C320	F12	C343	D13	CF301	D10	D384	J16	IC3
C103	E2	C110	C4	C116	D7	C151	C3	C301	G10	C308	K7	C315	J10	C322	F14	C381	I16	CF302	D10	D385	K15	L10
C105	B1	C111	B4	C120	B4	C152	D3	C303	E10	C309	J7	C316	F10	C323	J16	C382	K17	CF303	F15	IC101	A7	L30
C106	D2	C112	C4	C121	D3	C154	E3	C304	D12	C310	J8	C317	J11	C324	C16	C383	J16	D380	I12	IC301	B14	L30
C107	B2	C113	C7	C122	E5	C155	F6	C305	E17	C311	E14	C318	J12	C341	E13	C384	K13	D381	I15	IC302	G8	PD1



PN37	F10	PN9	K2	Q708	F2	R670	L3	R705	J8	R713	D7	R721	C4	R729	E5	R737	C11	R745	I13	R802	J14	RB10	H17
PN38	F10	Q701	C3	Q709	F2	R671	L2	R706	J9	R714	F7	R722	H4	R730	E2	R738	F11	R746	I13	R803	C14	RB11	G17
PN39	F9	Q702	A3	R653	E12	R672	L4	R707	J6	R715	C3	R723	H5	R731	G2	R739	B11	R747	I13	R804	C14	VR701	G2
PN4	K2	Q703	K11	R654	D12	R674	L4	R708	F9	R716	C3	R724	H5	R732	H11	R740	E13	R748	H15	R805	I15		
PN5	K2	Q704	F14	R655	I12	R701	K10	R709	I9	R717	B2	R725	G5	R733	I11	R741	F12	R749	I15	R806	F15		
PN6	K2	Q705	E14	R656	H12	R702	L11	R710	I7	R718	B3	R726	E4	R734	G12	R742	D13	R750	E15	R807	I16		
PN7	K2	Q706	I14	R668	L3	R703	J10	R711	F10	R719	A3	R727	D5	R736	J12	R743	E12	R751	D15	R808	H17		
PN8	K2	Q707	I14	R669	L3	R704	H10	R712	G10	R720	A4	R728	F5	R736	E11	R744	H13	R801	J14	R809	G17		

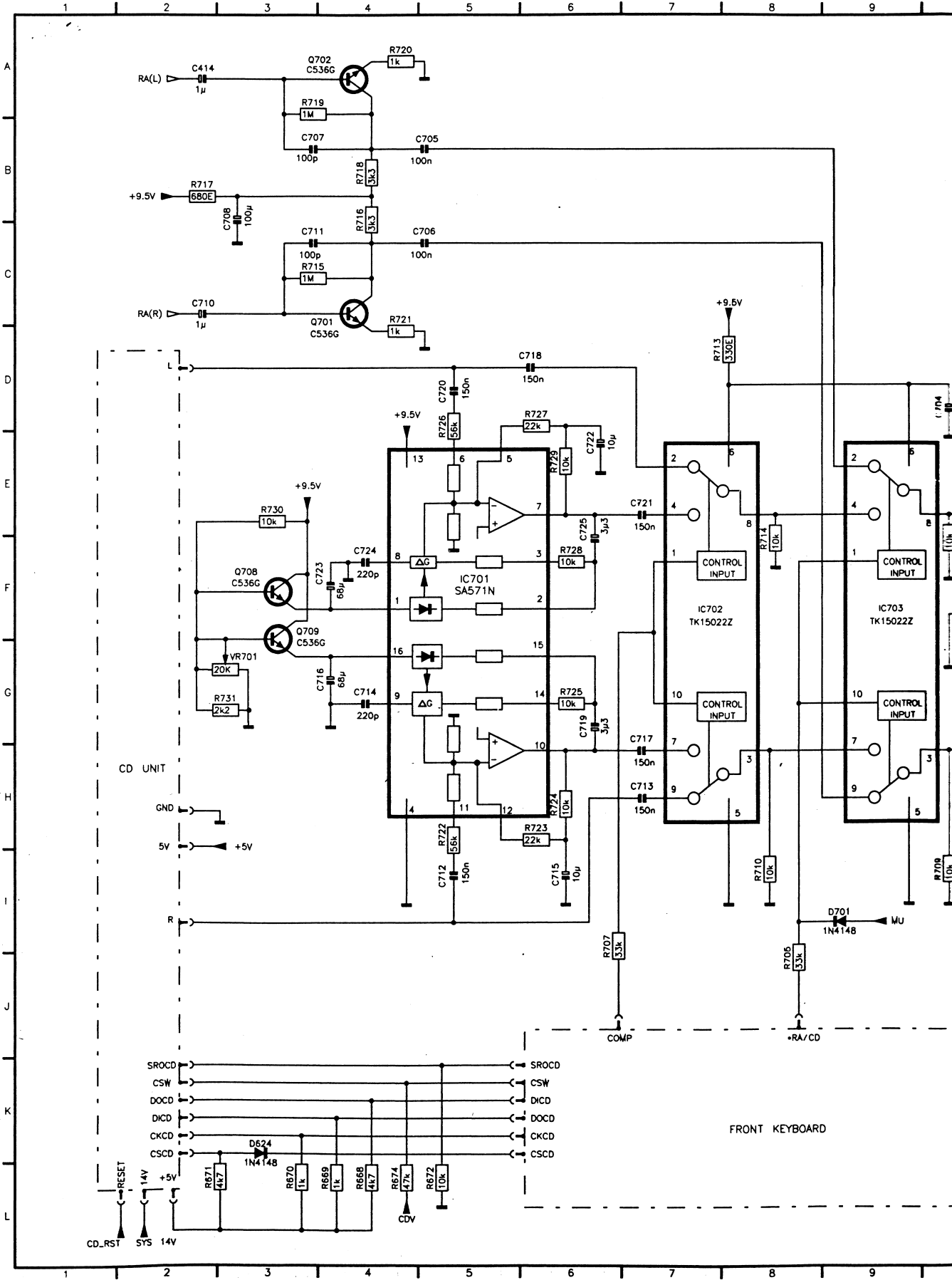
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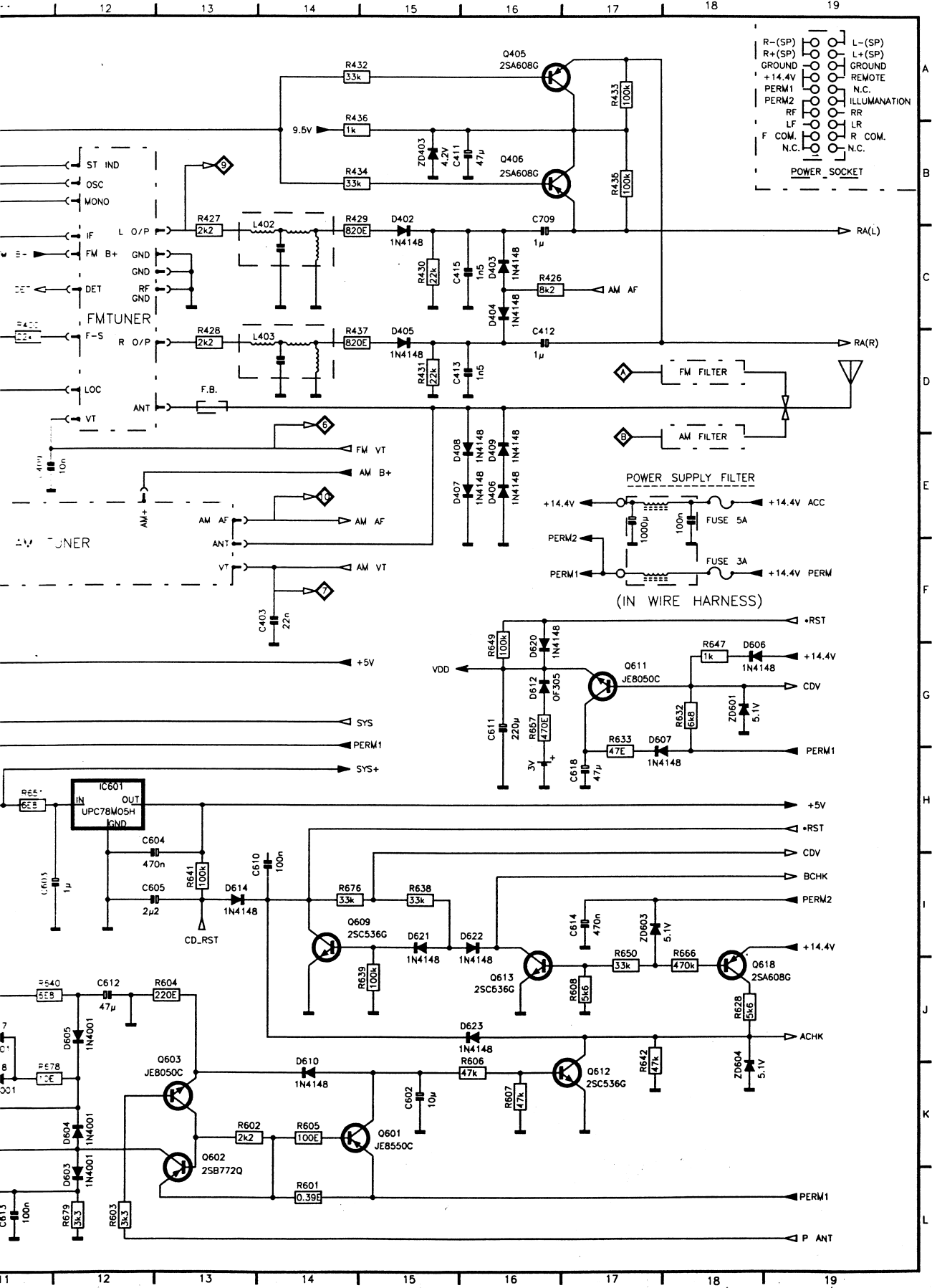
### 6.1.2 MAIN AUDIO CIRCUITS

C414	A2	C708	C2	C717	G6	C725	F6	C733	I13	C808	I16	D702	K10	IC704	D11	PN14	K5	PN21	J8	PN3	L1
C701	K11	C710	C2	C718	D5	C726	E11	C801	J14	C809	E17	D703	E14	IC705	H12	PN15	K5	PN23	J9	PN30	G'C
C702	E9	C711	C3	C719	G6	C727	C11	C802	J15	C810	H17	D704	D14	IC801	F16	PN16	K5	PN24	J10	PN31	G'C
C703	H9	C712	I4	C720	D4	C728	G12	C803	I15	C811	H17	D705	H14	PN1	L1	PN17	K5	PN25	K10	PN32	G''
C704	D9	C713	H6	C721	E6	C729	J12	C804	I16	C812	F17	D706	I14	PN10	I2	PN18	K5	PN26	L10	PN33	F''
C705	B4	C714	G3	C722	E6	C730	E12	C805	C15	C813	F17	IC701	F4	PN11	H2	PN19	K5	PN27	G10	PN34	F''
C706	C4	C715	I5	C723	F3	C731	D12	C806	C14	D624	K2	IC702	F7	PN12	H2	PN2	L1	PN28	G10	PN35	F''
C707	B3	C716	G3	C724	F3	C732	H13	C807	G15	D701	I8	IC703	F8	PN13	D2	PN20	J6	PN29	G10	PN36	F'C





R425	AB	R434	B14	R6C2	K13	R611	I10	R620	J4	R629	H5	R644	I4	R663	J3	XT401	D5
R426	C16	R435	B17	R6C3	L12	R612	H10	R621	J5	R632	G18	R645	I3	R666	I18	ZD403	B15
R427	B13	R436	B14	R6C4	J12	R613	I8	R622	K3	R633	G17	R646	J4	R675	J2	ZD601	G18
R428	D13	R437	D14	R6C5	K14	R614	I8	R623	K2	R636	C3	R647	G18	R676	I14	ZD602	J7
R429	B14	R438	F10	R6C6	K16	R615	I8	R624	K2	R638	I15	R649	G16	R677	I2	ZD603	I17
R430	C15	R439	D5	R6C7	K16	R616	I7	R625	K5	R639	J15	R650	I17	R678	K11	ZD604	K18
R431	D15	R440	C10	R6C8	J17	R617	L5	R626	K3	R640	J11	R651	H11	R679	L12	ZD605	I3
R432	A14	R441	D10	R6C9	G11	R618	J7	R627	L3	R641	I13	R657	G16	R680	C3		
R433	A17	R601	L14	R610	H10	R619	K5	R628	J18	R642	K17	R662	L5	THI-FI	G4		

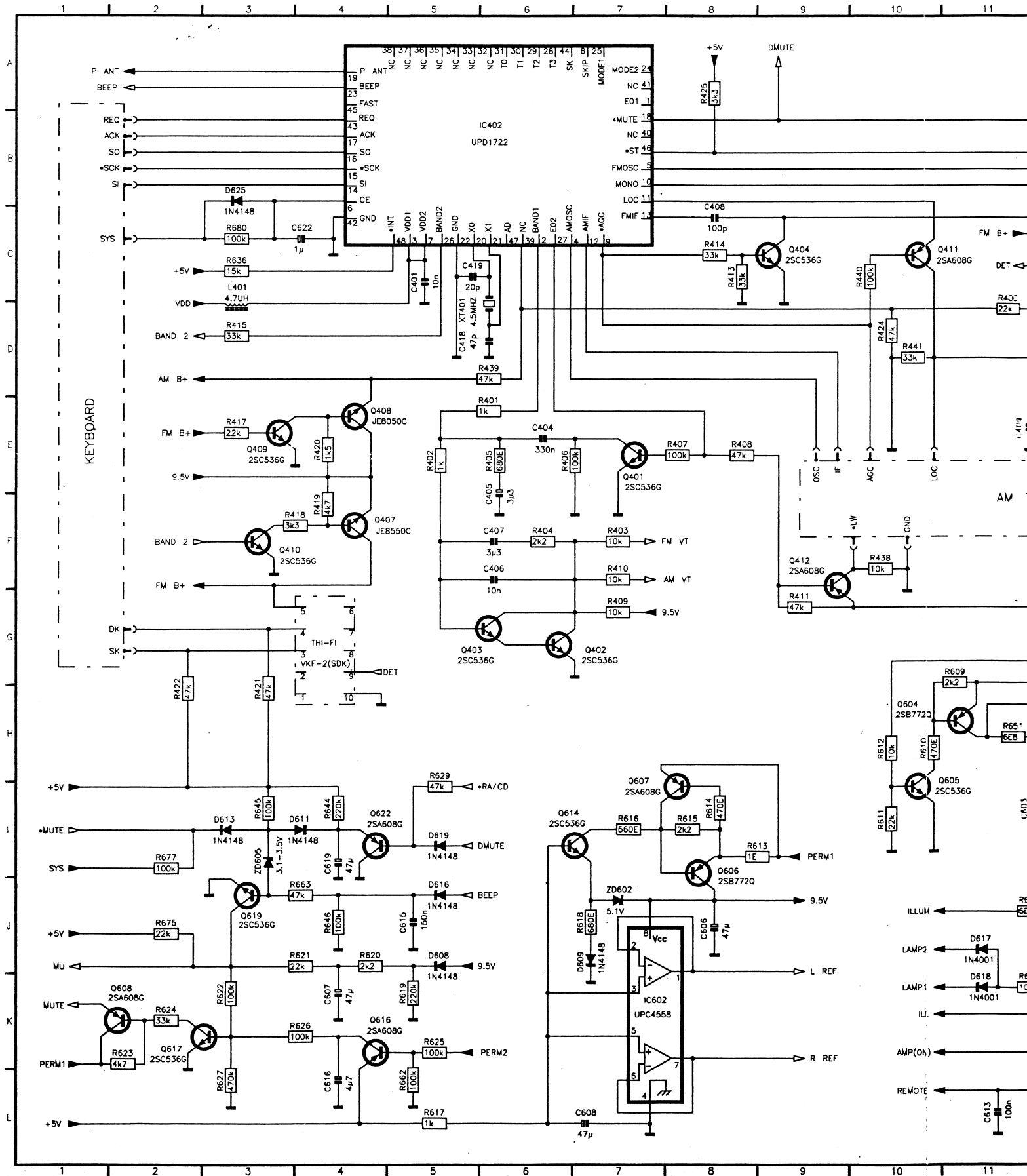


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## 6.1.1 MAIN DIGITAL TUNING SYSTEM AND SWITCHING CIRCUITS

C401	C5	C412	D16	C606	J8	C616	L4	D406	E16	D608	J5	D618	K11	IC602	K7	Q408	E4	O605	I10	Q616	K4	R404	F6	R414
C423	F14	C413	D15	C607	K4	C618	H17	D407	E15	D609	J7	D619	I5	L401	C3	Q409	E3	O606	I8	Q617	K2	R405	E6	R415
C434	E6	C415	C15	C608	L7	C619	I4	D408	E15	D610	K14	D620	G16	Q401	E7	Q410	F3	O607	I7	Q618	J18	R406	E6	R417
C435	F6	C418	D5	C610	I14	C622	C3	D409	E16	D611	I3	D621	I15	Q402	G7	Q411	C10	O608	K2	Q619	J3	R407	E8	R418
C436	F6	C419	C5	C611	G16	C709	B16	D603	L12	D612	I16	D622	I16	Q403	G5	Q412	F9	O609	I14	O622	I4	R408	E8	R419
C437	F6	C602	K15	C612	J12	D402	B15	D604	K12	D613	I13	D623	J16	Q404	C9	G601	K15	O611	G17	R400	C11	R409	G7	R420
C438	C8	C603	I11	C613	L11	D403	C16	D605	J12	D614	I13	D625	B3	Q405	A16	O602	L13	O612	K17	R401	E5	R410	F7	R421
C439	E11	C604	H12	C614	I17	D404	C16	D606	G18	D616	J5	IC402	B5	Q406	B16	O603	K12	O613	J16	R402	E5	R411	G9	R422
C411	B15	C605	I12	C615	J5	D405	D15	D607	G17	D617	J11	IC601	H12	Q407	F4	O604	H11	O614	I6	R403	F7	R413	C8	R424

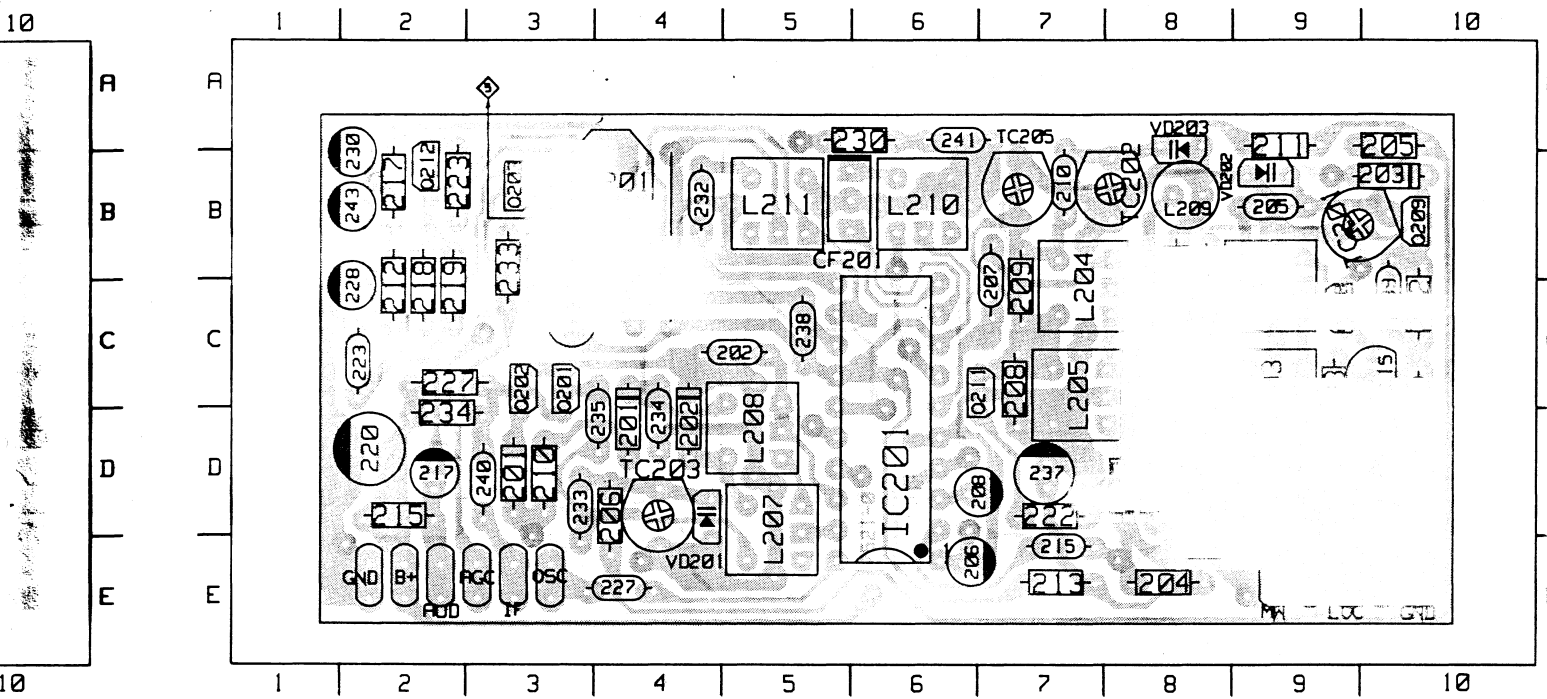


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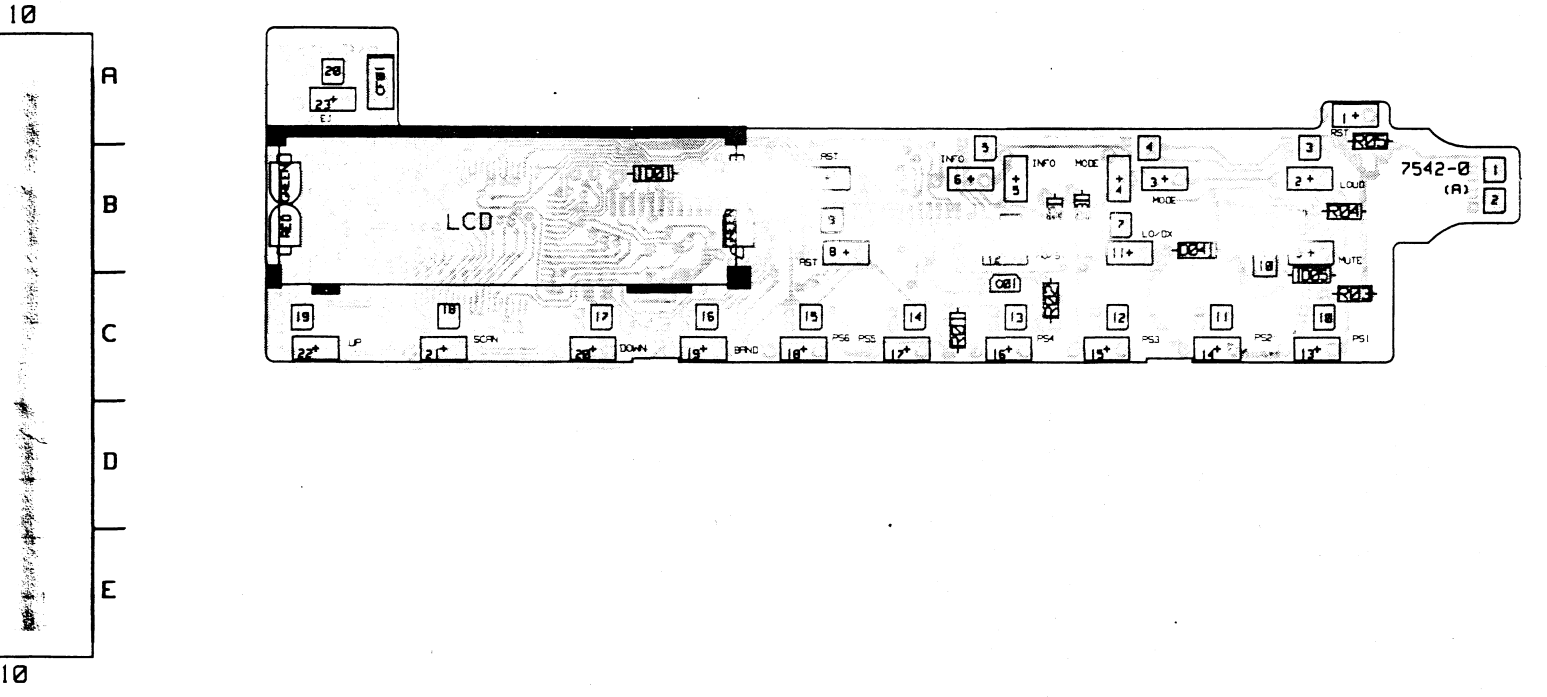
5.4 AM TUNER BOARD

R395 C5  
R396 C5  
R397 D4  
VD101 C9  
VD102 R9  
VR101 D8  
VR102 B4  
VR103 B5  
VR104 B4  
VR105 B3  
VR106 B2  
VR107 B2

C201	D9	C209	D9	C219	D9	C234	D4	C243	B2	L204	C7	Q202	C3	Q212	B2	R207	D8	R217	B2	R229	D9	TC203	D4
C202	C5	C210	B7	C220	D2	C235	D4	CF201	B5	L205	C7	Q203	B3	Q215	C9	R208	C7	R218	C2	R230	B5	TC204	D8
C203	C8	C211	B4	C223	C2	C237	D7	D201	D4	L207	E5	Q204	B3	R201	D3	R209	C7	R219	C2	R231	C4	TC205	B7
C204	D9	C213	C8	C227	E4	C238	C5	D202	D4	L208	D4	Q205	C8	R202	C9	R210	D3	R220	D8	R232	B3	VD201	D4
C205	B9	C214	C8	C228	B2	C239	C9	D203	B9	L209	B8	Q206	C9	R203	C9	R211	B9	R222	D7	R233	C3	VD202	B9
C206	E6	C215	E7	C230	A2	C240	D3	L201	D9	L210	B6	Q209	B9	R204	E8	R212	C2	R223	B3	R234	D2	VD203	A8
C207	C7	C216	E6	C232	B4	C241	A6	L202	C9	L211	B5	Q210	D8	R205	B9	R213	E7	R226	C8	TC201	B9	VR201	B4
C208	D6	C217	D2	C233	D3	C242	C3	L203	C9	Q201	C3	Q211	C7	R206	D4	R215	D2	R227	C2	TC202	B8		

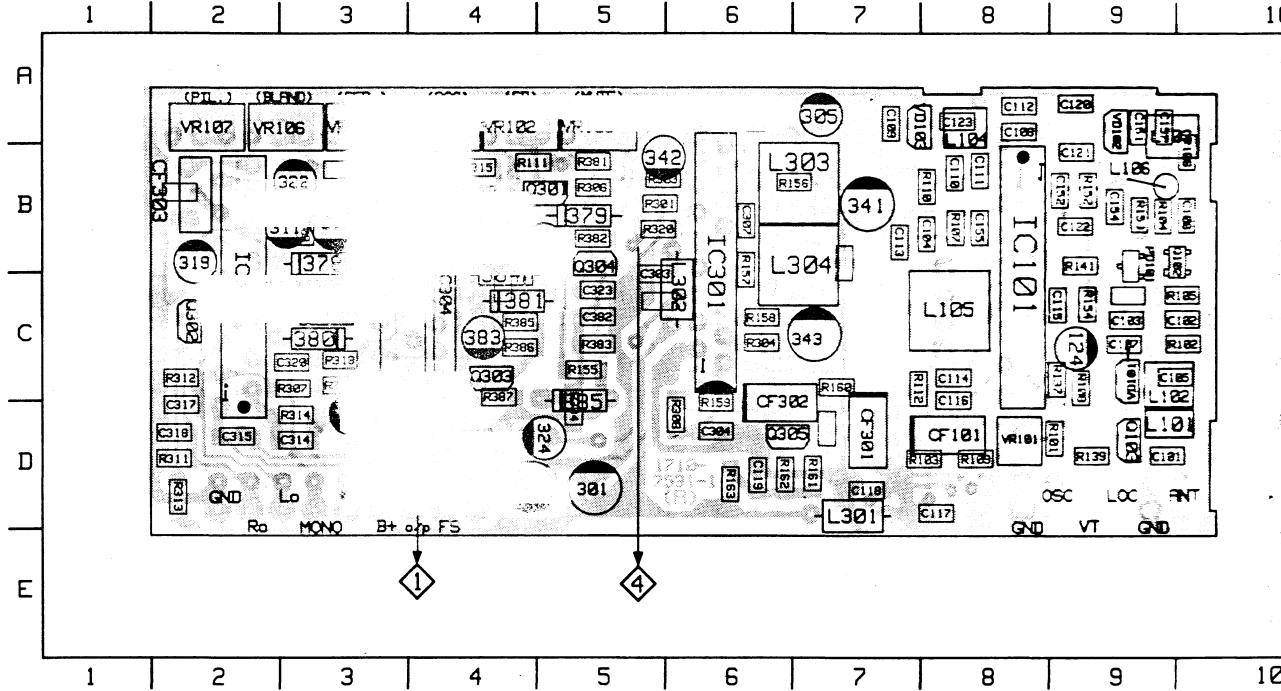


5.5 KEYBOARD



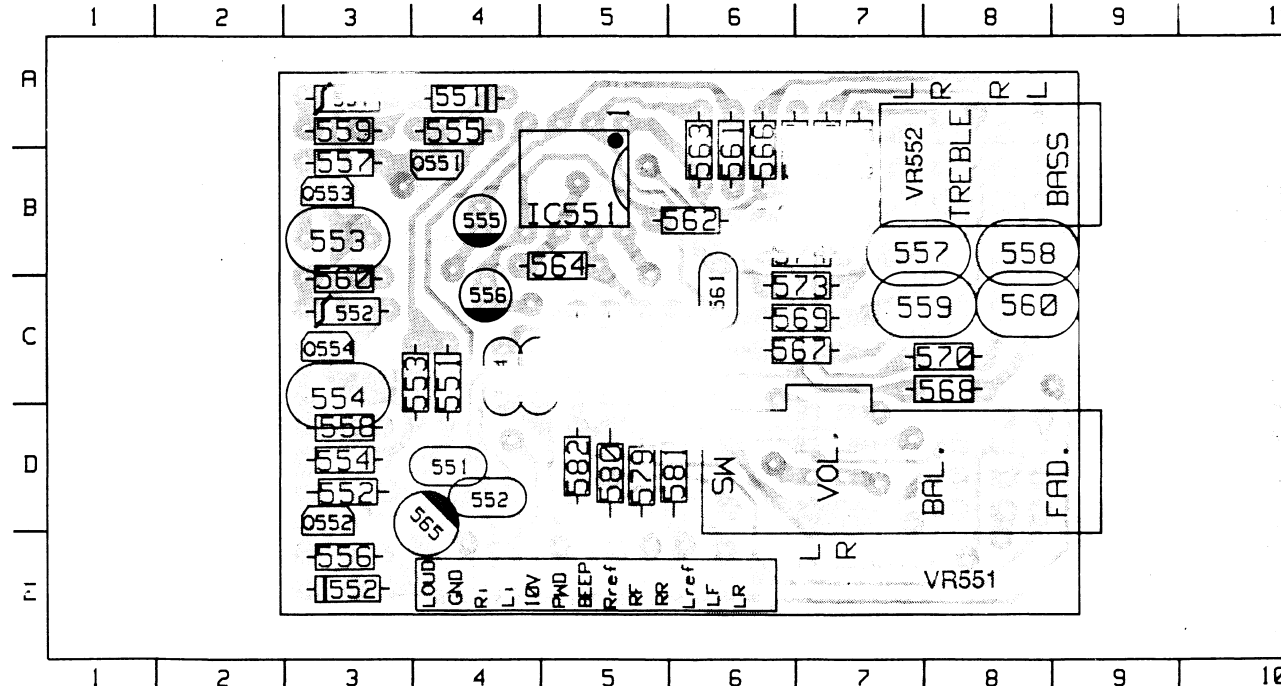
### 5.2 FM TUNER BOARD

C101	D9	C114	C9	C154	B9	C313	D3	C381	B5	D383	D4	L106	B9	Q305	D6	R137	C9	R152	D6	R313	D6	R385	D6
C102	C9	C115	C9	C155	B8	C314	D3	C382	C5	D384	C4	L301	D7	R101	D9	R139	D9	R153	D6	R314	D6	R386	D6
C103	C9	C116	D8	C156	B4	C315	D2	C383	C4	D385	C5	L302	B6	R102	C9	R141	B9	R154	D9	R315	D6	R387	D6
C104	B8	C117	D8	C157	A9	C317	D2	C384	D4	IC101	B8	L303	B6	R103	D8	R152	B9	R155	B9	R316	D6	R388	D6
C105	C9	C118	D7	C301	D5	C318	D2	CF101	D8	IC301	C6	L304	B6	R104	B9	R153	B9	R156	C9	R317	D6	R389	D6
C106	B9	C119	D6	C303	C6	C319	C2	CF301	D7	IC302	D3	PD101	C9	R105	C9	R154	C9	R157	C9	R318	D6	R390	D6
C107	C9	C120	A9	C304	D6	C320	C3	CF302	C7	IC303	C2	Q102	B9	R106	B9	R155	C5	R158	B7	R319	D6	R391	D6
C108	A8	C121	B9	C305	A7	C322	B3	CF303	B2	IC304	C4	Q103	B9	R107	B8	R156	B7	R159	C6	R320	D6	R392	D6
C109	A7	C122	B9	C306	A6	C323	C5	D378	B3	L101	D9	Q301	B4	R108	D8	R157	C6	R160	C6	R321	D6	R393	D6
C110	B8	C123	A8	C307	B6	C324	D5	D379	B5	L102	C9	Q302	C2	R109	D8	R158	C6	R161	D7	R322	D6	R394	D6
C111	B8	C124	C9	C308	C3	C341	B7	D380	C3	L103	A9	Q303	C4	R110	B8	R159	D6			R323	D6		
C112	A8	C151	A9	C309	B4	C342	B6	D381	C5	L104	A8	Q304	B5	R111	B5	R160	C7			R324	D6		
C113	B7	C152	B9	C311	B3	C343	C7	D382	C3	L105	C8			R112	D7	R161	D7			R325	D6		

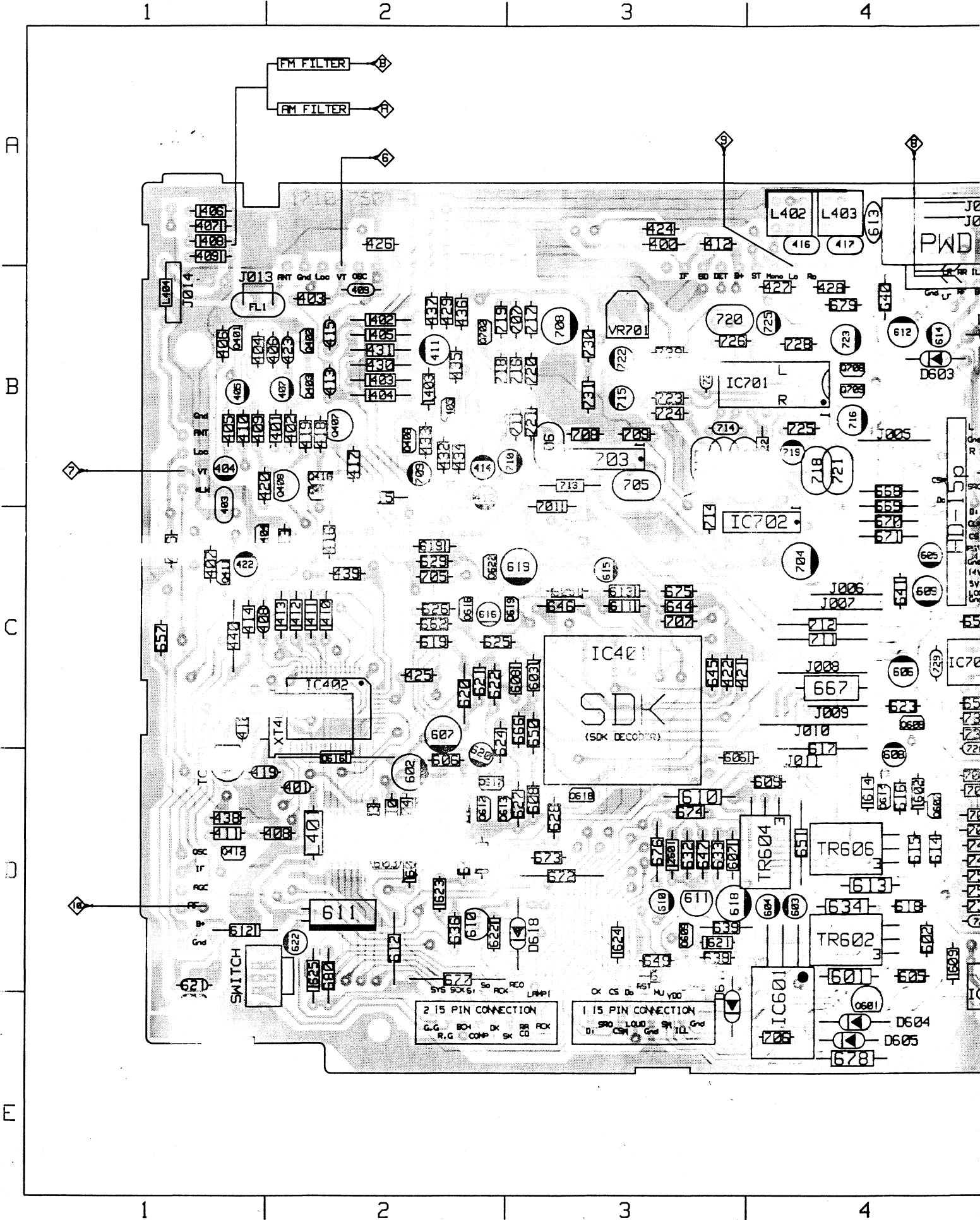


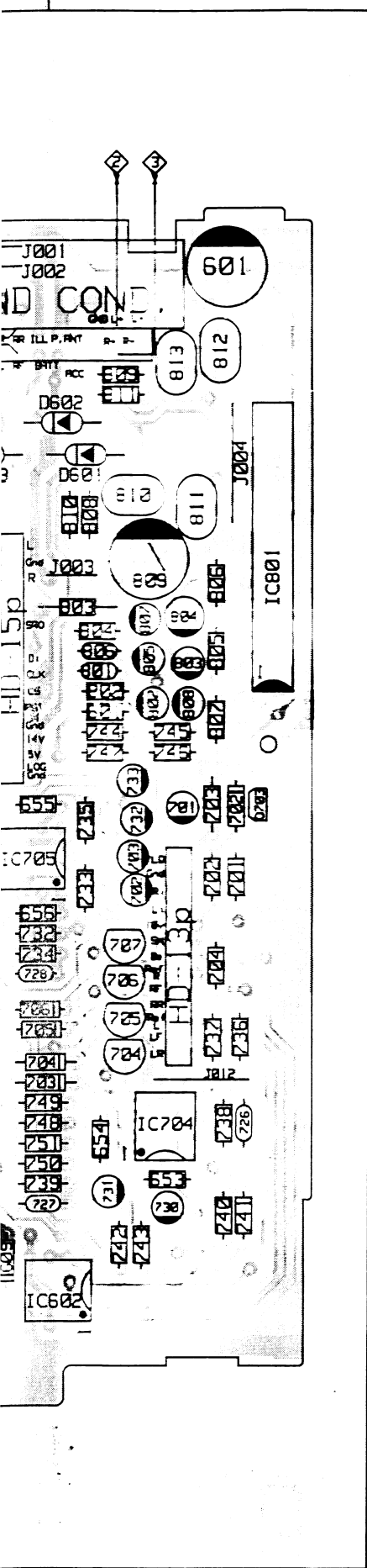
### 5.3 AUDIO CONTROL BOARD

C551	D4	C557	B8	C563	C5	O551	B4	R553	C4	R559	A3	R565	B7	R571	B7	R577	C5	Z0551	A3
C552	D4	C558	B8	C564	C4	O552	D3	R554	D3	R560	C3	R566	B6	R572	B7	R578	C5	Z0552	C3
C553	B3	C559	C8	C565	E4	O553	B3	R555	A4	R561	B6	R567	C7	R573	C7	R579	D5		
C554	D3	C560	C8	D551	A4	O554	C3	R556	E3	R562	B6	R568	C8	R574	B7	R580	D5		
C555	B4	C561	C6	D552	E3	R551	C4	R557	B3	R563	B6	R569	C7	R575	C6	R581	D6		
C556	C4	C562	B7	IC551	B5	R552	D3	R558	D3	R564	B5	R570	C8	R576	C5	R582	D5		



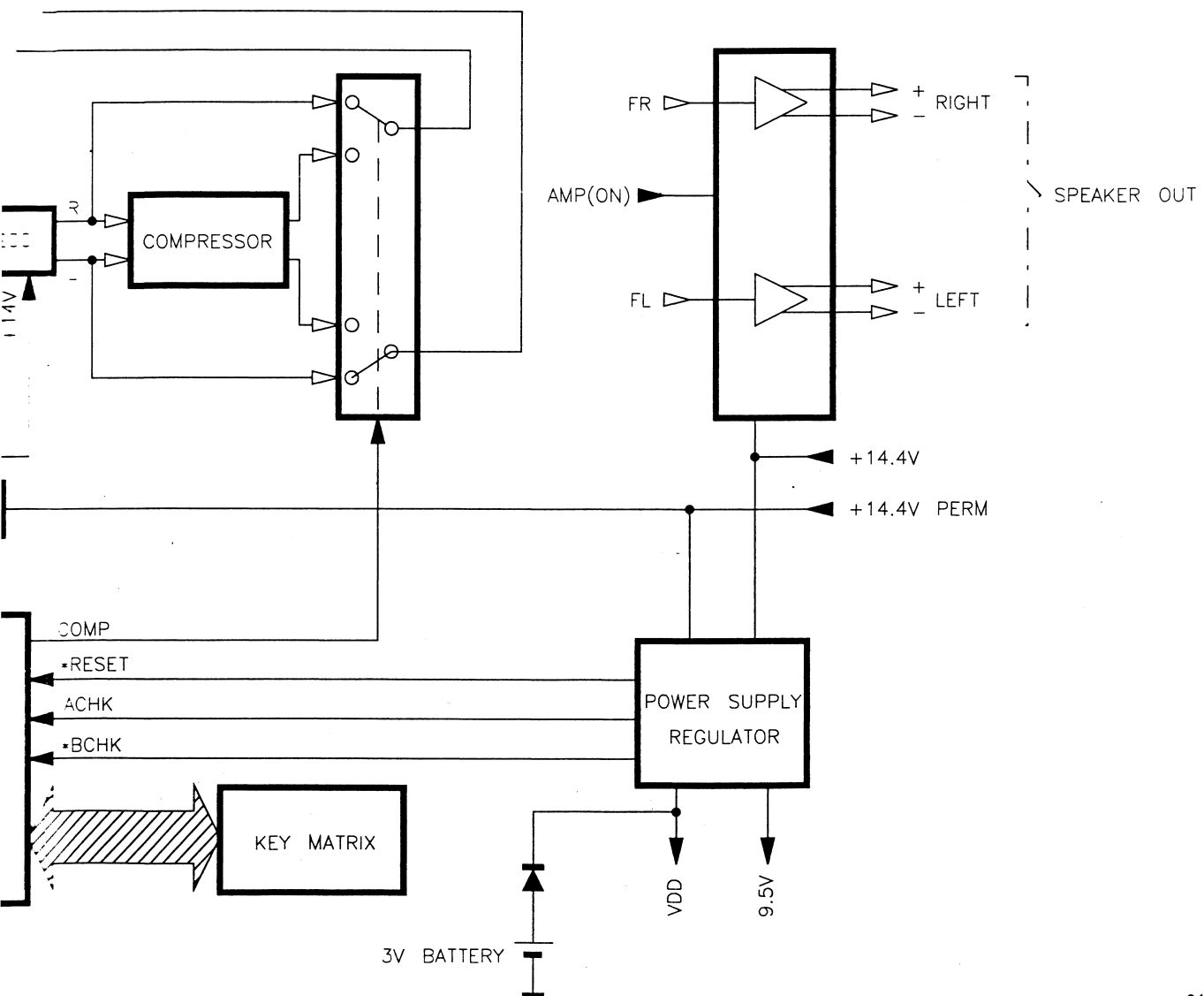
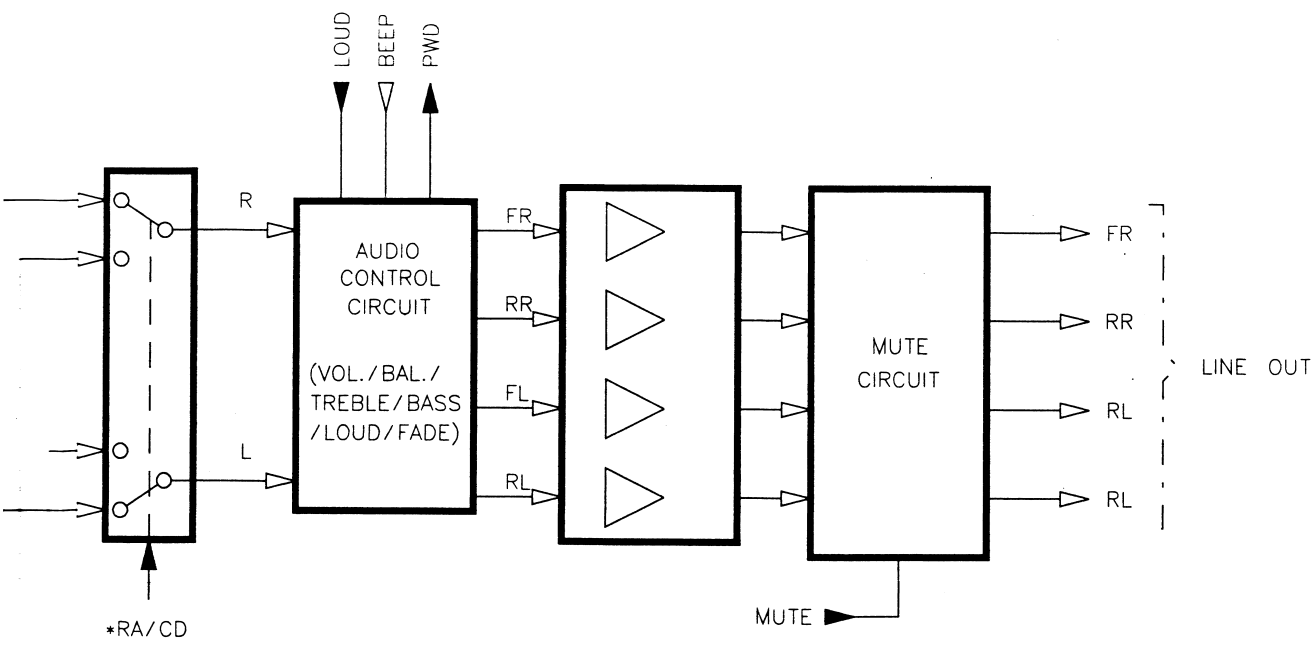
5.1 MAIN PCB



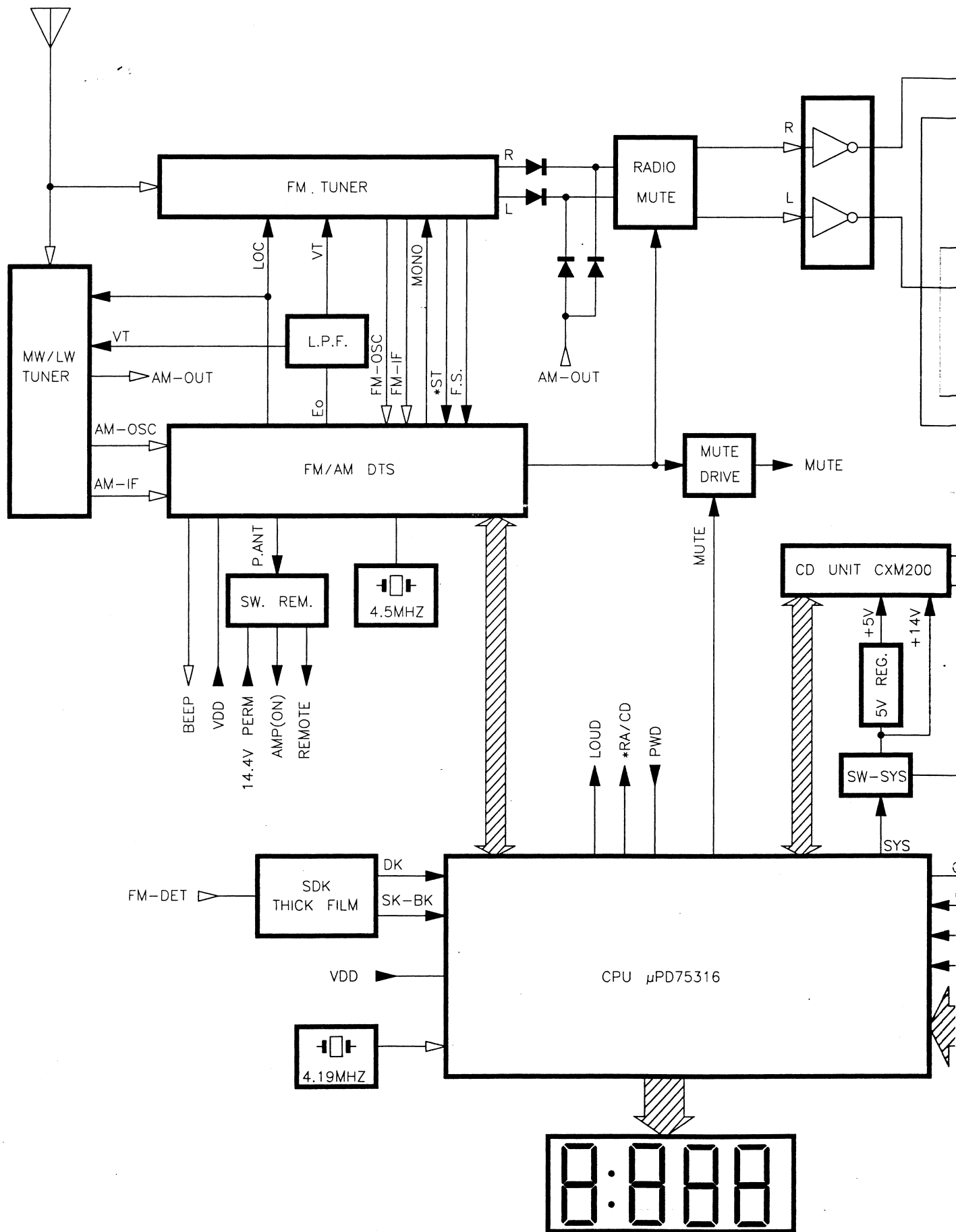


A  
B  
C  
D  
E

C401	D2	C808	C4	Q406	B2	R608	D3	R720	B3
C403	C1	C809	B4	Q407	B2	R609	D4	R721	B3
C404	B1	C810	B4	Q408	B2	R610	D3	R722	B4
C405	B1	C811	B4	Q409	B2	R611	D2	R723	B3
C406	B2	C812	B4	Q410	B2	R612	D2	R724	B3
C407	B2	C813	B4	Q411	C1	R613	D4	R725	B4
C408	C1	D402	B2	Q412	D1	R614	D4	R727	B3
C409	B2	D403	B2	Q601	E4	R615	D4	R728	B4
C411	B2	D404	B2	Q603	D2	R616	D4	R729	B3
C412	B2	D405	B2	Q605	D2	R617	D4	R730	B3
C413	B2	D406	A1	Q607	D4	R618	D4	R731	B3
C414	B2	D407	A1	Q608	C4	R619	C2	R732	C4
C415	B2	D408	A1	Q609	D3	R620	C2	R733	C4
C416	A4	D409	A1	Q610	D2	R621	C2	R734	C4
C417	A4	D410	C2	Q611	D3	R622	C2	R735	C4
C418	C1	D411	C2	Q612	D2	R623	C4	R736	D4
C419	D2	D412	C2	Q613	D3	R624	D2	R737	D4
C422	C1	D413	C2	Q614	D4	R625	C2	R738	D4
C423	B2	D601	B4	Q616	C2	R626	B3	R739	D4
C601	A4	D602	B4	Q617	D2	R626	C2	R740	D4
C602	D2	D603	B4	Q618	D3	R627	D3	R741	D4
C603	D4	D603	C3	Q619	C3	R628	D3	R742	D4
C604	D4	D604	E4	Q622	C2	R629	C2	R743	D4
C605	C4	D605	E4	Q701	B2	R632	D3	R744	C4
C606	C4	D606	D3	Q702	B2	R633	D3	R745	C4
C607	C2	D607	D3	Q703	C4	R634	D4	R746	C4
C608	D4	D608	C3	Q704	D4	R636	D2	R747	C4
C609	C4	D609	D4	Q705	D4	R638	D3	R748	D4
C610	D3	D610	D2	Q706	D4	R639	D3	R749	D4
C611	D2	D611	C3	Q707	C4	R640	B4	R750	D4
C612	B4	D612	D1	Q708	B4	R641	C4	R751	D4
C613	A4	D613	C3	Q709	B4	R642	D2	R801	C4
C614	B4	D614	D4	R400	A3	R644	C3	R802	C4
C615	C3	D616	D2	R401	B2	R645	C3	R803	B4
C618	D3	D617	E3	R402	B2	R646	C3	R804	B4
C619	C3	D618	D3	R403	B2	R647	D3	R805	C4
C620	D2	D619	C2	R404	B1	R649	D3	R806	B4
C621	D1	D620	D3	R405	B1	R650	C3	R807	C4
C622	D2	D621	D3	R406	B1	R651	D4	R808	B4
C622	E1	D622	D2	R407	C1	R653	D4	R809	B4
C701	C4	D623	D2	R408	D2	R654	D4	R810	B4
C702	C4	D624	D3	R409	B1	R655	C4	R811	B4
C702	C4	D625	D2	R410	B1	R656	C4	SW	D1
C703	C4	D701	B3	R411	D1	R657	C1	TC401	D1
C704	C4	D702	C4	R412	A3	R662	C2	TR602	D4
C705	B3	D703	D4	R413	C2	R663	C3	TR604	D4
C706	B3	D704	D4	R414	C1	R666	C3	TR606	D4
C707	B3	D705	D4	R415	B2	R667	C4	VR701	B3
C708	B3	D706	D4	R416	C2	R668	B4	XT401	C2
C709	B2	FL1	B1	R417	B2	R669	C4	Z403	B2
C710	B2	IC402	C2	R418	B2	R670	C4	Z601	D3
C711	B3	IC601	D4	R419	B2	R671	C4	Z602	D4
C712	B4	IC602	E4	R420	B1	R672	D3	Z604	D2
C713	B3	IC701	B3	R421	C3	R673	D3	Z605	C3
C714	B3	IC702	C4	R422	C3	R674	D3	Z606	D2
C715	B3	IC703	B3	R424	A3	R675	C3		
C716	B4	IC704	D4	R425	C2	R676	D3		
C717	B3	IC705	C4	R426	A2	R677	D2		
C718	B4	IC801	C4	R427	B4	R678	E4		
C719	B4	J001	A4	R428	B4	R679	B4		
C720	B3	J002	A4	R429	B2	R680	D2		
C721	B4	J003	B4	R430	B2	R701	C4		
C722	B3	J004	B4	R431	B2	R702	C4		
C723	B4	J005	B4	R432	B2	R703	C4		
C724	B3	J006	C4	R433	B2	R704	C4		
C725	B4	J007	C4	R434	B2	R705	C2		
C726	D4	J008	C4	R435	B2	R706	E4		
C727	D4	J009	C4	R436	B2	R707	C3		
C728	D4	J010	C4	R437	B2	R708	B3		
C729	C4	J011	D4	R438	D1	R709	B3		
C730	D4	J012	D4	R439	C1	R710	B4		
C731	D4	L401	D2	R439	C2	R711	C4		
C733	C4	L402	A4	R440	C1	R712	C4		
C801	C4	L403	A4	R601	D4	R713	B3		
C802	C4	L404	B1	R602	D4	R714	C3		
C803	C4	Q401	B1	R603	D2	R715	B2		
C804	B4	Q402	B2	R604	D2	R716	B3		
C805	C4	Q403	B2	R605	D4	R717	B3		
C806	C4	Q404	C1	R606	D2	R718	B2		
C807	B4	Q405	B2	R607	D2	R719	B2		

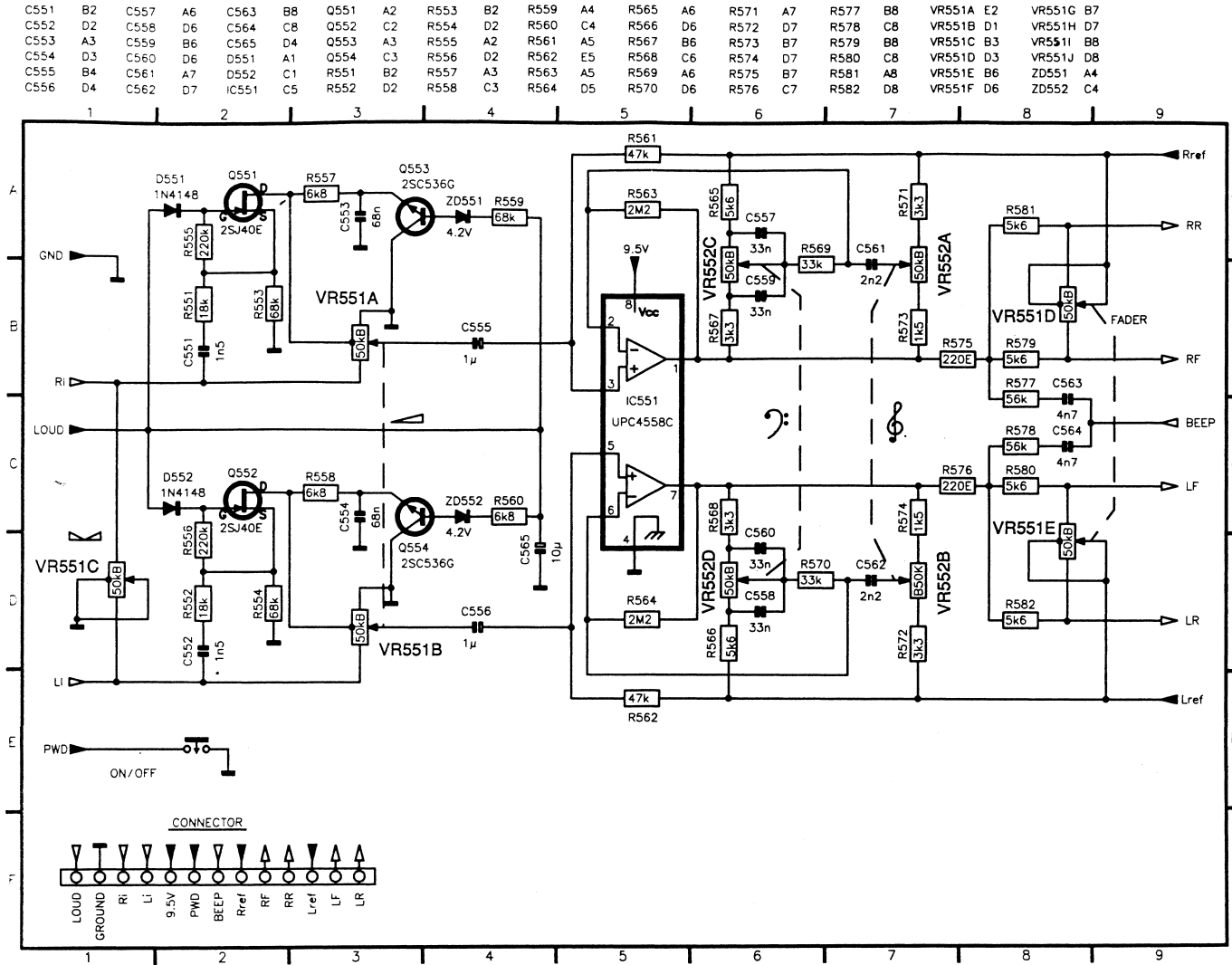


# 4.0 BLOCK DIAGRAM



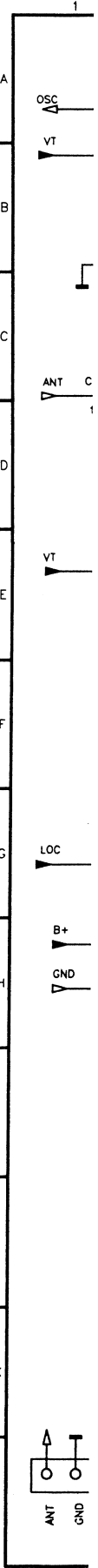


### 6.3 AUDIO CONTROL SCHEMATIC



### 6.4 FM TUN

C101	C1
C102	B2
C103	E2
C105	B1
C106	D2
C107	B2



### FM & AM TUNER VOLTAGES (REPEATED)

.....V any position	17 = 3V	<b>IC303 LA3400</b>	<b>Q203 2SC536G</b>	<b>Q212 2SA608G</b>
.....V FM position FM	18 = 5.8V	1 = 9.3V	e = 8V	e = 3V
.....V AM position MW/LW	19 = 5.7V	2 = 3.4V	b = 8.2V	b = 4.7V
.....V CD position CD	20 = 3V	3 = 3.5V	c = 7.5V	c = 3V
<b>IC101 LA1175</b>	<b>IC301 LA1145</b>	4 = 2.8V	<b>Q204 2SC536G</b>	<b>Q213 2SC536G</b>
1 = 1.4V	1,2 = 2.8V	5,6 = 3.6V	e = 0V	e = 4.7V
2 = 2.4V	3 = GND	7 = 1.3V	b = 0.7V MW	b = 0.8
3 = 1.8V	4 = 4V	8 = 0.8V	= 0V LW	c = 8V
4 = 9.3V	5 = 5V	9 = GND	c = 0V MW	<b>Q215 2SK163M</b>
5 = 3.7V	6 = 2V	10 = 0.8V	= 0.6V LW	G = 0V
6 = 0.8V	7-11 = 5V	11 = 2.8V	<b>Q205 2SK184GR</b>	S = 0V
7 = GND	12 = 9.3V	12 = 2.7V	G = 0V	D = 7.7V
8-9 = 8.5V	13 = 0V	13 = 2.6V	S = 0V	<b>Q301 2SA608G</b>
10 = 0V	14 = GND	14,15 = 2.7V	D = 7.5V	e = 5.6V
11 = 3.3V	15 = 0V	16 = 3.5V	<b>Q208 2SC536G</b>	b = 5V
12 = 0V	16,17 = 5V	<b>Q102 3SK159</b>	e = 7.7V	c = 0V
13 = 7.8V	18 = 4.6V	G = 8.9V	b = 2.4V	<b>Q302 2SC536G</b>
14 = 9.3V	<b>IC201 LA1135</b>	D1 = 3.3V	c = 7.7V	e = 0V
15 = 5.8V	<b>IC302 LA2110</b>	D2 = 5.7V	<b>Q200 2SC536G</b>	b = 0V
16 = 1.2V	1 = 9.3V	<b>Q103 2SC536G</b>	e = 0V	= 0.6V (MONO)
22-22 = 2.0V	2 = 3.5V	e = 0V	b = 0.5V	c = 0.7V
<b>IC202 LA1135</b>	3,4 = 4.6V	b = 0V	c = 0V	= 0V (MONO)
1 = 2.4V	5,6 = 4.2V	a = 0.6V (LOC)	<b>Q210 2SC536G</b>	<b>Q303 2SC536G</b>
2 = 2V	7 = 4.8V	c = 2.4V	e = 0V	e = 0V
3 = 0.9V	8 = GND	= 0V (LOC)	b = 6.7V	b = 0V
4 = 1V	9 = 1.7V	<b>Q201 2SC536G</b>	c = 0V	c = 2.8V
5 = GND	10 = 3V	e = 0V	<b>Q211 2SC536G</b>	e = 4.3V
6 = 2V	11 = 0V	b = 0V MW	e = 0V	b = 5V
7,8 = 8.3V	12 = 2.3V	= 0.6V LW	b = 0.7V	c = 4.8V
9 = 0.8V	13 = 0.1V	c = 0.1V MW	c = 0V	
10 = 8.3V	14 = 0V	= 4.5V LW		
11 = 0.7V	15,16 = 4.5V			
12 = GND				
13 = 3V				
14 = 8.3V				
15 = 1.3V				
16 = 3.9V				

