DIGITALE A/V SURROUND RECEIVER FR975/00/01C/17

MX980D/37

Service
Service
Service

Service Manual

DOLBY DIGITAL

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Safety regulations require that the set be restored to its original condition and that parts which are indentical with those specified be used.

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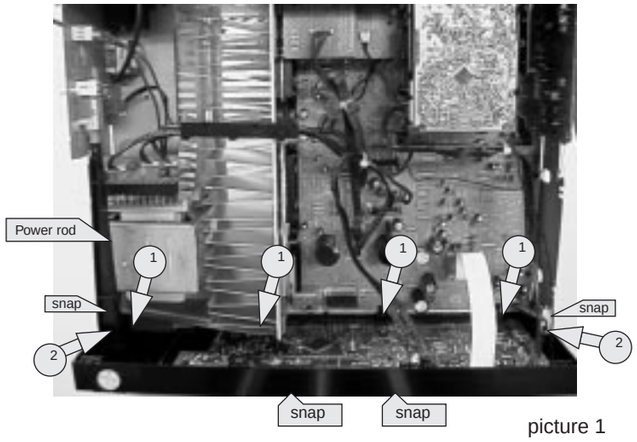
PCS 102 481

PHILIPS

DISMANTLING HINTS

Dismantling of Front

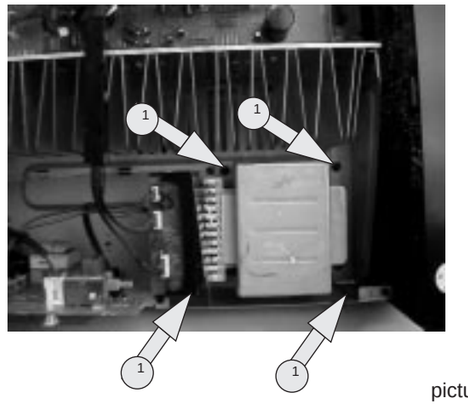


picture 1

1) Remove top cover
2) Remove power rod
3) Remove 6 x screw as shown in picture 1
4) Release two snaps (left & right side front)
5) Release two snaps on the bottom side front
6) Tipp down front as shown in picture 2

picture 2

Dismantling of mainstrafo

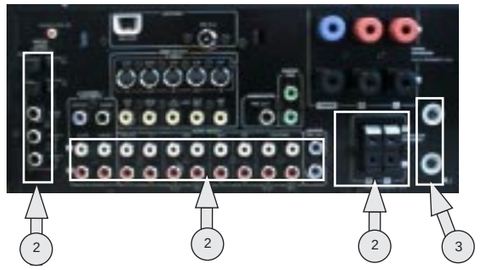


picture 8

1) Remove power rod
2) Remove 4x screw as shown in picture 8

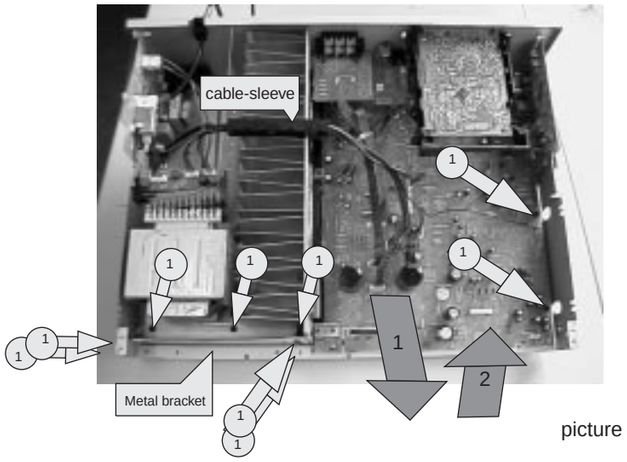
Dismantling of mono board

1) Remove front . See picture 1
2) Remove whole front (disconnect the wires on the mono board coming from front)



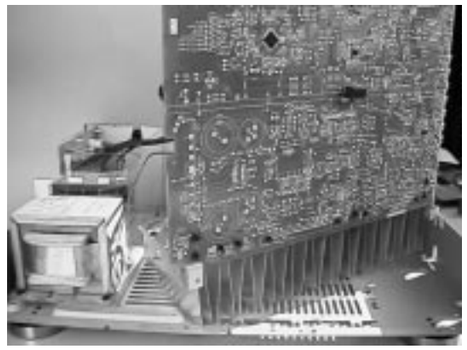
picture 3

3) Remove 14 x screws shown in mentionned aria . See picture 3



picture 4

4) Remove wires out the cable-sleeve.
5) Remove 7 x screw and remove metal bracket
6) Remove 2 x screw on mono board . See pictue 4
7) Remove mono board as shown arrow 1 & 2 . See picture 4
8) Bring the mono board in the service position as shown in picture 5



picture 5

Legend

1 = Torx M3x6mm (screw with big head)
2 = Torx 3x10mm
3 = Torx M3x6mm

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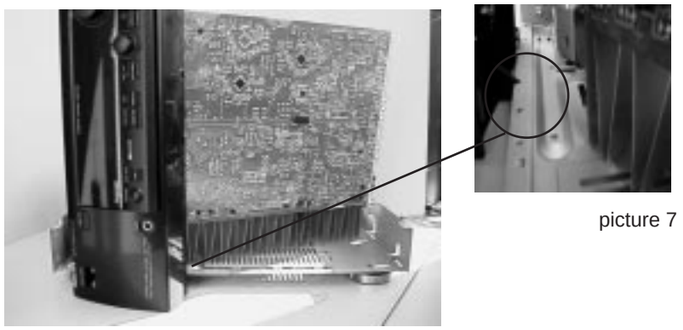
Service position monoboard

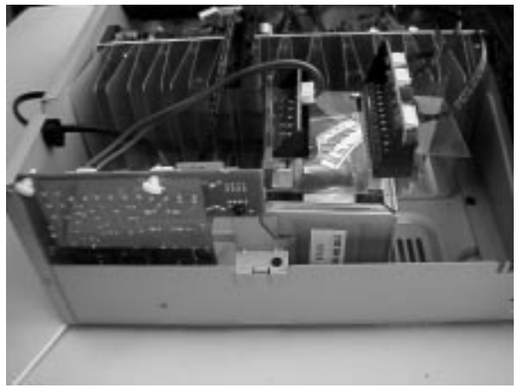
1) Bring front in position as shown in picture 6
2) Snap nok of front in bottom to make front stable . See picture 7
3) Connect front wiring back to monoboard.
*The tuner module doesn't have to be connected. Use an other source (pe.CD)



picture 7

picture 6

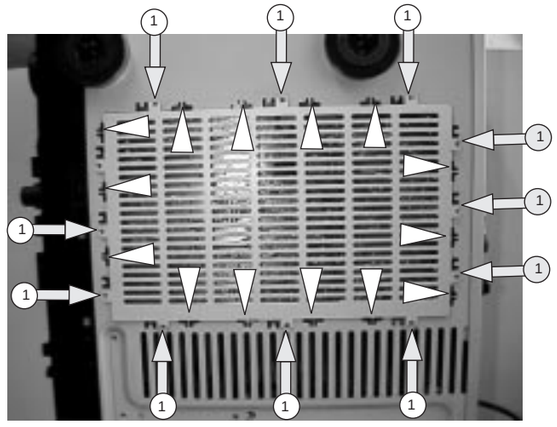
Service position main trafo



picture 9

1) Put main trafo as shown in picture 9

Handling service cover



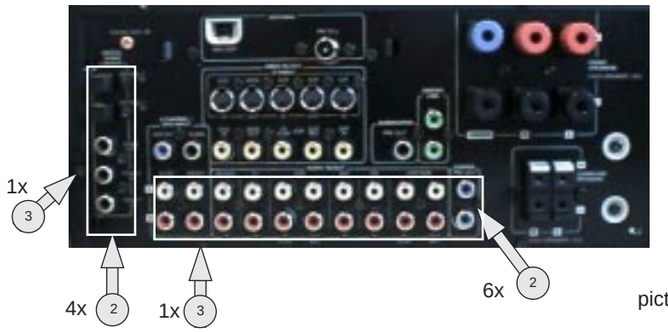
picture 10

1) To open the service cover cut 14 x lugs between cover and bottem . See picture 10 (▽)
2) To close the service cover put 11 x screw in mentionned holes. See picture 10
Service codenumber 12x Torx M3x6mm screw with big head = 4822 502 14659

DISMANTLING HINTS

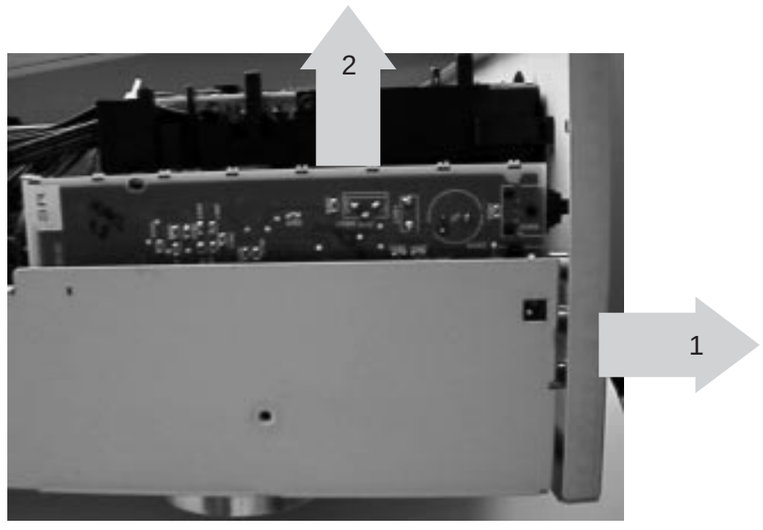
Dismantling of MDM module

1) Remove all the screws mentionned in the arial . See picture 11



picture11

2) Remove backplate a little backwards. See arrow 1 (picture 12)
3) Pull module out the set as shown in picture 12



picture12

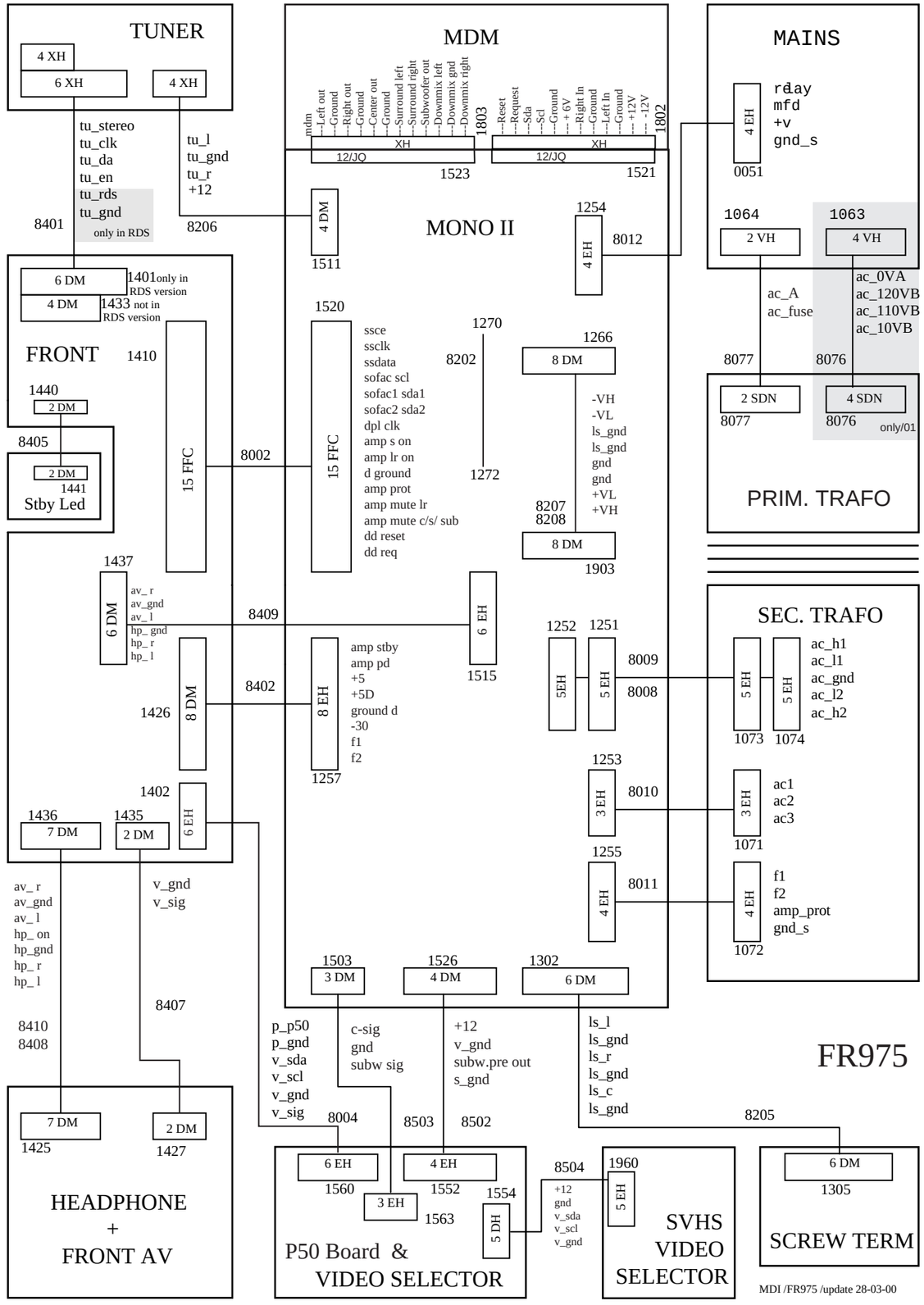
Legend

1 = Torx M3x6mm (screw with big head)

2 = Torx 3x10mm

3 = Torx M3x6mm

WIRING DIAGRAM



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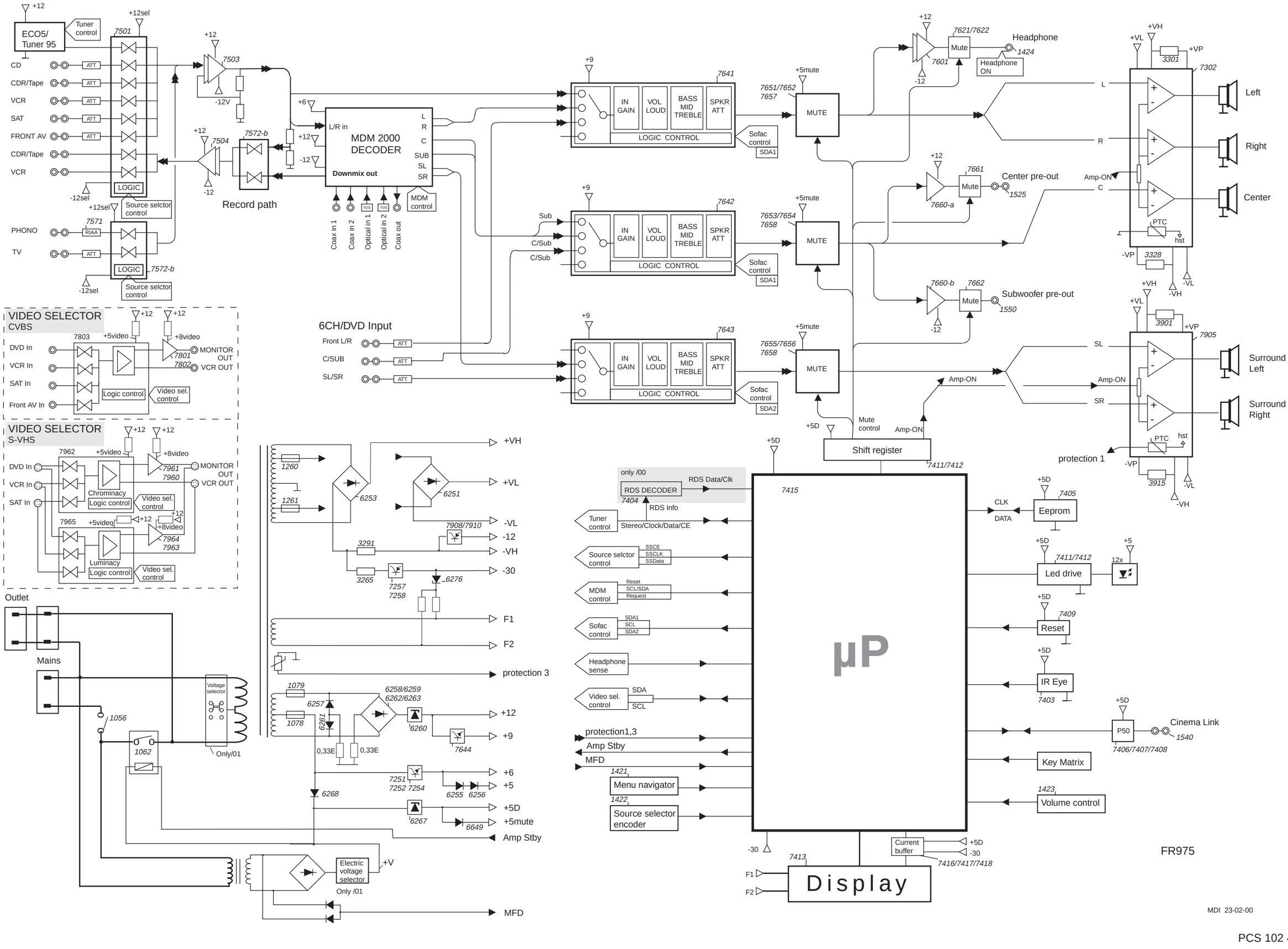
BLOCKDIAGRAM



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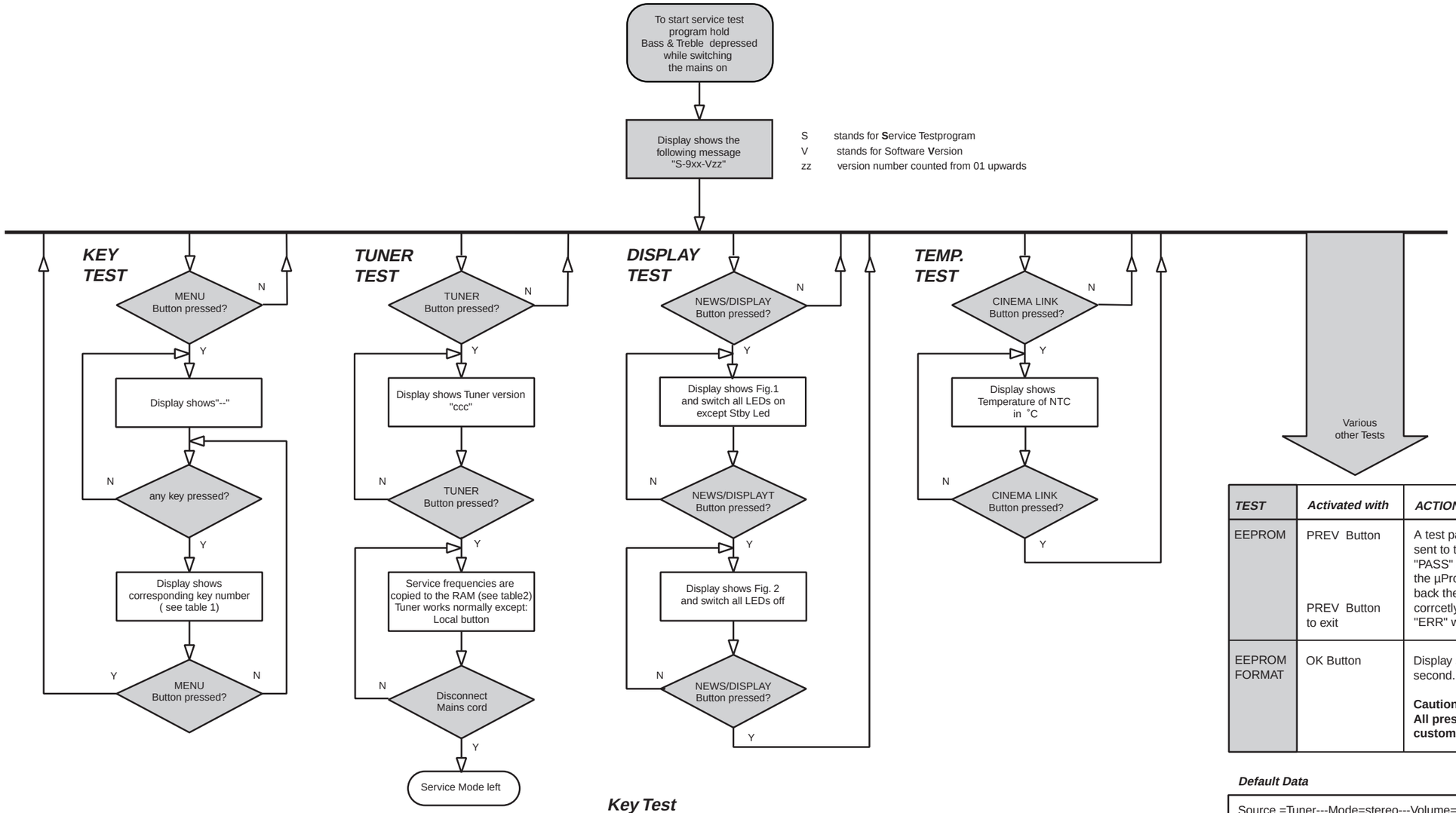
SERVICE TEST PROGRAM



TEST	*Activated with*	*ACTION*
EEPROM	PREV Button PREV Button to exit	A test pattern will be sent to the Eeprom. "PASS" is displayed if the µProcessor read back the test pattern corrcetly, otherwise "ERR" will be displayed.
EEPROM FORMAT	OK Button	Display shows"NEW" for 1 second. **Caution!** **All presets from the customer will be Lost**

Tuner Test

Display info Version	Europe "EUR" /00	East Eur. 3-band "EEL" /14	East Eur. 2-band "EEU" /14	USA "USA" /17	Oversea "OSE" /01
Preset 1	87.5MHz	65.81MHz	65.81MHz	87.5MHz	87.5MHz
2	108MHz	108MHz	108MHz	108MHz	108MHz
3	531kHz	74MHz	74MHz	530kHz	531kHz
4	1602kHz	87.5MHz	87.5MHz	1700kHz	1602kHz
5	558kHz	531kHz	531kHz	560kHz	558kHz
6	1494kHz	1602kHz	1602kHz	1500kHz	1494kHz
7	153kHz	558kHz	558kHz	98MHz	----
8	279kHz	1494kHz	1494kHz	----	----
9	198kHz	153kHz	98MHz	----	----
10	98MHz	279kHz	70.01MHz	----	----
11	----	198kHz	----	----	98MHz

Table 2

This table is valid for all types of tuners.
Custormer presets will not changed after this Tuner test.
If a station is tuned then the display flag "OK" will be ON otherwise it will be OFF.
If the tuned frequency is carrying RDS information, the display flag "RDS" will be ON.
Oversea version: the tuning grid can be switched between 9kHz and 10kHz by pressing the key "TUNER" for longer then 2 seconds. "Grid 9" or "Grid10" will be shown accordingly.
Grid 9kHz is in FM 50kHz , Grid 10kHz is in FM 100kHz
Europe version: the LW can be switched On and Off by pressing the key "TUNER" for longer than 2 seconds. LW OFF or LW ON will be shown accordingly.

Key Test

Key	Number	Key	Number	Key	Number
Cinema	1	Sens	7	Loudness	13
Surr. on/off	2	*News T/A	8	Bass	14
Surr. Mode	3	Prev.Exit	9	Treble	15
Virt. Mode	4	Setup Menu	- -	*Front A/V	16
Tuner	5	Next	11		
*Radio Text	6	Enter/OK	12		

*Button Radio Text change in Name/Frequency in /01/17 version
Button News T/A change in Display in /01/17 version
Button Front A/V not in FR965

Table 1

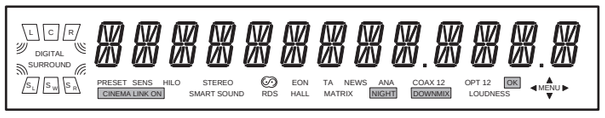


Figure 1

Default Data

Source =Tuner---Mode=stereo---Volume=10
Bass=0---Treble=0---Loudness=Off
#Effects: 3D Surr=100
#Volume balance:
Vol Front-L=0---Vol Front-R=0---Vol Center=0
Vol Rear-L=0---Vol Rear-R=0---Vol Subwoofer=0
#Speaker setup:
Subwoofer Present=Yes---Center=Yes---Rear=Yes
#Speaker Sizes:
Front Size=Large--- Center Size=Large---Rear Size=Large
#Speaker Distance:
Dist L/R=3meter---Dist Center=3meter---Dist Rear=3meter
For USA /17:
Dist L/R=10Feet---Dist Center=10Feet---Dist Rear=10Feet.
#Select input: DVD--->Coax1

For /01: FM grid is 50kHz : AM grid is 9kHz

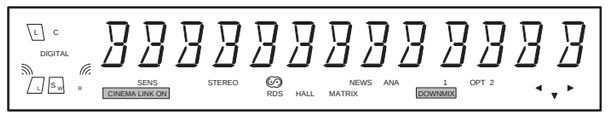
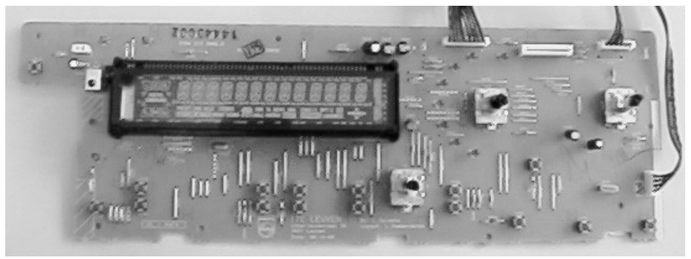


Figure 2

mdi 04-04-00



FRONT BOARD

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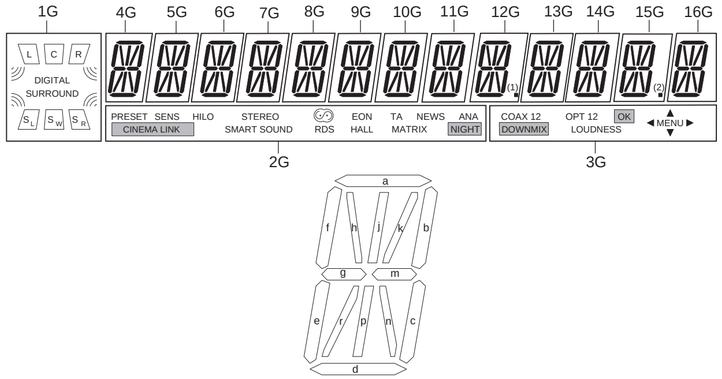
FTD DISPLAY PIN CONNECTIONS



	1G	2G	3G	4G~11G	12G	13G ,14G	15G	16G
P1	L	MATRIX	DOWNMIX	a	a	a	a	a
P2	R	NIGHT	COAX	j p	j p	j p	j p	j p
P3	C	ANA	1(coax)	h	h	h	h	h
P4	(C)	LO	2(coax)	k	k	k	k	k
P5	(S_L)	CINEMA LINK	OPT	b	b	b	b	b
P6	(S_R)	EON	1(opt)	f	f	f	f	f
P7	S_W	HALL	2(opt)	m	m	m	m	m
P8	$S_{(L)}$	HI	LOUDNESS	g	g	g	g	g
P9	L	NEWS	▼	c	c	c	c	c
P10	$S_{(R)}$	PRESET	MENU	e	e	e	e	e
P11	R	RDS	►	r	r	r	r	r
P12		SMART SOUND	OK	n	n	n	n	n
P13		STEREO	◄	d	d	d	d	d
P14	SURROUND	TA	▲	-	■ (1)	-	■ (2)	-
P15	DIGITAL	SENS	-	-	-	-	-	-

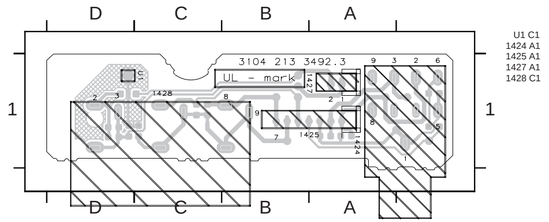
Pin Connection

Pin numbers	50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
Connection	1G 2G 3G 4G 5G 6G 7G 8G 9G 10G 11G 12G 13G 14G 15G 16G NC NC NC NC NC NC NC NC NC NC NC NC P15 P14 P13 P12 P11 P10 P9 P8 P7 P6 P5 P4 P3 P2 P1 NC NC NC NC NC NC NC NC NC NC NC NC NP NP F1 F2

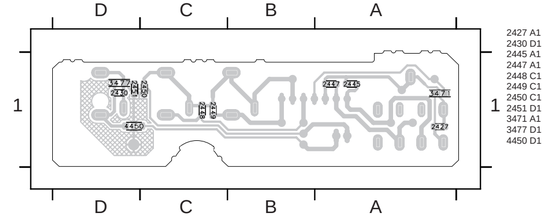
Pin numbers	62 61 60 59 58 57 56 55 54 53 52 51
Connection	F2 F1 NP NC NC NC NC NC NC NC NC NC

Note: FI , F2 --------- Filament
NC ---------- No connection
NP ---------- No pin
1G ~ 16G ----- Grid

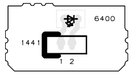
HEADPHONE BOARD - COMPONENT VIEW



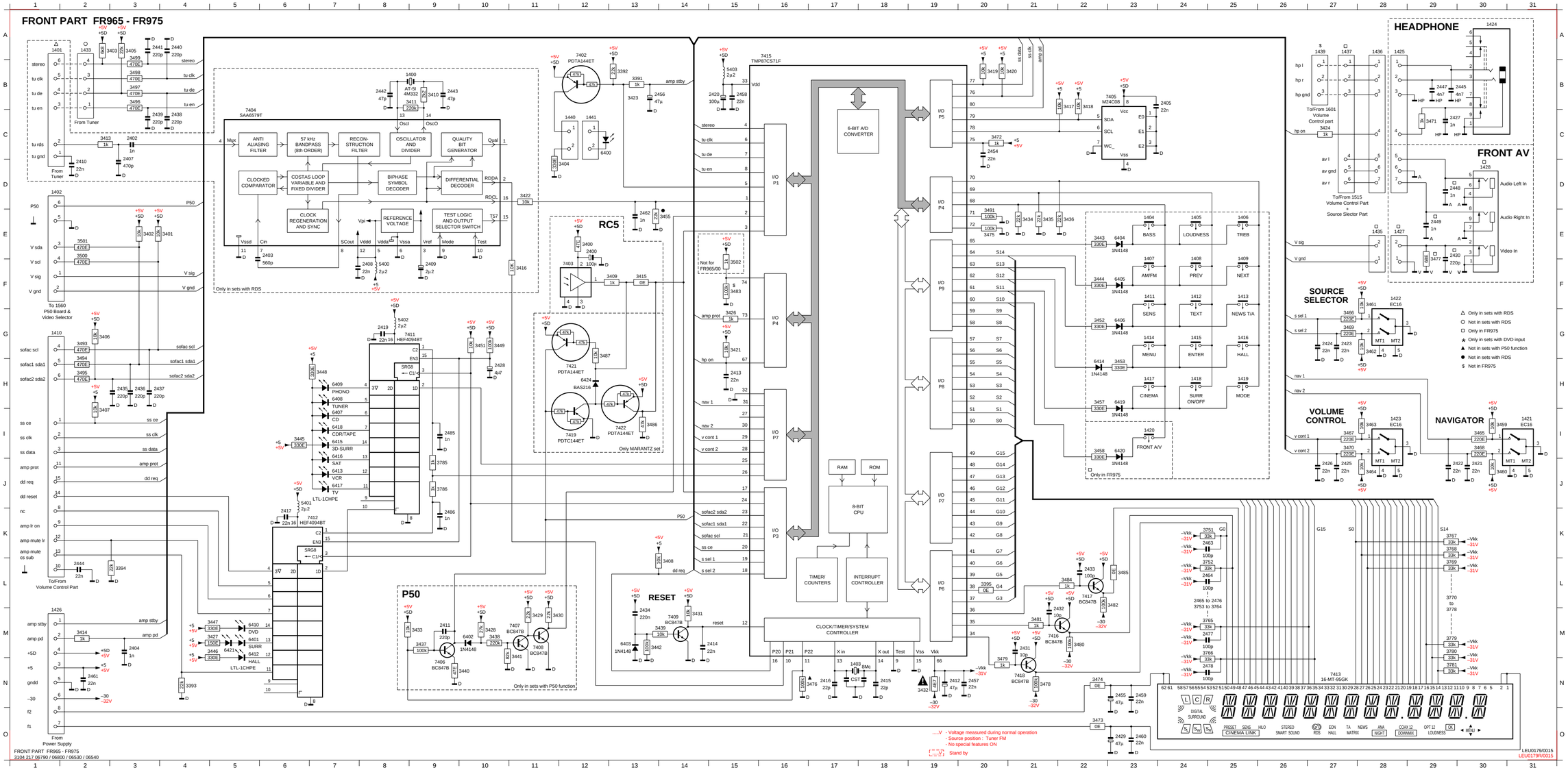
HEADPHONE BOARD - COPPER SIDE VIEW



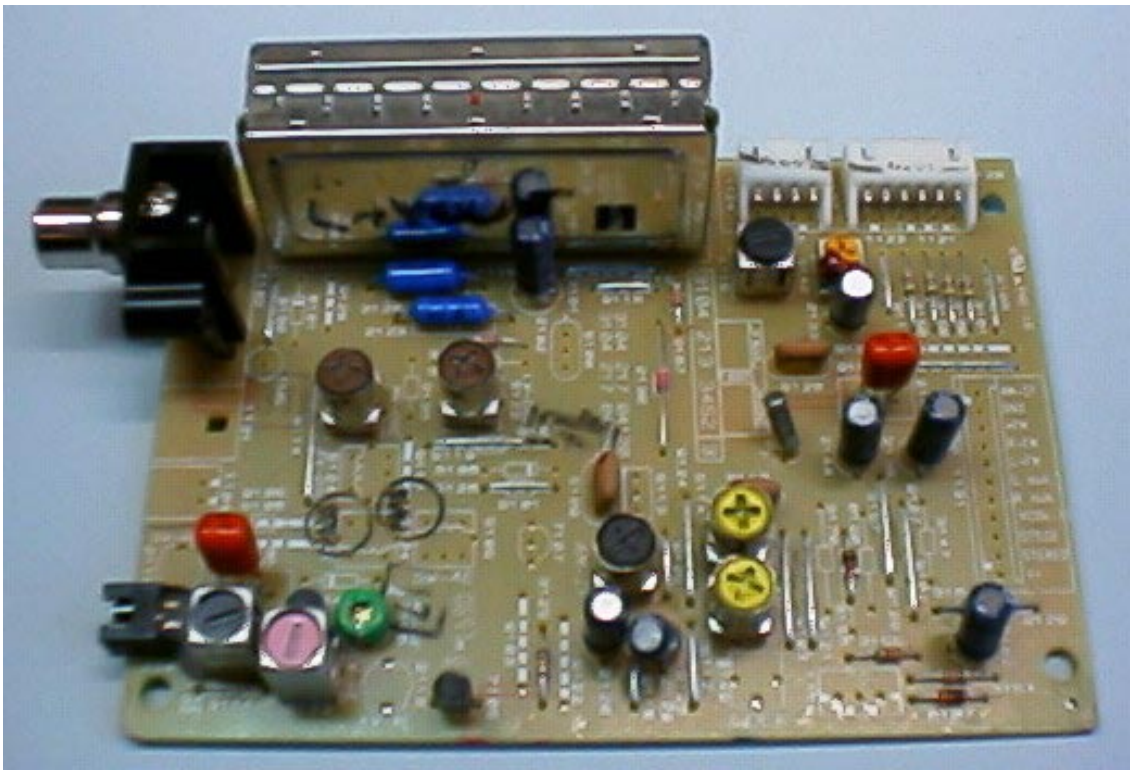
LED BOARD - COMPONENT VIEW



FRONT PART FR965 - FR975



1400	B8	3418	B22	7404	C5
1401	A1	3419	B20	7405	B22
1402	D1	3420	B20	7406	N9
1403	N17	3421	G15	7407	M11
1404	E23	3422	D11	7408	M11
1405	E24	3423	B13	7409	M14
1406	E25	3424	C27	7411	G8
1407	F23	3426	G15	7412	K6
1408	F24	3427	M4	7413	N27
1409	F25	3428	M10	7415	A16
1410	G1	3429	M11	7416	M21
1411	F23	3430	M11	7417	L22
1412	F24	3431	M14	7418	N21
1413	F25	3432	N19	7419	I12
1414	G23	3433	M9	7421	H12
1415	G24	3434	E21	7422	I13
1416	G25	3435	E21		
1417	H23	3436	E22		
1418	H24	3437	M9		
1419	H25	3438	M10		
1420	I23	3439	M13		
1421	I31	3440	N10		
1422	F28	3441	N11		
1423	I28	3442	M13		
1424	A30	3443	E22		
1425	A28	3444	F22		
1426	M1	3445	I6		
1427	E28	3446	M4		
1428	D30	3447	M4		
1433	A2	3448	H7		
1435	E28	3449	G10		
1436	A28	3451	G10		
1437	A27	3452	G22		
1439	A27	3453	H23		
1440	C12	3455	E14		
1441	C12	3457	H22		
2400	E12	3458	I22		
2402	C3	3459	I30		
2403	E6	3460	J30		
2404	M3	3461	F28		
2405	B24	3462	G28		
2407	D3	3463	I28		
2408	F8	3464	J28		
2409	F9	3465	I30		
2410	D2	3466	G27		
2411	M9	3467	I27		
2412	N19	3468	I30		
2413	H15	3469	G27		
2414	M14	3470	I27		
2415	N18	3471	C29		
2416	N17	3472	C20		
2417	K6	3473	O22		
2419	G8	3474	N22		
2420	B15	3475	E20		
2421	J30	3476	N16		
2422	J29	3477	F29		
2423	G27	3478	N21		
2424	G27	3479	N20		
2425	J27	3480	M22		
2426	J27	3481	M21		
2427	C29	3482	L23		
2428	H10	3483	F15		
2429	O23	3484	L22		
2430	E29	3485	L23		
2431	M21	3486	I13		
2432	M21	3487	G12		
2433	L22	3491	E20		
2434	M13	3493	G2		
2435	H3	3494	H2		
2436	H3	3495	H2		
2437	H3	3496	B3		
2438	C4	3497	B3		
2439	C3	3498	B3		
2440	A4	3499	A3		
2441	A3	3500	E2		
2442	B8	3501	E2		
2443	B9	3502	F15		
2444	L2	3751	K24		
2445	B29	3752	L24		
2447	B29	3753	M24		
2448	D29	3764	M25		
2449	E29	3765	M24		
2454	C20	3766	M24		
2455	N23	3767	K29		
2456	B13	3768	K29		
2457	N20	3769	L29		
2458	B15	3770	L29		
2459	N23	3778	M29		
2460	O23	3779	M29		
2461	N2	3780	M29		
2462	E13	3781	N29		
2463	K24	3785	J9		
2464	L24	3786	J9		
2465	L24	5400	F8		
2476	L25	5401	J6		
2477	M24	5402	G8		
2478	N24	5403	B15		
2485	I9	6400	C12		
2486	K9	6401	M5		
3391	B13	6402	M10		
3392	B13	6403	M13		
3393	N4	6404	E23		
3394	L3	6405	F23		
3395	L20	6406	G23		
3400	E12	6407	I7		
3401	E4	6408	H7		
3402	E3	6409	H7		
3403	A2	6410	M5		
3404	D12	6412	M5		
3405	A3	6413	J7		
3406	G2	6414	H22		
3407	I2	6415	I7		
3408	L14	6416	I7		
3409	F12	6417	J7		
3410	B9	6418	I7		
3411	B8	6419	H23		
3413	C2	6420	I23		
3414	M2	6421	M5		
3415	F13	6424	H12		
3416	F11	7402	A12		
3417	B22	7403	F12		



TUNER 95 BOARD

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TUNER 95 bis Adjustment Table (FM, MW, LW with Frame antenna)

Waverange	Input frequency	Input	Set tuned to	Adjust	Output	Scope / Voltmeter
VARICAP ALIGNMENT						
FM (50)			108 MHz	check		7 ... 9V
87.5 - 108 MHz			87.5 MHz	check		1.3 ... 2V
MW (9)			1602 kHz	5123	6	8.3V ± 0.2V
531 - 1602 kHz			531 kHz	check		1V ± 0.4V
LW (3)			279 kHz	5122		8.3V ± 0.2V
153 - 279 kHz			153 kHz	check		1V ± 0.4V
FM – DETECTION						
FM	98 Mhz 1mV continuous wave ***short pin 21 (IC7101) to ground***	A	98 MHz	5107	1 2	0mV ± 3mV
FM – VCO						
FM	98 Mhz 1 mV continuous wave	A	98 MHz	3142	3	152kHz ± 1 kHz
DISTORTION						
FM	98 Mhz 1 mV 90 % L + 9 % pilot mod = 1kHz	A	98MHz	mixcoil inside Tuner 1110	4	Distortion minimum
AM – IF						
MW	450kHz Δf = 10kHz Low as possible Swept signal	100nF 50E	MW	5111 5112	7	symmetrical and max. height
	450kHz continuous wave	C		5114	1 2	0mV ± 2mV
AM - RF						
MW	558kHz Mod = 1kHz 30 % AM 1494 kHz	B	558kHz	5102	7	MAX
			1494kHz	2106		
LW	198kHz mod = 1kHz 30 % AM	*	198kHz	5103		MAX

adjtable for 3104 217 04121/04341

* Signal send via a frame antenna
(..) = tuning grid in kHz

repeat

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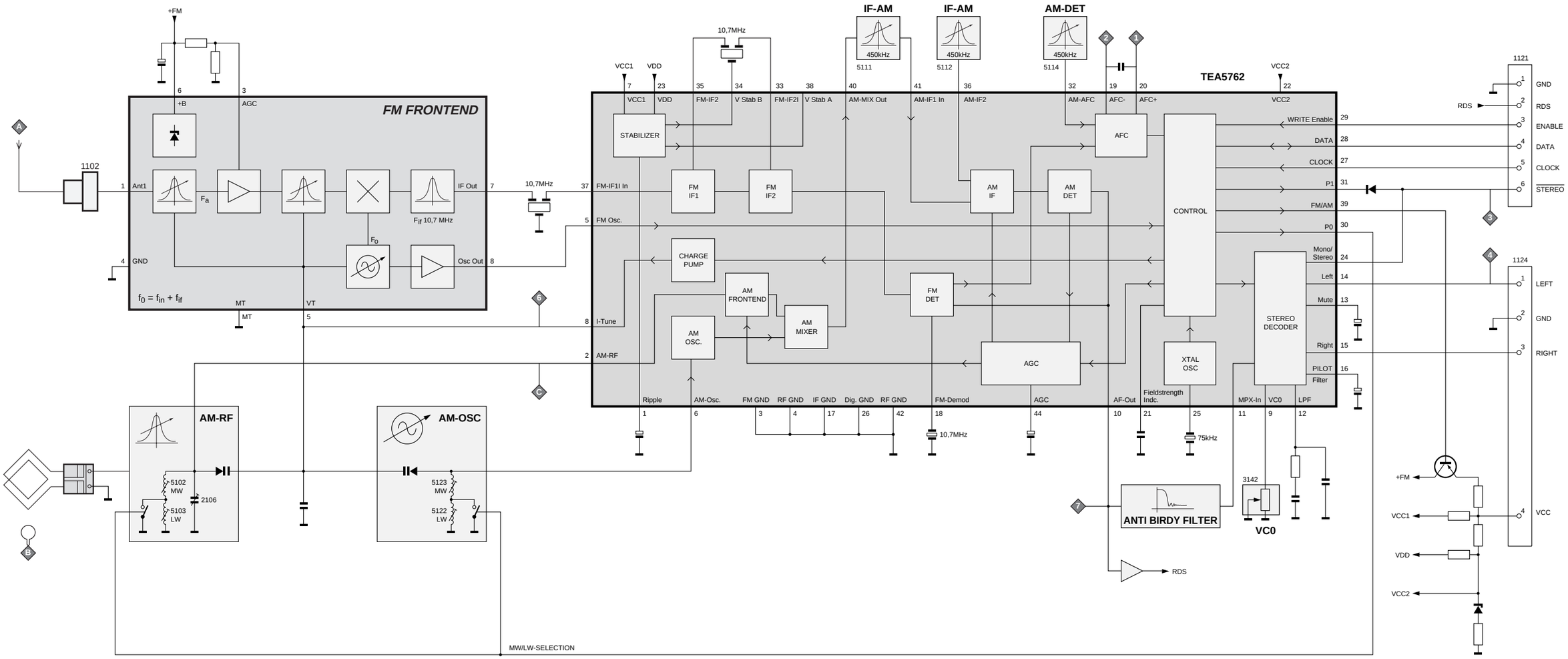
BLOCKDIAGRAM



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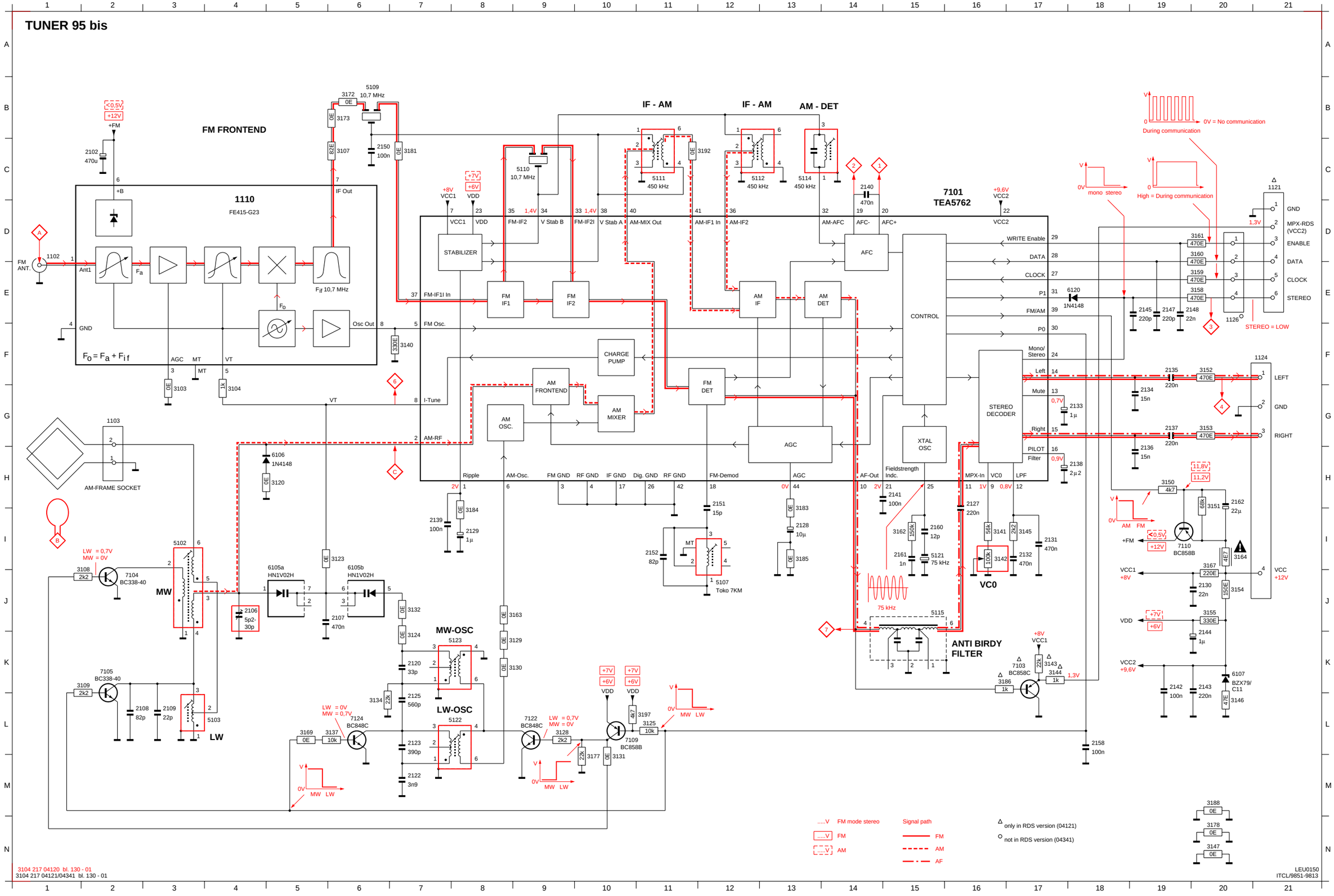
1102 D1 1124 F21 2107 J6 2122 M7 2128 I13 2132 I17 2136 H19 2140 C14 2144 K20 2150 C6 2160 I15 3104 G4 3120 H5 3128 L9 3132 J7 3141 I16 3145 I17 3151 I20 3155 J20 3161 D19 3167 I20 3177 M10 3184 I8 3192 C12 5107 J12 5112 C12 5122 L7 6106 H5 7103 K17 7110 I19
1103 G2 1126 E20 2108 L2 2123 L7 2129 I8 2133 G18 2137 G19 2141 H15 2145 E19 2151 H12 2161 I15 3107 C6 3123 I6 3129 K8 3134 L6 3142 I16 3146 L20 3152 F20 3158 E19 3162 I15 3169 L5 3178 N20 3185 I13 3197 L11 5109 B6 5114 C13 5123 K7 6107 K20 7104 J2 7122 L9
1110 D4 2102 C2 2109 L3 2125 L7 2130 J20 2134 G19 2138 H18 2142 K19 2147 E19 2152 I11 2162 H20 3108 J1 3124 K7 3130 K8 3137 L5 3143 K17 3147 N20 3153 G20 3159 E19 3163 J8 3172 B6 3181 C7 3186 K16 5102 I3 5110 C9 5115 J15 6105a I5 6120 E17 7105 K17 7124 L6
1121 C21 2106 J4 2120 K7 2127 H16 2131 I17 2135 F19 2139 I7 2143 K20 2148 E19 2158 L18 3103 G3 3109 K1 3125 L11 3131 M10 3140 F7 3144 K17 3150 H19 3154 J20 3160 D19 3164 I20 3173 B6 3183 I13 3188 M20 5103 L4 5111 C11 5121 I15 6105b I6 7101 C15 7109 L10

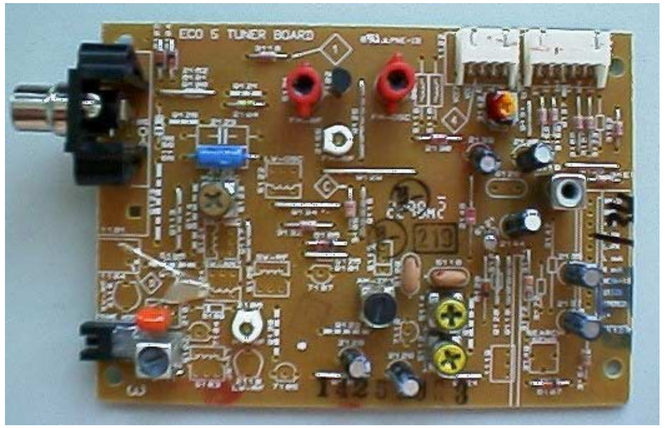


3104 217 04120 bl. 130 - 01
3104 217 04121/04341 bl. 130 - 01

LEU0150
ITCL/9851-9813

7B-1
7B-1

BLOCKDIAGRAM



TUNER BOARD ECO5

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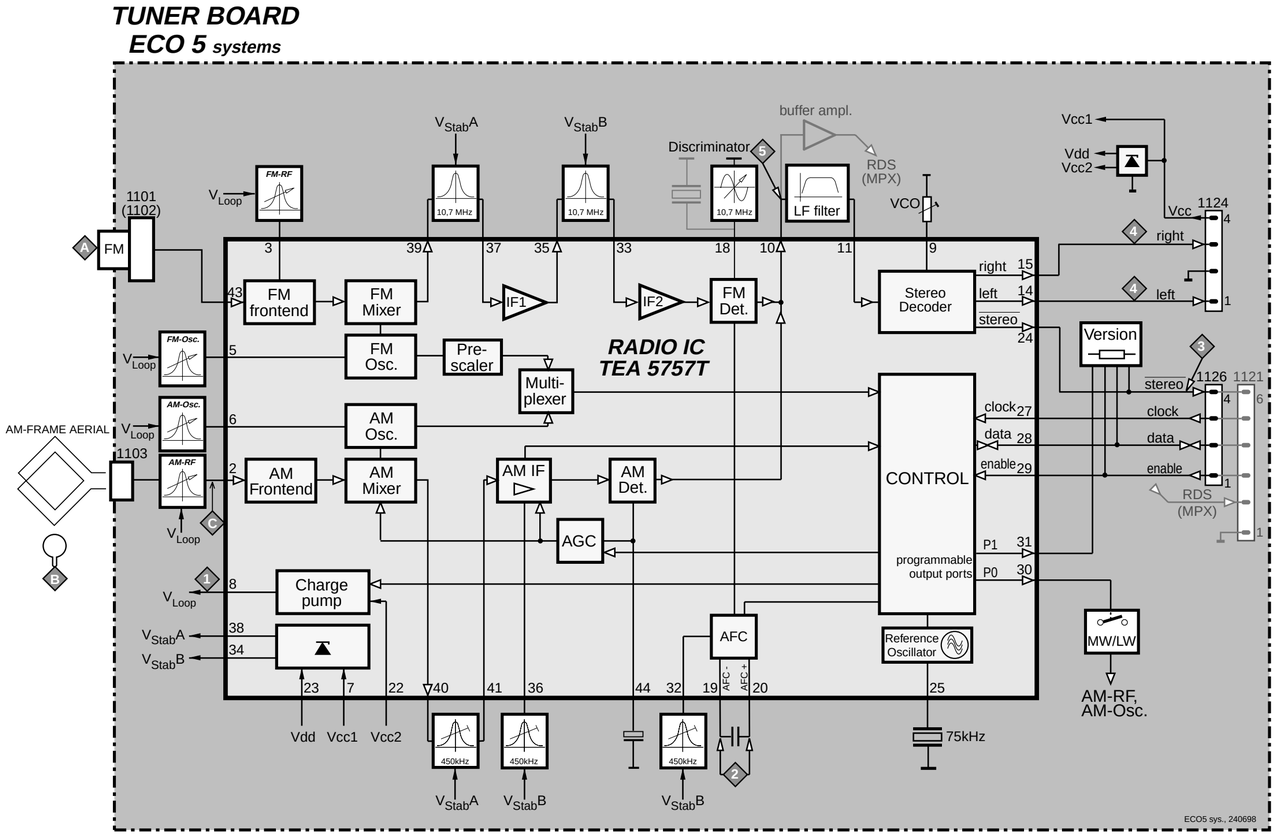
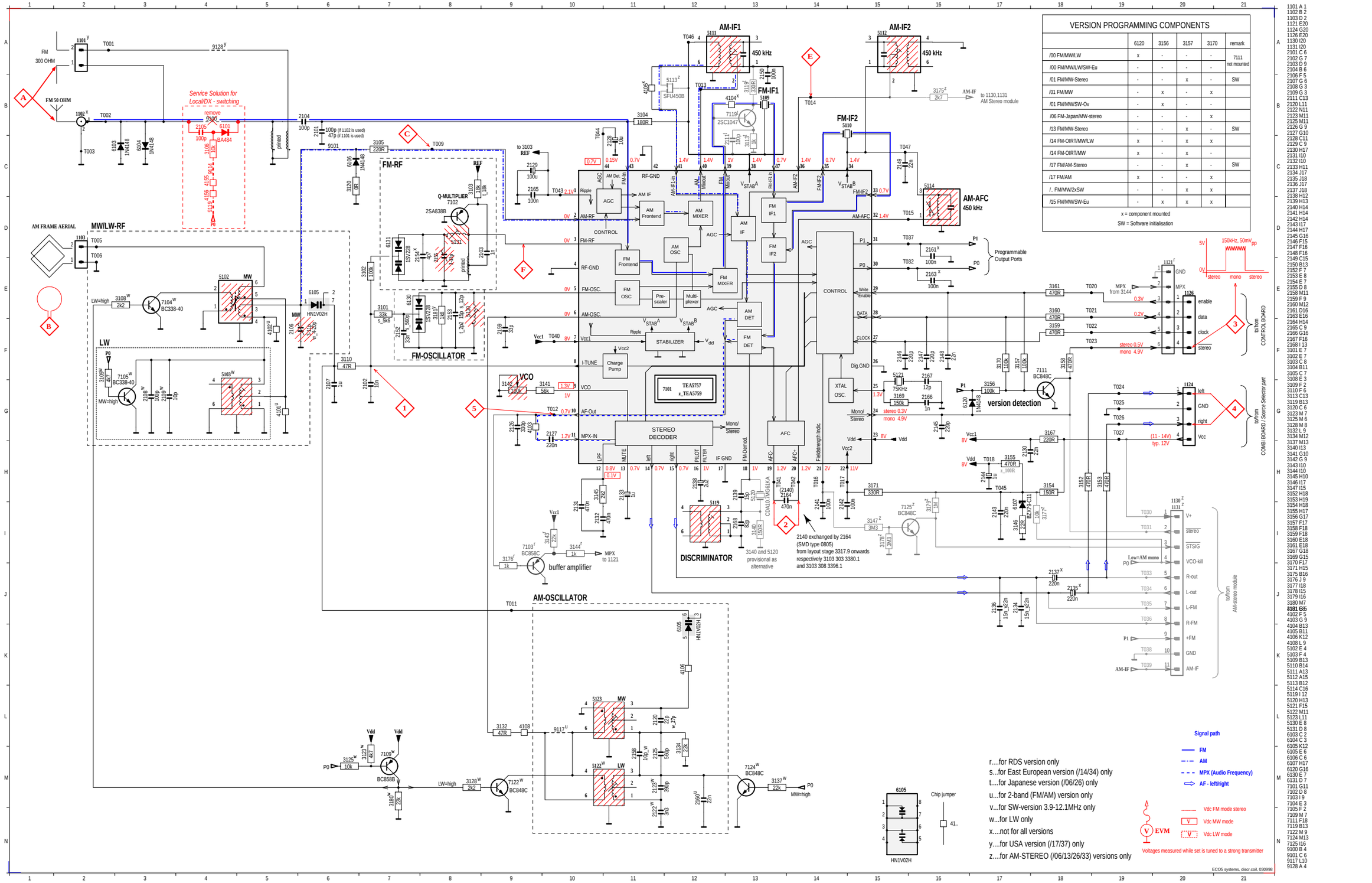
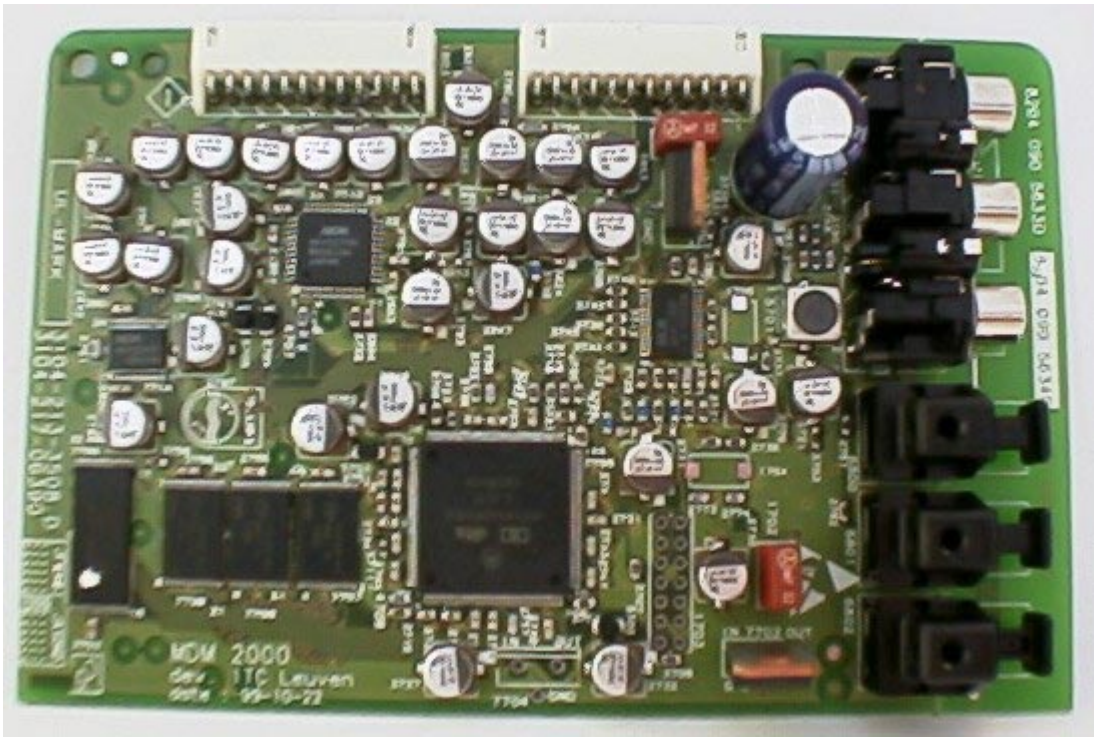


7B-3

TUNER BOARD ECO5 / Systems





MULTI-CHANNEL DECODING MODULE

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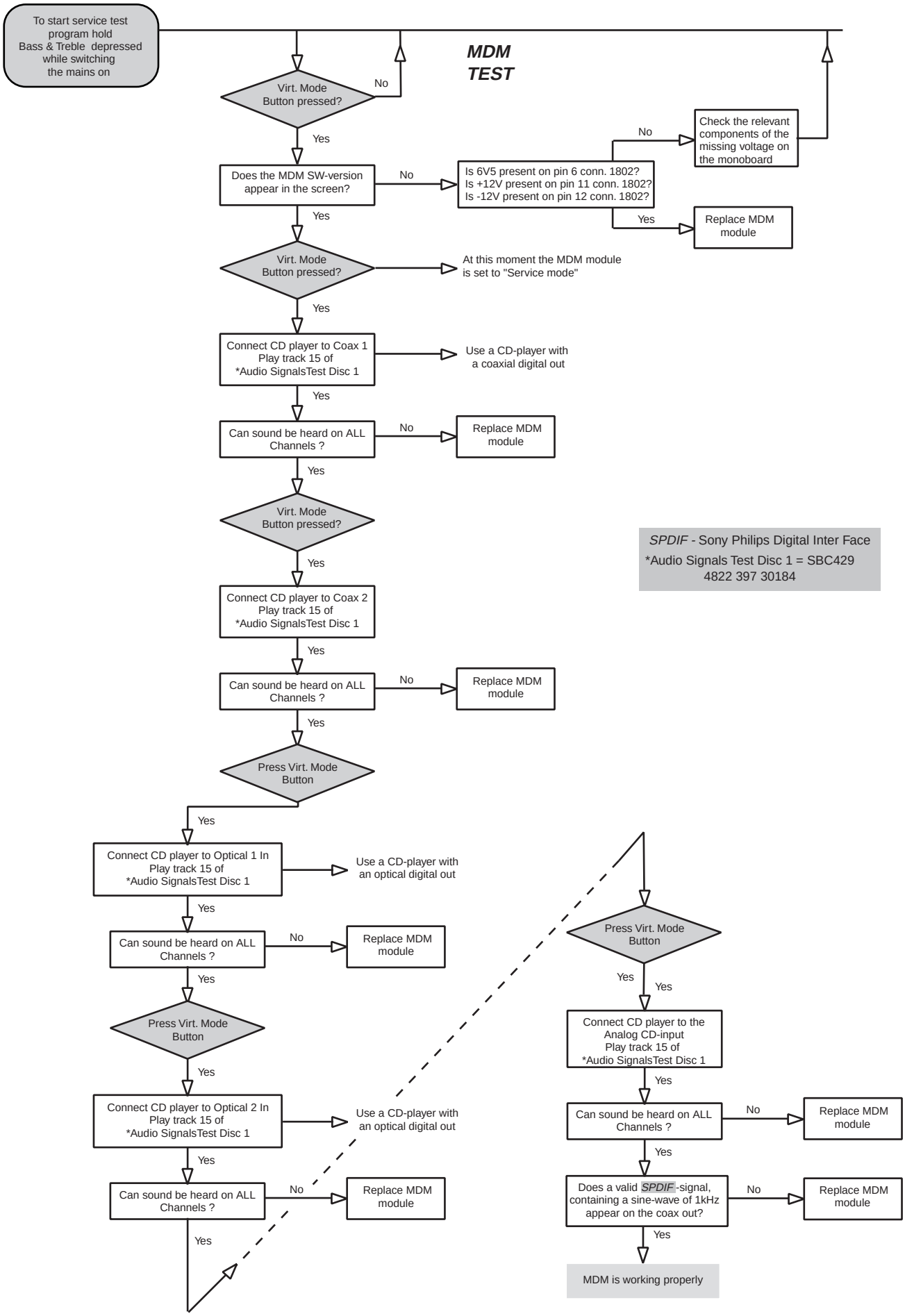
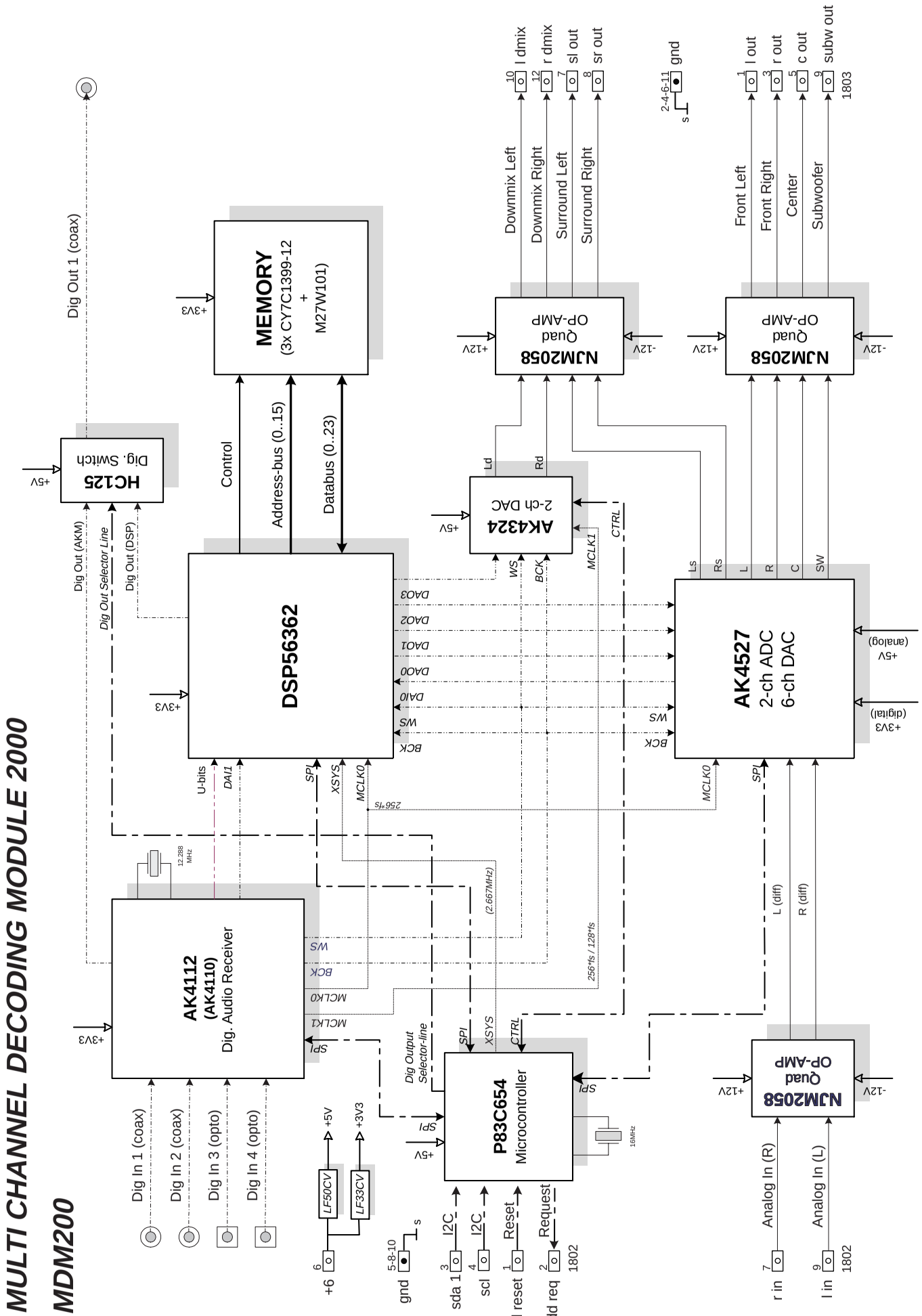
MULTI-CHANNEL DECODING MODULE - Troubleshooting



SPDIF - Sony Philips Digital Inter Face

*Audio Signals Test Disc 1 = SBC429
4822 397 30184

BLOCK-DIAGRAM

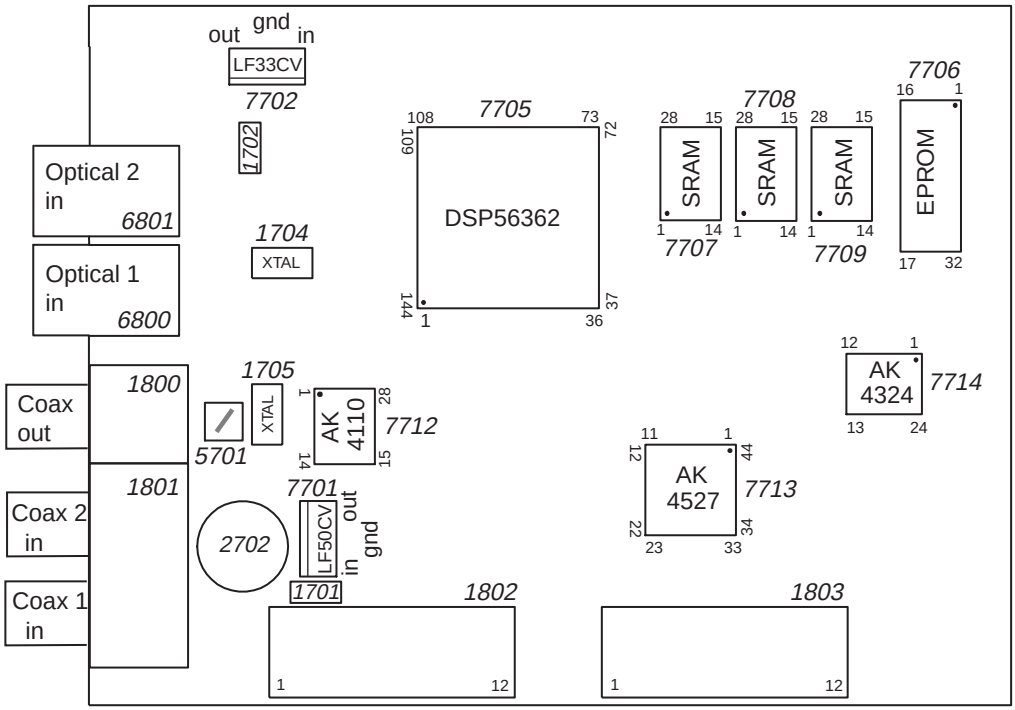


ELECTRICAL PARTSLIST - MDM MODULE

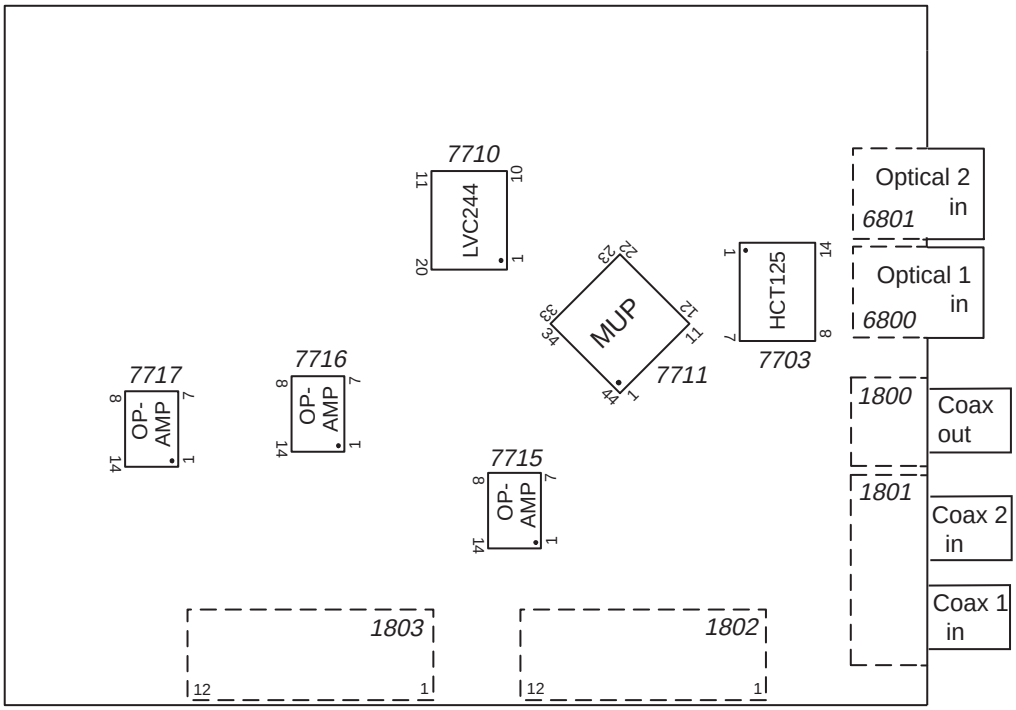
1003	3104 217 06390	MDM 2000 MODULE
1701	4822 252 51172	FUSE 0,315A
1702	4822 252 51172	FUSE 0,315A
1704	2422 543 01118	CRYSTAL 16MHZ
1705	2422 543 01132	CRYSTAL 12MH28
1800	4822 267 31729	COAX OUT CONN.
1801	4822 267 31448	COAX IN CONNECTOR
1802	2422 025 10253	CON 12P. MALE
1803	2422 025 10253	CON 12P. MALE
2702	4822 123 14025	16V 2200U 20%
6800	4822 218 11487	CONN. FIBER-GLASS GP1F32R
6801	4822 218 11487	CONN. FIBER-GLASS GP1F32R
7701	9322 146 09687	LF50CV
7702	4822 209 16978	LF33CV

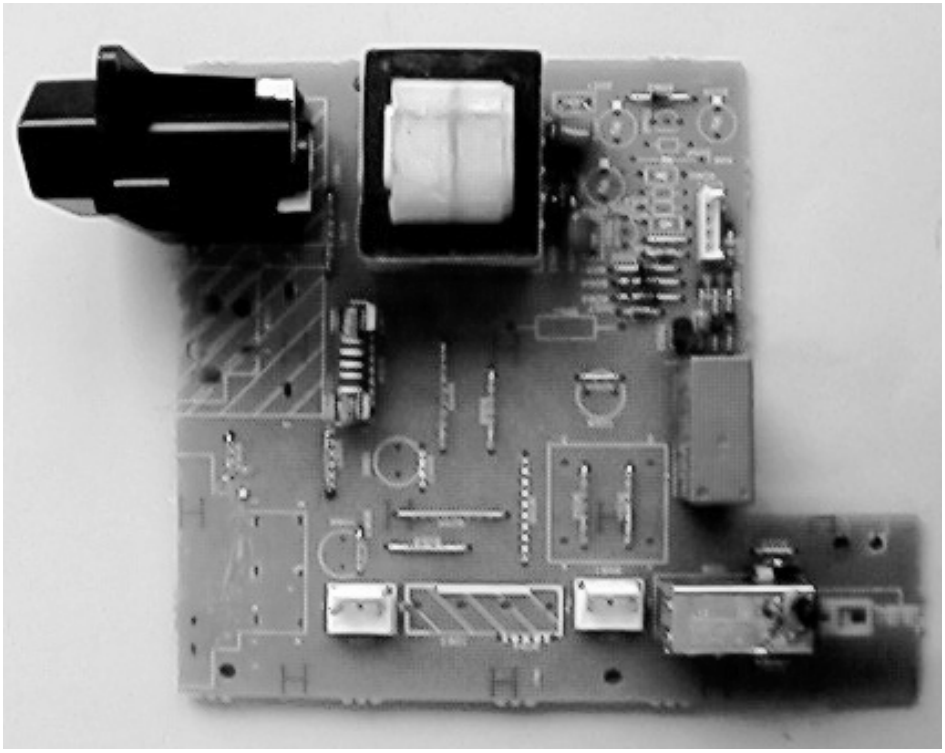
Note: Only the parts mentioned in this list are normal service parts.

Component side view



Copper side view





MAINS BOARD

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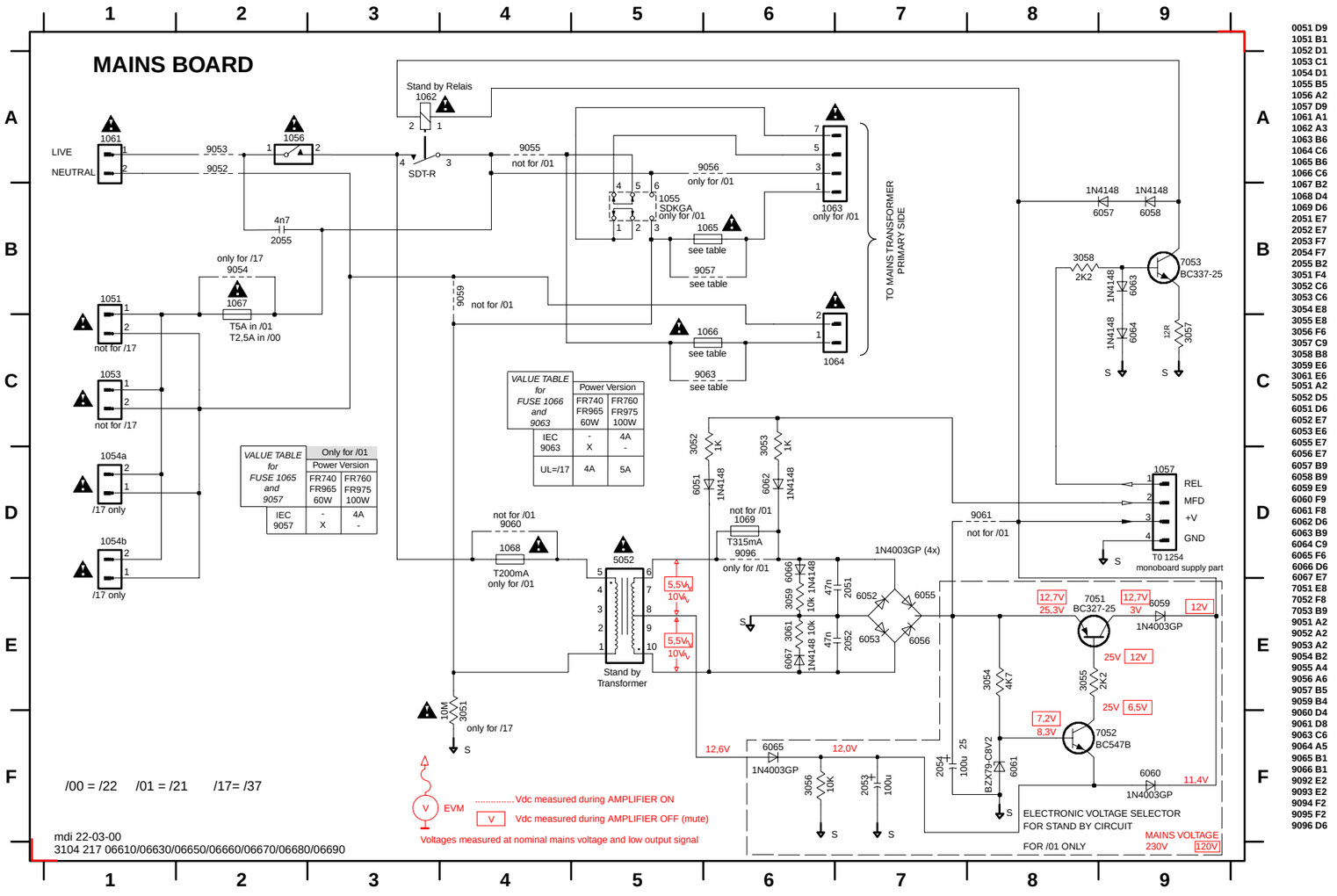
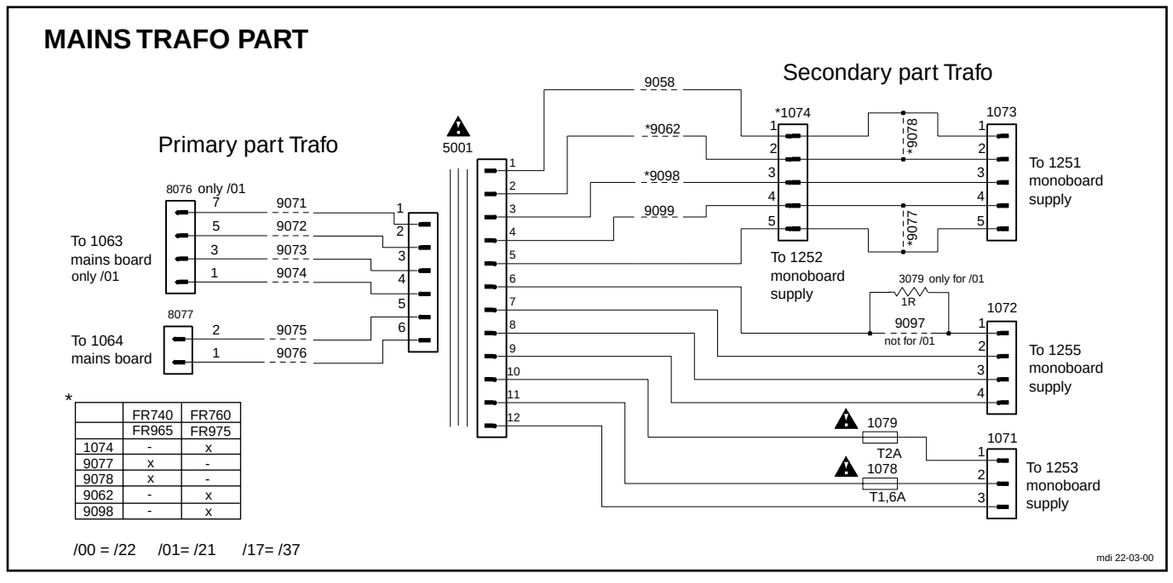
MAINS BOARD - CIRCUIT DIAGRAM





0051 D9
1051 B1
1052 D1
1053 C1
1054 D1
1055 B5
1056 A2
1057 D9
1061 A1
1062 A3
1063 B6
1064 C6
1065 B6
1066 C6
1067 B2
1068 D4
1069 D6
2051 E7
2052 E7
2053 F7
2054 F7
2055 B2
3051 F4
3052 C6
3053 C6
3054 E8
3055 E8
3056 F6
3057 C9
3058 B8
3059 E6
3061 E6
5051 A2
5052 D5
6051 D6
6052 E7
6053 E6
6055 E7
6056 E7
6057 B9
6058 B9
6059 E9
6060 F9
6061 F8
6062 D6
6063 B9
6064 C9
6065 F6
6066 D6
6067 E7
7051 E8
7052 F8
7053 B9
9051 A2
9052 A2
9053 A2
9054 B2
9055 A4
9056 A6
9057 B5
9059 B4
9060 D4
9061 D8
9063 C6
9064 A5
9065 B1
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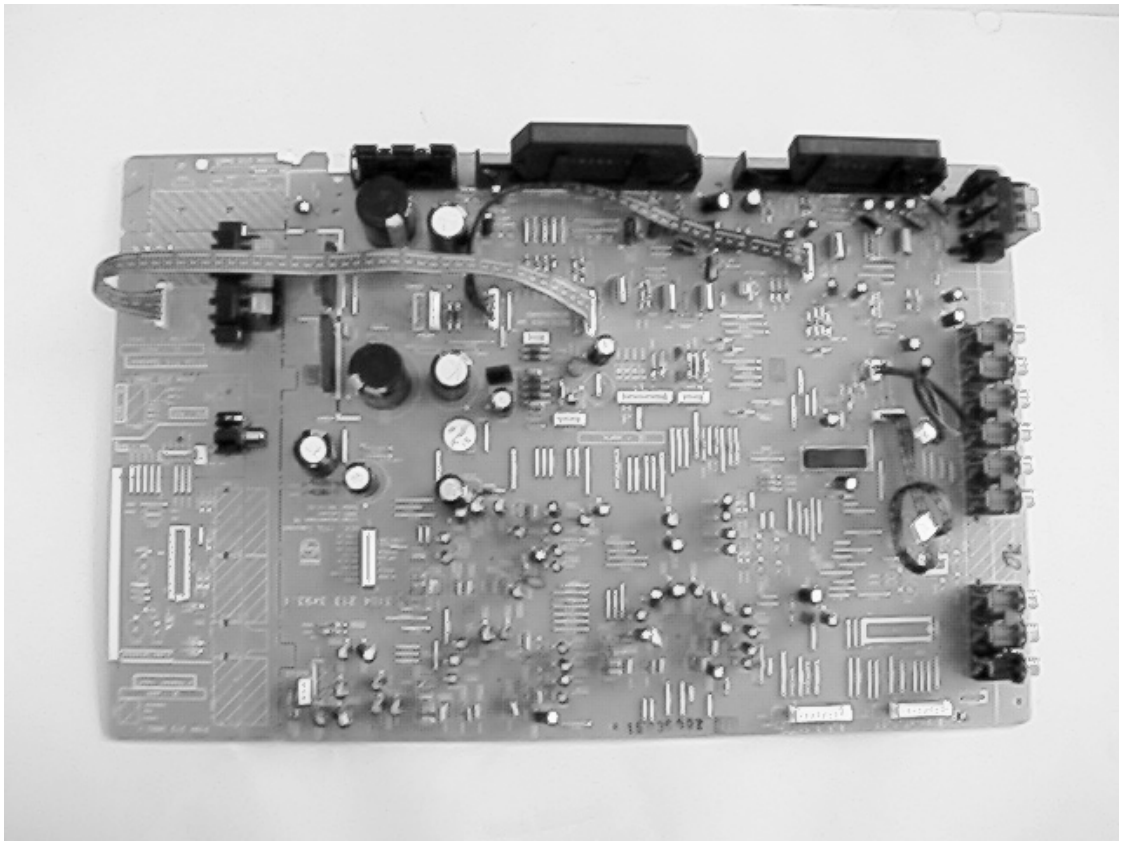
9092 E2
9093 E2
9094 F2
9095 F2
9096 D6



MONO2 BOARD

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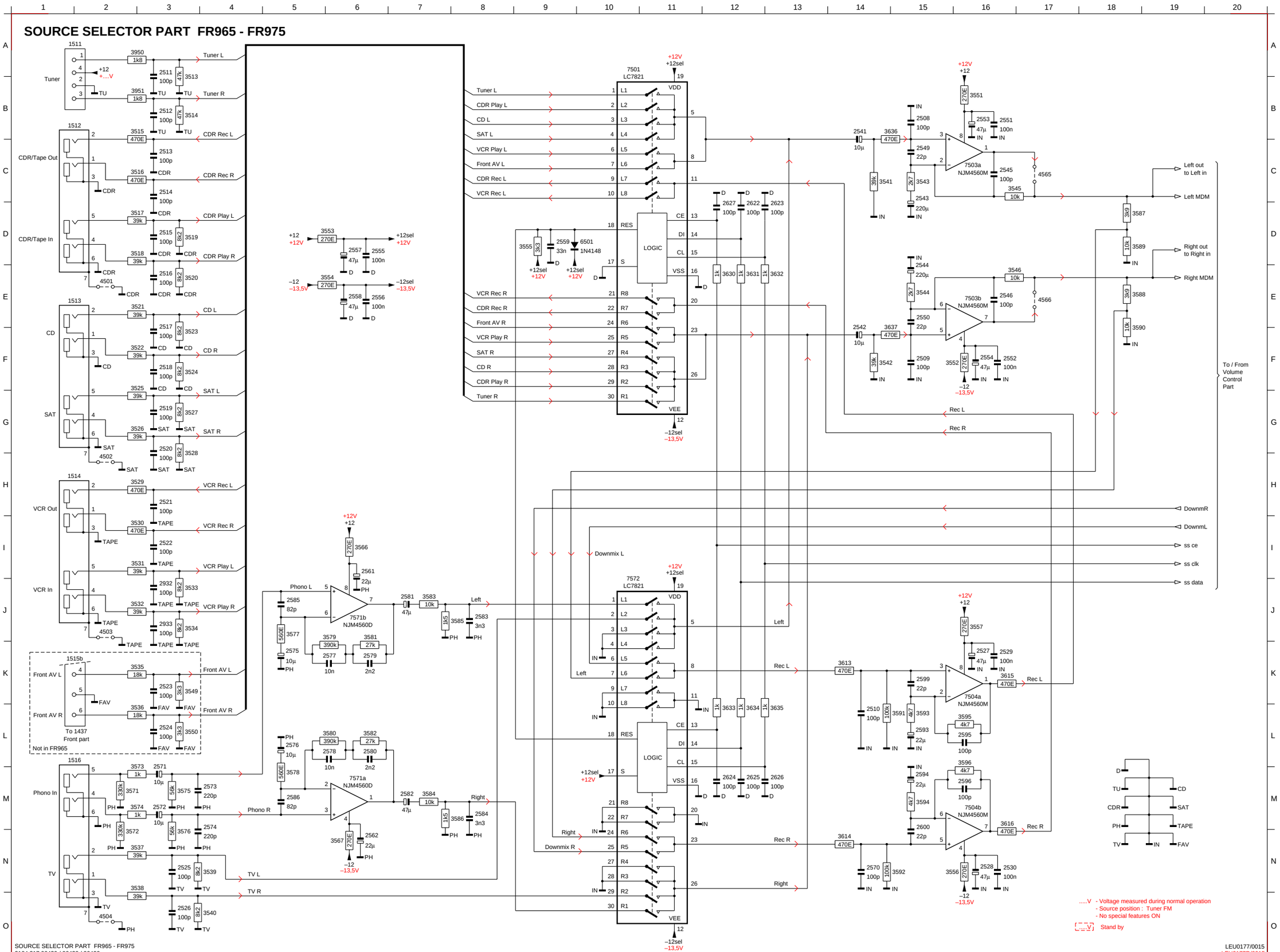
SOURCE SELECTOR PART FR965 - FR975



SOURCE SELECTOR PART FR965 - FR975
3104 217 06420 / 06430 / 06490

LEU0177/0015
LEU0177R/0015

1511	A1	3557	J16
1512	B1	3566	I6
1513	E1	3567	N6
1514	H1	3571	M2
1515b	K1	3572	N2
1516	L1	3573	M2
2508	B15	3574	M2
2509	F15	3575	M3
2510	L14	3576	N3
2511	A3	3577	J5
2512	B3	3578	M5
2513	C3	3579	J5
2514	C3	3580	L5
2515	D3	3581	J6
2516	E3	3582	L6
2517	F3	3583	J7
2518	F3	3584	M7
2519	G3	3585	J8
2520	G3	3586	M8
2521	H3	3587	D18
2522	I3	3588	E18
2523	K3	3589	D18
2524	L3	3590	F18
2525	N3	3591	L15
2526	O3	3592	N15
2527	K16	3593	L15
2528	N16	3594	M15
2529	K16	3595	L16
2530	N16	3596	L16
2541	B14	3613	K14
2542	F14	3614	N14
2543	C15	3615	K16
2544	E15	3616	M16
2545	C16	3630	E12
2546	E16	3631	E12
2549	C15	3632	E13
2550	E15	3633	L12
2551	B16	3634	L12
2552	F16	3635	L13
2553	B16	3636	B14
2554	F16	3637	F14
2555	D6	3950	A2
2556	E6	3951	B2
2557	D6	4501	E2
2558	E6	4502	H2
2559	D9	4503	J2
2561	I6	4504	O2
2562	N6	4565	C17
2570	N14	4566	E17
2571	M3	6501	D10
2572	M3	7501	A10
2573	M4	7503a	C16
2574	M4	7503b	E16
2575	K5	7504a	K16
2576	L5	7504b	M16
2577	K5	7571a	M6
2578	L5	7571b	J6
2579	K6	7572	J10
2580	L6		
2581	J7		
2582	M7		
2583	J8		
2584	M8		
2585	J5		
2586	M5		
2593	L15		
2594	M15		
2595	L16		
2596	M16		
2599	K15		
2600	M15		
2622	D12		
2623	D13		
2624	M12		
2625	M12		
2626	M13		
2627	D12		
2932	J3		
2933	J3		
3513	B3		
3514	B3		
3515	B2		
3516	C2		
3517	D2		
3518	D2		
3519	D3		
3520	E3		
3521	E2		
3522	F2		
3523	F3		
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3528	H3		
3529	H2		
3530	I2		
3531	I2		
3532	J2		
3533	J3		
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3535	K2		
3536	L2		
3537	N2		
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3539	N4		
3540	O4		
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3543	C15		
3544	E15		
3545	C16		
3546	E16		
3549	K3		
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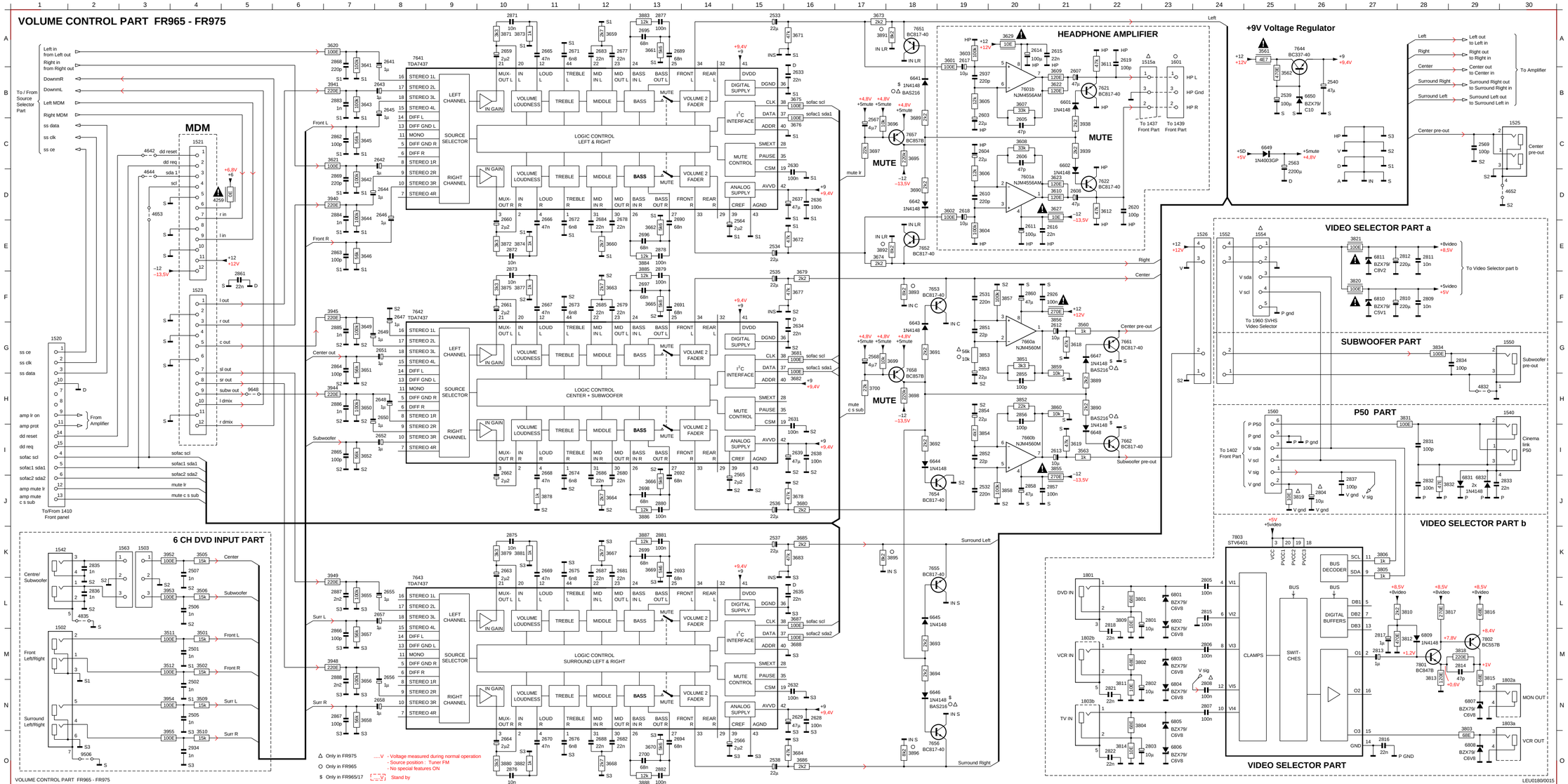

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1503	K3	2695	A13	3665	F13	6801	L23
1515a	A23	2696	E13	3666	J13	6802	L23
1520	G1	2697	F13	3667	K12	6803	M23
1521	C4	2698	J13	3668	O12	6804	N23
1523	F4	2699	K13	3669	K13	6805	N23
1525	C30	2700	O13	3670	O13	6806	O23
1526	E24	2801	L23	3671	A16	6807	N29
1540	H30	2802	N23	3672	E16	6808	O29
1542	K1	2803	O23	3673	A17	6809	M28
1550	G30	2804	J26	3674	E17	6810	F27
1552	E24	2805	L24	3675	B16	6811	E27
1554	E25	2806	M24	3676	C16	6831	J29
1560	H25	2807	N24	3677	F16	6832	J29
1563	K2	2808	N24	3678	J16	7601a	D20
1601	A23	2809	F28	3679	F16	7601b	B20
1801	K21	2810	F28	3680	J16	7621	B22
1802a	N30	2811	E28	3681	G16	7622	D22
1802b	M21	2812	E28	3682	H16	7641	A8
1803a	N20	2813	M27	3683	K16	7642	F8
1803b	N21	2814	M29	3684	O16	7643	L8
2501	M4	2815	L24	3685	K16	7644	A25
2502	N4	2816	O27	3686	O16	7651	A18
2505	N4	2817	M27	3687	L16	7652	E18
2506	L4	2818	L22	3688	M16	7653	F18
2507	K4	2821	N22	3689	C18	7654	J18
2531	F19	2822	O22	3690	D18	7655	K18
2532	J19	2831	I28	3691	G18	7656	O18
2533	A15	2832	J28	3692	I18	7657	C18
2534	E15	2833	J30	3693	M18	7658	G18
2535	F15	2834	J29	3694	M18	7660a	G20
2536	J15	2835	K2	3695	C18	7660b	I20
2537	K15	2836	L2	3696	C18	7661	G22
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2539	B25	2851	G19	3698	H18	7801	M28
2540	B26	2852	I19	3699	G18	7802	M29
2563	C25	2853	G19	3700	H17	7803	K24
2564	E15	2854	H19	3801	L22	9506	O2
2565	J15	2855	H20	3802	M22	9648	H5
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2567	C17	2857	J21	3804	N22		
2568	G17	2858	J20	3805	K27		
2569	C29	2860	F20	3806	K27		
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2637	D16	2926	F21	3871	A10		
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2639	I16	2937	B19	3873	A10		
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2642	C7	3502	M4	3875	F10		
2643	B7	3505	K4	3877	F10		
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2646	D8	3510	O4	3880	O10		
2647	F8	3511	M3	3881	K10		
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2649	G8	3560	G21	3883	A13		
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2665	A11	3611	A22	3939	C21		
2666	E11	3612	D22	3940	D7		
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2668	I11	3619	I21	3944	H7		
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2670	O11	3621	C7	3948	M7		
2671	A12	3622	B21	3949	C7		
2672	E11	3623	D21	3952	K3		
2673	F11	3627	D21	3953	L3		
2674	I11	3628	A20	3954	N3		
2675	K11	3641	B7	3955	O3		
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2678	E12	3644	E7	4644	D3		
2679	F12	3645	C7	4652	D30		
2680	I12	3646	E7	4653	O3		
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2683	A12	3651	G7	6601	B21		
2684	E12	3652	I7	6602	C21		
2685	F12	3655	L7	6641	B18		
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2687	K12	3657	M7	6643	G18		
2688	O12	3658	O7	6644	G18		
2689	A13	3659	A12	6645	L18		
2690	E13	3660	E12	6646	N18		
2691	F13	3661	A13	6647	C22		
2692	I13	3662	E13	6648	I22		
2693	K13	3663	F12	6649	C25		

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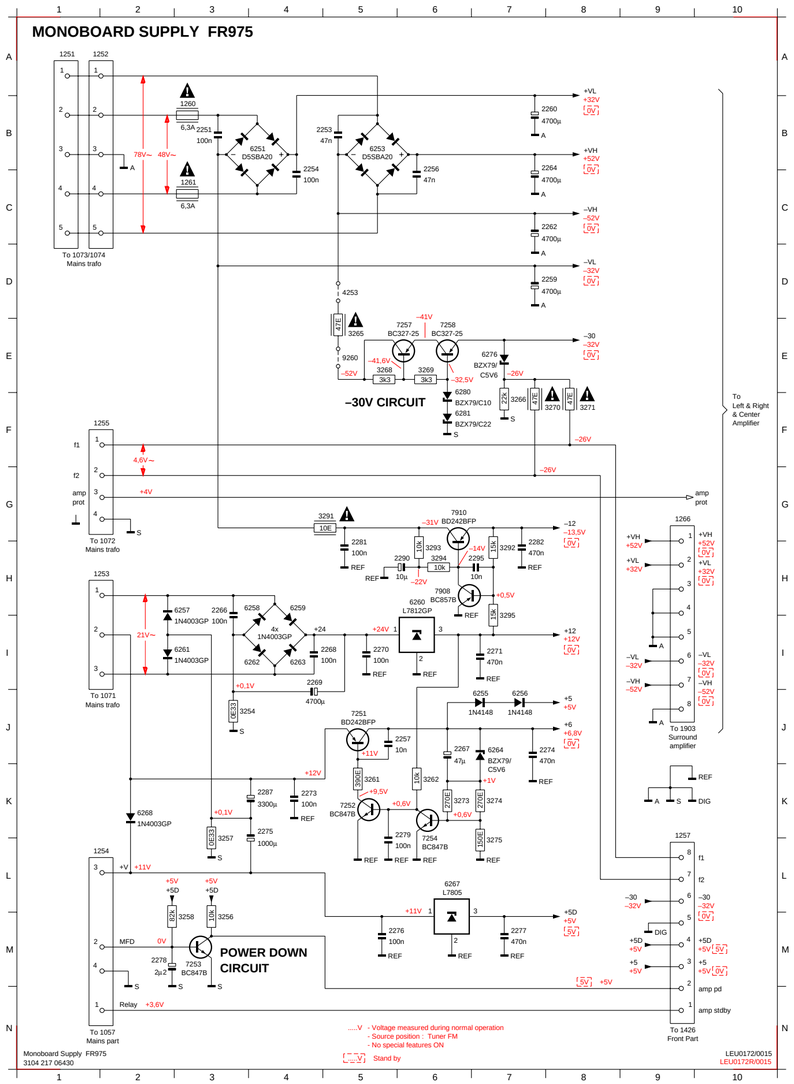
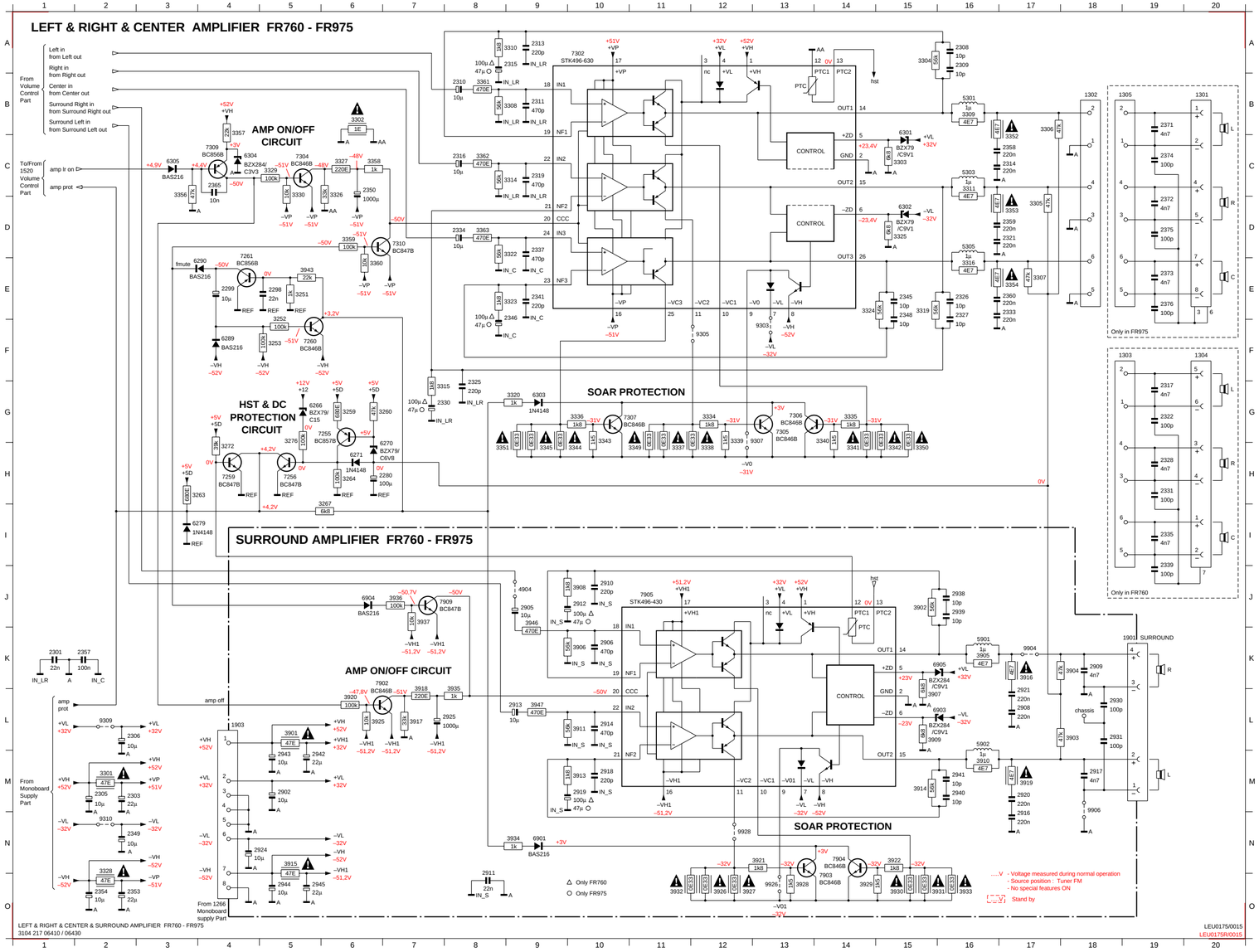
1252	A1	1261	C3	2257	J5	2267	J6	2274	J7	2281	H5	3256	M3	3266	F7	3274	K7	3295	I7	6257	H3	6263	I4	6281	F6	7258	E6
1253	H1	1266	G9	2259	D7	2268	I4	2275	K4	2282	H7	3257	L3	3268	E5	3275	L7	4253	D5	6258	H3	6264	J7	7251	J5	7908	H6
1254	L1	2251	B3	2260	B7	2269	I4	2276	M5	2287	K4	3258	M3	3269	E6	3291	G4	6251	B4	6259	H4	6267	L6	7252	K5	7910	G6
1255	F1	2253	B4	2262	C7	2270	I5	2277	M7	2290	H5	3261	K5	3270	F7	3292	H7	6253	B5	6260	H6	6268	K2	7253	M3	9260	E5
1257	K9	2254	C4	2264	C7	2271	I7	2278	M2	2295	H6	3262	K6	3271	F8	3293	H6	6255	J7	6261	I3	6276	E7	7254	L6		





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1302	B18	3337	H11																						
1303	F18	3338	H12																						
1304	F20	3339	H12																						
1305	B18	3340	H14																						
1901	K19	3341	H14																						
1903	L4	3342	H15																						
2280	H6	3343	H10																						
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2299	E4	3345	H9																						
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2325	G8	3903	L18																						
2326	E16	3904	K18																						
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2328	H19	3906	K10																						
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3335	G14																								

S-VHS VIDEO BOARD

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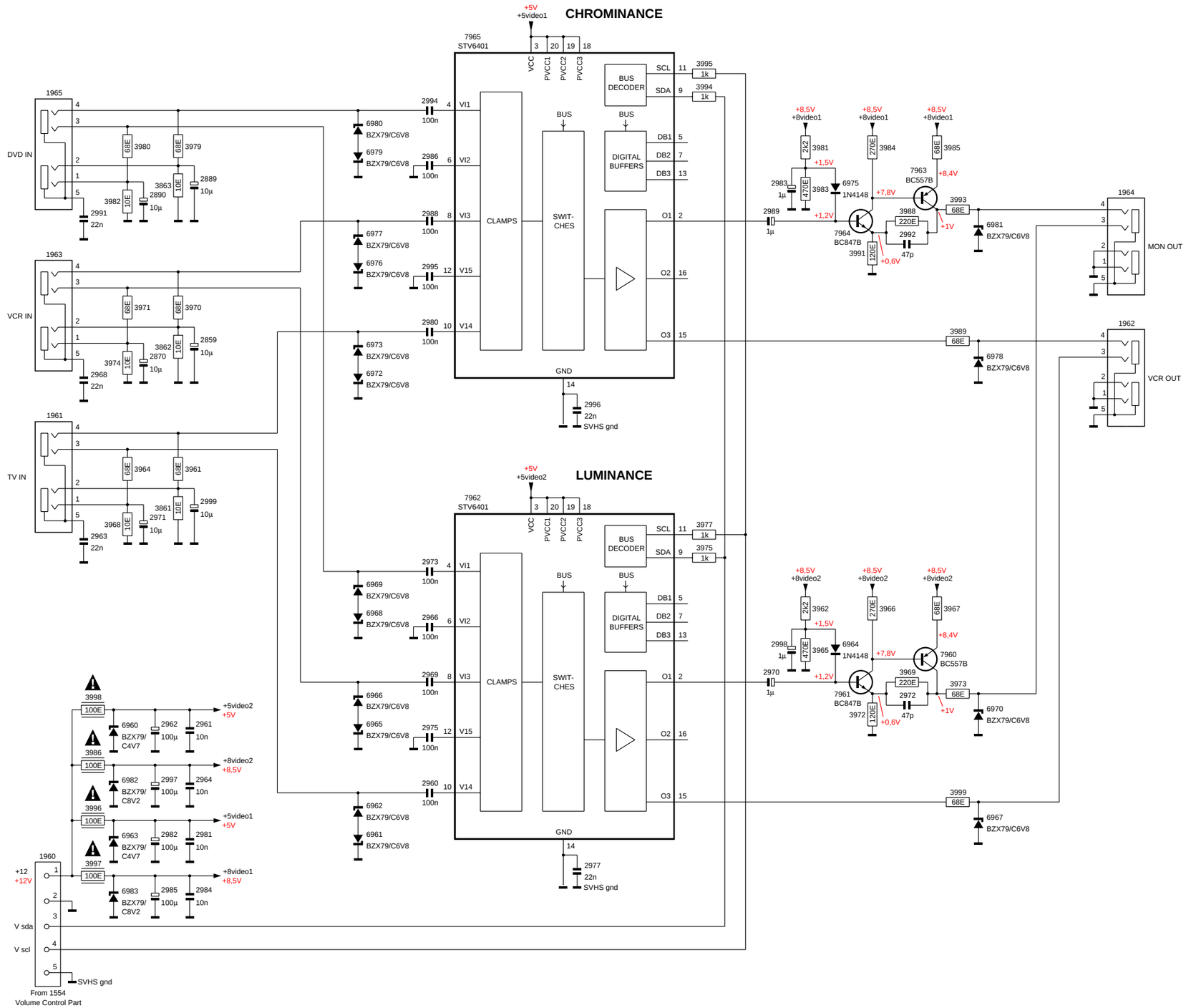

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2870	F5
2889	D5
2890	D5
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2961	K5
2962	K5
2963	I4
2964	L5
2966	J8
2968	F4
2969	J8
2970	J13
2971	H5
2972	K14
2973	I8
2975	K8
2977	M10
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2981	L5
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2983	D13
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2988	D8
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2994	C8
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2998	J13
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7962	H9
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