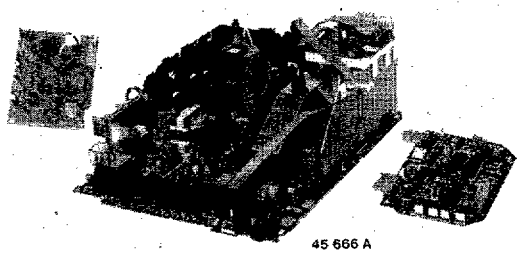
Service
Service
Service


45 666 A

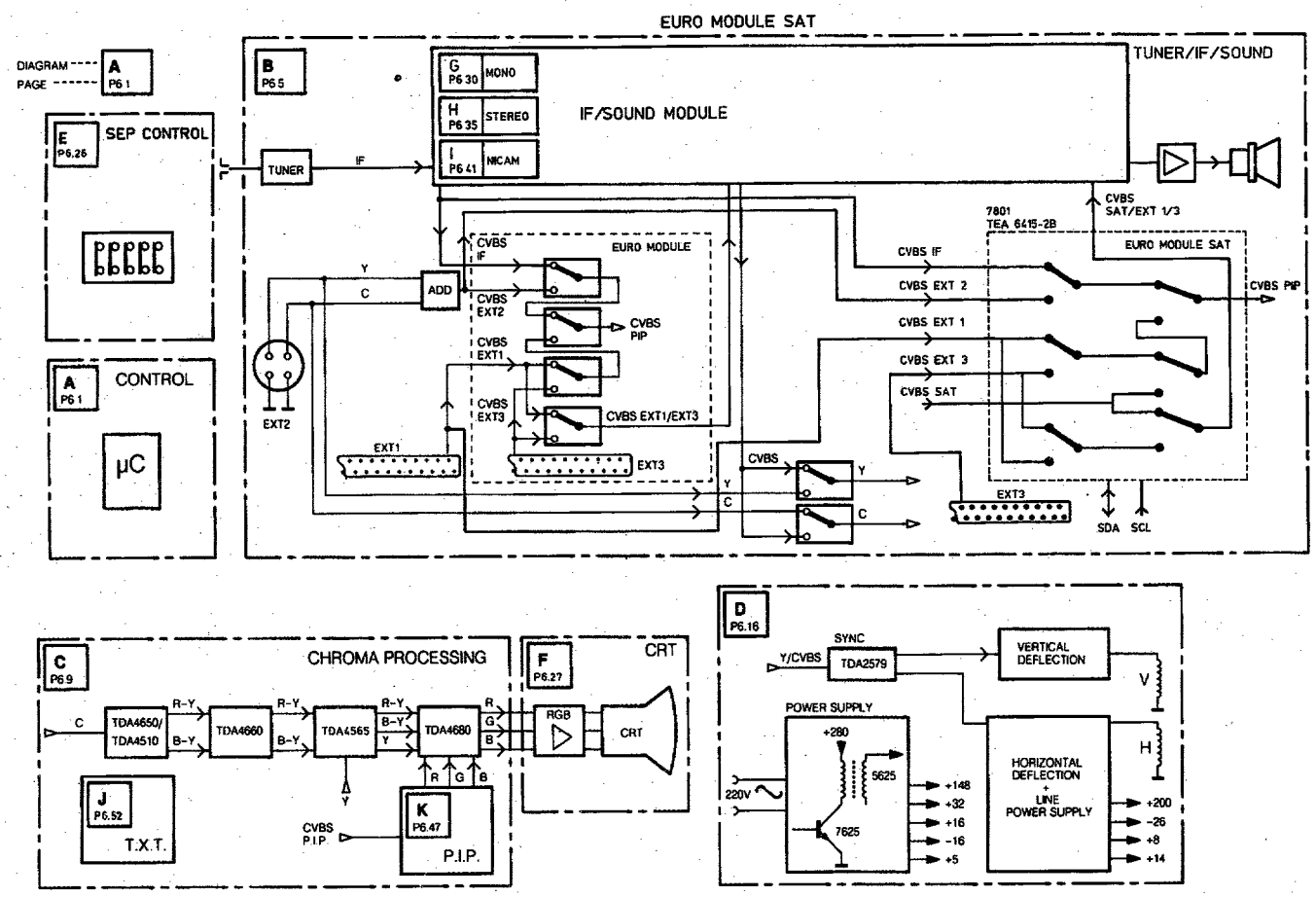
Service Manual

Contents

		Page
1.	Block diagram and technical specification	1.2
2.	Connection facilities	2.1
3.	Warnings and notes	3.1
4.	Mechanical instructions	4.1
5.	Overview oscillograms	5.1
	Detailed block diagram	5.3
6.	Electrical diagrams and PC-board layouts	
	Control (Diagram A)	6.1
	Tuner, IF and sound (Diagram B)	6.5
	Video processing (Diagram C)	6.9
	Power supply, synchronization, frame and line (Diagram D)	6.16
	Separate operation (Diagram E)	6.26
	Picture tube module (Diagram F)	6.27
	Mono IF/sound module (Diagram G)	6.30
	Stereo IF/sound module (Diagram H)	6.35
	NICAM IF/sound module (Diagram I)	6.41
	PIP module (Diagram K)	6.47
	Teletext module (Diagram J)	6.52
7.	Electrical adjustments	7.1
8.	List of error messages and repair tips	8.1
9.	Directions for use and survey of menus	9.1
10.	Electrical spare parts lists	10.1

Published by Consumer Electronics Printed in The Netherlands ©Copyright reserved Subject to modification GB 4822 727 19063

Block diagram



Technical specification

Mains voltag	:220 - 240 V (± 10%)
Mains frequency	:50 Hz (± 10%)
Aerial input impedance	:75Ω - coax
Minimum aerial voltage	:40µV
Maximum aerial voltage	:32mV
Pull-in range colour synchronization	: ± 300Hz
Pull-in range horizontal synchronization	: ± 300Hz

Local operation functions:

P +; P -; ◿ +; ◿ -; install

Programmes: 0-59
VCR operation on programmes: 0-59

Indications:

- On Screen Display (OSD)

- LED: - standby (red)
  - operation (green)
  - RC5 reception (flashing yellow)
  - internal fault in µP (flashing)

Errata

DIAGRAM: SCHALTBILD:	LOCATION: POSITION:	CORRECTION: KORREKTUR:	
(Page/ Seite):		Present situation: Vorliegende Situation:	Corrected situation: Korrekte Situation:
B (6.6)	C20	Item number R3386 Positionsnummer R3386	Item number R3886 Positionsnummer R3886
B (6.7)	O24	Connecting line reference E58 Verbindungsleitung Ref. E58	Connecting line reference D58 Verbindungsleitung Ref. D58
B (6.6)	B14	Connecting line reference A21 Verbindungsleitung Ref. A21	Connecting line reference D21 Verbindungsleitung Ref. D21
C (6.11)	K24	C2366	Delete C2366 C2366 entfernen
C (6.11)	N15 N16	Circuitry with TS7372 Circuitry with TS7374 Schaltung mit TS7322 Schaltung mit TS7374	Delete R3394, TS7372 and short circuit e-c TS7372 Delete R3395, TS7374 and short circuit e-c TS7374 R3394. TS7372 entfernen und Stromkreis e-c TS7372 kurzschließen R3305, TS7374 entfernen und Stromkreis e-c TS7374 kurzschließen
D (6.17)	E17		Add R3537 100kΩ (4822 116 52234) in series with R3539 R3537 100kΩ (4822 116 52234) in Reihe mit R3539 schalten
D (6.16)	A2	Connecting line reference B40 Verbindungsleitung Ref. B40	Connecting line reference B21 Verbindungsleitung Ref. B21
F (6.27/6.28)	D10	cD6301 connected to cTS7305 cD6331 connected to cTS7335 cD6361 connected to cTS7356 cD6302 verbunden mit cTS7305 cD6331 verbunden mit cTS7335 cD6361 verbunden mit cTS7356	cD6301 connected to bTS7305 cD6331 connected to bTS7335 cD6361 connected to bTS7356 cD6301 verbunden mit bTS7305 cD6331 verbunden mit bTS7335 cD6361 verbunden mit bTS7356
PWB mono carrier/Leiterplatte Monoträger (6.20)	F2	S5561	S5661
Spare parts list/ Stückliste (10.4)		6648-4822 130 34488-BZX79/F12	6648-4822 130 34197-BZX79/B12

Electrical adjustments/Electrische Abgleicharbeiten

Adapted Vg2, white drive, white limiter and cut-off settings: see service information GR2.2 93.02
Angepaßte Einstelungen für Vg2, Weißabgleich, Weißspitzenbegrenzung und Sperrpunktabgleich: siehe Service Information GR2.2 93.02

Turn page/Bitte wenden

Modifications during production/Änderungen während der Herstellung

* Modified line output transformer T5545: see of point 1 of service information GR2.2 93.01
* Modifizierter Zeilenausgangstransformator T5545: siehe Punkt 1 der Service-Information GR2.2 93.01

* Modified CRT panel: see points 2 and 3 of service information GR2.2 93.01
* Modifizierte CRT-Platine: siehe Punkt 2 und 3 der Service-Information GR2.2 93.01

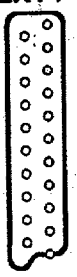
* Modified TXT module: see service information GR2.2 93.03
* Modifiziertes Videtext-Modul: siehe Service-Information GR2.2 93.03

* Modified IF module: see service information GR2.2 94.01
* Modifiziertes ZF-Modul: siehe Service-Information GR2.2 94.01

Connection facilities

1. Specification of the terminal sockets

EXT1



1 - Audio ⊖ R (0,5V_{RMS} ≤ 1kΩ)
2 - Audio ⊕ R (0,2 - 2V_{RMS}; 0,5 V_{nom}; ≥ 10kΩ)
3 - Audio ⊖ L (0,5V_{RMS} ≤ 1kΩ)
4 - Audio ⊥
5 - Blue ⊥
6 - Audio ⊕ L (0,2 - 2V_{RMS}; 0,5 V_{nom}; ≥ 10kΩ)
7 - Blue ⊕ (0,7V_{pp}/75Ω)
8 - RC5 ⊖ (500-800mV_{pp}) + CVBS-Status 1 ⊕ (0-2V: int.; 9,5-12V: ext.)
9 - Green ⊥
10 - -
11 - Green ⊕ (0,7V_{pp}; 75Ω)
12 - -
13 - Red ⊥
14 - -
15 - Red ⊕ (0,7V_{pp}; 75Ω)
16 - RGB-Status (0-0,4V: int. 1-3V ext. 75Ω)
17 - CVBS ⊖ ⊥
18 - CVBS ⊕ ⊥
19 - CVBS ⊖ (1V_{pp}/75Ω)
20 - CVBS ⊕ (1V_{pp}/75Ω)
21 - Earth screen

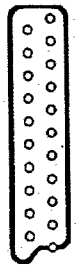
EXT2



1 - ⊥
2 - ⊥
3 - Y ⊕ (1V_{pp}; 75Ω)
4 - C ⊕ (1V_{pp}; 75Ω)

2x ◎ CINCH Audio ⊕ L+R (0,2-2V_{RMS}; 0,5 V_{nom} ≥ 10kΩ)

EXT3



1 - Audio ⊖ R (0,5V_{RMS}; ≤ 1kΩ)
2 - Audio ⊕ R (0,2 - 2V_{RMS}; 0,5 V_{nom}; ≥ 10kΩ)
3 - Audio ⊖ L (0,5V_{RMS}; ≤ 1kΩ)
4 - Audio ⊥
5 -
6 - Audio ⊕ L (0,2 - 2V_{RMS}; 0,5 V_{nom}; ≥ 10kΩ)
7 - -
8 - CVBS status 3 ⊖ (0-2V: int.; 9,5-12V: ext.)
9 - -
10 - -
11 - -
12 - -
13 - -
14 - -
15 - -
16 - -
17 - CVBS ⊖ ⊥
18 - CVBS ⊕ ⊥
19 - CVBS ⊖ (1V_{pp}/75Ω)
20 - CVBS ⊕ (1V_{pp}/75Ω)
21 - Earth screen

Audio out

2x ◎ CINCH Audio ⊖ L+R (0,5V_{RMS}; ≤ 1kΩ)

Front

◎ 3.5mm ⅛ ≥ 8Ω

2. Connecting equipment

Depending on the type of TV set, a variety of equipment can be connected. The exact number of pieces of equipment depends on the number of connectors on the back of the TV set (EXT1, 2 or 3). The wiring diagram in Fig. 2.1 shows which kinds of equipment can be connected. The wiring diagram shows the TV set with the maximum number of connectors possible for the GR2.2 chassis.

An RGB source (e.g. laserdisc player) can only be connected to EXT1. In order to switch the TV set to RGB operation, this RGB source must generate both a CVBS status signal at pin 8 and an RGB status signal at pin 16 of the euroconnector. It is not possible to switch the equipment to EXT1 in RGB operation using the remote control.

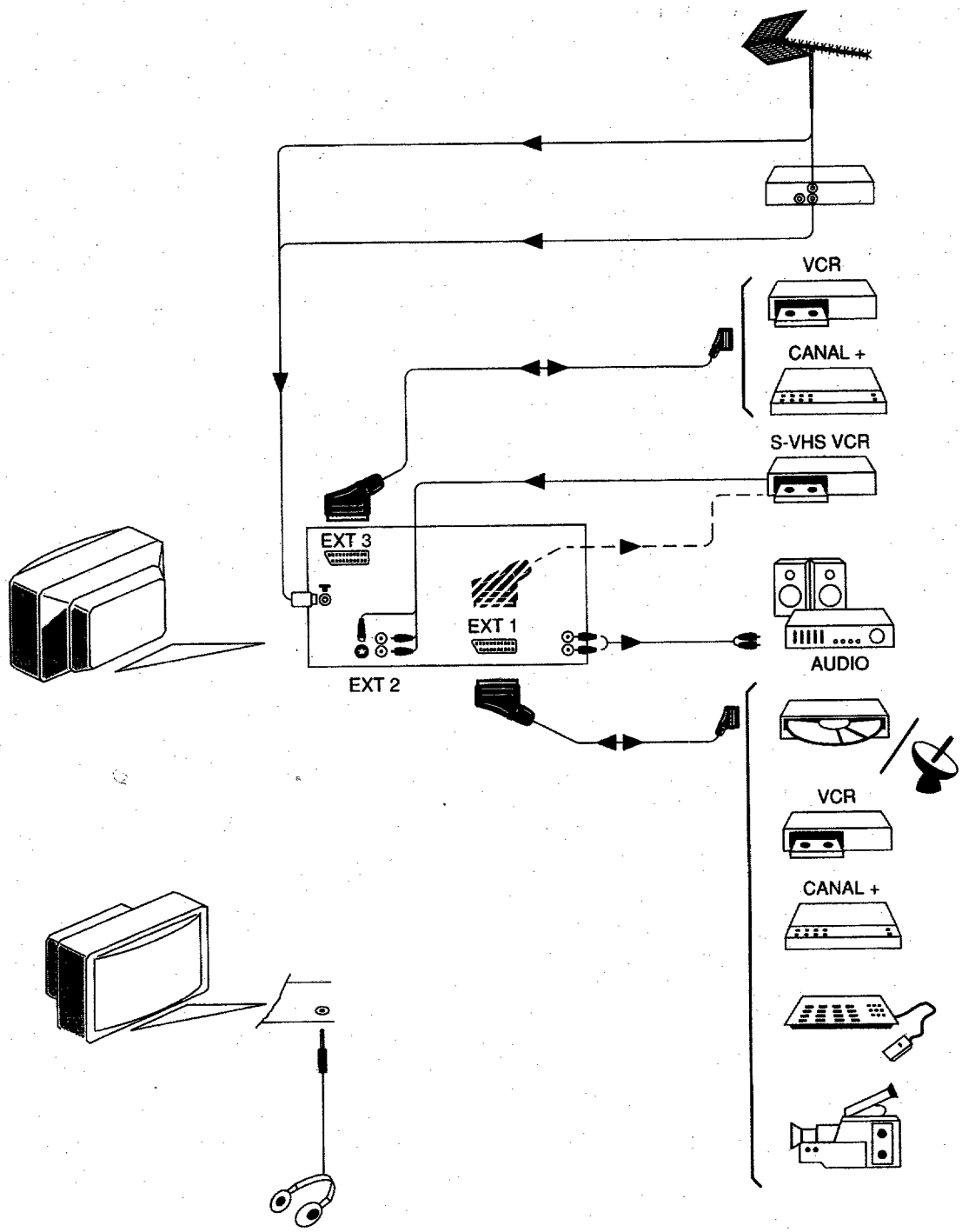


Fig. 2.1

Mechanical instructions

1. Removing the back plate

It is only possible to remove the back plate after removing the screws on the top, side, possibly on the underneath **and possibly under the EXT 3 connection** (see Fig. 4.1). In the case of subwoofer units, the subwoofer speaker on the carrier panel should also be unplugged.

2. Service position 1

Service position for module service and to measure test points
Unlock the chassis after the cables of the degaussing coil and any PIP module have been disconnected, and pull it backwards until all test points are accessible (see Fig. 4.2).
In order to make the tuner and the IF/sound module accessible, the bracket above these modules can be removed (see Fig. 4.3). With the exception of one fault message, the unit continues to function normally when the PIP module is not connected.

3. Service position 2

Service position for repair
Place the chassis on the heat sink on the tuner side after service position 1 is reached (see Fig. 4.4).
Warning: make sure that the heat sink of the sound output amplifier does not form a short circuit with the raster/line heat sink if the bracket of the euromodule has been removed!

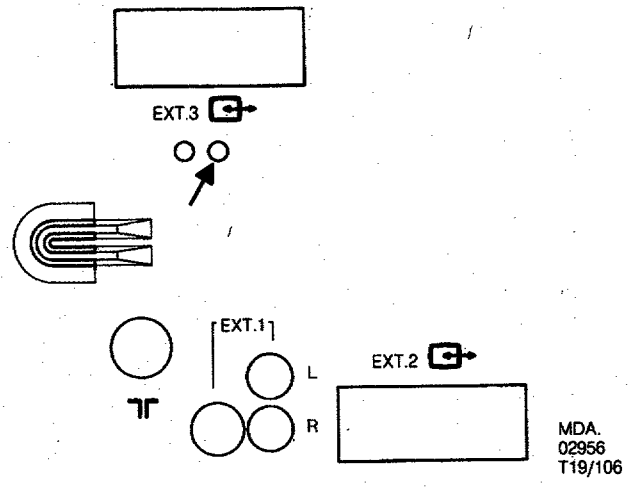


Fig. 4.1

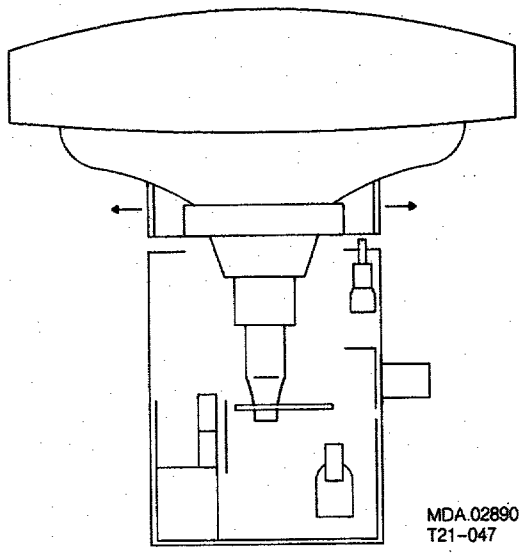


Fig. 4.2

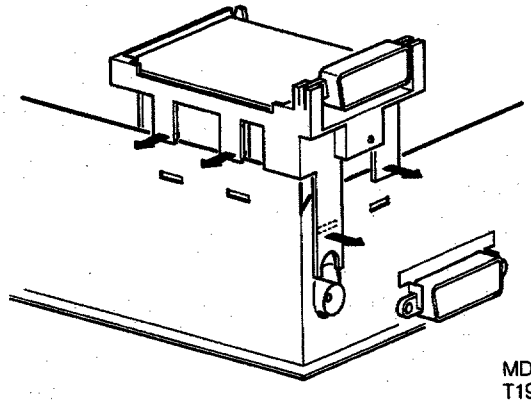


Fig. 4.3

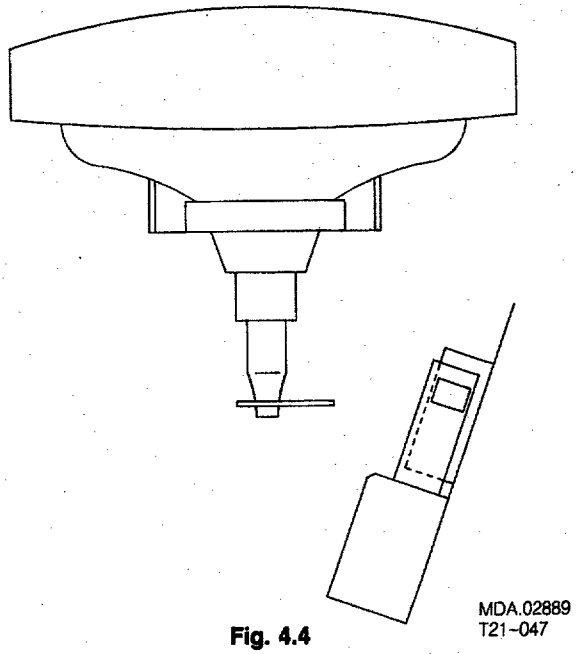


Fig. 4.4

Warnings

1. Safety regulations require that the unit should be returned in its original condition and that components identical to the original components are used. The safety components are indicated by the symbol ⚠.
2. In order to prevent damage to ICs and transistors, all high-voltage flashovers must be avoided. In order to prevent damage to the picture tube, it should be discharged using the method shown in Fig.3.1. Use a high-voltage probe and a multimeter (position DC-V). Discharge until the meter reading is OV (after approx. 30s).
3. **ESD**

   All ICs and many other semiconductors are sensitive to electrostatic discharges (ESD). Careless handling during repair can drastically shorten their life. Make sure that during repair you are connected by a pulse band with resistance to the same potential as the earth of the unit. Keep components and tools also at this same potential.
4. When repairing a unit, always connect it to the mains voltage via an isolating transformer.
5. Be careful when taking measurements in the high-voltage section and on the picture tube.
6. Never replace modules or other components while the unit is switched on.
7. It is recommended that safety goggles are worn when replacing the picture tube.
8. When making settings, use plastic rather than metal tools.
   This will prevent any short circuits and the danger of a circuit becoming unstable.
9. After repair the wiring should be fastened once more in the cable clamps for this purpose.
10. In order to prevent measuring errors, the heat sinks should not be used as reference points for measurements.
    The heat sink for the sound output amplifier (next to the channel selector) is connected to the -16 or -12 volts.
11. Together with the deflection unit and any multipole unit, the flat square picture tubes used form an integrated unit. The deflection and the multipole units are set optimally at the factory. Adjustment of this unit during repair is therefore not recommended.
12. The high-voltage cable in 21" units is glued in the line output transformer. This can therefore not be replaced.

Notes

1. The cold chassis direct voltages and oscillograms should be measured with regard to the tuner earth (⊥). Voltages on the line mains side of the SOPS transformer 5625 should be measured with respect to (⏚).
2. The direct voltages and oscillograms given in the diagrams should be measured in the service default mode (see section 9). A colour bar signal, modulated on a picture carrier wave of 475.25 MHz, should be used as the video signal. A 1 kHz signal should be used for the sound (for all systems).
3. Where necessary, the oscillograms and direct voltages are measured with (⏉) and without aerial signal(⏊). Voltages in the power supply section are measured both for normal operation (⏻) and in standby (⏻). These values are indicated by means of the appropriate symbols.
4. The picture tube PCB has printed spark gaps. Each spark gap is connected between an electrode of the picture tube and the Aquadag coating.
5. The semiconductors indicated in the circuit diagram and in the parts lists are completely interchangeable per position with the semiconductors in the unit, irrespective of the type indication on these semiconductors.
6. The connectors used for the modules (board to board) are gold-plated and should only be replaced by the same type.
7. In the case of fault finding and/or repair to the teletext module, the accessibility of the circuit and the components can be increased by using extension cards.
   The order numbers of these extension cards are:
   * 6 times: 4822 395 30259
   * 8 times: 4822 214 31402
8. Both multisystem and single system units are mentioned in this documentation.
   The term multisystem unit is used to refer to a unit that is suitable for the reception of PAL BGI and SECAM BGLL' systems.
   A multi-system set for Eastern-Europa is suitable for the reception of the PAL/SECAM BGDK systems. The term single system unit is used to refer to all other units (such as PAL BG, PAL/SECAM BG and PAL I units).
9. Blackline units can be recognized by the thick, protected high-voltage cable. Non-blackline units have a thin, unprotected high-voltage cable.

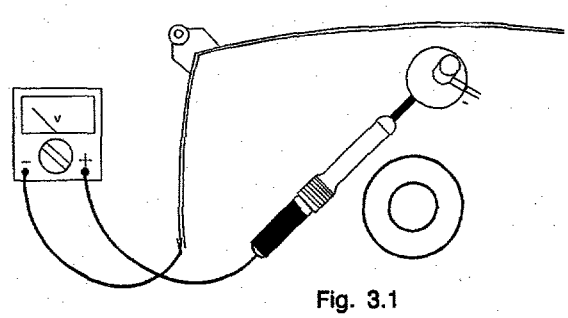
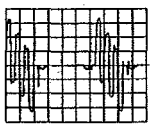
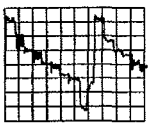


Fig. 3.1

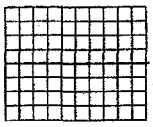
Oscillogrammes / Oszillogramme / Oscillogrammes



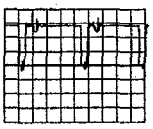
TP 1
0,2 V/div AC
20 µS/div



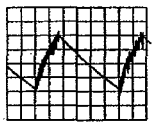
TP 8
50 mV/div AC
10 µS/div



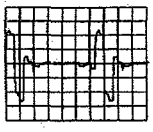
TP 14 ⏱
0,2 V/div DC
0,5 mS/div



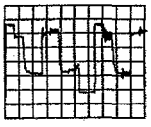
TP 21
0,5 V/div DC
5 µS/div



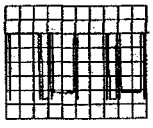
TP 26 ⏱
0,1 V/div AC
5 mS/div



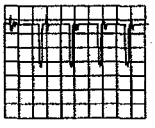
TP 2
0,2 V/div AC
20 µS/div



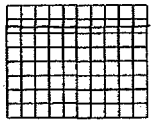
TP 9
0,5 V/div AC
10 µS/div



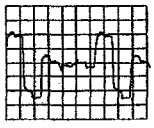
TP 15
1 V/div AC
0,2 mS/div



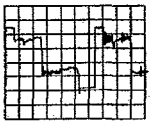
TP 21 ⏱
0,5 V/div DC
10 µS/div



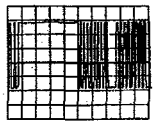
TP 27
1 V/div DC



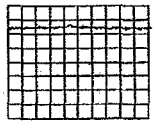
TP 3
0,2 V/div AC
10 µS/div



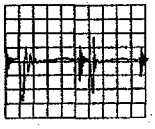
TP 10
0,5 V/div AC
10 µS/div



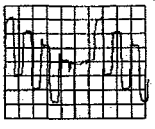
TP 16
1 V/div DC
0,1 mS/div



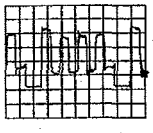
TP 22
1 V/div DC



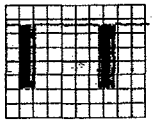
TP 27 ⏱
50 mV/div AC
10 mS/div



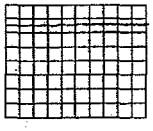
TP 4
0,2 V/div AC
10 µS/div



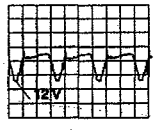
TP 11
0,5 V/div AC
10 µS/div



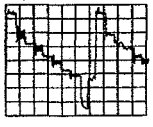
TP 17
1 V/div DC
20 mS/div



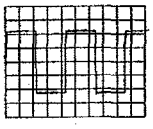
TP 23
1 V/div DC



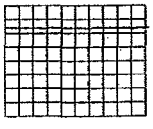
TP 28
0,5 V/div AC
5 µS/div



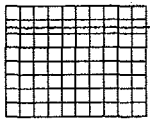
TP 5
0,1 V/div AC
10 µS/div



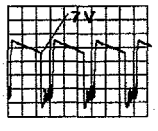
TP 12
1 V/div AC
10 µS/div



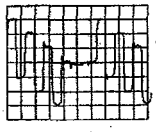
TP 18
2 V/div DC
20 mS/div



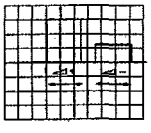
TP 24
5V/div DC



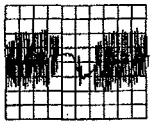
TP 28 ⏱
1 /div AC
10 mS/div



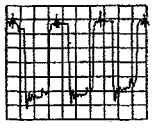
TP 6
0,2 V/div AC
10 µS/div



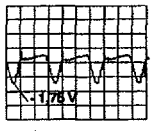
TP 13
1 V/div DC
1 S/div



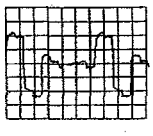
TP 19
50 mV/div AC
10 µS/div



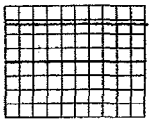
TP 25
0,2 V/div AC
5 µS/div



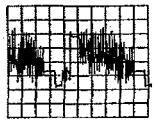
TP 29
0,5 V/div AC
5 µS/div



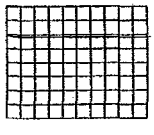
TP 7
0,2 V/div AC
10 µS/div



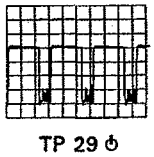
TP 14
1 V/div DC
0,5 mS/div



TP 20
0,5 V/div AC
10 µS/div

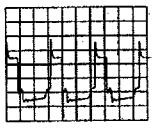


TP 26
1 V/div DC

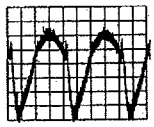


TP 29 ⏱
1 V/div AC
10 mS/div

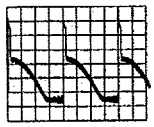
Oscillogrammes / Oszillogramme / Oscillogrammes



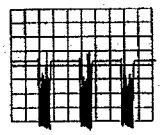
TP 30
2 V/div DC
5 µS/div



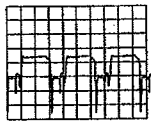
TP 36
0,2 V/div AC
5 mS/div



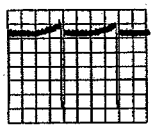
TP 41 b
5 V/div AC
5 mS/div



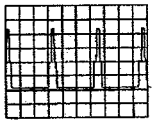
TP 30 ⏻
1 V/div DC
10 mS/div



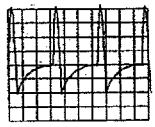
TP 37
2 V/div AC
20 µS/div



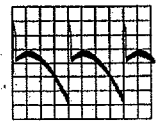
TP 41 c
0,1 V/div AC
5 mS/div



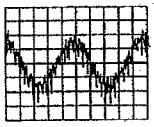
TP 31
2 V/div DC
20 µS/div



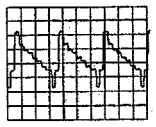
TP 38
20 mV/div AC
20 µS/div



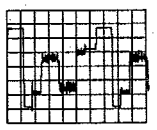
TP 41 d
5 V/div AC
5 mS/div



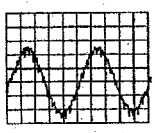
TP 32
50 mV/div DC
0,2 mS/div



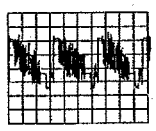
TP 39
0,2 V/div AC
20 µS/div



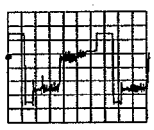
TP 51
130 V_{pp}
115 V_{pp} for 21"



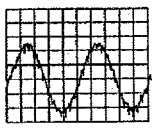
TP 33
2 V/div DC
0,2 mS/div



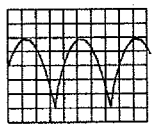
TP 40
0,5 V/div AC
20 µS/div



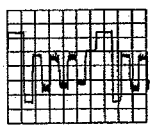
TP 52
120 V_{pp}
115 V_{pp} for 21"



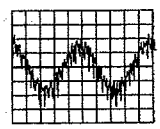
TP 34
2 V/div DC
20 µS/div



TP 41
2 V/div AC
5 mS/div



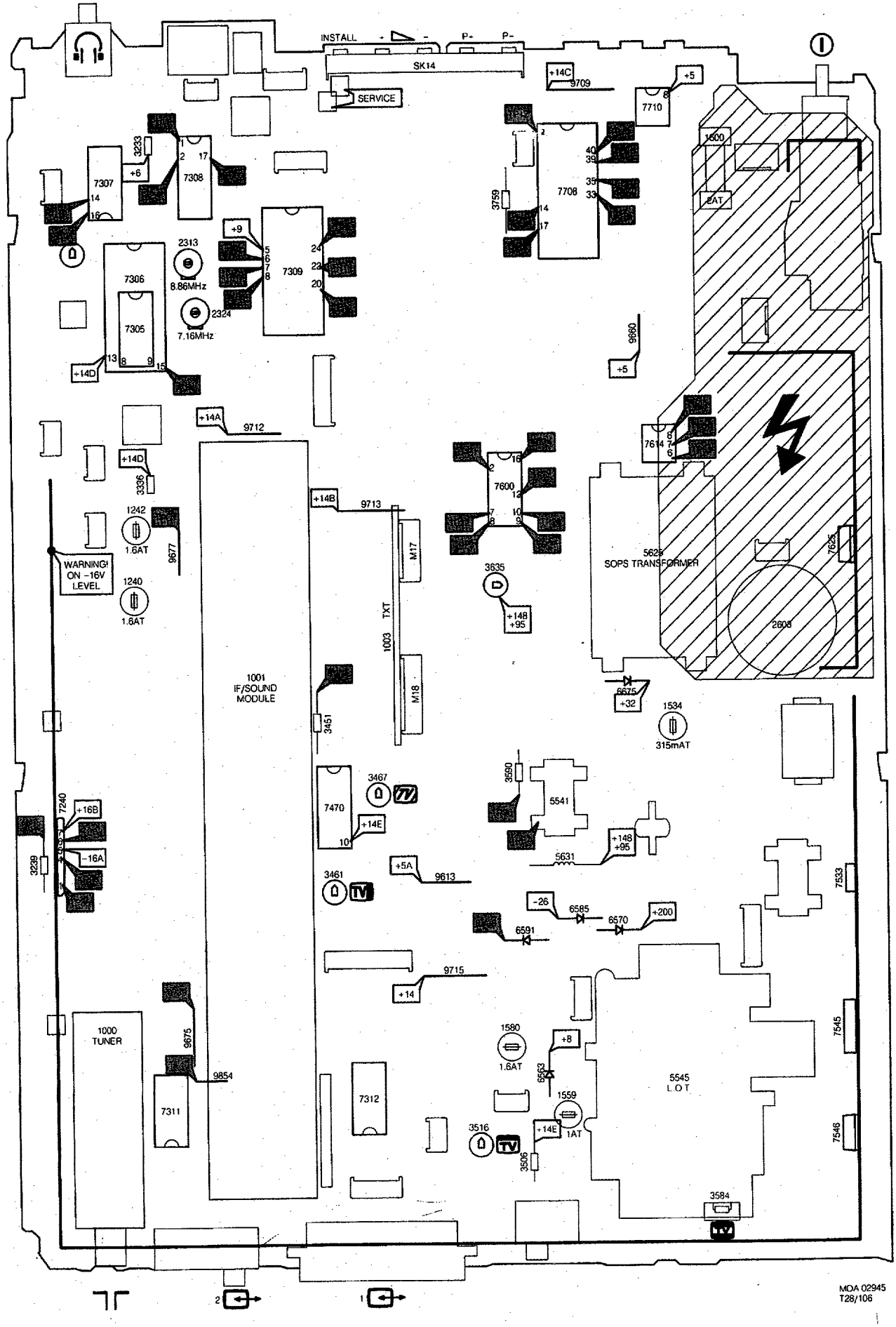
TP 53
120 V_{pp}
110 V_{pp} for 21"



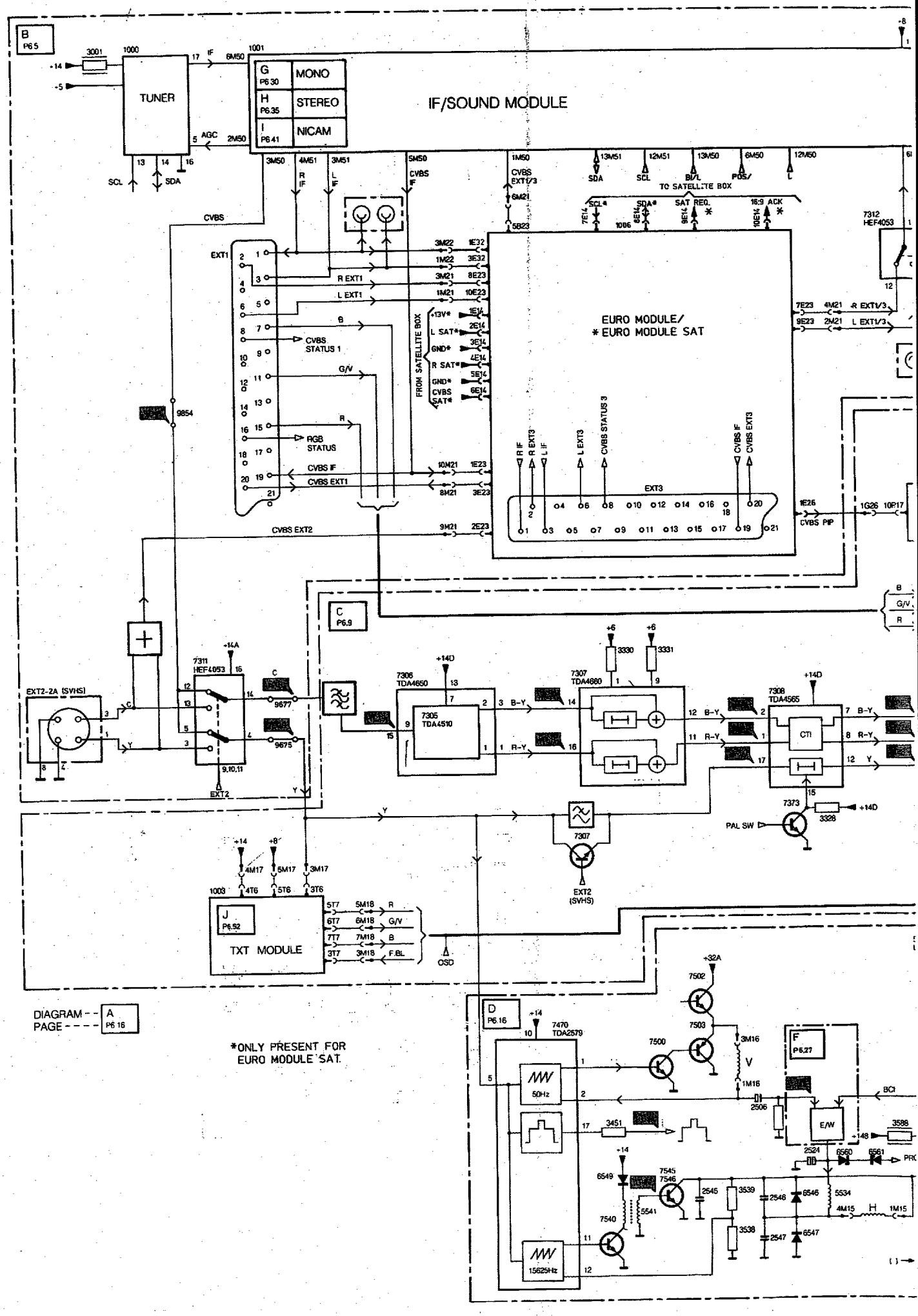
TP 35
50 mV/div DC
0,2 mS/div

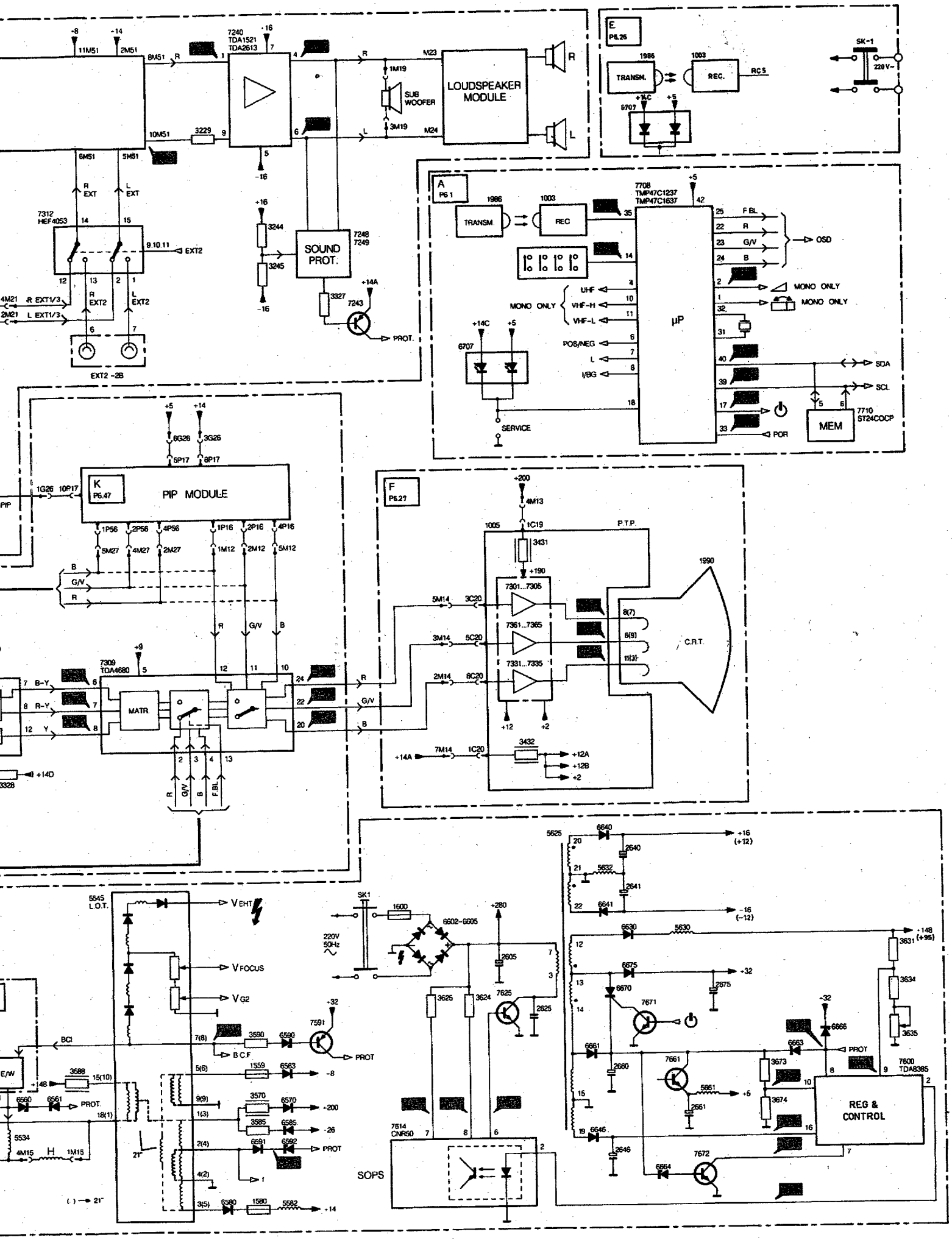


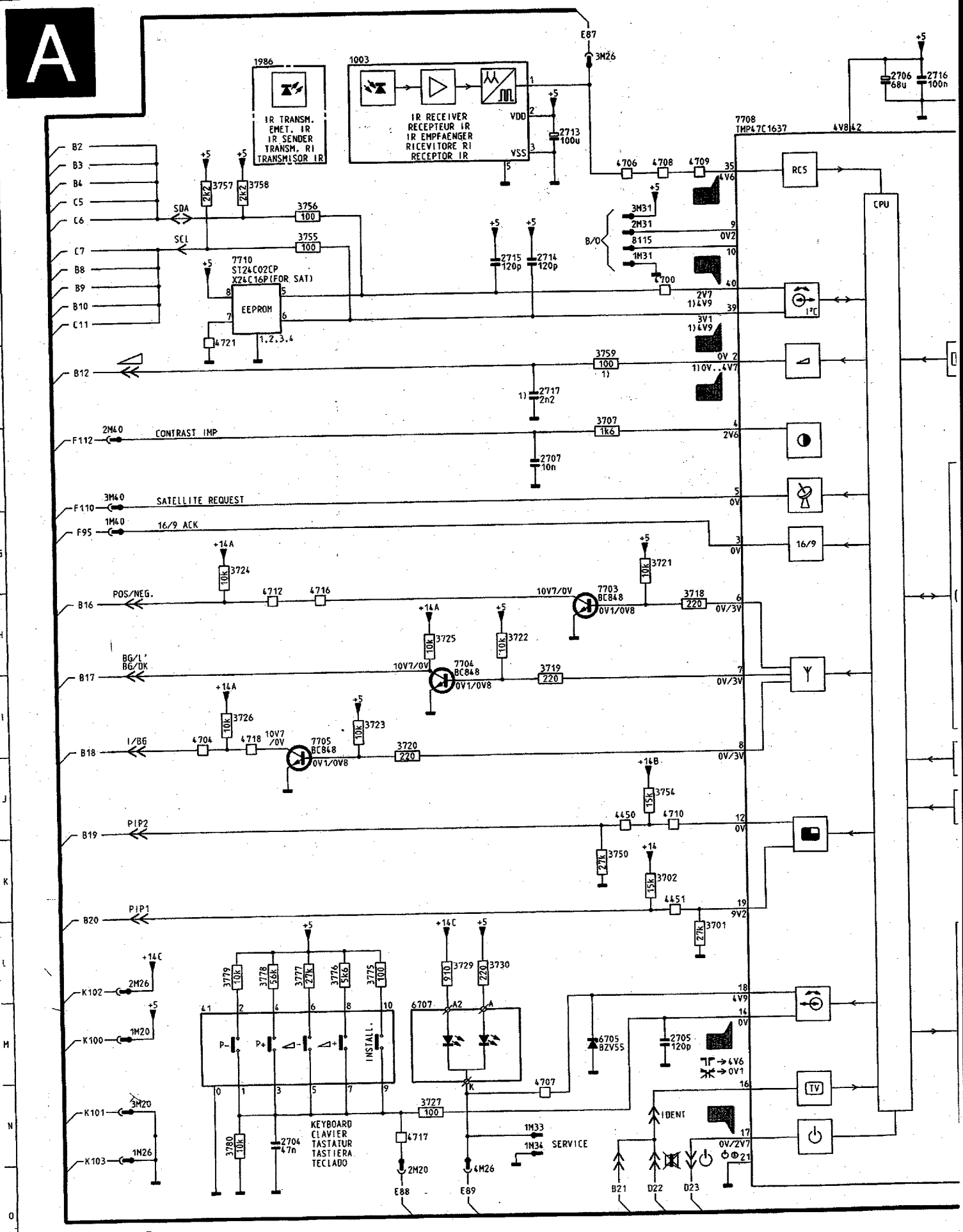
TP 41 a
5 V/div AC
5 mS/div


INSTALL
SK14
SERVICE
+14C
9709
+5
7710
1500
EAT
7307
3233
+6
7308
7708
3759
+9
7309
2313
8.86MHz
2324
7.16MHz
7306
7305
+14D
9660
+5
+14A
9712
7614
7600
+14B
9713
3335
1242
1.6AT
9677
WARNING! ON -16V LEVEL
1240
1.6AT
M17
TXT
1003
M18
3635
+14B
+95
5625
SOPS TRANSFORMER
2608
7625
6675
+32
1534
315mAT
1001
IF/SOUND
MODULE
3451
3467
7470
+14E
3590
5541
+148
+95
5631
7240
+16B
-16A
3239
+5A
9613
3461
-26
6585
6570
+200
6591
9715
+14
1000
TUNER
9675
9854
7311
7312
1580
1.6AT
+8
6563
1559
1AT
3516
+14E
3506
5545
LOT
7533
7545
7546
3584
MDA 02945
T28/106

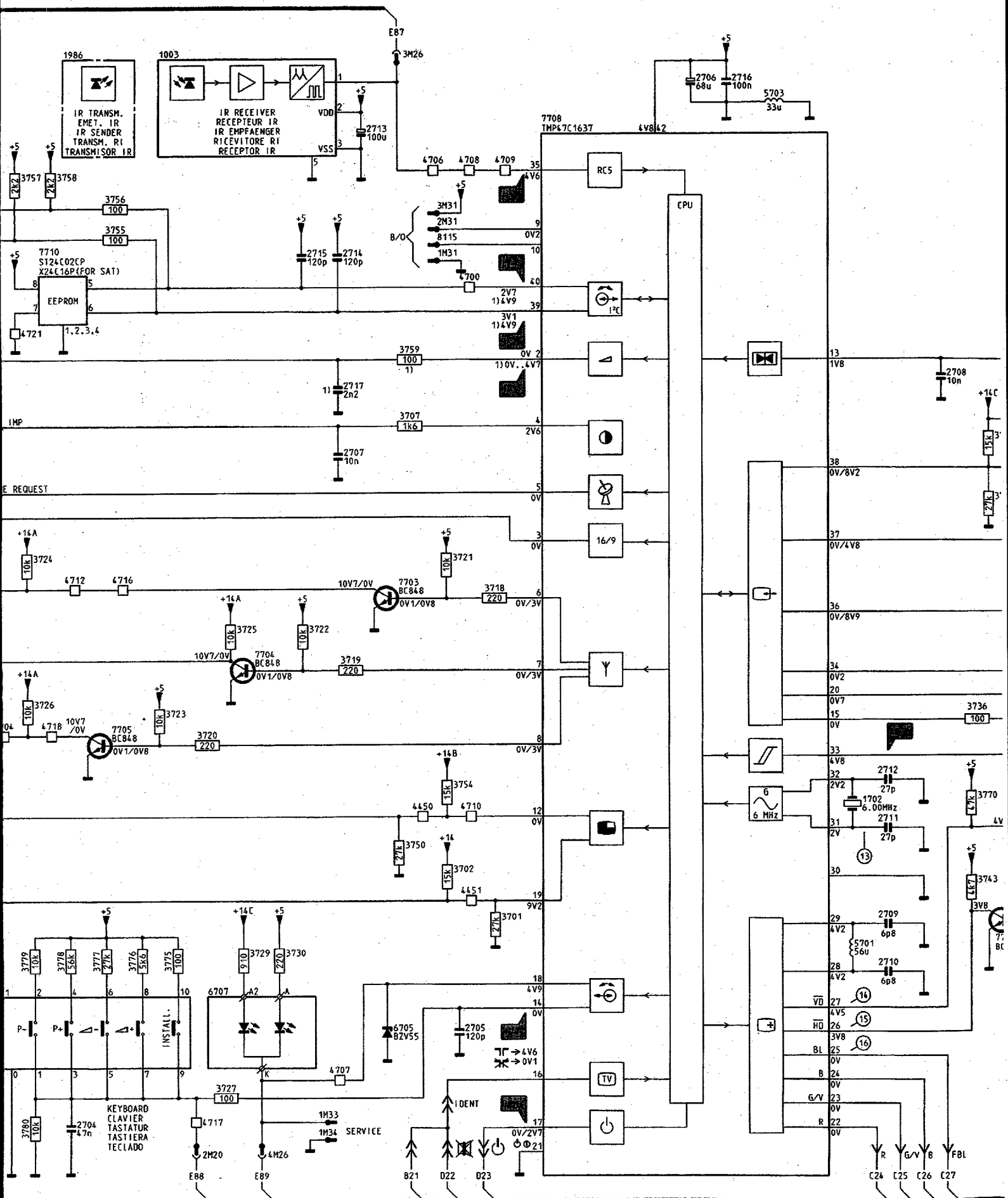
Blockdiagram / Blockschaltbild / Schéma-bloc

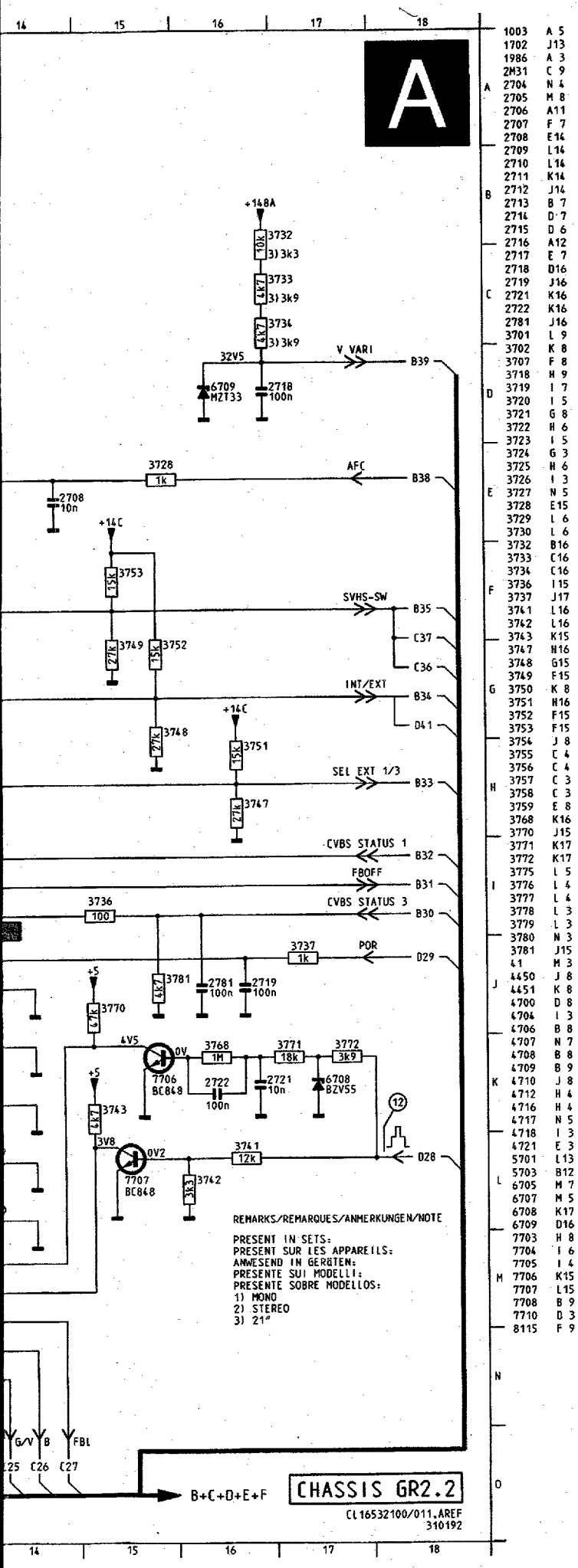



LOUDSPEAKER MODULE
SUB WOOFER
SOUND PROT.
TRANSM.
REC.
RC5
SK-1
220V~
TMP47C1237
TMP47C1637
μP
OSD
MONO ONLY
SDA
SCL
MEM
ST24COCP
SERVICE
POR
PIP MODULE
P.T.P.
C.R.T.
MATR.
REG & CONTROL
SOPS
L.O.T.
VEHT
VFOCUS
VG2
PROT
EXT2 -2B

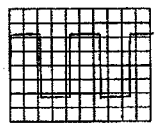

A
IR TRANSM.
EMET. IR
IR SENDER
TRANSM. RI
TRANSMISOR IR
IR RECEIVER
RECEPTEUR IR
IR EMPFAENGER
RICEVITORE RI
RECEPTOR IR
7708
TMP47C1637
EEPROM
7710
ST24C02CP
X24C16P(FOR SAT)
SDA
SCL
CONTRAST IMP
SATELLITE REQUEST
16/9 ACK
POS/NEG.
BG/L'
BG/DK
I/BG
PIP2
PIP1
KEYBOARD
CLAVIER
TASTATUR
TASTIERA
TECLADO
INSTALL.
SERVICE
IDENT
CPU
RCS
TV

Controls / Bedienung / La Commande

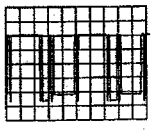




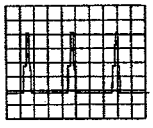
	1003	A 5
	1702	J13
	1986	A 3
	2M31	C 9
A	2704	N 4
	2705	M 8
	2706	A11
	2707	F 7
	2708	E14
	2709	L14
	2710	L14
	2711	K14
B	2712	J14
	2713	B 7
	2714	D 7
	2715	D 6
	2716	A12
	2717	E 7
	2718	D16
	2719	J16
C	2721	K16
	2722	K16
	2781	J16
	3701	L 9
	3702	K 8
	3707	F 8
	3718	H 9
D	3719	I 7
	3720	I 5
	3721	G 8
	3722	H 6
	3723	I 5
	3724	G 3
	3725	H 6
	3726	I 3
E	3727	N 5
	3728	E15
	3729	L 6
	3730	L 6
	3732	B16
	3733	C16
	3734	C16
F	3736	I15
	3737	J17
	3741	L16
	3742	L16
	3743	K15
	3747	H16
	3748	G15
	3749	F15
G	3750	K 8
	3751	H16
	3752	F15
	3753	F15
	3754	J 8
	3755	C 4
	3756	C 4
	3757	C 3
H	3758	C 3
	3759	E 8
	3768	K16
	3770	J15
	3771	K17
	3772	K17
	3775	L 5
I	3776	L 4
	3777	L 4
	3778	L 3
	3779	L 3
	3780	N 3
	3781	J15
	41	M 3
J	4450	J 8
	4451	K 8
	4700	D 8
	4704	I 3
	4706	B 8
	4707	N 7
	4708	B 8
	4709	B 9
K	4710	J 8
	4712	H 4
	4716	H 4
	4717	N 5
	4718	I 3
	4721	E 3
	5701	L13
	5703	B12
L	6705	M 7
	6707	M 5
	6708	K17
	6709	D16
	7703	H 8
	7704	I 6
	7705	I 4
M	7706	K15
	7707	L15
	7708	B 9
	7710	D 3
	8115	F 9
N		
O		



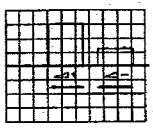
TP 12
1 V/div AC
10 µS/div



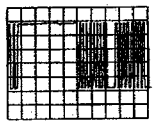
TP 15
1 V/div AC
0,2 mS/div



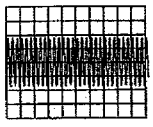
⑫
2 V/div AC
20 µS/div



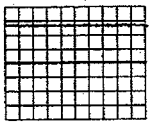
TP 13
1 V/div DC
1 S/div



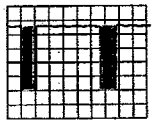
TP 16
1 V/div DC
0,1 mS/div



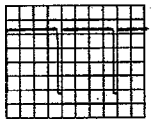
⑬
1 V/div AC
0,5 µS/div



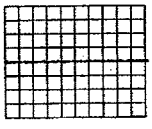
TP 14
1 V/div DC
0,5 mS/div



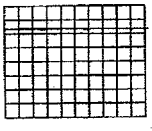
TP 17
1 V/div DC
20 mS/div



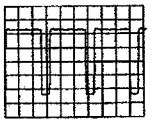
⑭
1 V/div AC
5 mS/div



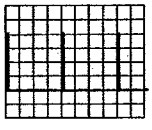
TP 14 ⏻
0,2 V/div DC
0,5 mS/div



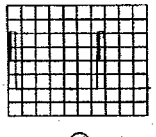
TP 18
2 V/div DC
20 mS/div



⑮
1 V/div AC
20 µS/div

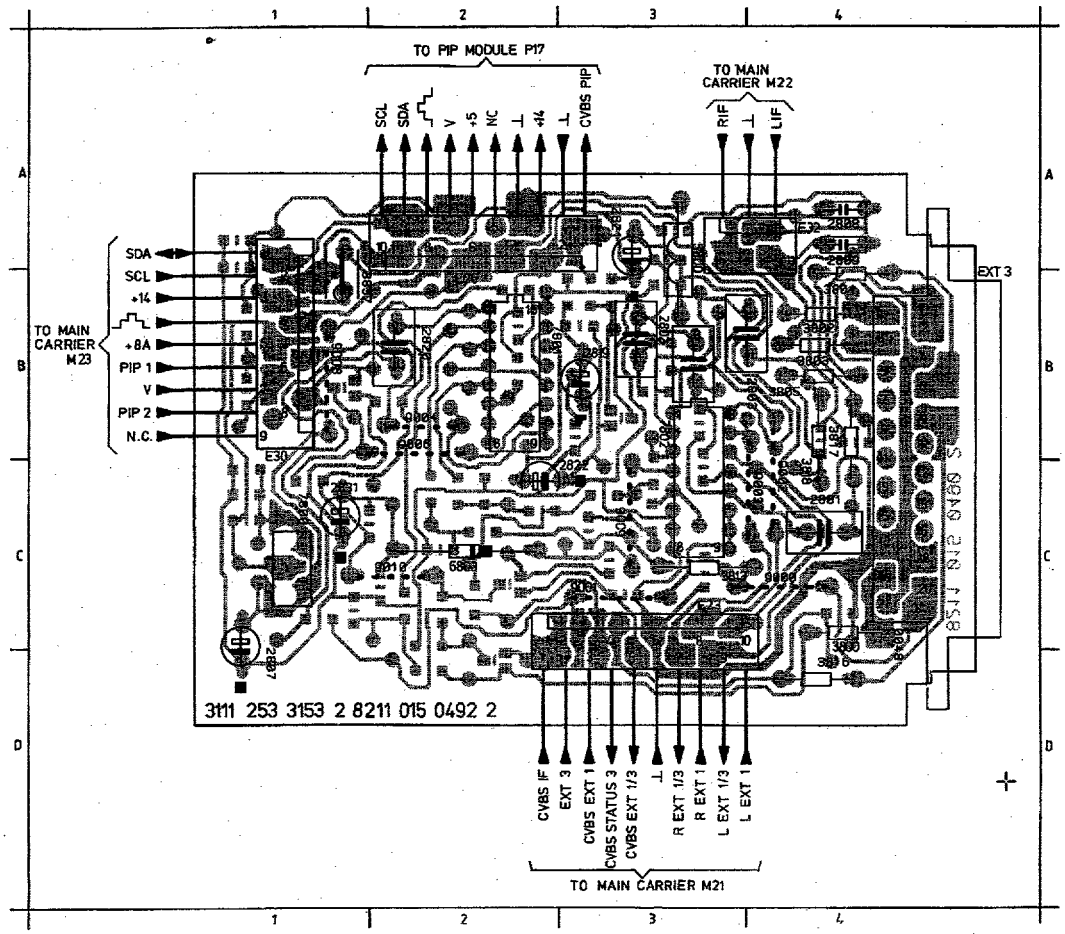


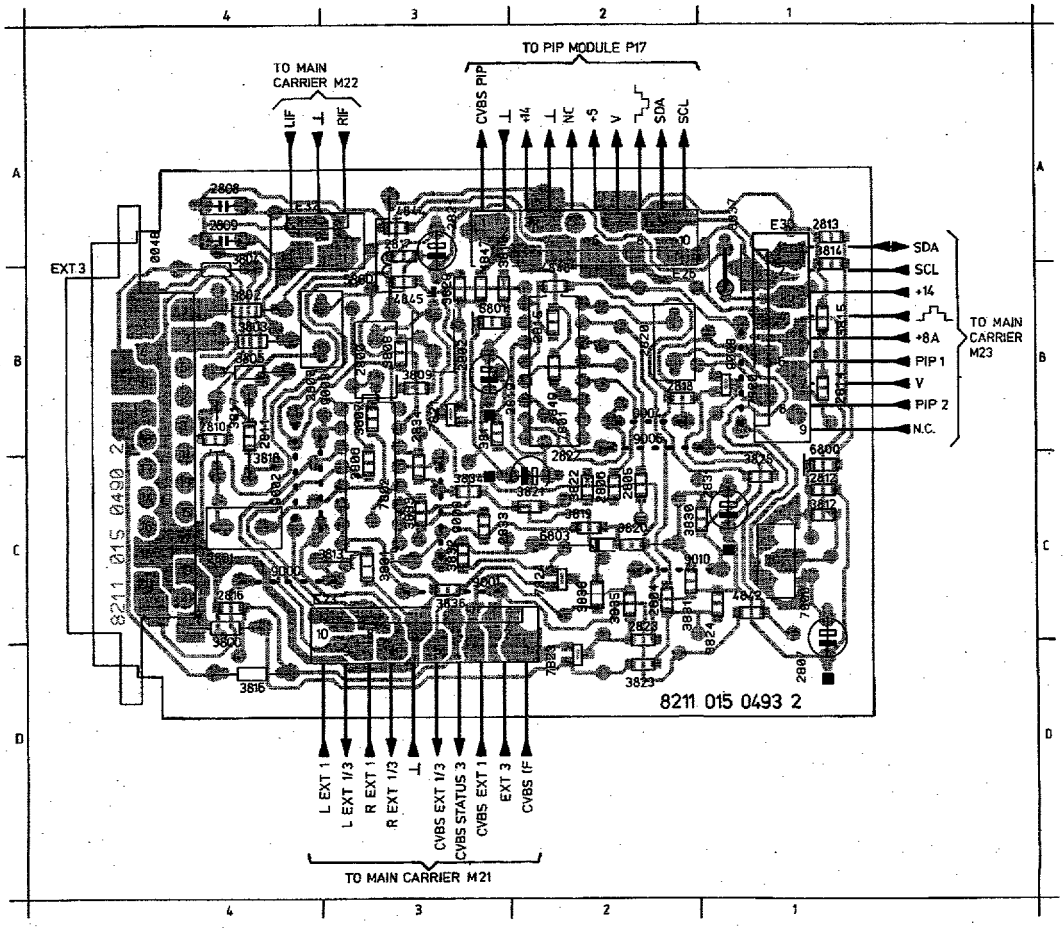
⑯
0,5 V/div AC
5 mS/div



⑯
1 V/div AC
10 µS/div

Euro module (ECO)
Euro-AV-Platte (ECO)
Module Prise Péritélévision (ECO)





E23 D3
E26 A2
E30 B1
E32 A3
0048 C4
2800 B3
2801 C4
2802 B3
2803 B4
2804 D2
2805 C2
2806 C2
2807 D1
2808 A4
2809 B4
2810 C4
2811 C4
2812 C1
2813 B1
2814 B1
2815 B2
2816 D4
2817 B3
2818 C2
2819 B3
2820 B2
2821 B3
2822 C2
2823 D2
2831 C1
2833 C3
2834 C3
3800 D4
3801 C3
3802 B4
3803 B4
3804 B4
3805 B4
3806 C3
3807 C3
3808 B3
3809 B3
3810 B3
3811 C3
3812 C1
3813 C3
3815 B1
3816 D4
3817 C4
3818 C4
3819 C2
3820 C2
3821 C2
3822 C2
3823 D2
3824 D1
3825 C1
3829 B3
3830 C2
3831 C2
3832 C3
3833 C3
3834 C3
3835 D2
3836 D3
3837 B1
3838 D2
4800 A4
4842 D1
4844 B3
4845 B3
4847 B3
4848 B2
4849 B2
5800 B3
6800 C1
6801 B3
6803 C2
7800 C1
7801 B2
7802 C3
7820 B1
7821 C3
7823 D2
7824 C2
9000 C4
9001 D3
9002 C4
9003 C4
9004 C2
9006 C2
9008 B1
9009 C3
9010 C2

Tuner / Kanalwähler / Sélecteur

B

TP 20
0,5 V/div AC
10 µS/div

TP 33
50 mV/div DC
0,2 mS/div

TP 35
50 mV/div DC
0,2 mS/div

TP 32
50 mV/div DC
0,2 mS/div

TP 34
2 V/div DC
20 µS/div

TP 39
0,2 V/div AC
20 µS/div

TP 40
0,5 V/div AC
20 µS/div

23
0,1 V/div DC
0,2 mS/div

24
50 mV/div DC
0,2 mS/div

25
0,5 V/div AC
10 µS/div

26
0,5 V/div AC
10 µS/div

P

EURO MODULE SATELLITE

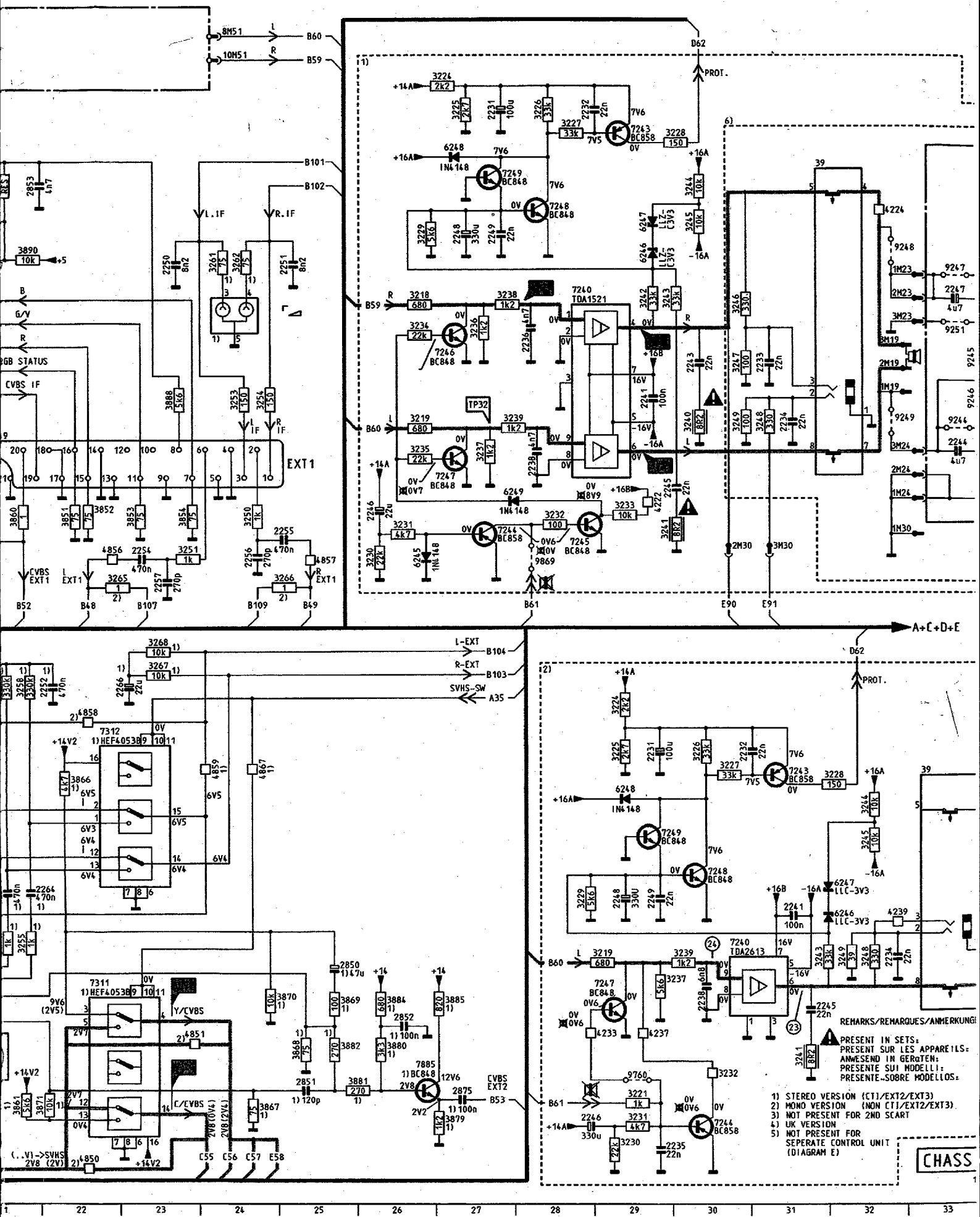
TO SATELLITE UNIT (DIAGRAM L,M,N,O)

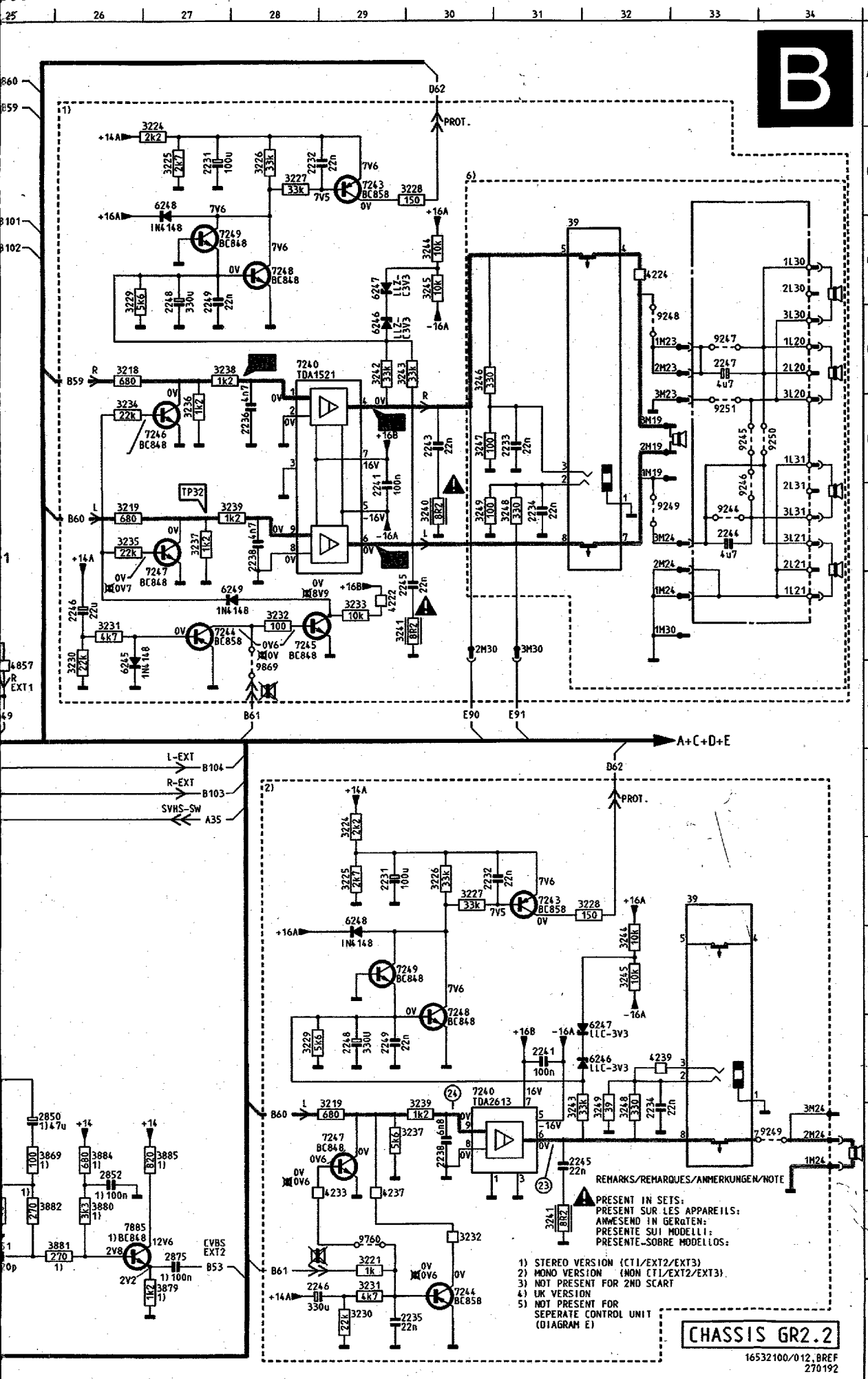
IF / ZF / FI

G : MONO
H : STEREO/ESTEREO
I : NICAM

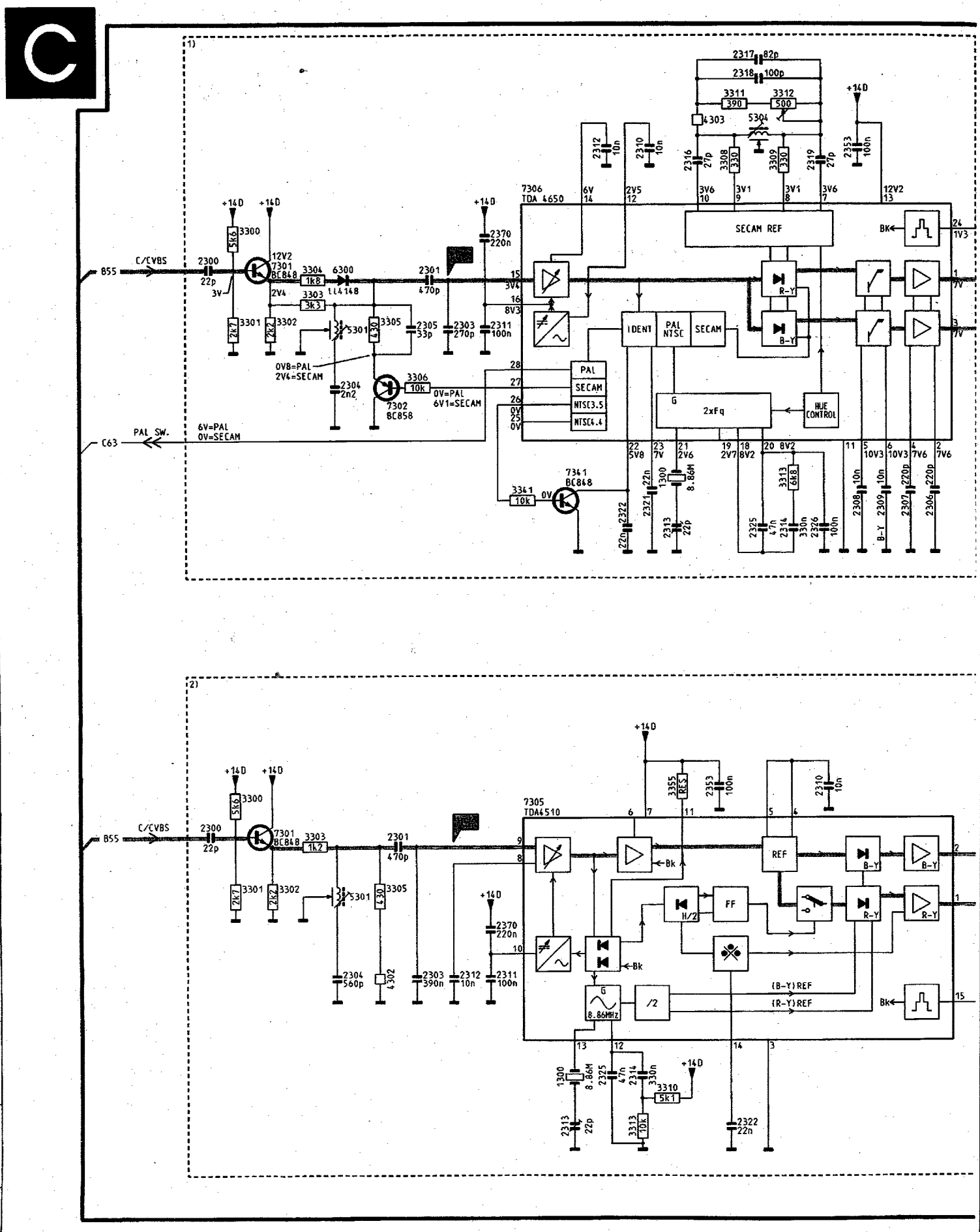
IF/SOUND MODULE ZF/TON MODUL MODULE FI/SON MODULO IF/AUDIO MODULO SONIDO FI

EURO MODULE
MODULO SCART
MODULO EURO

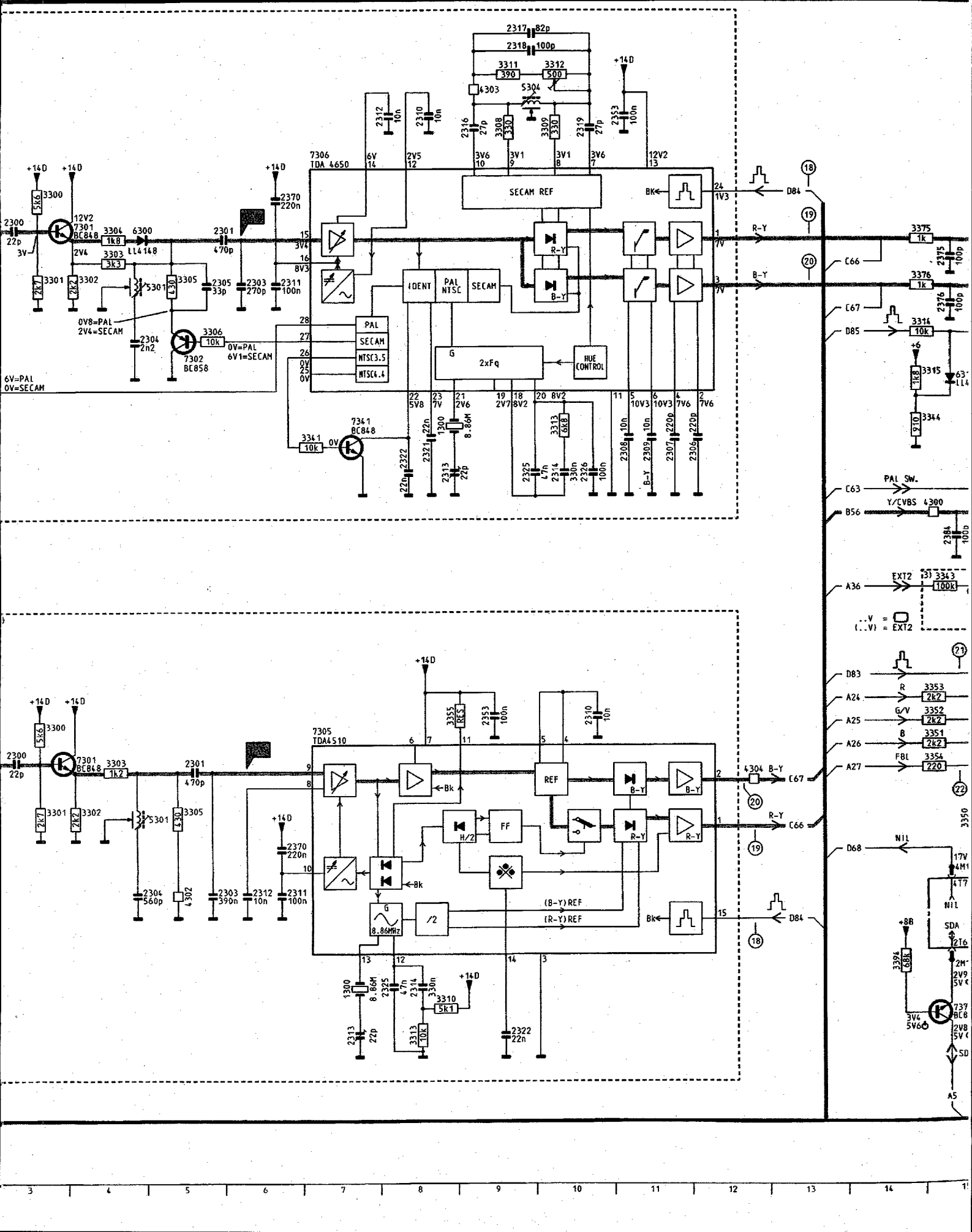

8M51
10M51
B60
B59
B101
B102
L.IF
R.IF
EXT1
B52
B48
B107
B109
B49
B61
E90
E91
D62
PROT.
7240 TDA1521
7240 TDA2613
7243 BC858
7248 BC848
7249 BC848
7246 BC848
7247 BC848
7244 BC858
7245 BC848
IN4148
LLZ-C3V3
TP32
L-EXT
R-EXT
SVHS-SW
B104
B103
A35
A+C+D+E
7312 HEF4053B
7311 HEF4053B
Y/CVBS
C/CVBS
CVBS EXT2
B53
REMARKS/REMARQUES/ANMERKUNG
PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERäTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:
1) STEREO VERSION (CTI/EXT2/EXT3)
2) MONO VERSION (NON CTI/EXT2/EXT3)
3) NOT PRESENT FOR 2ND SCART
4) UK VERSION
5) NOT PRESENT FOR SEPERATE CONTROL UNIT (DIAGRAM E)

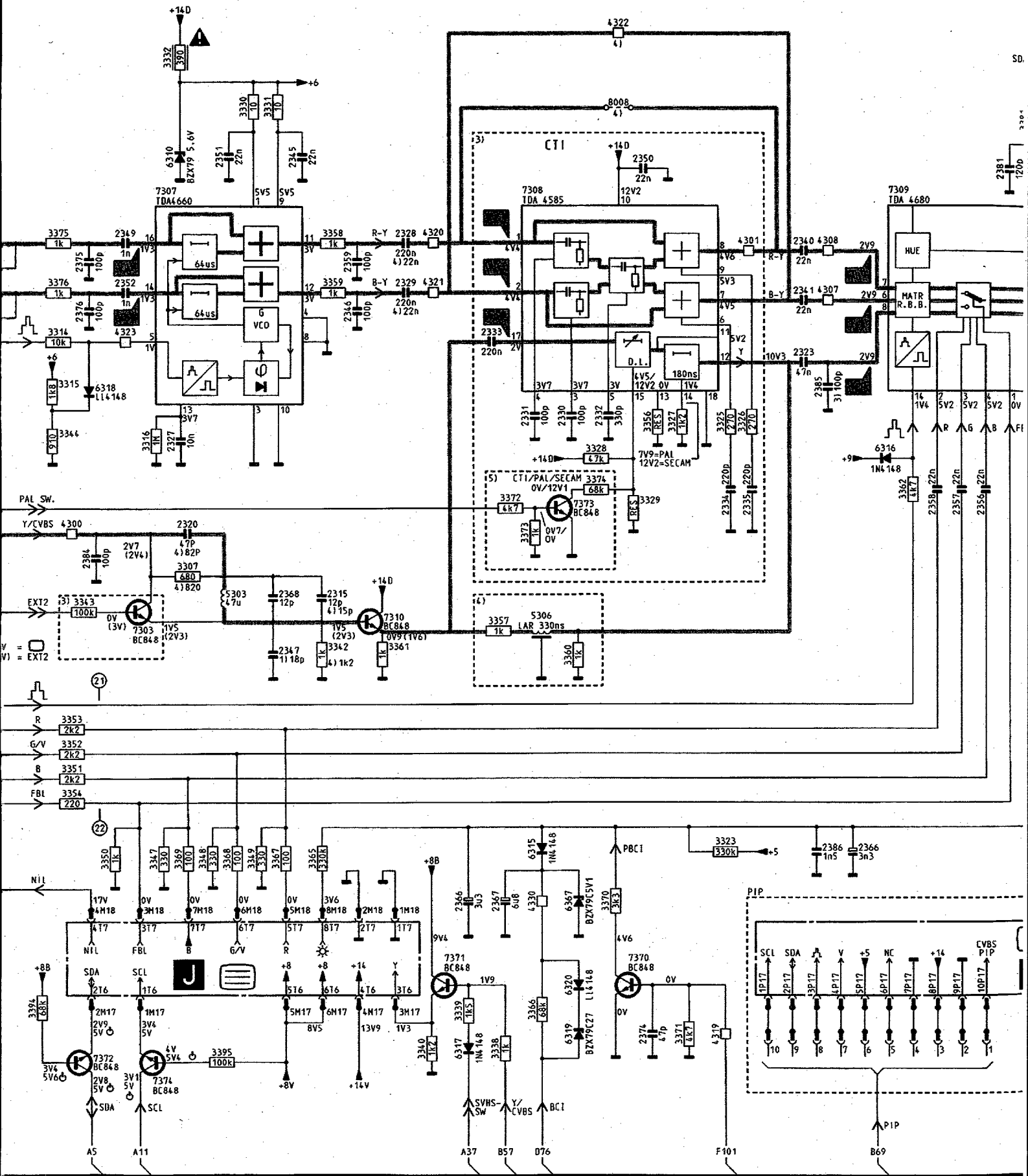


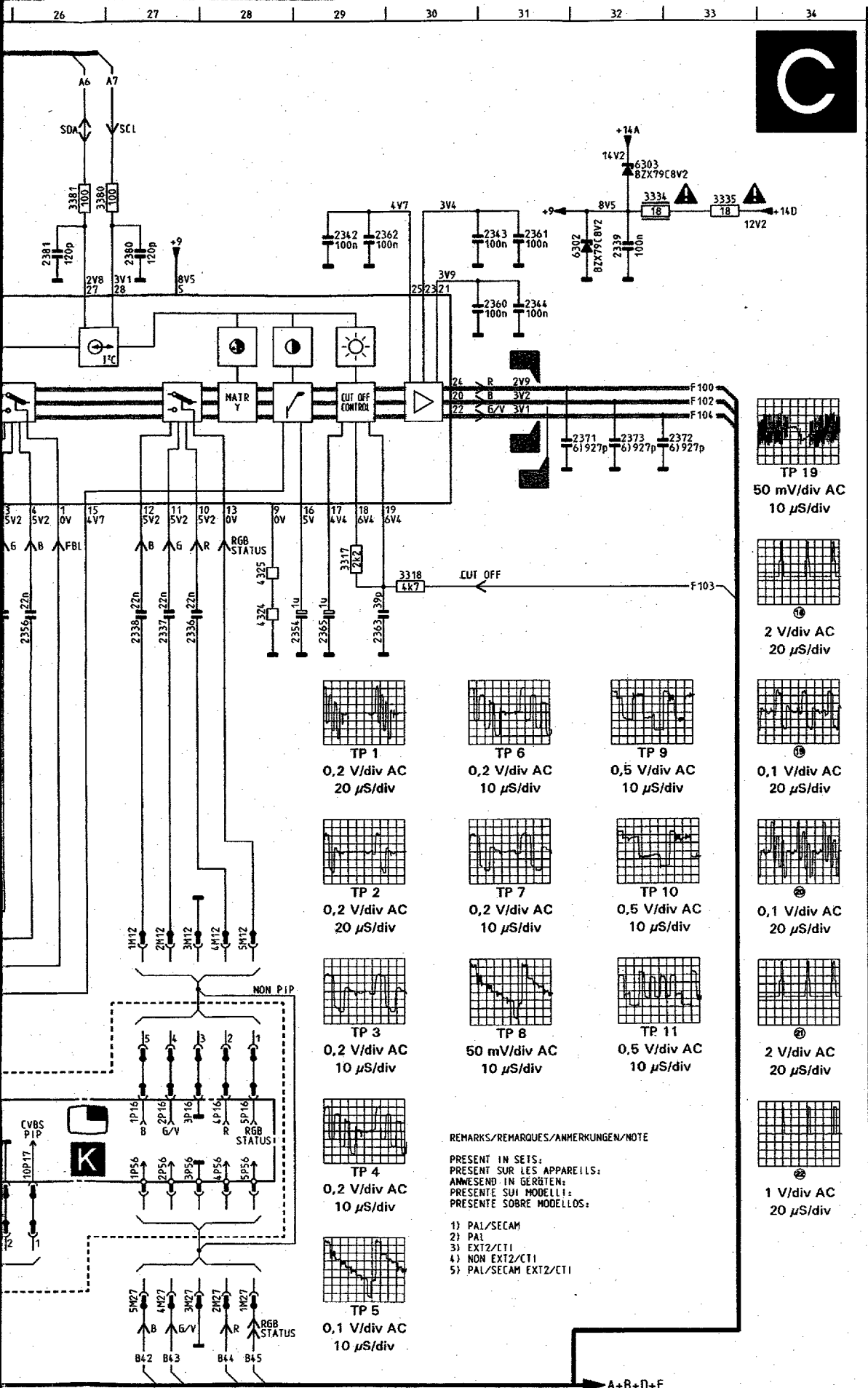
	1000	C 1	3258	I21
	1240	I 3	3259	I21
	1242	H 3	3260	I21
	2001	B 1	3261	D24
A	2002	F 2	3262	D24
	2003	G 3	3263	K20
	2004	D 4	3264	L20
	2008	G 4	3265	H22
	2010	G 4	3266	H25
	2230	F 1	3267	I23
	2231	J29	3268	I23
	2231	B27	3386	C20
B	2232	J30	3850	E21
	2232	B28	3851	G22
	2233	E31	3852	G22
	2234	M32	3853	G23
	2234	F31	3854	G23
	2235	O29	3855	H21
	2236	E28	3856	E21
	2237	J 4	3857	E21
C	2238	M30	3858	D21
	2238	F28	3859	D21
	2239	I 5	3860	G21
	2240	J 4	3861	O21
	2241	L31	3862	F21
	2241	F29	3866	J22
	2242	I 4	3867	O24
	2243	E30	3868	N25
D	2244	F33	3869	M25
	2245	M31	3870	M24
	2245	G29	3871	N22
	2246	O28	3872	F20
	2246	G26	3874	H20
	2247	D33	3879	O27
	2248	L29	3880	N26
E	2248	C27	3881	N25
	2249	L29	3882	N25
	2249	C27	3884	M26
	2250	D23	3885	M27
	2251	D25	3887	B21
	2252	I22	3888	F23
	2254	G23	3889	C21
	2255	G25	3890	D21
F	2256	H24	39	C31
	2257	H23	39	J33
	2262	M20	4222	G29
	2263	M21	4223	J 4
	2264	L21	4224	C32
	2265	L21	4233	N29
	2266	I23	4237	N29
G	2850	M25	4239	L32
	2851	N25	4850	O22
	2852	M26	4851	N23
	2853	C21	4853	K21
	2854	G21	4856	G22
	2875	N27	4857	H25
	3001	B 2	4858	J22
H	3002	H 5	4859	J24
	3003	F 2	4860	L21
	3010	F 4	4861	F 4
	3218	D26	4867	J24
	3219	M29	49	F21
	3219	F26	5001	G 3
	3220	H 4	5240	I 3
	3221	N29	5242	H 3
I	3222	K 1	6245	H26
	3224	I29	6246	L32
	3224	B27	6246	D29
	3225	J29	6247	L32
	3225	B27	6247	C29
	3226	J30	6248	B27
	3226	B28	6248	J29
	3227	J30	6249	G27
J	3227	B28	7003	G 3
	3228	J32	7240	L30
	3228	B30	7240	D28
	3229	I28	7243	J31
	3229	C26	7243	B29
	3230	O29	7244	D30
	3230	H26	7244	G27
K	3231	O29	7245	G28
	3231	G26	7246	E27
	3232	N30	7247	M29
	3232	G28	7247	F27
	3233	G29	7248	L30
	3234	E26	7248	C28
	3235	F26	7249	K29
	3236	E27	7249	C27
L	3237	M29	7311	M22
	3237	F27	7312	J22
	3238	D27	7850	C21
	3239	M30	7885	N26
	3239	F27	7886	F20
	3240	F30	9244	F33
	3241	N31	9245	E33
M	3241	G29	9246	F33
	3242	D29	9247	D33
	3243	D29	9248	D32
	3243	M31	9249	F32
	3244	C30	9249	M34
	3244	K32	9250	E34
	3245	C30	9251	E33
N	3245	K32	9760	N29
	3246	D30	9869	H28
	3247	E30		
	3248	M32		
	3248	F31		
	3249	M32		
	3249	F30		
	3250	G24		
	3251	G23		
O	3253	F24		
	3254	F24		
	3255	L21		
	3256	L21		
	3257	I20		


C
1)
B55
C/CVBS
2300
22p
3V
+14D
5k6
3300
12V2
7301
BC848
3304
1k8
6300
LL4148
2V4
3303
3k3
2k7
3301
2k2
3302
5301
4k30
3305
2305
33p
2303
270p
2301
470p
2370
220n
2311
100n
0V8=PAL
2V4=SECAM
2304
2n2
3306
10k
7302
BC858
0V=PAL
6V1=SECAM
PAL SW.
C63
6V=PAL
0V=SECAM
7306
TDA 4650
6V
2V5
3V6
3V1
12V2
2317
82p
2318
100p
3311
390
3312
500
4303
5304
2312
10n
2310
10n
2316
27p
3308
330
3309
330
2319
27p
2353
100n
SECAM REF
BK
R-Y
B-Y
IDENT
PAL NTSC
SECAM
PAL
SECAM
NTSC3.5
NTSC4.4
G
2xFq
HUE CONTROL
7341
BC848
3341
10k
2321
22n
2322
22n
2313
22p
2325
47n
2314
330n
2326
100n
3313
6k8
2308
10n
2309
10n
2307
220p
2306
220p
2)
7305
TDA4510
3355
RES
REF
H/2
FF
/2
G
8.86MHz
{B-Y}REF
{R-Y}REF
2304
560p
4302
2303
390n
2312
10n
2311
100n
1300
8.86M
2325
47n
2314
330n
3310
5k1
2313
22p
3313
10k
2322
22n

Video


7306 TDA 4650
SECAM REF
IDENT
PAL NTSC
SECAM
PAL
SECAM
NTSC3.5
NTSC4.4
2xFq
HUE CONTROL
R-Y
B-Y
7301 BC848
7302 BC858
7341 BC848
0V8=PAL
2V4=SECAM
0V=PAL
6V1=SECAM
6V=PAL
0V=SECAM
7305 TDA4510
REF
FF
H/2
/2
8.86MHz
(B-Y)REF
(R-Y)REF
PAL SW.
Y/CVBS 4300
EXT2
D84
D83
D85
D68
C63
B56
A36
A24
A25
A26
A27
C66
C67
SDA
SCL


CTI
7307 TDA4660
7308 TDA 4585
7309 TDA 4680
64us
VCO
D.L.
180ns
HUE
MATR R.B.B.
CTI/PAL/SECAM 0V/12V1
PAL SW.
Y/CVBS 4300
EXT2
LAR 330ns
PIP
SCL SDA V +5 NC +14 CVBS PIP
SDA SCL
NIL FBL B G/V R
SVHS-SW Y/CVBS BCI
A5 A11 A37 B57 D76 F101 B69

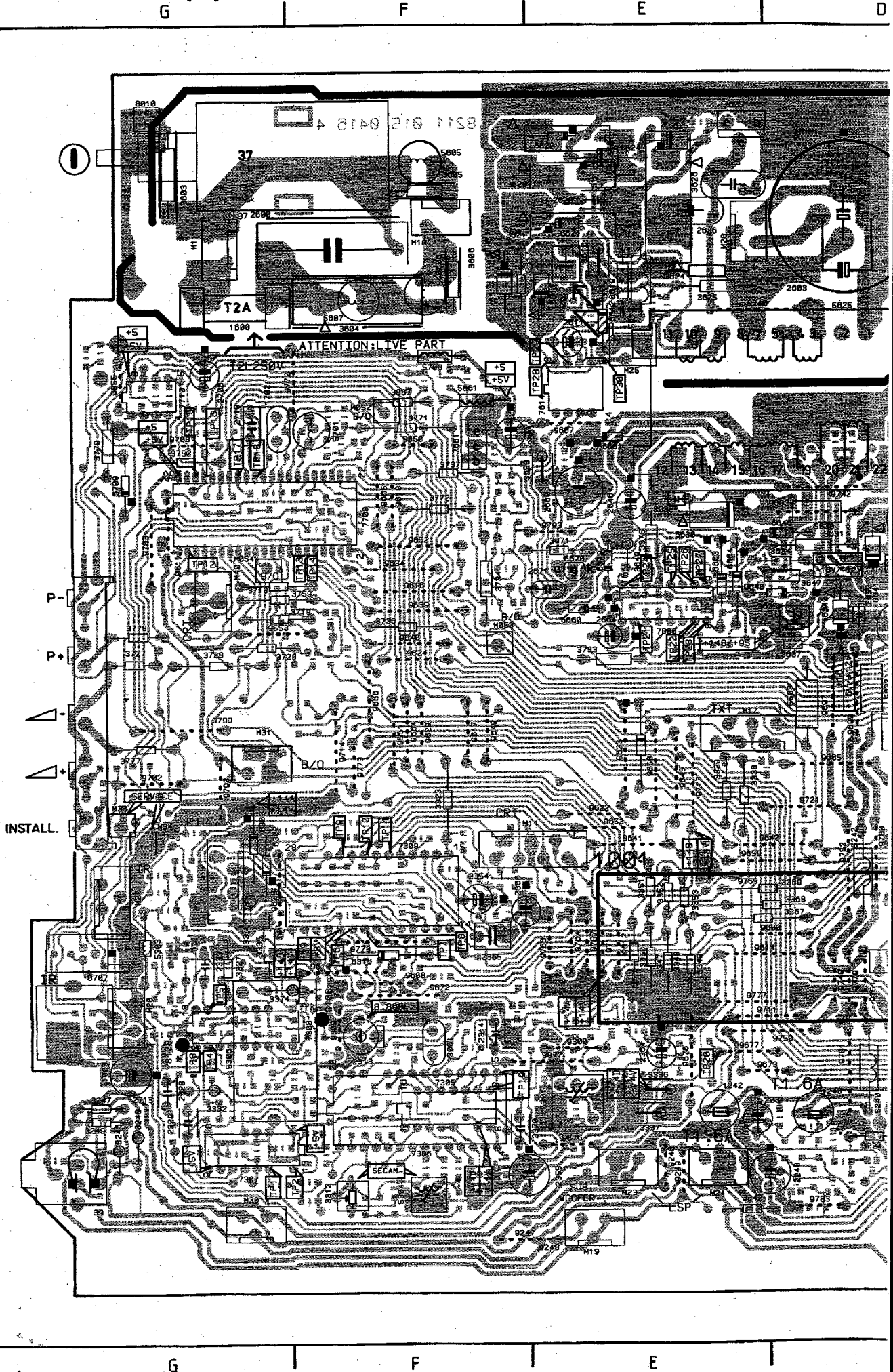


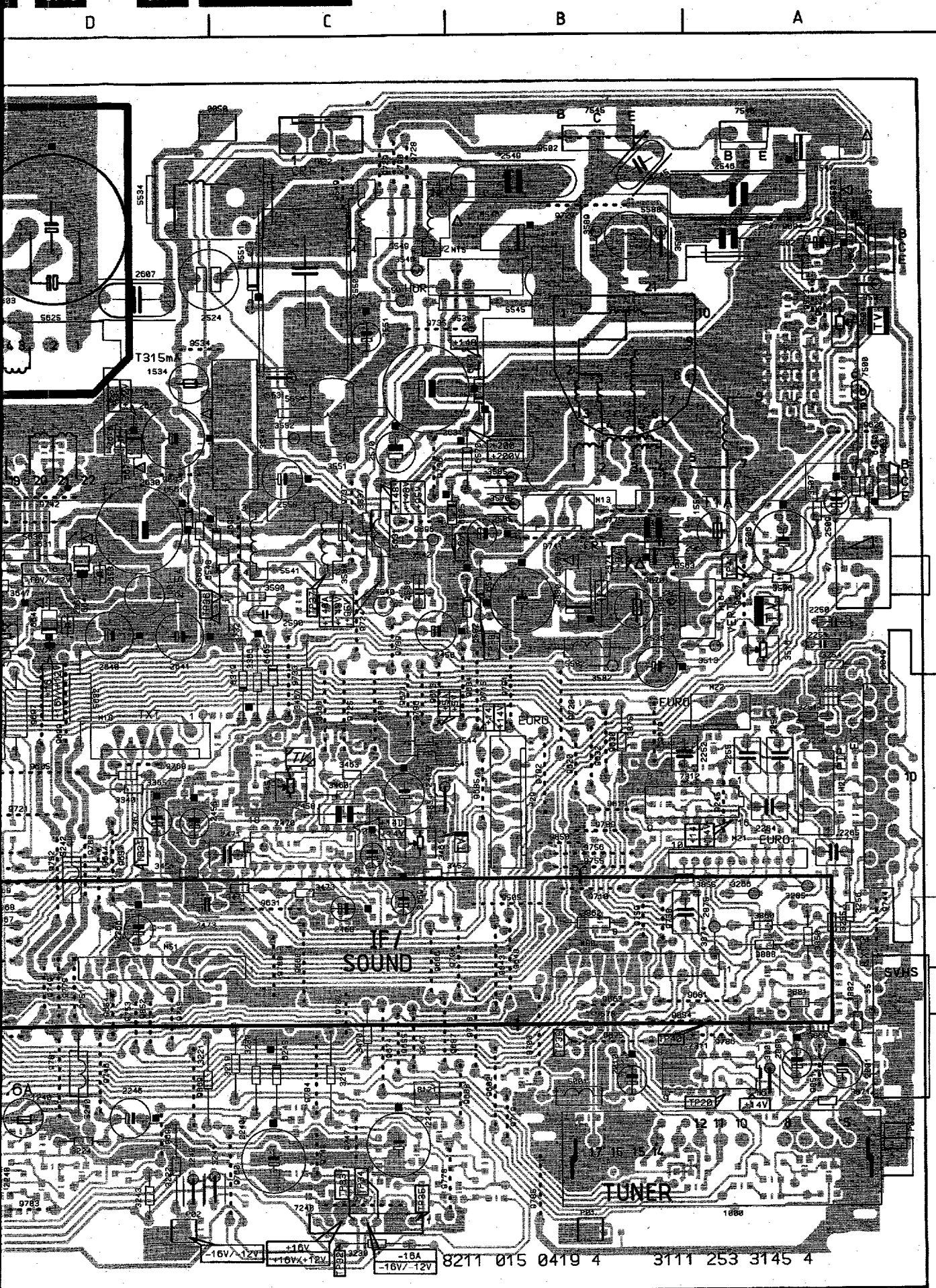
CHASSIS GR2.2

CL16532100/013.CREF
310192

	1300	F 8	3318	F30
	1300	M 7	3323	K23
	2300	C 3	3325	F23
	2300	J 3	3326	F23
A	2301	D 6	3327	F22
	2301	J 5	3328	F21
	2303	D 6	3329	G21
	2303	L 5	3330	B17
	2304	E 4	3331	B17
	2304	L 4	3332	A16
	2305	D 5	3334	B32
	2306	F12	3335	B33
B	2307	F11	3338	M20
	2308	F11	3339	M19
	2309	F11	3340	M19
	2310	B 8	3341	F 7
	2310	J10	3342	H18
	2311	D 6	3343	H15
	2311	L 6	3344	F14
	2312	B 8	3347	K16
C	2312	L 6	3348	K16
	2313	G 8	3349	K17
	2313	N 7	3350	K15
	2314	G10	3351	J15
	2314	M 8	3352	J15
	2315	H18	3353	I15
	2316	B 9	3354	J15
D	2317	A 9	3355	J 8
	2318	A 9	3356	F22
	2319	B10	3357	H20
	2320	G16	3358	D18
	2321	F 8	3359	D18
	2322	N 9	3360	I21
	2322	G 8	3361	H18
	2323	E23	3362	G25
E	2325	G 9	3365	K18
	2325	M 8	3366	M20
	2326	G10	3367	K17
	2327	F16	3368	K17
	2328	D19	3369	K16
	2329	D19	3370	L21
	2330	F21	3371	M22
F	2331	F20	3372	G20
	2332	F21	3373	G20
	2333	E20	3374	G21
	2334	G23	3375	D14
	2335	G23	3376	D14
	2336	G27	3380	B26
	2337	G27	3381	B26
	2338	G27	3394	M14
G	2339	C32	3395	M16
	2340	D23	4300	G15
	2341	D23	4301	D23
	2342	C29	4303	B 9
	2343	C31	4304	J12
	2344	C31	4307	D24
	2345	C17	4308	D24
H	2346	D18	4319	M22
	2347	I17	4320	D19
	2349	D15	4321	D19
	2350	C22	4322	A21
	2351	C16	4323	E15
	2352	D15	4324	G28
	2353	B11	4325	F28
	2353	J 9	4330	L20
I	2354	G29	5301	D 5
	2356	G26	5301	K 5
	2357	G25	5303	H16
	2358	G25	5304	B 9
	2359	D18	5306	H20
	2360	C31	6300	D 4
	2361	C31	6302	C32
J	2362	C29	6303	B32
	2363	G29	6310	C16
	2365	G29	6315	K20
	2366	L19	6316	F24
	2366	K24	6317	M19
	2367	L20	6318	E15
	2368	H17	6319	M21
	2370	C 6	6320	M21
K	2370	K 6	6367	L21
	2371	E32	7301	D 4
	2372	E33	7301	J 4
	2373	E32	7302	E 5
	2374	M22	7303	H15
	2375	D15	7305	J 7
	2376	D15	7306	C 7
	2380	C27	7307	C16
L	2381	C26	7308	C20
	2384	G15	7309	C24
	2385	E24	7310	H18
	2386	K24	7341	F 7
	3300	C 3	7370	L21
	3300	J 3	7371	L19
	3301	D 3	7372	N15
M	3301	K 3	7373	G21
	3302	D 4	7374	N16
	3302	K 4	8008	B21
	3303	D 4		
	3303	J 4		
	3304	D 4		
	3305	D 5		
	3305	K 5		
N	3306	E 5		
	3307	H16		
	3308	B 9		
	3309	B10		
	3310	M 8		
	3311	B 9		
	3312	B10		
	3313	F10		
O	3313	N 8		
	3314	E14		
	3315	E14		
	3316	F16		
	3317	F29		

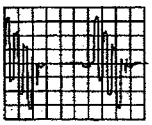
Monocarrier / Hauptplatine / Châssis



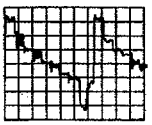


M10 F1
M11 G1
M12 G4
M13 B2
M14 E4
M15 B1
M16 A3
M17 D3
M18 C3
M19 E5
M20 G4
M21 A4
M22 A3
M23 E5
M24 E5
M25 E2
M26 G4
1 M27 A4
M28 D1
M29 B4
M30 G5
M31 F3
M32 C1
M33 G4
M34 G4
M40 G3
M50 B4
M51 D4
M52 F2
M53 E3
M54 F3
P01 B5
P02 C5
P03 A5
0035 A5
0037 G1
0039 G5
0041 G3
0047 A3
0049 A4
2 1000 A5
1003 G5
1240 D5
1242 E5
1300 F5
1534 C2
1559 A2
1580 B3
1600 G2
1601 D3
1702 F2
2001 A5
2010 B5
2231 D5
2240 C5
2242 C5
2246 D5
2248 D5
2250 A3
2251 A3
2252 A3
2254 A3
3 2255 A3
2264 A4
2285 A4
2286 D4
2313 F5
2314 E5
2328 G5
2329 G5
2333 G4
2354 F4
2355 E5
2364 E5
2365 F4
2366 E4
2367 D4
2370 E5
2450 B3
2456 C4
2458 C4
2465 C4
2466 C4
2468 C4
4 2469 C4
2471 C4
2473 C4
2502 A1
2506 A3
2509 A2
2524 C1
2538 B3
2539 A3
2545 A1
2546 A1
2547 A1
2549 B1
2550 C1
2551 C2
2559 C2
2560 B2
2563 A3
2570 C2
2574 B3
2580 B3
2585 B2
5 2590 C3
2600 F1
2603 D1
2605 D1
2607 D1
2611 E2
2617 E1
2620 E1
2625 D1
2626 E1
2630 D2
2631 C2
2632 E2
2640 D3
2641 D3
2646 E2
2652 D3
2653 D3
2660 E2

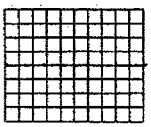
M10 F1 2661 E2 3734 F3 9605 D3 9773 F3
M11 G1 2664 E3 3736 F3 9608 F4 9775 B2
M12 G4 2671 E3 3737 F2 9609 F5 9777 D4
M13 B2 2675 D2 3752 G2 9610 F4 9778 B5
M14 E4 2676 D2 3759 F3 9611 G2 9779 D4
M15 B1 2706 G2 3771 F2 9612 E4 9780 D4
M16 A3 2713 G5 3772 F2 9613 B3 9781 D5
M17 D3 2719 F2 3777 G3 9614 D4 9783 D5
M18 C3 2850 A5 3778 G3 9616 F3 9784 C5
M19 E5 2875 A4 3779 G2 9617 F3 9785 B5
M20 G4 3001 A5 3850 A4 9618 F2 9786 A5
M21 A4 3218 C5 3855 A4 9619 B4 9787 C4
M22 A3 3219 C5 3860 A4 9620 B3 9788 C4
M23 E5 3221 C5 3862 B4 9622 E4 9789 B4
M24 E5 3222 D5 3869 A5 9623 E3 9790 C1
M25 E2 3224 D5 3871 A5 9624 F3 9791 B3
M26 G4 3230 C5 3874 A4 9626 A2 9792 B3
1 M27 A4 3239 C5 3875 B3 9627 A3 9793 E2
M28 D1 3240 C5 3881 A4 9628 F4 9796 B3
M29 B4 3241 C5 3882 A5 9629 F3 9797 E4
M30 G5 3242 D5 3887 F2 9630 B3 9798 G4
M31 F3 3243 D5 3888 A4 9631 C4 9799 G3
M32 C1 3246 G5 5001 B5 9632 B3 9850 B4
M33 G4 3247 G5 5240 D5 9634 F3 9851 A5
M34 G4 3248 G5 5242 D4 9638 C3 9852 D5
M40 G3 3249 G5 5301 E5 9639 F3 9853 F3
M50 B4 3250 A3 5303 G4 9640 F3 9854 A5
M51 D4 3251 A3 5304 F5 9641 E4 9855 G2
M52 F2 3253 A3 5306 F4 9642 D4 9869 C5
M53 E3 3254 A3 5534 D1 9643 B4 9876 E5
M54 F3 3255 A4 5541 C2 9644 D4 9877 E5
P01 B5 3256 A4 5545 A2 9645 E4
P02 C5 3265 A4 5549 B1 9647 C5
P03 A5 3266 A4 5554 C2 9648 B4
0035 A5 3312 F5 5563 D3 9649 F3
0037 G1 3323 F4 5582 B3 9650 F2
0039 G5 3327 G4 5588 B1 9652 F3
0041 G3 3332 G5 5605 F1 9653 E4
0047 A3 3334 G4 5606 F1 9654 D4
0049 A4 3335 F4 5607 F2 9655 C5
2 1000 A5 3336 E5 5619 E1 9657 D4
1003 G5 3337 E5 5625 D2 9658 E3
1240 D5 3338 D4 5630 D2 9659 D4
1242 E5 3339 E4 5631 C2 9663 B4
1300 F5 3340 D4 5632 D3 9664 F3
1534 C2 3347 E4 5661 F2 9665 F2
1559 A2 3348 E4 5701 F2 9666 F3
1580 B3 3349 E4 5703 F2 9667 E2
1600 G2 3350 E4 6245 C5 9668 C4
1601 D3 3351 E4 6302 F4 9670 A3
1702 F2 3352 E4 6303 G4 9671 C3
2001 A5 3353 E4 6316 F4 9672 F4
2010 B5 3365 D3 6317 E3 9673 D5
2231 D5 3366 C3 6319 C3 9674 C5
2240 C5 3367 D4 6450 A2 9675 B5
2242 C5 3368 D4 6465 C3 9676 E5
2246 D5 3369 D4 6503 A1 9677 D5
2248 D5 3374 F4 6546 B1 9678 B5
2250 A3 3450 A2 6547 A1 9679 A3
2251 A3 3451 C4 6548 C2 9681 A4
2252 A3 3452 B4 6551 C1 9682 B5
2254 A3 3457 C4 6561 C2 9684 B3
3 2255 A3 3460 C4 6563 A3 9685 B4
2264 A4 3461 C4 6570 B2 9686 B4
2265 A4 3463 C3 6571 B2 9687 B5
2266 D4 3467 C3 6580 B3 9688 B5
2313 F5 3470 C5 6585 B2 9690 D5
2314 E5 3471 C4 6591 B3 9692 D2
2328 G5 3473 C4 6592 B3 9693 C2
2329 G5 3483 B4 6611 E1 9694 A1
2333 G4 3502 A1 6612 E2 9695 C3
2354 F4 3503 A1 6617 E1 9696 B2
2355 E5 3504 A2 6621 E1 9697 D3
2364 E5 3506 A3 6622 E1 9699 D3
2365 F4 3507 A2 6624 E1 9700 B5
2366 E4 3513 A3 6625 E1 9702 G4
2367 D4 3516 A3 6630 E2 9703 G3
2370 E5 3537 C2 6640 D3 9704 B4
2450 B3 3538 C2 6641 D3 9708 G2
2456 C4 3539 B2 6646 D2 9710 B4
2458 C4 3541 B3 6648 D3 9711 D4
2465 C4 3542 B2 6649 E3 9712 E4
2466 C4 3544 B3 6660 E3 9713 E4
2468 C4 3545 C2 6661 E2 9714 F3
4 2469 C4 3549 C1 6663 E3 9715 B3
2471 C4 3550 C1 6664 D3 9718 B5
2473 C4 3551 C2 6670 E3 9719 B5
2502 A1 3552 C2 6675 D2 9720 B3
2506 A3 3553 C2 6707 G4 9721 D4
2509 A2 3560 C2 6709 G2 9724 C3
2524 C1 3570 B2 7240 C5 9725 C3
2538 B3 3582 B3 7305 F5 9727 B1
2539 A3 3585 B2 7306 F5 9728 C1
2545 A1 3588 A1 7307 F5 9729 C1
2546 A1 3589 B1 7308 G5 9733 C3
2547 A1 3590 C3 7309 F4 9735 B2
2549 B1 3603 G1 7311 A5 9736 B2
2550 C1 3604 F2 7312 A4 9737 C2
2551 C2 3605 F1 7470 C4 9738 C3
2559 C2 3606 F1 7500 A2 9739 C3
2560 B2 3610 E1 7502 A1 9740 D2
2563 A3 3617 E1 7503 A2 9741 B2
2570 C2 3619 E1 7540 C3 9742 D2
2574 B3 3620 E1 7545 B1 9744 A4
2580 B3 3621 E1 7546 A1 9745 D4
2585 B2 3622 E1 7600 E3 9746 D5
5 2590 C3 3624 E1 7614 E2 9747 C5
2600 F1 3625 E1 7625 D1 9748 C5
2603 D1 3626 E1 7661 F2 9749 D4
2605 D1 3631 D3 7708 G3 9750 D5
2607 D1 3634 D3 7710 G2 9751 D4
2611 E2 3635 D3 9245 A4 9752 D4
2617 E1 3637 D3 9246 E5 9753 D5
2620 E1 3647 D3 9247 E5 9755 B4
2625 D1 3649 E3 9248 E5 9756 B4
2626 E1 3658 E2 9249 E5 9757 C5
2630 D2 3671 E3 9300 E5 9758 A4
2631 C2 3675 E3 9502 B1 9759 B4
2632 E2 3718 F3 9505 B4 9760 C5
2640 D3 3719 F3 9522 A2 9764 E4
2641 D3 3720 F3 9523 A1 9766 E4
2646 E2 3727 G3 9534 C2 9768 D3
2652 D3 3728 G3 9549 C1 9769 D4
2653 D3 3732 C3 9551 F3 9770 F4
2660 E2 3733 E3 9600 D4 9772 F2



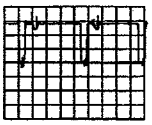
TP 1
0,2 V/div AC
20 µS/div



TP 8
50 mV/div AC
10 µS/div



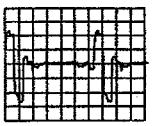
TP 14
0,2 V/div DC
0,5 mS/div



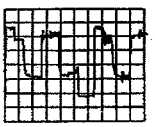
TP 21
0,5 V/div DC
5 µS/div



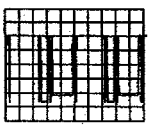
TP 26
0,1 V/div AC
5 mS/div



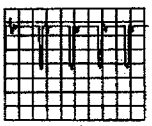
TP 2
0,2 V/div AC
20 µS/div



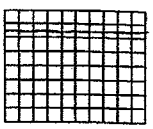
TP 9
0,5 V/div AC
10 µS/div



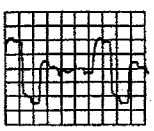
TP 15
1 V/div AC
0,2 mS/div



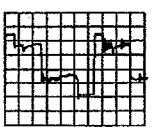
TP 21
0,5 V/div DC
10 µS/div



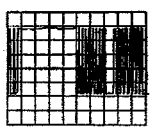
TP 27
1 V/div DC



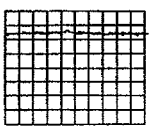
TP 3
0,2 V/div AC
10 µS/div



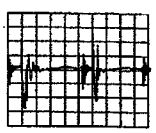
TP 10
0,5 V/div AC
10 µS/div



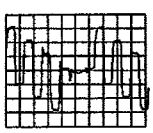
TP 16
1 V/div DC
0,1 mS/div



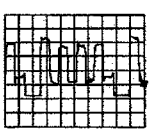
TP 22
1 V/div DC



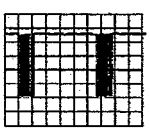
TP 27
50 mV/div AC
10 mS/div



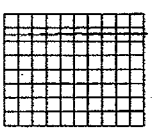
TP 4
0,2 V/div AC
10 µS/div



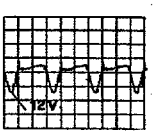
TP 11
0,5 V/div AC
10 µS/div



TP 17
1 V/div DC
20 mS/div



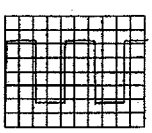
TP 23
1 V/div DC



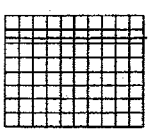
TP 28
0,5 V/div AC
5 µS/div



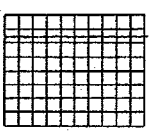
TP 5
0,1 V/div AC
10 µS/div



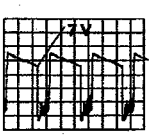
TP 12
1 V/div AC
10 µS/div



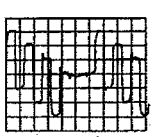
TP 18
2 V/div DC
20 mS/div



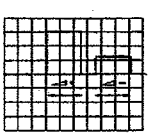
TP 24
5V/div DC



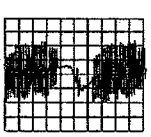
TP 28
1 /div AC
10 mS/div



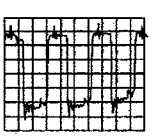
TP 6
0,2 V/div AC
10 µS/div



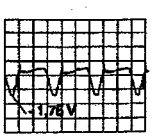
TP 13
1 V/div DC
1 S/div



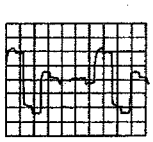
TP 19
50 mV/div AC
10 µS/div



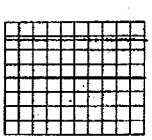
TP 25
0,2 V/div AC
5 µS/div



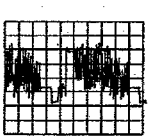
TP 29
0,5 V/div AC
5 µS/div



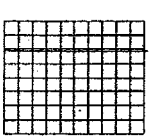
TP 7
0,2 V/div AC
10 µS/div



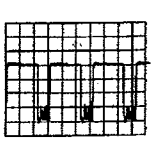
TP 14
1 V/div DC
0,5 mS/div



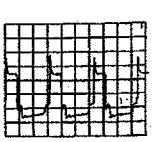
TP 20
0,5 V/div AC
10 µS/div



TP 26
1 V/div DC

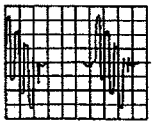


TP 29
1 V/div AC
10 mS/div

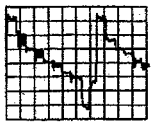


TP 30
2 V/div DC
5 µS/div

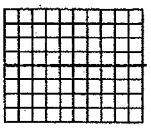
F3 B2 D4 B5 D4 D4 D5 D5 C5 B5 A5 C4 C4 B4 C1 B3 B3 E2 B3 E4 G4 G3 B4 A5 D5 F3 A5 G2 C5 E5 E5



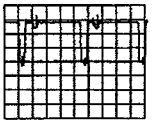
TP 1
0,2 V/div AC
20 µS/div



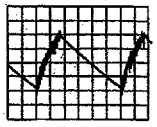
TP 8
50 mV/div AC
10 µS/div



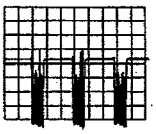
TP 14 ⏱
0,2 V/div DC
0,5 mS/div



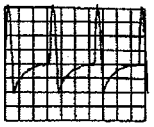
TP 21
0,5 V/div DC
5 µS/div



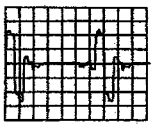
TP 26 ⏱
0,1 V/div AC
5 mS/div



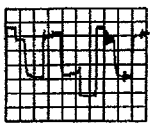
TP 30 ⏱
1 V/div DC
10 mS/div



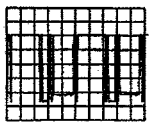
TP 38
20 mV/div AC
20 µS/div



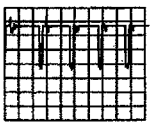
TP 2
0,2 V/div AC
20 µS/div



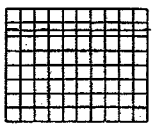
TP 9
0,5 V/div AC
10 µS/div



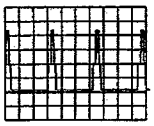
TP 15
1 V/div AC
0,2 mS/div



TP 21 ⏱
0,5 V/div DC
10 µS/div



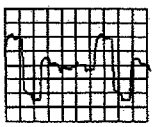
TP 27
1 V/div DC



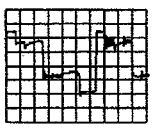
TP 31
2 V/div DC
20 µS/div



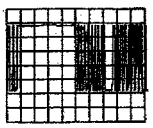
TP 39
0,2 V/div AC
20 µS/div



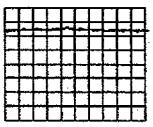
TP 3
0,2 V/div AC
10 µS/div



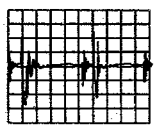
TP 10
0,5 V/div AC
10 µS/div



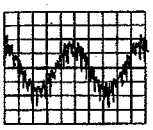
TP 16
1 V/div DC
0,1 mS/div



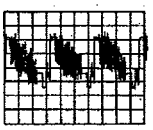
TP 22
1 V/div DC



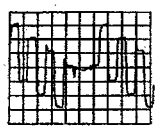
TP 27 ⏱
50 mV/div AC
10 mS/div



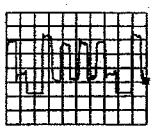
TP 32
50 mV/div DC
0,2 mS/div



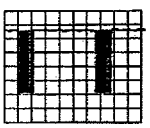
TP 40
0,5 V/div AC
20 µS/div



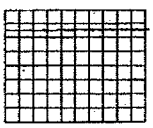
TP 4
0,2 V/div AC
10 µS/div



TP 11
0,5 V/div AC
10 µS/div



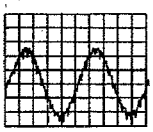
TP 17
1 V/div DC
20 mS/div



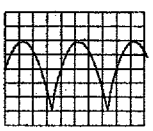
TP 23
1 V/div DC



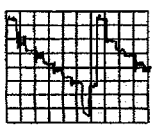
TP 28
0,5 V/div AC
5 µS/div



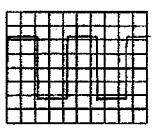
TP 33
2 V/div DC
0,2 mS/div



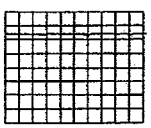
TP 41
2 V/div AC
5 mS/div



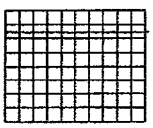
TP 5
0,1 V/div AC
10 µS/div



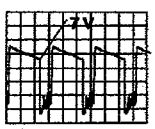
TP 12
1 V/div AC
10 µS/div



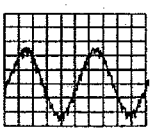
TP 18
2 V/div DC
20 mS/div



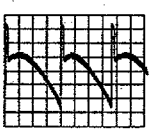
TP 24
5V/div DC



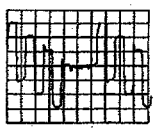
TP 28 ⏱
1 /div AC
10 mS/div



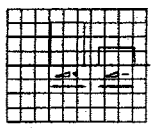
TP 34
2 V/div DC
20 µS/div



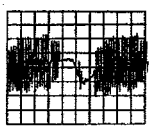
TP 41 a
5 V/div AC
5 mS/div



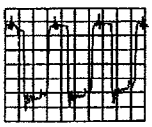
TP 6
0,2 V/div AC
10 µS/div



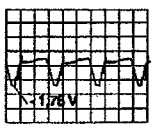
TP 13
1 V/div DC
1 S/div



TP 19
50 mV/div AC
10 µS/div



TP 25
0,2 V/div AC
5 µS/div



TP 29
0,5 V/div AC
5 µS/div

TP 35
50 mV/div DC
0,2 mS/div

TP 41 b
5 V/div AC
5 mS/div

TP 7
0,2 V/div AC
10 µS/div

TP 14
1 V/div DC
0,5 mS/div

TP 20
0,5 V/div AC
10 µS/div

TP 26
1 V/div DC

TP 29 ⏱
1 V/div AC
10 mS/div

TP 36
0,2 V/div AC
5 mS/div

TP 41 c
0,1 V/div AC
5 mS/div

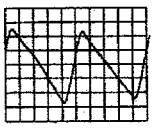
TP 30
2 V/div DC
5 µS/div

TP 37
2 V/div AC
20 µS/div

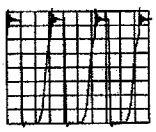
TP 41 d
5 V/div AC
5 mS/div

6.16 CHASSIS GR2.2

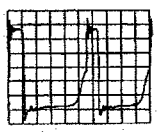
Power supply / Stromversorgun



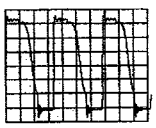
① 2 V/div AC
2 mS/div
280 V DC



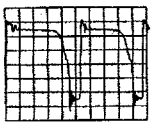
② 50 V/div AC
5 µS/div



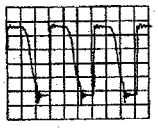
② ⏻ 50 V/div AC
5 µS/div



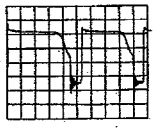
③ 50 V/div AC
5 µS/div



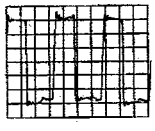
③ ⏻ 50 V/div AC
5 µS/div



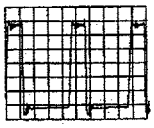
④ 5 V/div AC
5 µS/div



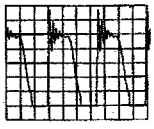
④ ⏻ 5 V/div AC
5 µS/div



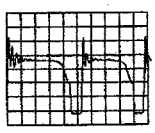
⑤ 0,5 V/div AC
5 µS/div



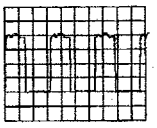
⑤ ⏻ 0,5 V/div AC
5 µS/div



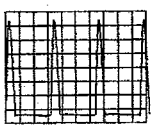
⑥ 100 V/div AC
5 µS/div



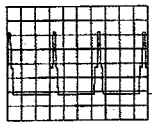
⑥ ⏻ 2 V/div AC
2 mS/div



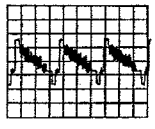
⑦ 0,5 V/div AC
20 µS/div



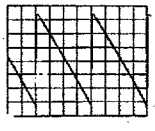
⑧ 0,5 V/div AC
20 µS/div



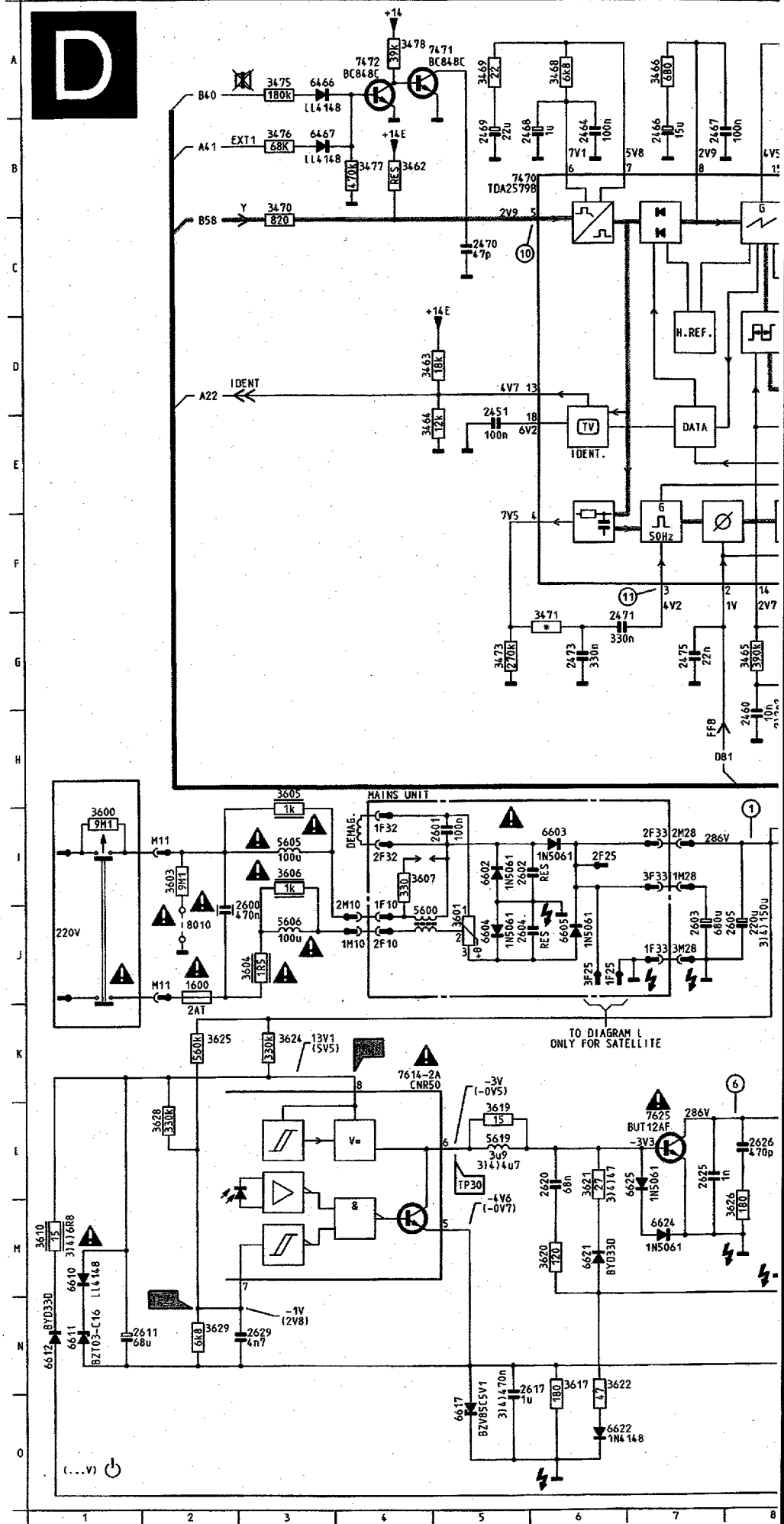
⑨ 2 V/div AC
20 µS/div



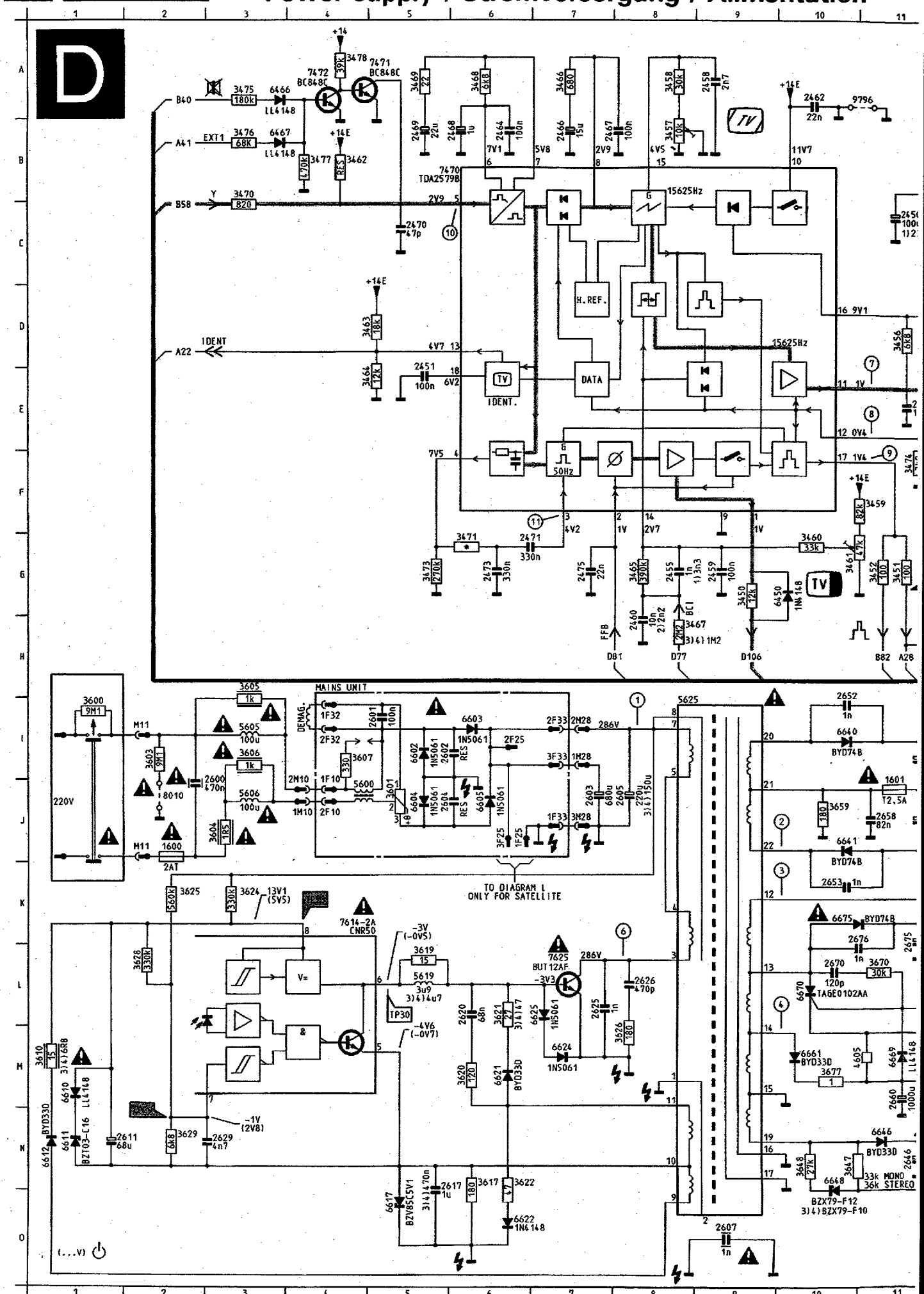
⑩ 0,5 V/div AC
5 mS/div

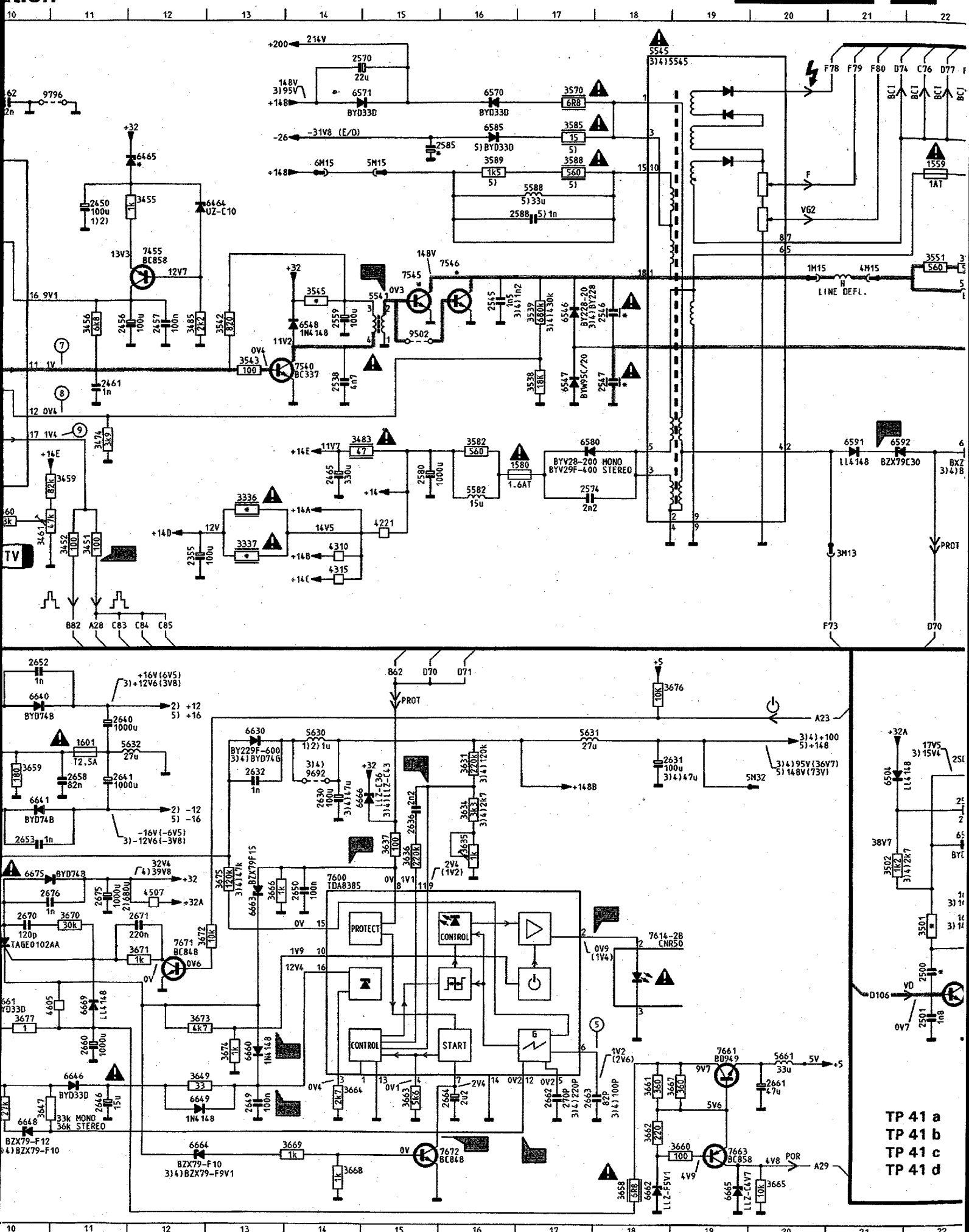


⑪ 0,5 V/div AC
5 mS/div

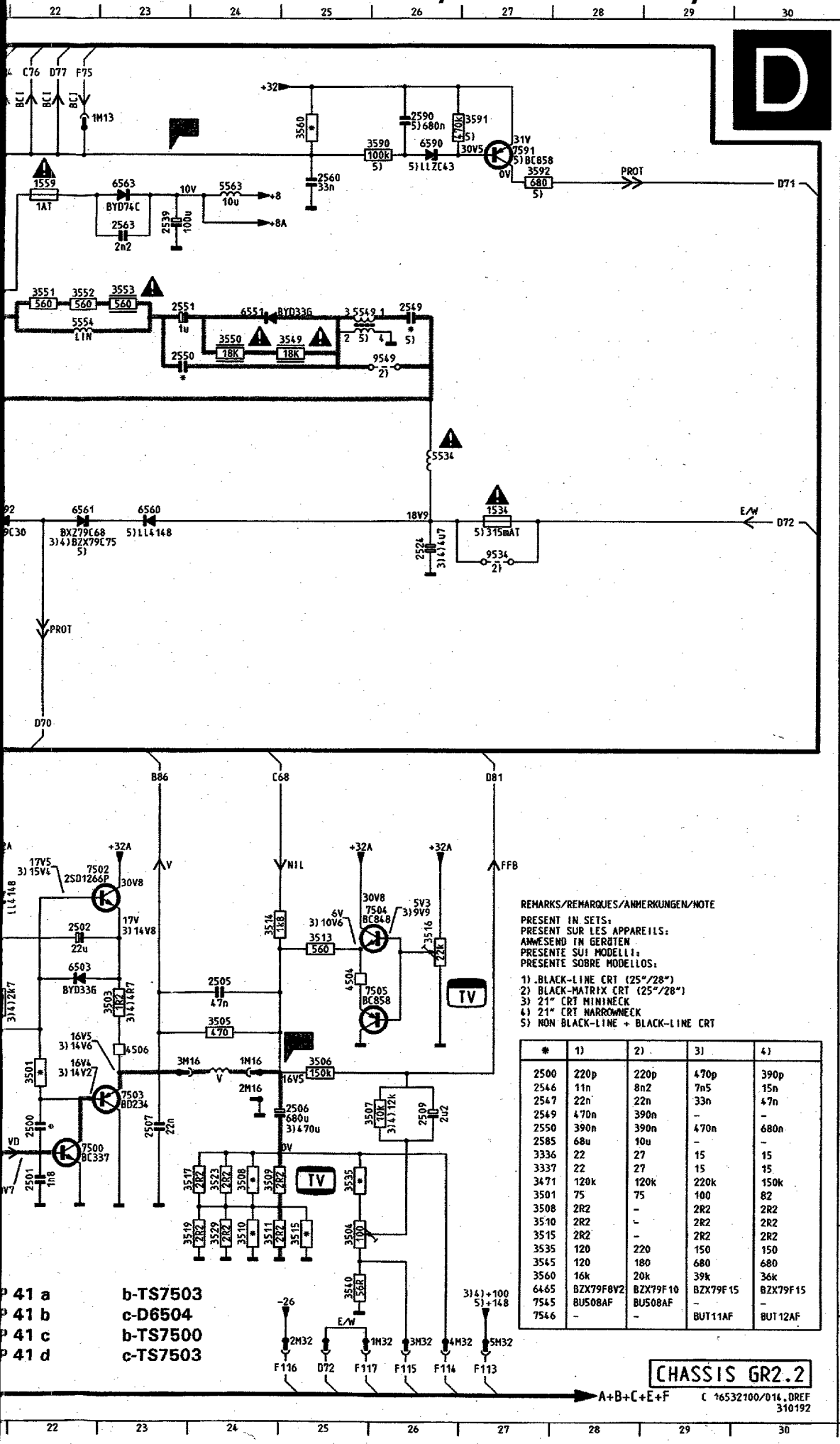


Power supply / Stromversorgung / Alimentation




+200 214V
2570 22u
148V 3)95V
+148
6571 BYD33D
6570 BYD33D
3570 6R8
-26 -31V8 (E/O)
6585 5) BYD33D
3585 15 5)
+148 6M15 5M15
3589 1k5 5)
3588 560 5)
5588 5) 33u
2588 5) 1n
5545 3)4)5545
F78 F79 F80 D74 C76 D77
1559 1AT
F
V62
6465
2450 100u 1)2)
3455 1k
6464 UZ-C10
13V3 7455 BC858 12V7
16 9V1
3456 6R8
2456 100u
2457 100n
3485 2k2
3542 820
+32
3545
6548 1N4148
2559 100u
11V2
0V4
3543 100
7540 BC337
2538 4n7
2461 1n
11 1V
12 0V4
148V
7546
7545
0V3
9502
2545 1n5
3539 680k
6546 BY228-20 3)4)BY228
2546
6547 BYW95C/20
2547
3538 18k
1M15 4M15 LINE DEFL.
3551 560
3474 3k9
+14E 11V7
3483 47
2465 330u
3582 560
5582 15u
1580 1.6AT
2580 1000u
6580 BYV28-200 MONO BYV29F-400 STEREO
2574 2n2
6591 LL4148
6592 BZX79C30
3459 82k
3461 4k7
3452 100
3451 100
3336
3337
+14D 12V
2355 100u
+14A
14V5
4221
+14B
4310
+14C
4315
3M13
PROT
B82 A28 C83 C84 C85
F73 D70
2652 1n
6640 BYD74B
+16V(6V5) 3)+12V6(3V8)
2) +12 5) +16
2640 1000u
1601 T2.5A
5632 27u
3659 180
2658 82n
2641 1000u
6641 BYD74B
2) -12 5) -16
2653 1n
-16V(-6V5) 3)-12V6(-3V8)
B62 D70 D71
PROT
6630 BYD229F-600 3)4)BYD74G
5630 1)2)1u
2632 1n
3)4) 9692
2630 100u
6666 LLZ-C36 3)4)LLZ-C43
3631 220k
3634 3k3
3637 100
3636 220k
2635 1k
2636 2n2
2V4 (1V2)
5631 27u
2631 100u 3)4)47u
5M32
+148B
3)4)+100 5)+148
3)4)95V(36V7) 5)148V(73V1)
+5
3676 10k
A23
+32A
6504 LL4148
38V7
3502 1k2 3)4)2k7
3501
2500
D106
VD
0V7
2501 1nB
6675 BYD74B
32V4 4)39V8
+32
2676 1n
2675 1000u
2680u
4507
+32A
2670 120p TAGE0102AA
3670 30k
2671 220n
3671 1k
7671 BC848
0V6
3672 10k
0V
3675 120k 3)4)47k
BZX79F15
6663
3666 1k
2650 100n
7600 TDA8385
0V 8
1V1 11
9
PROTECT
CONTROL
START
0V 15
1V9 10
12V4 16
7614-2B CNR50
0V9 (1V4)
2
3
5
1V2 (2V6)
6
661 YD33D
3677 1
4605
6669 LL4148
3673 4k7
3674 1k
6660 1N4148
2660 1000u
6646 BYD33D
3649 33
6649 1N4148
2649 100n
0V4
2k7 3664
0V1
3663 5k6
2V4
2664 2u2
0V2
2662 270P 3)4)220P
2663 82P 3)4)100P
7661 BD949
9V7
5661 33u
5V
+5
2661 47u
3661 360
3667 360
5V6
3662 220
3660 100
7663 BC858
4V8
POR
A29
4V9
3658 6R8
6662 LLZ-F5V1
6665 LLZ-C4V7
3665 10k
6664 BZX79-F10 3)4)BZX79-F9V1
3669 1k
3668 1k
0V
7672 BC848
6646 BYD33D
3647 27k
3646 33k MONO 36k STEREO
2646 15u
6648 BZX79-F12 4)BZX79-F10
TP 41 a
TP 41 b
TP 41 c
TP 41 d

Synchronization / Synchronisation



P 41 a b-TS7503
P 41 b c-D6504
P 41 c b-TS7500
P 41 d c-TS7503

REMARKS/REMARQUES/ANMERKUNGEN/NOTE

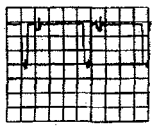
PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERÄTEN
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:

1) .BLACK-LINE CRT (25"/28")
2) BLACK-MATRIX CRT (25"/28")
3) 21" CRT MININECK
4) 21" CRT NARROWNECK
5) NON BLACK-LINE + BLACK-LINE CRT

*	1)	2)	3)	4)
2500	220p	220p	470p	390p
2546	11n	8n2	7n5	15n
2547	22n	22n	33n	47n
2549	470n	390n	-	-
2550	390n	390n	470n	680n
2585	68u	10u	-	-
3336	22	27	15	15
3337	22	27	15	15
3471	120k	120k	220k	150k
3501	75	75	100	82
3508	2R2	-	2R2	2R2
3510	2R2	-	2R2	2R2
3515	2R2	-	2R2	2R2
3535	120	220	150	150
3545	120	180	680	680
3560	16k	20k	39k	36k
6465	BZX79F8V2	BZX79F10	BZX79F15	BZX79F15
7545	BU508AF	BU508AF	-	-
7546	-	-	BUT11AF	BUT12AF

CHASSIS GR2.2

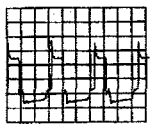
1534	F27	3552	C22	6649	N12
1559	B22	3553	C23	6660	M13
1580	F17	3560	B25	6661	M10
1600	J 2	3570	A17	6662	O18
1601	J11	3582	F16	6663	K13
2355	G12	3585	B17	6664	O12
2450	C11	3588	B17	6665	O19
2451	E 5	3589	B16	6666	J15
2455	G 8	3590	B26	6669	M11
2456	D11	3591	A27	6670	L10
2457	D12	3592	B27	6675	K10
2458	A 9	3600	I 1	7455	C12
2459	G 9	3601	J 5	7470	B 6
2460	H 8	3603	I 2	7471	A 5
2461	E11	3604	J 3	7472	A 4
2462	A10	3605	H 3	7540	E14
2464	B 6	3606	I 3	7545	D15
2465	F14	3607	I 4	7546	C16
2466	B 7	3610	M 1	7591	B27
2467	B 7	3617	M 6	7600	K14
2468	B 6	3619	L 5	7614	K 5
2469	B 5	3620	M 6	7614	L19
2470	C 5	3621	L 6	7625	L 7
2471	G 6	3622	N 6	7661	M19
2473	G 6	3624	K 3	7663	O19
2475	G 7	3625	K 2	7671	L12
2524	F26	3626	M 8	7672	O16
2538	E14	3628	L 2	8010	J 2
2539	C23	3629	N 2	9502	D15
2545	D16	3631	J16	9534	F27
2546	D18	3634	J16	9549	D26
2547	E18	3635	K16	9692	J14
2549	D26	3636	K15	9796	A11
2550	D23	3637	K15		
2551	D23	3647	N10		
2559	D14	3648	N10		
2560	B25	3649	N12		
2563	C23	3658	O18		
2570	A14	3659	J10		
2574	F17	3660	O19		
2580	F15	3661	N18		
2585	B15	3662	N18		
2588	C17	3663	N15		
2590	A26	3664	N14		
2600	J 2	3665	O20		
2601	I 5	3666	K13		
2602	I 5	3667	N19		
2603	J 7	3668	O14		
2604	J 5	3669	O14		
2605	J 8	3670	L11		
2607	O 9	3671	L12		
2611	N 1	3672	L12		
2617	N 5	3673	M12		
2620	L 6	3674	M13		
2625	L 7	3675	K13		
2626	L 8	3676	I18		
2629	N 3	3677	M10		
2630	J14	4221	G15		
2631	J18	4310	G14		
2632	J13	4315	G14		
2636	J15	4507	K12		
2640	I11	4605	M11		
2641	J11	5534	E26		
2646	N11	5541	D15		
2649	N13	5545	A18		
2650	K14	5545	A18		
2652	I10	5549	D25		
2653	K10	5554	D22		
2658	J11	5563	B24		
2660	M11	5582	F16		
2661	N20	5588	B17		
2662	N17	5600	J 4		
2663	N17	5605	I 3		
2664	N16	5606	J 3		
2670	L10	5619	L 5		
2671	L12	5625	I 8		
2675	K11	5630	I14		
2676	K11	5631	I17		
3336	F13	5632	J12		
3337	G13	5661	N20		
3450	G 9	6450	G10		
3451	G11	6464	C12		
3452	G11	6465	B12		
3455	C12	6466	A 3		
3456	D11	6467	B 3		
3457	B 8	6546	D17		
3458	A 8	6547	E17		
3459	F11	6548	D14		
3460	G10	6551	D24		
3461	G10	6560	F23		
3462	B 4	6561	F22		
3463	D 5	6563	B23		
3464	E 5	6570	A16		
3465	G 8	6571	A14		
3466	A 7	6580	F17		
3467	H 8	6585	B16		
3468	A 6	6590	B26		
3469	A 5	6591	F21		
3470	B 3	6592	F21		
3471	G 6	6602	I 5		
3473	G 5	6603	I 6		
3474	F11	6604	J 5		
3475	A 3	6605	J 6		
3476	B 3	6610	M 1		
3477	B 4	6611	N 1		
3478	A 4	6612	N 1		
3483	F14	6617	O 5		
3485	D12	6621	M 6		
3538	E17	6622	O 6		
3539	O17	6624	M 7		
3542	D13	6625	L 7		
3543	E13	6630	I13		
3545	D14	6640	I10		
3549	D25	6641	J10		
3550	D24	6646	N11		
3551	C22	6648	N10		



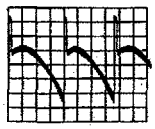
TP 21
0,5 V/div DC
5 µS/div



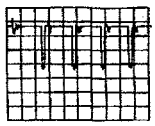
TP 26 ⏱
0,1 V/div AC
5 mS/div



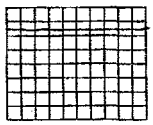
TP 30
2 V/div DC
5 µS/div



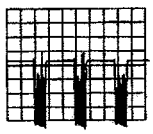
TP 41 a
5 V/div AC
5 mS/div



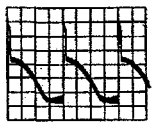
TP 21 ⏱
0,5 V/div DC
10 µS/div



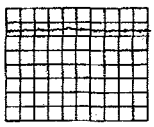
TP 27
1 V/div DC



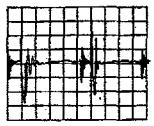
TP 30 ⏱
1 V/div DC
10 mS/div



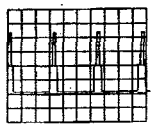
TP 41 b
5 V/div AC
5 mS/div



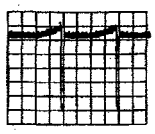
TP 22
1 V/div DC



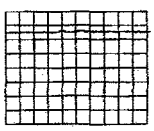
TP 27 ⏱
50 mV/div AC
10 mS/div



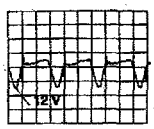
TP 31
2 V/div DC
20 µS/div



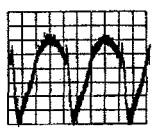
TP 41 c
0,1 V/div AC
5 mS/div



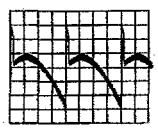
TP 23
1 V/div DC



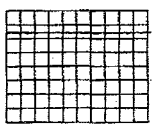
TP 28
0,5 V/div AC
5 µS/div



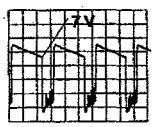
TP 36
0,2 V/div AC
5 mS/div



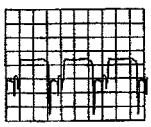
TP 41 d
5 V/div AC
5 mS/div



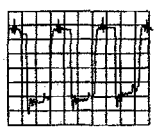
TP 24
5V/div DC



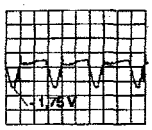
TP 28 ⏱
1 /div AC
10 mS/div



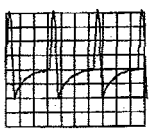
TP 37
2 V/div AC
20 µS/div



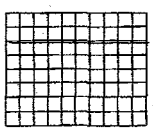
TP 25
0,2 V/div AC
5 µS/div



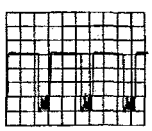
TP 29
0,5 V/div AC
5 µS/div



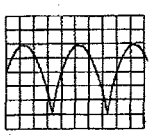
TP 38
20 mV/div AC
20 µS/div



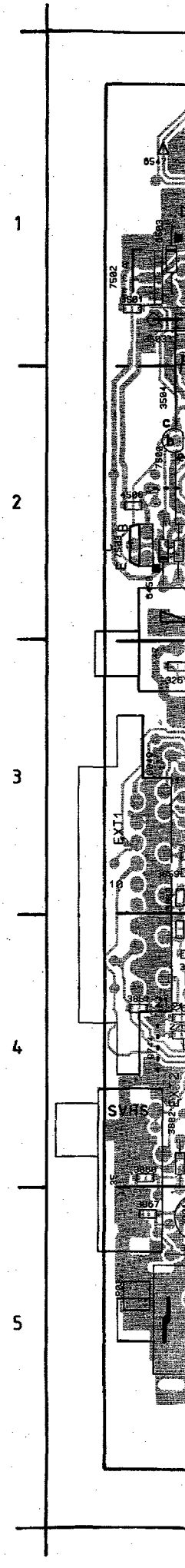
TP 26
1 V/div DC



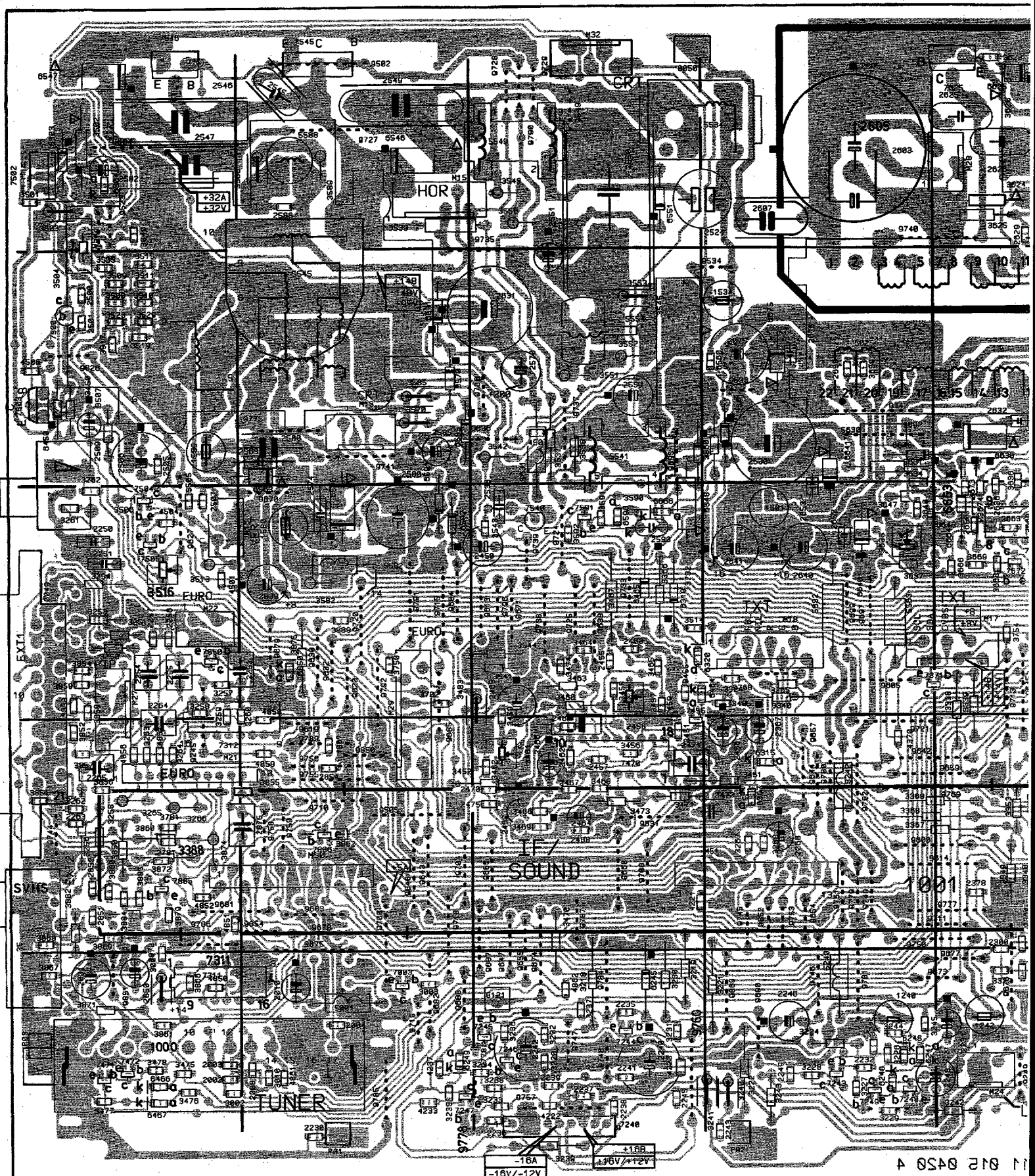
TP 29 ⏱
1 V/div AC
10 mS/div

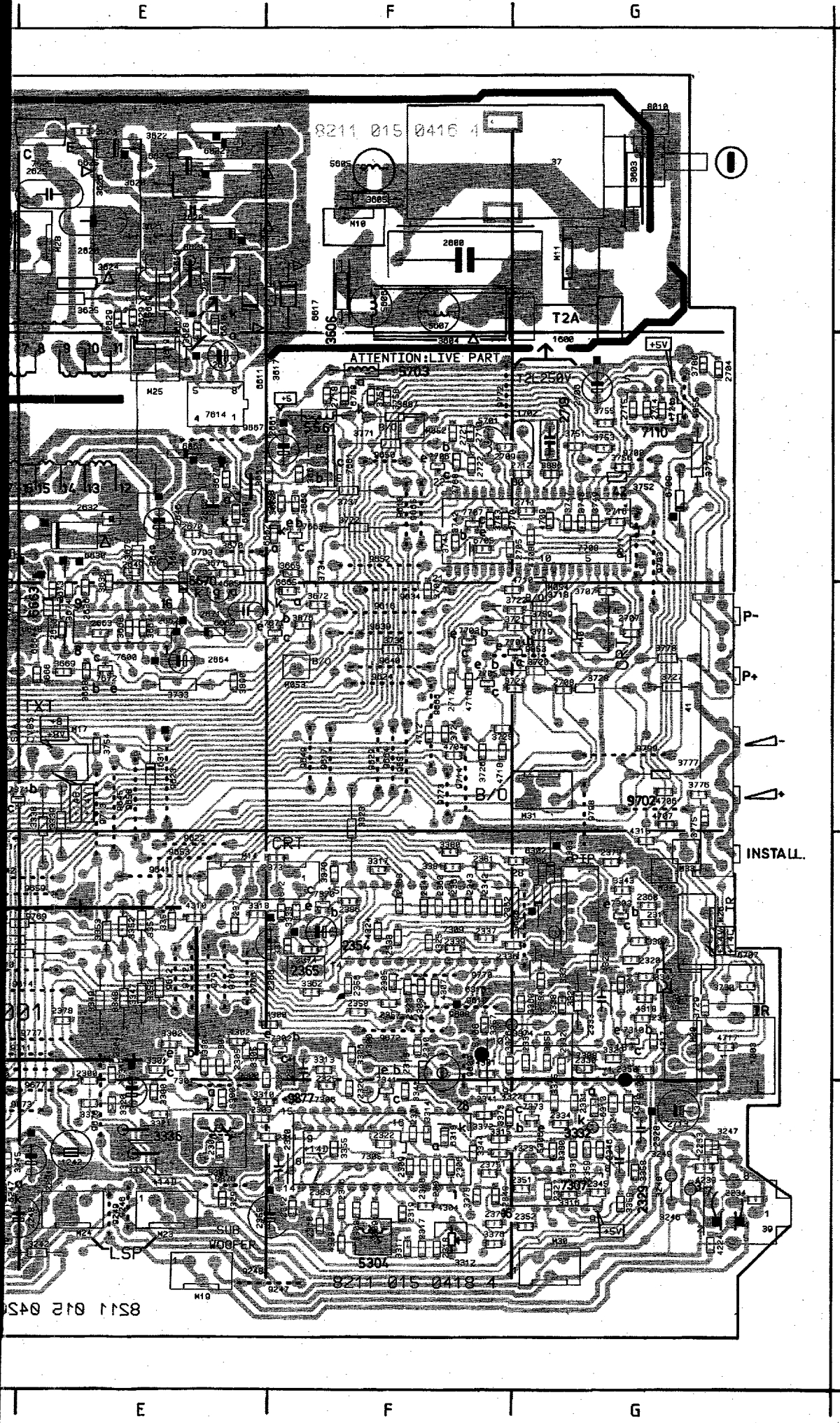


TP 41
2 V/div AC
5 mS/div

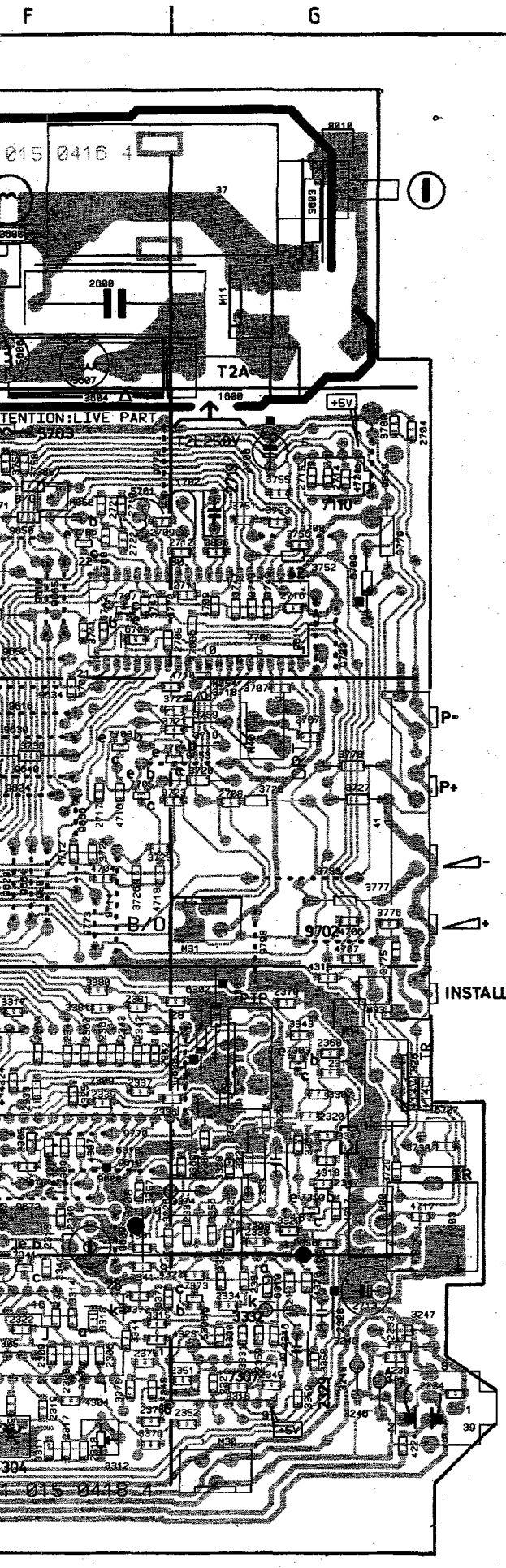


Monocarrier / Hauptplatine / Châssis



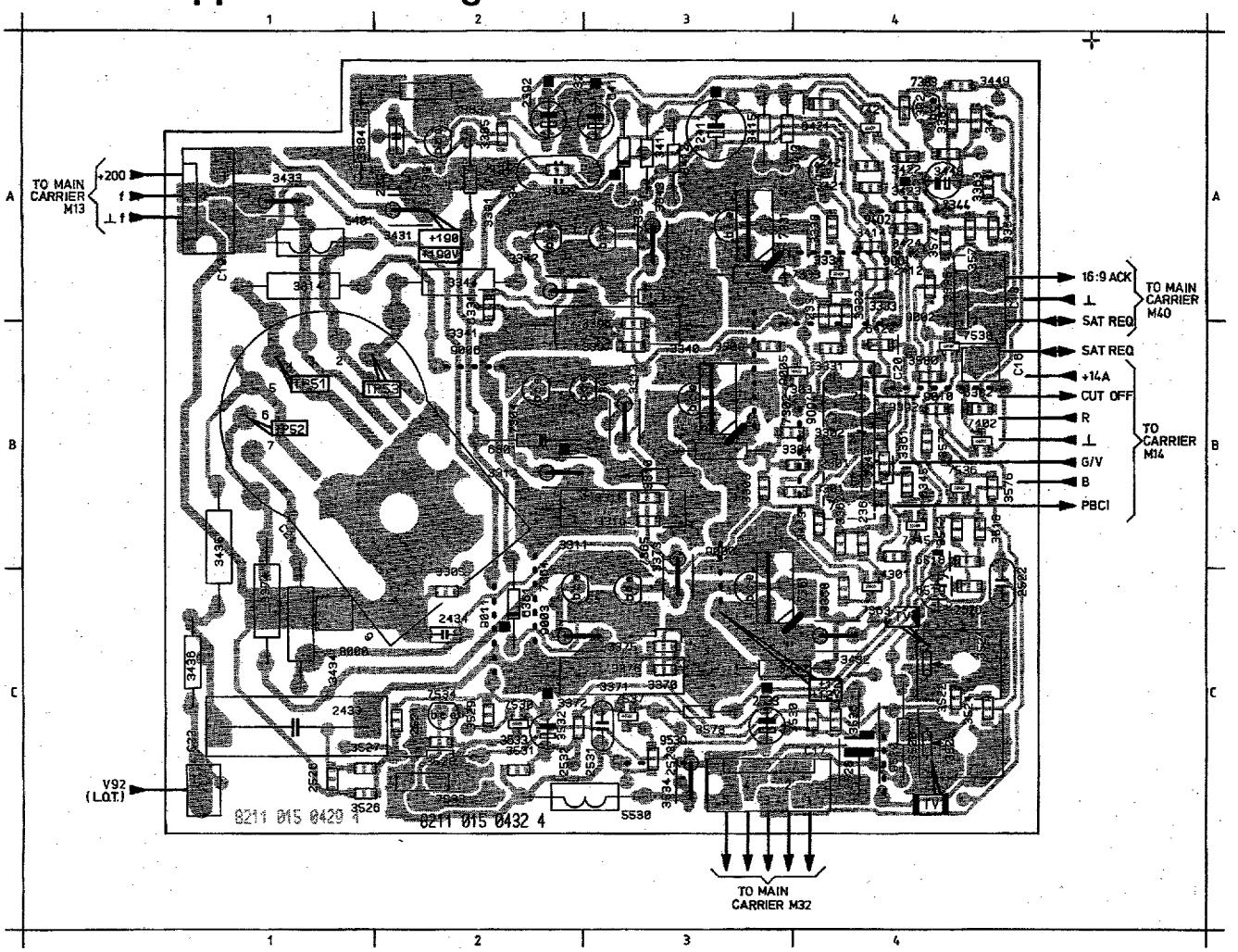


	M10 F1	2341 F5	2712 F2	3358 G5
	M11 G1	2342 F4	2713 G5	3359 G5
	M12 G4	2343 F4	2714 G2	3360 F4
	M13 B2	2344 F4	2715 G2	3361 G4
	M14 E4	2345 G5	2716 G2	3362 F4
	M15 B1	2346 G5	2717 F3	3365 D3
	M16 A3	2347 G4	2718 F2	3366 C3
	M17 D3	2349 F5	2719 F2	3367 D4
	M18 C3	2350 G5	2721 F2	3368 D4
	M19 E5	2351 F5	2722 F2	3369 D4
	M20 G4	2352 F5	2781 A4	3370 F4
	M21 A4	2353 F5	2850 A5	3371 E4
	M22 A3	2354 F4	2851 A4	3372 F5
	M23 E5	2355 E5	2852 A4	3373 F5
	M24 E5	2356 F4	2854 B4	3374 F4
	M25 E2	2357 F4	2875 A4	3375 F5
	M26 G4	2358 F4	3001 A5	3376 F5
1	M27 A4	2359 G5	3002 A5	3380 F4
	M28 D1	2360 F4	3003 B5	3381 F4
	M29 B4	2361 F4	3010 A5	3450 A2
	M30 G5	2362 F4	3218 C5	3451 C4
	M31 F3	2363 F4	3219 C5	3452 B4
	M32 C1	2364 E5	3220 C5	3455 C3
	M33 G4	2365 F4	3221 C5	3456 C4
	M34 G4	2366 E4	3222 D5	3457 C4
	M40 G3	2367 D4	3224 D5	3458 C3
	M50 B4	2368 G4	3225 D5	3459 B4
	M51 D4	2370 E5	3226 D5	3460 C4
	M52 F2	2371 E4	3227 D5	3461 C4
	M53 E3	2372 E4	3228 D5	3462 B4
	M54 F3	2373 E4	3229 D5	3463 C3
	P01 B5	2374 F4	3230 C5	3464 C3
	P02 C5	2375 F5	3231 C5	3465 C3
	P03 A5	2376 F5	3232 C5	3466 C4
	0035 A5	2378 E4	3233 B5	3467 C3
	0037 G1	2379 G4	3234 B5	3468 C4
	0039 G5	2380 F4	3235 B5	3469 C4
	0041 G3	2381 F4	3236 B5	3470 C5
	0049 A4	2384 F4	3237 C5	3471 C4
2	1000 A5	2385 F4	3238 B5	3473 C4
	1003 G5	2386 F4	3239 C5	3474 C3
	1240 D5	2450 B3	3240 C5	3475 A5
	1242 E5	2451 C4	3241 C5	3476 A5
	1300 F5	2455 C3	3242 D5	3477 A5
	1534 C2	2456 C4	3243 D5	3478 A5
	1559 A2	2457 C4	3244 D5	3483 B4
	1560 B3	2458 C4	3245 D5	3485 C4
	1600 G2	2459 C4	3246 G5	3501 A1
	1601 D3	2460 C3	3247 G5	3502 A1
	1702 F2	2461 C4	3248 G5	3503 A1
	2001 A5	2462 C4	3249 G5	3504 A2
	2002 A5	2464 C4	3250 A3	3505 A3
	2003 A5	2465 C4	3251 A3	3506 A3
	2004 B5	2466 C4	3253 A3	3507 A2
	2008 A5	2467 C4	3254 A3	3508 A2
	2010 B5	2468 C4	3255 A4	3509 A2
	2230 B5	2469 C4	3256 A4	3510 A2
	2231 D5	2470 B4	3257 A3	3511 A2
	2232 D5	2471 C4	3258 A4	3513 A3
	2233 G5	2473 C4	3259 A4	3514 C3
	2234 G5	2475 B4	3260 A4	3515 A2
	2235 C5	2500 A2	3261 A3	3516 A3
3	2236 B5	2501 A2	3262 A3	3517 A2
	2237 C5	2502 A1	3263 A4	3519 A2
	2238 C5	2505 A3	3264 A4	3523 A2
	2239 C5	2506 A3	3265 A4	3529 A2
	2240 C5	2507 A3	3266 A4	3535 A2
	2241 C5	2509 A2	3267 D4	3537 C2
	2242 C5	2524 C1	3268 D4	3538 C2
	2243 C5	2538 B3	3300 E5	3539 B2
	2245 C5	2539 A3	3301 E5	3540 A2
	2246 D5	2545 A1	3302 E4	3541 B3
	2248 D5	2546 A1	3303 E5	3542 B2
	2249 D5	2547 A1	3304 E5	3543 B3
	2250 A3	2549 B1	3305 E4	3544 B3
	2251 A3	2550 C1	3306 F4	3545 C2
	2252 A3	2551 C2	3307 G4	3549 C1
	2254 A3	2559 C2	3308 F5	3550 C1
	2255 A3	2560 B2	3309 F5	3551 C2
	2256 A3	2563 A3	3310 E5	3552 C2
	2257 A3	2570 C2	3311 F5	3553 C2
	2262 A4	2574 B3	3312 F5	3560 C2
	2263 A4	2580 B3	3313 F5	3570 B2
4	2264 A4	2585 B2	3314 F5	3582 B3
	2265 A4	2588 B1	3315 F5	3585 B2
	2266 D4	2590 C3	3316 G5	3588 A1
	2300 E5	2600 F1	3317 F4	3589 B1
	2301 E5	2603 D1	3318 E4	3590 C3
	2303 E5	2605 D1	3319 E5	3591 C3
	2304 E5	2607 D1	3320 E5	3592 C3
	2305 E4	2611 E2	3321 E5	3603 G1
	2306 F5	2617 E1	3322 E5	3604 F2
	2307 F5	2620 E1	3323 F4	3605 F1
	2308 F5	2625 D1	3324 C3	3606 F1
	2309 F5	2626 E1	3325 G5	3610 E1
	2310 F5	2629 E2	3326 F5	3617 E1
	2311 E5	2630 D2	3327 G4	3619 E1
	2312 E5	2631 C2	3328 G4	3620 E1
	2313 F5	2632 E2	3329 G5	3621 E1
	2314 E5	2636 E3	3330 G5	3622 E1
	2315 G4	2640 D3	3331 G5	3623 E1
	2316 F5	2641 D3	3332 G5	3624 E1
	2317 F5	2646 E2	3333 E4	3625 E1
	2318 F5	2649 E3	3334 G4	3626 E1
	2319 F5	2650 E3	3335 F4	3628 E2
	2320 G4	2652 D3	3336 E5	3629 E2
5	2321 F5	2653 D3	3337 E5	3631 D2
	2322 F5	2658 D2	3338 D4	3634 D2
	2323 F4	2660 E2	3339 E4	3635 D2
	2325 F5	2661 E2	3340 D4	3636 E2
	2326 F5	2662 E3	3341 F5	3637 D2
	2327 F5	2663 E3	3342 G4	3647 D2
	2328 G5	2664 E3	3343 G4	3648 D2
	2329 G5	2670 E2	3344 F5	3649 E2
	2330 G5	2671 E3	3347 E4	3658 E2
	2331 G5	2675 D2	3348 E4	3659 D2
	2332 G5	2676 D2	3349 E4	3660 E2
	2333 G4	2704 G2	3350 E4	3661 E2
	2334 G5	2705 F2	3351 E4	3662 E2
	2335 F5	2706 G2	3352 E4	3663 E2
	2336 F4	2707 G3	3353 E4	3664 E2
	2337 F4	2708 G3	3354 E4	3665 E2
	2338 F4	2709 F2	3355 F5	3666 D2
	2339 F4	2710 F2	3356 F5	3667 E2
	2340 F4	2711 F2	3357 F4	3668 E2



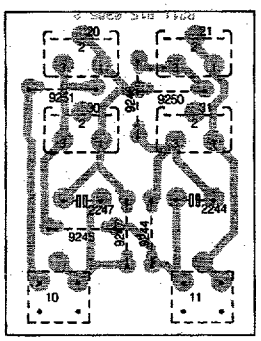
CHASSIS GR2.2				6.21			6.22		CHASSIS GR2.2	
M10 F1	2341 F5	2712 F2	3358 G5		3669 E3	4706 G3	7306 F5	9695 C3		
M11 G1	2342 F4	2713 G5	3359 G5		3670 E2	4707 G4	7307 F5	9696 B2		
M12 G4	2343 F4	2714 G2	3360 F4		3671 E3	4708 F2	7308 G5	9697 D3		
M13 B2	2344 F4	2715 G2	3361 G4		3672 F3	4709 F2	7309 F4	9699 D3		
M14 E4	2345 G5	2716 G2	3362 F4		3673 D3	4710 F3	7310 G4	9700 B5		
M15 B1	2346 G5	2717 F3	3365 D3		3674 E3	4712 F3	7311 A5	9702 G4		
M16 A3	2347 G4	2718 F2	3366 C3		3675 E3	4716 F3	7312 A4	9703 G3		
M17 D3	2349 F5	2719 F2	3367 D4		3676 E3	4717 G4	7341 F5	9704 B4		
M18 C3	2350 G5	2721 F2	3368 D4		3677 E2	4718 F3	7370 F4	9708 G2		
M19 E5	2351 F5	2722 F2	3369 D4		3701 F3	4721 G2	7371 D3	9710 B4		
M20 G4	2352 F5	2781 A4	3370 F4		3702 B4	4850 A5	7373 F5	9711 D4		
M21 A4	2353 F5	2850 A5	3371 E4		3707 G3	4851 A4	7455 C4	9712 E4		
M22 A3	2354 F4	2851 A4	3372 F5		3718 F3	4852 A4	7470 C4	9713 E4		
M23 E5	2355 E5	2852 A4	3373 F5		3719 F3	4856 A4	7471. A5	9714 F3		
M24 E5	2356 F4	2854 B4	3374 F4		3720 F3	4857 A4	7472 A5	9715 B3		
M25 E2	2357 F4	2875 A4	3375 F5		3721 F3	4858 A4	7500 A2	9718 B5		
M26 G4	2358 F4	3001 A5	3376 F5		3722 F3	4859 A4	7502 A1	9719 B5		
1 M27 A4	2359 G5	3002 A5	3380 F4		3723 F3	4861 B5	7503 A2	9720 B3		
M28 D1	2360 F4	3003 B5	3381 F4		3724 F3	4862 C5	7504 A3	9721 D4		
M29 B4	2361 F4	3010 A5	3450 A2		3725 F3	4867 B4	7505 A3	9724 C3		
M30 G5	2362 F4	3218 C5	3451 C4		3726 F3	5001 B5	7540 C3	9725 C3		
M31 F3	2363 F4	3219 C5	3452 B4		3727 G3	5240 D5	7545 B1	9727 B1		
M32 C1	2364 E5	3220 C5	3455 C3		3728 G3	5242 D4	7546 A1	9728 C1		
M33 G4	2365 F4	3221 C5	3456 C4		3729 G4	5301 E5	7591 C3	9729 C1		
M34 G4	2366 E4	3222 D5	3457 C4		3730 G4	5303 G4	7800 E3	9733 C3		
M40 G3	2367 D4	3224 D5	3458 C3		3732 C3	5304 F5	7614 E2	9735 B2		
M50 B4	2368 G4	3225 D5	3459 B4		3733 E3	5306 F4	7625 D1	9736 B2		
M51 D4	2370 E5	3226 D5	3460 C4		3734 F3	5534 D1	7661 F2	9737 C2		
M52 F2	2371 E4	3227 D5	3461 C4		3736 F3	5541 C2	7663 E2	9738 C3		
M53 E3	2372 E4	3228 D5	3462 B4		3737 F2	5545 A2	7671 E3	9739 C3		
M54 F3	2373 E4	3229 D5	3463 C3		3741 F2	5549 B1	7672 E3	9740 D2		
P01 B5	2374 F4	3230 C5	3464 C3		3742 F2	5554 C2	7703 F3	9741 B2		
P02 C5	2375 F5	3231 C5	3465 C3		3743 F2	5563 D3	7704 F3	9742 D2		
P03 A5	2376 F5	3232 C5	3466 C4		3747 G2	5582 B3	7705 F3	9744 A4		
0035 A5	2378 E4	3233 B5	3467 C3		3748 G2	5588 B1	7706 F2	9745 D4		
0037 G1	2379 G4	3234 B5	3468 C4		3749 G2	5605 F1	7707 F2	9746 D5		
0039 G5	2380 F4	3235 B5	3469 C4		3750 B3	5606 F1	7708 G3	9747 C5		
0041 G3	2381 F4	3236 B5	3470 C5		3751 G2	5607 F2	7710 G2	9748 C5		
0049 A4	2384 F4	3237 C5	3471 C4		3752 G2	5619 E1	7850 A3	9749 D4		
1000 A5	2385 F4	3238 B5	3473 C4		3753 G2	5625 D2	7885 A4	9750 D5		
2 1003 G5	2386 F4	3239 C5	3474 C3		3754 E3	5630 D2	7886 B4	9751 D4		
1240 D5	2450 B3	3240 C5	3475 A5		3755 G2	5631 C2	9245 A4	9752 D4		
1242 E5	2451 C4	3241 C5	3476 A5		3756 G2	5632 D3	9246 E5	9753 D5		
1300 F5	2455 C3	3242 D5	3477 A5		3757 F2	5681 F2	9247 E5	9755 B4		
1534 C2	2456 C4	3243 D5	3478 A5		3758 F2	5701 F2	9248 E5	9756 B4		
1559 A2	2457 C4	3244 D5	3483 B4		3759 F3	5703 F2	9249 E5	9757 C5		
1580 B3	2458 C4	3245 D5	3485 C4		3768 F2	6245 C5	9300 E5	9758 A4		
1600 G2	2459 C4	3246 G5	3501 A1		3770 F2	6246 D5	9502 B1	9759 B4		
1601 D3	2460 C3	3247 G5	3502 A1		3771 F2	6247 D5	9505 B4	9760 C5		
1702 F2	2461 C4	3248 G5	3503 A1		3772 F2	6248 D5	9522 A2	9764 E4		
2001 A5	2462 C4	3249 G5	3504 A2		3775 G4	6249 B5	9523 A1	9766 E4		
2002 A5	2464 C4	3250 A3	3505 A3		3776 G3	6300 E5	9534 C2	9768 D3		
2003 A5	2465 C4	3251 A3	3506 A3		3777 G3	6302 F4	9549 C1	9769 D4		
2004 B5	2466 C4	3253 A3	3507 A2		3778 G3	6303 G4	9551 F3	9770 F4		
2008 A5	2467 C4	3254 A3	3508 A2		3779 G2	6310 G5	9600 D4	9772 F2		
2010 B5	2468 C4	3255 A4	3509 A2		3780 G2	6315 D4	9605 D3	9773 F3		
2230 B5	2469 C4	3256 A4	3510 A2		3781 A4	6316 F4	9608 F4	9775 B2		
2231 D5	2470 B4	3257 A3	3511 A2		3850 A4	6317 E3	9609 F5	9777 D4		
2232 D5	2471 C4	3258 A4	3513 A3		3851 A4	6318 F5	9610 F4	9778 B5		
2233 G5	2473 C4	3259 A4	3514 C3		3852 A4	6319 C3	9611 G2	9779 D4		
2234 G5	2475 B4	3260 A4	3515 A2		3853 A4	6320 C3	9612 E4	9780 D4		
2235 C5	2500 A2	3261 A3	3516 A3		3854 A3	6367 D4	9613 B3	9781 D5		
3 2236 B5	2501 A2	3262 A3	3517 A2		3855 A4	6450 A2	9614 D4	9783 D5		
2237 C5	2502 A1	3263 A4	3519 A2		3856 A4	6464 C4	9616 F3	9784 C5		
2238 C5	2505 A3	3264 A4	3523 A2		3857 A4	6465 C3	9617 F3	9785 B5		
2239 C5	2506 A3	3265 A4	3528 A2		3858 A4	6466 A5	9618 F2	9786 A5		
2240 C5	2507 A3	3266 A4	3535 A2		3859 A3	6467 A5	9619 B4	9787 C4		
2241 C5	2509 A2	3267 D4	3537 C2		3860 A4	6503 A1	9620 B3	9788 C4		
2242 C5	2524 C1	3268 D4	3538 C2		3861 A5	6504 A1	9622 E4	9789 B4		
2243 C5	2538 B3	3300 E5	3539 B2		3862 B4	6546 B1	9623 E3	9790 C1		
2245 C5	2539 A3	3301 E5	3540 A2		3866 A5	6547 A1	9624 F3	9791 B3		
2246 D5	2545 A1	3302 E4	3541 B3		3867 A5	6548 C2	9626 A2	9792 B3		
2248 D5	2546 A1	3303 E5	3542 B2		3868 A5	6551 C1	9627 A3	9793 E2		
2249 D5	2547 A1	3304 E5	3543 B3		3869 A5	6560 C2	9628 F4	9796 B3		
2250 A3	2549 B1	3305 E4	3544 B3		3870 A5	6561 C2	9629 F3	9797 E4		
2251 A3	2550 C1	3306 F4	3545 C2		3871 A5	6563 A3	9630 B3	9798 G4		
2252 A3	2551 C2	3307 G4	3549 C1		3872 A4	6570 B2	9631 C4	9799 G3		
2254 A3	2559 C2	3308 F5	3550 C1		3874 A4	6571 B2	9632 B3	9850 B4		
2255 A3	2560 B2	3309 F5	3551 C2		3875 B3	6580 B3	9634 F3	9851 A5		
2256 A3	2563 A3	3310 E5	3552 C2		3879 A4	6585 B2	9638 C3	9852 D5		
2257 A3	2570 C2	3311 F5	3553 C2		3880 A4	6590 C3	9639 F3	9853 F3		
2262 A4	2574 B3	3312 F5	3560 C2		3881 A4	6591 B3	9640 F3	9854 A5		
2263 A4	2580 B3	3313 F5	3570 B2		3882 A5	6592 B3	9641 E4	9855 G2		
4 2264 A4	2585 B2	3314 F5	3582 B3		3884 A4	6610 E2	9642 D4	9869 C5		
2265 A4	2588 B1	3315 F5	3585 B2		3885 A4	6611 E1	9643 B4	9876 E5		
2266 D4	2590 C3	3316 G5	3588 A1		3886 G2	6612 E2	9644 D4	9877 E5		
2300 E5	2600 F1	3317 F4	3589 B1		3887 F2	6617 E1	9645 E4			
2301 E5	2603 D1	3318 E4	3590 C3		3888 A4	6621 E1	9647 C5			
2303 E5	2605 D1	3319 E5	3591 C3		3889 B3	6622 E1	9648 B4			
2304 E5	2607 D1	3320 E5	3592 C3		3890 E3	6624 E1	9649 F3			
2305 E4	2611 E2	3321 E5	3603 G1		4221 C4	6625 E1	9650 F2			
2306 F5	2617 E1	3322 E5	3604 F2		4222 C5	6630 E2	9652 F3			
2307 F5	2620 E1	3323 F4	3605 F1		4223 C5	6640 D3	9653 E4			
2308 F5	2625 D1	3324 C3	3606 F1		4224 G5	6641 D3	9654 D4			
2309 F5	2626 E1	3325 G5	3610 E1		4233 B5	6646 D2	9655 C5			
2310 F5	2629 E2	3326 F5	3617 E1		4237 B5	6648 D3	9657 D4			
2311 E5	2630 D2	3327 G4	3619 E1		4239 G5	6649 E3	9658 E3			
2312 E5	2631 C2	3328 G4	3620 E1		4300 E4	6660 E3	9659 D4			
2313 F5	2632 E2	3329 G5	3621 E1		4301 F5	6661 E2	9663 B4			
2314 E5	2636 E3	3330 G5	3622 E1		4302 E4	6662 E2	9664 F3			
2315 G4	2640 D3	3331 G5	3623 E1		4303 F5	6663 E3	9665 F2			
2316 F5	2641 D3	3332 G5	3624 E1		4304 F5	6664 D3	9666 F3			
2317 F5	2646 E2	3333 E4	3625 E1		4307 F4	6665 E3	9667 E2			
2318 F5	2649 E3	3334 G4	3626 E1		4308 F4	6666 C3	9668 C4			
2319 F5	2650 E3	3335 F4	3628 E2		4310 E4	6669 E2	9670 A3			
2320 G4	2652 D3	3336 E5	3629 E2		4315 G4	6670 E3	9671 C3			
5 2321 F5	2653 D3	3337 E5	3631 D3		4317 G4	6675 D2	9672 F4			
2322 F5	2658 D2	3338 D4	3634 D3		4318 G4	6705 F2	9673 D5			
2323 F4	2660 E2	3339 E4	3635 D3		4320 G5	6707 G4	9674 C5			
2325 F5	2661 E2	3340 D4	3636 E3		4321 G5	6708 F2	9675 B5			
2326 F5	2662 E3	3341 F5	3637 D3		4322 F5	6709 G2	9676 E5			
2327 F5	2663 E3	3342 G4	3647 D3		4323 F5	6850 B3	9677 D5			
2328 G5	2664 E3	3343 G4	3648 D3		4324 F4	7003 B5	9678 B5			
2329 G5	2670 E2	3344 F5	3649 E3		4325 F4	7240 C5	9679 A3			
2330 G5	2671 E3	3347 E4	3658 E2		4328 G4	7243 D5	9681 A4			
2331 G5	2675 D2	3348 E4	3659 D2		4329 E5	7244 C5	9682 B5			
2332 G5	2676 D2	3349 E4	3660 E2		4370 D4	7245 B5	9684 B3			
2333 G4	2704 G2	3350 E4	3661 E2		4501 A3	7246 B5	9685 B4			
2334 G5	2705 F2	3351 E4	3662 E2		4502 G2	7247 B5	9686 B4			
2335 F5	2706 G2	3352 E4	3663 E3		4504 A3	7248 D5	9687 B5			
2336 F4	2707 G3	3353 E4	3664 E3		4506 A2	7249 D5	9688 B5			
2337 F4	2708 G3	3354 E4	3665 E3		4507 C2	7301 E5	9690 D5			
2338 F4	2709 F2	3355 F5	3666 D3		4605 E3	7302 E4	9692 D2			
2339 F4	2710 F2	3356 F5	3667 E2		0047 A3	7303 G4	9693 C2			
2340 F4	2711 F2	3357 F4	3668 E3		4704 F3	7305 F5	9694 A1			

Picture tube module "narrowneck" / Bildröhren Modul "narrowneck" / Module support tube image "narrowneck"

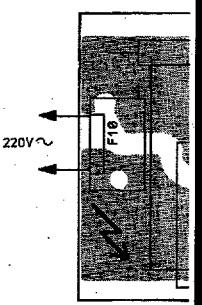


C16 B4
C18 A4
C19 A1
C20 B4
C21 B1
C22 C1
2301 B3
2331 A3
2344 A4
2361 B4
2391 A1
2392 A2
2411 A3
2412 A4
2421 A4
2431 A2
2432 A2
2433 C1
2434 C2
2520 C4
2521 C1
2522 C4
2523 C3
2526 C1
2528 C4
2531 C2
2532 C2
2533 C3
3301 B3
3302 B3
3303 B3
3304 B3
3305 C2
3309 B3
3310 B3
3311 B3
3312 B2
3313 B3
3314 A1
3315 B3
3316 B3
3331 B4
3332 A4
3333 A4
3334 A3
3338 A4
3340 A3
3341 A3
3342 A2
3343 A3
3344 A2
3345 B4
3361 B4
3362 B4
3363 A4
3364 A4
3368 C4
3370 C3

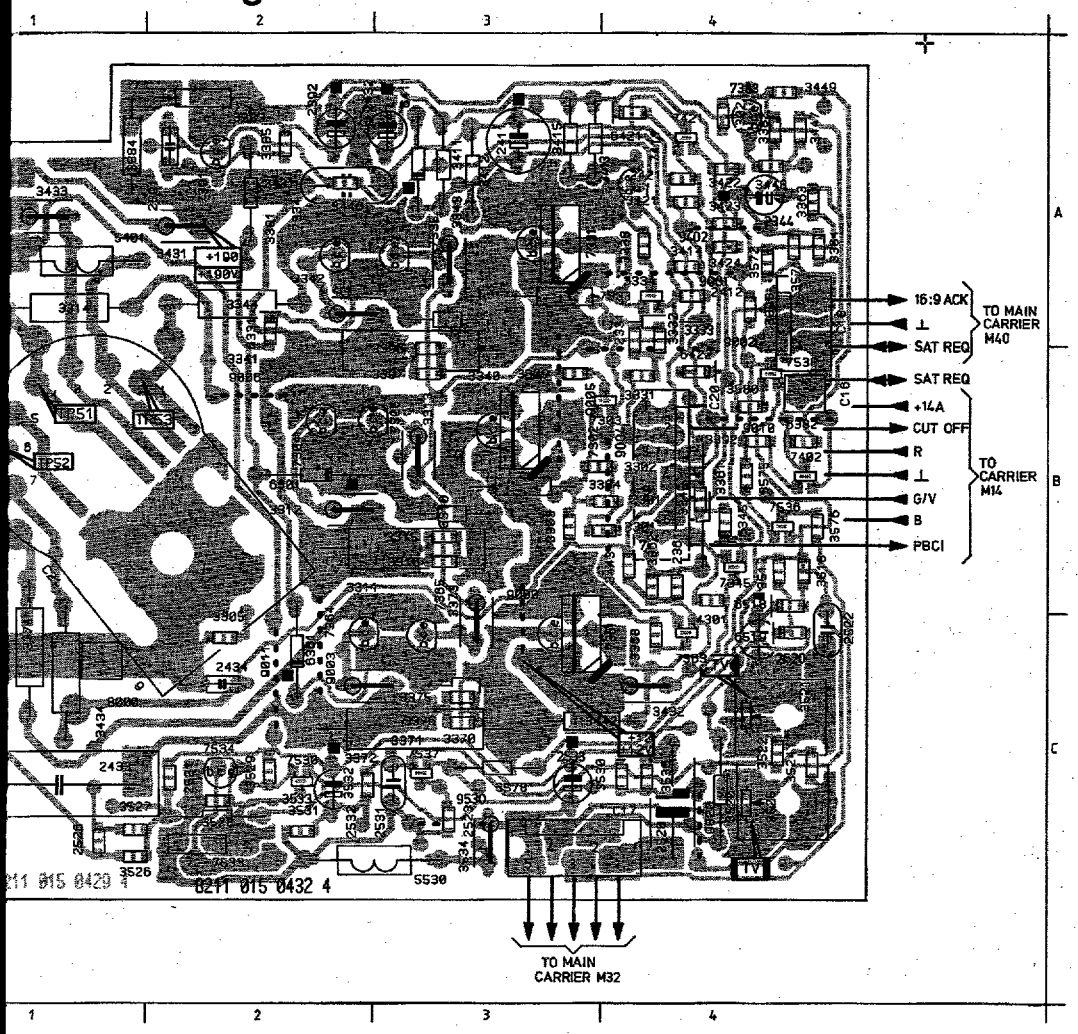
Loud speaker module
Lautsprecher Platte
Module haut parleur



Mains r
Netzteil
Module



nodule "narrowneck" / Bildröhren Modul "narrowneck" /
ort tube image "narrowneck"

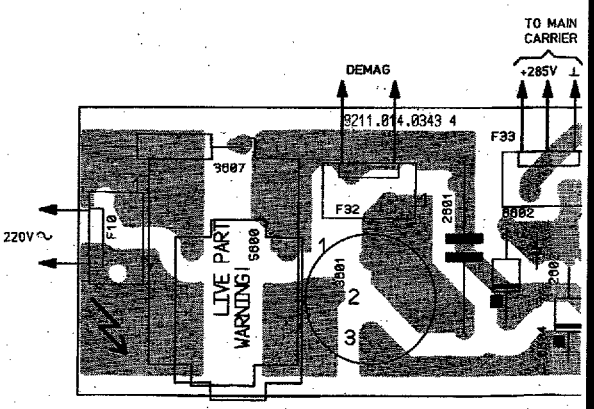


C16 B4	3371 C3	3580 B4
C18 A4	3372 C2	4301 B4
C19 A1	3373 C3	4302 A4
C20 B4	3374 C1	5401 A1
C21 B1	3375 C3	5530 C2
C22 C1	3376 C3	6301 B2
2301 B3	3382 A4	6331 A2
2331 A3	3383 A2	6345 B4
2344 A4	3384 A1	6361 C2
2361 B4	3385 A2	6382 B4
2391 A1	3391 A2	6411 A3
2392 A2	3392 B4	6421 A3
2411 A3	3395 A4	6422 B4
2412 A4	3396 A3	6518 B4
2421 A4	3397 B3	6519 C4
2431 A2	3411 A3	7302 B3
2432 A2	3412 A3	7303 B3
2433 C1	3413 A3	7304 B2
2434 C2	3414 A4	7305 B2
2520 C4	3415 A3	7331 A3
2521 C1	3421 A4	7333 A4
2522 C4	3422 A4	7334 A2
2523 C3	3423 A4	7335 A2
2526 C1	3424 A4	7345 B4
2528 C4	3431 A2	7361 C3
2531 C2	3432 C4	7363 C4
2532 C2	3433 A1	7364 C2
2533 C3	3434 C1	7365 C3
3301 B3	3435 B1	7383 A4
3302 B3	3436 C1	7391 A2
3303 B3	3442 C3	7402 B4
3304 B3	3443 B3	7411 A4
3305 C2	3446 A2	7421 A4
3309 B3	3447 A4	7530 C2
3310 B3	3448 A4	7533 C2
3311 B3	3449 A4	7534 C2
3312 B2	3512 B4	7536 B4
3313 B3	3518 B4	7537 C3
3314 A1	3520 C4	7538 B4
3315 B3	3521 C4	9000 B3
3316 B3	3522 C4	9001 A4
3331 B4	3524 C4	9002 A4
3332 A4	3525 C4	9003 C2
3333 A4	3526 C1	9004 B3
3334 A3	3527 C1	9005 B3
3338 A4	3528 C2	9006 B2
3340 A3	3529 C2	9010 B4
3341 A3	3530 C3	9011 C2
3342 A2	3531 C2	9402 A4
3343 A3	3532 C2	9520 C4
3344 A2	3533 C2	9530 C3
3345 B4	3534 C3	
3361 B4	3536 C4	
3362 B4	3571 A4	
3363 A4	3572 A4	
3364 A4	3575 B4	
3368 C4	3576 B4	
3370 C3	3578 C3	

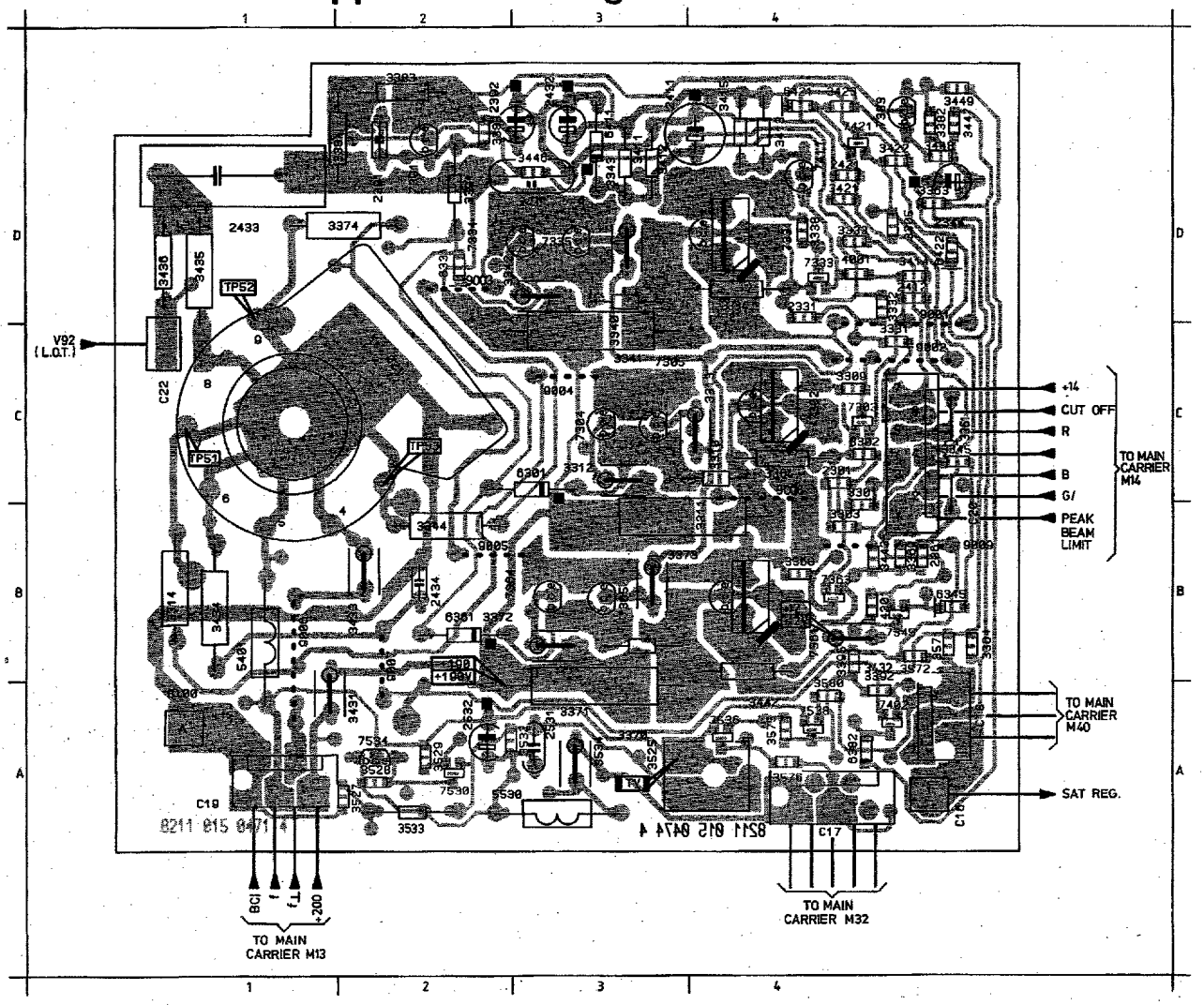
V92 (L.O.T.)

dule
te
eur

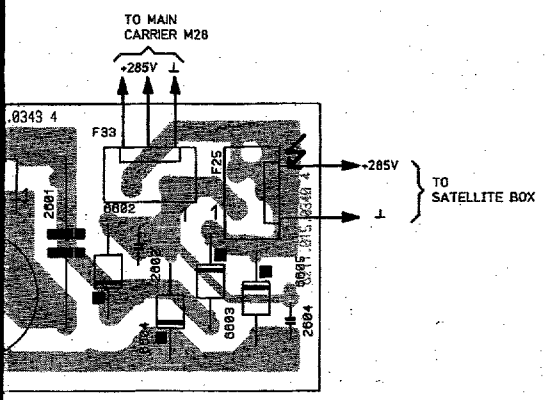
Mains module
Netzteil
Module secteur

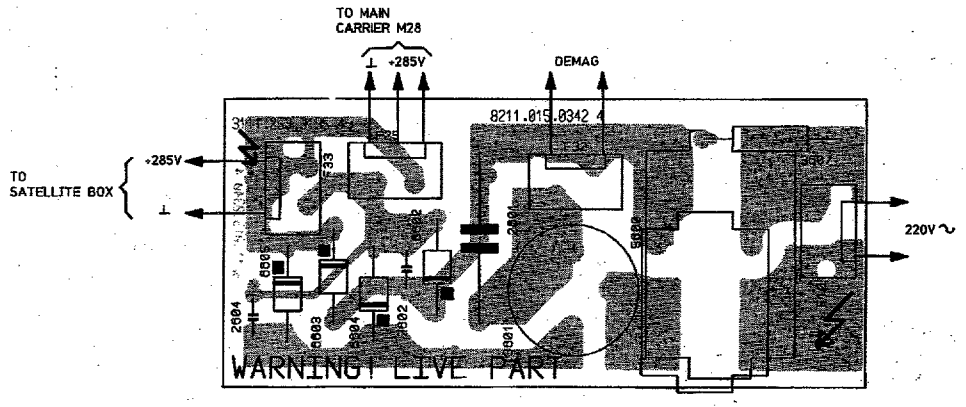


Picture tube module "mini neck" / Bildröhren Modul "mini neck" / Module support tube image "mini neck"

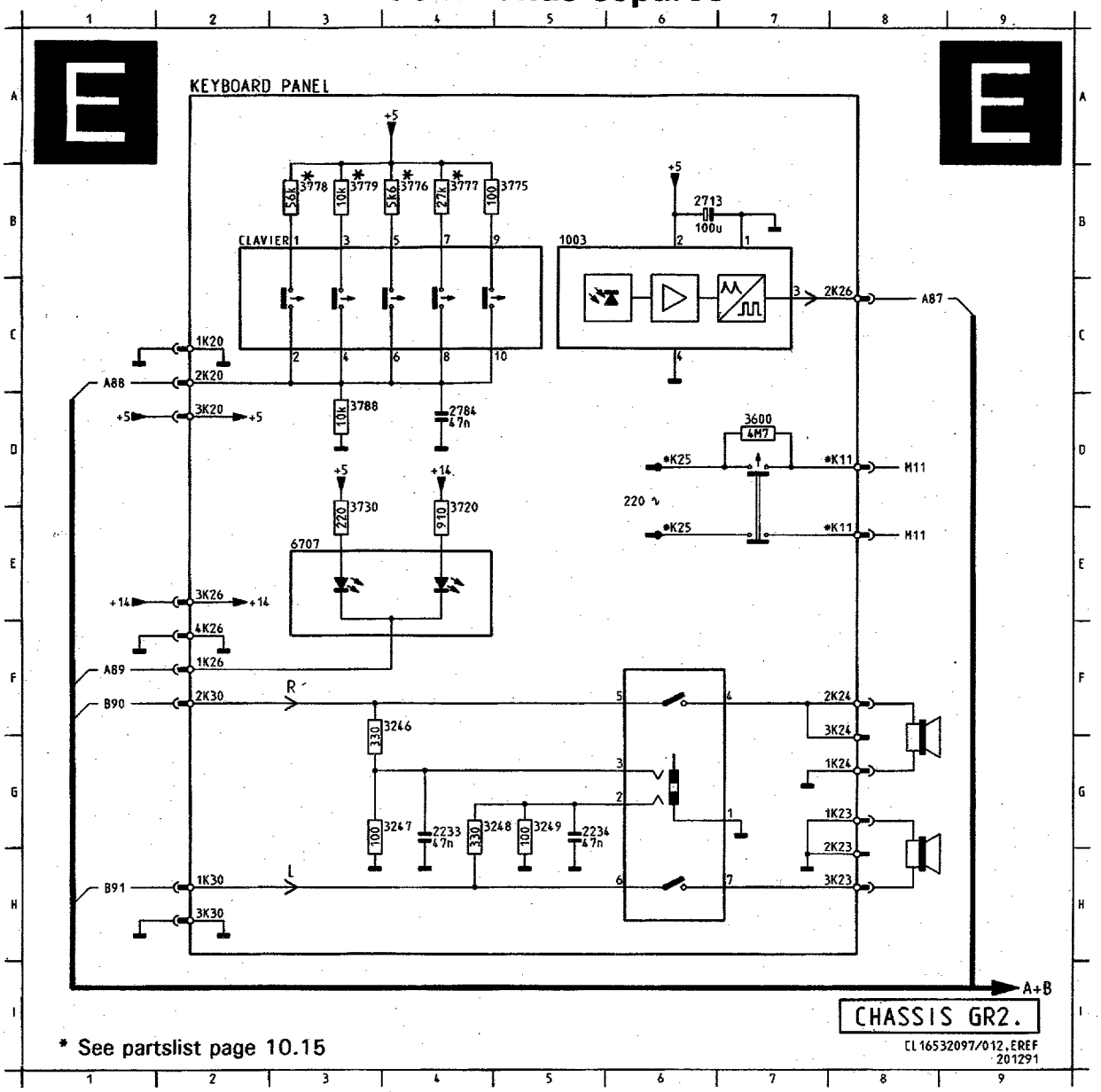


C16	A4	3431	A2
C17	A4	3432	B4
C18	A4	3433	B2
C19	A2	3434	B1
C20	C4	3435	D1
C21	C2	3436	D1
C22	D1	3442	B4
2301	C4	3443	B4
2331	D4	3446	D3
2344	D4	3447	D4
2361	B4	3448	D4
2391	D2	3449	D4
2392	D3	3525	A4
2411	D4	3527	A2
2412	D4	3528	A2
2421	D4	3529	A3
2431	D3	3532	A3
2433	D1	3533	A2
2434	B3	3534	A3
2531	A3	3571	B4
2532	A3	3572	B4
3301	C4	3575	A4
3302	C4	3576	A4
3303	B4	3580	A4
3304	C4	4001	D4
3305	D4	4301	B4
3309	C4	5401	B2
3310	C4	6301	C3
3311	B4	6331	D3
3312	C4	6345	B4
3313	C4	6361	B3
3314	B1	6382	A4
3331	C4	6411	D3
3332	D4	6422	D4
3333	D4	7302	C4
3334	D4	7303	C4
3338	D4	7304	C4
3340	D4	7305	C4
3341	D4	7331	D4
3342	D3	7333	D4
3343	D4	7334	D3
3344	B3	7335	D3
3345	C4	7345	B4
3361	C4	7361	B4
3362	B4	7363	B4
3363	D4	7364	B3
3364	B4	7365	B4
3368	B4	7391	D2
3370	B4	7402	A4
3371	B4	7411	D4
3372	B3	7421	D4
3373	B4	7530	A3
3374	D2	7534	A2
3384	D2	7536	A4
3385	D3	7538	A4
3391	D3	8100	A1
3392	A4	9001	D4
3395	B4	9002	C4
3411	D4	9003	D3
3412	D4	9004	C3
3413	D4	9005	B3
3414	D4	9006	B2
3415	D4	9007	B2
3421	D4	9008	C4
3422	D4	9009	B4



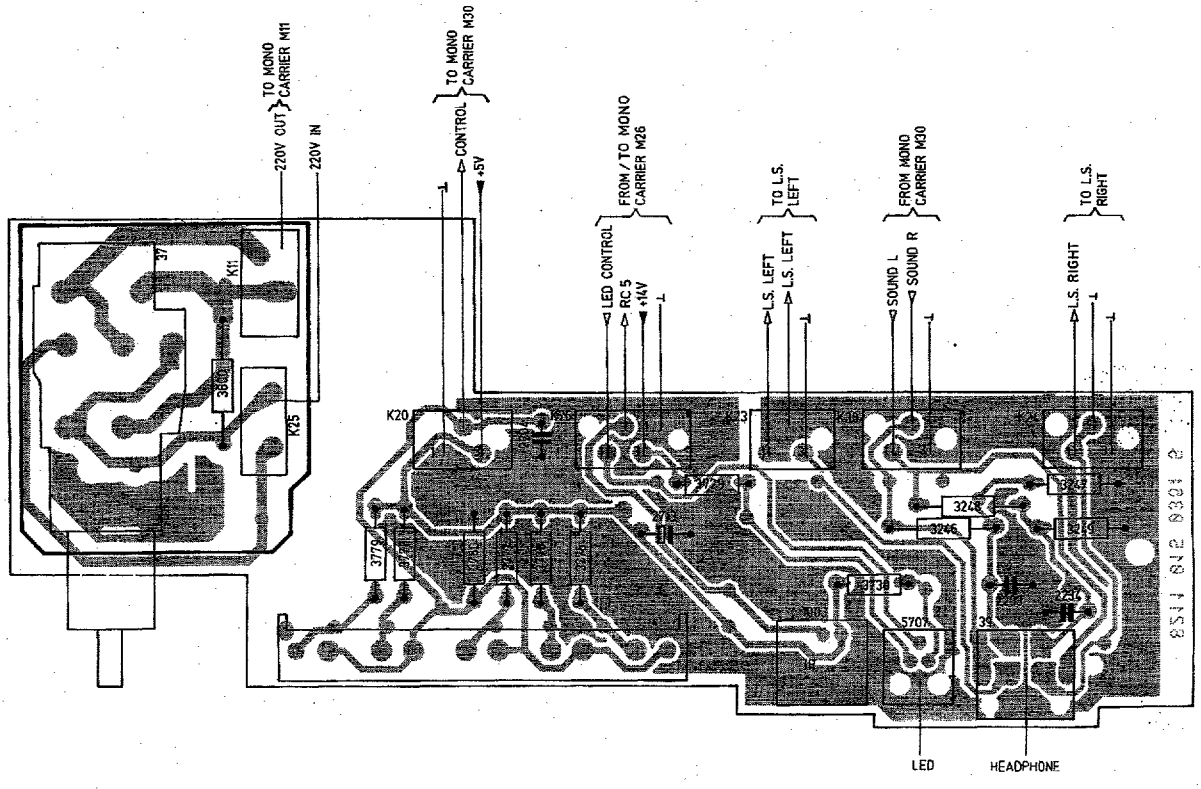


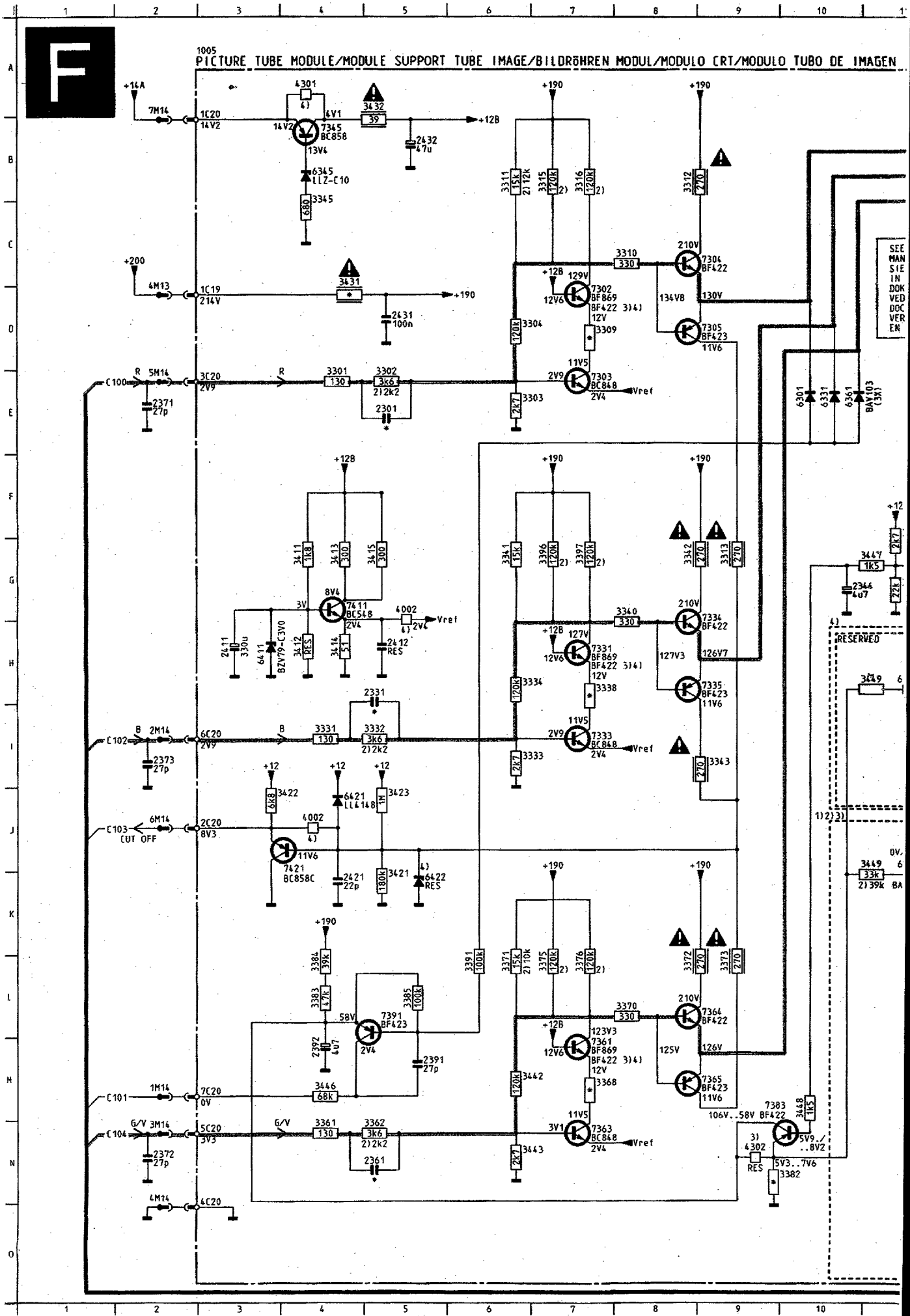
Separate Controle/Separate Bedienung/ Commande séparée



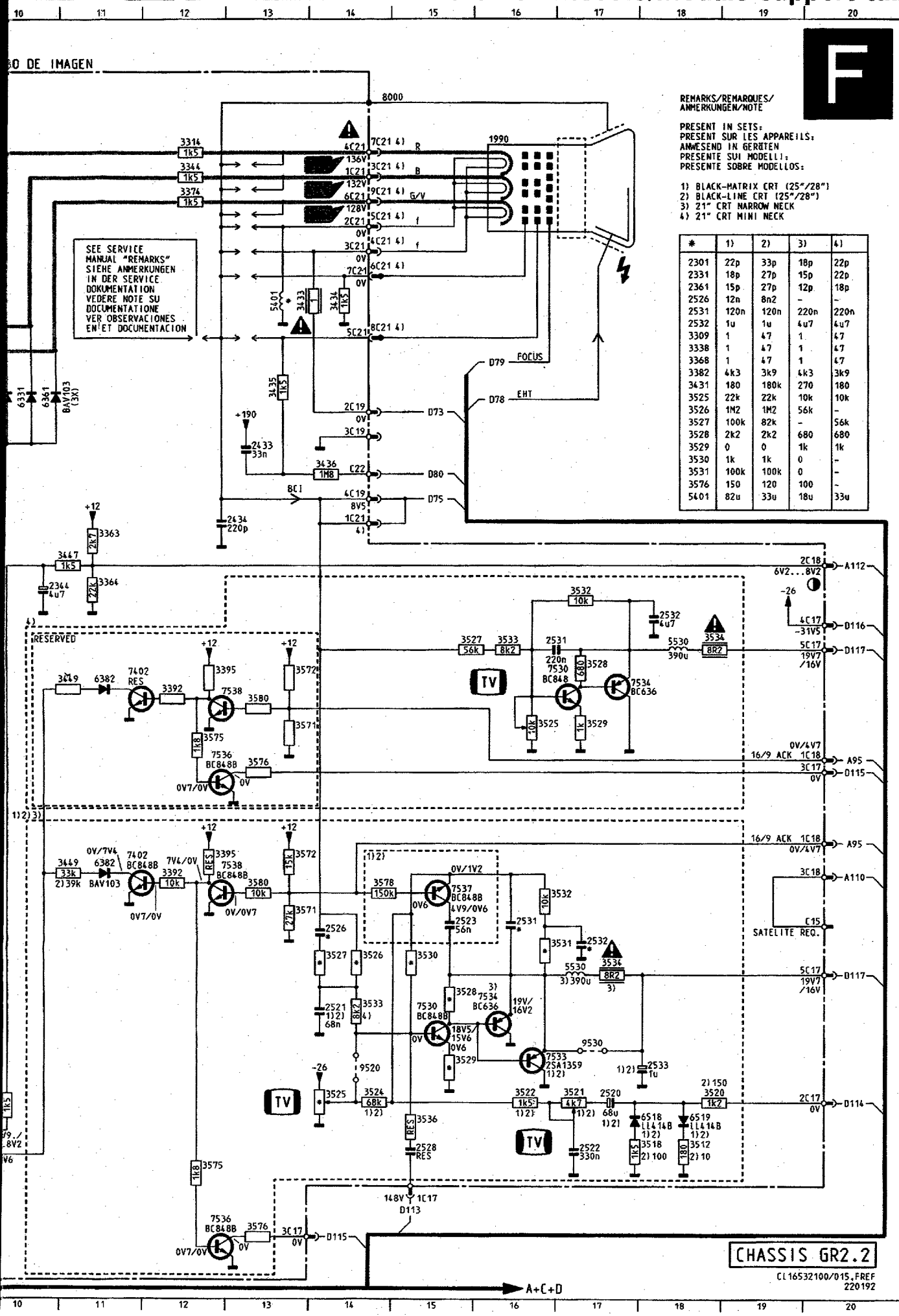
* See partslist page 10.15

1003 B 5
2233 G 4
2234 G 5
2713 B 6
2784 D 4
3246 F 3
3247 G 3
3248 G 4
3249 G 5
3600 D 7
3720 D 4
3730 D 3
3775 B 5
3776 B 4
3777 B 4
3778 B 3
3779 B 3
3788 D 3
6707 E 3




F
1005
PICTURE TUBE MODULE/MODULE SUPPORT TUBE IMAGE/BILDRÖHREN MODUL/MODULO CRT/MODULO TUBO DE IMAGEN
+14A
+200
+190
+12B
+12
C100
C101
C102
C103
C104
CUT OFF
Vref
RESERVED
SEE MANSIE IN DOK VED DOC VER EN

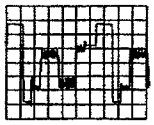
Bildröhren Module/Module support tube image



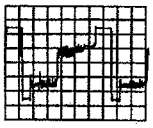
*	1)	2)	3)	4)
2301	22p	33p	18p	22p
2331	18p	27p	15p	22p
2361	15p	27p	12p	18p
2526	12n	8n2	-	-
2531	120n	120n	220n	220n
2532	1u	1u	4u7	4u7
3309	1	47	1	47
3338	1	47	1	47
3368	1	47	1	47
3382	4k3	3k9	4k3	3k9
3431	180	180k	270	180
3525	22k	22k	10k	10k
3526	1M2	1M2	56k	-
3527	100k	82k	-	56k
3528	2k2	2k2	680	680
3529	0	0	1k	1k
3530	1k	1k	0	-
3531	100k	100k	0	-
3576	150	120	100	-
5401	82u	33u	18u	33u

1005 A 2 3534 H1
1990 B16 3534 L1
2301 E 5 3536 M1
2331 H 5 3571 I1
2344 G10 3571 K1
2361 N 5 3572 H1
2371 E 2 3572 J1
2372 N 2 3575 M1
2373 I 2 3575 I1
2391 M 5 3576 I1
2392 M 4 3576 D1
2411 H 3 3578 K1
2412 H 5 3580 H1
2421 K 4 3580 K1
2431 D 5 4002 J
2432 B 5 4002 G
2433 E13 4301 A
2434 F13 4302 N
2520 M17 5401 D1
2521 L14 5530 H1
2522 N17 5530 L1
2523 K15 6301 E1
2526 K14 6331 E1
2528 N15 6345 B
2531 H16 6361 E1
2531 K16 6382 H1
2532 G18 6382 J1
2532 K17 6411 H
3301 E 4 6421 J
3302 E 5 6422 K
3303 E 6 6518 N
3304 D 6 6519 N
3309 D 7 7302 D
3310 C 8 7303 E
3311 B 6 7304 C
3312 B 8 7305 D
3313 G 9 7331 H
3314 B12 7333 I
3315 B 7 7334 H
3316 B 7 7335 H
3331 I 4 7345 B
3332 I 5 7361 M
3333 I 6 7363 N
3334 H 6 7364 L
3338 H 7 7365 M
3340 G 8 7383 M
3341 G 6 7391 L
3342 G 8 7402 H
3343 I 9 7402 J
3344 B12 7411 G
3345 B 4 7421 J
3361 N 4 7530 H
3362 N 5 7530 L
3363 F11 7533 M
3364 G11 7534 H
3368 M 7 7534 L
3370 L 8 7536 O
3371 L 6 7536 I
3372 L 8 7537 K
3373 L 9 7538 H
3374 B12 7538 K
3375 L 7 9530 N
3376 L 7
3382 N 9
3383 L 4
3384 L 4
3385 L 5
3391 L 6
3392 K12
3392 H12
3395 H12
3395 J12
3396 G 7
3397 G 7
3411 G 4
3412 H 4
3413 G 4
3414 H 4
3415 G 5
3421 J 5
3422 J 3
3423 J 5
3431 D 4
3432 A 5
3433 D13
3434 D14
3435 E13
3436 F14
3442 M 6
3443 N 6
3446 M 4
3447 G11
3448 M10
3449 H11
3449 J11
3512 N18
3518 N18
3520 M18
3521 M17
3522 M16
3524 M14
3525 I16
3525 M14
3526 K14
3527 H15
3527 K14
3528 H17
3528 L15
3529 I17
3529 M15
3530 K15
3531 K16
3532 G17
3532 K16
3533 H16
3533 L14

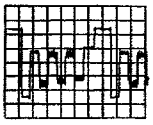
005	A 2	3534	H18
990	B16	3534	L17
801	E 5	3536	M15
831	H 5	3571	I13
844	G10	3571	K13
861	N 5	3572	H13
871	E 2	3572	J13
872	N 2	3575	N12
873	I 2	3575	I12
891	M 5	3576	I13
892	M 4	3576	O13
411	H 3	3578	K14
412	H 5	3580	H13
421	K 4	3580	K13
431	D 5	4002	J 4
432	B 5	4002	G 5
433	E13	4301	A 4
434	F13	4302	N 9
520	M17	5401	D13
521	L14	5530	H18
522	N17	5530	L17
523	K15	6301	E10
526	K14	6331	E10
528	N15	6345	B 4
531	H16	6361	E10
531	K16	6382	H11
532	G18	6382	J11
532	K17	6411	H 3
801	E 4	6421	J 4
802	E 5	6422	K 5
803	E 6	6518	N18
804	D 6	6519	N18
809	D 7	7302	D 7
810	C 8	7303	E 7
811	B 6	7304	C 9
812	B 8	7305	D 9
813	G 9	7331	H 7
814	B12	7333	I 7
815	B 7	7334	H 9
816	B 7	7335	H 9
831	I 4	7345	B 4
832	I 5	7361	M 7
833	I 6	7363	N 7
834	H 6	7364	L 9
838	H 7	7365	M 9
840	G 8	7383	M10
841	G 6	7391	L 5
842	G 8	7402	H11
843	I 9	7402	J11
844	B12	7411	G 4
845	B 4	7421	J 4
861	N 4	7530	H17
862	N 5	7530	L15
863	F11	7533	M16
864	G11	7534	H17
868	M 7	7534	L16
870	L 8	7536	O12
871	L 6	7536	I12
872	L 8	7537	K15
873	L 9	7538	H12
874	B12	7538	K12
875	L 7	9530	M17
876	L 7		
882	N 9		
883	L 4		
884	L 4		
885	L 5		
891	L 6		
892	K12		
892	H12		
895	H12		
895	J12		
896	G 7		
897	G 7		
411	G 4		
412	H 4		
413	G 4		
414	H 4		
415	G 5		
421	J 5		
422	J 3		
423	J 5		
431	D 4		
432	A 5		
433	D13		
434	D14		
435	E13		
436	F14		
442	M 6		
443	N 6		
446	M 4		
447	G11		
448	M10		
449	H11		
449	J11		
512	N18		
518	N18		
520	M18		
521	M17		
522	M16		
524	M14		
525	I16		
525	M14		
526	K14		
527	H15		
527	K14		
528	H17		
528	L15		
529	I17		
529	M15		
530	K15		
531	K16		
532	G17		
532	K16		
533	H16		
533	L14		



TP 51
130 V_{pp}
115 V_{pp} for 21"

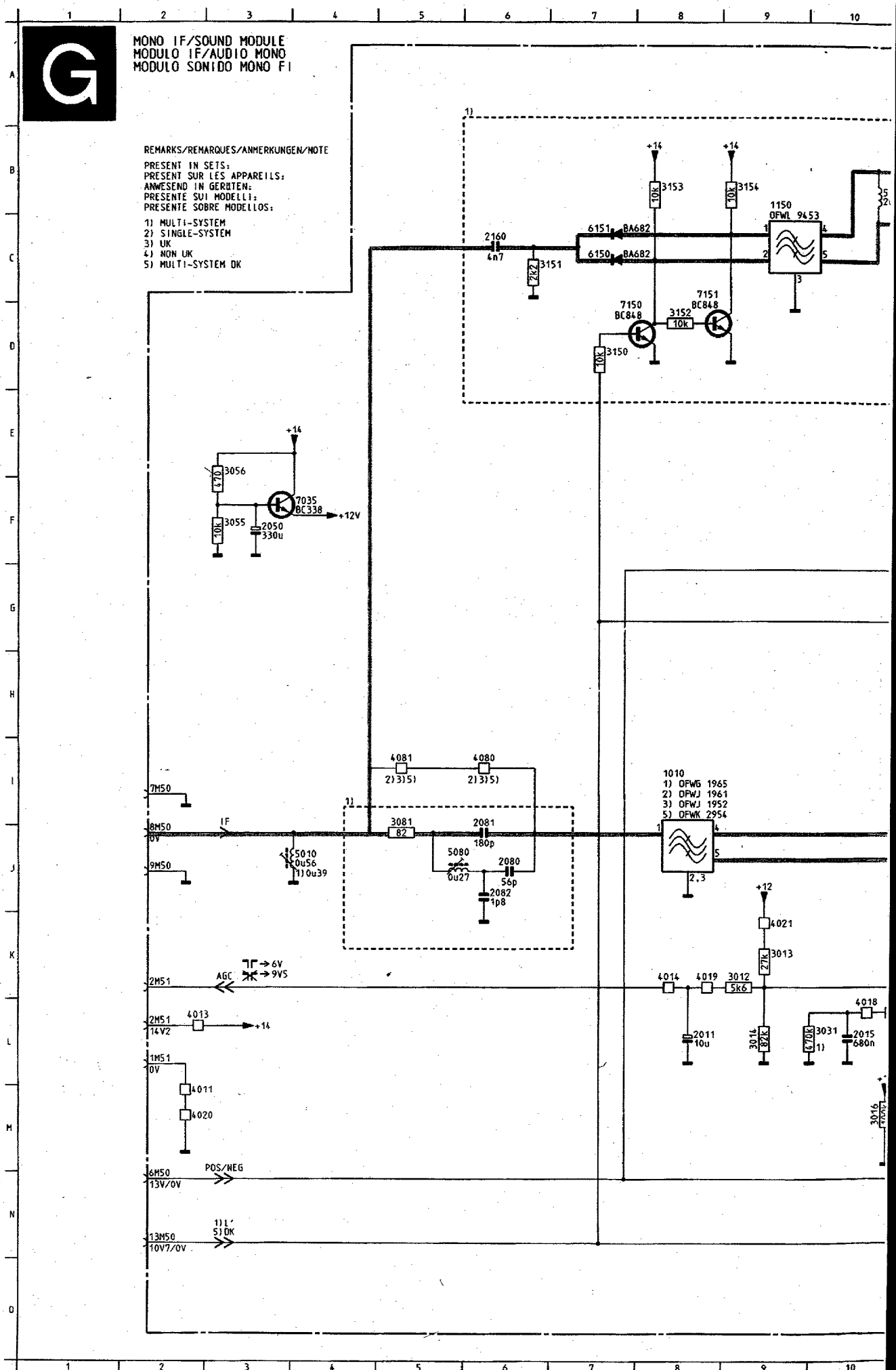


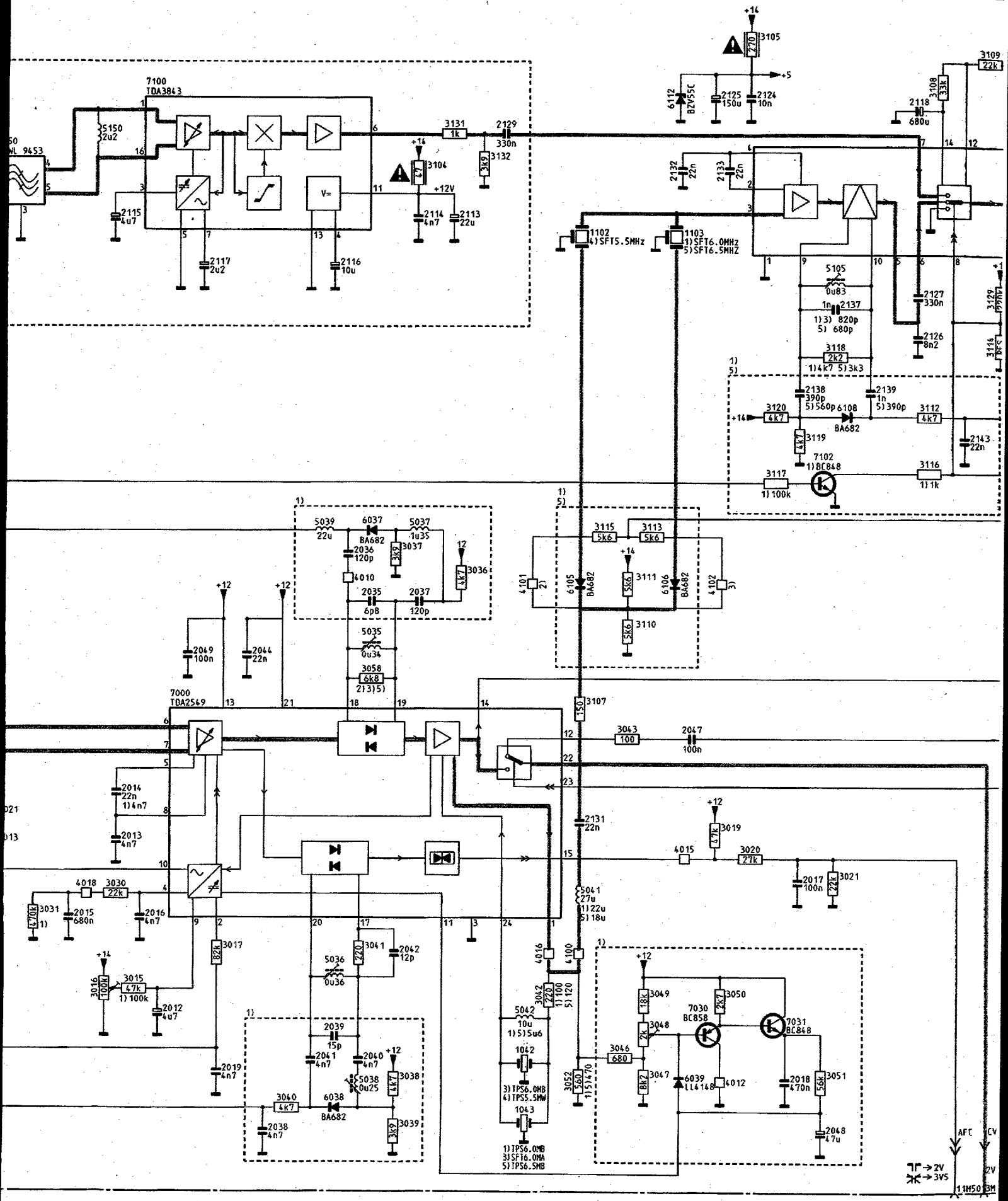
TP 52
120 V_{pp}
115 V_{pp} for 21"

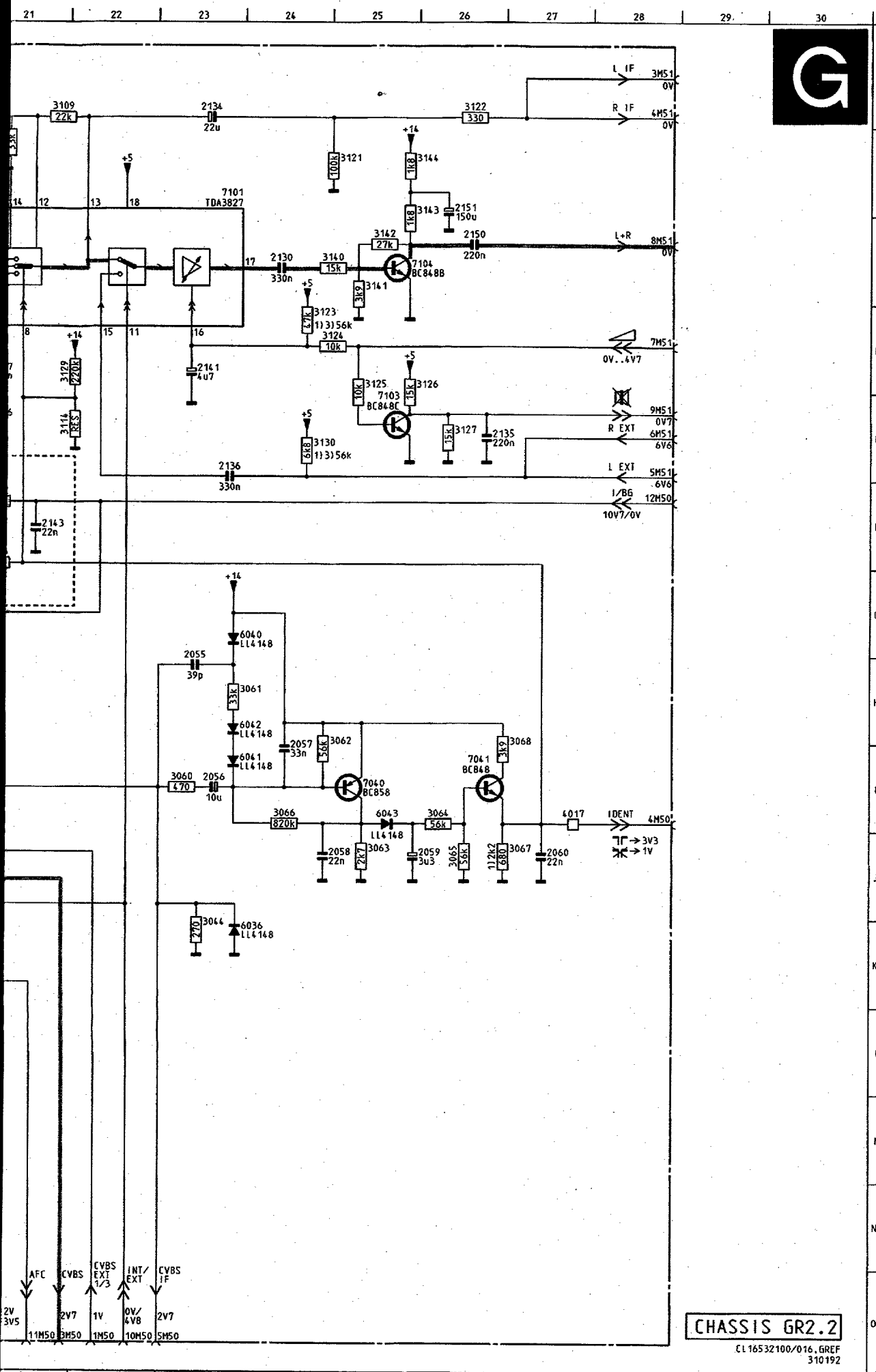


TP 53
120 V_{pp}
110 V_{pp} for 21"

Mono IF/sound module / Mono ZF/Tonmodul




7100 TDA3843
7000 TDA2549
BA682
BC848
BC858
BZV55C
BA682
LL4148
1) 100k
1) 1k
1) 4k7 5) 3k3
1) 3) 820p 5) 680p
1) 4n7
1) 22u 5) 18u
1) 5) 5u6
1) 100 5) 120
1) TPS6.0MB 3) TPS5.5MW
1) TPS6.0MB 3) SFT6.0MA 5) TPS6.5MB
1) SFT5.5MHz
1) SFT6.0MHz 5) SFT6.5MHz
1) 5)
AFC
CV
2V
→ 2V
→ 3V5

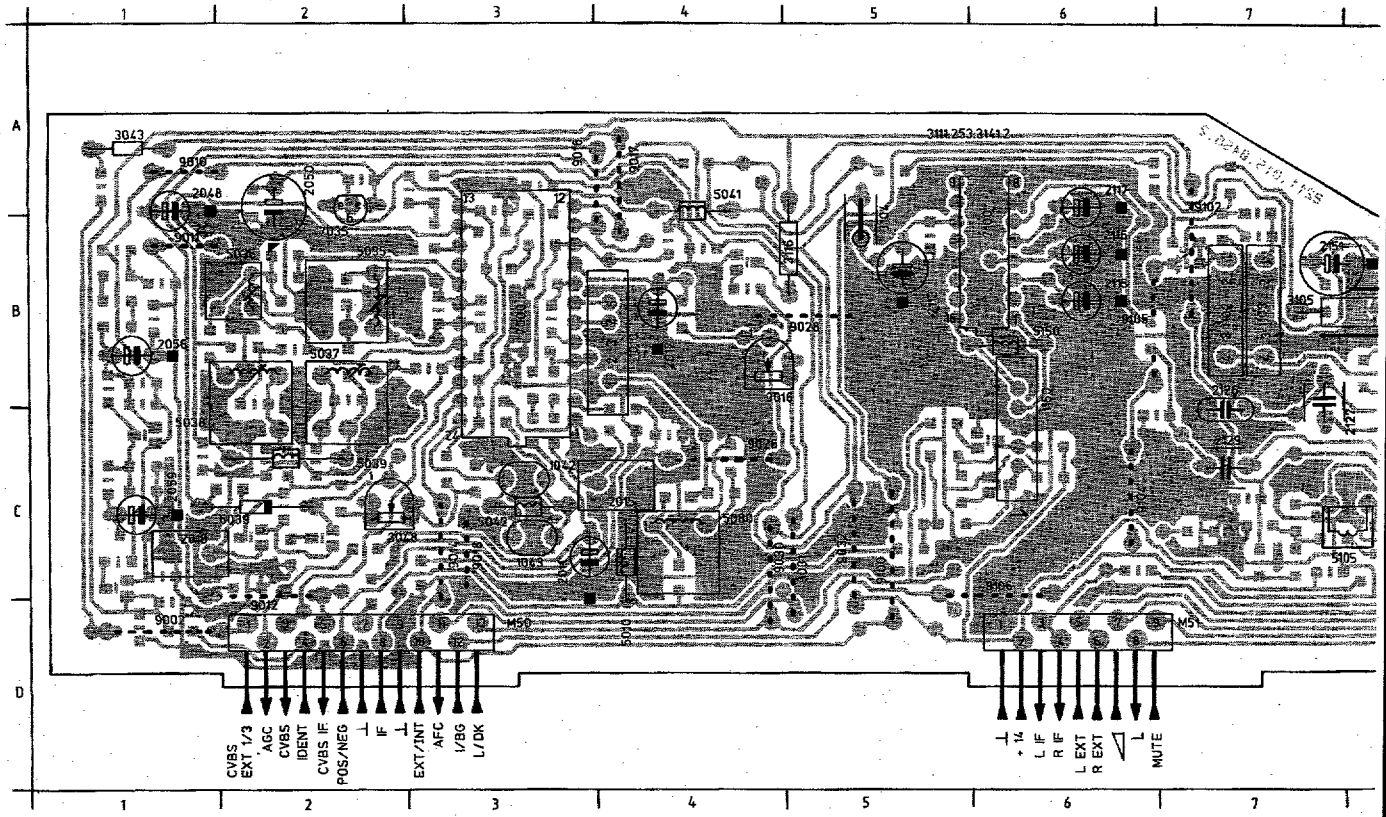


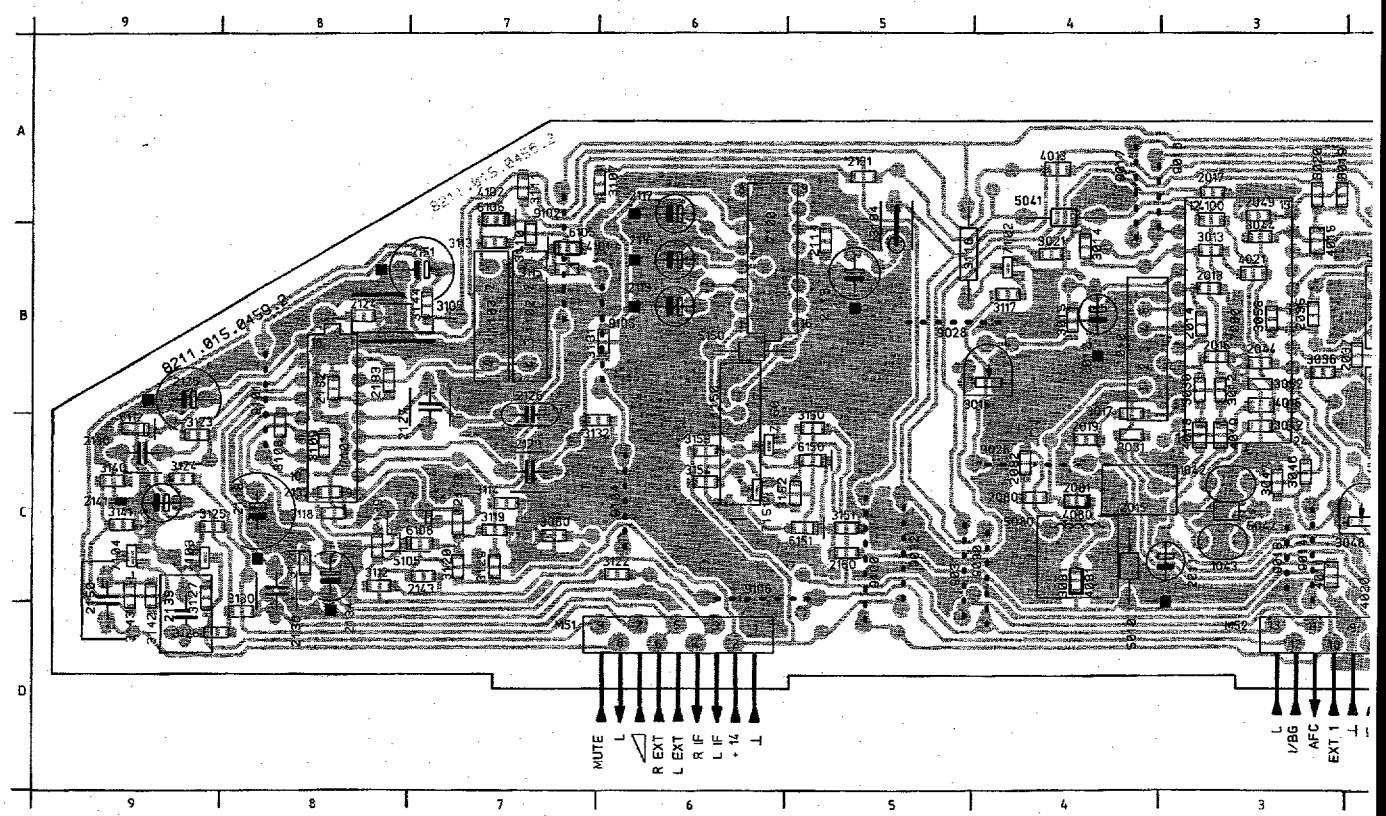
CHASSIS GR2.2

CL16532100/016.GREF
310192

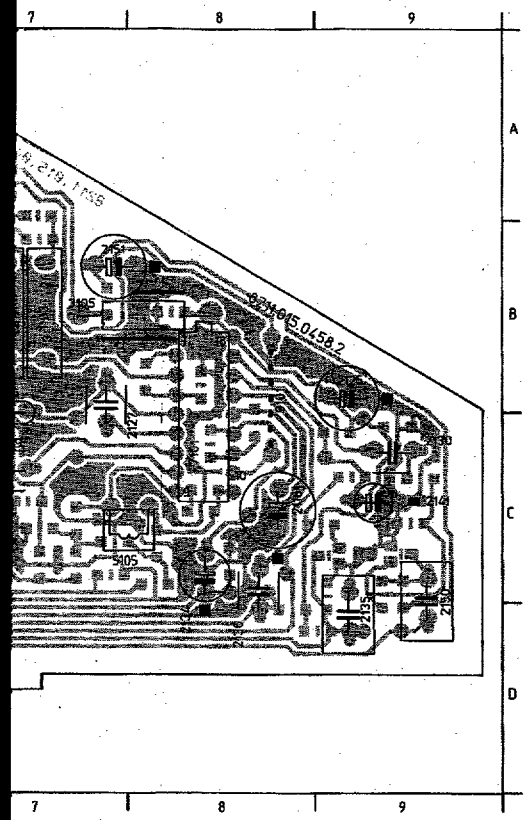
	1010	I 8	3118	E19
	1042	N16	3119	F19
	1043	N16	3120	F19
	1102	D16	3121	B25
A	1103	D18	3122	A26
	1150	B 9	3123	D24
	2011	L 8	3124	D24
	2012	M11	3125	D25
	2013	K11	3126	D25
	2014	J11	3127	E26
	2015	L10	3129	D21
	2016	L11	3130	E24
B	2017	L19	3131	B15
	2018	N19	3132	C15
	2019	N12	3140	C24
	2035	H14	3141	C25
	2036	G13	3142	C25
	2037	H14	3143	B25
	2038	O12	3144	B25
	2039	M13	3150	D 7
C	2040	N14	3151	C 6
	2041	N13	3152	D 8
	2042	L14	3153	B 8
	2044	I12	3154	B 9
	2047	J18	4010	H13
	2048	O19	4011	M 2
	2049	I11	4012	N18
D	2050	F 3	4014	K 8
	2055	H23	4015	K18
	2056	I23	4016	L16
	2057	I24	4017	I27
	2058	J24	4018	L10
	2059	J26	4019	K 8
	2060	J27	4020	M 2
	2080	J 6	4021	K 9
E	2081	J 6	4080	I 6
	2082	J 6	4081	I 5
	2113	C15	4100	L16
	2114	C14	4101	H16
	2115	C11	4102	H18
	2116	D13	5010	J 4
	2117	D12	5035	H14
F	2118	B21	5036	M13
	2124	B18	5037	G14
	2125	B18	5038	N14
	2126	E21	5039	G13
	2127	D21	5041	L16
	2129	B15	5042	M16
	2130	C24	5080	J 5
	2131	K16	5105	D19
G	2132	C17	5150	B10
	2133	C18	6036	K23
	2134	A23	6037	G14
	2135	E26	6038	N13
	2136	E23	6039	N18
	2137	D20	6040	G23
	2138	E19	6041	I23
H	2139	E20	6042	H23
	2141	D23	6043	I25
	2143	F21	6105	H16
	2150	C26	6106	H17
	2151	B26	6108	F20
	2160	C 6	6112	B17
	3012	K 9	6150	C 7
	3013	K 9	6151	C 7
I	3014	L 9	7000	L11
	3015	M11	7030	M18
	3016	M10	7031	M19
	3017	L12	7035	F 4
	3019	K18	7040	I25
	3020	K18	7041	I26
	3021	K20	7100	B11
J	3030	L11	7101	B23
	3031	L10	7102	F19
	3036	H15	7103	E25
	3037	G14	7104	C25
	3038	N14	7150	D 8
	3039	N14	7151	C 8
	3040	N13		
	3041	L14		
K	3042	M16		
	3043	J17		
	3044	J23		
	3046	N17		
	3047	N17		
	3048	M17		
	3049	M17		
L	3050	M18		
	3051	N19		
	3052	N16		
	3055	F 3		
	3056	E 3		
	3058	I14		
	3060	I23		
	3061	H23		
M	3062	H24		
	3063	J25		
	3064	I26		
	3065	J26		
	3066	I24		
	3067	J27		
	3068	H27		
	3081	J 5		
N	3104	C14		
	3105	A19		
	3107	I16		
	3108	B21		
	3109	A21		
	3110	H17		
	3111	H17		
	3112	F21		
O	3113	G17		
	3114	E21		
	3115	G17		
	3116	F21		
	3117	F19		

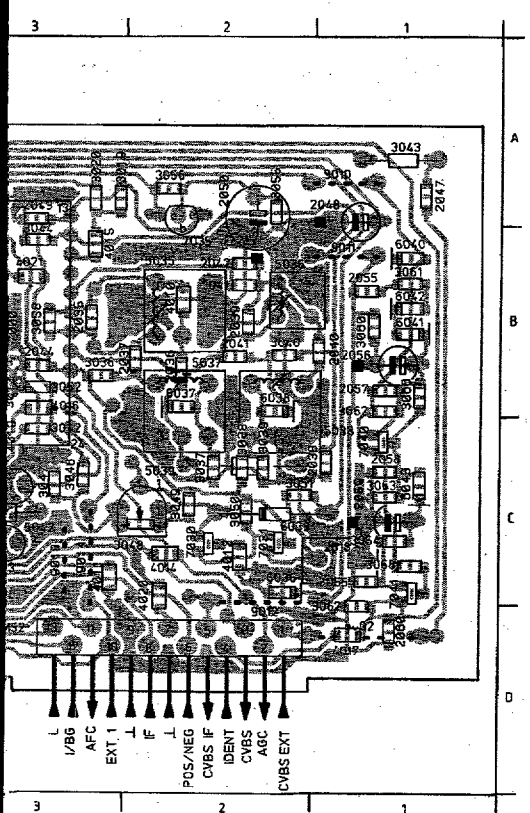
Mono IF/sound module / Mono ZF/Tonmodul /



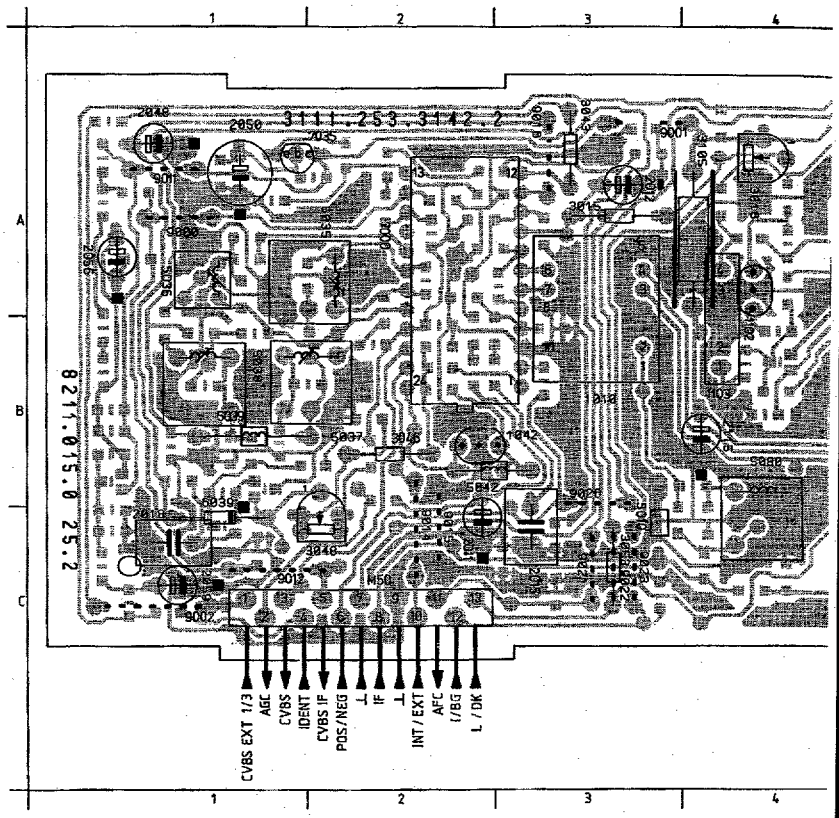


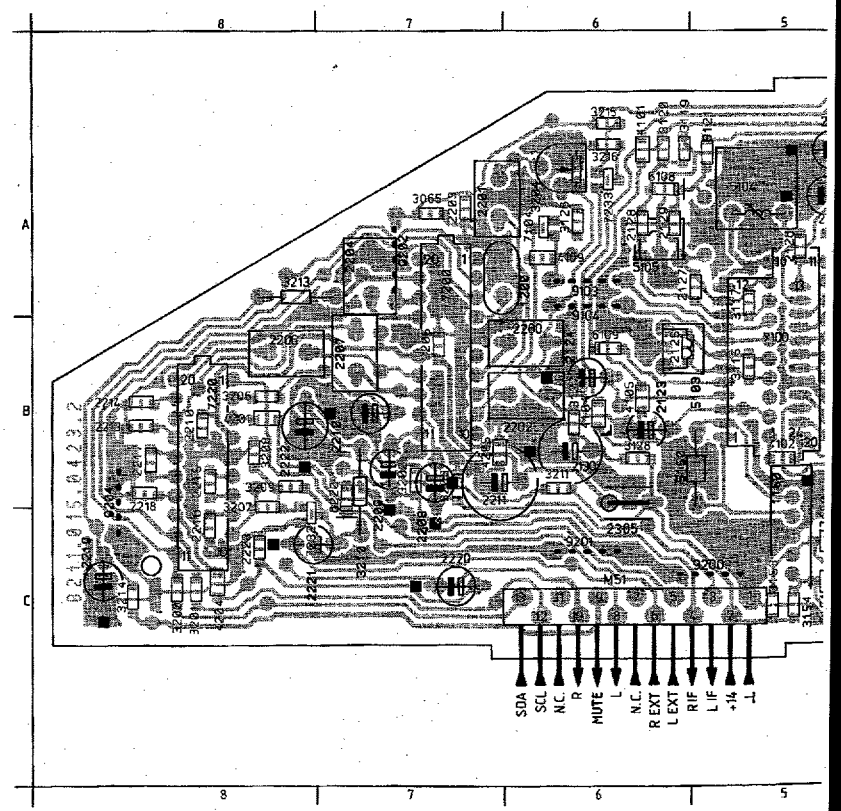
Module FI/son mono



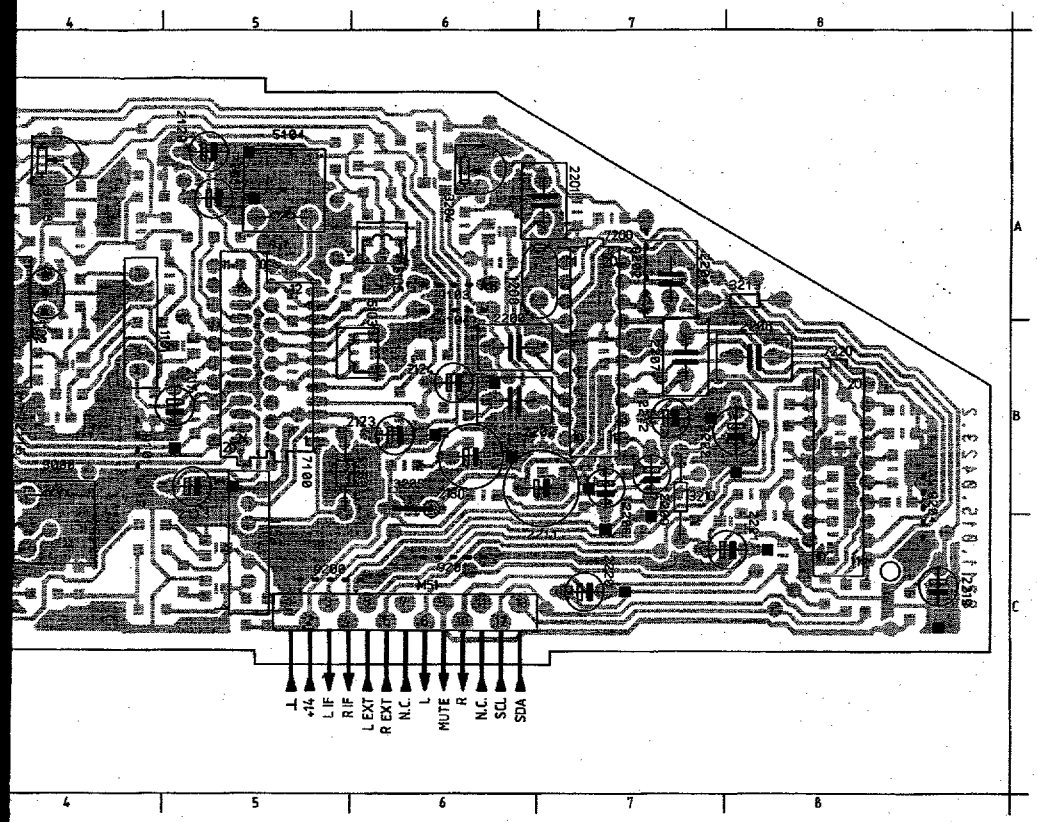


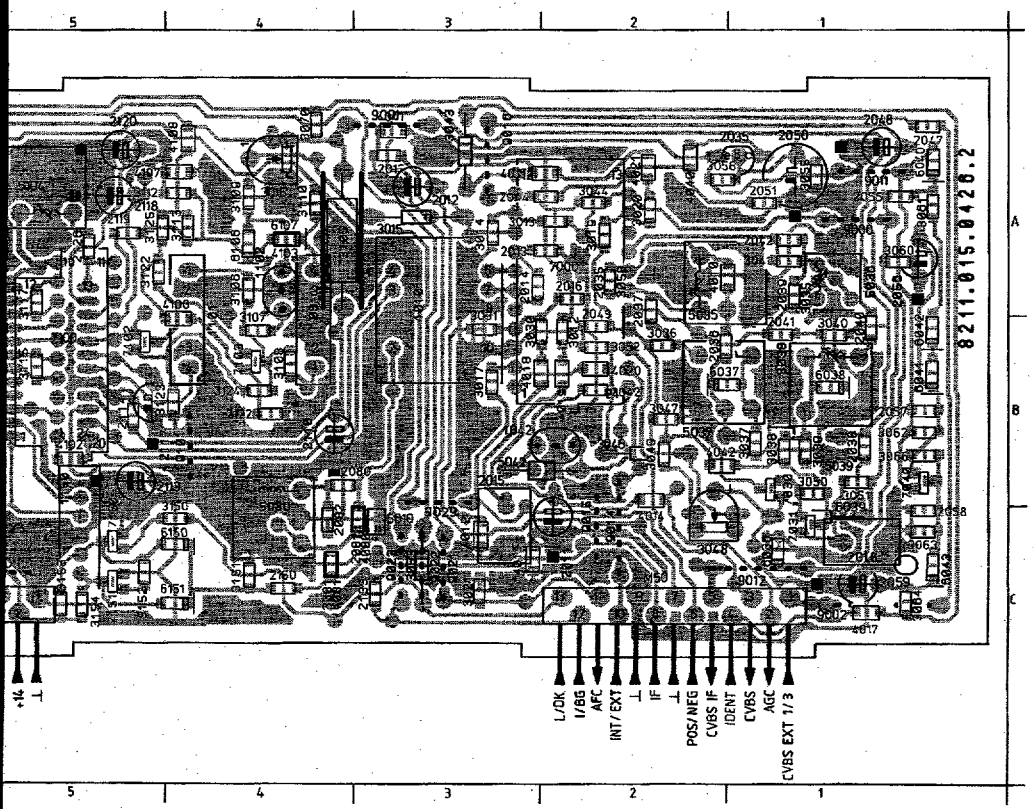
M50	D2	3108	C9
M51	D6	3109	C8
1010	B4	3110	B7
1042	C3	3111	A7
1043	C3	3112	C8
1102	B7	3113	B7
1103	B7	3114	C7
1150	C6	3115	B7
2011	C4	3116	B5
2012	B4	3117	B5
2013	B4	3118	C8
2014	B4	3119	C7
2015	C4	3120	C8
2016	B4	3121	C8
2017	A4	3122	C7
2018	C2	3123	C9
2019	C4	3124	C9
2035	B3	3125	C9
2036	B3	3126	D9
2037	B3	3127	C9
2038	C2	3129	C7
2039	B2	3130	D9
2040	B2	3131	B7
2041	B2	3132	C7
2042	B2	3140	C9
2044	B3	3141	C9
2047	A1	3142	C9
2048	A2	3143	C9
2049	A3	3144	B8
2050	A2	3150	C6
2055	B2	3151	C6
2056	B1	3152	C8
2057	B1	3153	C6
2058	C1	3154	C6
2059	C1	4010	B3
2060	D1	4011	C3
2080	C5	4012	C2
2081	C4	4013	A4
2082	C5	4014	C3
2113	B6	4015	B3
2114	B6	4016	B3
2115	B6	4017	D2
2116	B6	4018	C4
2117	A6	4019	C4
2118	C9	4020	C3
2124	B8	4021	B3
2125	B9	4080	C4
2126	B7	4081	C4
2127	B8	4100	A4
2129	C7	4101	B7
2130	C9	4102	A7
2131	A5	5010	C4
2132	B8	5035	B3
2133	B8	5036	B2
2134	C8	5037	B3
2135	D9	5038	B2
2136	C9	5039	C2
2137	C8	5041	A4
2138	C8	5042	C4
2139	C8	5080	C4
2141	C9	5105	C8
2143	C8	5150	B6
2150	C9	6036	C2
2151	B8	6037	B3
2160	C6	6038	B2
3012	B4	6039	C2
3013	B4	6040	B1
3014	B4	6041	B1
3015	B4	6042	B1
3016	B5	6043	C1
3017	B4	6105	B7
3019	A3	6106	A7
3020	A3	6108	C8
3021	B4	6112	C9
3030	B4	6150	C6
3031	C4	6151	C6
3036	B3	7000	C4
3037	C2	7030	C2
3038	C2	7031	C2
3039	C2	7035	A3
3040	B2	7040	C2
3041	B2	7041	C1
3042	C3	7100	B6
3044	B3	7101	B8
3046	C3	7102	B5
3047	C3	7103	C9
3048	C3	7104	C9
3049	C3	7150	C6
3050	C2	7151	C6
3051	C2	9002	D2
3052	B3	9010	A2
3055	A2	9011	B2
3056	A3	9012	C2
3058	B3	9014	C3
3060	B2	9016	A4
3061	B1	9017	A4
3062	B1	9018	C3
3063	C1	9026	C5
3064	C1	9028	B5
3065	C2	9030	C5
3066	B1	9031	C5
3067	C2	9032	C5
3068	C1	9100	C5
3080	C7	9101	B9
3081	C4	9102	B7
3104	A5	9104	C7
3105	B8	9105	B7
3107	A7	9106	C6


3111.253.3142.2
8211.015.0252.2
CVBS EXT 1/3
AGC
CVBS
IDENT
CVBS IF
POS./NEG
⊥
IF
⊥
INT / EXT
AFC
I/BG
L / DK


8211.015.0422.2
SDA
SCL
N.C.
R
MUTE
L
N.C.
R EXT
L EXT
RIF
L IF
+14
⊥

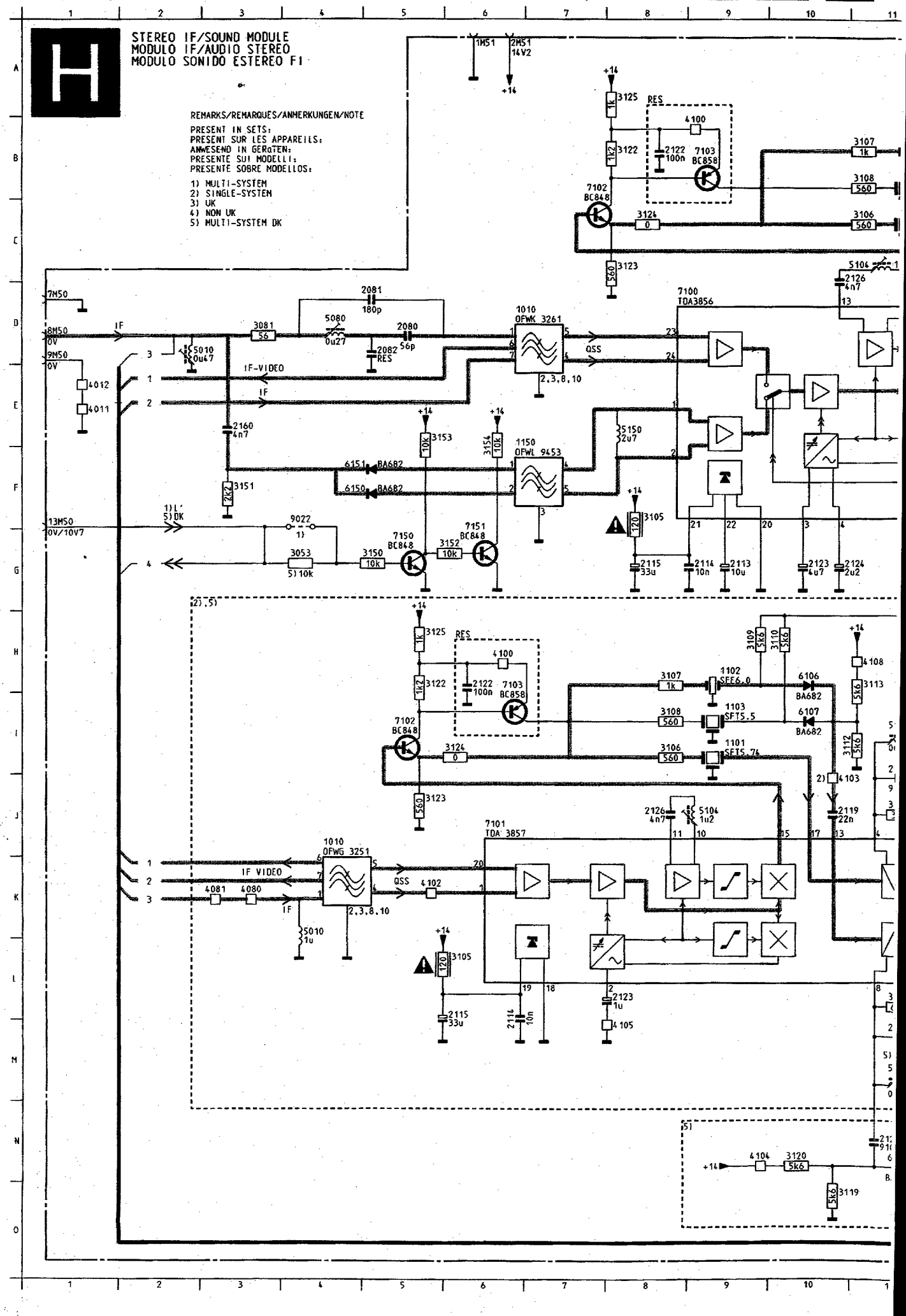
Module FI/son stéréo



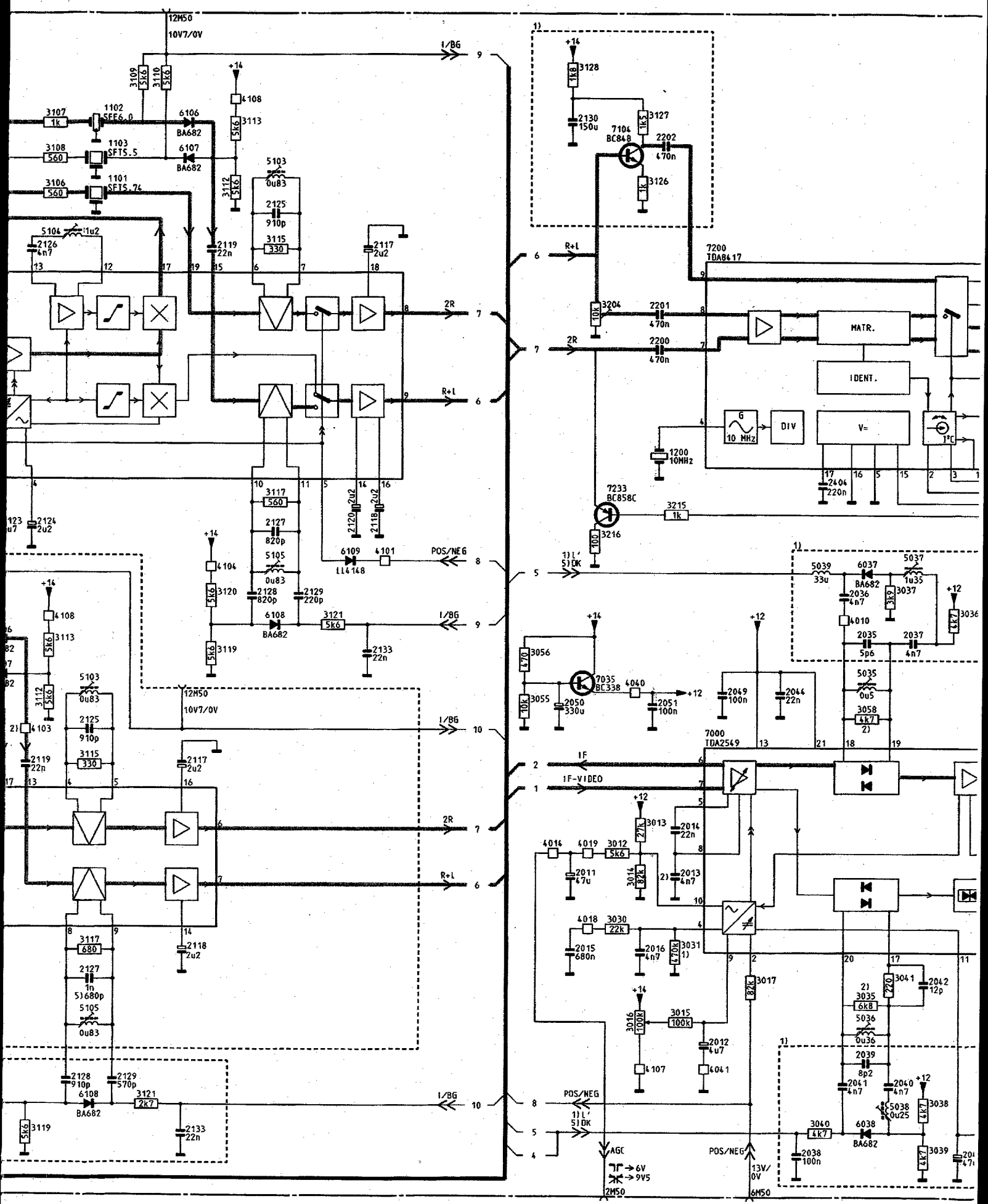


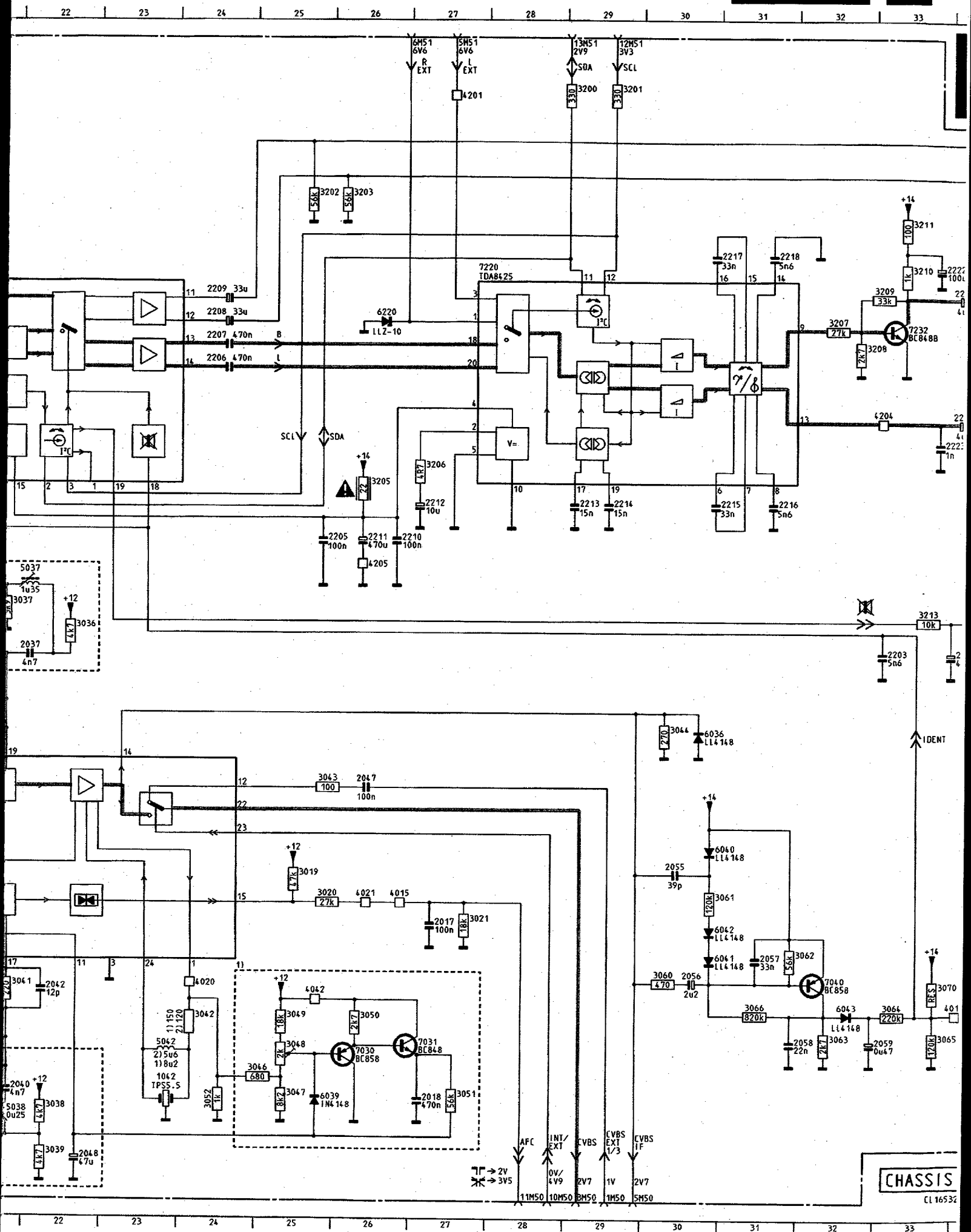
M50 C2
M51 C6
1010 B4
1042 B3
1101 A5
1102 A4
1103 B4
1150 C5
1200 A7
2011 C3
2012 A3
2013 A3
2014 A3
2015 C3
2016 A3
2017 A4
2018 C1
2035 A2
2036 B2
2037 A2
2038 B1
2039 A1
2040 B1
2041 B1
2042 A1
2044 A3
2048 A1
2049 B2
2050 A1
2051 A2
2055 A1
2056 A1
2057 B1
2058 C1
2059 C1
2080 B4
2081 C4
2082 C4
2113 B5
2114 B5
2115 B4
2117 B5
2118 A5
2119 A5
2120 A5
2122 B4
2123 B6
2124 B6
2125 B6
2126 A5
2127 A6
2128 A6
2129 A6
2130 B6
2133 C4
2160 C4
2200 B7
2201 A7
2202 B7
2203 A7
2204 A7
2205 B7
2206 B8
2207 B8
2208 B7
2209 B7
2210 B8
2211 B7
2212 B7
2213 B9
2214 B9
2215 B8
2216 C8
2217 B9
2218 B9
2219 C9
2220 C7
2221 C8
2222 B8
2223 C8
3012 B3
3013 A3
3014 A3
3015 A3
3016 A4
3017 B3
3019 A2
3020 A2
3021 C3
3030 B3
3031 B3
3035 A1
3036 B2
3037 B2
3038 B1
3039 B1
3040 B1
3041 A1
3042 B2
3043 A3
3044 A2
3046 B2
3047 B2
3048 C2
3049 B2
3050 B1
3051 B1
3052 B2
3053 C3
3055 A1
3056 A2
3058 A2
3060 A1
3061 A1
3062 B1
3063 C1
3064 C1
3065 A7
3066 B1
3070 A4
3081 C4
3105 A4
3106 A4
3107 B4
3108 B4
3109 A4
3110 A4
3112 A5
3113 A5
3115 B5
3117 A5
3119 A6
3120 A6
3121 A6
3122 A5
3123 B5
3124 B4
3125 A5
3126 A6
3127 B6
3128 B6
3150 C5
3151 C4
3152 C5
3153 C5
3154 C5
3200 C9
3201 C8
3202 B7
3203 B7
3204 A6
3205 C6
3206 B8
3207 C8
3208 B8
3209 B8
3210 B8
3211 B6
3213 A8
3214 C9
3215 A6
3216 A6
4010 A2
4011 C3
4012 C3
4014 B2
4015 A3
4017 C1
4018 B3
4019 B3
4020 B2
4021 A2
4040 A2
4041 A4
4042 B2
4080 C4
4081 C4
4100 B5
4101 A6
4102 B5
4103 A4
4104 B6
4105 B6
4107 A5
4108 A5
4109 A7
4201 B8
4204 C8
4205 B7
5010 C4
5035 A2
5036 A1
5037 B2
5038 B1
5039 B1
5042 B3
5080 C4
5103 B6
5104 A5
5105 A6
5150 B6
6036 C2
6037 B2
6038 B1
6039 C1
6040 A1
6041 B1
6042 B1
6043 C1
6106 A4
6107 A4
6108 A6
6109 B6
6150 C5
6151 C5
6220 B8
7000 B3
7030 B2
7031 C1
7035 A2
7040 B1
7100 B5
7102 B5
7103 B4
7104 A7
7150 C5
7151 C5
7200 A7
7220 B8
7232 C8
7233 A6
9000 A1
9001 A4
9002 C1
9011 A1
9012 C2
9014 C2
9015 C2
9016 A3
9021 C3
9022 C3
9023 C4
9026 C3
9101 B5
9103 A6
9104 A6
9200 C6
9201 C6
9202 A7
9204 C9

Stereo IF/sound module / Stereo ZF/Tonmodul /



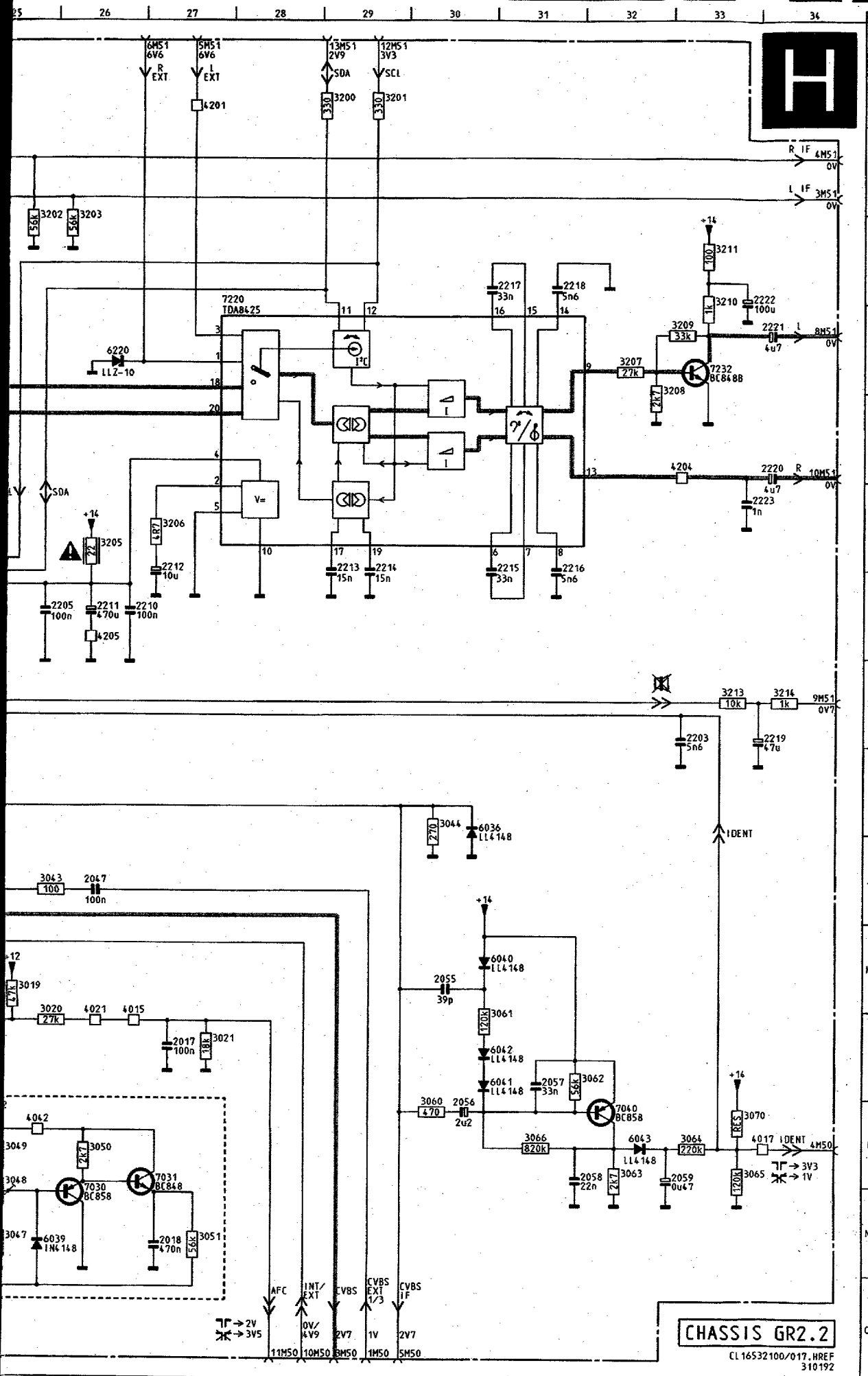
Module FI/son stéréo





CHASSIS

CL 16532

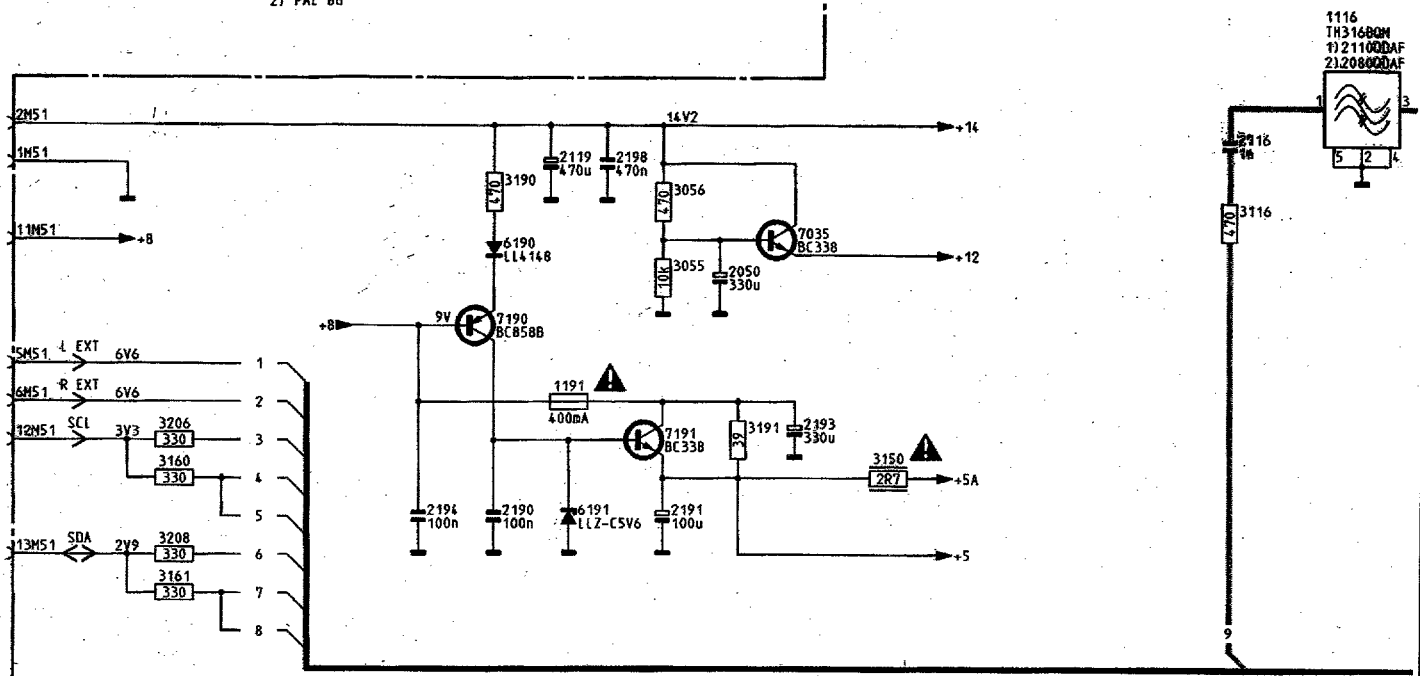


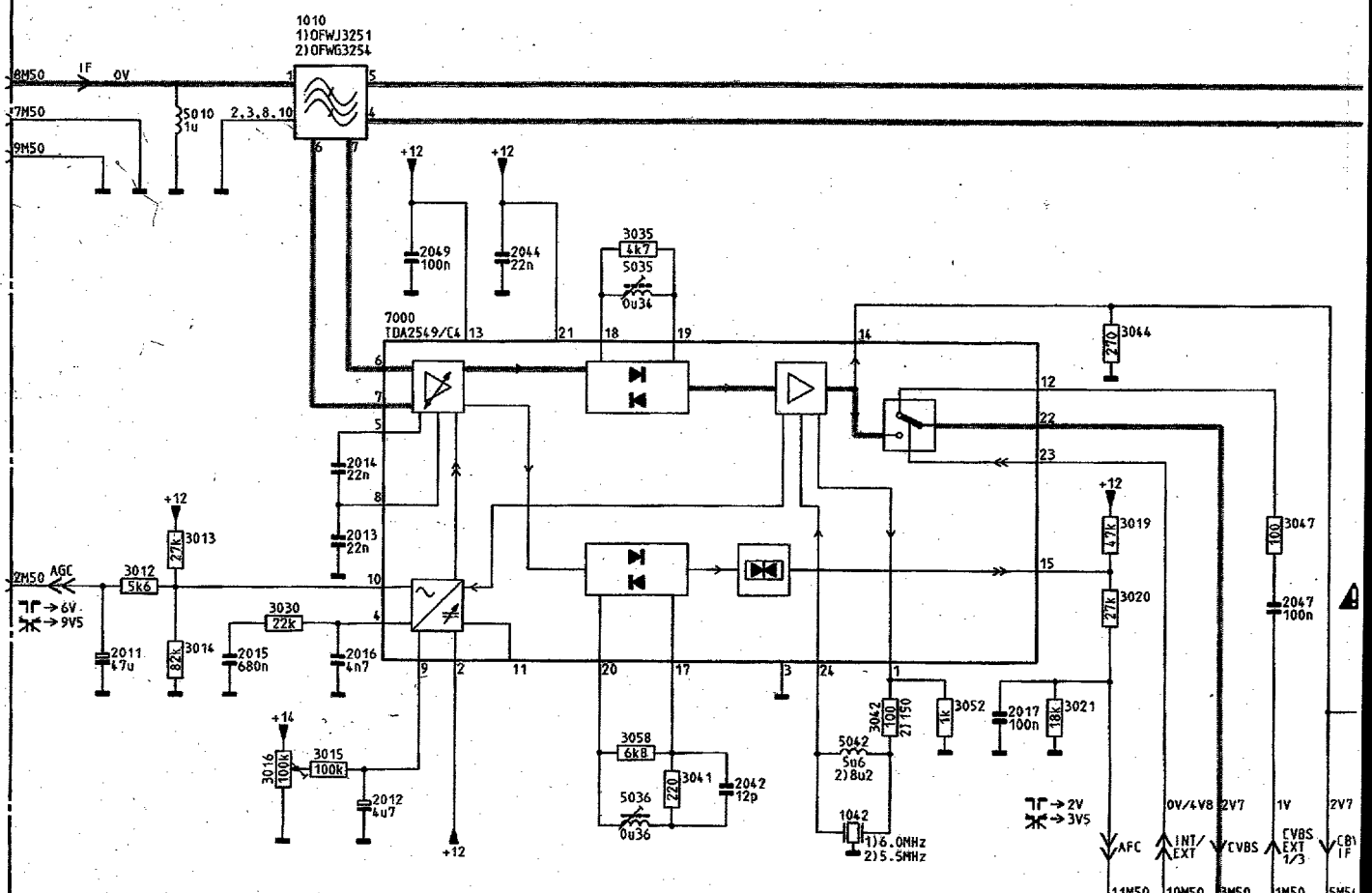
1010	D 6	3044	I30	5080	D 4
1010	J 4	3046	N25	5103	B13
1042	N23	3047	N25	5103	I 11
1101	C11	3048	M25	5104	J 9
1101	I 9	3049	M25	5104	C11
1102	B11	3050	M26	5105	G13
1102	H 9	3051	N27	5105	M11
1103	B11	3052	N24	5150	E 8
1103	I 9	3053	G 4	6036	I30
1150	F 6	3055	I17	6037	G21
1200	F18	3056	I17	6038	O21
2011	K17	3058	I21	6039	N25
2012	N19	3060	M30	6040	K30
2013	K19	3061	K30	6041	L30
2014	K19	3062	L31	6042	L30
2015	L17	3063	M32	6043	M32
2016	L18	3064	M33	6106	B12
2017	L27	3065	M33	6106	H10
2018	N27	3066	M31	6107	B12
2035	H21	3070	M33	6107	I10
2036	H21	3081	D 3	6108	H13
2037	H22	3105	F 8	6108	N11
2038	O20	3105	L 6	6109	G14
2039	N21	3106	C11	6150	F 5
2040	N21	3106	I 8	6151	F 5
2041	N21	3107	B11	6220	D26
2042	M22	3107	H 8	7000	J19
2044	I20	3108	B11	7030	N26
2047	J26	3108	I 8	7031	M27
2048	O22	3109	A12	7035	I18
2049	I19	3109	H 9	7040	M32
2050	I17	3110	A12	7100	D 8
2051	I18	3110	H10	7101	J 6
2055	K30	3112	C13	7102	B 7
2056	M30	3112	I11	7102	I 5
2057	L31	3113	B13	7103	B 9
2058	M31	3113	H11	7103	H 6
2059	M33	3115	C13	7104	B18
2080	D 5	3115	J11	7150	G 5
2081	D 5	3117	G13	7151	G 6
2082	D 5	3117	L11	7200	D19
2113	G 9	3119	I13	7220	D27
2114	G 9	3119	O10	7232	D33
2114	L 6	3120	H13	7233	G18
2115	G 8	3120	N10	9022	F 4
2115	L 6	3121	H14		
2117	C15	3121	N12		
2117	J12	3122	B 8		
2118	G15	3122	H 5		
2118	L12	3123	C 8		
2119	C13	3123	J 5		
2119	J10	3124	C 8		
2120	G14	3124	I 6		
2122	B 8	3125	A 8		
2122	H 6	3125	H 5		
2123	G10	3126	C18		
2123	L 8	3127	B18		
2124	G10	3128	A17		
2125	C13	3150	G 5		
2125	I11	3151	F 3		
2126	C10	3152	G 6		
2126	J 8	3153	E 5		
2127	G13	3154	E 6		
2127	M11	3200	A29		
2128	H13	3201	A29		
2128	N11	3202	B25		
2129	H14	3203	B26		
2129	N11	3204	D18		
2130	B17	3205	F26		
2133	I15	3206	F27		
2133	O12	3207	D32		
2160	E 3	3208	D32		
2200	E18	3209	D33		
2201	D18	3210	C33		
2202	B18	3211	C33		
2203	H33	3213	H33		
2205	G25	3214	H34		
2206	E24	3215	G19		
2207	D24	3216	G18		
2208	D24	4010	H21		
2209	D24	4011	E 1		
2210	G26	4012	E 1		
2211	G26	4014	K17		
2212	G27	4015	L26		
2213	G29	4017	M34		
2214	G29	4018	L17		
2215	G31	4019	K17		
2216	G31	4020	M24		
2217	C31	4021	L26		
2218	C31	4040	I18		
2219	H34	4041	N19		
2220	E34	4042	M25		
2221	D34	4080	K 3		
2222	C33	4081	K 3		
2223	F33	4100	B 9		
2404	F20	4100	H 6		
3012	K18	4101	G15		
3013	K18	4102	K 5		
3014	K18	4103	J10		
3015	M19	4104	G13		
3016	M18	4104	N 9		
3017	M20	4105	M 8		
3019	K25	4107	N18		
3020	L25	4108	B13		
3021	L27	4108	H11		
3030	L18	4201	A27		
3031	L19	4204	E33		
3035	M21	4205	G26		
3036	H22	5010	K 4		
3037	H21	5010	D 2		
3038	N22	5035	I21		
3039	O22	5036	M21		
3040	O20	5037	G22		
3041	M21	5038	N21		
3042	N24	5039	H20		
3043	J25	5042	M23		

REMARKS/REMARQUES/ANMERKUNGEN/NOTE

PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERÄTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:

1) PAL I
2) PAL BG

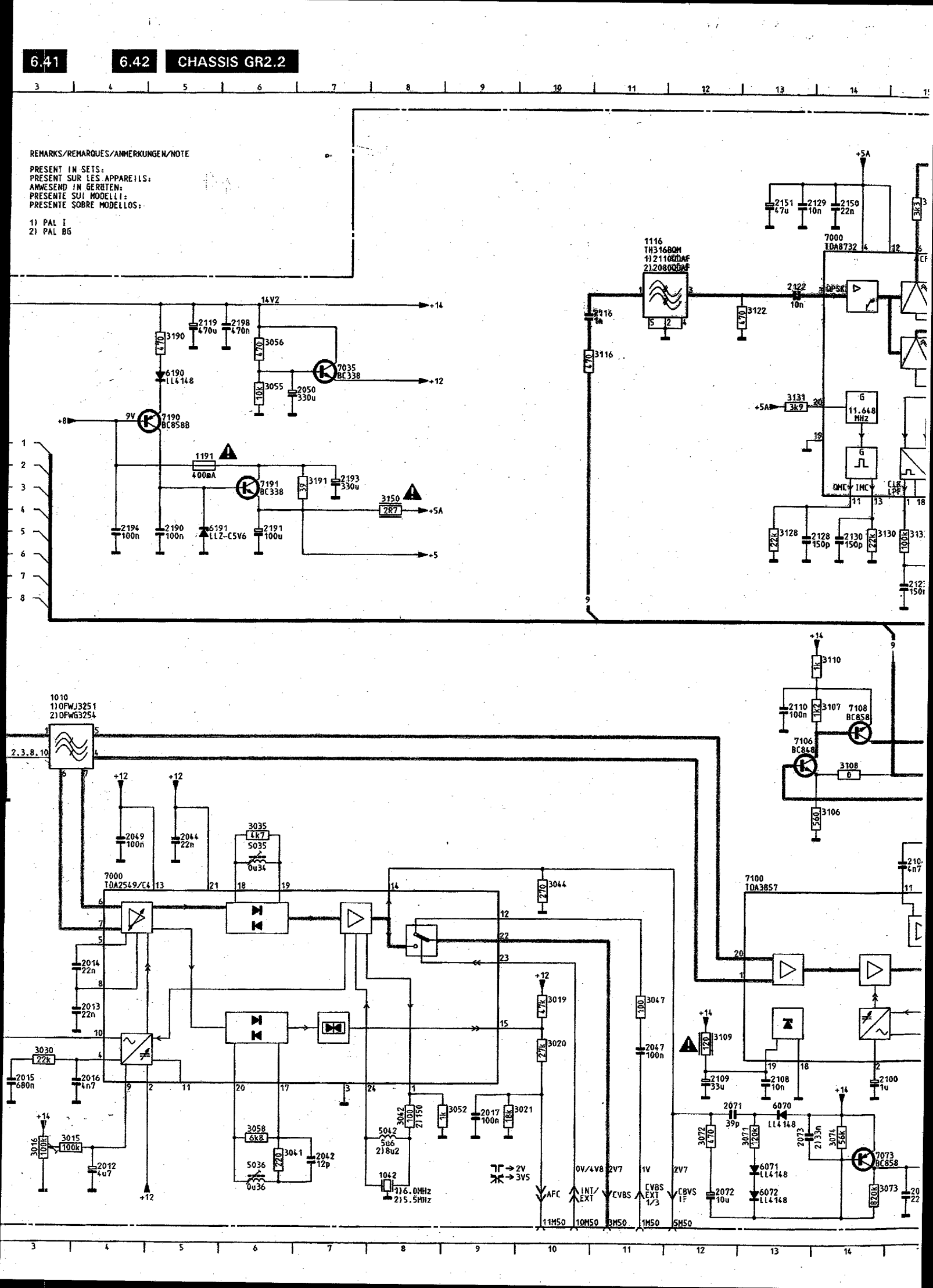


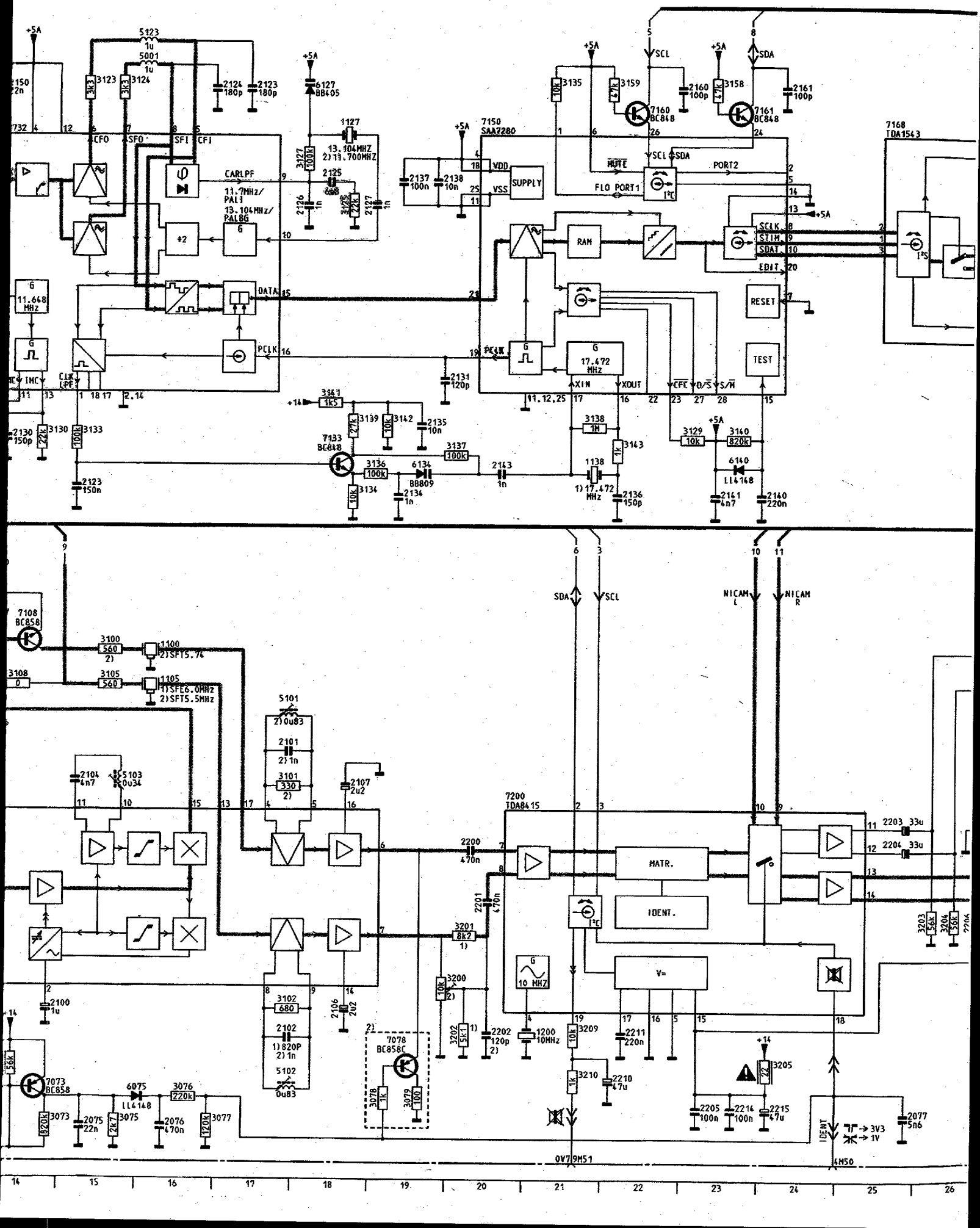


REMARKS/REMARQUES/ANMERKUNGEN/NOTE

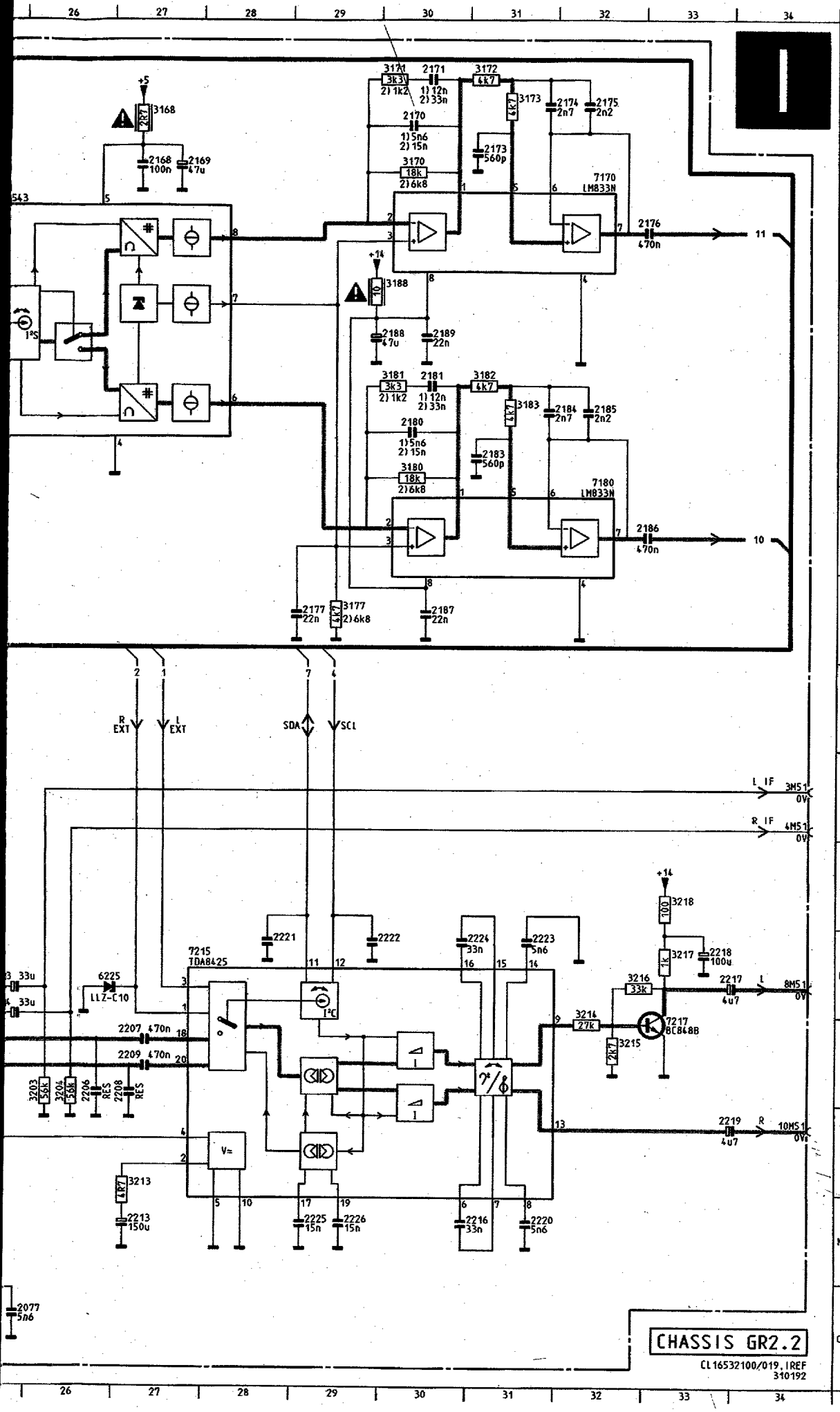
PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERÄTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:

1) PAL I
2) PAL BG



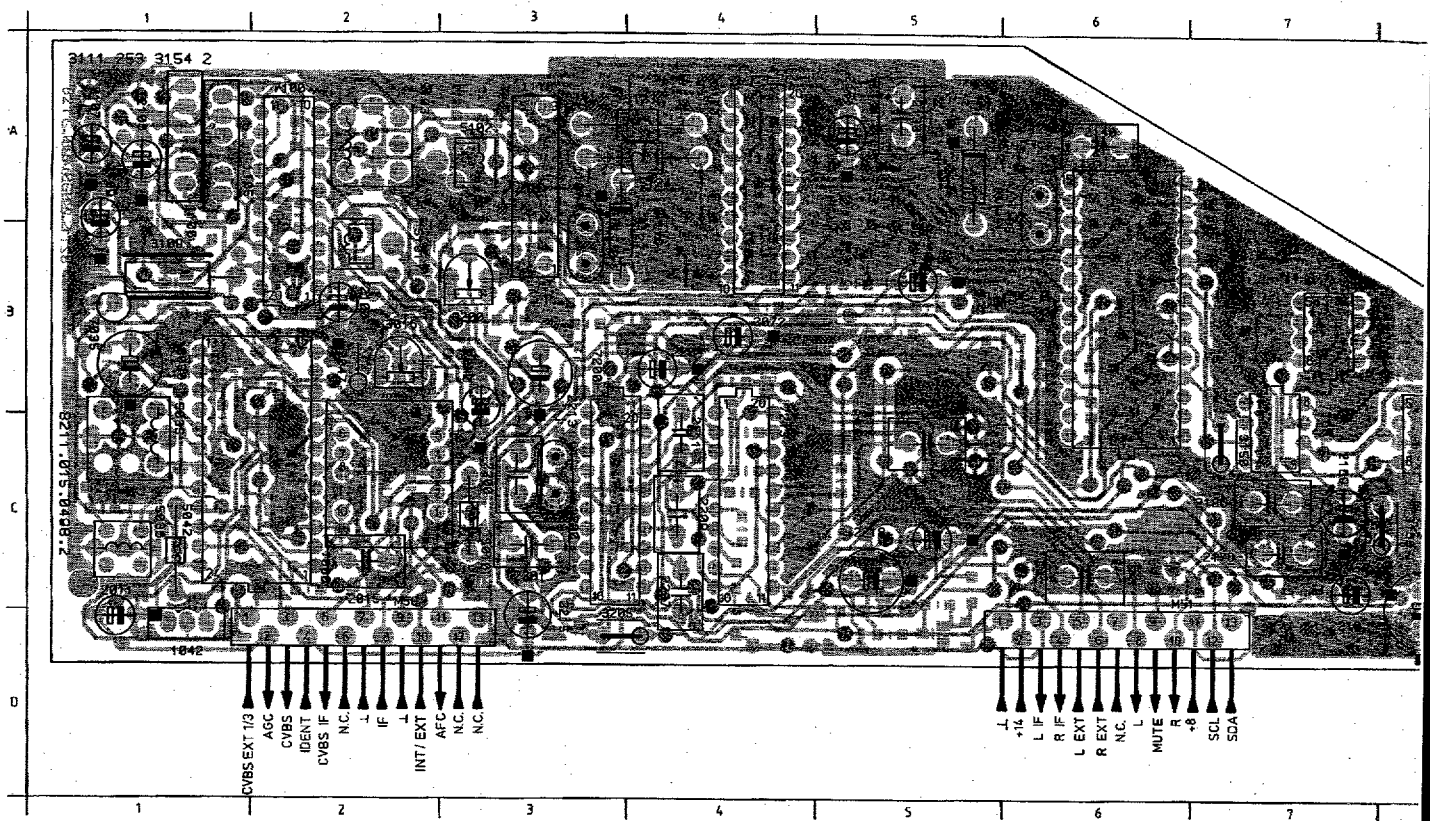

+5A
5123
1u
5001
1u
3123
3124
2124
180p
2123
180p
6127
BB405
1127
13.104MHZ
2)13.700MHZ
3127
100k
2125
2126
1n
2127
1n
CARLPF
11.7MHz/
PAL1
13.104MHz/
PALBG
÷2
÷G
DATA
PCLK
CLK
(PF)
11.648
MHz
2130
150p
3130
22k
3133
100k
2123
150n
2131
120p
7150
SAA7280
VDD
VSS
SUPPLY
RAM
RESET
TEST
SCL
SDA
MUTE
PORT2
FLO PORT1
I²C
SCLK
STIM
SDAT
EDIT
I²S
7168
TDA1543
3135
10K
3159
47k
7160
BC848
2160
100p
3158
47k
7161
BC848
2161
100p
17.472
MHz
XIN
XOUT
CFE
D/S
S/M
3138
1M
3143
1k
1138
1) 17.472
MHz
2136
150p
3129
10k
3140
820k
6140
LL4148
2141
4n7
2140
220n
3141
1k5
3139
27k
3142
10k
2135
10n
7133
BC848
3137
100k
3136
100k
6134
BB809
2134
1n
3134
10k
2163
1n
7108
BC858
3100
560
2)
1100
2)SFT5.74
3108
0
3105
560
1105
1)SFE6.0MHz
2)SFT5.5MHz
5101
2)0u83
2101
2) 1n
3101
330
2)
2104
4n7
5103
0u34
2107
2u2
7200
TDA8415
SDA
SCL
NICAM
L
NICAM
R
MATR.
IDENT.
V=
2200
470n
2201
470n
3201
8k2
1)
3200
10k
2)
3202
5k1
1)
2202
120p
2)
1200
10MHz
3209
10k
2211
220n
3210
1k
2210
47u
3205
22
2205
100n
2214
100n
2215
47u
2203
33u
2204
33u
3203
56k
3204
56k
2077
5n6
IDENT
→ 3V3
→ 1V
4M50
0V719M51
2100
1u
3102
680
2102
1) 820P
2) 1n
5102
0u83
2106
2u2
7078
BC858C
3078
1K
3079
100
7073
BC858
6075
LL4148
3076
220k
3073
820k
2075
22n
3075
2k7
2076
470n
3077
120k

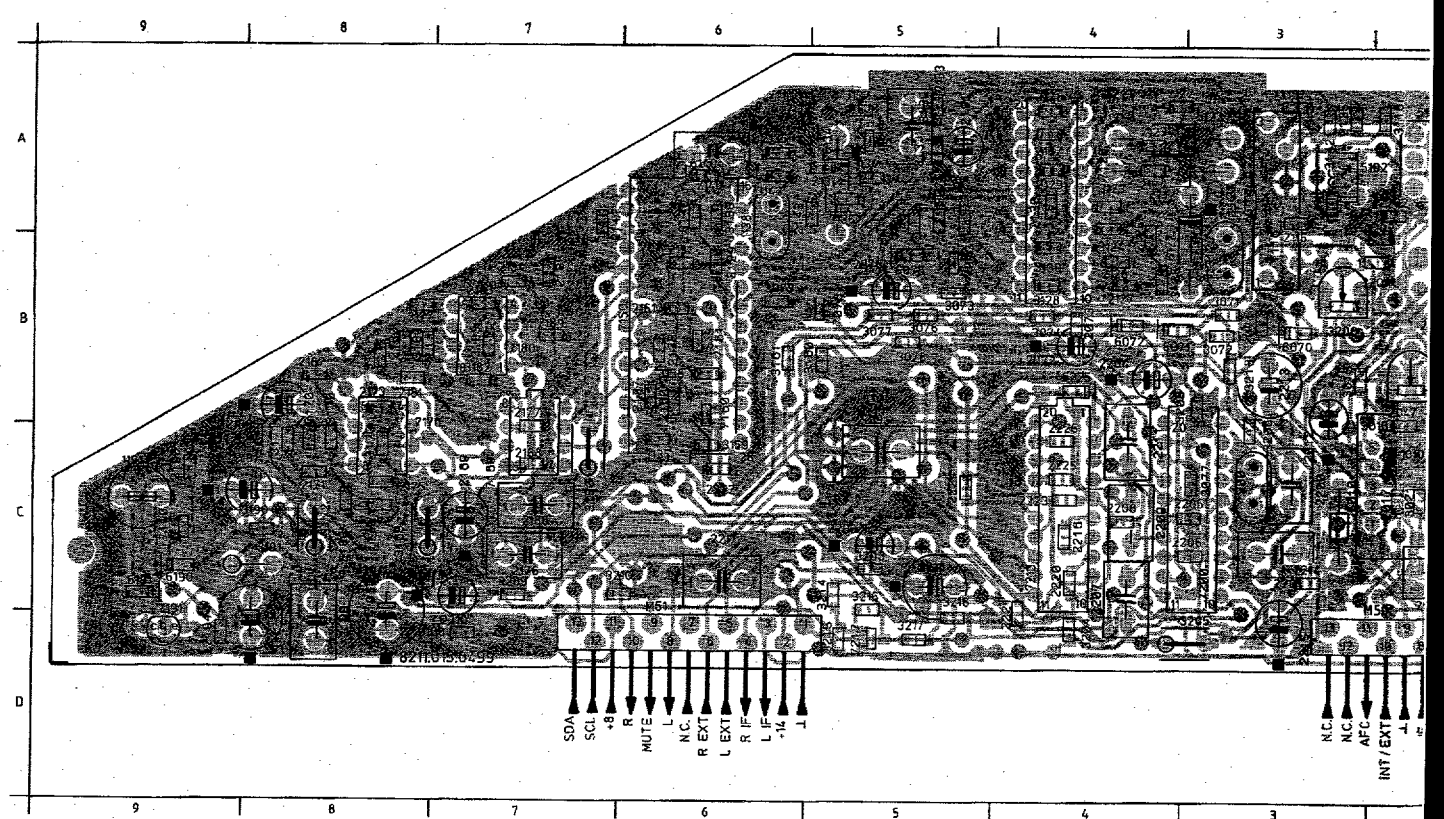
Module FI/son NICAM



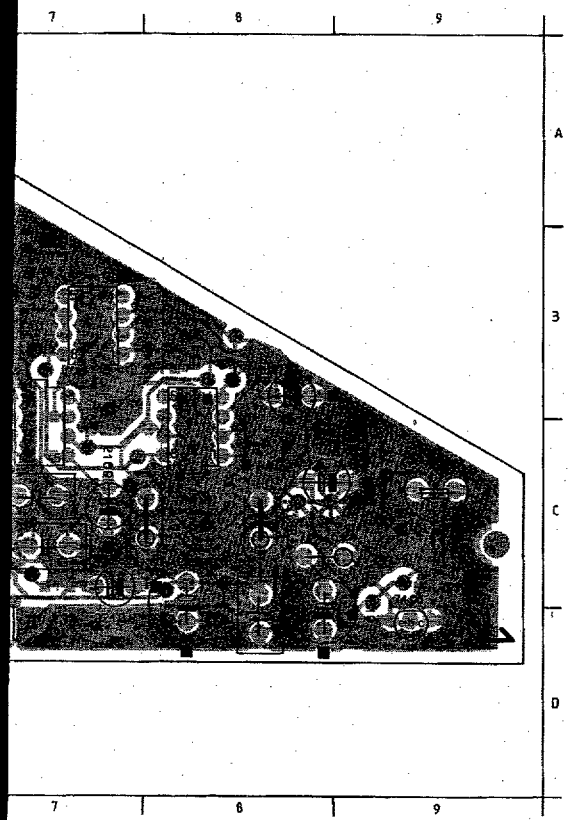
	1010	H 3	3020	M10	7168	B25
	1042	O 8	3021	N 9	7170	B32
	1100	I 16	3030	M 3	7180	F32
	1105	I 16	3035	J 6	7190	E 5
A	1116	B11	3041	N 6	7191	F 6
	1127	B18	3042	N 8	7200	K20
	1138	G21	3044	K10	7215	K27
	1191	E 5	3047	L11	7217	L33
	1200	N21	3052	N 9		
	2011	N 2	3055	D 6		
	2012	O 4	3056	D 6		
	2013	M 4	3058	N 6		
B	2014	L 4	3071	N13		
	2015	N 3	3072	N12		
	2016	N 4	3073	O14		
	2017	M 9	3074	N14		
	2042	O 7	3075	O15		
	2044	J 5	3076	O16		
	2047	M11	3077	O16		
	2049	J 4	3078	O19		
C	2050	D 7	3079	O19		
	2071	N12	3100	I 15		
	2072	O12	3101	K17		
	2073	N13	3102	M17		
	2075	O15	3105	I 15		
	2076	O16	3106	J14		
	2077	O25	3107	I 14		
D	2100	N14	3108	I 14		
	2101	J17	3109	M12		
	2102	N17	3110	H14		
	2104	K15	3116	D11		
	2106	N18	3122	C13		
	2107	K18	3123	B15		
	2108	N13	3124	B15		
	2109	N12	3125	C18		
E	2110	I 13	3127	C18		
	2116	C11	3128	F13		
	2119	C 5	3129	F23		
	2122	C13	3130	F14		
	2123	B17	3131	D13		
	2123	G15	3133	F15		
	2124	B17	3134	G18		
F	2125	C18	3135	B21		
	2126	C18	3136	G19		
	2127	C18	3137	F20		
	2128	F13	3138	F21		
	2129	B13	3139	F18		
	2130	F14	3140	F23		
	2131	E20	3141	F18		
	2134	G19	3142	F19		
G	2135	F19	3143	F22		
	2136	G22	3150	F 8		
	2137	C19	3158	B23		
	2138	C19	3159	B22		
	2140	G24	3160	F 2		
	2141	G23	3161	G 2		
	2143	G20	3168	A27		
H	2150	B14	3170	B30		
	2151	B13	3171	A30		
	2160	B23	3172	A31		
	2161	B24	3173	A31		
	2168	B27	3177	G29		
	2169	B27	3180	E30		
	2170	A30	3181	D30		
	2171	A30	3182	D31		
I	2173	B31	3183	E31		
	2174	A31	3188	C30		
	2175	A32	3190	C 5		
	2176	C33	3191	E 7		
	2177	G29	3200	M20		
	2180	E30	3201	L20		
	2181	D30	3202	N20		
	2183	E31	3203	L26		
J	2184	E31	3204	L26		
	2185	E32	3205	N24		
	2186	F33	3206	E 2		
	2187	G30	3208	F 2		
	2188	D29	3209	N21		
	2189	D30	3210	N21		
	2190	F 5	3213	M27		
K	2191	F 6	3214	L32		
	2193	E 7	3215	L32		
	2194	F 4	3216	K32		
	2198	C 6	3217	K33		
	2200	K20	3218	J33		
	2201	L20	5001	A16		
	2202	N20	5010	I 2		
	2203	K25	5035	J 6		
L	2204	K25	5036	O 6		
	2205	O23	5042	N 8		
	2206	L26	5101	J17		
	2207	L27	5102	N17		
	2208	L27	5103	K15		
	2209	L27	5123	A16		
	2210	N22	6070	N13		
M	2211	N22	6071	O13		
	2213	N27	6072	O13		
	2214	O23	6075	O16		
	2215	O24	6127	B18		
	2216	N31	6134	G19		
	2217	K33	6140	G23		
	2218	K33	6190	D 5		
	2219	M33	6191	F 5		
N	2220	N31	6225	K26		
	2221	K28	7000	K 4		
	2222	K29	7000	B14		
	2223	K31	7035	D 7		
	2224	K31	7073	O14		
	2225	N29	7078	N19		
	2226	N29	7100	K13		
	3012	M 2	7106	I 13		
O	3013	M 2	7108	L14		
	3014	M 2	7133	F18		
	3015	N 3	7150	B20		
	3016	N 3	7160	B22		
	3019	L10	7161	B23		

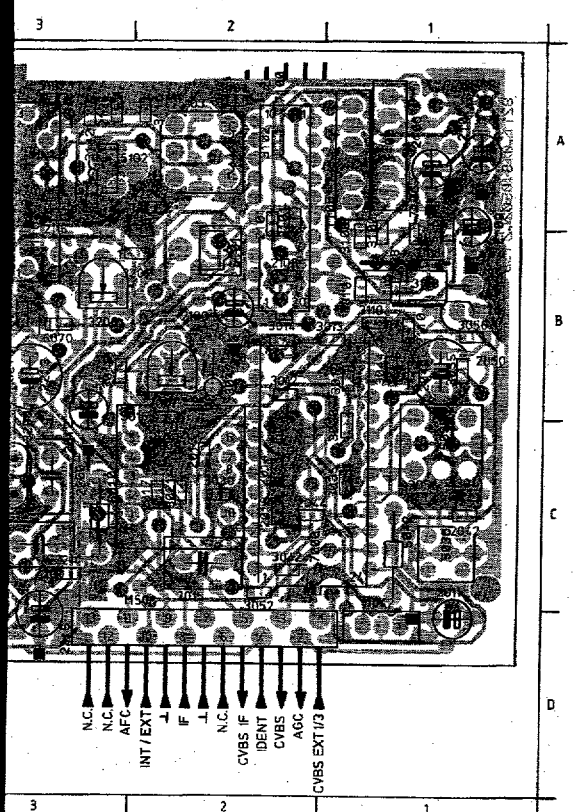
NICAM IF/sound module / NICAM ZF/Tonmodul /





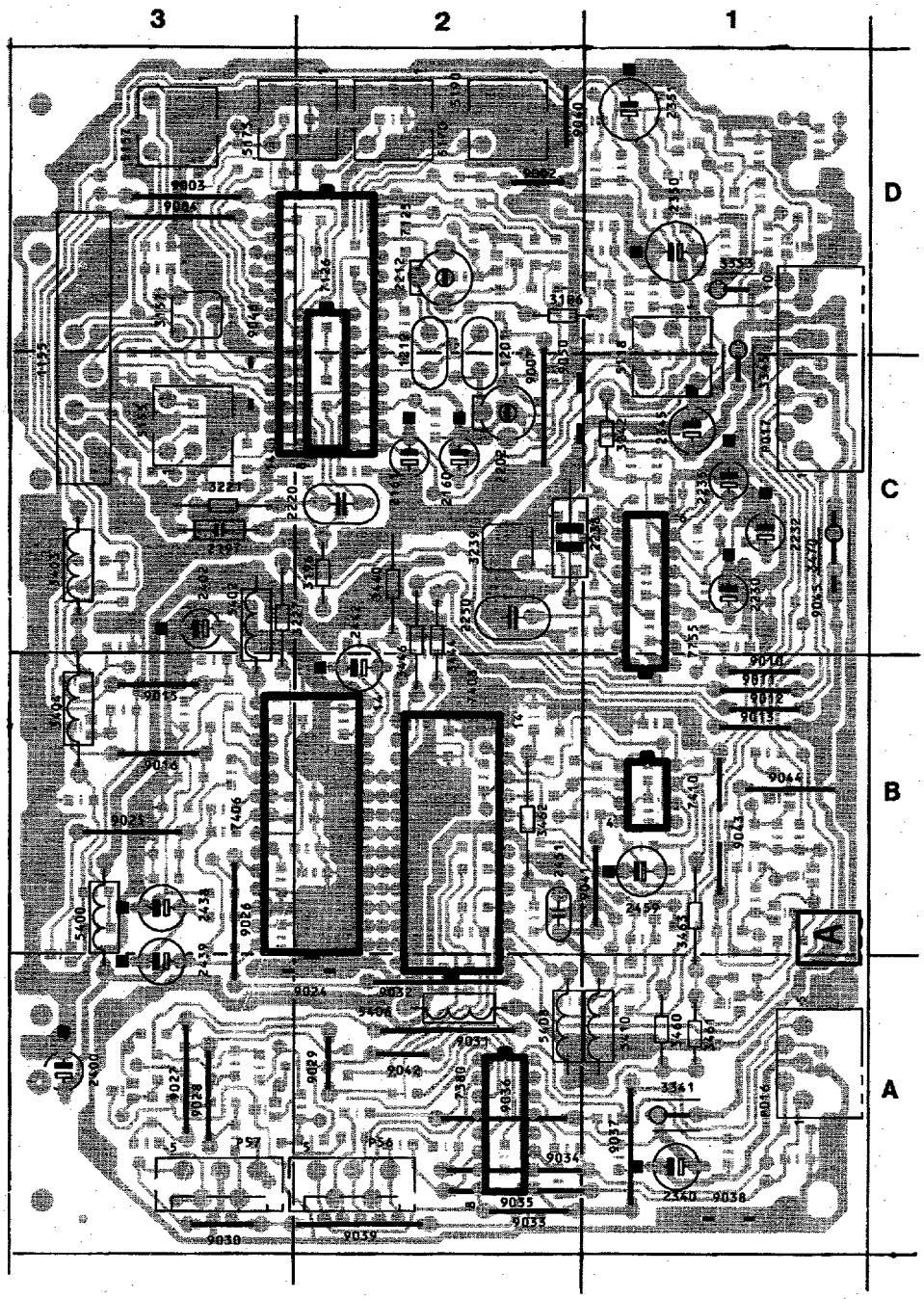
Module FI/son NICAM





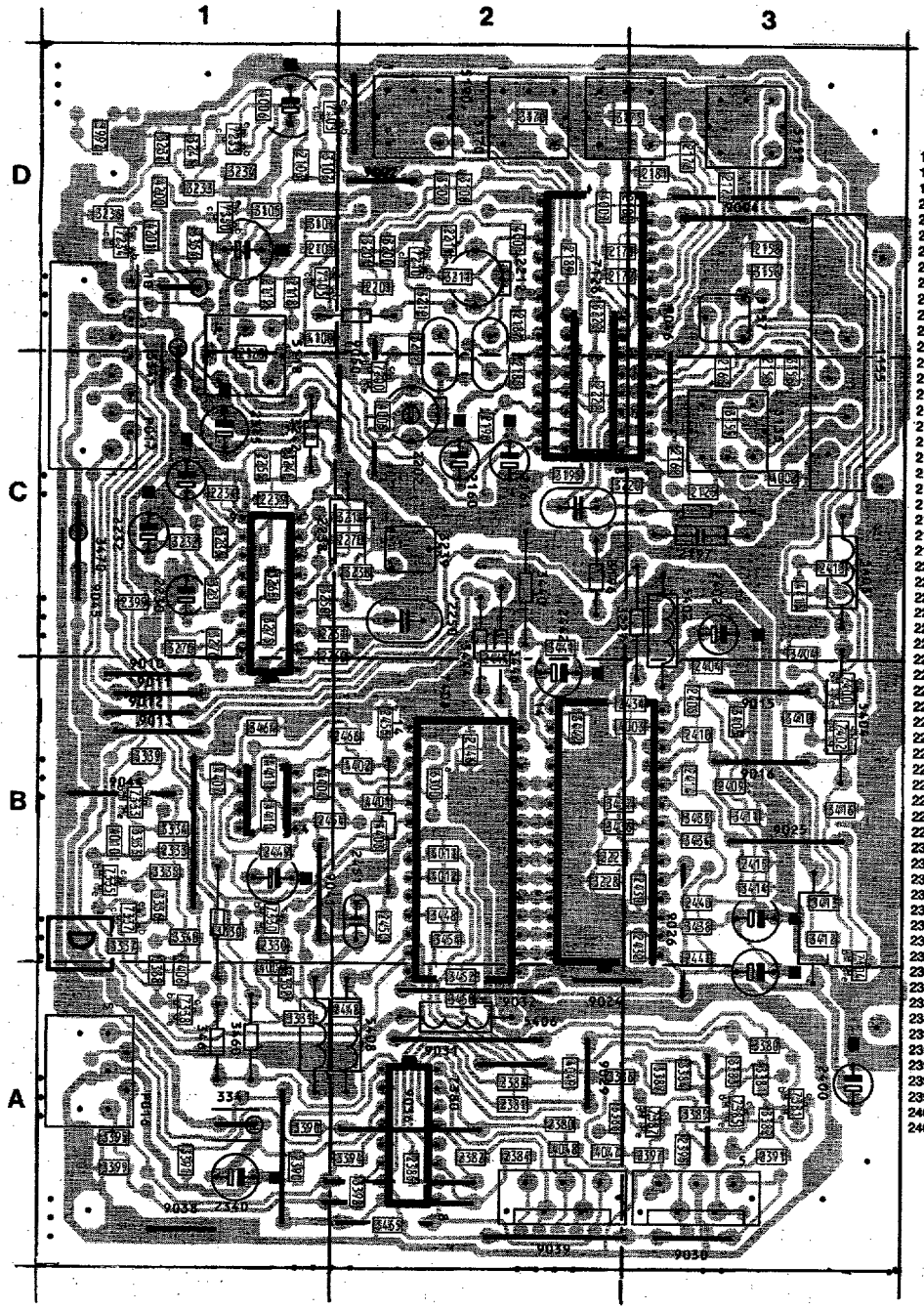
M50 D2	2220 C4	5102 A3
M51 D6	2221 D4	5103 A2
1010 C2	2222 C6	5123 A4
1042 D1	2223 C4	5124 A4
1100 A1	2224 C5	6070 B3
1105 A1	2225 C4	6071 B4
1116 A3	2226 C4	6072 B4
1127 B3	3012 B2	6075 B5
1138 B6	3013 B1	6127 B3
1191 C9	3014 B2	6134 A5
1200 C3	3015 B3	6140 A6
2011 D1	3016 B2	6190 C9
2012 C3	3019 B1	6191 C9
2013 C2	3020 C1	6225 B4
2014 C2	3021 C2	7000 C2
2015 C2	3030 C2	7035 B1
2016 C2	3035 C1	7073 B5
2017 C2	3041 C1	7078 B5
2042 C1	3042 C2	7100 B2
2044 C2	3044 B1	7106 B1
2047 C2	3047 B2	7108 B1
2049 B1	3052 C2	7120 A4
2050 B1	3055 B1	7133 A5
2071 B3	3056 B1	7150 C6
2072 B4	3058 C1	7160 C6
2073 B4	3071 B3	7161 B6
2075 A5	3072 B3	7168 B7
2076 B5	3073 B5	7170 C8
2077 C3	3074 B4	7180 B7
2100 B2	3075 B5	7190 C9
2101 B2	3076 B5	7191 D9
2102 A3	3077 B5	7200 C3
2104 A2	3078 B5	7213 C4
2106 A1	3079 B6	7217 D5
2107 A1	3100 B1	
2108 B2	3101 B2	
2109 B1	3102 A2	
2110 B1	3105 B1	
2116 A3	3106 B1	
2119 C8	3107 B1	
2122 A4	3108 B1	
2123 A4	3109 B1	
2124 A4	3110 B1	
2125 B4	3116 A2	
2126 B4	3122 A3	
2127 B4	3123 A4	
2128 B5	3124 B4	
2129 A4	3125 B4	
2130 A4	3127 B3	
2131 B6	3128 B4	
2132 A4	3129 B6	
2133 A5	3130 B4	
2134 A5	3131 A4	
2135 A3	3133 A5	
2136 A6	3134 A5	
2137 B6	3135 C6	
2138 B6	3136 A5	
2140 A6	3137 A5	
2141 B7	3138 A6	
2143 A5	3139 A5	
2151 A5	3140 A6	
2160 B6	3141 A3	
2161 B6	3142 A3	
2168 C7	3143 A6	
2169 C7	3150 C7	
2170 C8	3158 B6	
2171 C8	3159 C6	
2173 B8	3160 B5	
2174 C8	3161 B6	
2175 C8	3168 C8	
2176 C7	3170 C8	
2177 C7	3171 C8	
2180 B8	3172 C8	
2181 B8	3173 C8	
2183 B7	3177 B8	
2184 B7	3180 B8	
2185 B7	3181 B8	
2186 C7	3182 B7	
2187 B8	3183 B7	
2188 B8	3188 C8	
2189 B7	3190 C8	
2190 C9	3191 C8	
2191 C8	3200 B3	
2193 D8	3201 B2	
2194 D9	3202 B2	
2198 D8	3203 C5	
2200 C3	3204 D4	
2201 C3	3205 D3	
2202 A2	3206 C3	
2203 C5	3208 B3	
2204 B4	3209 C7	
2205 C3	3210 C6	
2206 C3	3213 B3	
2207 C4	3214 C5	
2208 C4	3215 D5	
2209 C4	3216 D5	
2210 C7	3217 D5	
2211 C4	3218 D5	
2213 B3	4000 D7	
2214 C3	4199 B9	
2215 D3	5010 C3	
2216 C4	5035 C1	
2217 C6	5036 C1	
2218 C5	5042 C1	
2219 C5	5101 B2	

PIP module / PIP-Modul / Module PIP

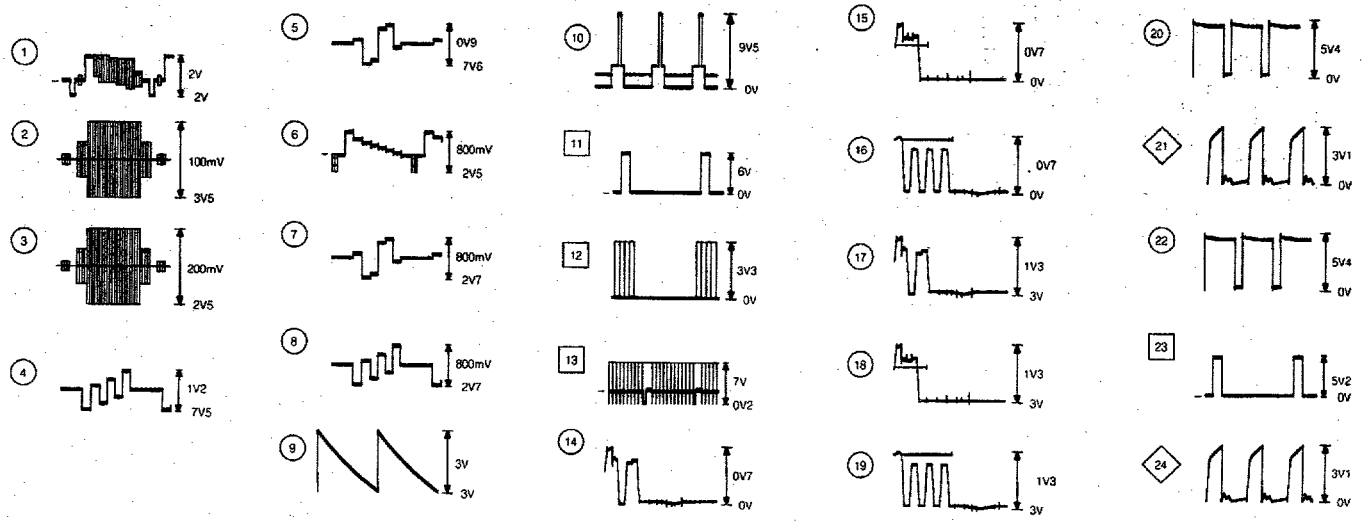


1155 C3	2404 B3	3265 C1	3997 D1	7410 B
1201 D2	2405 B3	3270 C1	4001 D2	7755 B
1212 D2	2409 B3	3275 C1	4002 C3	9002 D
2103 D1	2410 B3	3276 C1	4003 B2	9003 D
2105 D1	2413 C3	3330 B1	4004 A1	9004 D
2118 D1	2414 B3	3331 A1	4005 C2	9007 C
2119 D1	2415 B3	3332 A1	4006 D1	9010 B
2120 D1	2430 B3	3333 B1	4007 D2	9011 B
2125 C3	2432 B3	3334 B1	4010 B1	9012 B
2155 C3	2434 B2	3335 B1	4011 B2	9013 B
2158 D3	2438 B3	3336 B1	4012 B2	9015 B
2160 C2	2439 A3	3337 B1	4047 A2	9016 B
2161 C2	2440 B3	3338 A1	4048 A2	9024 A
2162 C3	2441 B3	3339 B1	4049 A2	9025 B
2163 C3	2442 B2	3340 B1	4100 D1	9026 B
2171 D2	2444 C2	3341 A1	4200 D1	9027 A
2172 D2	2446 B2	3345 C1	4201 D1	9028 A
2176 D3	2448 A2	3353 D1	4401 B2	9029 A
2177 D3	2449 B1	3354 D1	4402 B2	9030 A
2180 D2	2450 B2	3380 A3	4403 B2	9031 A
2181 D3	2451 B2	3381 A3	4404 B1	9032 A
2185 C2	2454 B1	3382 A3	4406 A1	9033 A
2187 D2	2455 B2	3383 A3	4407 B1	9034 A
2189 D2	2459 B1	3384 A3	4410 B1	9035 A
2196 C2	2466 B2	3385 A3	4411 B1	9036 A
2197 C3	3103 D1	3386 A2	4415 C3	9037 A
2201 D2	3104 D1	3387 A3	5118 D1	9038 A
2202 C2	3105 D1	3388 A2	5155 C3	9039 A
2211 D2	3106 D2	3390 A1	5157 D3	9040 C
2212 D2	3107 D2	3391 A1	5170 D2	9041 E
2220 C2	3108 D2	3394 A2	5175 D2	9042 A
2222 C2	3155 C3	3395 A1	5190 D2	9043 E
2227 B2	3156 C3	3398 A2	5400 B3	9044 E
2230 C1	3157 D3	3399 A1	5402 C3	9045 C
2232 C1	3158 D3	3404 C3	5403 C3	9046 C
2234 C1	3170 D2	3405 B3	5404 B3	9050 C
2235 C1	3175 D2	3410 B3	5406 A2	P016 A
2238 C2	3195 C2	3411 B3	5408 A2	P017 C
2239 C1	3196 C2	3412 B3	5410 A1	P56 A2
2250 C2	3200 D2	3413 B3	6300 B2	P57 A2
2251 C1	3201 D2	3414 B3	7103 D1	
2255 C1	3202 D2	3416 B3	7105 D1	
2260 C1	3211 D2	3434 B3	7125 D3	
2270 C2	3212 D2	3435 B3	7126 D2	
2330 B1	3214 C2	3436 B2	7200 C2	
2333 B1	3220 C2	3437 B2	7210 D2	
2340 A1	3221 C3	3438 B3	7233 D1	
2345 C1	3222 D2	3440 C2	7234 D1	
2350 D1	3227 C3	3441 C2	7330 B1	
2351 D1	3228 B2	3442 B2	7333 B1	
2380 A2	3231 C1	3444 C2	7335 B1	
2381 A2	3232 C1	3446 C2	7337 B1	
2382 A2	3233 D1	3448 B2	7338 A1	
2383 A2	3234 D1	3450 A2	7350 D1	
2384 A2	3235 C1	3452 A2	7380 A2	
2385 A2	3238 D1	3454 B2	7381 A3	
2390 A1	3237 D1	3460 A1	7385 A3	
2391 A3	3238 C2	3461 A1	7387 A3	
2395 A3	3239 C2	3462 B2	7400 B3	
2397 A3	3240 C1	3463 B1	7402 B3	
2399 C1	3241 D1	3464 B1	7404 B3	
2400 A3	3242 C1	3465 A2	7406 B2	
2402 C3	3250 C1	3470 C1	7408 A2	

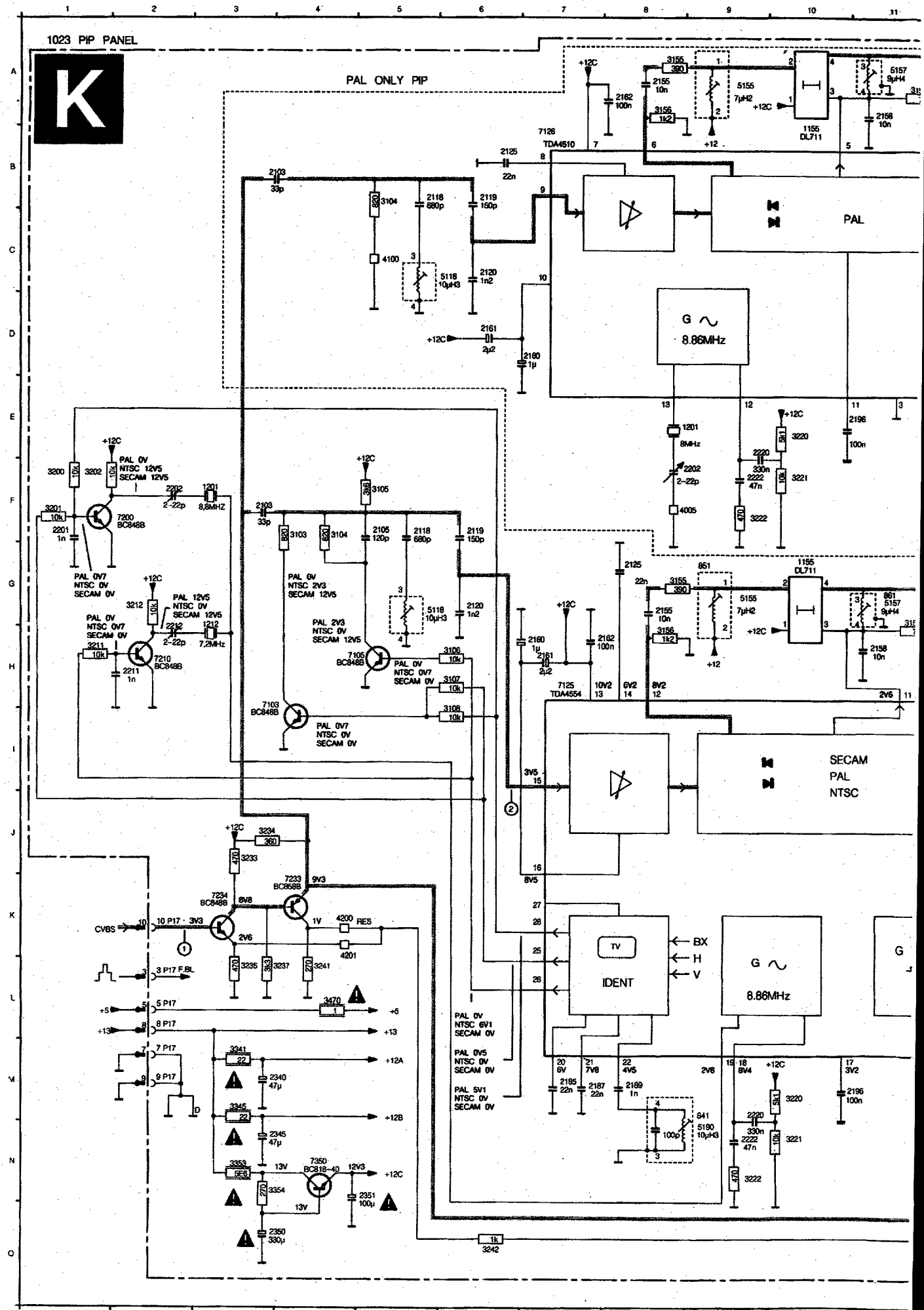
6.48 CHASSIS GR2.2

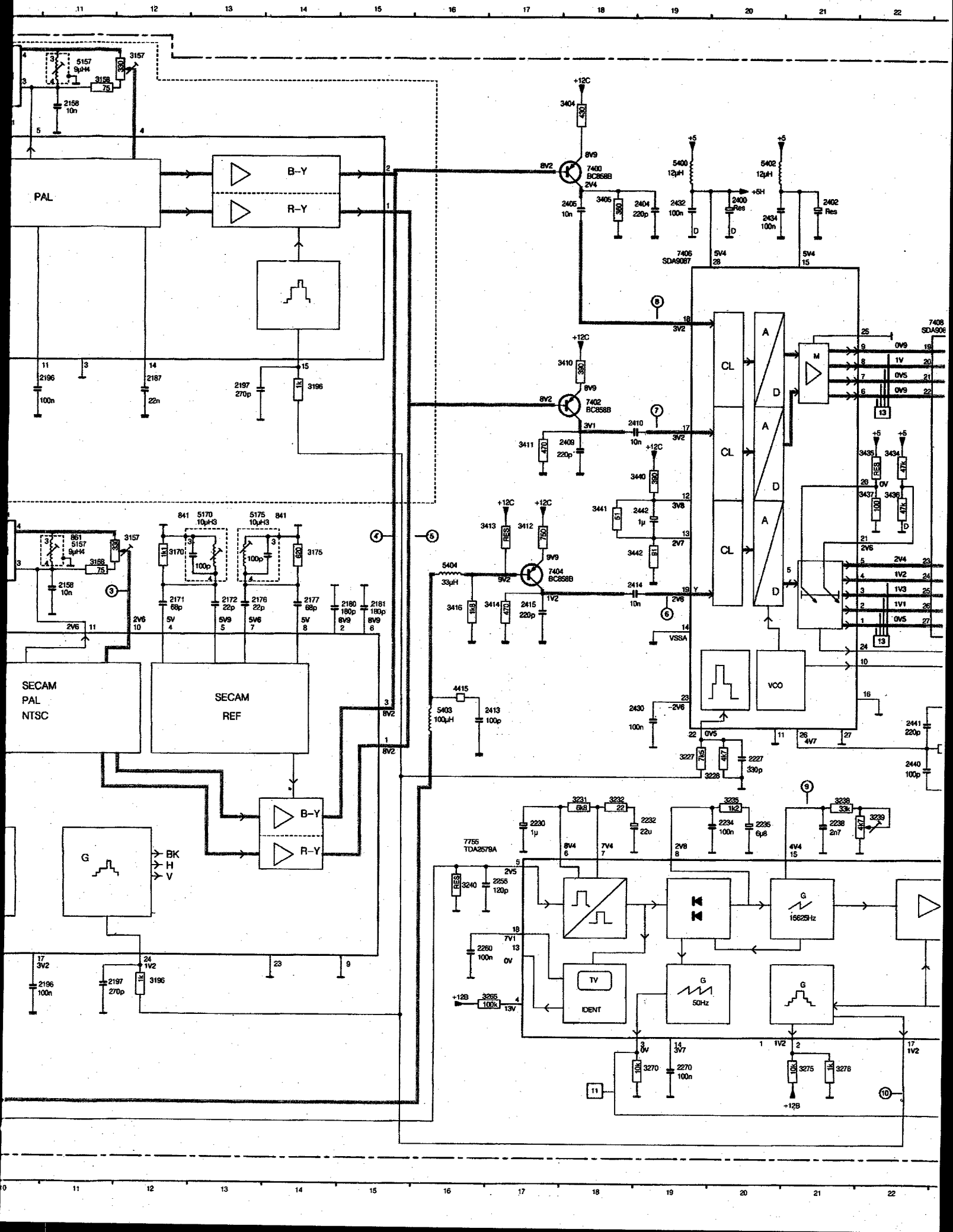


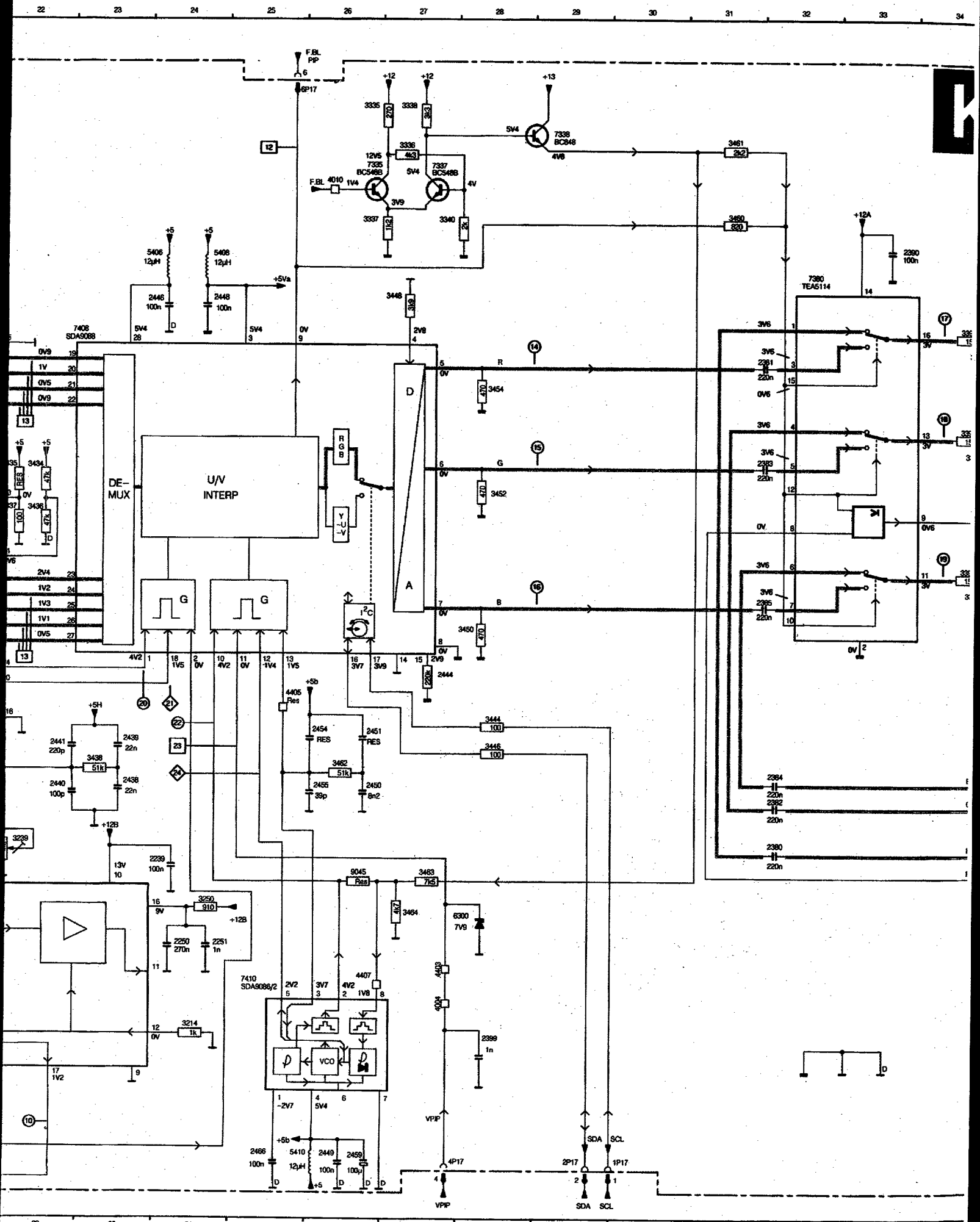
D1	7410 B1	1155 C3	2404 B3	3265 C1	3997 D1	7410 B1			
D2	7755 B1	1201 D2	2405 B3	3270 C1	4001 D2	7755 B1			
C3	9002 D2	1212 D2	2409 B3	3275 C1	4002 C3	9002 D2			
B2	9003 D3	2103 D1	2410 B3	3276 C1	4003 B2	9003 D3			
A1	9004 D3	2105 D1	2413 C3	3330 B1	4004 A1	9004 D3			
C2	9007 C2	2118 D1	2414 B3	3331 A1	4005 C2	9007 C2			
D1	9010 B1	2119 D1	2415 B3	3332 A1	4006 D1	9010 B1			
D2	9011 B1	2120 D1	2430 B3	3333 B1	4007 D2	9011 B1			
B1	9012 B1	2125 C3	2432 B3	3334 B1	4010 B1	9012 B1			
B2	9013 B1	2155 C3	2434 B2	3335 B1	4011 B2	9013 B1			
B2	9015 B3	2158 D3	2438 B3	3336 B1	4012 B2	9015 B3			
A2	9016 B3	2160 C2	2439 A3	3337 B1	4047 A2	9016 B3			
A2	9024 A2	2161 C2	2440 B3	3338 A1	4048 A2	9024 A2			
A2	9025 B3	2162 C3	2441 B3	3339 B1	4049 A2	9025 B3			
D1	9026 B3	2163 C3	2442 B2	3340 B1	4100 D1	9026 B3			
D1	9027 A3	2171 D2	2444 C2	3341 A1	4200 D1	9027 A3			
B2	9028 A3	2172 D2	2446 B2	3345 C1	4201 D1	9028 A3			
B2	9029 A2	2176 D3	2448 A2	3353 D1	4401 B2	9029 A2			
B2	9030 A3	2177 D3	2449 B1	3354 D1	4402 B2	9030 A3			
B1	9031 A2	2180 D2	2450 B2	3380 A3	4403 B2	9031 A2			
A1	9032 A2	2181 D3	2451 B2	3381 A3	4404 B1	9032 A2			
B1	9033 A2	2185 C2	2454 B1	3382 A3	4406 A1	9033 A2			
B1	9034 A2	2187 D2	2455 B2	3383 A3	4407 B1	9034 A2			
B1	9035 A2	2189 D2	2459 B1	3384 A3	4410 B1	9035 A2			
B1	9036 A2	2196 C2	2466 B2	3385 A3	4411 B1	9036 A2			
C3	9037 A1	2197 C3	3103 D1	3386 A2	4415 C3	9037 A1			
D1	9038 A1	2201 D2	3104 D1	3387 A3	5118 D1	9038 A1			
C3	9039 A2	2202 C2	3105 D1	3388 A2	5155 C3	9039 A2			
C3	9040 D2	2211 D2	3106 D2	3390 A1	5157 D3	9040 D2			
D2	9041 B1	2212 D2	3107 D2	3391 A1	5170 D2	9041 B1			
D2	9042 A2	2220 C2	3108 D2	3394 A2	5175 D2	9042 A2			
D2	9043 B1	2222 C2	3155 C3	3395 A1	5190 D2	9043 B1			
B3	9044 B1	2227 B2	3156 C3	3398 A2	5400 B3	9044 B1			
C3	9045 C1	2230 C1	3157 D3	3399 A1	5402 C3	9045 C1			
C3	9046 C3	2232 C1	3158 D3	3404 C3	5403 C3	9046 C3			
B3	9050 C2	2234 C1	3170 D2	3405 B3	5404 B3	9050 C2			
A2	P016 A1	2235 C1	3175 D2	3410 B3	5406 A2	P016 A1			
A2	P017 C1	2238 C2	3195 C2	3411 B3	5408 A2	P017 C1			
A1	P56 A2	2239 C1	3196 C2	3412 B3	5410 A1	P56 A2			
B2	P57 A3	2250 C2	3200 D2	3413 B3	6300 B2	P57 A3			
D1		2251 C1	3201 D2	3414 B3	7103 D1				
D1		2255 C1	3202 D2	3416 B3	7105 D1				
D3		2260 C1	3211 D2	3434 B3	7125 D3				
D2		2270 C2	3212 D2	3435 B3	7126 D2				
C2		2330 B1	3214 C2	3436 B2	7200 C2				
D2		2333 B1	3220 C2	3437 B2	7210 D2				
D1		2340 A1	3221 C3	3438 B3	7233 D1				
D1		2345 C1	3222 D2	3440 C2	7234 D1				
B1		2350 D1	3227 C3	3441 C2	7330 B1				
B1		2351 D1	3228 B2	3442 B2	7333 B1				
B1		2360 A2	3231 C1	3444 C2	7335 B1				
A1		2381 A2	3232 C1	3446 C2	7337 B1				
D1		2382 A2	3233 D1	3448 B2	7338 A1				
A2		2383 A2	3234 D1	3450 A2	7350 D1				
A3		2384 A2	3235 C1	3452 A2	7380 A2				
A3		2385 A2	3236 D1	3454 B2	7381 A3				
A3		2390 A1	3237 D1	3460 A1	7385 A3				
B3		2391 A3	3238 C2	3461 A1	7387 A3				
B3		2395 A3	3239 C2	3462 B2	7400 B3				
B3		2397 A3	3240 C1	3463 B1	7402 B3				
B2		2399 C1	3241 D1	3464 B1	7404 B3				
A2		2400 A3	3242 C1	3465 A2	7406 B2				
		2402 C3	3250 C1	3470 C1	7408 A2				

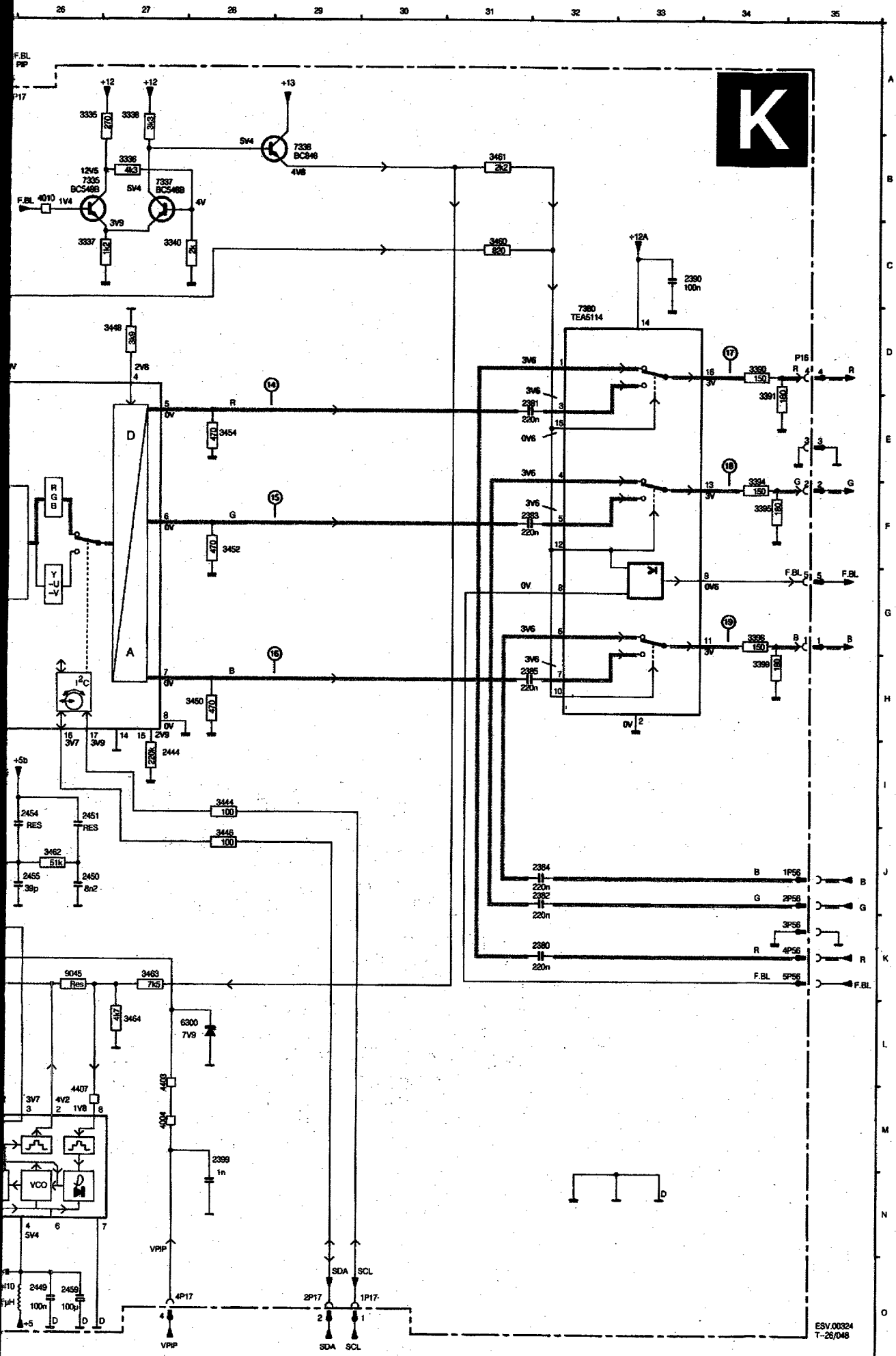


PIP module / PIP-Modul / Module PIP



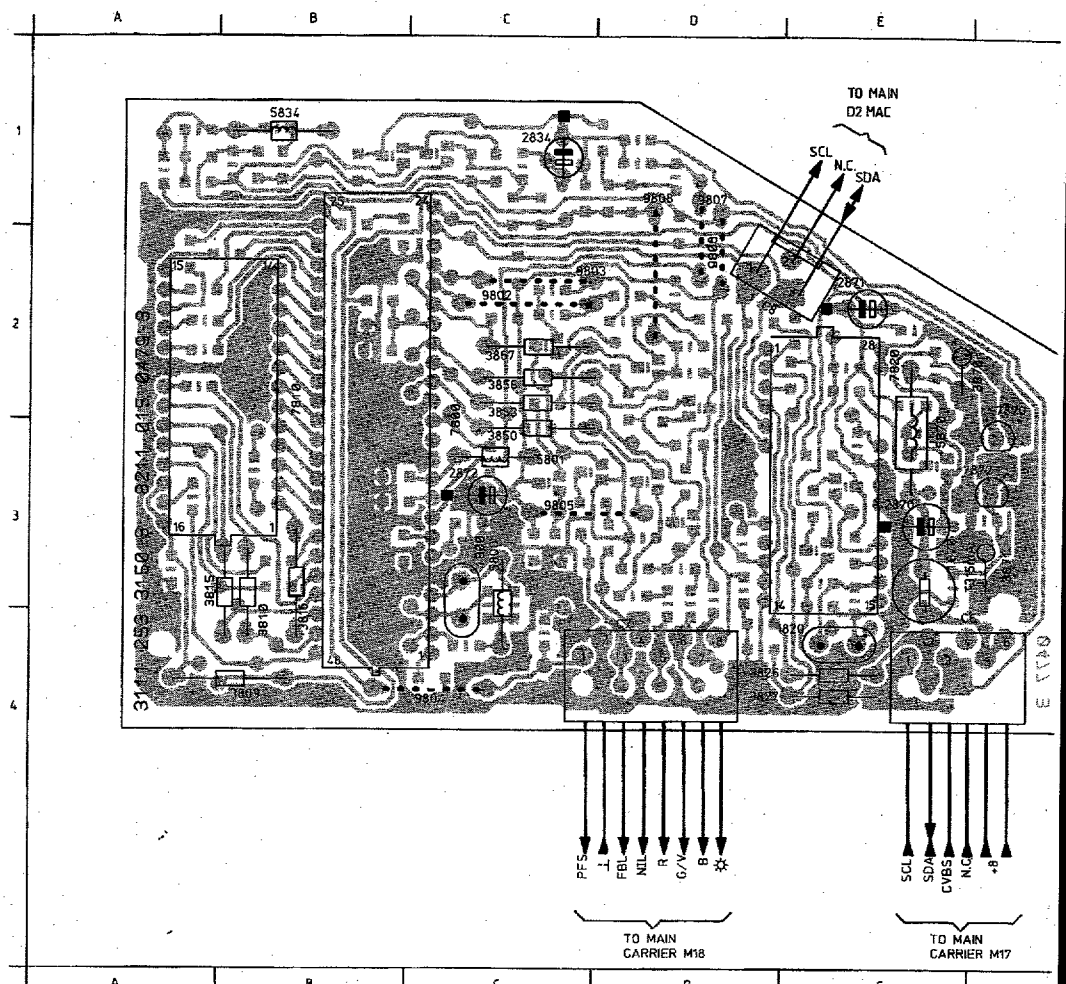

PAL
B-Y
R-Y
SECAM
PAL
NTSC
SECAM
REF
B-Y
R-Y
G
BK
H
V
7400
BC858B
7402
BC858B
7404
BC858B
7406
SDA9087
7408
SDA906
CL
A
D
M
VCO
7755
TDA2579A
TV
IDENT
G
50Hz
G
15625Hz
+12C
+5
+5H
VSSA
0V9
1V
0V5
0V9
2V6
2V4
1V2
1V3
1V1
0V5
0V
8V9
8V2
3V1
3V2
3V8
2V7
2V6
-2V6
0V5
4V7
8V4
7V4
2V8
4V4
2V5
7V1
0V
3V7
1V2
+12B
13V

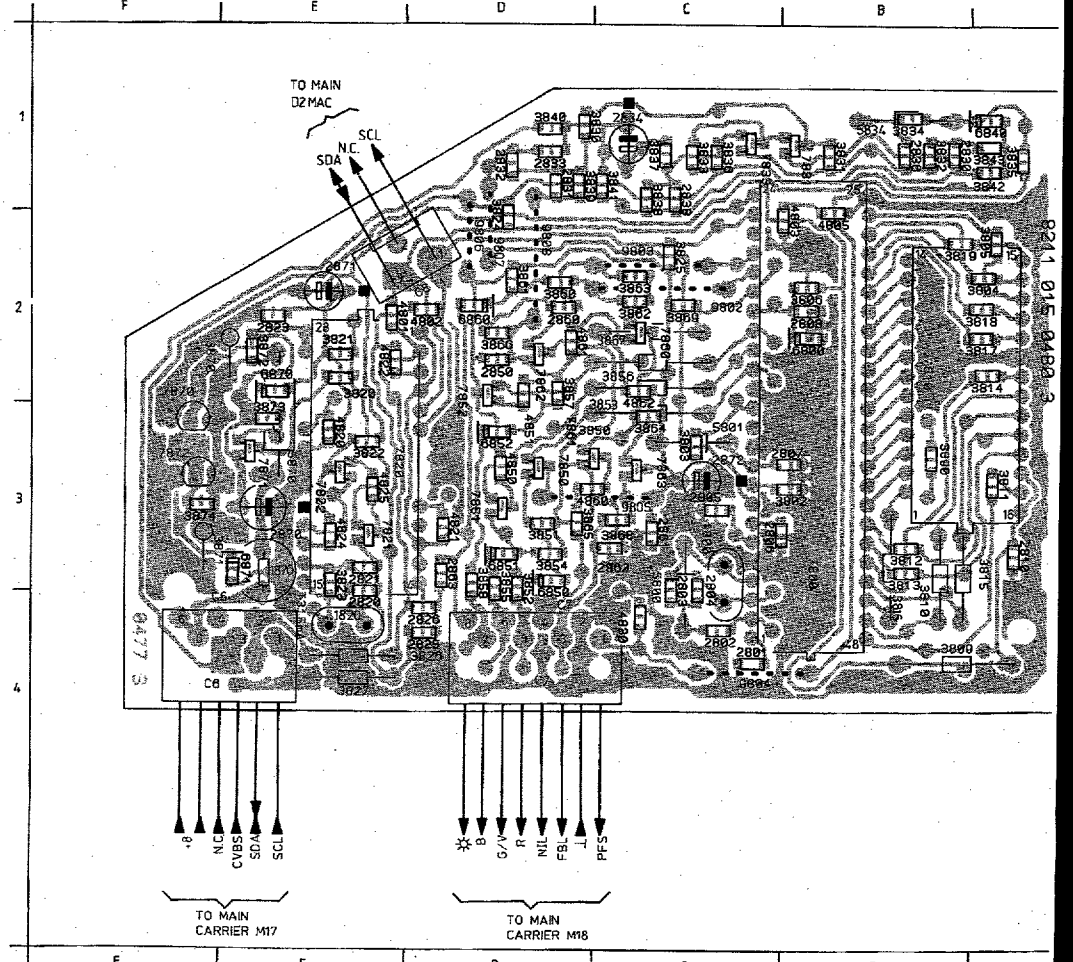

DE-MUX
U/V INTERP
7408 SDA9088
7360 TEA5114
7410 SDA9086/2
VCO
F.BL PIP
+5Va
+12A
+12B
+5H
+5b
VPIP
SDA
SCL



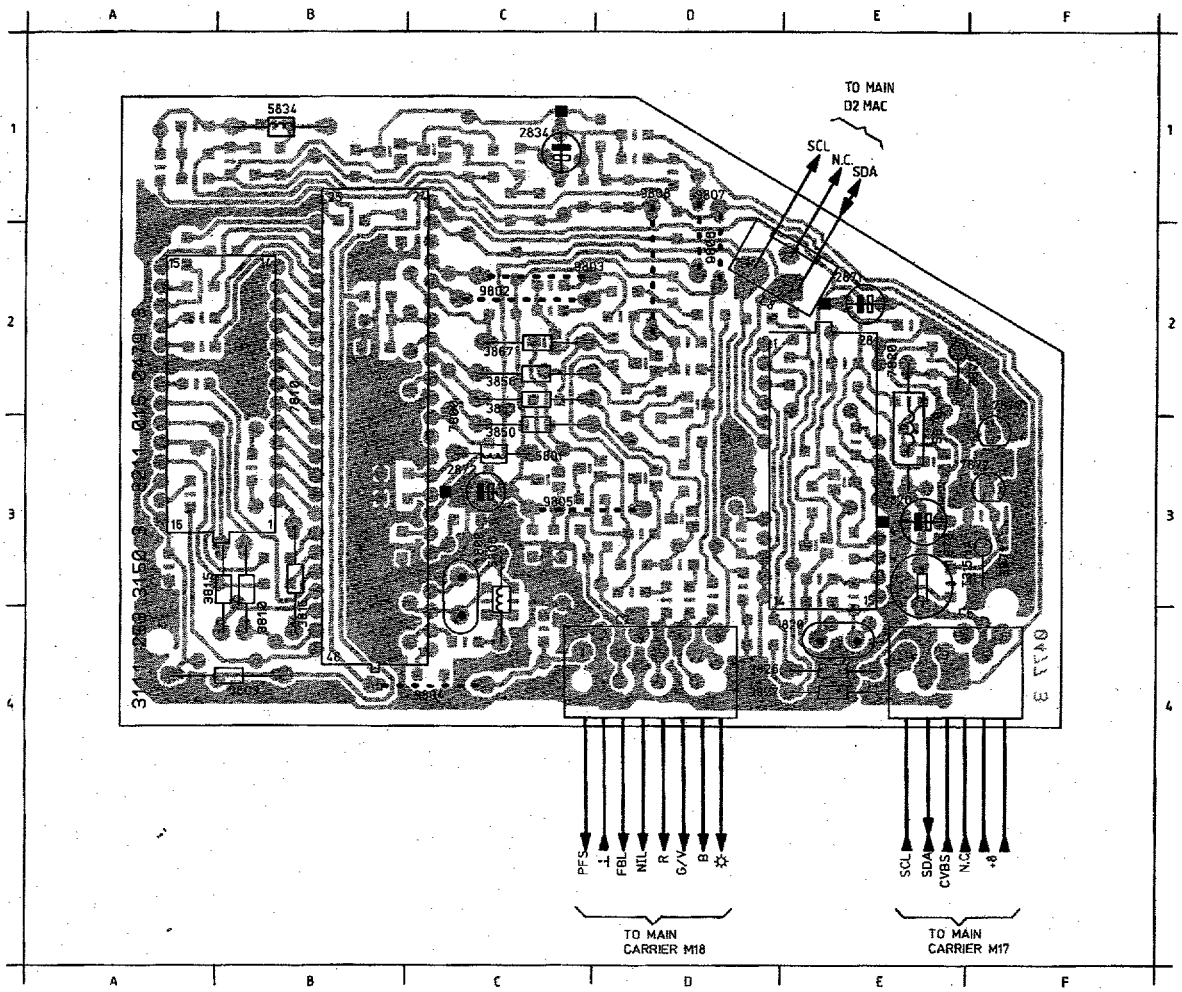
1155	B10	3275	N21
1155	G10	3276	N21
1201	E9	3335	A26
1201	F3	3336	B27
1212	H3	3337	C26
2103	B4	3338	A27
2103	F3	3340	C27
2105	F5	3341	M3
2118	B5	3345	M3
2118	F5	3353	N3
2119	B6	3354	N3
2119	F6	3390	D34
2120	C6	3391	E34
2120	G6	3394	F34
2125	B6	3395	F34
2125	G8	3398	G34
2155	A8	3399	H34
2155	G8	3404	A18
2158	A11	3405	C18
2158	H11	3410	E18
2160	D7	3411	F17
2160	H7	3412	G17
2161	D6	3413	G17
2161	H7	3414	H17
2162	A8	3416	H16
2162	H8	3434	F22
2171	H12	3435	F22
2172	H13	3436	G22
2176	H13	3437	G22
2177	H14	3438	J23
2180	H15	3440	F19
2181	H15	3441	G18
2185	M7	3442	G19
2187	E12	3444	I 28
2187	M7	3446	J28
2189	M8	3448	D27
2196	E11	3450	H28
2196	M11	3452	F28
2197	E13	3454	E28
2197	M12	3460	C31
2201	F1	3461	B31
2202	F2	3462	J26
2202	F9	3463	K27
2211	H2	3464	L27
2212	H2	3470	L4
2220	E9	4004	M27
2220	M9	4005	F9
2222	F9	4010	B26
2222	N9	4100	C5
2227	J20	4200	K4
2230	K17	4201	K4
2232	K19	4403	M27
2234	K20	4405	I 25
2235	K20	4407	M26
2236	K21	4415	I 16
2239	K24	5118	C6
2250	L24	5118	G5
2251	L24	5155	A9
2255	L17	5155	G9
2260	M16	5157	A11
2270	N19	5157	G11
2340	M3	5170	G13
2345	N3	5175	G13
2350	O3	5190	N9
2351	N5	5400	B19
2380	K32	5402	B20
2381	E32	5403	I 16
2382	J32	5404	G16
2383	F32	5406	C24
2384	J32	5408	C24
2385	H32	5410	O25
2390	C33	6300	L28
2399	M28	7103	H4
2400	C20	7105	H5
2402	C21	7125	H7
2404	C19	7126	B7
2405	C18	7200	F2
2409	F18	7210	H2
2410	F19	7233	K4
2413	I 17	7234	K3
2414	H19	7335	B26
2415	H17	7337	B27
2430	I 19	7338	B29
2432	C19	7350	N4
2434	C20	7380	D32
2438	J23	7400	B18
2439	J23	7402	E18
2440	J22	7404	H17
2441	J22	7406	C19
2442	G19	7408	D23
2444	I 27	7410	M25
2446	D24	7755	K16
2448	D24	9045	K26
2449	O26		
2450	J26		
2451	I 26		
2454	I 26		
2455	J26		
2459	O26		
2466	O25		
3103	F4		
3104	B5		
3104	F4		
3105	F5		
3106	H6		
3107	H6		
3108	I 6		
3155	A8		
3155	G8		
3156	A8		
3156	H8		
3157	A12		
3157	G12		
3158	A11		
3158	G11		
3170	G12		
3175	G14		
3196	E14		
3196	M12		
3200	F1		
3201	F1		
3202	F1		
3211	H1		
3212	G2		
3214	M24		
3220	E10		
3220	M10		
3221	F10		
3221	N10		
3222	F9		
3222	N9		
3227	J19		
3228	J20		
3231	K18		
3232	K18		
3233	J3		
3234	J3		
3235	K20		
3236	L3		
3237	L3		
3238	K21		
3239	K22		
3240	L16		
3241	L4		
3242	O6		
3250	L24		
3265	M17		
3270	N19		

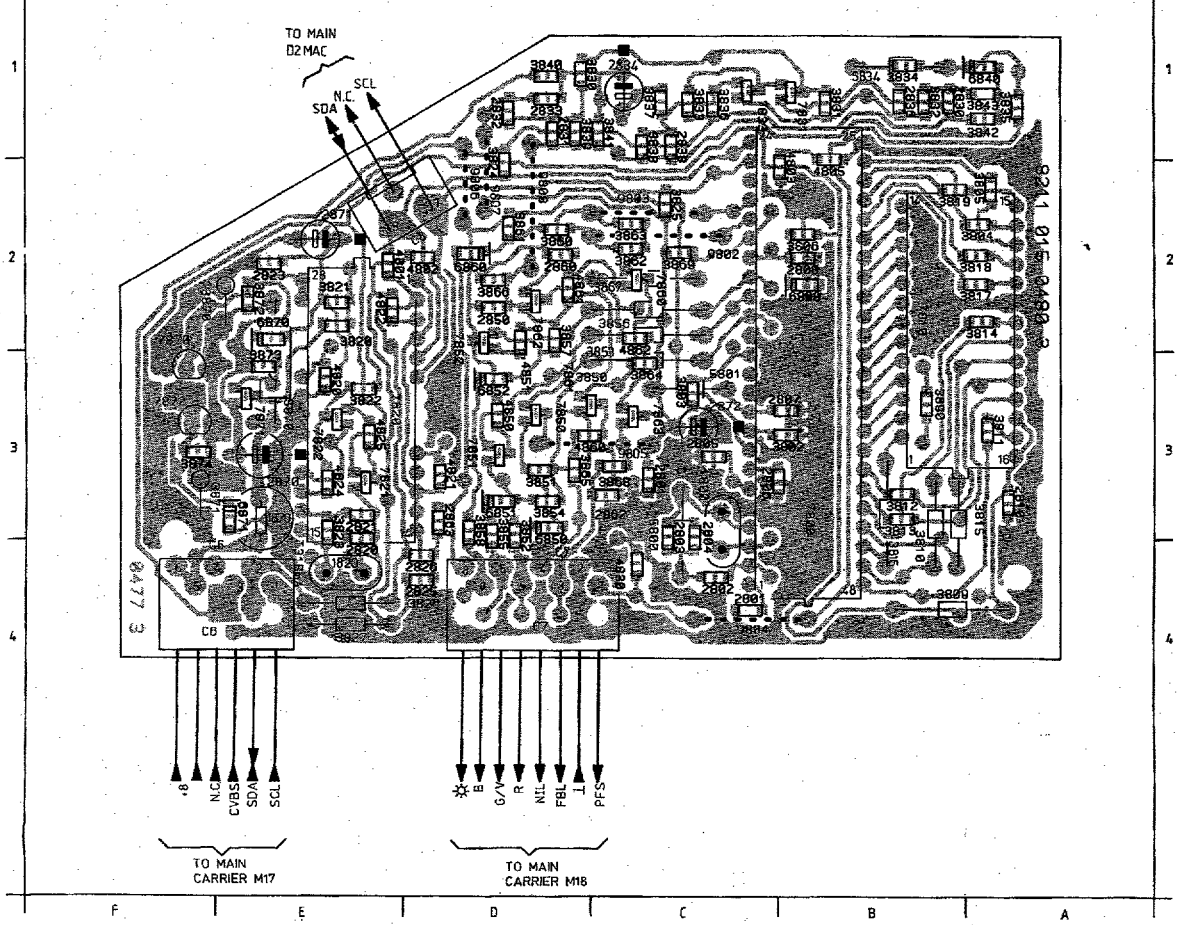
Teletext / Videotext / Teletexte





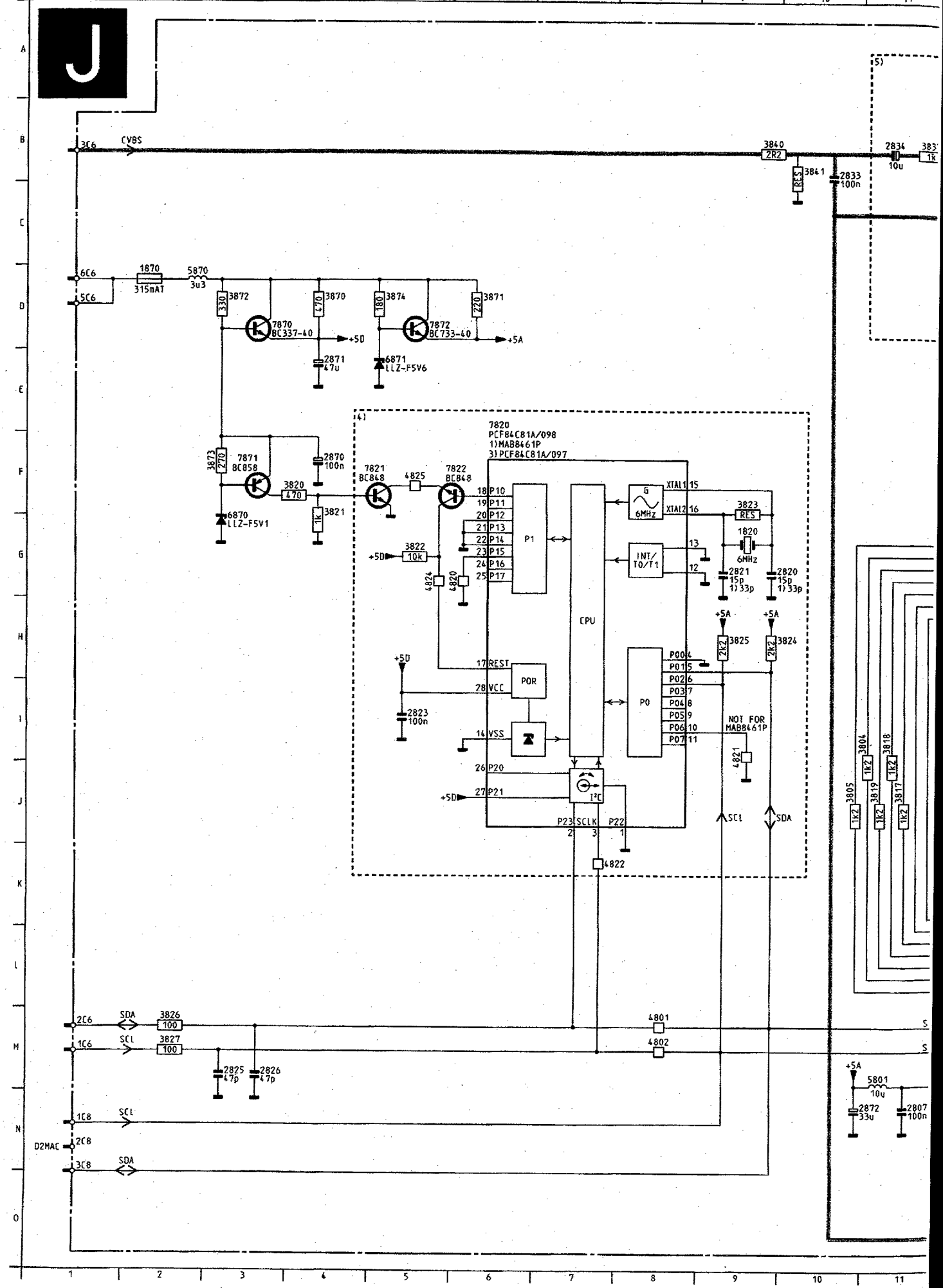
Teletext / Videotext / Teletexte



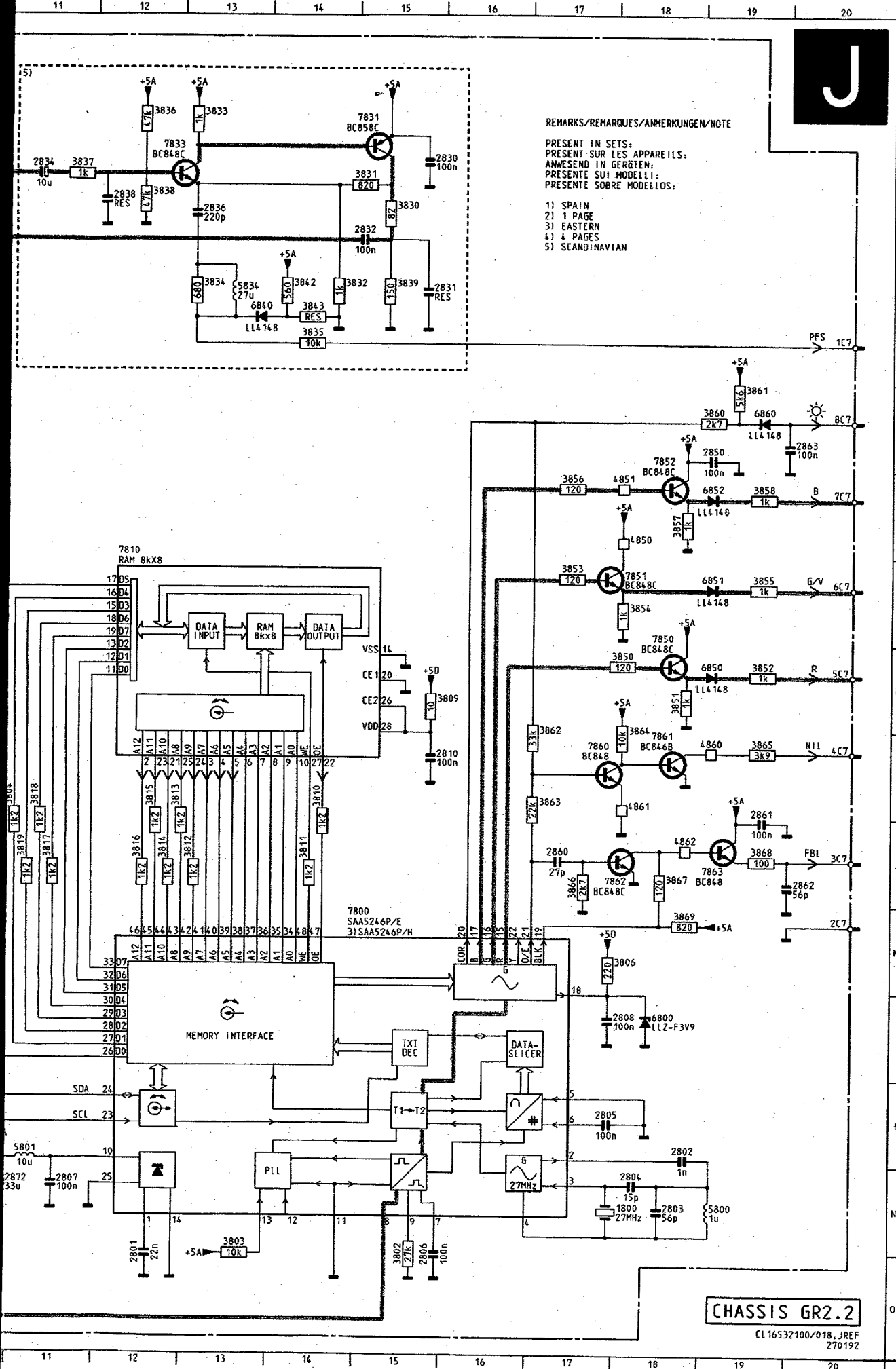


C6 E4
C7 D4
C8 D2
1800 C3
1820 E4
1870 E3
2801 C4
2802 C4
2803 C4
2804 C4
2805 C3
2806 B3
2807 B3
2808 B2
2810 A3
2820 E4
2821 E3
2823 E2
2825 D4
2826 D4
2830 A1
2831 D1
2832 D1
2833 D1
2834 C1
2836 B1
2838 C1
2850 D2
2860 D2
2861 C3
2862 C3
2863 D3
2870 E3
2871 E2
2872 C3
3802 B3
3803 C3
3804 A2
3805 A2
3806 B2
3809 A4
3810 B3
3811 A3
3812 B3
3813 B3
3814 A2
3815 A3
3816 B3
3817 A2
3818 A2
3819 A2
3820 E2
3821 E2
3822 E3
3823 E4
3824 D2
3825 C2
3826 E4
3827 E4
3830 C1
3831 B1
3832 B1
3833 C1
3834 B1
3835 A1
3836 C1
3837 C1
3838 C1
3839 C1
3840 D1
3841 C1
3842 A1
3843 A1
3850 C3
3851 D3
3852 D4
3853 C2
3854 D3
3855 D4
3856 C2
3857 D3
3858 D4
3860 D2
3861 D2
3862 C2
3863 C2
3864 C3
3865 C3
3866 D2
3867 C2
3868 C3
3869 C2
3870 E2
3871 E3
3872 E2
3873 E3
3874 E3
3890 B3
4801 D2
4802 D2
4803 B2
4805 B2
4820 E3
4821 D3
4822 D2
4824 E3
4825 E3
4830 C4
4850 D3
4851 D3
4860 C3
4861 D2
4862 C2
5800 C4
5801 C3
5834 B1
5870 E3
6800 B2
6840 A1
6850 D4
6851 D3
6852 D3
6860 D2
6870 E2
6871 E3
7800 B3
7810 B3
7820 D2
7821 E3
7822 E3
7831 B1
7833 C1
7850 D3
7851 D3
7852 D3
7860 C2
7861 C3
7862 D2
7863 C3
7871 E3
7872 F3
9802 C2
9803 C2
9804 C4
9805 C3
9806 D2
9807 D2
9808 D2

4850 D3
4851 D3
4860 C3
4861 D2
4862 C2
5800 C4
5801 C3
5834 B1
5870 E3
6800 B2
6840 A1
6850 D4
6851 D3
6852 D3
6860 D2
6870 E2
6871 E3
7800 B3
7810 B3
7820 D2
7821 E3
7822 E3
7831 B1
7833 C1
7850 D3
7851 D3
7852 D3
7860 C2
7861 C3
7862 D2
7863 C3
7871 E3
7872 F3
9802 C2
9803 C2
9804 C4
9805 C3
9806 D2
9807 D2
9808 D2



Teletext / Videotext / Teletexte



	1800	N18	6870	G 3
	1820	G 9	6871	E 5
	1870	D 2	7800	K14
	2801	O12	7810	F12
A	2802	M18	7820	E 6
	2803	N18	7821	F 5
	2804	N18	7822	F 5
	2805	M17	7831	B15
	2806	O15	7833	B12
	2807	N11	7850	G18
	2808	L17	7851	G18
	2810	I15	7852	E18
B	2820	G 9	7860	I17
	2821	G 9	7861	I18
	2823	I 5	7862	J18
	2825	M 3	7863	J19
	2826	M 3	7870	D 3
	2830	B15	7871	F 3
	2831	C15	7872	D 5
	2832	C15		
C	2833	B10		
	2834	B11		
	2836	C13		
	2838	B12		
	2850	E19		
	2860	J17		
	2861	I19		
D	2862	J20		
	2863	E20		
	2870	F 4		
	2871	E 4		
	2872	N10		
	3802	O15		
	3803	N13		
	3804	I11		
E	3805	J10		
	3806	K17		
	3809	H15		
	3810	I14		
	3811	J14		
	3812	J13		
	3813	I12		
	3814	J12		
F	3815	I12		
	3816	J12		
	3817	J11		
	3818	I11		
	3819	J11		
	3820	F 4		
	3821	F 4		
G	3822	G 5		
	3823	F 9		
	3824	H 9		
	3825	H 9		
	3826	M 2		
	3827	M 2		
	3830	B15		
	3831	B15		
H	3832	C14		
	3833	A13		
	3834	C13		
	3835	D14		
	3836	A12		
	3837	B11		
	3838	B12		
I	3839	C15		
	3840	B 9		
	3841	B10		
	3842	C14		
	3843	D14		
	3850	H18		
	3851	H18		
	3852	H19		
J	3853	G17		
	3854	G18		
	3855	G19		
	3856	F17		
	3857	F18		
	3858	F19		
	3860	E19		
K	3861	D19		
	3862	H17		
	3863	I17		
	3864	H18		
	3865	I19		
	3866	J17		
	3867	J18		
	3868	J19		
L	3869	K18		
	3870	D 4		
	3871	D 6		
	3872	D 3		
	3873	F 3		
	3874	D 5		
	4801	M 8		
M	4802	M 8		
	4820	G 6		
	4821	I 9		
	4822	K 7		
	4824	G 5		
	4825	F 5		
	4850	F18		
	4851	F18		
N	4860	I19		
	4861	I18		
	4862	J18		
	5800	N19		
	5801	M11		
	5834	C13		
	5870	D 2		
	6800	L18		
O	6840	D13		
	6850	H19		
	6851	G19		
	6852	F19		
	6860	E19		

Electrical adjustments

Setting conditions

All electrical settings should be made under the following conditions:

* supply voltage: 220 - 240 V ± 10%; 50 Hz ± 5%
* warming-up time ≈ 10 minutes
* the voltages and oscillograms have been measured with regard to tuner earth.
* measuring probe: Ri > 10 MΩ; Ci < 2.5 pF.

1. Settings on the carrier board

1.1 +148V/+95V supply voltage

Connect a voltmeter over C2631. Using R3635, set the supply voltage to +148V ± 0.5V for 25" and 28" units or to 95V ± 0.5V for 21" units.

1.2 Focusing

This is set using the focusing potentiometer (on the top of the line output transformer).

1.3 Vg2 setting

Connect a pattern generator and supply a blanking frame signal (black picture). Switch the unit to the service default mode (see section 9).
Connect an oscilloscope to the emitters of transistors 7304 and 7364 on the picture tube module. Set the oscilloscope to frame frequency. Measure the DC voltage level of the measuring pulses (see Fig. 7.2). Using the Vg2 potentiometer on the line output transformer, set the measuring pulse with the lowest DC voltage level to:

* +145V ± 5V for 25" and 28" blackline units (protected high-voltage cable)
* +130V ± 5V for 28" non-blackline units
* +118V ± 5V for 25" non-blackline units
* +120V ± 5V for 21" units.

1.4 Horizontal synchronization

Connect pin 5-IC7470 to pin 9-IC7470.
Supply an aerial signal and tune the set.
Adjust potentiometer 3457 until the picture is straight. Remove the interconnection.

1.5 Horizontal centring

Set using potentiometer 3461.

1.6 Vertical centring

Set using potentiometer 3516.

1.7 Picture height

Set using potentiometer 3504.

1.8 Chroma bandpass filter

a. Setting for PAL/SECAM sets (TDA4650)

Connect a signal generator (e.g. PM 5326) to pin 20 of the euroconnector (EXT1) and set its frequency to 4.286 MHz/0.2 Vpp. Switch the unit to EXT1. Connect pin 27-IC7306 to pin 13-IC7306 (+12V). Connect an oscilloscope to pin 15-IC7306.
Set 5301 to maximum amplitude.
Remove the interconnection.

b. Setting for PAL sets (TDA4510)

Connect a signal generator (e.g. PM 5326) to pin 20 of the euroconnector (EXT1) and set its frequency to 4.43 MHz. Connect the unit to EXT1. Connect an oscilloscope to pin 9-IC7305 (TDA4650).Set 5301 to maximum amplitude.

1.9 Chroma auxiliary oscillator

Connect a pattern generator and supply a PAL colour bar pattern. Connect pin 11-IC7305 (TDA4510) or pin 17-IC7306 (TDA4650) to earth. Set 2313 so that the colour on the screen has practically stopped. Remove the interconnection.

1.10 SECAM demodulators for PAL/SECAM sets (TDA4650)

Connect a pattern generator and supply a SECAM black pattern. Connect an oscilloscope to pin 1-IC7306 (TDA4650). Set 5304 to minimum amplitude.Connect the oscilloscope to pin 3-IC7306 (TDA4650). Set 3312 to minimum amplitude.

1.11 White balance

Connect a pattern generator and select a white picture. Switch on the service menu (see section 9) and select "WHITE BALANCE".
Set the value of "Green" to 51, and the Value of "Blue" to 46. In most cases no futher adjustments are required.

1.12 Peak white limit

Switch on the service menu (see section 9) and select "WHITE BALANCE".
Set "WHITE LIMIT" to the value:

- 43 for blackline units
- 53 for non-blackline units
- 53 for 21" units.

1.13 Cut-off points of the picture tube

Connect a pattern generator and select a black picture. Switch on the service menu (see section 9) and select "CUT OFF".
Set the value of "Red" to 56, and fore "Green" to 16, and for "Blue" to 15. In most cases no futher adjustments are required.

1.14 Options

Switch on the service menu and select "OPTION 1" or "OPTION 2".
Switch the options "ON" and "OFF" according to whether the following options are present:

- "PIP" on a PIP set
- "2ND SCART" on a set with two euroconnectors
- "TELETEXT" on a teletext set
- "SVHS" for the Y/C connector in mono sets
- "MULTI SYSTEM" for multisystem sets
- "HYPERBAND" for a tuner which can be tuned to the frequency band of 300 MHz to 450 MHz
- "UHF ONLY" for a tuner which can only be tuned to the UHF band
- "NICAM TWIN" for stereo sets which can also receive NICAM sound.
- "SIXTEEN/NINE" for switching between normal screen size and wide screen size.

MAIN PANEL

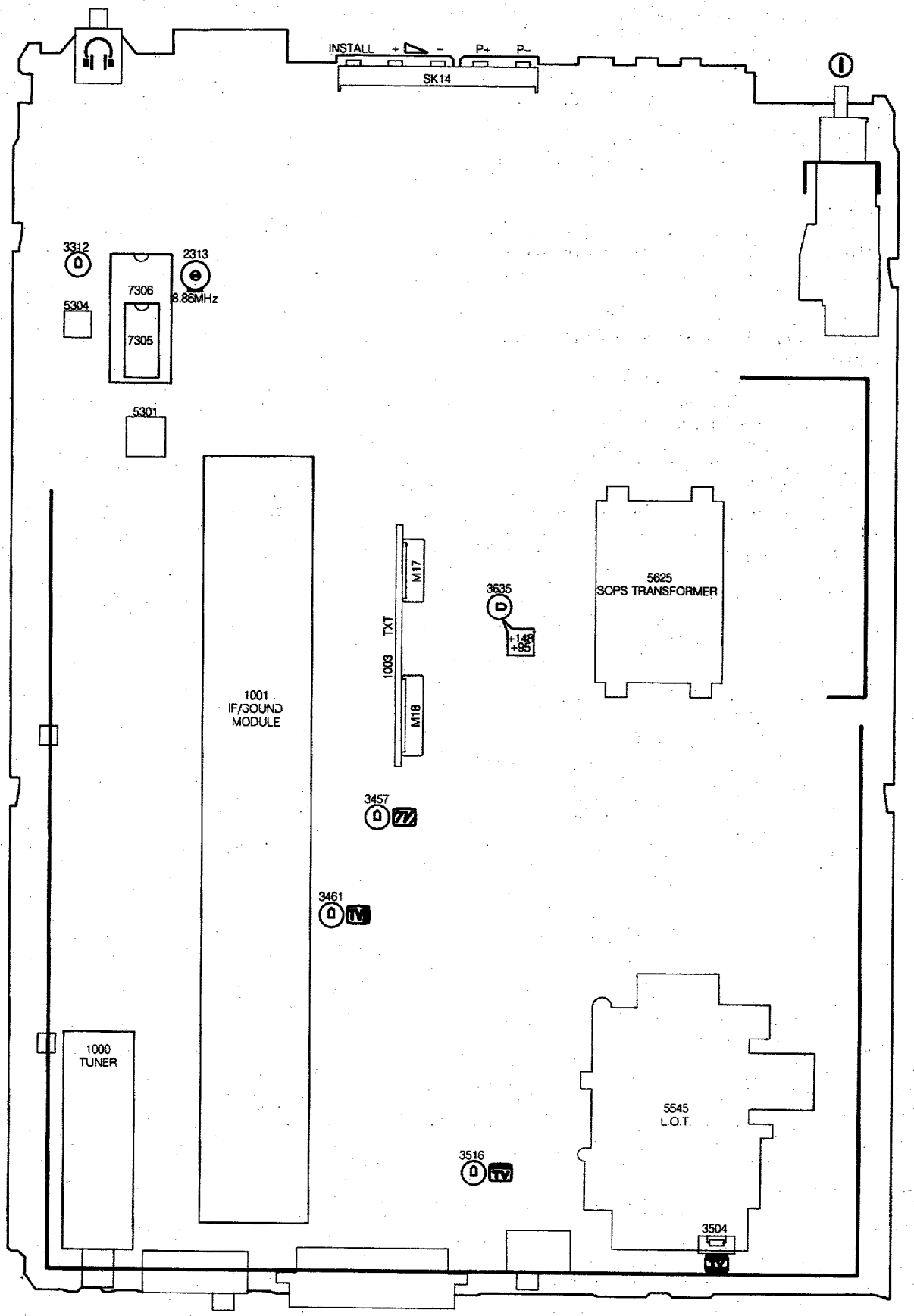


Fig. 7.1

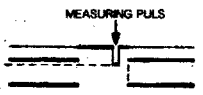


Fig. 7.2

2. MF/sound module adjustment (Fig 7.3)

2.1 The M.F. sound modulator

a. For multi-system France (BGLI).

Stereo + mono:

- Connect a pattern generator (e.g PM 5518) to the tuner and adjust the generator to SECAM L with a frequency of 47.25 MHz (SECAM L'). Adjust L 5080 to minimum picture distortion.
- Adjust the pattern generator to PAL BG with a frequency of 475.25 MHz.

Stereo:

- Connect an oscilloscope to pin 17 of IC 7100 (TDA 3856). Using L 5104 adjust the amplitude of the signal to its minimum value.

b. For Europe (BG) stereo and East-European multi system (BGDK) stereo.

- Adjust the pattern generator to PAL BG with a frequency of 475.25 MHz.
- Connect an oscilloscope to pin 15 of IC 7101 (TDA 3857). Using L 5104 adjust the amplitude of the signal to its minimum value.

c. For NICAM (BGI) stereo.

- Adjust the pattern generator to PAL BG with a frequency of 475.25 MHz.
- Connect an oscilloscope to pin 15 of IC 7100 (TDA 3857). Using L 5103 adjust the amplitude of the signal to its minimum value.

2.2 The FM sound modulator

a. For multi system France (BGLI) + Europe + mono UK.

Adjust the pattern generator to PAL BG with a frequency of 475.25 MHz with stereo L= 3kHz and R= 1kHz.

- 5.5 MHz

Connect an oscilloscope to pin 2 of M 24. Using L 5105 adjust the amplitude to its maximum value.

- 5.74 MHz (only for stereo)

Connect an oscilloscope to pin 3 of M 23. Using L 5103 adjust the amplitude to its maximum value.

b. For East-European multi system (BGDK).

- 6.5 MHz.

Adjust the pattern generator to SECAM DK with a frequency of 475.25 MHz.
Connect an oscilloscope to pin 2 of M 24. Using L 5105 adjust the amplitude to its maximum value.

- 5.74 MHz (only for stereo)

Adjust the pattern generator to PAL BG with a frequency of 475.25 MHz with stereo L= 3kHz and R= 1kHz.
Connect an oscilloscope to pin 3 of M 23. Using L 5103 adjust the amplitude to its maximum value.

c. For NICAM

- NICAM I.

Adjust the pattern generator to PAL I with a frequency of 475.25 MHz.
Select analogue sound.
Connect an oscilloscope to pin 7 of IC 7100 (TDA 3857). Using L 5102 adjust the amplitude to its maximum value.

- NICAM BG.

Adjust the pattern generator to PAL BG with a frequency of 475.25 MHz.
Select analogue stereo sound with L= 3kHz and R= 1kHz.

* 5.5 MHz.

Connect an oscilloscope to pin 7 of IC 7100 (TDA 3857).
Using L 5102 adjust the amplitude to its maximum value.

* 5.74 MHz.

Connect an oscilloscope to pin 6 of IC 7100 (TDA 3857).
Using L 5101 adjust the amplitude to its maximum value.

2.3 AFC and picture demodulation:

Adjust the pattern generator to the system given in the table below (PAL BGI and SECAM BGDK to 475.25 MHz, SECAM L' to 47.25 MHz).

- Connnect an oscilloscope to pin 3 of connector G 29 and using L 5035 or L 5037 (see table) adjust the amplitude to its minimum value.
- Connect an oscilloscope to pin 11 of connector G 29 and using L 5036 or L 5038 (see table) adjust to 2V Dc.

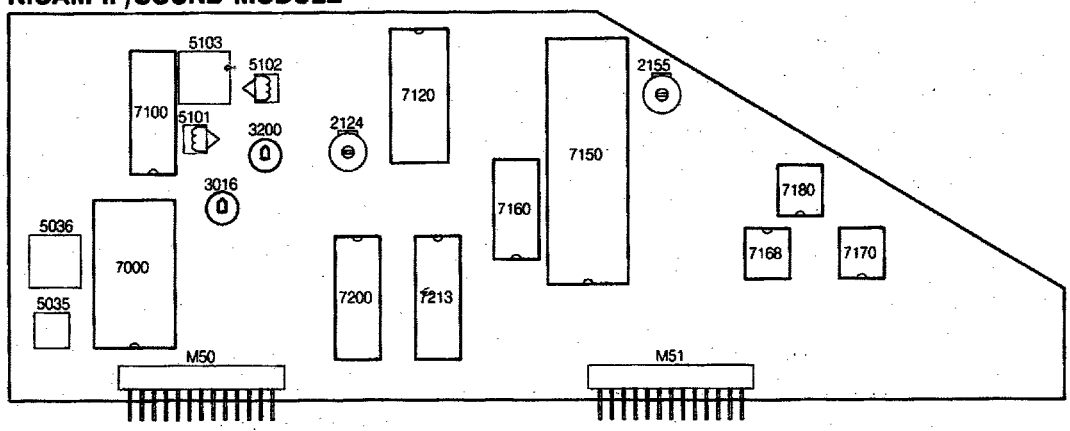
SYSTEM	L5035/L5036	L5037/L5038
Multi French (BGLI) mono/stereo	SECAM L'	SECAM BG/PAL BG
Europe (BG) stereo	PAL BG	--
Europe (BG) mono	--	PAL BG
Multi Eastern- Europe (BGDK) stereo	SECAM K	--
Multi Eastern- Europe (BGDK) mono	--	SECAM K
UK mono	--	PAL I
UK stereo	PAL I	--

2.4 **RF-AGC**
If the picture from a strong local transmitter is distorted, adjust 3016 until the picture is not distorted.

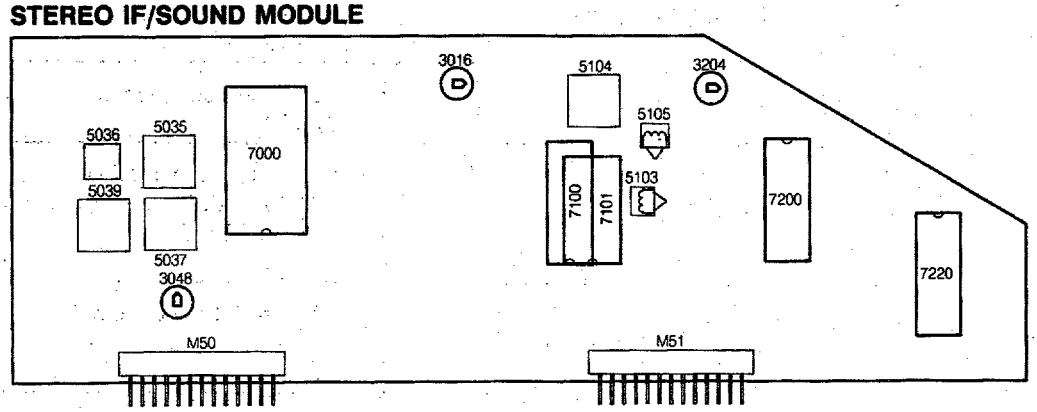
2.5 **MF-AGC** (Multi French (BGLI) system sets).
Connect a pattern generator and select a SECAM-L colour bar signal with a frequency of 475.25 MHz.
Connect an oscilloscope to pin 3 of connector G 29.
Using 3048 adjust the amplitude of the video signal to 1.8 Vpp.

2.6 **Stereo matrix** (stereo and NICAM units)
Connect a pattern generator and supply a PAL BG signal with stereo sound. Select only the right-hand channel sound. Set the balance of the unit completely to the left.
Set 3204 (stereo units) or 3200 (NICAM PAL BG units) to minimum sound reproduction.

NICAM IF/SOUND MODULE



STEREO IF/SOUND MODULE



MONO IF/SOUND MODULE

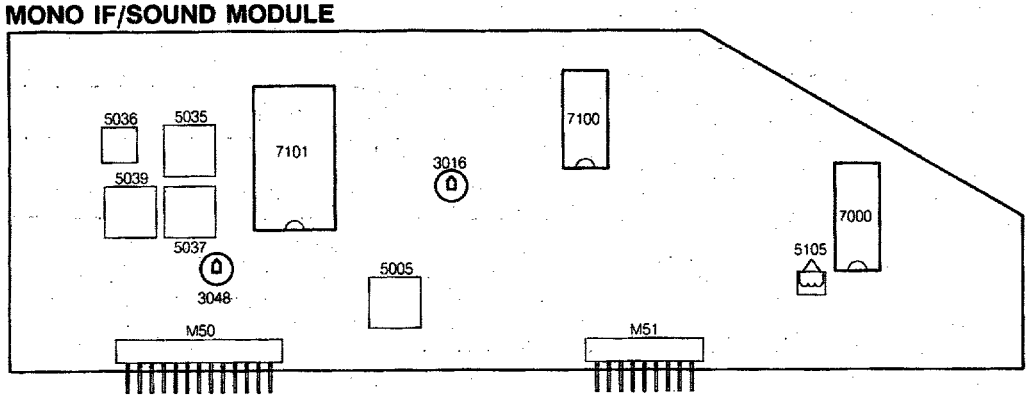


Fig. 7.3

PIP MODULE

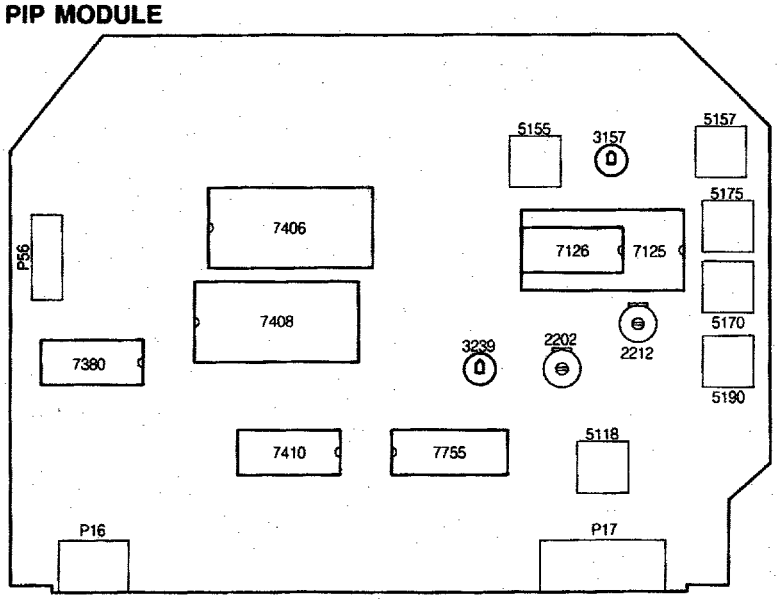


Fig. 7.4

3. Adjustments on the PIP module (Fig. 7.4)

Adjustment conditions
Before making each adjustment, ensure that a PIP picture with the prescribed signal is visible on the screen and that the unit has reached its operating temperature (after ≈ 10 min.).

3.1 Horizontal synchronization
Do not supply an aerial or generator signal.
Connect pin 28-IC7125 to pin 13-IC7125 if TDA4554 is present (PAL selection). Connect pin 5-IC7755 to earth.
Measure the frequency at pin 17-IC7755 and using 3239 set it to 15.625 Hz ± 25 Hz.
Remove the interconnection.

3.2 Chroma bandpass filter

a. Adjustment for PIP modules with TDA4554
Connect a signal generator (e.g. PM 5326) to pin 10 of P17 and set its frequency to 4.286 MHz/0.2 Vpp.
Connect pin 27-IC7125 to 13-IC7125. Connect an oscilloscope to pin 15-IC7125.
Set 5118 to maximum amplitude.
Remove the interconnection.

b. Adjustment for PIP modules with TDA4510
Connect a signal generator (e.g. PM 5326) to pin 10 of P17 and set its frequency to 4.43 MHz/0.2Vpp.
Connect an oscilloscope to pin 9-IC7126.
Set 5118 to maximum amplitude.

3.3 PAL chroma auxiliary oscillator
Connect a pattern generator and supply a PAL colour bar pattern. Connect pin 17-IC7125 (TDA4554) or pin 11-IC7126 (TDA4510) to earth.
Set 2202 so that the colour of the PIP picture is practically still.
Remove the interconnection.

3.4 NTSC chroma auxiliary oscillator for PIP modules with TDA4554
Connect a pattern generator and supply an NTSC M colour bar pattern. Connect pin 17-IC7125 to earth. Set 2202 so that the colour of the PIP picture is practically still.
Remove the interconnection.

3.5 Delay line
Connect a pattern generator and supply a PAL colour bar signal. Connect the X-input of the oscilloscope to pin 1-IC7125 (TDA4554) or pin 1-IC7126 (TDA4510). Connect the Y-input of the oscilloscope to pin 3-IC7125 (TDA4554) or pin 2-IC7126 (TDA4510). Set the oscilloscope to the X-Y position.
Set 5155 and 5157 so that the vectors lie in one line (points which are furthest from the origin).
Set the pattern generator to the "DEM" mode.
Set R3157 so that the vectors lie on top of one another in the origin.

3.6 SECAM identification for PIP modules with TDA4554
Connect a pattern generator and supply a SECAM colour bar signal.
Connect pin 27-IC7125 to pin 13-IC7125.
Connect an oscilloscope to pin 21-IC7125.
Set 5190 to minimum DC level.
Remove the interconnection.

3.7 SECAM demodulators for PIP modules with TDA4554
Connect a pattern generator and supply a SECAM signal without contents (black). Connect pin 27-IC7125 to pin 13-IC7125. Connect an oscilloscope to pin 1-IC7125. Using 5175, set the DC level during the scan equal to the DC level during the flyback.
In the same way set 5170, but now measure at pin 3-IC7125.
Remove the interconnection.

4. Adjustments on the picture tube module

4.1 Picture width
Set using potentiometer 3525.

4.2 East/West correction
Set using potentiometer 3521. This setting is only for 25" and 28" units.

Repair tips

1. Servicing of SMDs (Surface Mounted Devices)

1.1 General cautions on handling and storage

a. Oxidation on the terminals of SMDs results in poor soldering. Do not handle SMDs with bare hands.

b. Avoid using storage places that are sensitive to oxidation such as places with sulphur or chlorine gas, direct sunlight, high temperatures or a high degree of humidity.
The capacitance or resistance value of the SMDs may be affected by this.

c. Rough handling of circuit boards containing SMDs may cause damage to the components as well as the circuit boards. Circuit boards containing SMDs should never be bent or flexed. Different circuit board materials expand and contract at different rates when heated or cooled and the components and/or solder connections may be damaged due to the stress. Never rub or scrape chip components as this may cause the value of the component to change. Similarly, do not slide the circuit board across any surface.

1.2 Removal of SMDs

a. Heat the solder (for 2-3 seconds) at each terminal of the chip. By means of litz wire and a slight horizontal force, small components can be removed with the soldering iron. They can also be removed with a solder sucker (see Fig. 8.1A) or:

b. While holding the SMD with a pair of tweezers, take it off gently using the soldering iron's heat applied to each terminal (see Fig. 8.1B).

c. Remove the excess solder on the solder lands by means of litz wire or a solder sucker (see Fig. 8.1C).

Caution on removal:

a. When handling the soldering iron, use suitable pressure and be careful.

b. When removing the chip, do not use undue force with the pair of tweezers.

c. The soldering iron to be used (approx. 30 W) should preferably be equipped with a thermal control (soldering temperature: 225 to 250°C).

d. The chip, once removed, must **never** be reused.

1.3 Attachment of SMDs

a. Locate the SMD on the solder lands by means of tweezers and solder the component on one side. Ensure that the component is positioned correctly on the solder lands (see Fig. 8.2A).

b. Next complete the soldering of the terminals of the component (see Fig. 8.2B).

Caution when attaching SMDs:

a. When soldering the SMD terminals, do not touch them directly with the soldering iron. The soldering should be done as quickly as possible; care must be taken to avoid damage to the terminals of the SMDs themselves.

b. Keep the SMD's body in contact with the printed board when soldering.

c. The soldering iron to be used (approx. 30 W) should preferably be equipped with a thermal control (soldering temperature: 225 to 250°C).

d. Soldering should not be done outside the solder land.

e. Soldering flux (of rosin) may be used, but should not be acidic.

f. After soldering, let the SMD cool down gradually at room temperature.

g. The quantity of solder must be proportional to the size of the solder land. If the quantity is too great, the SMD might crack or the solder lands might be torn loose from the printed board (see Fig. 8.3).

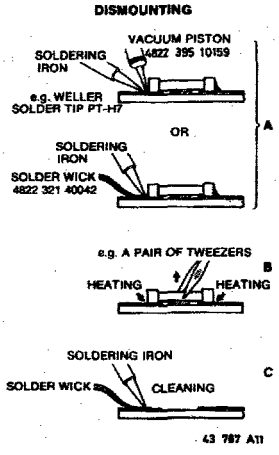


Fig. 8.1

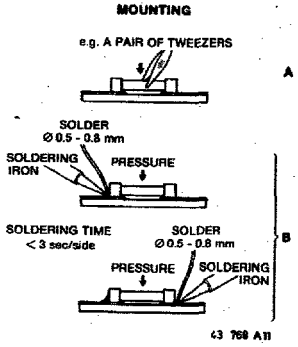


Fig. 8.2

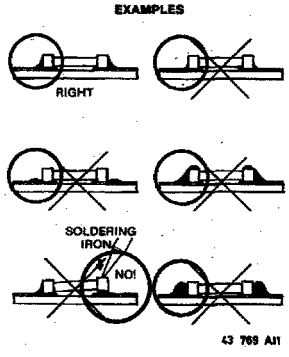


Fig. 8.3

2. Replacing the EEPROM IC7710

If the EEPROM has to be replaced during a repair, the microprocessor will load the EEPROM with a number of default values for the white balance, peak white limit and cut-off point settings.
However, all these values should be checked and adjusted, if necessary.
All options should also be set, the programs installed and personal preference set.

3. Table of error messages

Error indication	Description	Possible fault
OSD: ERR PIP	I^2C fault PIP module	* +5 on PIP module * IC7406
OSD: ERR TXT	I^2C fault TXT module	* +5 on teletext module * IC7800
OSD: ERR NICAM	I^2C fault IC7160 (NICAM units)	* +5 on IF/sound module * IC7160, C2160, C2161, C2221, C2222 * IC7213
OSD: ERR 8415	I^2C fault IC7200 (stereo and NICAM units)	* +14 on IF/Sound module * IC7200 * IC7220
OSD: ERR 8425	I^2C fault IC7213 (NICAM units) I^2C fault IC7220 (Stereo units)	* IC7213/IC7220
OSD: ERR EEPROM	I^2C fault IC7710	* IC7710
OSD: ERR TUNER	I^2C fault tuner	* Tuner * TS7003
OSD: ERR CHROMA	I^2C fault IC7309	* supply IC7309 (+9) * IC7309
Flashing LED	Internal fault in μP	* IC7708
OSD: ERR BUS	I^2C bus blocked	* C2714, C2715

Directions for use

1. Service-Default-Mode

The GR2.2 is equipped with a service default mode. The service default mode is a fixed defined mode in which the unit can be placed.

1.1 Mode definition

The definition of the fixed mode in the service default mode is as follows:

- all sound and picture controls are in the central position (with the exception of the volume which is set to low)
- The set should be tuned to 475.25 MHz
- system:
  * PAL BG, PAL/SECAM BG or PAL I for single system units (option 2 MULTI SYSTEM "OFF")
  * SECAM L for multisystem units. (option 2 MULT SYSTEM "ON")
  * SECAM DK for sets for Eastern-Europa with option 2 MULTI SYSTEM "ON".
  * PAL BG for sets for Eastern-Europa with option 2 MULTI SYSTEM "OFF".

1.2 Switching on and off

The service default mode is switched on by briefly short-circuiting the pins M33 and M34 (SERVICE) behind the INSTALL key on the carrier panel when switching the unit on with the mains switch. In order to indicate that the unit is in the service default mode, an "SER" appears on the screen. The service default mode can only be switched off by switching the unit to standby (⏻). If the unit is switched off and then on again using the mains switch or mains plug, the service default mode remains switched on.

1.3 Operation and extra facilities

In addition to the fact that the unit can be operated normally, in the service default mode two extra functions are available:

- Autostore
  When operating the **install** key on the local control panel, the unit is tuned to the next transmitter frequency. This frequency is also stored under the selected programme number. Therefore the installation menu cannot be accessed in the service default mode!
- Service menu
  The service menu is activated by first pressing the ◿ - key and then at the same time the P+ key on the local control panel. The service menu now appears on the screen. The service menu offers the facility to set various options and make a number of picture tube settings. The various components in the service menu are selected using the coloured keys on the remote control. The various components themselves are adjusted using the + and - keys on the remote control.The values and options set are immediately stored in the EEPROM.

Note 1:
If the service menu does not appear on the screen and the autostore function does not react, then the "LOCK" function is probably activated.
If the autostore function only does not react, the hotel mode is activated.

Note 2:
If a multisystem unit in the service default mode is to be used with the PAL/SECAM BG system, option 2 "MULTI SYSTEM" may be temporarily disabled "OFF".

Note 3:
If a multi-system set for Eastern-Europe in the service default mode is nevertheless to be used with the PAL BG system, option 2 "MULTI SYSTEM" may be temporarily disabled ("OFF").

2. Hotel mode

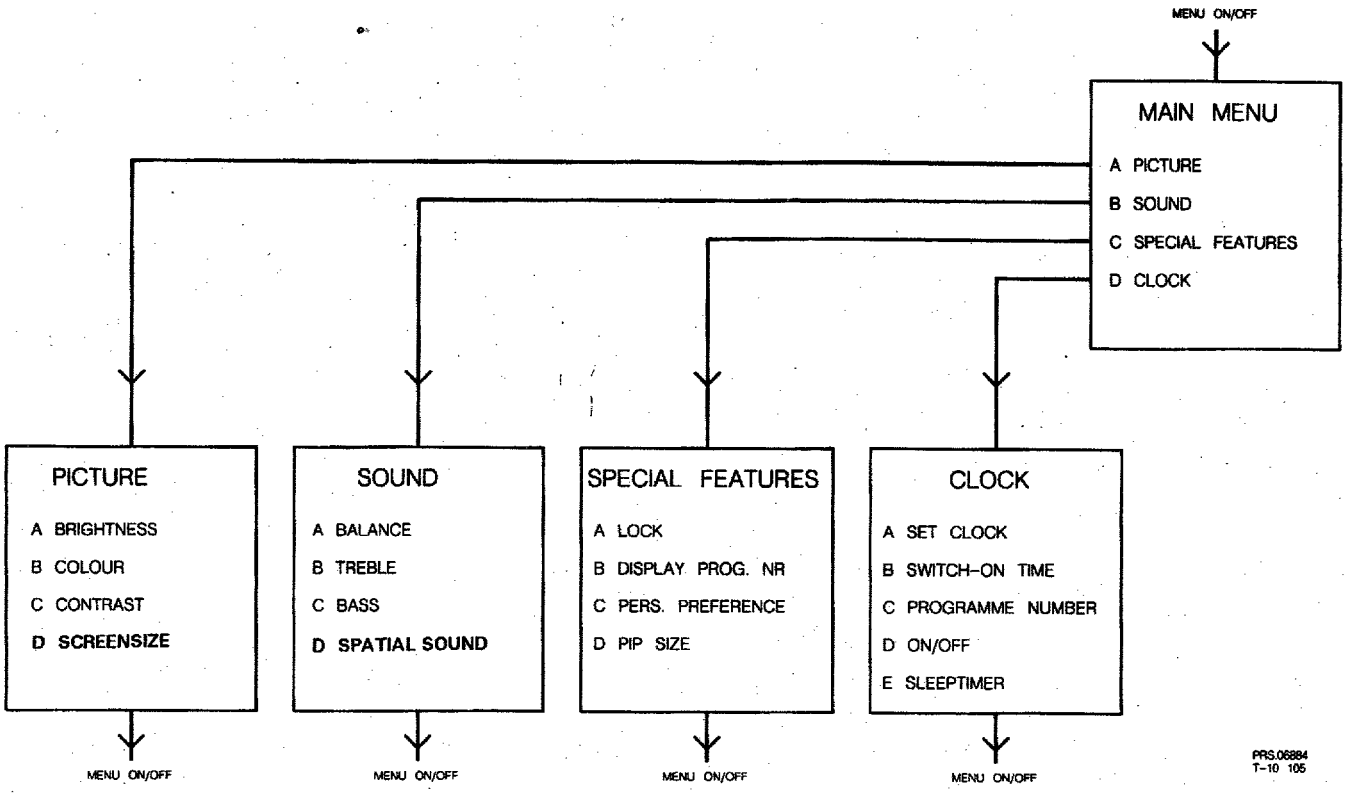
In the hotel mode the volume control is limited to a maximum to be set beforehand and the installation menu cannot be called up.

2.1 Switching the hotel mode on and off

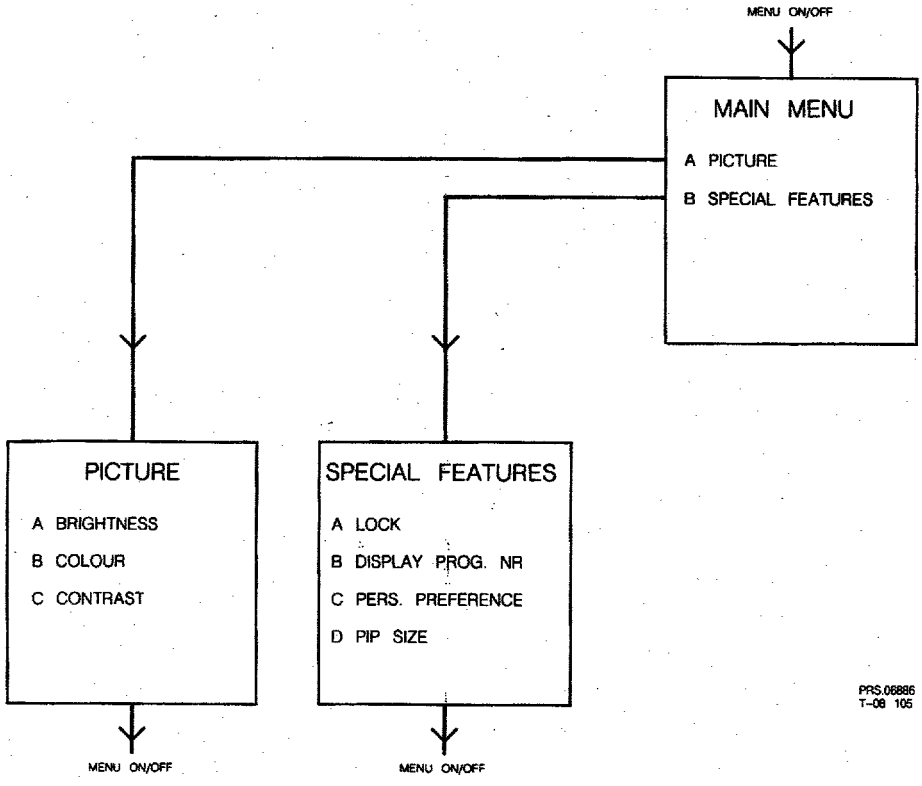
Select programme number 38.
First press ◿ + and keep this depressed while pressing P -.

Survey of menus

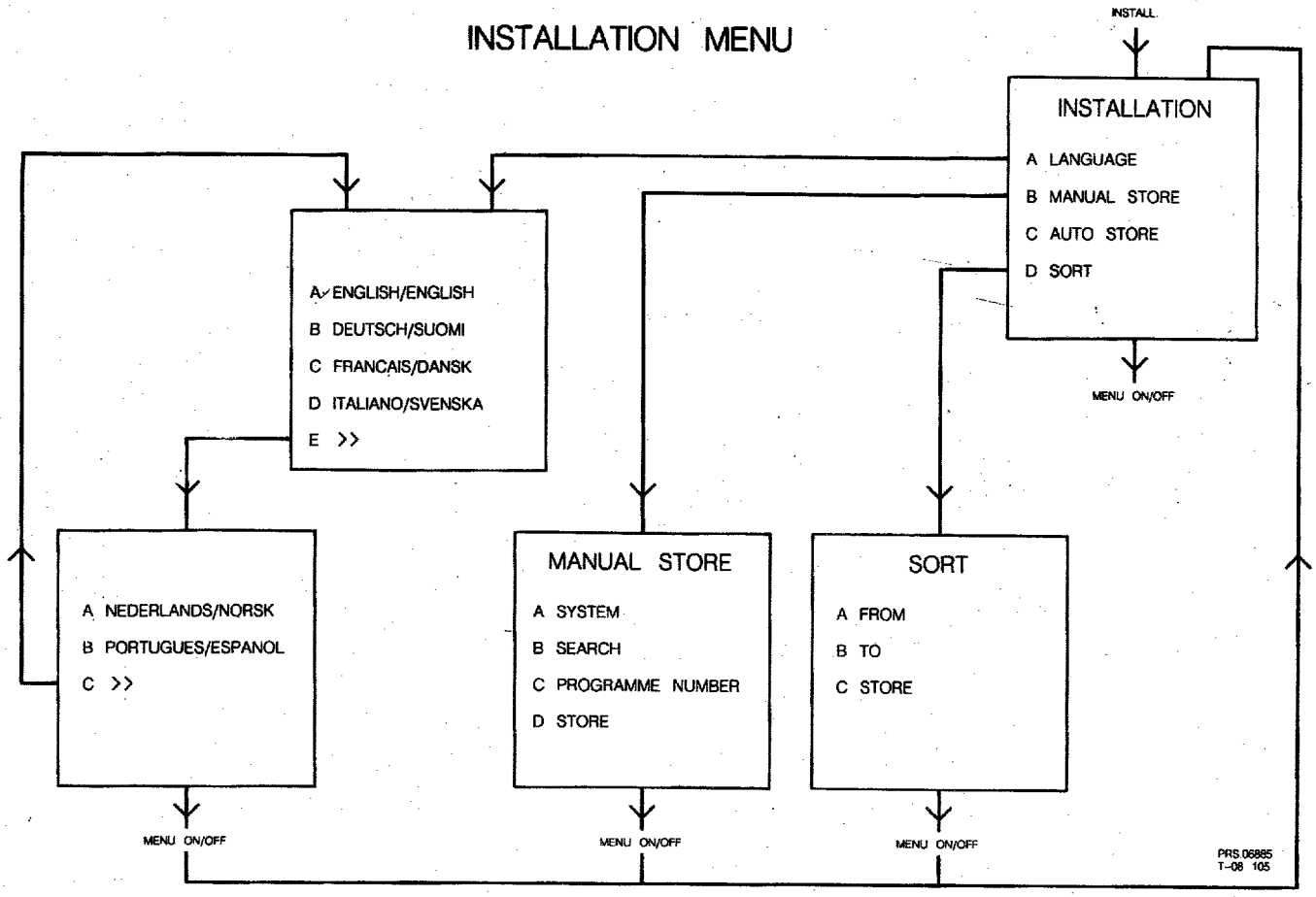
MAIN MENU STEREO



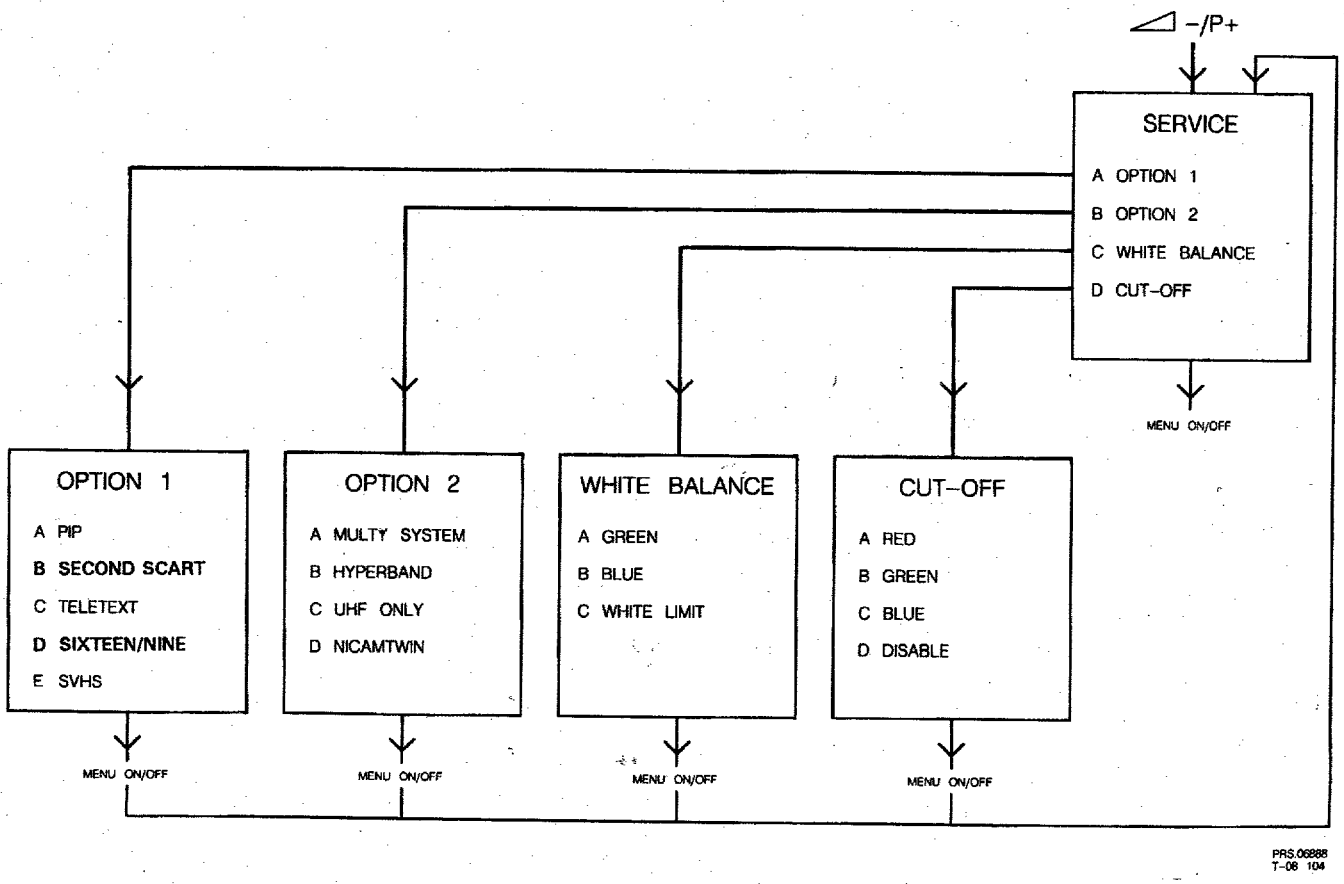
MAIN MENU MONO



INSTALLATION MENU



SERVICE MENU



Main Carrier

Mechanical parts

	4822 492 70871	spring wire
	4822 404 31174	bracket EURO module
▲	4822 256 91766	Spring fix.
0103	4822 466 93111	insulator
0170	4822 466 30395	shield for µP
0010	4822 265 30389	2p male
0011	4822 265 30389	2p male
0012	4822 265 30351	5p male
0013	4822 265 30378	4p male
0014	4822 290 40295	7p male
0015	4822 265 40421	6p male
0016	4822 264 40207	3p male
0017	4822 267 50591	6p male
0018	4822 264 50148	8p male
0019	4822 264 40239	3p male
0022	4822 267 40666	3p male
0023	4822 264 40207	3p male
0024	4822 264 40207	3p male
0027	4822 265 30351	5p male
0028▲	4822 265 30877	3p
0029	4822 265 41086	9p male
0032	4822 290 40283	5p male
0035	4822 267 20387	SVHS-connector
0039	4822 267 31014	bushing
0040	4822 267 40878	3p male
0041	4822 276 50354	switch
0042▲	4822 256 30274	Fuse holder
0047	4822 267 30631	cinch fem. 2p
0049	4822 267 60243	euro connector
	4822 267 30546	6p female
	4822 267 50637	10p female

Various

1000	4822 210 10436	U944C/IEC
1000	4822 210 50124	UV916E/IEC
1002	4822 526 10405	ferrite bead
1003	4822 212 23667	infra red receiver
1004	4822 526 10405	ferrite bead
1240	4822 071 51602	fuse T1.6A
1242	4822 071 51602	fuse T1.6A
1300	4822 242 70304	8,867MHz
1534	4822 071 53151	fuse T315mA
1559	4822 071 51002	fuse T1A
1580	4822 071 51602	fuse T1.6A
1600	4822 070 32002	fuse T2A
1601	4822 071 52502	fuse T2.5A
1702	4822 242 70392	6MHz

⊣⊢

2001	4822 124 40849	330µF 20% 16V
2002	4822 122 31797	22nF 10% 63V
2003	4822 122 31947	100nF 20% 63V
2008	4822 122 31765	100pF 5% 50V
2010	4822 124 40435	10µF 20% 50V
2231	4822 124 41525	100µF 20% 25V
2232	4822 122 32863	22nF 80% 50V
2233	4822 122 32863	22nF 80% 50V
2234	4822 122 32863	22nF 80% 50V
2235	4822 122 32863	22nF 80% 50V
2236	4822 122 31784	4,7nF 10% 50V
2237	4822 122 31947	100nF 20% 63V
2238	4822 122 31784	4,7nF 10% 50V
2238[1b]	4822 122 32597	6,8nF 10% 63V
2239	4822 122 31947	100nF 20% 63V
2240	4822 124 40214	1000µF 20% 25V
2241	4822 122 31947	100nF 20% 63V
2242	4822 124 40214	1000µF 20% 25V
2243	4822 122 32863	22nF 80% 50V
2245	4822 122 32863	22nF 80% 50V
2246[1b]	4822 124 40849	330µF 20% 16V
2246	4822 124 41596	22µF 20% 50V
2248	4822 124 40849	330µF 20% 16V
2249	4822 122 32863	22nF 80% 50V
2250	4822 121 41857	10nF 5% 250V
2251	4822 121 41857	10nF 5% 250V
2252	4822 121 51252	470nF 5% 63V
2254	4822 121 51252	470nF 5% 63V
2255	4822 121 51252	470nF 5% 63V
2256	4822 122 32142	270pF 5% 63V
2257	4822 122 32142	270pF 5% 63V
2262	4822 122 32142	270pF 5% 63V
2263	4822 122 32142	270pF 5% 63V
2264	4822 121 51252	470nF 5% 63V
2265	4822 121 51252	470nF 5% 63V
2266	4822 124 41796	22µF 20% 16V
2300	4822 122 32482	22pF 5% 63V
2301	4822 122 31773	560pF 5% 50V
2303	4822 122 32142	270pF 5% 63V
2304[7]	4822 122 31773	560pF 5% 50V
2304	4822 122 32999	2,2nF 5%
2305	4822 126 10324	33pF 63V
2306	4822 122 31965	220pF 5% 63V
2307	4822 122 31965	220pF 5% 63V
2308	4822 122 32442	10nF 50V
2309	4822 122 32442	10nF 50V
2310	4822 122 32442	10nF 50V
2311	4822 122 33496	100nF 10% 63V
2312	4822 122 32442	10nF 50V
2313	4822 125 50045	20pF
2314	5322 121 42661	330nF 5% 63V
2315[2,4]	4822 122 32139	12pF 5% 63V
2315[1,3]	4822 122 32504	15pF 5% 50V
2316	4822 122 31825	27pF 10% 50V
2317	4822 122 33466	82pF 2%
2318	4822 122 32875	100pF 5% 50V
2319	4822 122 31825	27pF 10% 50V
2320[2,4]	4822 122 31772	47pF 5% 50V
2320[1,3]	4822 122 31839	82pF 10% 50V
2321	4822 122 31797	22nF 10% 63V
2322	4822 122 31797	22nF 10% 63V
2323	4822 122 32542	47nF 10% 63V
2325	4822 122 32542	47nF 10% 63V
2326[7,8]	4822 051 10008	jumper
2326	4822 122 33496	100nF 10% 63V
2328[1,3]	4822 121 41856	22nF 5% 250V
2328[2,4]	4822 121 42408	220nF 5% 63V
2329[1,3]	4822 121 41856	22nF 5% 250V
2329[2,4]	4822 121 42408	220nF 5% 63V
2330	4822 122 31765	100pF 5% 50V
2331	4822 122 31765	100pF 5% 50V
2332	5322 122 31842	330pF 5% 63V
2333	4822 121 42408	220nF 5% 63V
2334	4822 122 31965	220pF 5% 63V
2335	4822 122 31965	220pF 5% 63V
2336	4822 122 31797	22nF 10% 63V
2337	4822 122 31797	22nF 10% 63V
2338	4822 122 31797	22nF 10% 63V
2339	4822 122 33496	100nF 10% 63V
2340	4822 122 31797	22nF 10% 63V
2341	4822 122 31797	22nF 10% 63V
2342	4822 122 33496	100nF 10% 63V
2343	4822 122 33496	100nF 10% 63V
2344	4822 122 33496	100nF 10% 63V
2345	4822 122 31797	22nF 10% 63V
2346	4822 122 31765	100pF 5% 50V
2347	4822 122 31769	18pF 5% 50V
2349	5322 122 31647	1nF 10% 63V
2350	4822 122 31797	22nF 10% 63V
2351	4822 122 31797	22nF 10% 63V
2352	5322 122 31647	1nF 10% 63V
2353	4822 122 33496	100nF 10% 63V
2354	4822 124 40242	1µF 20% 63V
2355	4822 124 40849	330µF 20% 16V
2356	4822 122 31797	22nF 10% 63V
2357	4822 122 31797	22nF 10% 63V
2358	4822 122 31797	22nF 10% 63V
2359	4822 122 31765	100pF 5% 50V
2360	4822 122 33496	100nF 10% 63V
2361	4822 122 33496	100nF 10% 63V
2362	4822 122 33496	100nF 10% 63V
2363	4822 122 31972	39pF 5% 50V
2365	5322 121 42661	330nF 5% 63V
2366	4822 124 41566	3,3µF 20% 50V
2367	4822 124 41578	6,8µF 20% 50V
2368	4822 122 32139	12pF 5% 63V
2370	4822 121 42408	220nF 5% 63V
2371	4822 122 31825	27pF 10% 50V
2372	4822 122 31825	27pF 10% 50V
2373	4822 122 31825	27pF 10% 50V
2374	4822 122 31772	47pF 5% 50V
2375	4822 122 31765	100pF 5% 50V
2376	4822 122 31765	100pF 5% 50V
2380	4822 122 31766	120pF 5% 50V
2381	4822 122 31766	120pF 5% 50V
2384	4822 122 31772	47pF 5% 50V
2385	4822 122 31765	100pF 5% 50V
2386	4822 122 33481	1,8nF 15%
2450	4822 124 80059	100µF 20% 25V
2451	4822 122 33496	100nF 10% 63V
2455	5322 122 31647	1nF 10% 63V
2455[2]	5322 122 33446	3,3nF 10% 63V
2456	4822 124 80059	100µF 20% 25V
2457	4822 122 33496	100nF 10% 63V
2458	4822 121 42937	2.7nF 1% 250V
2459	4822 122 33496	100nF 10% 63V
2460[1]	4822 122 31644	2,2nF 10% 63V
2460	4822 122 32442	10nF 50V
2461	5322 122 31647	1nF 10% 63V
2462	4822 122 31797	22nF 10% 63V
2464	4822 122 33496	100nF 10% 63V
2465	4822 124 40849	330µF 20% 16V
2466	4822 124 22403	10µF 20% 16V
2467	4822 122 33496	100nF 10% 63V
2468	4822 124 40244	2,2µF 20% 63V
2469	4822 124 41596	22µF 20% 50V
2470	4822 122 31772	47pF 5% 50V
2471	5322 121 42661	330nF 5% 63V
2473	5322 121 42661	330nF 5% 63V
2475	4822 122 33496	100nF 10% 63V
2500[3]	4822 122 31727	470pF 5% 63V
2500[4]	4822 122 31771	390pF 5% 50V
2500[1,2]	4822 122 31965	220pF 5% 63V
2501	4822 122 33481	1,8nF 15%
2502	5322 124 41381	22µF 20% 50V
2505	4822 122 32542	47nF 10% 63V
2506[3]	4822 124 80062	470µF 20% 35V
2506[4]	4822 124 80063	680µF 20% 35V
2506[1,2]	4822 124 80065	1000µF 20% 50V
2507	4822 122 31797	22nF 10% 63V
2509	5322 124 41379	2,2µF 20% 50V
2524	4822 124 42167	4,7µF 20% 50V
2538	4822 121 43856	4.7nF 5% 250V
2539	4822 124 80057	330µF 20% 16V

Spare parts list / Stückliste / Liste

Main carrier

2545▲[1,2]	4822 126 10202	1,5nF 10% 2KV
2545▲[3,4]	4822 126 11539	1,2nF 10% 2KV
2546▲[1]	4822 121 43061	8,2nF 5% 1,6KV
2546▲[2]	4822 121 43076	11nF 5% 1600V
2546▲[3]	4822 121 70109	7,5nF 5% 1,6KV
2546▲[4]	5322 121 44345	15nF 5% 1,6KV
2547▲[1,2]	4822 121 40488	22nF 10% 400V
2547▲[3]	5322 121 44151	33nF 10% 400V
2547▲[4]	5322 121 44219	47nF 10% 400V
2549[1]	4822 121 42073	390nF 10% 400V
2549[2]	4822 121 42074	470nF 10% 400V
2550▲[1,2]	4822 121 51527	390nF 5% 250V
2550▲[3]	4822 121 51601	470nF 10% 200V
2550▲[4]	5322 121 44128	680nF 10% 250V
2551	4822 124 80069	1µF 20% 160V
2559	4822 124 80059	100µF 20% 25V
2560▲	4822 121 51408	33nF 10% 250V
2570	4822 124 80071	22µF 20% 160V
2574	4822 122 10175	2,2nF 10% 50V
2580	4822 124 80061	1000µF 20% 25V
2585[2]	4822 124 80058	68µF 20% 25V
2585[1]	5322 124 21731	10µF 20% 50V
2588[1,2]	4822 122 31644	2,2nF 10% 63V
2588[4]	5322 122 31647	1nF 10% 63V
2590	5322 121 42498	680nF 5% 63V
2600▲	4822 124 41531	470nF 10% 250V
2605▲[1,2]	4822 124 80053	220µF 20% 385V
2605▲[3,4]	4822 124 80134	150µF 20% 400V
2607▲	4822 121 51469	1nF 400V
2611	5322 124 41299	68µF 20% 25V
2617[3,4]	4822 121 51252	470nF 5% 63V
2617[1,2]	4822 121 51319	1µF 10% 63V
2620	5322 121 42465	68nF 5% 63V
2625	4822 122 40593	1nF 10% 1KV
2626	4822 122 40594	470pF 10% 1KV
2629	4822 122 31784	4,7nF 10% 50V
2630[3,4]	4822 124 23418	47µF 200V
2630[1,2]	4822 124 80055	100µF 10% 160V
2631[3,4]	4822 124 23418	47µF 200V
2631[1,2]	4822 124 80055	100µF 10% 160V
2632	4822 126 11382	1nF 10% 1KV
2636	4822 122 31644	2,2nF 10% 63V
2640	4822 124 80061	1000µF 20% 25V
2641	4822 124 80061	1000µF 20% 25V
2646	4822 124 80054	15µF 20% 50V
2649	4822 122 33496	100nF 10% 63V
2650	4822 122 33496	100nF 10% 63V
2652	5322 122 32331	1nF 10% 100V
2653	5322 122 32331	1nF 10% 100V
2658	5322 122 32838	82nF 10% 63V
2660	4822 124 80061	1000µF 20% 25V
2661	4822 124 41506	47µF 20% 16V
2662[3,4]	4822 122 31965	220pF 5% 63V
2662[1,2]	4822 122 32142	270pF 5% 63V
2663[3,4]	4822 122 31765	100pF 5% 50V
2663[1,2]	4822 122 31839	82pF 10% 50V
2664	5322 124 41379	2,2µF 20% 50V
2670	4822 122 31766	120pF 5% 50V
2671	4822 121 42408	220nF 5% 63V
2675[3,4]	4822 124 80064	680µF 20% 50V
2675[1,2]	4822 124 80065	1000µF 20% 50V
2676	5322 122 32331	1nF 10% 100V
2704	4822 122 32542	47nF 10% 63V
2705	4822 122 31766	120pF 5% 50V
2706	5322 124 41299	68µF 20% 25V
2707	4822 122 32442	10nF 50V
2708	4822 122 31766	120pF 5% 50V
2709	4822 122 32507	6,8pF 5% 50V
2710	4822 122 32507	6,8pF 5% 50V
2711	4822 122 31825	27pF 10% 50V
2712	4822 122 31825	27pF 10% 50V
2713	4822 124 41525	100µF 20% 25V
2714	4822 122 31766	120pF 5% 50V
2715	4822 122 31766	120pF 5% 50V
2716	4822 122 33496	100nF 10% 63V
2717	4822 122 31644	2,2nF 10% 63V
2718	4822 122 33496	100nF 10% 63V
2719	5322 121 42386	100nF 5% 63V
2721	4822 122 32442	10nF 50V
2722	4822 122 31947	100nF 20% 63V
2781	4822 122 33496	100nF 10% 63V
2850	4822 124 41506	47µF 20% 16V
2851	4822 122 31766	120pF 5% 50V
2852	4822 122 33496	100nF 10% 63V
2853	4822 122 31784	4,7nF 10% 50V
2854	4822 122 33496	100nF 10% 63V
2875	5322 121 42386	100nF 5% 63V



3001▲	4822 052 10399	39Ω 5% 0,33W
3002	4822 051 10223	22k 2% 0,25W
3003	4822 051 20222	2k2 5% 0,1W
3010	4822 051 10102	1k 2% 0,25W
3218	4822 116 52228	680Ω 5% 0,5W
3219	4822 116 52228	680Ω 5% 0,5W
3220	4822 051 10392	3k9 2% 0,25W
3221	4822 050 11002	1k 1% 0,4W
3222	4822 116 52234	100k 5% 0,5W
3224	4822 116 52256	2k2 5% 0,5W
3225	4822 051 10272	2k7 2% 0,25W
3226	4822 051 10333	33k 2% 0,25W
3227	4822 051 10333	33k 2% 0,25W
3228	4822 051 10151	150Ω 2% 0,25W
3229	4822 051 10562	5k6 2% 0,25W
3230	4822 116 52257	22k 5% 0,5W
3231	4822 051 10472	4k7 2% 0,25W
3232[1b]	4822 051 10008	jumper
3232	4822 051 10101	100Ω 2% 0,25W
3233	4822 051 10103	10k 2% 0,25W
3234	4822 051 10223	22k 2% 0,25W
3235	4822 051 10223	22k 2% 0,25W
3236	4822 051 10122	1k2 2% 0,25W
3237	4822 051 10122	1k2 2% 0,25W
3237[1b]	4822 051 10562	5k6 2% 0,25W
3238	4822 051 10122	1k2 2% 0,25W
3239	4822 116 52207	1k2 5% 0,5W
3240▲	4822 052 10828	8Ω2 5% 0,33W
3241▲	4822 052 10828	8Ω2 5% 0,33W
3242	4822 051 10333	33k 2% 0,25W
3243	4822 051 10333	33k 2% 0,25W
3244	4822 051 10103	10k 2% 0,25W
3245	4822 051 10103	10k 2% 0,25W
3246	4822 050 23301	330Ω 1% 0,6W
3247	4822 116 52175	100Ω 5% 0,5W
3248	4822 050 23301	330Ω 1% 0,6W
3249	4822 116 52175	100Ω 5% 0,5W
3249[1b]	4822 116 52193	39Ω 5% 0,5W
3250	4822 050 11002	1k 1% 0,4W
3251	4822 050 11002	1k 1% 0,4W
3253	4822 116 52211	150Ω 5% 0,5W
3254	4822 116 52211	150Ω 5% 0,5W
3255	4822 050 11002	1k 1% 0,4W
3256	4822 050 11002	1k 1% 0,4W
3257	4822 051 10334	330k 2% 0,25W
3258	4822 051 10334	330k 2% 0,25W
3259	4822 051 10334	330k 2% 0,25W
3260	4822 051 10334	330k 2% 0,25W
3261	4822 116 80747	75Ω 5% 0,125W
3262	4822 116 80747	75Ω 5% 0,125W
3263	4822 051 10008	jumper
3263[1b]	4822 051 10562	5k6 2% 0,25W
3264	4822 051 10008	jumper
3264[1b]	4822 051 10562	5k6 2% 0,25W
3265	4822 050 21008	1Ω 1% 0,6W
3266	4822 050 21008	1Ω 1% 0,6W
3267	4822 051 10103	10k 2% 0,25W
3268	4822 051 10103	10k 2% 0,25W
3300	4822 051 10822	8k2 2% 0,25W
3301	4822 051 10272	2k7 2% 0,25W
3302	4822 051 20222	2k2 5% 0,1W
3303[7,8]	4822 051 10122	1k2 2% 0,25W
3303	4822 051 10332	3k3 2% 0,25W
3304	4822 051 10182	1k8 2% 0,25W
3305	4822 051 10431	430Ω 2% 0,25W
3306	4822 051 10103	10k 2% 0,25W
3307[2,4]	4822 051 10681	680Ω 2% 0,25W
3307[1,3]	4822 051 10821	820Ω 2% 0,25W
3308	4822 051 10331	330Ω 2% 0,25W
3309	4822 051 10331	330Ω 2% 0,25W
3310	4822 051 10512	5k1 2% 0,25W
3311	4822 051 10391	390Ω 2% 0,25W
3312	4822 101 11186	470Ω 30% 0.1W
3313[7,8]	4822 051 10103	10k 2% 0,25W
3313	4822 051 10682	6k8 2% 0,25W
3314	4822 051 10103	10k 2% 0,25W
3318	4822 051 10472	4k7 2% 0,25W
3323	4822 116 52272	330k 5% 0,5W
3325	4822 051 10271	270Ω 2% 0,25W
3326	4822 051 10271	270Ω 2% 0,25W
3327	4822 050 11202	1k2 1% 0,4W
3328	4822 051 10473	47k 2% 0,25W
3330	4822 051 10109	10Ω 2% 0,25W
3331	4822 051 10109	10Ω 2% 0,25W
3332	4822 050 23901	390Ω 1% 0,6W
3334	4822 050 21809	18Ω 1% 0,6W
3335	4822 116 52184	18Ω 5% 0,5W
3336▲[2,4]	4822 052 10189	18Ω 5% 0,33W
3336▲[1,3]	4822 052 10279	27Ω 5% 0,33W
3337▲[2,4]	4822 052 10189	18Ω 5% 0,33W
3337▲[1,3]	4822 052 10279	27Ω 5% 0,33W
3338	4822 050 11002	1k 1% 0,4W
3339	4822 116 52243	1k5 5% 0,5W
3340	4822 050 11002	1k 1% 0,4W
3341	4822 051 10103	10k 2% 0,25W
3342[2,4]	4822 051 10102	1k 2% 0,25W
3342[1,3]	4822 051 10122	1k2 2% 0,25W
3343	4822 051 10104	100k 2% 0,25W
3344	4822 051 10103	10k 2% 0,25W
3347	4822 116 52219	330Ω 5% 0,5W
3348	4822 116 52219	330Ω 5% 0,5W
3349	4822 116 52219	330Ω 5% 0,5W
3350	4822 050 11002	1k 1% 0,4W
3351	4822 116 52263	2k7 5% 0,5W
3352	4822 116 52263	2k7 5% 0,5W
3353	4822 116 52263	2k7 5% 0,5W
3354	4822 051 10221	220Ω 2% 0,25W
3357	4822 051 10102	1k 2% 0,25W
3358	4822 051 10331	330Ω 2% 0,25W
3359	4822 051 10331	330Ω 2% 0,25W
3360	4822 051 10102	1k 2% 0,25W
3361	4822 051 10102	1k 2% 0,25W
3362	4822 051 10472	4k7 2% 0,25W
3365	4822 116 52272	330k 5% 0,5W
3366	4822 116 52297	68k 5% 0,5W
3367	4822 116 52175	100Ω 5% 0,5W
3368	4822 116 52175	100Ω 5% 0,5W
3369	4822 116 52175	100Ω 5% 0,5W
3370	4822 051 10472	4k7 2% 0,25W
3371	4822 051 10332	3k3 2% 0,25W

Main carrier

3372	4822 051 10472	4k7 2% 0,25W
3373	4822 051 10102	1k 2% 0,25W
3374	4822 050 22702	27k 1% 0,6W
3375	4822 051 10331	330Ω 2% 0,25W
3376	4822 051 10331	330Ω 2% 0,25W
3380	4822 051 10101	100Ω 2% 0,25W
3381	4822 051 10101	100Ω 2% 0,25W
3394	4822 051 10683	68k 2% 0,25W
3395	4822 051 10683	68k 2% 0,25W
3450	4822 116 52238	12k 5% 0,5W
3451	4822 116 52175	100Ω 5% 0,5W
3452	4822 116 52175	100Ω 5% 0,5W
3455	4822 051 10102	1k 2% 0,25W
3456	4822 051 10682	6k8 2% 0,25W
3457	4822 101 11191	10k 30%LIN 0,1W
3458	4822 051 10303	30k 2% 0,25W
3459	4822 051 10823	82k 2% 0,25W
3460	4822 051 10333	33k 2% 0,25W
3461	4822 101 11193	470k 30% 0.1W
3463	4822 116 52251	18k 5% 0,5W
3464	4822 051 10123	12k 2% 0,25W
3465	4822 051 10394	390k 2% 0,25W
3466	4822 051 10681	680Ω 2% 0,25W
3467[3,4]	4822 050 21205	1M2 1% 0,6W
3467[1,2]	4822 116 80692	2M2 5% 0,2W
3468	4822 051 10682	6k8 2% 0,25W
3469	4822 051 10229	22Ω 2% 0,25W
3470	4822 116 52231	820Ω 5% 0,5W
3471[1,2]	4822 116 52239	120k 5% 0,5W
3471[4]	4822 116 52245	150k 5% 0,5W
3471[3]	4822 116 52258	220k 5% 0,5W
3473	4822 116 52265	270k 5% 0,5W
3474	4822 051 10392	3k9 2% 0,25W
3475	4822 051 10184	180k 2% 0,25W
3476	4822 051 10683	68k 2% 0,25W
3477	4822 051 10474	470k 2% 0,25W
3478	4822 051 10393	39k 2% 0,25W
3483	4822 051 10479	47Ω 2% 0,25W
3485	4822 051 20222	2k2 5% 0,1W
3501[3]	4822 051 10101	100Ω 2% 0,25W
3501[1,2]	4822 051 10759	75Ω 2% 0,25W
3501[4]	4822 051 10829	82Ω 2% 0,25W
3502[1,2]	4822 053 10122	1k2 5% 1W
3502[3,4]	4822 053 10272	2k7 5% 1W
3503▲[1,2]	4822 052 10128	1Ω2 5% 0,33W
3503▲[3,4]	4822 052 10478	4Ω7 5% 0,33W
3504	4822 100 11684	100Ω 10% 0.1W
3505	4822 051 10471	470Ω 2% 0,25W
3506	4822 116 52242	130k 5% 0,5W
3507[1,2]	4822 116 52233	10k 5% 0,5W
3507[3,4]	4822 116 52238	12k 5% 0,5W
3508	4822 051 10228	2Ω2 5% 0,25W
3509	4822 051 10228	2Ω2 5% 0,25W
3510	4822 051 10228	2Ω2 5% 0,25W
3511	4822 051 10228	2Ω2 5% 0,25W
3513	4822 050 25601	560Ω 1% 0,6W
3514	4822 051 10182	1k8 2% 0,25W
3515	4822 051 10228	2Ω2 5% 0,25W
3516	4822 101 11192	22k 30% 0.1W
3517	4822 051 10228	2Ω2 5% 0,25W
3519	4822 051 10228	2Ω2 5% 0,25W
3523	4822 051 10228	2Ω2 5% 0,25W
3529	4822 051 10228	2Ω2 5% 0,25W
3535[3,4]	4822 051 10151	150Ω 2% 0,25W
3535[1]	4822 051 10221	220Ω 2% 0,25W
3535[2]	4822 051 51201	120Ω 1% 0,25W
3539[3,4]	4822 053 20434	430k 5% 0,25W
3539[1,2]	4822 053 20684	680k 5% 0,25W
3540	4822 051 51201	120Ω 1% 0,25W
3542	4822 050 28201	820Ω 1% 0,6W
3543	4822 051 10101	100Ω 2% 0,25W
3545[2]	4822 111 70178	120Ω 5% 5W
3545[1]	4822 113 80565	180Ω 5% 5W
3545[3,4]	4822 116 83686	680Ω 5% 5W
3549	4822 116 52251	18k 5% 0,5W
3550	4822 116 52251	18k 5% 0,5W
3551	4822 050 25601	560Ω 1% 0,6W
3552	4822 050 25601	560Ω 1% 0,6W
3553▲	4822 052 10561	560Ω 5% 0,33W
3560[2]	4822 116 52247	16k 5% 0,5W
3560[1]	4822 116 52254	20k 5% 0,5W
3560[4]	4822 116 52274	36k 5% 0,5W
3560[3]	4822 116 52277	39k 5% 0,5W
3570▲	4822 052 10688	6Ω8 5% 0,33W
3582	4822 050 25601	560Ω 1% 0,6W
3585▲	4822 052 10159	15Ω 5% 0,33W
3588▲	4822 052 10561	560Ω 5% 0,33W
3589	4822 050 21502	1k5 1% 0,6W
3590	4822 116 52234	100k 5% 0,5W
3591	4822 051 10474	470k 2% 0,25W
3592	4822 051 10681	680Ω 2% 0,25W
3603▲	4822 053 21915	9M1 5% 0,5W
3604	4822 113 80593	1,5Ω 10% 5W
3605▲	4822 052 10102	1k 5% 0,33W
3606▲	4822 052 10102	1k 5% 0,33W
3610▲[1,2]	4822 052 10159	15Ω 5% 0,33W
3610▲[3,4]	4822 052 10688	6Ω8 5% 0,33W
3617	4822 116 52213	180Ω 5% 0,5W
3619	4822 116 52182	15Ω 5% 0,5W
3620	4822 053 12121	120Ω 5% 3W
3621[1,2]	4822 053 12279	27Ω 5% 3W
3621[3,4]	4822 053 12479	47Ω 5% 3W
3622	4822 053 12479	47Ω 5% 3W
3624	4822 053 10334	330k 5% 1W
3625	4822 116 52292	560k 5% 0,5W
3626	4822 113 80565	180Ω 5% 5W
3628	4822 051 10334	330k 2% 0,25W
3629	4822 051 10682	6k8 2% 0,25W
3631[3,4]	4822 050 21204	120k 1% 0,6W
3631[1,2]	4822 050 22204	220k 1% 0,6W
3634[3,4]	4822 116 52263	2k7 5% 0,5W
3634[1,2]	4822 116 52269	3k3 5% 0,5W
3635	4822 101 11187	1k 30%LIN 0,1W
3636	4822 051 10224	220k 2% 0,25W
3637	4822 116 52175	100Ω 5% 0,5W
3647[1b]	4822 050 23303	33k 1% 0,6W
3647	4822 050 23603	36k 1% 0,6W
3648	4822 051 10273	27k 2% 0,25W
3649	4822 050 23309	33Ω 1% 0,6W
3658▲	4822 052 10688	6Ω8 5% 0,33W
3659	4822 051 10181	180Ω 2% 0,25W
3660	4822 051 10101	100Ω 2% 0,25W
3661	4822 051 10361	360Ω 2% 0,25W
3662	4822 051 10221	220Ω 2% 0,25W
3663	4822 051 10562	5k6 2% 0,25W
3664	4822 051 10272	2k7 2% 0,25W
3665	4822 051 10103	10k 2% 0,25W
3666	4822 051 10102	1k 2% 0,25W
3667	4822 051 10361	360Ω 2% 0,25W
3668	4822 051 10102	1k 2% 0,25W
3669	4822 051 10102	1k 2% 0,25W
3670	4822 051 10303	30k 2% 0,25W
3671	4822 050 11002	1k 1% 0,4W
3672	4822 051 10103	10k 2% 0,25W
3673	4822 051 10472	4k7 2% 0,25W
3674	4822 051 10102	1k 2% 0,25W
3675[1,2]	4822 116 52239	120k 5% 0,5W
3675[3,4]	4822 116 52284	47k 5% 0,5W
3676	4822 051 10103	10k 2% 0,25W
3677	4822 051 10118	1Ω1 5% 0,25W
3701	4822 051 10273	27k 2% 0,25W
3702	4822 051 10153	15k 2% 0,25W
3707	4822 051 10182	1k8 2% 0,25W
3718	4822 116 52215	220Ω 5% 0,5W
3719	4822 116 52215	220Ω 5% 0,5W
3720	4822 116 52215	220Ω 5% 0,5W
3721	4822 051 10103	10k 2% 0,25W
3722	4822 051 10103	10k 2% 0,25W
3723	4822 051 10103	10k 2% 0,25W
3724	4822 051 10103	10k 2% 0,25W
3725	4822 051 10103	10k 2% 0,25W
3726	4822 051 10103	10k 2% 0,25W
3727	4822 116 52175	100Ω 5% 0,5W
3728	4822 116 52175	100Ω 5% 0,5W
3729	4822 051 10911	910Ω 2% 0,25W
3730	4822 051 10221	220Ω 2% 0,25W
3732[1,2]	4822 053 11103	10k 5% 2W
3732[3,4]	4822 053 11332	3k3 5% 2W
3733[3,4]	4822 050 23902	3k9 1% 0,6W
3733[1,2]	4822 116 52283	4k7 5% 0,5W
3734[3,4]	4822 050 23902	3k9 1% 0,6W
3734[1,2]	4822 116 52283	4k7 5% 0,5W
3736	4822 116 52175	100Ω 5% 0,5W
3737	4822 050 11002	1k 1% 0,4W
3741	4822 051 10123	12k 2% 0,25W
3742	4822 051 10332	3k3 2% 0,25W
3743	4822 051 10472	4k7 2% 0,25W
3747	4822 051 10273	27k 2% 0,25W
3748	4822 051 10273	27k 2% 0,25W
3749	4822 051 10273	27k 2% 0,25W
3750	4822 051 10273	27k 2% 0,25W
3751	4822 051 10153	15k 2% 0,25W
3752	4822 116 52244	15k 5% 0,5W
3753	4822 051 10153	15k 2% 0,25W
3754	4822 051 10153	15k 2% 0,25W
3755[1b]	4822 051 10008	jumper
3755	4822 051 10101	100Ω 2% 0,25W
3756	4822 051 10101	100Ω 2% 0,25W
3757	4822 051 20222	2k2 5% 0,1W
3758	4822 051 10392	3k9 2% 0,25W
3759	4822 116 52175	100Ω 5% 0,5W
3768	4822 051 10105	1M 5% 0,25W
3770	4822 051 10473	47k 2% 0,25W
3771	4822 116 52251	18k 5% 0,5W
3772	4822 116 52276	3k9 5% 0,5W
3775	4822 051 10101	100Ω 2% 0,25W
3776	4822 051 10562	5k6 2% 0,25W
3777	4822 116 52264	27k 5% 0,5W
3778	4822 116 52291	56k 5% 0,5W
3779	4822 116 52233	10k 5% 0,5W
3780	4822 051 10103	10k 2% 0,25W
3781	4822 051 10472	4k7 2% 0,25W
3849	4822 116 52218	300Ω 5% 0,5W
3850	4822 116 52189	30Ω 5% 0,5W
3851	4822 116 80747	75Ω 5% 0,125W
3852	4822 116 80747	75Ω 5% 0,125W
3853	4822 116 80747	75Ω 5% 0,125W
3854	4822 116 80747	75Ω 5% 0,125W
3855	4822 116 52201	75Ω 5% 0,5W
3856	4822 051 10101	100Ω 2% 0,25W
3857	4822 051 10331	330Ω 2% 0,25W
3858	4822 051 10331	330Ω 2% 0,25W
3859	4822 051 10331	330Ω 2% 0,25W
3860	4822 116 80176	1Ω 5% 0,5W
3861	4822 051 10562	5k6 2% 0,25W
3866	4822 051 10472	4k7 2% 0,25W
3867	4822 116 80747	75Ω 5% 0,125W
3868	4822 116 80747	75Ω 5% 0,125W
3869	4822 116 52175	100Ω 5% 0,5W
3870	4822 051 10103	10k 2% 0,25W

Spare parts list / Stückliste / Liste

Main carrier

3871	4822 116 52175	100Ω 5% 0,5W
3872	4822 051 10102	1k 2% 0,25W
3874	4822 050 21008	1Ω 1% 0,6W
3875	4822 051 10154	150k 2% 0,25W
3879	4822 051 10122	1k2 2% 0,25W
3880	4822 051 10332	3k3 2% 0,25W
3881	4822 116 52217	270Ω 5% 0,5W
3882	4822 116 52217	270Ω 5% 0,5W
3884	4822 051 10681	680Ω 2% 0,25W
3885	4822 051 10821	820Ω 2% 0,25W
3886	4822 051 10472	4k7 2% 0,25W
3887	4822 116 52207	1k2 5% 0,5W
3888	4822 116 52289	5k6 5% 0,5W
3890	4822 051 10103	10k 2% 0,25W
9723	4822 116 52234	100K 5% 0,5W

Jumper

4221.. 4318	4822 051 10008	jumper
4319	4822 051 10152	1k5 2% 0,25W
4320.. 4329	4822 051 10008	jumper
4330	4822 051 10102	1k 2% 0,25W
4450.. 4867	4822 051 10008	jumper

5001	4822 157 60138	47µH
5240	4822 158 10551	27µH
5242	4822 158 10551	27µH
5301	4822 157 63075	7,95µH
5303	4822 157 53906	47µH
5304	4822 157 63074	7.6µH 4.3MHz
5306	4822 320 40081	470ns
5534A[3,4]	4822 157 62771	coil
5534A[1,2]	4822 158 10728	coil
5541A	4822 157 63078	line driver
5545A[2]	4822 140 10414	LOT 25"/28" BL
5545A[1]	4822 140 10417	LOT 25"/28" BM
5545A[3]	4822 140 10418	LOT 21" MN
5545A[4]	4822 140 10435	LOT 21" NN
5549	4822 157 53069	coil balance
5554A	4822 157 63079	AT4042/97
5554A[3]	4822 157 63161	AT4042/90G
5582	5322 157 52539	15µH
5588	4822 157 52505	33µH
5605A	4822 157 53995	100µH
5606A	4822 157 53995	100µH
5619[1,2]	4822 156 21125	3,9µH
5619[3,4]	4822 157 51235	4µH 7 10%
5625A[3,4]	4822 148 81159	SOPS trafo
5625A[1,2]	4822 148 81168	SOPS trafo
5630	4822 157 60387	1µH
5631	4822 158 10551	27µH
5632	4822 158 10551	27µH
5661	4822 157 52279	33µH 10%
5701	4822 157 52843	56µH 5%
5703	4822 157 52279	33µH 10%

6245	4822 130 30621	1N4148
6246	4822 130 81139	LLZ-C3V3
6247	4822 130 81139	LLZ-C3V3
6248	4822 130 80446	LL4148
6249	4822 130 80446	LL4148
6300	4822 130 80446	LL4148
6302	4822 130 34382	BZX79-C8V2
6303	4822 130 34382	BZX79-C8V2
6310	4822 130 80884	LLZ-C5V1
6315	4822 130 80446	LL4148
6316	4822 130 30621	1N4148
6317	4822 130 30621	1N4148
6318	4822 051 10008	jumper
6319	4822 130 34379	BZX79-C27
6320	4822 130 80877	BAV103
6367	4822 130 80884	LLZ-C5V1
6464	4822 130 81015	LLZ-C10
6465[3,4]	4822 130 34281	BZX79-F15
6465[1]	4822 130 61219	BZX79-F10
6465[2]	4822 130 80239	BZX79-F8V2
6466	4822 130 80446	LL4148
6467	4822 130 80446	LL4148
6503	4822 130 42488	BYD33D
6504	4822 130 80446	LL4148
6546	4822 130 41275	BY228/20
6547	4822 130 41602	BYW95C/20
6548	4822 130 30621	1N4148
6551	4822 130 42489	BYD33G
6560	4822 130 80446	LL4148
6561	4822 130 30864	BZX79-C68
6563	4822 130 80915	BYD74C
6570	4822 130 42489	BYD33G
6571	4822 130 42488	BYD33D
6580	4822 130 80791	BYV28-200/20
6580[2]	4822 130 82512	BYV29F-400
6585	4822 130 42489	BYD33G
6590	4822 130 81141	LLZ-C43
6591	4822 130 30621	1N4148
6592	4822 130 80928	BZX79-C30
6610	4822 130 80446	LL4148
6611	5322 130 34413	BZT03-C16
6612	4822 130 30621	1N4148
6617	4822 130 31456	BZV85-C5V1
6621	4822 130 42488	BYD33D
6622	4822 130 30621	1N4148
6624	4822 130 31933	1N5061
6625	4822 130 31933	1N5061
6630[1,2]	4822 130 33531	BY229F-600
6630[3,4]	4822 130 81175	BYD74G
6640	4822 130 80914	BYD74B
6641	4822 130 80914	BYD74B
6646	4822 130 42488	BYD33D
6648[1,2]	4822 130 34488	BZX79-F12
6648[3,4]	4822 130 61219	BZX79-F10
6649	4822 130 30621	1N4148
6660	4822 130 30621	1N4148
6661	4822 130 42488	BYD33D
6662	4822 130 80905	LLZ-F5V1
6663	4822 130 34281	BZX79-F15
6664[3,4]	4822 130 30862	BZX79-F9V1
6664[1,2]	4822 130 61219	BZX79-F10
6665	4822 130 80883	LLZ-C4V7
6666[1,2]	4822 130 80887	LLZ-C36
6666[3,4]	4822 130 81141	LLZ-C43
6669	4822 130 80446	LL4148
6670	4822 130 20272	E0102AA
6675	4822 130 80914	BYD74B
6705	4822 130 80905	LLZ-F5V1
6707	4822 209 72895	TLUV5320
6708	4822 130 81145	LLZ-F2V4
6709	4822 130 82037	HZT33

7003	4822 130 42133	BC817
7240[1b]	4822 209 73253	TDA2613/N1
7240	4822 209 73853	TDA1521/N4
7243	5322 130 42012	BC858
7244	4822 130 42513	BC858C
7245	5322 130 42136	BC848C
7246	5322 130 42136	BC848C
7247	5322 130 42136	BC848C
7248	4822 130 61207	BC848
7249	4822 130 61207	BC848
7301	4822 130 61207	BC848
7302	5322 130 42012	BC858
7303	4822 130 61207	BC848
7305	4822 209 30389	TDA4510/V8
7306	4822 209 30837	TDA4650/V4/S1
7307	4822 209 31216	TDA4661
7308	4822 209 71512	TDA4565/V6
7309	4822 209 63733	TDA4680/V5
7310	4822 130 61207	BC848
7311	5322 209 10576	4053B
7312	5322 209 10576	4053B
7341	4822 130 61207	BC848
7370	4822 130 61207	BC848
7371	4822 130 61207	BC848
7372	4822 130 61207	BC848
7373	4822 130 61207	BC848
7374	4822 130 61207	BC848
7455	5322 130 42012	BC858
7470	4822 209 63423	TDA2579B/N2
7471	4822 130 61207	BC848
7472	5322 130 42136	BC848C
7500	4822 130 41344	BC337-40
7502	4822 130 60775	2SD1266P
7503	4822 130 61236	BD234
7504	4822 130 61207	BC848
7505	5322 130 42012	BC858
7540	4822 130 41344	BC337-40
7545[3,4]	4822 130 61265	BU508AF
7546[3]	4822 130 42679	BUT11AF/1
7546[4]	4822 130 62735	BUT12AF
7591	5322 130 42012	BC858
7600	4822 209 63735	TDA8385/N2
7614A	4822 209 30992	CNR50
7625	4822 130 62735	BUT12AF
7661	5322 130 44921	BD943
7663	4822 130 42513	BC858C
7671	4822 130 61207	BC848
7672	4822 130 61207	BC848
7703	4822 130 61207	BC848
7704	4822 130 61207	BC848
7705	4822 130 61207	BC848
7706	4822 130 61207	BC848
7707	4822 130 61207	BC848
7708	4822 209 31209	UP GR2STL1-5.2
7708	4822 209 31211	UP GR2STL2-5.2
7708	4822 209 31212	UP GR2STL3-1.0
7708	4822 209 31213	UP GR2M1/2-5.1
7710	4822 209 62098	ST24C02AB1
7850	4822 130 61207	BC848
7885	4822 130 61207	BC848
7886	4822 130 61207	BC848

1)	25"/28" Black Matrix
1b)	Black Matrix mono
2)	25"/28" Black Line
3)	21" Mini Neck
4)	21" Narrow Neck
7)	system BG
8)	system I

L1 = English, German, French, Italian, Dutch, Portugues
L2 = English, Finnish, Danish, Swedish, Norvegian, Spanish
L3 = English, German, French, Hungarian, Csech, Russian
M1/2 = L1 + L2

Spare parts list / Stückliste / Liste

Mains module

	4822 212 23664	mains module

Mechanical parts

0010⚠	4822 265 30389	2p male
0032⚠	4822 265 30389	2p male
0033⚠	4822 265 30877	3p male

2601⚠	4822 121 40487	100nF 10% 400V
2602	4822 126 11141	2,2nF 10% 1KV
2604	4822 126 11141	2,2nF 10% 1kV

3601⚠	4822 116 40211	PTC/NTC
3607	4822 050 23901	390Ω 1% 0,6W

5600⚠	4822 157 63073	filter

6602	4822 130 31933	1N5061
6603	4822 130 31933	1N5061
6604	4822 130 31933	1N5061
6605	4822 130 31933	1N5061

CRT module

[1]	4822 212 30057	CRT Black Matrix
[2]	4822 212 30058	CRT Black Line
[3]	4822 212 30059	CRT Mini Neck
[4]	4822 212 30061	CRT Narrow Neck

Mechanical parts

0017	4822 290 40283	5p male
0018	4822 267 40878	3p male
0019	4822 265 30378	4p male
0020	4822 290 40295	7p male
0021[3]	4822 255 70251	CRT socket
0021	4822 255 70261	CRT socket
	4822 320 20188	focus cable
	4822 267 31168	3p female
	4822 267 50824	4p female
	4822 265 40252	7p female
	4822 290 40287	5p female
	4822 492 70871	spring

2301[4]	4822 122 31769	18pF 5% 50V
2301	4822 122 32482	22pF 5% 63V
2301[2]	4822 126 10324	33pF 63V
2331[1]	4822 122 31769	18pF 5% 50V
2331[2]	4822 122 31825	27pF 10% 50V
2331[3]	4822 122 32482	22pF 5% 63V
2331[4]	4822 122 32504	15pF 5% 50V
2344[3]	4822 124 21208	4,7µF 20% 50V
2344	4822 124 40246	4,7µF 20% 63V
2361[3]	4822 122 31769	18pF 5% 50V
2361[2]	4822 122 31825	27pF 10% 50V
2361[4]	4822 122 32139	12pF 5% 63V
2361[1]	4822 122 32504	15pF 5% 50V
2391	4822 121 43878	27pF 2% 500V
2411	4822 124 80057	330µF 20% 16V
2421	4822 122 32482	22pF 5% 63V
2431	4822 121 41689	100nF 10% 250V
2432[3]	4822 124 80056	47µF 20% 16V
2432	5322 124 41381	22µF 20% 50V
2433	5322 121 50885	33nF 5% 1KV
2434	5322 122 32334	220pF 10% 100V
2520	5322 124 41299	68µF 20% 25V
2521	4822 122 32891	68nF 10% 63V
2522	5322 121 42661	330nF 5% 63V
2523	4822 122 33105	56nF 10% 63V
2526[2]	4822 122 32856	8,2nF 10% 63V
2526[1]	5322 122 31648	12nF 10% 50V
2531[4]	4822 121 42408	220nF 5% 63V
2531	4822 121 43396	120nF 5% 63V
2532	4822 124 80066	1µF 20% 63V
2532[4]	4822 124 80067	4,7µF 20% 63V
2533	4822 124 40242	1µF 20% 63V

3301	4822 051 10131	130Ω 2% 0,25W
3302	4822 051 10362	3k6 2% 0,25W
3302[2]	4822 051 20222	2k2 5% 0,1W
3303	4822 051 10272	2k7 2% 0,25W
3304	4822 116 52239	120k 5% 0,5W
3304	4822 116 52239	120k 5% 0,5W
3309	4822 051 10118	1Ω1 5% 0,25W
3309[2]	4822 051 10479	47Ω 2% 0,25W
3310	4822 116 52219	330Ω 5% 0,5W
3311[2]	4822 053 12123	12k 5% 3W
3311	4822 053 12153	15k 5% 3W
3312	4822 052 10271	270Ω 5% 0,33W
3313	4822 052 10271	270Ω 5% 0,33W
3314	4822 050 21502	1k5 1% 0,6W
3315	4822 051 10124	120k 2% 0,25W
3316	4822 051 10124	120k 2% 0,25W
3331	4822 051 10131	130Ω 2% 0,25W
3332	4822 051 10362	3k6 2% 0,25W
3332[2]	4822 051 20222	2k2 5% 0,1W
3333[3]	4822 051 10272	2k7 2% 0,25W
3333	4822 116 52263	2k 7 5% 0,5W
3334	4822 116 52239	120k 5% 0,5W
3338	4822 051 10118	1Ω1 5% 0,25W
3338[3]	4822 051 10479	47Ω 2% 0,25W
3340	4822 116 52219	330Ω 5% 0,5W
3341	4822 053 12153	15k 5% 3W
3342	4822 052 10271	270Ω 5% 0,33W
3343	4822 052 10271	270Ω 5% 0,33W
3344	4822 050 21502	1k5 1% 0,6W
3345	4822 051 10681	680Ω 2% 0,25W
3361	4822 116 52208	130Ω 5% 0,5W
3362	4822 051 10362	3k6 2% 0,25W
3362[2]	4822 051 20222	2k2 5% 0,1W
3363	4822 051 10272	2k7 2% 0,25W
3364	4822 051 10223	22k 2% 0,25W
3368	4822 051 10118	1Ω1 5% 0,25W
3368[2]	4822 051 10479	47Ω 2% 0,25W
3370	4822 116 52219	330Ω 5% 0,5W
3371[2]	4822 053 12103	10k 5% 3W
3371	4822 053 12153	15k 5% 3W
3372	4822 052 10271	270Ω 5% 0,33W
3373	4822 052 10271	270Ω 5% 0,33W
3374	4822 050 21502	1k5 1% 0,6W
3382[2]	4822 051 10392	3k9 2% 0,25W
3382	4822 051 10432	4k3 2% 0,25W
3383	4822 116 52284	47k 5% 0,5W
3384	4822 116 52277	39k 5% 0,5W
3385	4822 051 10104	100k 2% 0,25W
3391	4822 116 52234	100k 5% 0,5W
3392	4822 051 10103	10k 2% 0,25W
3395	4822 051 10122	1k2 2% 0,25W
3396	4822 051 10124	120k 2% 0,25W
3397	4822 051 10124	120k 2% 0,25W
3411	4822 116 52249	1k 8 5% 0,5W
3413	4822 116 52218	300Ω 5% 0,5W
3414	4822 051 10519	51Ω 2% 0,25W
3415	4822 116 52218	300Ω 5% 0,5W
3421[3]	4822 051 10104	100k 2% 0,25W
3421	4822 051 10184	180k 2% 0,25W
3422	4822 051 10682	6k8 2% 0,25W
3423	4822 051 10105	1M 5% 0,25W
3431	4822 052 10181	180Ω 5% 0,33W
3431[4]	4822 052 10271	270Ω 5% 0,33W
3432	4822 052 10399	39Ω 5% 0,33W
3433	4822 052 10108	1Ω 5% 0,33W
3434	4822 050 21502	1k5 1% 0,6W
3435	4822 050 21502	1k5 1% 0,6W
3436	4822 050 21805	1M 8 1% 0,6W
3442	4822 116 52239	120k 5% 0,5W
3443	4822 051 10272	2k7 2% 0,25W
3446	4822 051 10683	68k 2% 0,25W
3447	4822 051 10152	1k5 2% 0,25W
3448	4822 051 10152	1k5 2% 0,25W
3449	4822 051 10333	33k 2% 0,25W
3449[2]	4822 051 10393	39k 2% 0,25W
3512[2]	4822 051 10109	10Ω 2% 0,25W
3512[1]	4822 051 10181	180Ω 2% 0,25W
3518[2]	4822 051 10101	100Ω 2% 0,25W
3518[1]	4822 051 10152	1k5 2% 0,25W
3520[1]	4822 116 52207	1k 2 5% 0,5W
3520[2]	4822 116 52211	150Ω 5% 0,5W
3521	4822 101 20902	4k 7 10% 0,05W
3522	4822 051 10152	1k5 2% 0,25W
3524	4822 051 10683	68k 2% 0,25W

CRT module

3525[4]	4822 100 20169	10k 10% 0,05W
3525	4822 100 20644	22k 10% 0.05W
3526	4822 051 10125	1M 2 5% 0,25W
3526[4]	4822 051 10563	56k 2% 0,25W
3527[1]	4822 051 10104	100k 2% 0,25W
3527[3]	4822 051 10563	56k 2% 0,25W
3527[2]	4822 051 10823	82k 2% 0,25W
3528[3,4]	4822 051 10681	680Ω 2% 0,25W
3528	4822 051 20222	2k2 5% 0,1W
3529	4822 051 10008	jumper
3529[3,4]	4822 051 10102	1k 2% 0,25W
3530[4]	4822 051 10008	jumper
3530	4822 051 10102	1k 2% 0,25W
3531[4]	4822 051 10008	jumper
3531	4822 051 10104	100k 2% 0,25W
3532	4822 051 10103	10k 2% 0,25W
3533	4822 116 52303	8k 2 5% 0,5W
3534	4822 052 10828	8Ω2 5% 0,33W
3571	4822 051 10273	27k 2% 0,25W
3572	4822 051 10153	15k 2% 0,25W
3575	4822 051 10182	1k8 2% 0,25W
3576[4]	4822 051 10101	100Ω 2% 0,25W
3576[1]	4822 051 10151	150Ω 2% 0,25W
3576[2]	4822 051 51201	120Ω 1% 0,25W
3578	4822 116 52245	150k 5% 0,5W
3580	4822 051 10103	10k 2% 0,25W

Jumper

4001	4822 051 10008	jumper
4002	4822 051 10008	jumper

5401[2,3]	4822 156 20915	33µH
5401[4]	4822 157 63788	18µH 10%
5401[1]	4822 158 10563	82µH 7.5%
5530	4822 152 20559	

6301	4822 130 80877	BAV103
6331	4822 130 80877	BAV103
6345	4822 130 81015	LLZ-C10
6361	4822 130 80877	BAV103
6382	4822 130 80877	BAV103
6411	4822 130 32831	BZX79-F3V0
6421	4822 130 80446	LL4148
6519	4822 130 80446	LL4148

7302[1,2]	4822 130 41773	BF869
7302[3,4]	4822 130 41782	BF422
7303	4822 130 61207	BC848
7304	4822 130 41782	BF422
7305	4822 130 41646	BF423
7331[1,2]	4822 130 41773	BF869
7331[3,4]	4822 130 41782	BF422
7333	4822 130 61207	BC848
7334	4822 130 41782	BF422
7335	4822 130 41646	BF423
7345	5322 130 42012	BC858
7361[1,2]	4822 130 41773	BF869
7361[3,4]	4822 130 41782	BF422
7363	4822 130 61207	BC848
7364	4822 130 41782	BF422
7365	4822 130 41646	BF423
7383	4822 130 41782	BF422
7391	4822 130 41646	BF423
7402▲	5322 130 41982	BC848B
7411	4822 130 40938	BC548
7421	4822 130 42513	BC858C
7530▲[3]	4822 130 61207	BC848
7530	5322 130 41982	BC848B
7533	4822 130 60111	2SA1359
7534	4822 130 44283	BC636
7536▲	5322 130 41982	BC848B
7537	5322 130 41982	BC848B
7538▲	5322 130 41982	BC848B

1) 25"/28" Black Matrix
2) 25"/28" Black Line
3) 21" Mini Neck
4) 21" Narrow Neck

Euro module

15	4822 212 30074	Euro module ECO
16	4822 212 30075	Euro module PIP

Mechanical parts

0023	4822 265 40442	10p male
0026	4822 265 40442	10p male
0030	4822 265 41086	9p male
0032	4822 267 40666	3p male
0048	4822 267 60247	euro connector
0100	4822 256 91879	holder
0050	4822 267 51084	9p female
0051	4822 290 40285	3p female

2800	4822 121 51252	470nF 5% 63V
2801	4822 121 51252	470nF 5% 63V
2802	4822 121 51252	470nF 5% 63V
2803	4822 121 51252	470nF 5% 63V
2804	4822 122 33496	100nF 10% 63V
2805	4822 122 33496	100nF 10% 63V
2806	4822 122 33496	100nF 10% 63V
2807	4822 124 41506	47µF 20% 16V
2810	4822 122 32142	270pF 5% 63V
2811	4822 122 32142	270pF 5% 63V
2812	4822 122 33496	100nF 10% 63V
2813	4822 122 32542	47nF 10% 63V
2814	4822 122 31759	18nF
2815	4822 122 33496	100nF 10% 63V
2816	4822 122 33496	100nF 10% 63V
2817	4822 122 33496	100nF 10% 63V
2818	4822 122 33496	100nF 10% 63V
2819	4822 124 41525	100µF 20% 25V
2820	4822 121 42408	220nF 5% 63V
2821	4822 124 40433	47µF 20% 25V
2822	4822 124 40435	10µF 20% 50V
2823	4822 122 33496	100nF 10% 63V
2831	4822 124 40272	33µF 20% 16V
2833	4822 122 33496	100nF 10% 63V
2834	4822 122 33496	100nF 10% 63V

3800	4822 116 52189	30Ω 5% 0,5W
3801	4822 116 80747	75Ω 5% 0,125W
3802	4822 116 52211	150Ω 5% 0,5W
3803	4822 116 52211	150Ω 5% 0,5W
3804	4822 050 11002	1k 1% 0,4W
3805	4822 050 11002	1k 1% 0,4W
3806	4822 051 10334	330k 2% 0,25W
3807	4822 051 10334	330k 2% 0,25W
3808	4822 051 10334	330k 2% 0,25W
3809	4822 051 10334	330k 2% 0,25W
3810	4822 051 10682	6k8 2% 0,25W
3811	4822 051 20222	2k2 5% 0,1W
3812	4822 051 10331	330Ω 2% 0,25W
3813	4822 116 52201	75Ω 5% 0,5W
3814	4822 051 10152	1k5 2% 0,25W
3815	4822 051 10472	4k7 2% 0,25W
3816	4822 116 52296	6k 8 5% 0,5W
3817	4822 116 52224	470Ω 5% 0,5W
3818	4822 116 52224	470Ω 5% 0,5W
3819	4822 051 10008	jumper
3820	4822 051 10681	680Ω 2% 0,25W
3821	4822 051 10008	jumper
3822	4822 051 10681	680Ω 2% 0,25W
3823	4822 051 10331	330Ω 2% 0,25W
3824	4822 051 10331	330Ω 2% 0,25W
3825	4822 051 10223	22k 2% 0,25W
3829	4822 051 10102	1k 2% 0,25W
3830	4822 051 10683	68k 2% 0,25W
3831	4822 051 10123	12k 2% 0,25W

Spare parts list / Stückliste / Liste

Euro module

3832	4822 051 10102	1k 2% 0,25W
3833	4822 051 10279	27Ω 2% 0,25W
3835[16]	4822 051 10221	220Ω 2% 0,25W
3836[15]	4822 051 10102	1k 2% 0,25W
3836	4822 051 10271	270Ω 2% 0,25W
3837	4822 052 10278	2Ω7 5% 0,33W
3838	4822 116 80747	75Ω 5% 0,125W

Jumper

4842	4822 051 10008	jumper
4844	4822 051 10008	jumper
4845	4822 051 10008	jumper
4847	4822 051 10008	jumper
4848	4822 051 10008	jumper
4849	4822 051 10008	jumper

5800	4822 157 51462	10µH

6800	4822 130 80954	LLZ-C5V6
6801	4822 130 80446	LL4148
6803	4822 130 30621	1N4148

7800	5322 130 44921	BD943
7801	5322 209 10576	4053B
7802	5322 209 10576	4053B
7820	4822 130 61207	BC848
7821	5322 130 42136	BC848C
7823	4822 130 61207	BC848
7824	5322 130 42136	BC848C

15) Non PIP
16) PIP

Mono IF/sound module

[5]	4822 212 30064	IF MONO BGDK
[6]	4822 212 30065	IF MONO BGLI
[7]	4822 212 30066	IF MONO BG
[8]	4822 212 30067	IF MONO I

Various

1010[8]	4822 242 70936	OFW31952
1010[7]	4822 242 72374	OFWG1961
1010[6]	4822 242 81156	OFWG1965
1010[5]	4822 242 81186	OFWK2954
1042[8]	4822 153 30025	6MHz
1042	4822 242 72211	5,5MHz
1043[6]	4822 153 30025	6MHz
1043[5]	4822 242 71375	6,5MHz
1043[8]	4822 242 71841	6.0MHz
1102	4822 242 70714	5,5MHz
1103[6]	4822 242 71841	6.0MHz
1103[5]	4822 242 72059	6,5MHz
1150	4822 242 81157	OFWL9453

2011	4822 124 40435	10µF 20% 50V
2012	4822 124 41577	4,7µF 20% 50V
2013	4822 122 31784	4,7nF 10% 50V
2014[6]	4822 122 31784	4,7nF 10% 50V
2014	4822 122 31797	22nF 10% 63V
2015	5322 121 42498	680nF 5% 63V
2016	4822 122 31784	4,7nF 10% 50V
2017	4822 122 33496	100nF 10% 63V
2018	4822 121 51252	470nF 5% 63V
2019	4822 122 31784	4,7nF 10% 50V
2035	4822 122 32507	6,8pF 5% 50V
2036	4822 122 31766	120pF 5% 50V
2037	4822 122 31766	120pF 5% 50V
2038	4822 122 31784	4,7nF 10% 50V
2039	4822 122 32504	15pF 5% 50V
2040	4822 122 31784	4,7nF 10% 50V
2041	4822 122 31784	4,7nF 10% 50V
2042	4822 122 32139	12pF 5% 63V
2044	4822 122 31797	22nF 10% 63V
2047	4822 122 33496	100nF 10% 63V
2048	4822 124 41506	47µF 20% 16V
2049	4822 122 33496	100nF 10% 63V
2050	4822 124 40849	330µF 20% 16V
2055	4822 122 31972	39pF 5% 50V
2056	4822 124 40435	10µF 20% 50V
2057	4822 122 31981	33nF 50V
2058	4822 122 31797	22nF 10% 63V
2059	4822 124 41566	3,3µF 20% 50V
2060	4822 122 31797	22nF 10% 63V
2080	4822 122 33464	56pF 2%
2081	4822 122 31794	180pF 2% 50V
2082	4822 122 32087	1,8pF 5% 50V
2113	4822 124 41596	22µF 20% 50V
2114	4822 122 31784	4,7nF 10% 50V
2115	4822 124 41577	4,7µF 20% 50V
2116	4822 124 40435	10µF 20% 50V
2117	4822 124 41576	2,2µF 20% 50V
2118	4822 124 40432	1500µF 20% 25V
2124	4822 122 32442	10nF 50V
2125	4822 124 40195	150µF 20% 16V
2126	4822 121 43898	8,2nF 10% 50V
2127	5322 121 42661	330nF 5% 63V
2129	5322 121 42661	330nF 5% 63V
2130	5322 121 42661	330nF 5% 63V
2131	4822 122 31797	22nF 10% 63V
2132	4822 122 31797	22nF 10% 63V
2133	4822 122 31797	22nF 10% 63V
2134	4822 124 41596	22µF 20% 50V
2135	4822 121 42408	220nF 5% 63V
2136	5322 121 42661	330nF 5% 63V
2137[7]	4822 122 31746	1000pF 5% 50V
2137	4822 126 11381	820pF 2%
2137[5]	4822 126 12075	680pF 2% 63V
2138[6]	4822 122 31771	390pF 5% 50V
2138[5]	4822 126 12154	560pF 2% 50V
2139[5]	4822 122 31771	390pF 5% 50V
2139[6]	4822 126 12155	1nF 2% 50V
2141	4822 124 41577	4,7µF 20% 50V
2143	4822 122 31797	22nF 10% 63V
2150	4822 121 42408	220nF 5% 63V
2151	4822 124 40195	150µF 20% 16V
2160	4822 122 31784	4,7nF 10% 50V

3012	4822 051 10562	5k6 2% 0,25W
3013	4822 051 10273	27k 2% 0,25W
3014	4822 051 10823	82k 2% 0,25W
3015[6]	4822 051 10104	100k 2% 0,25W
3015	4822 051 10473	47k 2% 0,25W
3016	4822 100 11819	100k 30% 0,1W
3017	4822 051 10823	82k 2% 0,25W
3019	4822 051 10473	47k 2% 0,25W
3020	4822 051 10273	27k 2% 0,25W
3021	4822 051 10223	22k 2% 0,25W
3030	4822 051 10223	22k 2% 0,25W
3031	4822 051 10474	470k 2% 0,25W
3036	4822 051 10472	4k7 2% 0,25W
3037	4822 051 10392	3k9 2% 0,25W
3038	4822 051 10472	4k7 2% 0,25W
3039	4822 051 10392	3k9 2% 0,25W
3040	4822 051 10472	4k7 2% 0,25W
3041	4822 051 10221	220Ω 2% 0,25W
3042[6]	4822 051 10101	100Ω 2% 0,25W
3042[5]	4822 051 10221	220Ω 2% 0,25W
3042	4822 051 51201	120Ω 1% 0,25W
3043	4822 116 52175	100Ω 5% 0,5W
3044	4822 051 10271	270Ω 2% 0,25W
3046	4822 051 10681	680Ω 2% 0,25W
3047	4822 051 10822	8k2 2% 0,25W
3048	4822 101 11188	2k 30%LIN 0,1W
3049	4822 051 20183	18k 5% 0,1W
3050	4822 051 10272	2k7 2% 0,25W
3051	4822 051 10563	56k 2% 0,25W
3052[5,6]	4822 051 10471	470Ω 2% 0,25W
3052[7,8]	4822 051 10561	560Ω 2% 0,25W
3055	4822 051 10103	10k 2% 0,25W
3056	4822 051 10471	470Ω 2% 0,25W
3058	4822 051 10682	6k8 2% 0,25W
3060	4822 051 10471	470Ω 2% 0,25W
3061	4822 051 10333	33k 2% 0,25W
3062	4822 051 10563	56k 2% 0,25W
3063	4822 051 10272	2k7 2% 0,25W
3064	4822 051 10563	56k 2% 0,25W
3065	4822 051 10563	56k 2% 0,25W
3066	4822 051 10824	820k 2% 0,25W
3067	4822 051 10681	680Ω 2% 0,25W
3067[6]	4822 051 20222	2k2 5% 0,1W
3068	4822 051 10392	3k9 2% 0,25W
3080[8]	4822 051 10332	3k3 2% 0,25W
3080[5]	4822 051 10472	4k7 2% 0,25W
3080[6]	4822 051 10682	6k8 2% 0,25W
3080[7]	4822 051 20222	2k2 5% 0,1W
3081	4822 051 10829	82Ω 2% 0,25W
3104	4822 052 10479	47Ω 5% 0,33W
3105	4822 053 11271	270Ω 5% 2W
3107	4822 051 10151	150Ω 2% 0,25W
3108	4822 051 10333	33k 2% 0,25W
3109	4822 051 10223	22k 2% 0,25W

Mono IF/sound module

3110	4822 051 10562	5k6 2% 0,25W
3111	4822 051 10562	5k6 2% 0,25W
3112	4822 051 10472	4k7 2% 0,25W
3113	4822 051 10562	5k6 2% 0,25W
3115	4822 051 10562	5k6 2% 0,25W
3116	4822 050 11002	1k 1% 0,4W
3117	4822 051 10104	100k 2% 0,25W
3118[5]	4822 051 10332	3k3 2% 0,25W
3118[6]	4822 051 10472	4k7 2% 0,25W
3118	4822 051 20222	2k2 5% 0,1W
3119	4822 051 10472	4k7 2% 0,25W
3120	4822 051 10472	4k7 2% 0,25W
3121	4822 051 10104	100k 2% 0,25W
3122	4822 051 10331	330Ω 2% 0,25W
3123[5,7]	4822 051 10473	47k 2% 0,25W
3123[6]	4822 051 10563	56k 2% 0,25W
3124	4822 051 10103	10k 2% 0,25W
3125	4822 051 10103	10k 2% 0,25W
3126	4822 051 10153	15k 2% 0,25W
3127	4822 051 10153	15k 2% 0,25W
3129	4822 051 10224	220k 2% 0,25W
3130	4822 051 10682	6k8 2% 0,25W
3131	4822 051 10102	1k 2% 0,25W
3132	4822 051 10392	3k9 2% 0,25W
3140	4822 051 10153	15k 2% 0,25W
3141	4822 051 10392	3k9 2% 0,25W
3142	4822 051 10273	27k 2% 0,25W
3143	4822 051 10182	1k8 2% 0,25W
3144	4822 051 10182	1k8 2% 0,25W
3150	4822 051 10103	10k 2% 0,25W
3151	4822 051 20222	2k2 5% 0,1W
3152	4822 051 10103	10k 2% 0,25W
3153	4822 051 10103	10k 2% 0,25W
3154	4822 051 10103	10k 2% 0,25W

Jumper

4010.. 4102	4822 051 10008	jumper

5010	4822 157 63081	0.56µH 20%
5010[6]	4822 157 63858	0,39µH
5035	4822 157 53534	0,34µH 5%
5036[6]	4822 157 53609	0,36µH 5%
5036	4822 157 63824	0,36µH 5% 38,9mH z
5037	4822 157 53537	1,35µH 5%
5038	4822 157 63076	1.2µH 5%
5039	4822 157 52983	2N2
5041[5]	4822 153 20251	18µH 10%
5041[6]	4822 157 52983	2N2
5041	4822 157 53001	27µH 10%
5042[7,8]	4822 152 20677	
5042[5,6]	4822 157 53634	5,6µH 10%
5080	4822 157 53539	0,27µH 5%
5105	4822 157 52511	0,83µH
5150	4822 157 62552	

6036	4822 130 80446	LL4148
6037	4822 130 80888	BA682
6038	4822 130 80888	BA682
6039	4822 130 30621	1N4148
6040	4822 130 80446	LL4148
6041	4822 130 80446	LL4148
6042	4822 130 80446	LL4148
6043	4822 130 80446	LL4148
6105	4822 130 80888	BA682
6106	4822 130 80888	BA682
6108	4822 130 80888	BA682
6112	4822 130 80884	LLZ-C5V1
6150	4822 130 80888	BA682
6151	4822 130 80888	BA682

7000	4822 209 72812	TDA2549/C4
7030	5322 130 42012	BC858
7031	4822 130 61207	BC848
7035	4822 130 44121	BC338
7040	5322 130 42012	BC858
7041	4822 130 61207	BC848
7100	4822 209 63105	TDA3843/V3
7101	4822 209 30278	TDA3827/V3
7102	4822 130 61207	BC848
7103	5322 130 42136	BC848C
7104	5322 130 41982	BC848B
7150	4822 130 61207	BC848
7151	4822 130 61207	BC848

5) system BGBK
6) system BGLI
7) system BG
8) system I

Stereo IF/sound module

[7]	4822 212 30069	IF STEREO BG
[6]	4822 212 30072	IF STEREO BGLI
[5]	4822 212 30073	IF STEREO BGDK

Various

1010[7]	4822 242 72554	OFWG3254
1010[5]	4822 242 73936	OFWK3255
1010[6]	4822 242 80205	OFWK3261
1042	4822 242 72211	5,5MHz
1101	4822 242 70485	5,74MHz
1102[6]	4822 242 71713	6,0MHz
1102[5]	4822 242 72057	6,5MHz
1103	4822 242 70714	5,5MHz
1150	4822 242 81157	OFWL9453
1200	4822 242 80208	10MHz

2011	4822 124 41506	47µF 20% 16V
2012	4822 124 41577	4,7µF 20% 50V
2013	4822 122 31784	4,7nF 10% 50V
2014	4822 122 31797	22nF 10% 63V
2015	5322 121 42498	680nF 5% 63V
2016	4822 122 31784	4,7nF 10% 50V
2017	4822 122 33496	100nF 10% 63V
2018	4822 121 51252	470nF 5% 63V
2035	4822 122 32506	5,6pF 5% 50V
2036	4822 122 31784	4,7nF 10% 50V
2037	4822 122 31784	4,7nF 10% 50V
2038	4822 122 33496	100nF 10% 63V
2039	4822 122 32083	8,2pF 5% 50V
2040	4822 122 31784	4,7nF 10% 50V
2041	4822 122 31784	4,7nF 10% 50V
2042	4822 122 32139	12pF 5% 63V
2044	4822 122 31797	22nF 10% 63V
2047	4822 122 33496	100nF 10% 63V
2048	4822 124 41506	47µF 20% 16V
2049	4822 122 33496	100nF 10% 63V
2050	4822 124 40849	330µF 20% 16V
2051	4822 122 33496	100nF 10% 63V
2055	4822 122 31972	39pF 5% 50V
2056	4822 124 41576	2,2µF 20% 50V
2057	4822 122 31981	33nF 50V
2058	4822 122 31797	22nF 10% 63V
2059	4822 124 41407	0,47µF 20% 63V
2080	4822 122 33464	56pF 2%
2081	4822 122 31794	180pF 2% 50V
2113	4822 124 40435	10µF 20% 50V
2114	4822 122 32442	10nF 50V
2115	4822 124 41509	33µF 20% 35V
2117	4822 124 41576	2,2µF 20% 50V
2118	4822 124 41576	2,2µF 20% 50V
2119	4822 122 31797	22nF 10% 63V
2120	4822 124 41576	2,2µF 20% 50V
2123	4822 124 40242	1µF 20% 63V
2123[6]	4822 124 41577	4,7µF 20% 50V
2124	4822 124 41576	2,2µF 20% 50V
2125	4822 122 10527	910pF 2% 50V
2126	4822 122 31784	4,7nF 10% 50V
2127	4822 122 31746	1000pF 5% 50V
2127[7]	4822 126 11381	820pF 2%
2127[6]	4822 126 12075	680pF 2% 63V
2128[5]	4822 122 10527	910pF 2% 50V
2128	4822 126 11381	820pF 2%
2129[6]	4822 122 31727	470pF 5% 63V
2129[5]	4822 122 33476	220pF 2% 50V
2130[6]	4822 124 40195	150µF 20% 16V
2133	4822 122 31797	22nF 10% 63V
2160	4822 122 31784	4,7nF 10% 50V
2200	4822 121 51252	470nF 5% 63V

Spare parts list / Stückliste / Liste

Stereo IF/sound module

2201	4822 121 51252	470nF 5% 63V
2202	4822 121 51252	470nF 5% 63V
2203	4822 122 31916	5,6nF 10% 63V
2204	4822 121 42408	220nF 5% 63V
2205	4822 122 31947	100nF 20% 63V
2206	4822 121 51252	470nF 5% 63V
2207	4822 121 51252	470nF 5% 63V
2208	4822 124 41509	33µF 20% 35V
2209	4822 124 41509	33µF 20% 35V
2210	4822 122 31947	100nF 20% 63V
2211	4822 124 40198	470µF 20% 16V
2212	4822 124 40435	10µF 20% 50V
2213	4822 122 31782	15nF 10% 50V
2214	4822 122 31782	15nF 10% 50V
2215	4822 122 31981	33nF 50V
2216	4822 122 31916	5,6nF 10% 63V
2217	4822 122 31981	33nF 50V
2218	4822 122 31916	5,6nF 10% 63V
2219	4822 124 41577	4,7µF 20% 50V
2220	5322 121 42498	680nF 5% 63V
2221	5322 121 42498	680nF 5% 63V
2222	4822 124 41643	100µF 20% 16V
2223	5322 122 31647	1nF 10% 63V

3012	4822 051 10562	5k6 2% 0,25W
3013	4822 051 10273	27k 2% 0,25W
3014	4822 051 10823	82k 2% 0,25W
3015	4822 116 52234	100k 5% 0,5W
3016	4822 100 11819	100k 30% 0,1W
3017	4822 051 10823	82k 2% 0,25W
3019	4822 051 10473	47k 2% 0,25W
3020	4822 051 10273	27k 2% 0,25W
3021	4822 051 20183	18k 5% 0,1W
3030	4822 051 10223	22k 2% 0,25W
3031	4822 051 10474	470k 2% 0,25W
3035	4822 051 10682	6k8 2% 0,25W
3036	4822 051 10472	4k7 2% 0,25W
3037	4822 051 10392	3k9 2% 0,25W
3038	4822 051 10472	4k7 2% 0,25W
3039	4822 051 10472	4k7 2% 0,25W
3040	4822 051 10472	4k7 2% 0,25W
3041	4822 051 10221	220Ω 2% 0,25W
3042	4822 051 10151	150Ω 2% 0,25W
3042	4822 051 51201	120Ω 1% 0,25W
3043	4822 116 52175	100Ω 5% 0,5W
3044	4822 051 10271	270Ω 2% 0,25W
3046	4822 116 52228	680Ω 5% 0,5W
3047	4822 051 10822	8k2 2% 0,25W
3048	4822 101 11188	2k 30%LIN 0,1W
3049	4822 051 20183	18k 5% 0,1W
3050	4822 051 10272	2k7 2% 0,25W
3051	4822 051 10563	56k 2% 0,25W
3052	4822 051 10102	1k 2% 0,25W
3053	4822 116 52233	10k 5% 0,5W
3055	4822 051 10103	10k 2% 0,25W
3056	4822 051 10471	470Ω 2% 0,25W
3058	4822 051 10472	4k7 2% 0,25W
3060	4822 051 10471	470Ω 2% 0,25W
3061	4822 051 10124	120k 2% 0,25W
3062	4822 051 10563	56k 2% 0,25W
3063	4822 051 10272	2k7 2% 0,25W
3064	4822 051 10224	220k 2% 0,25W
3065	4822 051 10124	120k 2% 0,25W
3066	4822 051 10824	820k 2% 0,25W
3081	4822 051 10569	56Ω 2% 0,25W
3105	4822 053 11121	120Ω 5% 2W
3106	4822 051 10561	560Ω 2% 0,25W
3107	4822 051 10102	1k 2% 0,25W
3108	4822 051 10561	560Ω 2% 0,25W
3109	4822 051 10562	5k6 2% 0,25W
3110	4822 051 10562	5k6 2% 0,25W
3112	4822 051 10562	5k6 2% 0,25W
3113	4822 051 10562	5k6 2% 0,25W
3115[5]	4822 051 10301	300Ω 2% 0,25W
3115	4822 051 10331	330Ω 2% 0,25W
3117[6]	4822 051 10561	560Ω 2% 0,25W
3117	4822 051 10681	680Ω 2% 0,25W
3119	4822 051 10562	5k6 2% 0,25W
3120	4822 051 10562	5k6 2% 0,25W
3121[5]	4822 051 10272	2k7 2% 0,25W
3121[6]	4822 051 10562	5k6 2% 0,25W
3122	4822 051 10122	1k2 2% 0,25W
3123	4822 051 10561	560Ω 2% 0,25W
3124	4822 051 10008	jumper
3125	4822 051 10102	1k 2% 0,25W
3126	4822 051 10102	1k 2% 0,25W
3127	4822 051 10152	1k5 2% 0,25W
3128	4822 051 10182	1k8 2% 0,25W
3150	4822 051 10103	10k 2% 0,25W
3151	4822 051 20222	2k2 5% 0,1W
3152	4822 051 10103	10k 2% 0,25W
3153	4822 051 10103	10k 2% 0,25W
3154	4822 051 10103	10k 2% 0,25W
3200	4822 051 10331	330Ω 2% 0,25W
3201	4822 051 10331	330Ω 2% 0,25W
3202	4822 051 10563	56k 2% 0,25W
3203	4822 051 10563	56k 2% 0,25W
3204	4822 101 11191	10k 30% 0,1W
3205	4822 052 10229	22Ω 5% 0,33W
3206	4822 051 10478	4Ω7 5% 0,25W
3207	4822 051 10223	22k 2% 0,25W
3208	4822 051 10272	2k7 2% 0,25W
3209	4822 051 10333	33k 2% 0,25W
3210	4822 050 11002	1k 1% 0,4W
3211	4822 051 10101	100Ω 2% 0,25W
3213	4822 116 52233	10k 5% 0,5W
3214	4822 051 10102	1k 2% 0,25W
3215	4822 051 10102	1k 2% 0,25W
3216	4822 051 10101	100Ω 2% 0,25W

Jumper

4010.. 4205	4822 051 10008	jumper

5010	4822 157 53302	
5010[6]	4822 157 61898	
5035	4822 157 53534	0,34µH 5%
5036[6]	4822 157 53609	0,36µH 5%
5036	4822 157 63824	0,36µH 5%
5037	4822 157 53537	1,35µH 5%
5038	4822 157 63076	1.2µH 5%
5039	4822 152 20678	33µH 10%
5080	4822 157 53539	0,27µH 5%
5103	4822 157 52511	0,83µH
5104	4822 157 63077	0.25µH 5%
5105	4822 157 52511	0,83µH
5042	4822 157 53634	5,6µH 10%
5042[6]	4822 157 62767	
5150	4822 157 63845	2,7µH

6037	4822 130 80888	BA682
6038	4822 130 80888	BA682
6039	4822 130 30621	1N4148
6040	4822 130 80446	LL4148
6041	4822 130 80446	LL4148
6042	4822 130 80446	LL4148
6043	4822 130 80446	LL4148
6106	4822 130 80888	BA682
6107	4822 130 80888	BA682
6108	4822 130 80888	BA682
6109	4822 130 80446	LL4148
6150	4822 130 80888	BA682
6151	4822 130 80888	BA682
6220	4822 130 81015	LLZ-C10

7000	4822 209 72812	TDA2549/C4
7030	5322 130 42012	BC858
7031	4822 130 61207	BC848
7035	4822 130 44121	BC338
7040	5322 130 42012	BC858
7100	4822 209 63059	TDA3856/V3
7101	4822 209 63784	TDA3857/V3
7102	4822 130 61207	BC848
7104	4822 130 61207	BC848
7150	4822 130 61207	BC848
7151	4822 130 61207	BC848
7200	4822 209 63967	TDA8417/V3
7220	4822 209 63734	TDA8425/V7
7232	5322 130 41982	BC848B
7233	4822 130 42513	BC858C

5) system BGDK
6) system BGLI
7) system BG

Nicam IF/sound module

[7]	4822 212 30071	IF NICAM BG
[8]	4822 212 30068	IF NICAM I

Various

1010[7]	4822 242 72554	OFWG3254
1010[8]	4822 242 72553	OFWJ3251
1042[7]	4822 242 72211	5,5MWHz
1042[8]	4822 153 30025	6MHz
1100	4822 242 70485	5,74MHz
1105[7]	4822 242 70714	5,5MHz
1105[8]	4822 242 71713	6,0MHz
1116[7]	4822 242 72301	TH316BOM-20800DAF
1116[8]	4822 242 72303	TH316BOM
1127[7]	4822 242 81187	11.7MHz
1127[8]	4822 242 81188	13.104MHz
1138	4822 242 81189	17.472MHz
1191	4822 071 54001	fuse T400mA
1200	4822 242 80208	10MHz

⊣⊢

2011	4822 124 41506	47µF 20% 16V
2012	4822 124 41577	4,7µF 20% 50V
2013	4822 122 31797	22nF 10% 63V
2014	4822 122 31797	22nF 10% 63V
2015	5322 121 42498	680nF 5% 63V
2016	4822 122 31784	4,7nF 10% 50V
2017	4822 122 33496	100nF 10% 63V
2042	4822 122 32139	12pF 5% 63V
2044	4822 122 31797	22nF 10% 63V
2047	4822 122 33496	100nF 10% 63V
2049	4822 122 33496	100nF 10% 63V
2050	4822 124 40849	330µF 20% 16V
2071	4822 122 31972	39pF 5% 50V
2072	4822 124 40435	10µF 20% 50V
2073	4822 122 31981	33nF 50V
2075	4822 122 31797	22nF 10% 63V
2076	4822 124 41407	0,47µF 20% 63V
2077	4822 122 31916	5,6nF 10% 63V
2100	4822 124 40242	1µF 20% 63V
2101	4822 122 31746	1000pF 5% 50V
2102	4822 122 31746	1000pF 5% 50V
2102	4822 122 32765	820pF 10% 63V
2104	4822 122 31784	4,7nF 10% 50V
2106	4822 124 41576	2,2µF 20% 50V
2107	4822 124 41576	2,2µF 20% 50V
2108	4822 122 32862	10nF 80% 50V
2109	4822 124 41509	33µF 20% 35V
2110	4822 122 31947	100nF 20% 63V
2116	5322 122 31647	1nF 10% 63V
2119	4822 124 40198	470µF 20% 16V
2122	4822 122 32862	10nF 80% 50V
2123	4822 122 31768	180pF 5% 50V
2124	4822 122 31768	180pF 5% 50V
2125	4822 122 32597	6,8nF 10% 63V
2126	5322 122 31647	1nF 10% 63V
2127	5322 122 31647	1nF 10% 63V
2128	4822 122 31808	150pF 10% 50V
2129	4822 122 32862	10nF 80% 50V
2130	4822 122 31808	150pF 10% 50V
2131	4822 122 31766	120pF 5% 50V
2132	4822 122 32862	10nF 80% 50V
2133	4822 121 41854	150nF 5% 63V
2134	5322 122 31647	1nF 10% 63V
2135	4822 122 32862	10nF 80% 50V
2136	4822 122 31808	150pF 10% 50V
2137	4822 122 31947	100nF 20% 63V
2138	4822 122 32862	10nF 80% 50V
2140	4822 121 42408	220nF 5% 63V
2141	4822 122 31784	4,7nF 10% 50V
2143	5322 122 31647	1nF 10% 63V
2150	4822 122 32863	22nF 80% 50V
2151	4822 124 41506	47µF 20% 16V
2160	4822 122 31765	100pF 5% 50V
2161	4822 122 31765	100pF 5% 50V
2168	4822 122 31947	100nF 20% 63V
2169	4822 124 41506	47µF 20% 16V
2170[7]	4822 122 31782	15nF 10% 50V
2170[8]	4822 122 31916	5,6nF 10% 63V
2171[7]	4822 122 31981	33nF 50V
2171[8]	5322 122 31648	12nF 10% 50V
2173	4822 122 31773	560pF 5% 50V
2174	4822 122 33498	2,7nF 10% 63V
2175	4822 122 32999	2,2N 5%
2176	4822 121 51252	470nF 5% 63V
2177	4822 122 32863	22nF 80% 50V
2180[7]	4822 122 31782	15nF 10% 50V
2180[8]	4822 122 31916	5,6nF 10% 63V
2181	5322 122 31648	12nF 10% 50V
2181	4822 122 31981	33nF 50V
2183	4822 122 31773	560pF 5% 50V
2184	4822 122 33498	2,7nF 10% 63V
2185	4822 122 32999	2,2nF 5%
2186	4822 121 51252	470nF 5% 63V
2187	4822 122 32863	22nF 80% 50V
2188	4822 124 41506	47µF 20% 16V
2189	4822 122 32863	22nF 80% 50V
2190	4822 122 31947	100nF 20% 63V
2191	4822 124 41643	100µF 20% 16V
2193	4822 124 40849	330µF 20% 16V
2194	4822 122 31947	100nF 20% 63V
2198	4822 121 51252	470nF 5% 63V
2200	4822 121 51252	470nF 5% 63V
2201	4822 121 51252	470nF 5% 63V
2202	4822 122 31766	120pF 5% 50V
2203	4822 124 41509	33µF 20% 35V
2204	4822 124 41509	33µF 20% 35V
2205	4822 122 31947	100nF 20% 63V
2207	4822 121 51252	470nF 5% 63V
2209	4822 121 51252	470nF 5% 63V
2210	4822 124 41577	4,7µF 20% 50V
2211	4822 121 42408	220nF 5% 63V
2213	4822 124 40195	150µF 20% 16V
2214	4822 122 31947	100nF 20% 63V
2215	4822 124 41506	47µF 20% 16V
2216	4822 122 31981	33nF 50V
2217	5322 121 42498	680nF 5% 63V
2218	4822 124 41643	100µF 20% 16V
2219	5322 121 42498	680nF 5% 63V
2220	4822 122 31916	5,6nF 10% 63V
2223	4822 122 31916	5,6nF 10% 63V
2224	4822 122 31981	33nF 50V
2225	4822 122 31782	15nF 10% 50V
2226	4822 122 31782	15nF 10% 50V

⊣▭⊢

3012	4822 051 10562	5k6 2% 0,25W
3013	4822 051 10273	27k 2% 0,25W
3014	4822 051 10823	82k 2% 0,25W
3015	4822 051 10104	100k 2% 0,25W
3016	4822 100 11819	100k 30% 0,1W
3019	4822 051 10473	47k 2% 0,25W
3020	4822 051 10273	27k 2% 0,25W
3021	4822 051 20183	18k 5% 0,1W
3030	4822 051 10223	22k 2% 0,25W
3035	4822 051 10472	4k7 2% 0,25W
3041	4822 051 10221	220Ω 2% 0,25W
3042[7]	4822 051 10151	150Ω 2% 0,25W
3042[8]	4822 051 10101	100Ω 2% 0,25W
3044	4822 051 10271	270Ω 2% 0,25W
3047	4822 050 21001	100Ω 1% 0,6W
3052	4822 051 10102	1k 2% 0,25W
3055	4822 051 10103	10k 2% 0,25W
3056	4822 051 10471	470Ω 2% 0,25W
3058	4822 051 10682	6k8 2% 0,25W
3071	4822 051 10124	120k 2% 0,25W
3072	4822 051 10471	470Ω 2% 0,25W
3073	4822 051 10824	820k 2% 0,25W
3074	4822 051 10563	56k 2% 0,25W
3075	4822 051 10272	2k7 2% 0,25W
3076	4822 051 10224	220k 2% 0,25W
3077	4822 051 10124	120k 2% 0,25W
3078	4822 051 10102	1k 2% 0,25W
3079	4822 051 10101	100Ω 2% 0,25W
3100	4822 051 10561	560Ω 2% 0,25W
3101	4822 051 10331	330Ω 2% 0,25W
3102	4822 051 10681	680Ω 2% 0,25W
3105	4822 051 10561	560Ω 2% 0,25W
3106	4822 051 10561	560Ω 2% 0,25W
3107	4822 051 10122	1k2 2% 0,25W
3108	4822 051 20222	2k2 5% 0,1W
3109	4822 053 11121	120Ω 5% 2W
3110	4822 051 10102	1k 2% 0,25W
3116	4822 051 10471	470Ω 2% 0,25W
3122	4822 051 10471	470Ω 2% 0,25W
3123	4822 051 10332	3k3 2% 0,25W
3124	4822 051 10332	3k3 2% 0,25W
3125	4822 051 10223	22k 2% 0,25W
3127	4822 051 10104	100k 2% 0,25W
3128	4822 051 10223	22k 2% 0,25W
3129	4822 051 10103	10k 2% 0,25W
3130	4822 051 10223	22k 2% 0,25W
3131	4822 051 10392	3k9 2% 0,25W
3133	4822 051 10333	33k 2% 0,25W
3134	4822 051 10103	10k 2% 0,25W
3135	4822 051 10103	10k 2% 0,25W
3136	4822 051 10104	100k 2% 0,25W
3137	4822 051 10104	100k 2% 0,25W
3138	4822 051 10105	1M 5% 0,25W
3139	4822 051 10273	27k 2% 0,25W
3140	4822 051 10824	820k 2% 0,25W
3141	4822 051 10152	1k5 2% 0,25W
3142	4822 051 10103	10k 2% 0,25W
3143	4822 051 10102	1k 2% 0,25W
3150	4822 052 10278	2Ω7 5% 0,33W
3158	4822 051 10473	47k 2% 0,25W
3159	4822 051 10473	47k 2% 0,25W
3160	4822 051 10331	330Ω 2% 0,25W
3161	4822 051 10331	330Ω 2% 0,25W
3168	4822 052 10278	2Ω7 5% 0,33W
3170[7]	4822 051 10682	6k8 2% 0,25W
3170[8]	4822 051 20183	18k 5% 0,1W
3171[7]	4822 051 10122	1k2 2% 0,25W
3171[8]	4822 051 10332	3k3 2% 0,25W
3172	4822 051 10472	4k7 2% 0,25W
3173	4822 051 10472	4k7 2% 0,25W
3177[7]	4822 051 10682	6k8 2% 0,25W
3177[8]	4822 051 10472	4k7 2% 0,25W
3180[7]	4822 051 10682	6k8 2% 0,25W
3180[8]	4822 051 20183	18k 5% 0,1W
3181[7]	4822 051 10122	1k2 2% 0,25W
3181[8]	4822 051 10332	3k3 2% 0,25W
3182	4822 051 10472	4k7 2% 0,25W
3183	4822 051 10472	4k7 2% 0,25W
3188	4822 052 10109	10Ω 5% 0,33W
3190	4822 051 10471	470Ω 2% 0,25W
3200	4822 101 11191	10k 30% 0.1W
3201	4822 051 10822	8k2 2% 0,25W
3202	4822 051 10512	5k1 2% 0,25W
3203	4822 051 10563	56k 2% 0,25W
3204	4822 051 10563	56k 2% 0,25W

Nicam IF/sound module

3205	4822 052 10229	22Ω 5% 0,33W
3206	4822 051 10331	330Ω 2% 0,25W
3208	4822 051 10331	330Ω 2% 0,25W
3209	4822 051 10103	10k 2% 0,25W
3210	4822 051 10102	1k 2% 0,25W
3213	4822 051 10478	4Ω7 5% 0,25W
3214	4822 051 10223	22k 2% 0,25W
3215	4822 051 10272	2k7 2% 0,25W
3216	4822 051 10333	33k 2% 0,25W
3217	4822 051 10102	1k 2% 0,25W
3218	4822 051 10101	100Ω 2% 0,25W

Jumper

4000[7]	4822 051 10393	39k 2% 0,25W
4000[8]	4822 051 10392	3k9 2% 0,25W

5010	4822 157 53302	
5035	4822 157 53534	0,34µH 5%
5036	4822 157 63824	0,36µH 5%
5042	4822 157 62767	
5042	4822 157 53634	5,6µH 10%
5101	4822 157 52511	0,83µH
5102	4822 157 52511	0,83µH
5103	4822 157 63077	0.25µH 5%
5123	4822 157 50975	1 mH
5124	4822 157 50975	1 mH

6070	4822 130 80446	LL4148
6071	4822 130 80446	LL4148
6072	4822 130 80446	LL4148
6075	4822 130 80446	LL4148
6127	5322 130 34953	BB405B
6134	5322 130 31684	BB809
6140	4822 130 80446	LL4148
6190	4822 130 80446	LL4148
6191	4822 130 80954	LLZ-C5V6
6225	4822 130 81015	LLZ-C10

7000	4822 209 72812	TDA2549/C4
7035	4822 130 44121	BC338
7073	5322 130 42012	BC858
7078	4822 130 42513	BC858C
7100	4822 209 63784	TDA3857/V3
7106	4822 130 61207	BC848
7108	5322 130 42012	BC858
7120	4822 209 30909	TDA8732/C1
7133	4822 130 61207	BC848
7150	4822 209 30914	SAA7280/M2
7160	4822 130 61207	BC848
7161	4822 130 61207	BC848
7168	4822 209 73236	TDA1543/N2
7170	4822 209 83163	LM833N
7180	4822 209 83163	LM833N
7190	5322 130 41983	BC858B
7191	4822 130 44121	BC338
7200	4822 209 30147	TDA8415
7213	4822 209 63734	TDA8425/V7
7217▲	5322 130 41982	BC848B

[7] BG

[8] I

TXT module

[9]	4822 212 30062	IVT TXT europe
[10]	4822 212 30063	IVT TXT nordic
[11]	4822 212 30076	TXT spain
[12]	4822 212 30077	TXT east-europe
[13]	4822 212 30078	TXT europe
[14]	4822 212 30079	TXT nordic

Connectors

	4822 265 40469	BTB AU 6P
	4822 265 40471	BTB AU 8P

Various

1800	4822 242 81191	27MHz
1820	4822 242 71508	6MHz
1870	4822 071 53151	Fuse 315mA

2801	4822 122 31797	22nF 10% 63V
2802	4822 122 31746	1000pF 5% 50V
2803	4822 122 31774	56pF 5% 50V
2804	4822 122 32504	15pF 5% 50V
2805	4822 122 33496	100nF 10% 63V
2806	4822 122 33496	100nF 10% 63V
2807	4822 122 33496	100nF 10% 63V
2808	4822 122 33496	100nF 10% 63V
2810	4822 122 33496	100nF 10% 63V
2820	4822 122 32504	15pF 5% 50V
2820[11]	4822 126 10324	33pF 63V
2821	4822 122 32504	15pF 5% 50V
2821[11]	4822 126 10324	33pF 63V
2823	4822 122 33496	100nF 10% 63V
2825	4822 122 31772	47pF 5% 50V
2826	4822 122 31772	47pF 5% 50V
2830	4822 122 33496	100nF 10% 63V
2832	4822 122 33496	100nF 10% 63V
2833	4822 122 33496	100nF 10% 63V
2834	4822 124 40435	10µF 20% 50V
2836	4822 122 31965	220pF 5% 63V
2850	4822 122 33496	100nF 10% 63V
2860	4822 122 31825	27pF 10% 50V
2861	4822 122 33496	100nF 10% 63V
2862	4822 122 31774	56pF 5% 50V
2863	4822 122 33496	100nF 10% 63V
2870	4822 124 41643	100µF 20% 16V
2871	4822 124 41506	47µF 20% 16V
2872	4822 124 40272	33µF 20% 16V

3802	4822 051 10273	27k 2% 0,25W
3803	4822 051 10103	10k 2% 0,25W
3804	4822 051 10122	1k2 2% 0,25W
3805	4822 051 10122	1k2 2% 0,25W
3806	4822 051 10221	220Ω 2% 0,25W
3809	4822 116 52176	10Ω 5% 0,5W
3810	4822 116 52207	1k 2 5% 0,5W
3811	4822 051 10122	1k2 2% 0,25W
3812	4822 051 10122	1k2 2% 0,25W
3813	4822 051 10122	1k2 2% 0,25W
3814	4822 051 10122	1k2 2% 0,25W
3815	4822 116 52207	1k 2 5% 0,5W
3816	4822 116 52207	1k 2 5% 0,5W
3817	4822 051 10122	1k2 2% 0,25W
3818	4822 051 10122	1k2 2% 0,25W
3819	4822 051 10122	1k2 2% 0,25W
3820	4822 051 10471	470Ω 2% 0,25W
3821	4822 051 10102	1k 2% 0,25W
3822	4822 051 10103	10k 2% 0,25W
3823	4822 051 10105	1M 5% 0,25W
3824	4822 051 20222	2k2 5% 0,1W
3825	4822 051 20222	2k2 5% 0,1W
3826	4822 116 52175	100Ω 5% 0,5W
3827	4822 116 52175	100Ω 5% 0,5W
3830	4822 051 10829	82Ω 2% 0,25W
3831	4822 051 10821	820Ω 2% 0,25W
3832	4822 051 10102	1k 2% 0,25W
3833	4822 051 10102	1k 2% 0,25W
3834	4822 051 10681	680Ω 2% 0,25W
3835	4822 051 10103	10k 2% 0,25W
3836	4822 051 10473	47k 2% 0,25W
3837	4822 051 10102	1k 2% 0,25W
3838	4822 051 10473	47k 2% 0,25W
3839	4822 051 10151	150Ω 2% 0,25W
3840	4822 051 10228	2Ω2 5% 0,25W
3842	4822 051 10561	560Ω 2% 0,25W
3850	4822 116 52206	120Ω 5% 0,5W
3851	4822 051 10102	1k 2% 0,25W
3852	4822 051 10102	1k 2% 0,25W
3853	4822 116 52206	120Ω 5% 0,5W
3854	4822 051 10102	1k 2% 0,25W
3855	4822 051 10102	1k 2% 0,25W
3856	4822 116 52206	120Ω 5% 0,5W
3857	4822 051 10102	1k 2% 0,25W
3858	4822 051 10102	1k 2% 0,25W
3860	4822 051 10272	2k7 2% 0,25W
3861	4822 051 10562	5k6 2% 0,25W
3862	4822 051 10333	33k 2% 0,25W
3863	4822 051 10223	22k 2% 0,25W
3864	4822 051 10103	10k 2% 0,25W
3865	4822 051 10392	3k9 2% 0,25W
3866	4822 051 10272	2k7 2% 0,25W
3867	4822 116 52206	120Ω 5% 0,5W
3868	4822 051 10101	100Ω 2% 0,25W
3869	4822 051 10821	820Ω 2% 0,25W
3870	4822 050 24701	470Ω 1% 0,6W
3871	4822 050 22201	220Ω 1% 0,6W
3872	4822 051 10331	330Ω 2% 0,25W
3873	4822 051 10271	270Ω 2% 0,25W
3874	4822 051 10181	180Ω 2% 0,25W
3890[9]	4822 051 10102	1k 2% 0,25W
3890[13]	4822 051 10103	10k 2% 0,25W
3890[14]	4822 051 10153	15k 2% 0,25W
3890[10]	4822 051 10272	2k7 2% 0,25W
3890[11]	4822 051 10562	5k6 2% 0,25W
3890[12]	4822 051 10822	8k2 2% 0,25W

Jumper

4801.. 4862	4822 051 10008	jumper

5800	4822 157 53302	
5801	4822 152 20677	
5834	4822 157 53001	27µH 10%
5870	4822 157 51157	3.3µH

6800	4822 130 82921	LLZ-F3V9
6840	4822 130 80446	LL4148
6850	4822 130 80446	LL4148
6851	4822 130 80446	LL4148
6852	4822 130 80446	LL4148
6860	4822 130 80446	LL4148
6870	4822 130 80905	LLZ-F5V1
6871	4822 130 81227	LLZ-F5V6

7800	4822 209 31214	SAA5246P/E
7800[12]	4822 209 31215	SAA5246P/H
7810	4822 209 61805	HY6264P-15
7810[11]	4822 209 72681	MSM5165AL-12RS
7820[12]	4822 209 30281	PCF84C81A/097

TXT module

7820[9.10]	4822 209 31069	PCF84C81A/098
7820[11]	4822 209 62479	MAB8461/W196
7821	4822 130 61207	BC848
7822	4822 130 61207	BC848
7831	4822 130 42513	BC858C
7833	5322 130 42136	BC848C
7850	5322 130 42136	BC848C
7851	5322 130 42136	BC848C
7852	5322 130 42136	BC848C
7860	4822 130 61207	BC848
7861	5322 130 60159	BC846B
7862	5322 130 42136	BC848C
7863	4822 130 61207	BC848
7870	4822 130 41344	BC337-40
7871	5322 130 42012	BC858
7872	4822 130 41344	BC337-40

[9] IVT Europe BGLI
[10] IVT Nordic
[11] CCT Spain
[12] CCT Europe BGDK
[13] CCT Europa BGLI
[14] CCT Nordic

PIP module

	4822 212 23605	PIP module

Connectors

	4822 265 30828	5p female
	4822 265 40472	10p female
	4822 265 40503	5p male

Various

1155	4822 320 40051	delay line DL711
1201	4822 242 70304	8,867238 MHz
1212	4822 242 70736	7,159090 MHz

⊣⊢

2103	4822 122 32444	33pF 5% 50V
2105	4822 122 31766	120pF 5% 50V
2118	4822 122 31775	680pF 5% 50V
2119	4822 122 31808	150pF 10% 50V
2120	4822 122 31807	1200pF 5% 50V
2125	4822 122 32863	22nF 80% 50V
2155	4822 122 32862	10nF 80% 50V
2158	4822 122 32862	10nF 80% 50V
2160	4822 124 40242	1µF 20% 63V
2161	4822 124 41576	2,2µF 20% 50V
2162	4822 122 32893	100nF 80% 50V
2171	4822 122 31961	68pF 5% 63V
2172	4822 126 11175	22pF 5% 50V
2176	4822 126 11175	22pF 5% 50V
2177	4822 122 31961	68pF 5% 63V
2180	4822 122 31768	180pF 5% 50V
2181	4822 122 31768	180pF 5% 50V
2185	4822 122 32863	22nF 80% 50V
2187	4822 122 32863	22nF 80% 50V
2189	4822 122 31746	1000pF 5% 50V
2196	4822 122 32893	100nF 80% 50V
2197	4822 122 31385	22pF 50V
2201	4822 122 31746	1000pF 5% 50V
2202	4822 125 50045	20pF
2211	4822 122 31746	1000pF 5% 50V
2212	4822 125 50045	20pF
2220	5322 121 42661	330nF 5% 63V
2222	4822 122 32542	47nF 10% 63V
2227	5322 122 31842	330pF 5% 63V
2230	4822 124 40242	1µF 20% 63V
2232	4822 124 41678	22µF 20% 25V
2234	4822 122 33496	100nF 10% 63V
2235	4822 124 41578	6,8µF 20% 50V
2238	4822 121 42937	2.7nF 1% 250V
2239	4822 122 32893	100nF 80% 50V
2250	4822 121 51115	270nF 10% 63V
2251	5322 122 31647	1nF 10% 63V
2255	4822 122 31766	120pF 5% 50V
2260	4822 122 32893	100nF 80% 50V
2270	4822 122 32893	100nF 80% 50V
2340	4822 124 41506	47µF 20% 16V
2345	4822 124 41506	47µF 20% 16V
2350	4822 124 40849	330µF 20% 16V
2351	4822 124 41643	100µF 20% 16V
2380	4822 122 32927	220nF
2381	4822 122 32927	220nF
2382	4822 122 32927	220nF
2383	4822 122 32927	220nF
2384	4822 122 32927	220nF
2385	4822 122 32927	220nF
2390	4822 122 32893	100nF 80% 50V
2399	4822 122 31746	1000pF5%50V
2404	4822 122 31965	220pF 5% 63V
2405	4822 122 32862	10nF 80% 50V
2409	4822 122 31965	220pF 5% 63V
2410	4822 122 32862	10nF 80% 50V
2413	4822 122 31765	100pF 5% 50V
2414	4822 122 32862	10nF 80% 50V
2415	4822 122 31965	220pF 5% 63V
2430	4822 122 32893	100nF 80% 50V
2432	4822 122 32893	100nF 80% 50V
2434	4822 122 32893	100nF 80% 50V
2438	4822 121 42472	10nF 10% 50V
2439	4822 121 41856	22nF 5% 250V
2440	4822 122 31965	220pF 5% 63V
2441	4822 122 31727	470pF 5% 63V
2442	4822 124 40242	1µF 20% 63V
2446	4822 122 32893	100nF 80% 50V
2448	4822 122 32893	100nF 80% 50V
2450	4822 122 32856	8,2nF 10% 63V
2455	4822 122 31972	39pF 5% 50V
2459	4822 124 41997	470µF 10V
2466	4822 122 32893	100nF 80% 50V

⊓

2444	4822 051 10224	220k 2% 0,25W
3103	4822 051 10821	820Ω 2% 0,25W
3104	4822 051 10821	820Ω 2% 0,25W
3105	4822 051 10362	3k6 2% 0,25W
3106	4822 116 52233	10k 5% 0,5W
3107	4822 051 10103	10k 2% 0,25W
3108	4822 051 10103	10k 2% 0,25W
3155	4822 051 10391	390Ω 2% 0,25W
3156	4822 051 10122	1k2 2% 0,25W
3157	4822 100 11391	330Ω 30% LIN
3158	4822 051 10759	75Ω 2% 0,25W
3170	4822 051 10112	1k1 2% 0,25W
3175	4822 051 10621	620Ω 2% 0,25W
3196	4822 050 11002	1k 1% 0,4W
3200	4822 051 10103	10k 2% 0,25W
3201	4822 051 10103	10k 2% 0,25W
3202	4822 051 10103	10k 2% 0,25W
3211	4822 051 10103	10k 2% 0,25W
3212	4822 051 10103	10k 2% 0,25W
3214	4822 051 10102	1k 2% 0,25W
3220	4822 051 10512	5k1 2% 0,25W
3221	4822 116 52233	10k 5% 0,5W
3222	4822 051 10008	jumper
3227	4822 116 52299	7k5 5% 0,5W
3228	4822 051 10472	4k7 2% 0,25W
3231	4822 051 10682	6k8 2% 0,25W
3232	4822 051 10229	22Ω 2% 0,25W
3233	4822 051 10471	470Ω 2% 0,25W
3234	4822 051 10361	360Ω 2% 0,25W
3235	4822 051 10122	1k2 2% 0,25W
3236	4822 051 10471	470Ω 2% 0,25W
3237	4822 051 10332	3k3 2% 0,25W
3238	4822 051 10333	33k 2% 0,25W
3239	4822 100 11319	4k7 30% LIN
3241	4822 051 10271	270Ω 2% 0,25W
3242	4822 050 11002	1k 1% 0,4W
3250	4822 051 10911	910Ω 2% 0,25W
3265	4822 051 10104	100k 2% 0,25W
3270	4822 051 10103	10k 2% 0,25W
3275	4822 051 10103	10k 2% 0,25W
3276	4822 051 10102	1k 2% 0,25W
3330	4822 051 20008	0Ω 5% 0,1W
3335	4822 051 10271	270Ω 2% 0,25W
3336	4822 051 10432	4k3 2% 0,25W
3337	4822 051 10122	1k2 2% 0,25W
3338	4822 051 10332	3k3 2% 0,25W
3340	4822 051 10202	2k 2% 0,25W
3341	4822 052 10229	22Ω 5% 0,33W
3345	4822 052 10229	22Ω 5% 0,33W
3353	4822 052 10568	5Ω6 5% 0,33W

Spare parts list / Stückliste / Liste

PIP module

3354	4822 051 10271	270Ω 2% 0,25W
3390	4822 051 10151	150Ω 2% 0,25W
3391	4822 051 10181	180Ω 2% 0,25W
3394	4822 051 10151	150Ω 2% 0,25W
3395	4822 051 10181	180Ω 2% 0,25W
3398	4822 051 10151	150Ω 2% 0,25W
3399	4822 051 10181	180Ω 2% 0,25W
3404	4822 051 10431	430Ω 2% 0,25W
3405	4822 051 10361	360Ω 2% 0,25W
3410	4822 051 10391	390Ω 2% 0,25W
3411	4822 051 10471	470Ω 2% 0,25W
3412	4822 051 10751	750Ω 2% 0,25W
3414	4822 051 10471	470Ω 2% 0,25W
3416	4822 051 10182	1k8 2% 0,25W
3434	4822 051 10473	47k 2% 0,25W
3436	4822 051 10473	47k 2% 0,25W
3437	4822 051 10101	100Ω 2% 0,25W
3438	4822 051 10513	51k 2% 0,25W
3440	4822 116 52222	390Ω 5% 0,5W
3441	4822 051 10519	51Ω 2% 0,25W
3442	4822 051 10919	91Ω 2% 0,25W
3444	4822 116 52175	100Ω 5% 0,5W
3446	4822 116 52175	100Ω 5% 0,5W
3448	4822 051 10392	3k9 2% 0,25W
3450	4822 051 10471	470Ω 2% 0,25W
3452	4822 051 10471	470Ω 2% 0,25W
3454	4822 051 10471	470Ω 2% 0,25W
3460	4822 116 52231	820Ω 5% 0,5W
3461	4822 116 52259	2k4 5% 0,5W
3462	4822 051 10333	33k 2% 0,25W
3463	4822 116 52299	7k5 5% 0,5W
3464	4822 051 10472	4k7 2% 0,25W
3470	4822 052 10108	1Ω 5% 0,33W
3618	4822 052 10568	5Ω6 5% 0,33W
3621	4822 051 10105	1M 5% 0,25W
3997	4822 051 10339	33Ω 2% 0,25W
3997	4822 051 10279	27Ω 2% 0,25W

Jumper

4001.. 4415	4822 051 10008	jumper

5118	4822 157 60435	10,3µH 6%
5155	4822 157 60433	7,2µH 6%
5157	4822 157 60434	9,4µH 6%
5170	4822 157 60432	10,3µH
5175	4822 157 60432	10,3µH
5190	4822 157 60432	10,3µH
5400	4822 157 50943	12µH 10%
5402	4822 157 50943	12µH 10%
5403	4822 157 52333	100µH 10%
5406	4822 157 50943	12µH 10%
5408	4822 157 50943	12µH 10%
5410	4822 157 50943	12µH 10%
6300	4822 130 80906	LLZ-C7V5
7103	5322 130 41982	BC848B
7105	5322 130 41982	BC848B
7125	4822 209 63927	TDA4554/V1
7126	4822 209 30389	TDA4510/V8
7200	5322 130 41982	BC848B
7210	5322 130 41982	BC848B
7233	5322 130 41983	BC858B
7234	5322 130 41982	BC848B
7335	5322 130 41982	BC848B
7337	5322 130 41982	BC848B
7338	5322 130 41982	BC848B
7350	4822 130 42616	BC818-40
7380	4822 209 60479	TEA5114A
7400	5322 130 41983	BC858B
7402	5322 130 41983	BC858B
7404	5322 130 41983	BC858B
7406	4822 209 62473	SDA9087
7408	4822 209 63291	SDA9088/2Ω
7410	4822 209 63644	SDA9086-3
7755	4822 209 72363	TDA2579A/N8

Control module DAS

[17]	4822 212 30036	control module
[18]	4822 212 30029	control module

Connectors

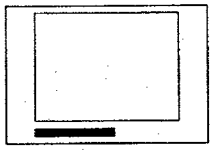
▲	4822 265 30384	mains K11
▲	4822 265 40596	mains K25
	4822 264 40207	3p male
	4822 265 30951	4p male

Various

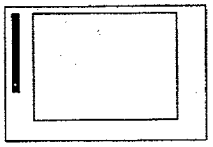
▲	4822 276 12597	Mains switch
	4822 267 31014	Headphone socket
	4822 276 50354	Swith assembly
	4822 212 23667	IR receiver GP1U52YP
	4822 209 72895	LED TLUV5320
	4822 256 91766	LED holder

2233	4822 121 43526	47nF 5% 100V
2234	4822 121 43526	47nF 5% 100V
2713	5322 124 21189	100µF 20% 40V
3246	4822 116 52219	330Ω 5% 0,5W
3247	4822 116 52175	100Ω 5% 0,5W
3248	4822 116 52219	330Ω 5% 0,5W
3249	4822 116 52175	100Ω 5% 0,5W
3729	4822 116 52232	910Ω 5% 0,5W
3730	4822 116 52215	220Ω 5% 0,5W
3775	4822 116 52175	100Ω 5% 0,5W
3776[17]	4822 116 52264	5K6 5% 0,5W
3776[18]	4822 116 52289	27K 5% 0,5W
3777[17]	4822 116 52289	27K 5% 0,5W
3777[18]	4822 116 52264	5K6 5% 0,5W
3778[17]	4822 116 52233	56K 5% 0,5W
3778[18]	4822 116 52291	10K 5% 0,5W
3779[17]	4822 116 52291	10K 5% 0,5W
3779[18]	4822 116 52233	56K 5% 0,5W

17)



18)



Service
Service
Service

GR 2.2

93.01

Service Information

(GB)

1. Modified line output transformer TS5545

In GR2.2 sets with PROD. NO. QG04 (AG04) and higher a different Line Output Transformer (L.O.T.) has been introduced. The print track on the chassis has also been modified. This L.O.T. is not compatible with the "old" L.O.T. The code numbers for the new L.O.T. are:

- for 21" narrow neck: 4822 140 10483
- for 21" mini neck: 4822 140 10484
- for 25"/28" sets 4822 140 10474

The "old" L.O.T.'s will remain available.

2. Modified CRT-panel/chassis to avoid "picture mute".

In GR2.2 sets with PROD. NO. QG04 (AG04) and higher the following modifications have been introduced on the CRT-panel.

- remove R3422, T7421 and R3423.
- replace C2421 with 27 pF (4822 122 31825)
- replace R3421 with 150 Kohm (4822 051 10154)
- add 2.2 Kohm (4822 051 10222) to position 4002 (4002 is located between the anode of 6421 and the emitter of 7421).
- add LLZ-6V2 (4822 130 81512) to position no. D6422 (anode to earth).

The following modifications have been introduced for the chassis:

- remove C2363
- replace R3318 with 390 Ohm (4822 051 10391)

Due to the CRT circuits being modified the Vg2 voltages will have to be readjusted in sets with the following picture tubes:

- 25" black line-s (A59EAK252X...) Vg2 = 130V (was 145V)
- 28" black line-s (A66EAK252X...) Vg2 = 130V (was 145V)
- 25" black matrix (A59EAK71X...) Vg2 = 120V (was 130V)
- 28" black matrix (A66EAK71X...) Vg2 = 120V (was 130V)

3. For picture tube panels with the following code numbers:

- 4822 212 30057, 4822 212 30058, 4822 212 30059 and 4822 212 30061.

When replacing the picture tube panel in sets (GR2.2/GR2.1) up to and including PROD. NO. QG03 (AG03):

- Only make the chassis modifications (see point 2).
- Readjust the Vg2 voltages (see point 2).

(NL)

1. Gewijzigde lijnuitgangstransformator T5545

Bij GR2.2 apparaten met PROD. NO. QG04(AG04) en hoger is een andere L.O.T. geïntroduceerd, Hierdoor is ook het printspoor van het chassis gewijzigd. Deze L.O.T. is niet compatibel met de "oude" L.O.T. De codenummers van de "nieuwe" L.O.T. zijn:

- voor 21" narrow neck: 4822 140 10483
- voor 21" mini neck: 4822 140 10484
- voor 25"/28" apparaten: 4822 140 10474

De "oude" L.O.T.'s blijven leverbaar.

2. Gewijzigd CRT-paneel/chassis om "picture-mute" te voorkomen.

Bij GR2.2 apparaten met PROD. NO. QG04(AG04) en hoger zijn op het CRT-paneel de volgende wijzigingen ingevoerd:

- verwijder R3422, T7421 en R3423.
- vervang C2421 door 27pF(4822 122 31825).
- vervang R3421 door 150 Kohm (4822 051 10154)
- toevoegen 2,2 Kohm (4822 051 10222) op pos.nr 4002 (4002 zit tussen anode 6421 en emitter van 7421).
- toevoegen LLZ-6V2(4822 130 81512) op pos.nr.D6422 (anode aan aarde)

Op het chassis zijn de volgende wijzigingen ingevoerd:

- verwijder C2363.
- vervang R3318 door 390 0hm(4822 051 10391)

Doordat schakelingen op het CRT gewijzigd zijn moeten ook de Vg2 spanningen opnieuw afgeregeld worden voor de apparaten met de beeldbuizen :

- 25" black line-s (A59EAK252X...) Vg2= 130V (was 145V)
- 28" black line-s (A66EAK252X...) Vg2= 130V (was 145V)
- 25" black matrix (A59EAK71X...) Vg2= 120V (was 130V)
- 28" black matrix (A66EAK71X...) Vg2= 120V (was 130V)

3. Voor beeldbuis panelen met de volgende code nummers:

- 4822 212 30057, 4822 212 30058, 4822 212 30059 en 4822 212 30061.

Bij het vervangen van het beeldbuispaneel in apparaten (GR2.2/GR2.1) tot en met PROD. NO. QGo3 (AG03):

- Doe alleen de wijzigingen op het chassis (zie punt 2).
- Regel de Vg2 spanningen opnieuw af (zie punt 2).

Published by Consumer Electronics Printed in The Netherlands ©Copyright reserved Subject to modification

(D)

1. Geänderter Zeilenausgangstransformator (Line Output Transformator LOT) T5545

Bei GR2.2 Geräten mit der Produktionsnummer QG04 (AG04) und höher ist ein anderer LOT eingeführt. Hierdurch hat sich auch die Platinenschiene des Chassis geändert. Dieser LOT ist mit dem 'alten' LOT nicht kompatibel. Die Kodenummern des neuen 'LOT's sind:

- für 21" narrow neck: 4822 140 10483
- für 21" mini neck: 4822 140 10484
- für 25"/28" Geräte: 4822 140 10474

Der 'alte' LOT bleibt weiterhin lieferbar.

2. Geänderte(s) CRT-Platine/Chassis zur Vermeidung von 'picture-mute'.

Bei GR2.2 Geräten mit der Produktionsnummer QG04 (AG04) und höher wurden auf der CRT-Platine die folgenden Änderungen eingeführt:

- entfernen Sie R3422, T7421 und R3423.
- ersetzen Sie C2421 durch 27pF (4822 122 31825)
- ersetzen Sie R3421 durch 150 Kohm (4822 051 10154)
- 2,2 Kohm (4822 051 10222) auf Positonsnr. 4002 hinzufügen (4002 befindet sich zwischen Anode 6421 und Emitter von 7421).
- LLZ-6V2 (4822 130 81512) auf Positonsnr. D6422 hinzufügen (Anode an Erde)

Auf dem Chassis wurden die folgenden Änderungen vorgenommen:

- entfernen C2363
- R3318 durch 390 Ohm (4822 051 10391) ersetzen.

Da die Schaltungen auf der CRT geändert sind, müssen auch die Vg2 Spannungen für die Geräte mit den folgenden Bildröhren erneut abgeglichen werden:

- 25" black line-s (A59EAK252X ...) Vg2= 130V (war 145V)
- 28" black line-s (A66EAK252X ...) Vg2= 130V (war 145V)
- 25" black matrix (A59EAK71X ...) Vg2= 120V (war 130V)
- 28" black matrix (A66EAK71X ...) Vg2= 120V (war 130V)

3. Für Bildröhren-Platinen mit den folgenden Kodenummern:

- 4822 212 30057, 4822 212 30058, 4822 212 30059 und 4822 212 30061.

Beim Austausch der Bildröhrenplatine in Geräten (GR2.2/GR2.1) bis einschließlich Produktionsnummer QG03(AG03):

- Nur die Änderungen auf dem Chassis vornehmen (siehe Punkt 2).
- Die Vg2 Spannungen erneut abgleichen (siehe Punkt 2).

(F)

1. Modification du transformateur de sortie de lignes T5545

Pour les appareils GR2.2 avec PROD.Nº QG04 (AG04) et suivants, un autre T.S.L. est introduit. Par là même, la piste d'impression du châssis est également modifiée. Ce T.S.L. n'est pas compatible avec "l'ancien" T.S.L.. Les numéros de code du "nouveau" T.S.L. sont:

- pour 21" col étroit: 4822 140 10483
- pour 21" mini-col: 4822 140 10484
- pour les appareils 25"/28": 4822 140 10474

Les "anciens" T.S.L. demeurent livrables.

2. Modification de la platine CRT/du châssis pour éviter l'image muette".

Pour les appareils GR2.2 avec PROD.Nº QG04 (AG04) et suivants, les modifications suivantes doivent être apportées à la platine CRT:

- supprimer R3422, T7421 et R3423.
- remplacer C2421 par 27 pF (4822 122 31825).
- remplacer R3421 par 150 Kohms (4822 051 10154)
- ajouter 2,2 Kohms (4822 051 10222) en position nº 4002 (4002 se trouve entre l'anode 6421 et l'émetteur de 7421)
- ajouter LLZ-6V2 (4822 130 81512) à la position nº D6422 (anode de terre)

Modifications à apporter au châssis:

- supprimer C2363
- remplacer R3318 par 390 ohms (4822 051 10391).

Du fait de la modification des circuits au niveau du CRT, les tensions Vg2 doivent être de nouveau réglées pour les appareils dotés des tubes-images suivants:

- 25" black line-s (A59EAK252X...) Vg2= 130V (était 145V)
- 28" black line-s (A66EAK252X...) Vg2= 130V (était 145V)
- 25" black matrix (A59EAK71X...) Vg2= 120V (était 130V)
- 28" black matrix (A66EAK71X...) Vg2= 120V (était 130V)

3. Pour les platines de tube-image ayant les numéros de code suivants:

- 4822 212 30057, 4822 212 30058, 4822 212 30059 et 4822 212 30061.

Lors du remplacement de la platine de tube-image dans les appareils (GR2.2/GR2.1) avec PROD. Nº allant jusqu'à QG03 (AG03) compris:

- Ne procéder aux modifications qu'au niveau du châssis (voir point 2).
- Régler de nouveau les tensions Vg2 (voir point 2).

(E)

1. Modifica del trasformatore dell'uscita di linea T5545

Negli apparecchi GR2.2 con NO. PROD. QG04 (AG04) e seguenti è stato introdotto un altro L.O.T. Per questo motivo anche la traccia dello stampato dello chassis è stata modificata. Questo L.O.T. non è compatibile con il "vecchio" L.O.T.
I numeri di codice del "nuovo" L.O.T. sono:

- per 21" narrow neck : 4822 140 10483
- per 21" mini neck: 4822 140 10484
- per apparecchi da 25"/28": 4822 140 10474

I "vecchi" L.O.T. continuano ad essere disponibili.

2. Modifica del pannello CRT/chassis per prevenire "l'immagine senza audio"

Negli apparecchi GR2.2 con NO. PROD. QG04 (AG04) e seguenti
sono state introdotte sul pannello CRT le seguenti modifiche:

- eliminare R3422, T7421 E R3423
- sostituire C2421 CON 27pF (4822 122 31825)
- sostituire R3421 con 150 Kohm (4822 051 10154)
- aggiungere 2,2 Kohm (4822 051 10222) su pos. nr.4002 (4002 si trova tra l'anodo 6421 e l'emettitore di 7421)
- aggiungere LLZ-6V2 (4822 130 81512) su pos. nr. D6422 (anodo a terra)

Sullo chassis sono state introdotte le seguenti modifiche:

- eliminare C2363
- sostituire R3318 con 390 Ohm (4822 051 10391)

Poiché le connessioni sul CRT sono state modificate anche le tensioni Vg2 devono essere nuovamente regolate per gli apparecchi con gli schermi:

- 25" black line-s (linea/e nera/e) (A59EAK252X...)
  Vg2= 130V (era 145V)
- 28" black line-s (linea/e nera/e) (A66EAK252X...)
  Vg2= 130V (era 145V)
- 25" black matrix (matrice nera) (A59EAK71X...)
  Vg2= 120V (era 130V)
- 28" black matrix (matrice nera) (A66EAK71X...)
  Vg2= 120V (era 130V)

3. Per pannelli degli schermi con i seguenti numeri di codice:

- 4822 212 30057, 4822 212 30058, 4822 212 30059 e 4822 212 30061.

Sostituendo il pannello dello schermo negli apparecchi (GR2.2/GR2.1) fino al NO. PROD. QG03(AG03):

- effettuate solo le modifiche sullo chassis (si veda il punto 2);
- regolate di nuovo le tensioni Vg2 (si veda il punto 2).

(I)

1. Modificación del transformador de salida de línea T5545.

Para los aparatos GR2.2 con PROD. NO. QG04 (AG04) y siguientes, otro T.S.L. ha sido introducido. En su consecuencia también ha sido modificado el conductor de impresión del chasis. Este T.S.L. no es compatible con el T.S.L. "viejo". Los números de código del T.S.L. "nuevo" son:

- para 21" narrow neck (cuello estrecho): 4822 140 10483
- para 21" mini neck (cuello mini): 4822 140 10484
- para los aparatos 25"/28": 4822 140 10474

Los T.S.L. "viejos" siguen siendo disponibles.

2. Modificación del panel CRT/chasis para evitar "la imagen muda".

Para los aparatos GR2.2 con PROD NO. QG04 (AG04) y siguientes, las modificaciones siguientes deberán ser introducidas en el panel GRT:

- eliminar R3422, T7421 y R3423.
- sustituir C2421 por 27pF (4822 122 31825).
- sustituir R3421 por 150 Kohm (4822 051 10154)
- añadir 2,2 Kohm (4822 051 10222) en pos. nº 4002 (4002 se encuentra entre el ánodo 6421 y el emisor de 7421).
- añadir LLZ-6V2 (4822 130 81512) en la pos. nº D6422 (ánodo a tierra)

En el chasis han sido introducidas las modificaciones siguientes:

- eliminar C2363.
- sustituir R3318 por 390 Ohm (4822 051 10391)

Ya que los circuitos en el CRT han sido modificados, hay que ajustar de nuevo las tensiones Vg2 para los aparatos dotados de los tubos de imagen:

- 25" black line-s (línea-s negra-s) (A59EAK252X...)
  Vg2= 130V (fue 145V)
- 28" black line-s (línea-s negra-s) (A66EAK252X...)
  Vg2= 130V (fue 145V)
- 25" black matrix (matriz negro) (A59EAK71X...)
  Vg2= 120V (fue 130V)
- 28" black matrix (matriz negro) (A66EAK71X...)
  Vg2= 120V (fue 130V)

3. Para los paneles de tubo de imagen con los números de código siguientes:

- 4822 212 30057, 4822 212 30058, 4822 212 30059 y 4822 212 30061.

Para la sustitución del panel de tubo de imagen de los aparatos (GR2.2/GR2.1) hasta PROD. NO. QG03 (AG03) inclusive:

- Sólo efectuar las modificaciones en el chasis (véase punto 2).
- Ajustar de nuevo las tensiones Vg2 (véase punto 2).

Service
Service
Service

GR2.2

AA 94.01

Service Information

(GB)

1. Modified IF Module

In GR2.2 sets with PROD. NO. QG05(AG05) and higher an improved IF module has been introduced (see diagrams A to D). With this modification another microprocessor (IC7708) has also been introduced on the chassis.
The code numbers for the "new" (eco) IF modules are:

- IF-Pal/BG module (eco)	4822 212 31387
- IF-Pal/Secam-BGLI (eco)	4822 212 31389
- IF-Pal/Secam-BGDK (eco)	4822 212 31391
- IF-Pal/BG Nicam (eco)	4822 212 31388
- IF-Pal/I Nicam (eco)	4822 212 31386

The "old" IF-modules remain available.
The code numbers for the new microprocessors are:

- U272 stereo L2 ESL2-1.0	4822 209 33297
- U277 stereo L1 ESL1-1.0	4822 209 33296

Diagrams "A" and "B" replace diagram I in service manual GR2.2 AA. Diagrams "C" and "D" replace diagram H in service manual GR2.2 AA.

When replacing the microprocessor and IF-module the following adjustments should be made:

A Connect a video generator to the TV set and set it at 475.25 MHz. Select stereo sound on the generator.
B Enter the service mode and select C (SND ADJ).
C Now select SND level and set this to zero (0).
D Now select SND stereo, disconnect the right loudspeaker (seen from the front of the set) and adjust the volume to maximum using the volume key.
E Using the menu key adjust the volume until the volume is (barely) audible in the left loudspeaker.
F Exit the service mode (e.g. by going to stand-by).

(D)

1. Geändertes IF-Modul

Bei GR2.2 Geräten mit PROD.NO.QG05(AG05) und höher wurde ein verbessertes IF-Modul eingeführt (siehe Schaltplan A bis D). Mit dieser Änderung wurde auch ein anderer Mikroprozessor (IC7708) auf dem Chassis eingeführt.
Die Kode-Nummern für die "neuen" (eco) IF-Moduls sind:

- IF-Pal/BG Moduls(eco)	4822 212 31387
- IF-Pa/Secam-BGLI(eco)	4822 212 31389
- IF-Pal/Secam/BGDK(eco)	4822 212 31391
- IF-Pal/BG Nicam(eco)	4822 212 31388
- IF/Pal/I Nicam(eco)	4822 212 31386

Die "alten" IF-Moduls bleiben lieferbar.
Die Kode-Nummern für die "neuen" Mikroprozessoren sind:

- U274 Stereo L2ESL2-1.0	4822 209 33297
- U277 Stereo L1ESL1-1.0	4822 209 33296

Schaltplan "A" und "B" ersetzen den Schaltplan I in der Serviceanleitung GR2.2 AA. Schaltplan "C" und "D" ersetzen den Schaltplan H in der Serviceanleitung GR2.2 AA.

Beim Auswechseln des Mikroprozessors und des IF-Moduls ist die folgende Abstimmung vorzunehmen:

A Verbinden Sie einen Videogenerator mit dem Fernsehgerät und stimmen Sie das auf 475,25 MHz ab, stellen Sie den Generator auf Stereo ein.
B Schalten Sie in den Service-Modus und wählen Sie C (SND ADJ).
C Wählen Sie jetzt SND Niveau und stellen Sie dieses auf Punkt Null (0) ein.
D Wählen Sie jetzt SND Stereo, unterbrechen Sie den rechten Lautsprecher (von der Vorderseite des Gerätes aus gesehen) und schalten Sie die Lautstärke mit der Taste für die Lautstärke auf maximale Stärke.
E Regeln Sie jetzt mit der Menü-Taste die Lautstärke des linken Lautsprechers auf minimale Stärke (gerade hörbar).
F Verlassen Sie den Service-Modus (z.B. in dem Sie in die Stand-by Einstellung gehen).

(NL)

1. Gewijzigde IF module

Bij GR2.2 apparaten met PROD. NO. QG05(AG05) en hoger is een verbeterde IF-module geïntroduceerd (zie schema A tot en met D). Met deze wijziging is ook een andere microprocessor(IC7708) op het chassis geintroduceerd.
De code nummers voor de "nieuwe"(eco) IF-module's zijn:

- IF-Pal/BG module(eco)	4822 212 31387
- IF-Pal/Secam-BGLI(eco)	4822 212 31389
- IF-Pal/Secam-BGDK(eco)	4822 212 31391
- IF-Pal/BG Nicam(eco)	4822 212 31388
- IF-Pal/I Nicam(eco)	4822 212 31386

De "oude" IF-module's blijven leverbaar.
De code nummers voor de "nieuwe" microprocessoren zijn:

- U274 stereo L2 ESL2-1.0	4822 209 33297
- U277 stereo L1 ESL1-1.0	4822 209 33296

Schema "A" en "B" vervangen het schema het schema I in service manual GR2.2 AA. Schema "C" en "D" vervangen het schema H in service manual GR2.2 AA.

Bij vervangen van de microprocessor en IF-module moet de volgende afregelingen gedaan worden:

A Sluit een videogenerator aan op het tv-apparaat en zet deze op 475,25MHz. kies stereo-geluid op de generator
B Ga in de service mode en kies C (SND ADJ)
C Kies nu SND Level en zet dit op nul(0)
D Kies nu SND stereo, disconnect de rechter luidspreker(dit gezien vanaf de voorzijde van het apparaat), en zet nu het volume maximaal met de volume toets.
E Regel nu met de menu - toets zodanig dat het geluid in de linker luidspreker minimaal is (juist hoorbaar)
F Verlaat de service mode (bijv. door naar standby te gaan)

Published by Consumer Electronics Printed in The Netherlands ©Copyright reserved Subject to modification 4822 727 20094

(E)

1. Módulo-IF modificado

En aparatos GR2.2 con PROD.Nº QG05(AG05) y siguientes se ha introducido un módulo - IF mejorado (véase esquema A hasta D inclusive). Con esta modificación se ha introducido a la vez otro microprocesador (IC7708) en el chasis.
Los números de código para los "nuevos" módulos-IF(eco) son:

- IF-Pal/BG módulo(eco)	4822 212 31387
- IF-Pal/SECAM-BGLI(eco)	4822 212 31389
- IF-Pal/Secam-BGDK(eco)	4822 212 31391
- IF-Pal/BG NICAM(eco)	4822 212 31388
- IF-Pal/I Nicam(eco)	4822 212 31386

Los módulos-IF "viejos" siguen siendo disponibles.
Los números de código para los "nuevos" microprocesadores son:

- U274 estéreo L2 ESL2-1.0	4822 209 33297
- U277 estéreo L1 ESL1-1.0	4822 209 33296

Los esquemas "A" y "B" sustituyen el esquema I en el manual de servicio GR2.2 AA. Los esquemas "C" y "D" sustituyen el esquema H en el manual de servicio GR2.2 AA.

Al sustituir el microprocesador y el módulo-IF, hay que hacer los ajustes siguientes:

A Conectar un videogenerador al televisor y ponerlo en 475,25Hz. elegir sonido estéreo en el generador
B Entrar en el modo de servicio y elegir C (SND ADJ)
C Elegir ahora SND Level y ponerlo en cero(O)
D Elegir ahora SND estéreo, desconectar el altavoz derecho (visto desde la parte delantera del aparato) y luego poner el volumen en máximo con la tecla del volumen.
E Regular ahora con la tecla del menú hasta que el sonido del altavoz izquierdo sea mínimo (apenasperceptible)
F Salir del modo de servicio (por ejemplo yendo al modo de espera).

(I)

1. Modifica del modulo IF

Negli apparecchi GR2.2 con NR. di PRODUZIONE a partire da QG05(AG05) è stato introdotto un modulo IF migliorato (si veda gli schemi da A a D compreso). Con questa modifica è stato introdotto sullo chassis anche un altro microprocessore (IC7708).
I numeri di serie per i "nuovi" moduli IF (eco) sono:

- modulo IF-Pal/BG (eco)	4822 212 31387
- IF-Pal/Secam-BGLI (eco)	4822 212 31389
- IF-Pal/Secam-BGDK (eco)	4822 212 31391
- IF-Pal/BG Nicam (eco)	4822 212 31388
- IF-Pal/I Nicam (eco)	4822 212 31386

I "vecchi" moduli IF continuano ad essere disponibili.
I numeri di serie per i "nuovi" microprocessori sono:

- U274 stereo L2 ESL2-1.0	4822 209 33297
- U277 stereo L1 ESL1-1.0	4822 209 33296

Gli schemi "A" e "B" sostituiscono lo schema I nel manuale di servizio GR2.2 AA. Gli schemi "C" e "D" sostituiscono lo schema H nel manuale di servizio GR2.2 AA.

Durante la sostituzione del microprocessore e modulo IF devono essere effettuate le seguenti regolazioni:

A Collegare un generatore video al televisore e sintonizzarlo su 475,25 MHz. Scegliere audio stereo sul generatore
B Andare in modo di servizio e scegliere C (SND ADJ)
C Scegliere il Livello SND e metterlo a zero (0)
D Scegliere stereo SND, scollegare l'altoparlante destro (come visto sulla parte anteriore dell'apparecchio) ed alzare il volume al massimo con il tasto apposito
E Regolare ora con il menu - continuare a premere il tasto fino a che l'audio dell'altoparlante sinistro è al minimo (appena udibile)
F Uscire dal modo di servizio (ad esempio andando in stand-by)

(F)

1. Module IF modifié

Pour les appareils GR2.2 avec PROD.NO.QG05(AG05) et suivants, est introduit un module IF amélioré (voir schémas de A à D). Cette modification est également accompagnée de l'introduction d'un autre microprocesseur (IC7708) sur le châssis.
Les numéros de code des "nouveaux" modules IF (éco) sont:

- Module IF-Pal/BG (éco)	4822 212 31387
- Module IF-Secam/BGLI (éco)	4822 212 31389
- Module IF-Secam/BGDK (éco)	4822 212 31391
- Module IF-Pal/BG Nicam (éco)	4822 212 31388
- Module IF-Pal/I Nicam (éco)	4822 212 31386

Les "anciens" modules IF demeurent disponibles.
Les numéros de code des "nouveaux" microprocesseurs sont:

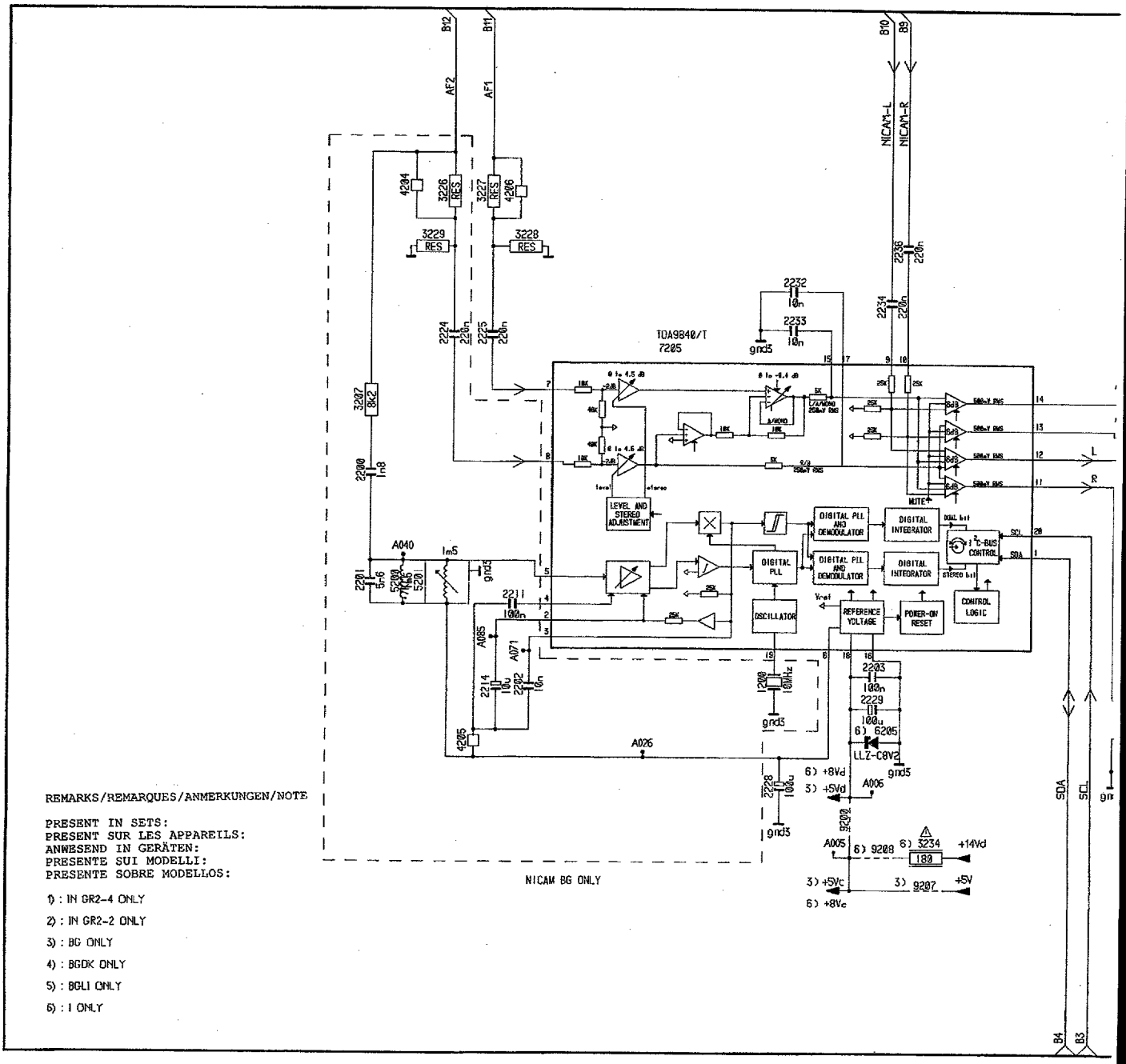
- U274 stéréo L2 ESL2-1.0	4822 209 33297
- U277 stéréo L1 ESL1-1.0	4822 209 33296

Les schémas "A" et "B" remplacent le schéma I dans le manuel d'entretien/réparation GR2.2 AA. Les schémas "C" et "D" remplacent le schéma H dans le manuel d'entretien/réparation GR2.2 AA.

Le remplacement du microprocesseur et du module IF exigent les ajustements suivants:

A Brancher un générateur vidéo sur le poste TV et régler ce dernier sur 475,25 MHz. Sélectionner le son stéréo au niveau du générateur.
B Aller en mode entretien/réparation et sélectionner C (SND ADJ)
C Sélectionner SND Level puis le positionner sur zéro (0)
D Sélectionner SND stéréo, couper le haut-parleur de droite (ce dernier étant vu depuis l'avant de l'appareil) puis mettre le volume au maximum au moyen de la touche volume.
E Régler au moyen de la touche menu de sorte que le son du haut parleur de gauche soit au minimum (à peine audible).
F Quitter le mode entretien/réparation (par exemple en allant en position de veille)

Nicam IF-Sound Module / Nicam ZF-Ton Module



REMARKS/REMARQUES/ANMERKUNGEN/NOTE

PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERÄTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:

1) : IN GR2-4 ONLY

2) : IN GR2-2 ONLY

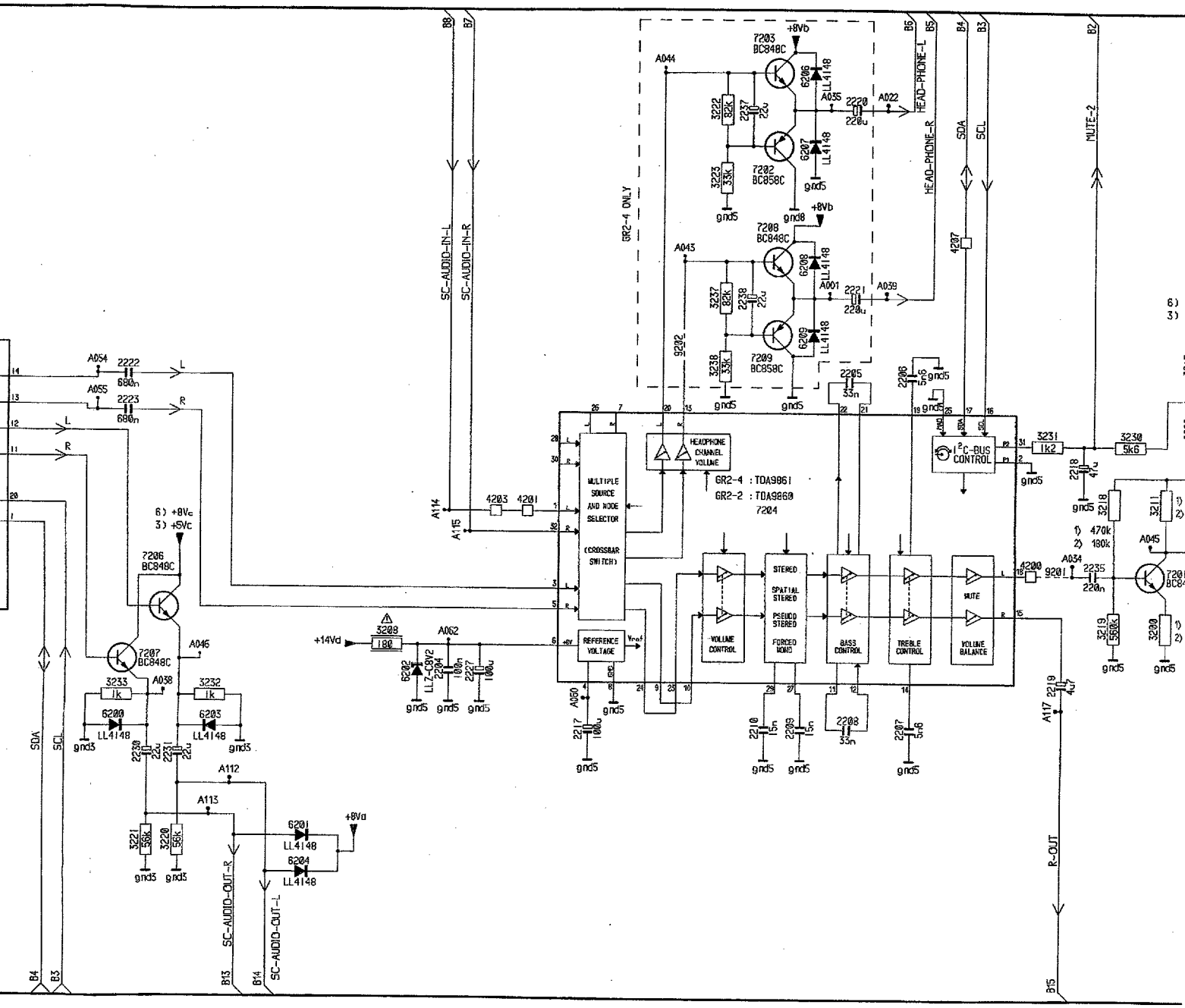
3) : BG ONLY

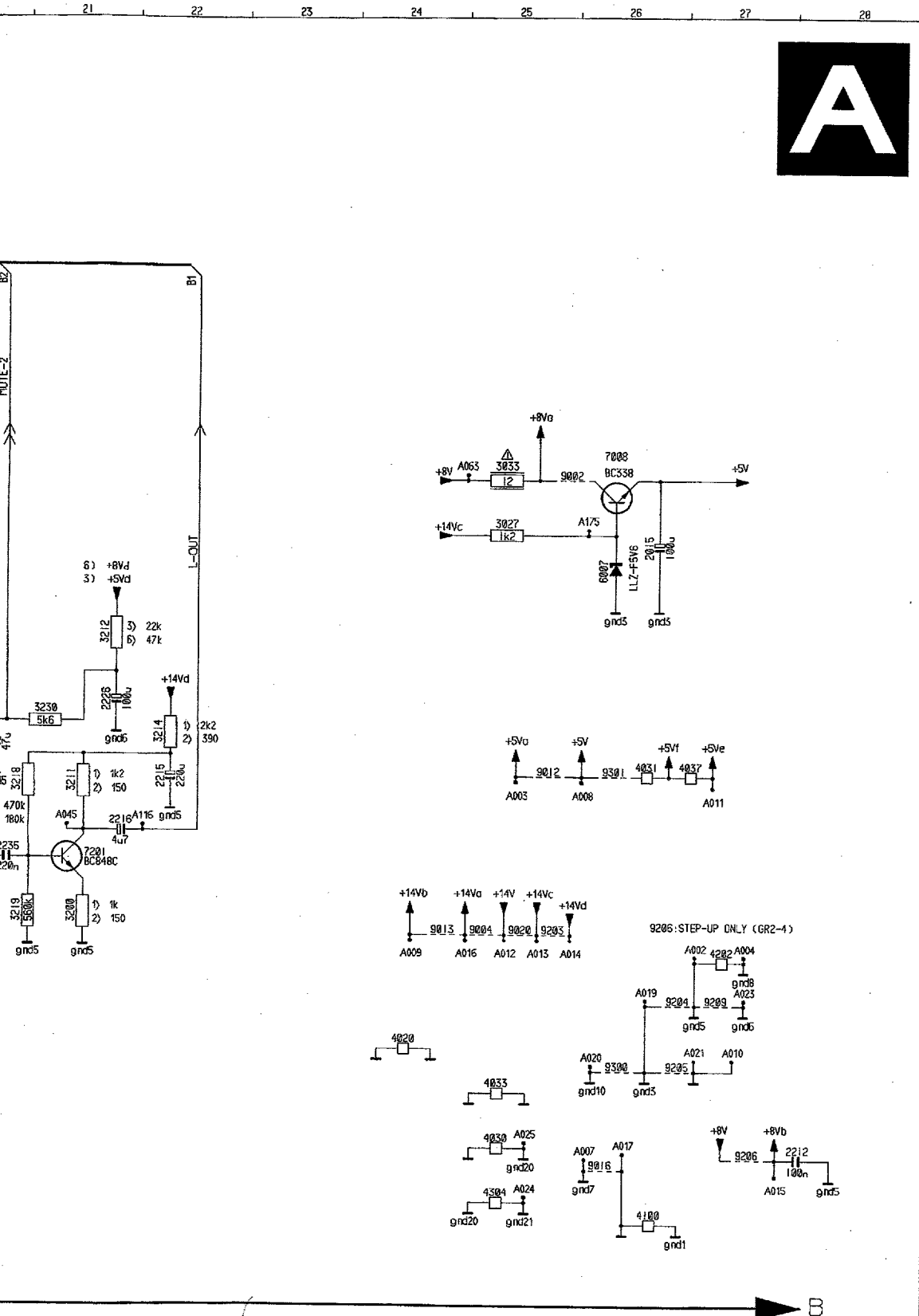
4) : BGDK ONLY

5) : BGLI ONLY

6) : I ONLY

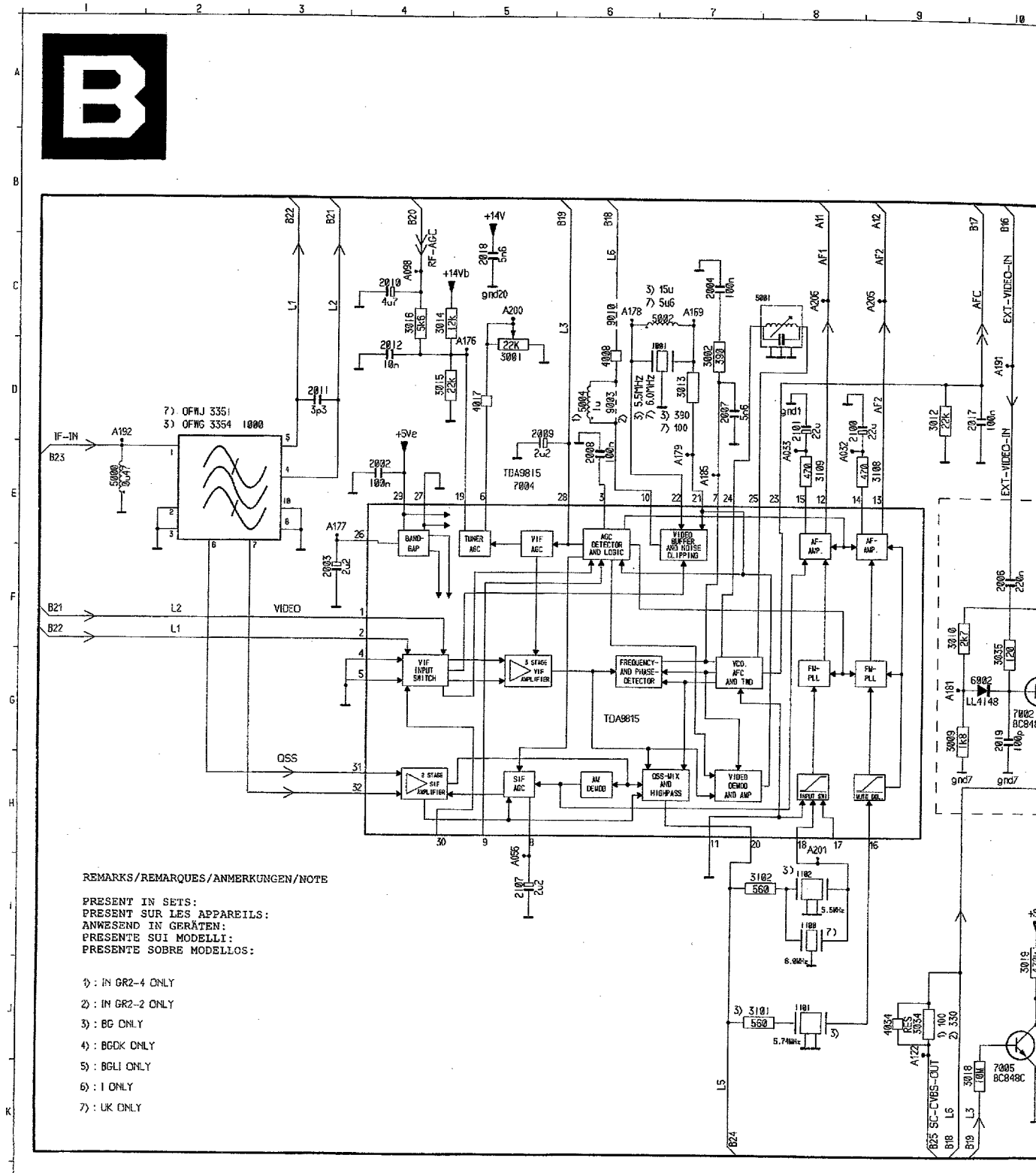
Module FI-Son Nicam GR2.2



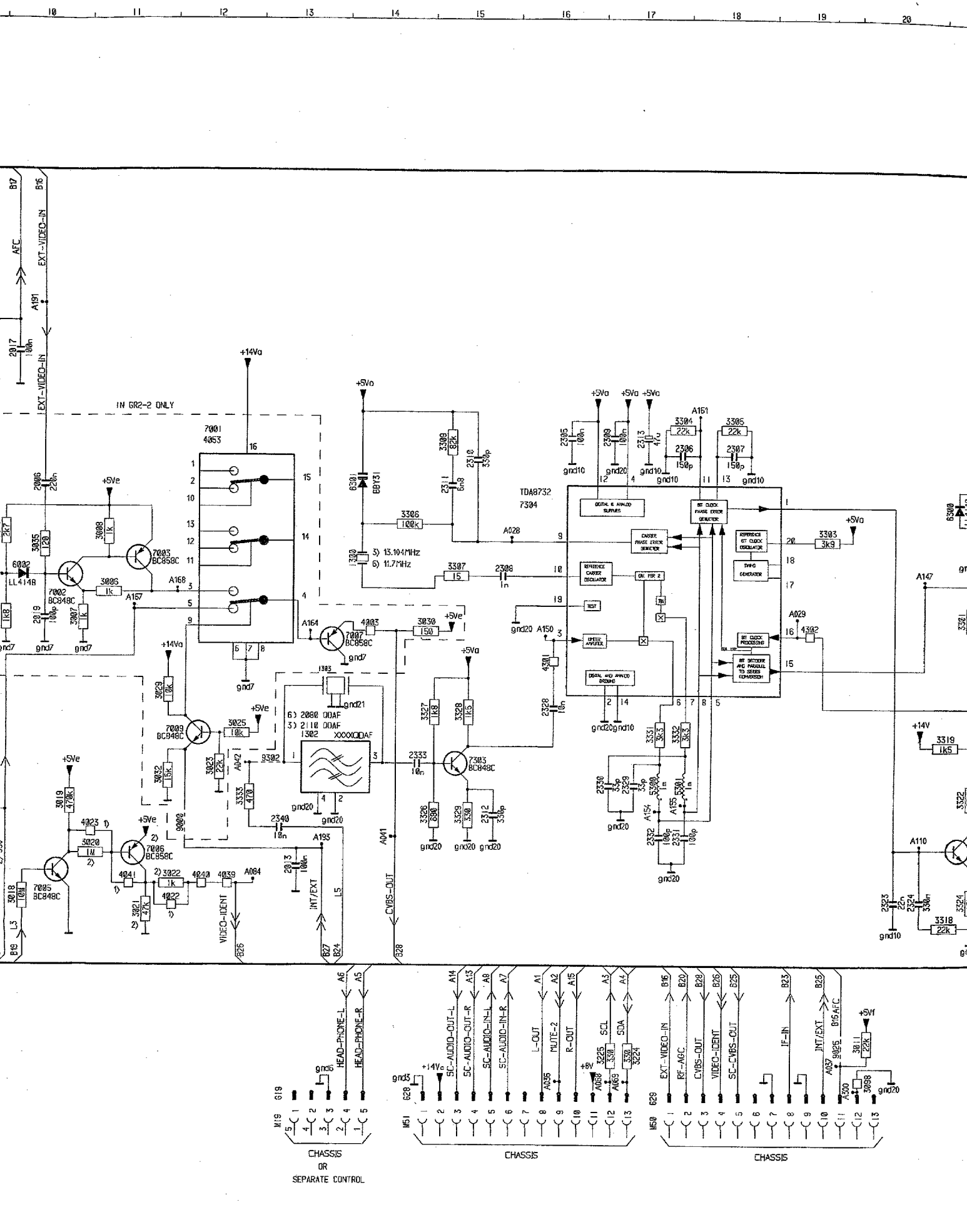


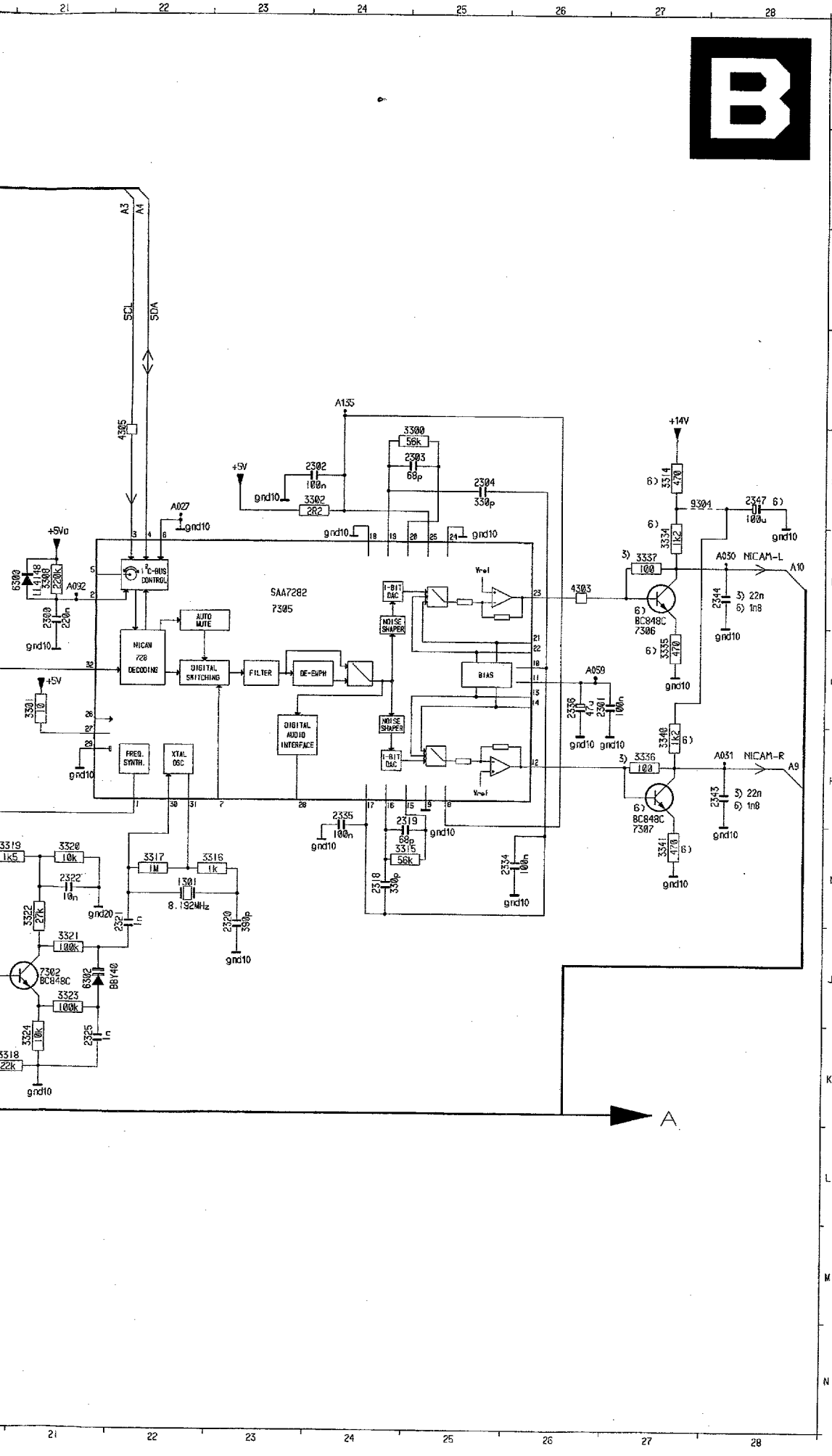
1200 I 7
2015 E26
2200 G 4
2201 H 4
2202 I 5
2203 I 8
2204 I14
2205 F18
2206 F18
2207 J18
2208 I18
2209 J17
2210 J17
2211 H 5
2212 K28
2214 I 5
2215 G22
2216 H21
2217 J15
2218 G20
2219 I20
2220 D18
2221 E18
2222 F11
2223 F11
2224 F 4
2225 F 5
2226 G21
2227 I14
2228 J 7
2229 I 8
2230 J11
2231 J11
2232 E 8
2233 E 8
2234 E 8
2235 H20
2236 E 9
2237 D17
2238 E17
3027 E25
3033 D25
3200 I21
3207 F 4
3208 I14
3211 G21
3212 F21
3214 G22
3218 G20
3219 I20
3220 K11
3221 K11
3222 D17
3225 D17
3226 D 4
3227 D 5
3228 E 5
3229 E 4
3230 G21
3231 G20
3232 I12
3233 I11
3234 J 9
3237 E17
3238 F17
4020 J24
4030 K25
4031 G26
4033 J26
4037 G27
4100 K26
4200 H20
4201 G15
4202 I27
4203 G15
4204 D 4
4205 I 5
4206 D 5
4207 E19
4304 K25
5200 H 4
5201 H 4
6007 E26
6200 I11
6201 K13
6202 I14
6203 I12
6204 K13
6205 I 9
6206 G18
6207 D18
6208 E18
6209 F18
7008 D26
7201 H21
7202 D17
7203 C17
7204 G17
7205 F 6
7206 H11
7207 I11
7208 E17
7209 F17
9002 E25
9004 I25
9012 G25
9013 I24
9016 K26
9020 I25
9200 J 8
9201 H20
9202 F16
9203 I25
9204 I26
9205 J26
9206 K27
9207 K 9
9208 J 9
9209 I27
9300 J26
9301 G26
A001 E18
A002 I27
A003 G25
A004 I27
A005 J 8
A006 J 8
A007 K26
A008 G26
A009 I24
A010 J27
A011 H27
A012 I25
A013 I25
A014 I25
A015 K27
A016 I25
A017 K26
A019 I26
A020 J26
A021 J27
A022 C18
A023 I27
A024 K25
A025 K25
A026 I 6
A034 H20
A035 C18
A038 I11
A039 E18
A040 H 4
A043 E15
A044 C16
A045 H21
A046 I12
A054 F11
A055 F11
A060 I15
A062 I14
A063 D24
A071 H 5
A085 H 5
A112 J12
A113 J12
A114 G14
A115 H14
A116 H22
A117 I20
A175 E26

Nicam IF-Sound Module / Nicam ZF-Ton Module



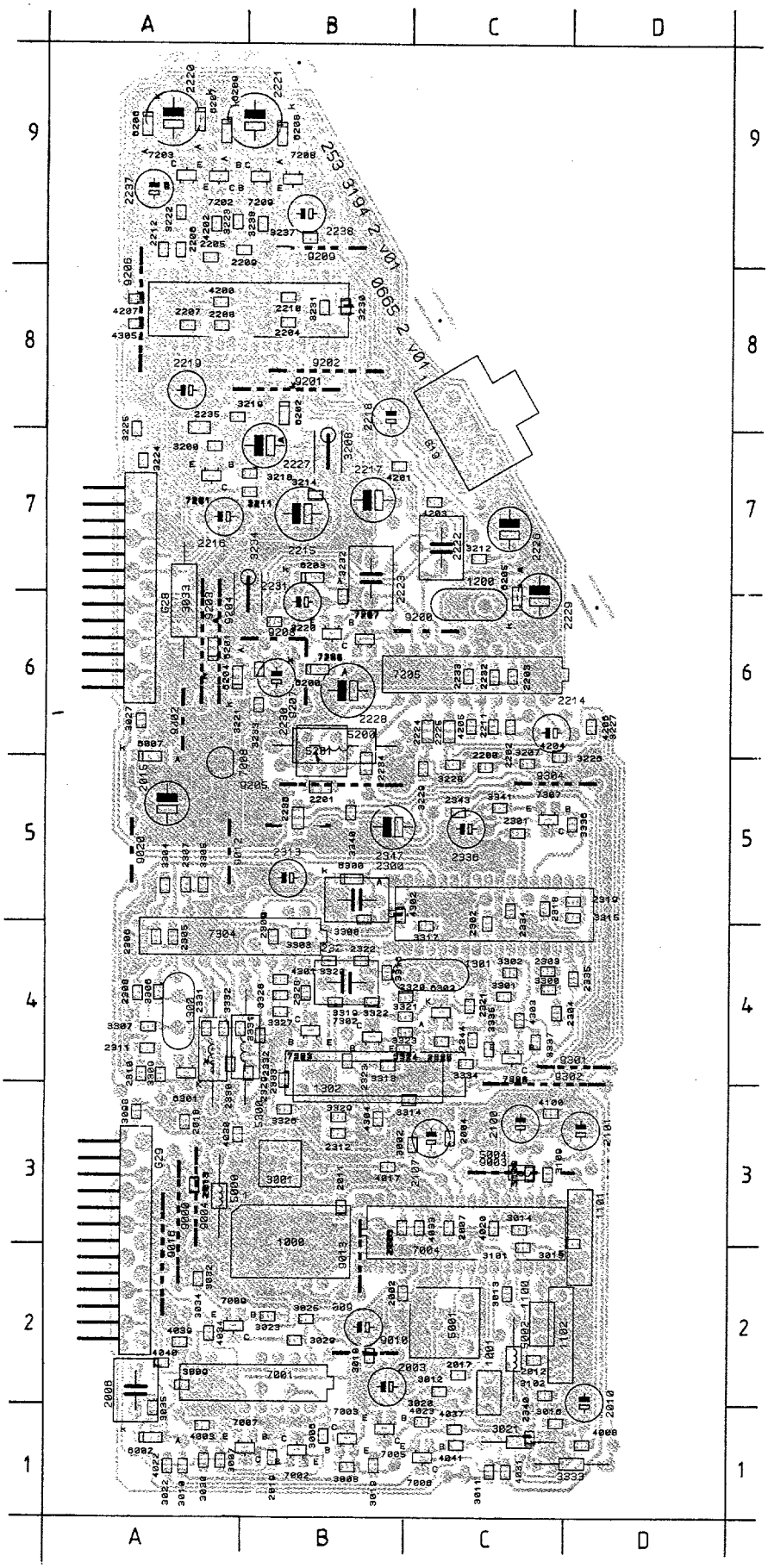
Module FI-Son Nicam GR2.2





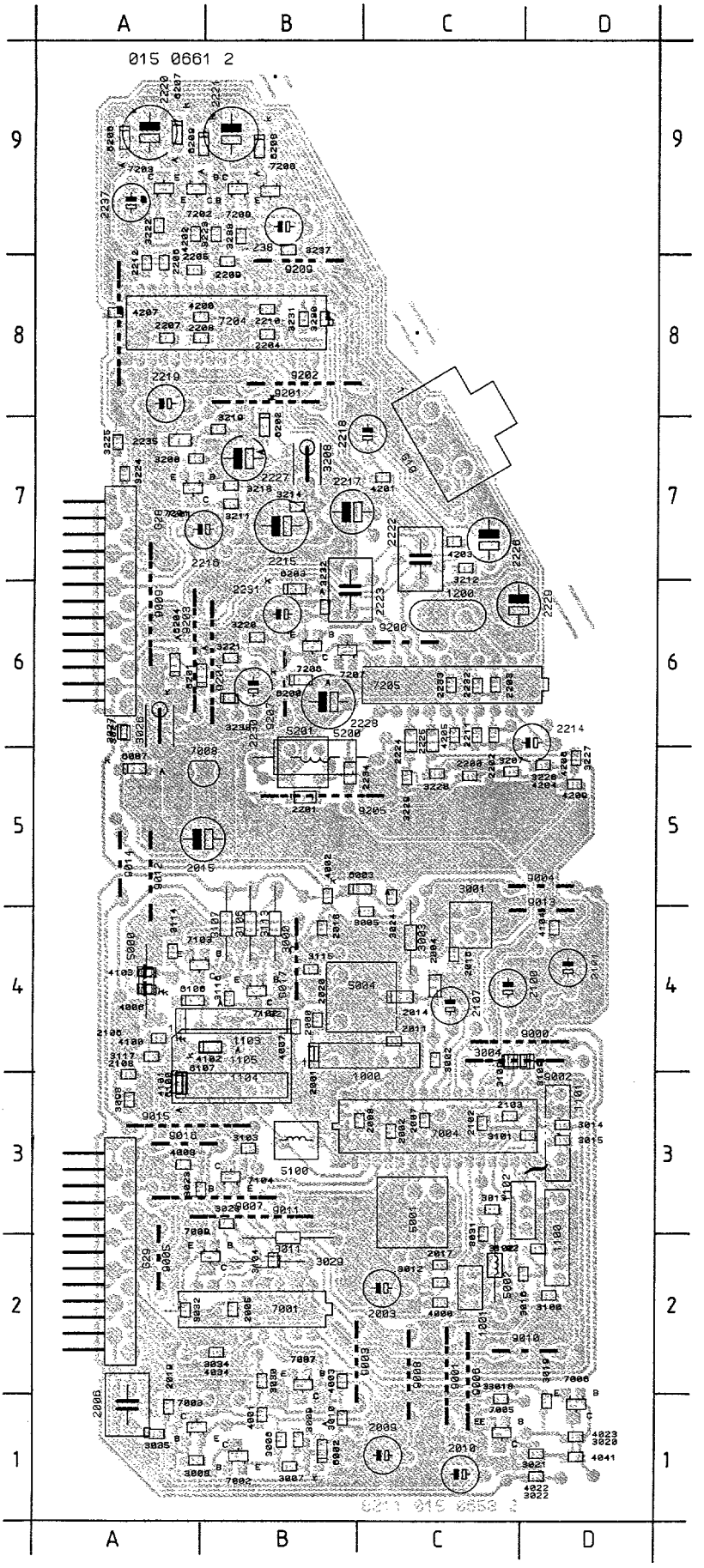
	1000	D 2	7002	G10
	1001	D 6	7003	G11
	1100	I 8	7004	E 5
	1101	J 8	7005	K10
	1102	I 8	7006	J11
	1300	G14	7007	H13
A	1301	I22	7009	I12
	1302	I13	7302	J21
	1303	H13	7303	I15
	2002	E 4	7304	F15
	2003	F 3	7305	F23
	2004	C 7	7306	G27
	2006	F10	7307	I27
	2007	D 7	9000	J12
	2008	E 6	9003	D 6
	2009	D 5	9010	C 6
	2010	C 4	9025	L19
	2011	D 3	9302	I13
B	2012	D 4	9304	E27
	2013	J13	A027	E22
	2017	D10	A028	F15
	2018	C 5	A029	G19
	2019	G10	A030	F28
	2100	D 8	A031	H28
	2101	D 8	A032	E 8
	2107	I 5	A033	E 8
	2300	F21	A036	M16
	2301	G26	A037	M19
C	2302	E24	A041	J14
	2303	E25	A042	I12
	2304	E25	A056	I 5
	2305	E16	A059	G26
	2306	E17	A068	M16
	2307	E18	A069	M17
	2308	G15	A084	J12
	2309	E17	A092	F21
	2310	E15	A098	C 4
	2311	F15	A110	J20
	2312	J15	A122	J 9
D	2315	E17	A135	D24
	2318	I24	A147	G20
	2319	H25	A150	G16
	2320	I23	A154	J17
	2321	I22	A155	J17
	2322	I21	A161	E18
	2325	K20	A164	G13
	2324	K20	A167	G11
	2326	K21	A168	G11
	2328	H16	A169	C 7
	2329	I17	A176	E 5
	2330	I16	A177	E 5
E	2331	J17	A178	E 6
	2332	J17	A179	E 7
	2333	I14	A181	G 9
	2334	I28	A185	E 7
	2335	H24	A191	G10
	2336	G26	A192	D 1
	2340	J13	A193	J13
	2343	H28	A200	C 5
	2344	F28	A201	H 8
F	2347	E28	A205	C 9
	3001	D 5	A206	C 8
	3002	D 7	A390	M19
	3006	G11	G19	M13
	3007	G10	G19	M13
	3008	F11	G19	M13
	3009	G 9	G19	M13
	3010	F 9	G19	M14
	3011	L20	G28	M14
	3012	D 9	G28	M15
G	3013	D 7	G28	M15
	3014	C 4	G28	M15
	3015	D 4	G28	M15
	3016	C 4	G28	M15
	3018	K10	G28	M16
	3019	I10	G28	M16
	3020	J11	G28	M16
	3021	K11	G28	M16
	3022	J11	G28	M16
	3023	I12	G28	M17
	3025	I12	G28	M17
	3029	H11	G29	M17
H	3030	G14	G29	M17
	3032	I11	G29	M18
	3034	J 9	G29	M18
	3035	F10	G29	M18
	3098	M20	G29	M18
	3101	J 9	G29	M18
	3102	I 8	G29	M19
	3108	E 9	G29	M19
	3109	E 8	G29	M19
	3224	L17	G29	M19
I	3225	L17	G29	M19
	3300	E25	G29	M20
	3301	G21		
	3302	E24		
	3303	F19		
	3304	E17		
	3305	E18		
	3306	F14		
	3307	G15		
	3308	F21		
	3309	E15		
J	3314	G27		
	3315	I25		
	3316	I23		
	3317	I22		
	3318	K21		
	3319	I21		
	3320	I21		
	3321	J21		
	3322	I21		
	3323	J21		
	3324	K21		
K	3326	J14		
	3327	H14		
	3328	H15		
	3329	J15		
	3331	I17		
	3332	I17		
	3333	I12		
	3334	F27		
	3335	G27		
	3336	H27		
L	3337	F27		
	3340	H27		
	3341	I27		
	4005	G14		
	4008	D 6		
	4017	D 5		
	4022	K11		
	4025	J10		
	4034	J 9		
	4039	J12		
	4040	J12		
M	4041	J11		
	4301	H16		
	4302	G19		
	4303	F26		
	4305	E22		
	5000	E 1		
	5001	C 7		
	5002	C 7		
	5004	D 6		
	5300	I17		
	5301	I17		
N	6002	G18		
	6500	F26		
	6501	F14		
	6502	J21		
	7001	E12		

Nicam IF Module



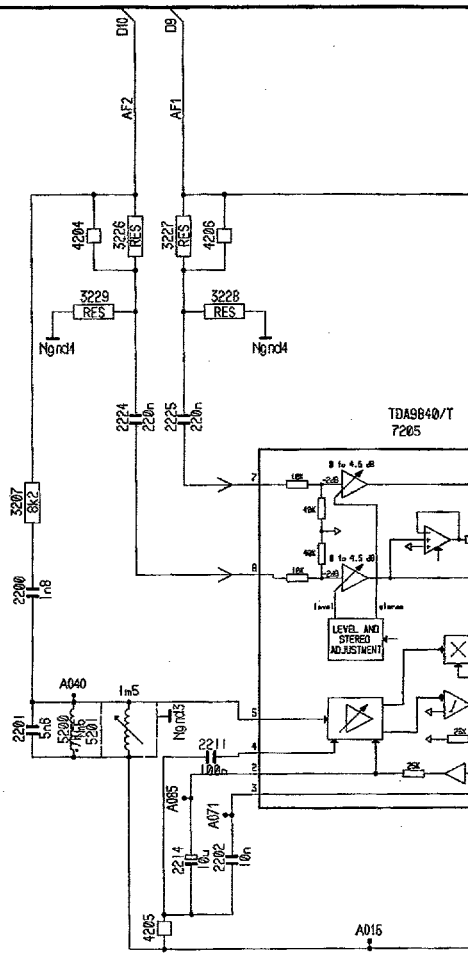
G28	C7	3015	A3	6007	C5
G29	C3	3016	A1	6200	B6
1000	B3	3018	B2	6201	C6
1001	A2	3019	B1	6202	B8
1100	A2	3020	A1	6203	B7
1101	A3	3021	A1	6204	C6
1102	A2	3022	C1	6205	A6
1200	A6	3023	B2	6206	C9
1300	C4	3025	B2	6207	C9
1301	A4	3027	C6	6208	B9
1302	B3	3029	B2	6209	C9
1303	B3	3030	C1	6300	B5
2002	B2	3032	C2	6301	C4
2003	B2	3033	C6	6302	A4
2004	A3	3034	C2	7001	C2
2006	C2	3035	C1	7002	B1
2007	A3	3098	C3	7003	B1
2008	B3	3101	A2	7004	A3
2009	B2	3102	A2	7005	B1
2010	A1	3108	A3	7006	A1
2011	B3	3109	A3	7007	C1
2012	A2	3200	C7	7008	C5
2013	C3	3207	A5	7009	C2
2015	C5	3208	B7	7201	C7
2017	A2	3211	C7	7202	C9
2018	C3	3212	A7	7203	C9
2019	B1	3214	B7	7204	C8
2100	A3	3218	C7	7205	A6
2101	A3	3219	C8	7206	B6
2107	A3	3220	B6	7207	B6
2200	A5	3221	C6	7208	B9
2201	B5	3222	C9	7209	C9
2202	A6	3223	C9	7302	B4
2203	A6	3224	C7	7303	B4
2204	B8	3226	A6	7304	C4
2205	C9	3227	A5	7305	A5
2206	C9	3228	A5	7306	A4
2207	C8	3229	B5	7307	A5
2208	C8	3230	B8	9000	C3
2209	C9	3231	B8	9002	C6
2210	B8	3232	B6	9003	A3
2211	A6	3233	C6	9004	C3
2212	C9	3234	C6	9010	B2
2214	A6	3237	B9	9012	C5
2215	B7	3238	C9	9013	B2
2216	C7	3300	A4	9016	C2
2217	B7	3301	A4	9025	A1
2218	B8	3302	A4	9200	B6
2219	C8	3303	B4	9201	B8
2220	C9	3304	C5	9202	B8
2221	C9	3305	C5	9203	C6
2222	A7	3306	C4	9204	C6
2223	B7	3307	C4	9205	B5
2224	A6	3308	B4	9207	B6
2225	A6	3309	C4	9208	B6
2226	A7	3314	B3	9209	B9
2227	C7	3315	A5	9300	B5
2228	B6	3316	B4	9301	A4
2229	A6	3317	A4	9302	A3
2230	B6	3318	B4	9304	A5
2231	B6	3319	B4		
2232	A6	3320	B4		
2233	A6	3321	B4		
2234	B5	3322	B4		
2235	C8	3323	B4		
2236	B5	3324	B4		
2237	C9	3326	B3		
2238	B9	3327	B4		
2300	B5	3328	B4		
2301	A5	3329	B3		
2302	A4	3331	C4		
2303	A4	3332	C4		
2304	A4	3333	A1		
2305	C4	3334	A4		
2306	C4	3335	A4		
2307	C5	3336	A5		
2308	C4	3337	A4		
2309	B4	3340	B5		
2310	C4	3341	A5		
2311	C4	4003	C1		
2312	B3	4008	A1		
2313	B5	4017	B3		
2318	A5	4020	A3		
2319	A5	4022	C1		
2320	B4	4023	A1		
2321	A4	4030	C3		
2322	B4	4031	A1		
2323	B4	4033	B3		
2324	B4	4034	C2		
2325	A4	4037	A1		
2328	B4	4039	C2		
2329	C4	4040	C2		
2330	C4	4041	A1		
2331	C4	4100	A3		
2332	C4	4200	C8		
2333	B4	4201	B7		
2334	A5	4202	C9		
2335	A4	4203	A7		
2336	A5	4204	A6		
2340	A1	4205	A6		
2343	A5	4206	A6		
2344	A4	4301	B4		
2347	B5	4302	B5		
3001	B3	4303	A4		
3002	B3	4304	B3		
3006	B1	5000	C3		
3007	C1	5001	A2		
3008	B1	5002	A2		
3009	C2	5004	A3		
3010	C1	5200	B6		
3011	A1	5201	B6		
3012	A2	5300	C4		
3013	A2	5301	C4		
3014	A3	6002	C1		

Stereo IF Module



1000	C3	3109	B3	9017	C4
1001	B2	3113	C4	9200	B6
1100	A2	3114	D4	9201	C8
1101	A3	3115	C4	9202	C8
1102	B3	3116	C4	9203	D6
1103	C4	3117	D4	9204	D6
1104	C3	3200	D7	9205	C5
1105	C3	3207	B5	9206	D8
1200	B6	3208	C7	9207	C6
2000	C4	3211	C7	9209	C8
2001	C4	3212	B7	G19	B7
2002	B3	3214	C7	G28	D6
2003	B2	3218	C7	G29	D2
2004	B4	3219	C7		
2005	C2	3220	C6		
2006	D1	3221	C6		
2007	B3	3222	D9		
2008	C3	3223	C9		
2009	B1	3224	D7		
2010	B1	3225	D7		
2011	B4	3226	A5		
2014	B4	3227	A5		
2015	D5	3228	B5		
2016	B4	3229	B5		
2017	B2	3230	C8		
2018	C4	3231	C8		
2019	D1	3232	C6		
2020	C4	3233	C6		
2100	B4	3237	C8		
2101	A4	3238	C9		
2102	B3	4000	B2		
2103	B3	4001	C1		
2106	D4	4002	C4		
2107	B4	4003	C1		
2108	D3	4006	D4		
2200	B5	4007	C4		
2201	C5	4008	D3		
2202	B5	4022	B1		
2203	B6	4023	A1		
2204	C8	4034	D2		
2205	D8	4041	A1		
2206	D8	4100	D4		
2207	D8	4101	D3		
2208	D8	4102	D4		
2209	C8	4103	D4		
2210	C8	4104	A4		
2211	B5	4200	D8		
2212	D8	4201	B7		
2214	B5	4202	D9		
2215	C7	4203	B7		
2216	D7	4204	A5		
2217	C7	4205	B5		
2218	C7	4207	D8		
2219	D8	4209	A5		
2220	D9	5000	D4		
2221	C9	5001	B3		
2222	B7	5002	B2		
2223	C6	5004	C4		
2224	B5	5100	C3		
2225	B5	5200	C5		
2226	B7	5201	C5		
2227	C7	6002	C1		
2228	C6	6003	C5		
2229	B6	6007	D5		
2230	C6	6100	D3		
2231	C6	6106	D4		
2232	B6	6107	D4		
2233	B6	6200	C6		
2234	C5	6201	D6		
2235	D7	6202	C7		
2237	D9	6203	C6		
2238	C9	6204	D6		
3000	C4	6206	D9		
3001	B4	6207	D9		
3002	B3	6208	C9		
3003	B4	6209	D9		
3004	B3	7001	C2		
3005	C4	7002	C1		
3006	C1	7003	D1		
3007	C1	7004	B3		
3008	D1	7005	B1		
3009	C1	7006	A1		
3010	C1	7007	C1		
3011	C2	7008	D5		
3012	B2	7009	D2		
3013	B3	7102	C4		
3014	A3	7103	D4		
3015	A3	7104	C3		
3016	B2	7201	D7		
3018	B1	7202	D9		
3019	A1	7203	D9		
3020	A1	7204	C8		
3021	B1	7205	B6		
3022	B1	7206	C6		
3023	D3	7207	C6		
3024	B4	7208	C9		
3025	C2	7209	C9		
3026	D6	9000	B4		
3027	D6	9001	B2		
3029	C2	9002	B3		
3030	C2	9003	C2		
3031	B2	9004	A5		
3032	D2	9005	D2		
3034	D2	9006	B1		
3035	D1	9007	C3		
3098	D3	9008	B2		
3100	A2	9009	D6		
3101	B3	9010	B2		
3102	B2	9011	C3		
3103	C3	9012	D5		
3104	C2	9013	A4		
3106	C4	9014	D5		
3107	C4	9015	D3		
3108	B3	9016	D3		

Stereo IF-Sound Module / Stereo ZF-Ton Module



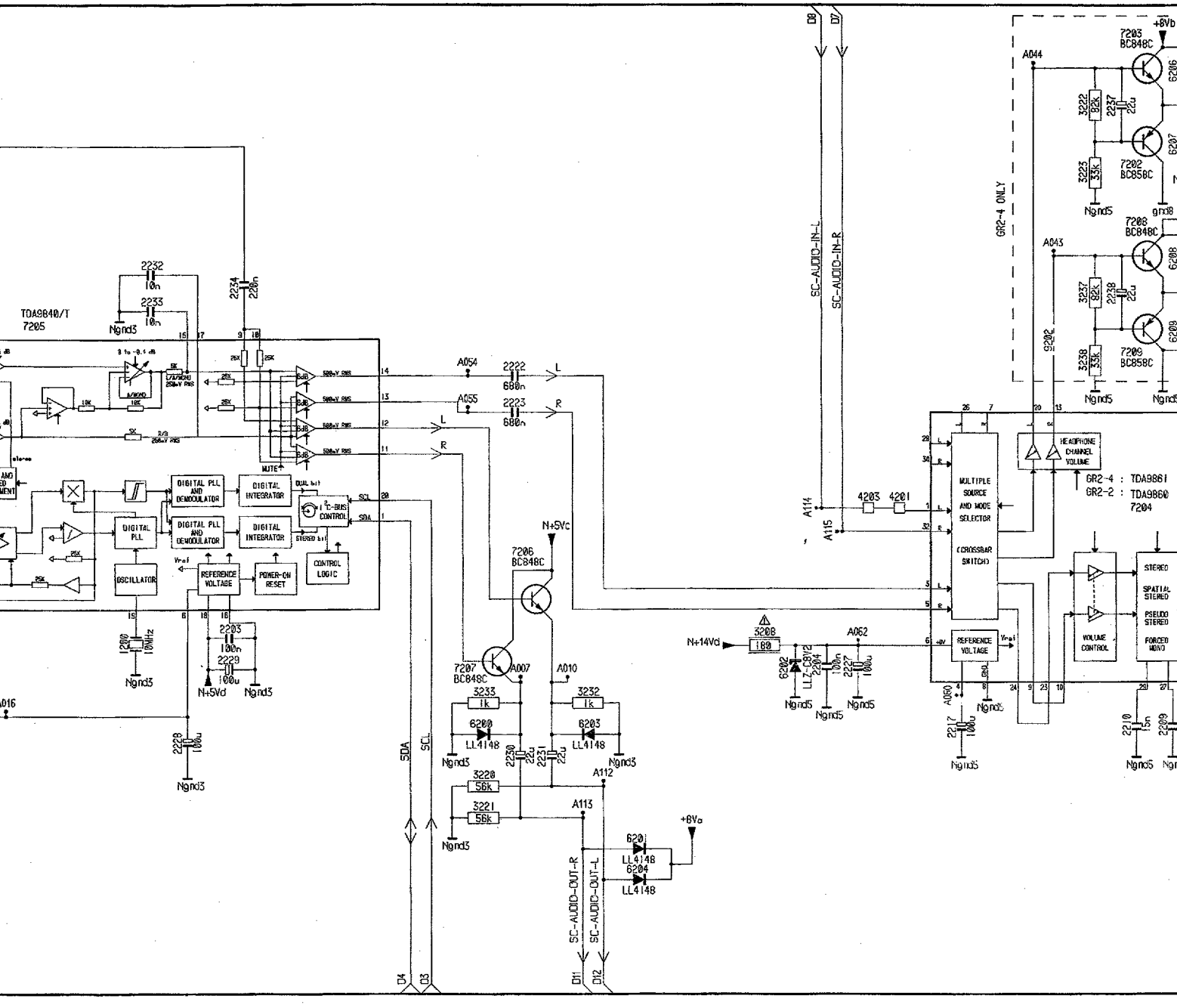
REMARKS/REMARQUES/ANMERKUNGEN/NOTE

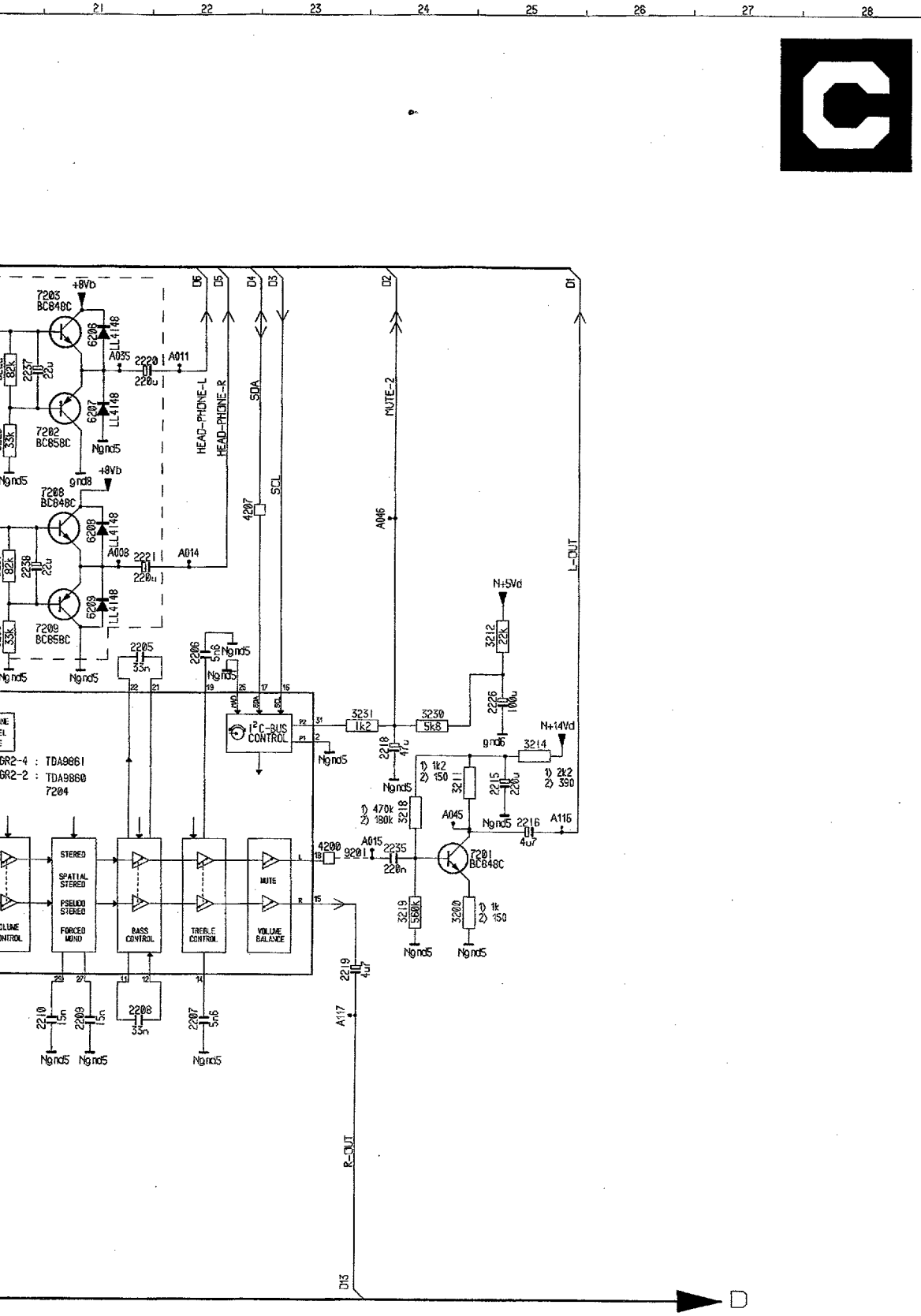
PRESENT IN SETS:
PRESENT SUR LES APPAREILS:
ANWESEND IN GERÄTEN:
PRESENTE SUI MODELLI:
PRESENTE SOBRE MODELLOS:

1) : IN GR2-4 ONLY

2) : IN GR2-2 ONLY

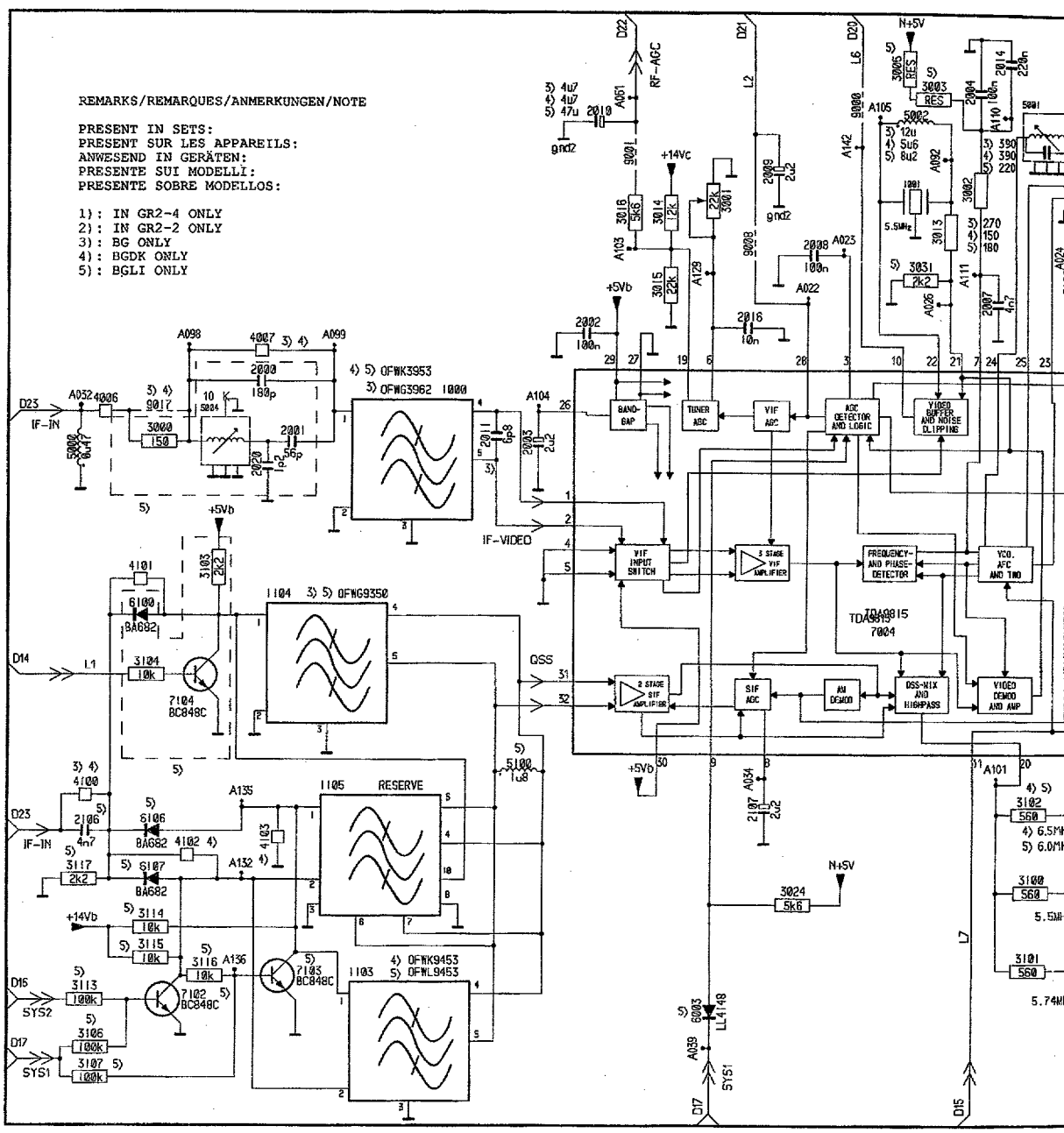
Module FI-Son Stereo GR2.2



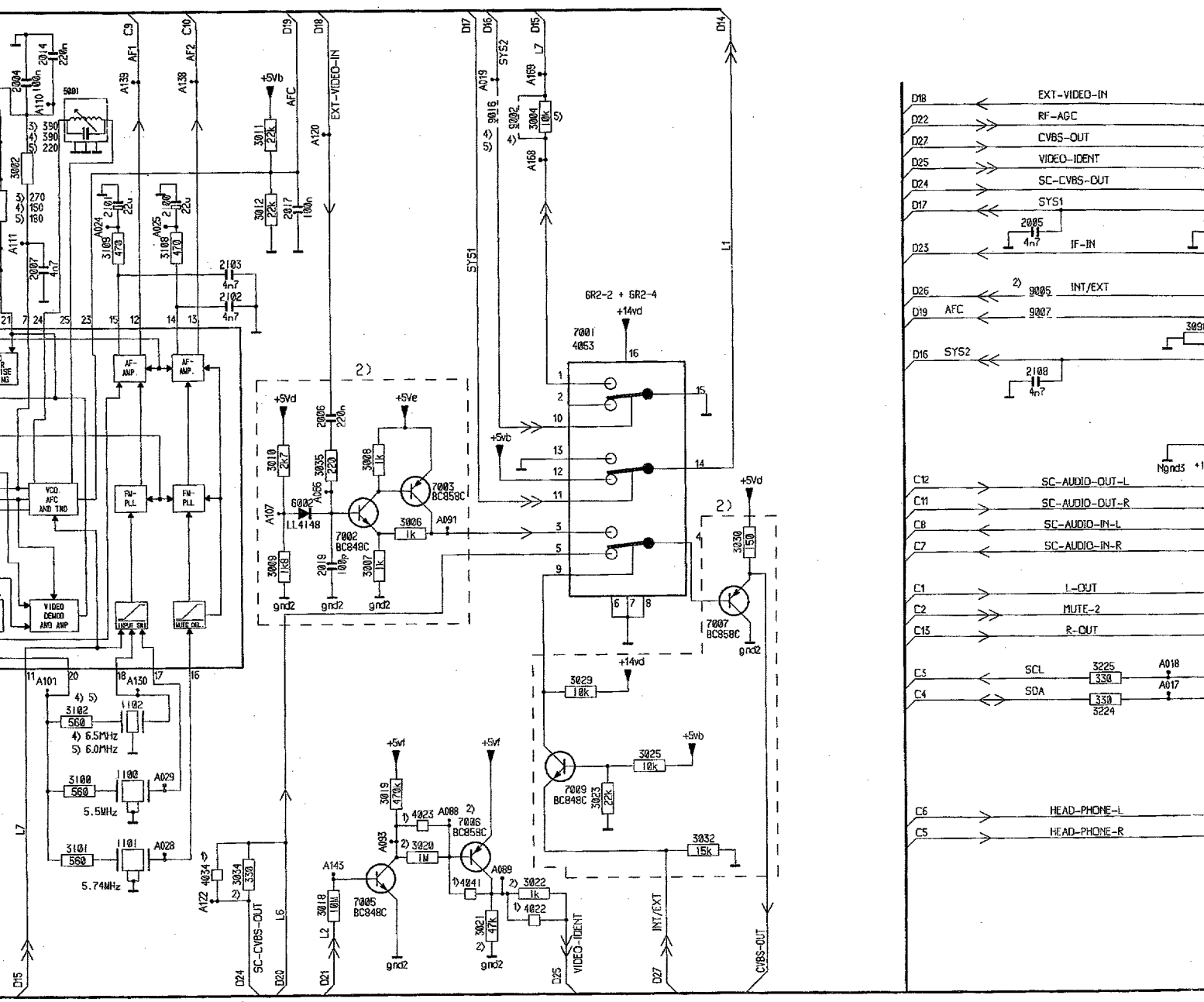


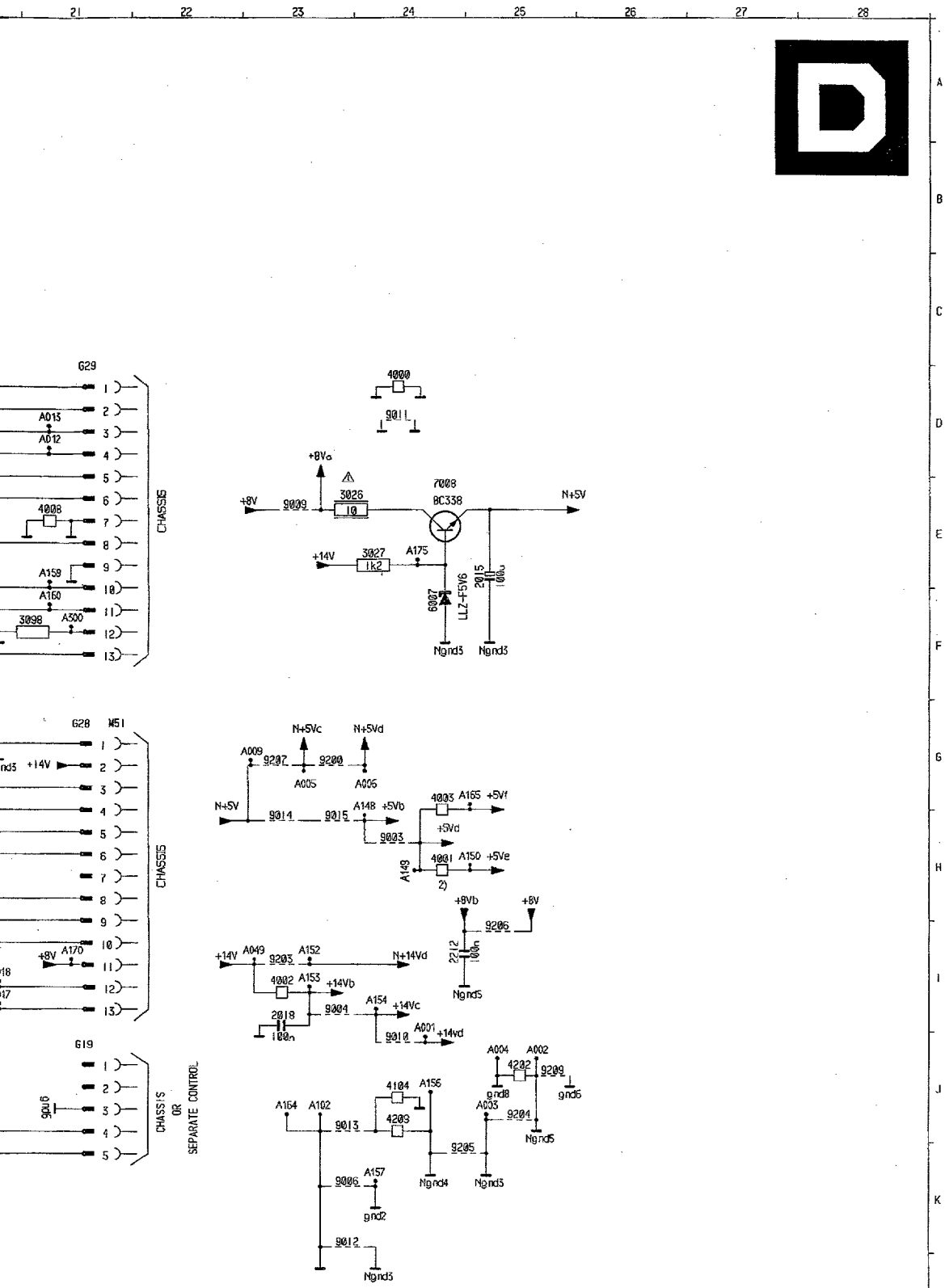
1200 I11
2200 G 7
2201 H 7
2202 I 9
2203 I12
2204 I18
2205 F21
2206 F22
2207 J22
2208 J21
2209 J21
2210 J21
2211 H 9
2214 I 8
2215 G25
2216 H25
2217 J19
2218 G24
2219 I23
2220 D21
2221 E21
2222 F15
2223 G15
2224 F 8
2225 F 8
2226 G25
2227 I18
2228 J11
2229 I12
2230 J15
2231 J15
2232 E11
2233 F11
2234 E12
2235 H24
2237 D20
2238 E20
3200 I24
3207 F 7
3208 I17
3211 G24
3212 F25
3214 G25
3218 H24
3219 I24
3220 J14
3221 J14
3222 D20
3223 D20
3226 D 8
3227 D 8
3228 E 9
3229 E 8
3230 G24
3231 G23
3232 I15
3233 I14
3237 E20
3238 F20
4200 H23
4201 G18
4203 G18
4204 D 6
4205 I 8
4206 D 9
4207 E22
5200 H 8
5201 H 8
6200 J14
6201 K16
6202 I17
6203 J15
6204 K16
6206 C21
6207 D21
6208 E21
6209 F21
7201 H24
7202 D20
7203 C20
7204 H21
7205 F10
7206 H15
7207 I14
7208 E20
7209 F20
9201 H23
9202 F20
A007 I15
A008 E21
A010 I15
A011 D22
A014 E22
A015 H24
A016 I10
A035 D21
A040 H 8
A043 E20
A044 C20
A045 H24
A046 E24
A054 F14
A055 F14
A060 I19
A062 I18
A071 I 9
A085 H 8
A112 J15
A113 J15
A114 H17
A115 H18
A116 H25
A117 J23

Stereo IF-Sound Module / Stereo ZF-Ton Module



Module FI-Son Stereo GR2.2





	1000	F 5	A001	I24			
	1001	D 9	A002	J25			
	1100	J10	A003	J25			
	1101	K10	A004	J25			
	1102	I10	A005	G23			
	1103	K 4	A006	G24			
A	1104	H 4	A009	G23			
	1105	I 4	A012	D21			
	2000	F 4	A013	D21			
	2001	F 4	A017	I20			
	2002	E 6	A018	I20			
	2003	F 6	A019	C14			
	2004	C 9	A022	E 8			
	2005	E19	A023	E 8			
	2006	G12	A024	E10			
	2007	E10	A025	E11			
	2008	E 8	A026	E 9			
B	2009	D 8	A028	K11			
	2010	D 6	A029	J11			
	2011	F 5	A032	F 2			
	2014	C10	A034	I 8			
	2015	E25	A039	K 7			
	2016	E 8	A049	I23			
	2017	E12	A061	C 7			
	2018	I23	A066	G12			
	2019	H12	A088	J13			
	2020	G 4	A089	K14			
	2100	E11	A091	H13			
C	2101	E10	A092	D 9			
	2102	E11	A093	K13			
	2103	E11	A098	E 3			
	2106	J 2	A099	E 4			
	2107	I 8	A101	I10			
	2108	F19	A102	J25			
	2212	I24	A105	E 7			
	3000	F 5	A104	F 6			
	3001	D 7	A105	D 9			
	3002	D 9	A107	H12			
	3003	C 9	A110	D10			
D	3004	D14	A111	E 9			
	3005	C 9	A120	D12			
	3006	H13	A122	K11			
	3007	H13	A129	E 7			
	3008	G13	A130	I11			
	3009	H12	A132	J 3			
	3010	G12	A135	I 3			
	3011	D12	A136	K 3			
	3012	E12	A138	C11			
	3013	E 9	A139	C10			
E	3014	D 7	A142	D 8			
	3015	E 7	A143	K12			
	3016	D 7	A148	G24			
	3018	K12	A149	H24			
	3019	J13	A150	H25			
	3020	K13	A152	I23			
	3021	K14	A153	I23			
	3022	K14	A154	I24			
	3023	J15	A156	J24			
	3024	J 8	A157	K24			
	3025	J15	A159	E21			
F	3026	E23	A160	F21			
	3027	E24	A164	J23			
	3029	I15	A165	G25			
	3030	H16	A168	D14			
	3031	E 9	A169	C14			
	3032	K16	A170	I21			
	3034	K12	A175	E24			
	3035	G12	A300	F21			
	3098	F21	G19	J21			
	3100	J10	G19	K21			
G	3101	K10	G19	J21			
	3102	I10	G19	J21			
	3103	G 3	G19	J21			
	3104	H 3	G28	G21			
	3105	K 2	G28	I21			
	3107	L 2	G28	H21			
	3108	E11	G28	H21			
	3109	E10	G28	H21			
	3113	K 2	G28	H21			
	3114	J 3	G28	H21			
	3115	K 3	G28	G21			
H	3116	K 3	G28	G21			
	3117	J 2	G28	G21			
	3224	I20	G28	I21			
	3225	I20	G28	I21			
	4000	D24	G28	I21			
	4001	H24	G29	D21			
	4002	I23	G29	F21			
	4003	G24	G29	F21			
	4005	F 2	G29	F21			
	4007	F 4	G29	E21			
	4008	E21	G29	E21			
I	4022	K14	G29	E21			
	4023	J13	G29	E21			
	4034	K11	G29	E21			
	4041	K14	G29	D21			
	4100	I 2	G29	D21			
	4101	G 3	G29	D21			
	4102	J 3	G29	D21			
	4103	J 4					
	4104	J24					
	4202	J25					
J	4209	J24					
	5000	F 2					
	5001	D10					
	5002	D 9					
	5004	F 3					
	5100	I 6					
	6002	G12					
	6005	K 7					
	6007	F24					
	6100	H 3					
	6106	J 3					
K	6107	J 3					
	7001	F15					
	7002	H12					
	7003	G13					
	7004	H 9					
	7005	K13					
	7006	J14					
	7007	I16					
	7008	E24					
	7009	J15					
	7102	K 3					
L	7103	K 4					
	7104	I 3					
	9000	D 9					
	9001	D 7					
	9002	D14					
	9003	H24					
	9004	I23					
	9005	E19					
	9006	K23					
	9007	F19					
M	9008	E 8					
	9009	G23					
	9010	J24					
	9011	D24					
	9012	K23					
	9013	J23					
	9014	H23					
	9015	H23					
	9016	D14					
	9017	F 3					
	9200	G23					
	9203	I23					
N	9204	J25					
	9205	K24					
	9206	I25					
	9207	G23					
	9209	J25					

Spare parts list / Stükliste / Liste des pièces

IF-Module(eco)

Various

1003	4822 212 31387	Pal/BG module
1003	4822 212 31389	Pal/secam BG/LI module
1003	4822 212 31391	Pal/secam BG/DK module
1003	4822 212 31388	Pal/BG nicam module
1003	4822 212 31386	Pal/I nicam module
1000	4822 242 80295	OFWG3962M [2]
1000	4822 242 81436	OFWK3953M [4,5]
1000	4822 242 81717	B39389-G3354-M 100[3]
1000	4822 242 81718	B39389-J3351-K1 00[1]
1001	4822 153 30025	6MHz [1]
1001	4822 242 72211	TPS5,5MW [3]
1100	4822 242 70714	SFT5,5MA [5]
1100	4822 242 71713	SFE6,0MBF [1]
1101	4822 242 70485	SFT5,74MA
1102	4822 242 70714	SFT5,5MA [3]
1102	4822 242 71713	SFE6,0MBF [4]
1102	4822 242 72057	SFE6,5MBF [5]
1103	4822 242 81423	B39389-L9453-M1 00[4]
1103	4822 242 81716	B39389-K9453-M1 00
1104	4822 242 81715	B39389-G9350-M 100
1200	4822 242 80208	10.0MHz
1300	4822 242 81187	11.700MHz [3]
1300	4822 242 81188	13.104MHz [1]
1301	4822 242 81719	8,192MHz
1302	4822 242 72301	TH316BOM-20800 DAF[3]
1302	4822 242 72303	TH316BQM [1]

⊣⊢

2000	4822 126 13159	180pF 5% 50V
2001	4822 126 13162	56pF 5%N470 50V
2002	4822 126 13161	100nF 10% 25V
2003	4822 124 41576	2,2µF 20% 50V
2004	4822 122 33496	100nF 10% 63V [2]
2004	4822 126 13161	100nF 10% 25V
2005▲	5322 126 10223	4,7nF 10% 63V
2006	4822 121 42408	220nF 5% 63V
2007	4822 122 32646	5,6nF 10% 50V
2007▲	5322 126 10223	4,7nF 10% 63V [2]
2008	4822 126 13161	100nF 10% 25V
2009	4822 124 41576	2,2µF 20% 50V
2010▲	4822 124 40246	4,7µF 20% 63V [2]
2010▲	4822 124 40433	47µF 20% 25V
2011	5322 122 32269	6,8pF 5% 50V [2]
2011	5322 122 32286	3,3pF 5% 50V
2012▲	4822 122 33177	10nF 20% 50V
2013	4822 126 13161	100nF 10% 25V
2014	4822 122 32927	220nF 20% 50V
2015	4822 124 41643	100µF 20% 16V
2016▲	4822 122 33177	10nF 20% 50V
2017	4822 126 13161	100nF 10% 25V
2018	4822 122 32646	5,6nF 10% 50V
2018	4822 126 13161	100nF 10% 25V [2]
2019	5322 122 32531	100pF 5% 50V
2020	5322 122 33537	1,2pF 5% 63V
2100	5322 124 41431	22µF 20% 35V
2101	5322 124 41431	22µF 20% 35V
2102▲	5322 126 10223	4,7nF 10% 63V
2103▲	5322 126 10223	4,7nF 10% 63V
2106▲	5322 126 10223	4,7nF 10% 63V
2107	4822 124 41576	2,2µF 20% 50V
2108▲	5322 126 10223	4,7nF 10% 63V
2200	4822 122 33219	1,8nF 10% 50V
2201	4822 126 13163	5,6nF 2% 63V
2202▲	4822 122 33177	10nF 20% 50V
2203	4822 126 13161	100nF 10% 25V
2204	4822 126 13161	100nF 10% 25V
2205	4822 122 33342	33nF 10% 63V
2206	4822 122 32646	5,6nF 10% 50V
2207	4822 122 32646	5,6nF 10% 50V
2208	4822 122 33342	33nF 10% 63V
2209	4822 122 33128	15nF 10% 63V
2210	4822 122 33128	15nF 10% 63V
2211	4822 126 13161	100nF 10% 25V
2214	4822 124 40248	10µF 20% 63V
2215▲	4822 124 40196	220µF 20% 16V
2216▲	4822 124 40246	4,7µF 20% 63V
2217	4822 124 41643	100µF 20% 16V
2218▲	4822 124 40433	47µF 20% 25V
2219▲	4822 124 40246	4,7µF 20% 63V
2222	5322 121 42498	680nF 5% 63V
2223	5322 121 42498	680nF 5% 63V
2224	4822 122 32927	220nF 20% 50V
2225	4822 122 32927	220nF 20% 50V
2226	4822 124 41643	100µF 20% 16V
2227	4822 124 41643	100µF 20% 16V
2228	4822 124 41643	100µF 20% 16V
2229	4822 124 41643	100µF 20% 16V
2230	5322 124 41431	22µF 20% 35V
2231	5322 124 41431	22µF 20% 35V
2232	5322 122 34098	10nF 10% 63V
2233	5322 122 34098	10nF 10% 63V
2234	4822 122 32927	220nF 20% 50V
2235	4822 122 32927	220nF 20% 50V
2236	4822 122 32927	220nF 20% 50V
2300	4822 121 42408	220nF 5% 63V
2301	4822 126 13161	100nF 10% 25V
2302	4822 126 13161	100nF 10% 25V
2303	4822 122 33514	68pF 5% 50V
2304	5322 122 31863	330pF 5% 50V
2305	4822 126 13161	100nF 10% 25V
2306	5322 122 33538	150pF 2% 63V
2307	5322 122 33538	150pF 2% 63V
2308▲	5322 122 34123	1nF 10% 50V
2309	4822 126 13161	100nF 10% 25V
2310	5322 122 31863	330pF 5% 50V
2311	5322 122 31866	6,8nF 10% 63V
2312	5322 122 31863	330pF 5% 50V
2313▲	4822 124 40433	47µF 20% 25V
2318	5322 122 31863	330pF 5% 50V
2319	4822 122 33514	68pF 5% 50V
2320▲	4822 122 33172	390pF 5% 50V
2321▲	5322 122 34123	1nF 10% 50V
2322▲	4822 122 33177	10nF 20% 50V
2323▲	5322 122 32654	22nF 10% 63V
2324	5322 121 42661	330nF 5% 63V
2325▲	5322 122 34123	1nF 10% 50V
2328▲	4822 122 33177	10nF 20% 50V
2329	5322 122 32659	33pF 5% 50V
2330	5322 122 32659	33pF 5% 50V
2331	5322 122 32531	100pF 5% 50V
2332	5322 122 32531	100pF 5% 50V
2333▲	4822 122 33177	10nF 20% 50V
2334	4822 126 13161	100nF 10% 25V
2335	4822 126 13161	100nF 10% 25V
2336▲	4822 124 40433	47µF 20% 25V
2340▲	4822 122 33177	10nF 20% 50V
2343	4822 122 33219	1,8nF 10% 50V [1]
2343▲	5322 122 32654	22nF 10% 63V [3]
2344	4822 122 33219	1,8nF 10% 50V [1]
2344▲	5322 122 32654	22nF 10% 63V [3]
2347	4822 124 41643	100µF 20% 16V

⊏⊐

3000	4822 116 52211	150Ω 5% 0,5W
3001	4822 101 11192	22k 30%LIN 0,1W
3002	4822 051 20221	220Ω 5% 0,1W
3002	4822 051 20391	390Ω 5% 0,1W [2]
3004	4822 116 52233	10k 5% 0,5W
3006	4822 051 10102	1k 2% 0,25W
3007	4822 051 10102	1k 2% 0,25W
3008	4822 051 10102	1k 2% 0,25W
3009	4822 051 20182	1k8 5% 0,1W
3010	4822 051 20272	2k7 5% 0,1W
3011	4822 051 20223	22k 5% 0,1W
3011	4822 116 52257	22k 5% 0,5W [1,3]
3012	4822 051 20223	22k 5% 0,1W
3013	4822 051 20101	100Ω 5% 0,1W [1]
3013	4822 051 20151	150Ω 5% 0,1W [5]
3013	4822 051 20181	180Ω 5% 0,1W [4]
3013	4822 051 20271	270Ω 5% 0,1W [2]
3013	4822 051 20391	390Ω 5% 0,1W [3]
3014	4822 051 20123	12k 5% 0,1W
3015	4822 051 20223	22k 5% 0,1W
3016	4822 051 20562	5k6 5% 0,1W
3018	4822 051 20106	10M 5% 0,1W
3019	4822 051 20474	470k 5% 0,1W
3020	4822 051 20105	1M 5% 0,1W
3021	4822 116 52284	47k 5% 0,5W
3021	4822 117 10834	47k 1% 0,1W [2]
3022	4822 051 10102	1k 2% 0,25W
3023	4822 051 20223	22k 5% 0,1W
3024	4822 051 20562	5k6 5% 0,1W
3025	4822 117 10833	10k 1% 0,1W
3026▲	4822 052 10109	10Ω 5% 0,33W
3027	4822 051 20122	1k2 5% 0,1W
3029	4822 116 52233	10k 5% 0,5W [2]
3029	4822 117 10833	10k 1% 0,1W
3030	4822 051 20151	150Ω 5% 0,1W
3031	4822 051 20222	2k2 5% 0,1W
3032	4822 051 20153	15k 5% 0,1W
3033	4822 053 11129	12Ω 5% 2W
3034	4822 051 20331	330Ω 5% 0,1W
3035▲	4822 051 20121	120Ω 5% 0,1W
3098	4822 051 10102	1k 2% 0,25W [4]
3098	4822 051 20151	150Ω 5% 0,1W [5]
3098	4822 051 20562	5k6 5% 0,1W [1]
3098	4822 051 20563	56k 5% 0,1W [3]
3098	4822 117 10833	10k 1% 0,1W [2]
3100	4822 051 20561	560Ω 5% 0,1W
3101	4822 051 20561	560Ω 5% 0,1W
3102	4822 051 20561	560Ω 5% 0,1W
3103	4822 051 20222	2k2 5% 0,1W
3104	4822 117 10833	10k 1% 0,1W
3106	4822 116 52234	100k 5% 0,5W
3107	4822 116 52234	100k 5% 0,5W
3108	4822 051 20471	470Ω 5% 0,1W
3109	4822 051 20471	470Ω 5% 0,1W
3113	4822 116 52234	100k 5% 0,5W
3114	4822 117 10833	10k 1% 0,1W
3115	4822 117 10833	10k 1% 0,1W
3116	4822 117 10833	10k 1% 0,1W
3117	4822 051 20222	2k2 5% 0,1W
3200	4822 051 20151	150Ω 5% 0,1W
3207	4822 051 20822	8k2 5% 0,1W
3208▲	4822 052 10181	180Ω 5% 0,33W
3211	4822 051 20151	150Ω 5% 0,1W
3212	4822 051 20223	22k 5% 0,1W
3212	4822 117 10834	47k 1% 0,1W
3214	4822 051 20391	390Ω 5% 0,1W
3218	4822 051 20184	180k 5% 0,1W
3219	4822 051 20564	560k 5% 0,1W
3220	4822 051 20563	56k 5% 0,1W
3221	4822 051 20563	56k 5% 0,1W
3224	4822 051 20331	330Ω 5% 0,1W
3225	4822 051 20331	330Ω 5% 0,1W
3230	4822 051 20562	5k6 5% 0,1W
3231	4822 051 20122	1k2 5% 0,1W
3232	4822 051 10102	1k 2% 0,25W
3233	4822 051 10102	1k 2% 0,25W
3234▲	4822 052 10181	180Ω 5% 0,33W
3300	4822 051 20563	56k 5% 0,1W
3301▲	4822 051 20109	10Ω 5% 0,1W
3302	4822 051 20228	2Ω2 5% 0,1W
3303	4822 051 20392	3k9 5% 0,1W
3304	4822 051 20223	22k 5% 0,1W
3305	4822 051 20223	22k 5% 0,1W
3306	4822 051 20104	100k 5% 0,1W
3307	4822 051 20159	15Ω 5% 0,1W
3308	4822 051 20224	220k 5% 0,1W
3309	4822 051 20823	82k 5% 0,1W
3314	4822 051 20471	470Ω 5% 0,1W
3315	4822 051 20563	56k 5% 0,1W
3316	4822 051 10102	1k 2% 0,25W
3317	4822 051 20105	1M 5% 0,1W
3318	4822 051 20223	22k 5% 0,1W
3319	4822 051 20152	1k5 5% 0,1W
3320	4822 117 10833	10k 1% 0,1W
3321	4822 051 20104	100k 5% 0,1W
3322	4822 051 20273	27k 5% 0,1W
3323	4822 051 20104	100k 5% 0,1W
3324	4822 117 10833	10k 1% 0,1W
3326	4822 051 20681	680Ω 5% 0,1W
3327	4822 051 20182	1k8 5% 0,1W
3328	4822 051 20152	1k5 5% 0,1W
3329	4822 051 20331	330Ω 5% 0,1W
3331	4822 051 20332	3k3 5% 0,1W
3332	4822 051 20332	3k3 5% 0,1W
3333	4822 116 52224	470Ω 5% 0,5W
3334	4822 051 20122	1k2 5% 0,1W
3335	4822 051 20471	470Ω 5% 0,1W
3336	4822 051 20101	100Ω 5% 0,1W
3337	4822 051 20101	100Ω 5% 0,1W
3340	4822 051 20122	1k2 5% 0,1W
3341	4822 051 20471	470Ω 5% 0,1W
4xxx	4822 051 10008	0Ω 5% 0,25W

⌒

5000	4822 157 61898	COIL
5001	4822 157 71099	0,28µH
5002	4822 157 53066	15µH 10% [3]
5002	4822 157 53303	COIL [2]
5002	4822 157 53634	5,6µH 10% [1,5]
5002	4822 157 62767	8,2µH [4]
5004	4822 157 53539	0,27µH 5%
5100	4822 157 71098	1,8µH
5200	4822 157 70467	1500µH
5300	4822 157 50975	1 mH
5301	4822 157 50975	1 mH

⊣▶

6002	4822 130 80446	LL4148
6003	4822 130 80446	LL4148
6007	4822 130 80954	LLZ-C5V6
6007	4822 130 81227	LLZ-F5V6 [1,3]
6100	4822 130 80888	BA682
6106	4822 130 80888	BA682
6107	4822 130 80888	BA682
6200	4822 130 80446	LL4148
6201	4822 130 80446	LL4148
6202	4822 130 82192	LLZ-C8V2
6203	4822 130 80446	LL4148
6204	4822 130 80446	LL4148
6205	4822 130 82192	LLZ-C8V2
6300	4822 130 80446	LL4148
6301	5322 130 34689	BBY31
6302	5322 130 80119	BBY40

⊗

7001	5322 209 10576	4053B
7002	5322 130 42136	BC848C
7003	4822 130 42513	BC858C
7004	4822 209 33294	TDA9815/V1
7005	5322 130 42136	BC848C
7006	4822 130 42513	BC858C
7007	4822 130 42513	BC858C
7008	4822 130 44121	BC338
7009	5322 130 42136	BC848C
7102	5322 130 42136	BC848C
7103	5322 130 42136	BC848C
7104	5322 130 42136	BC848C
7201	5322 130 42136	BC848C
7204	4822 209 33293	TDA9860/V2
7205	4822 209 32863	TDA9840/V1
7206	5322 130 42136	BC848C
7207	5322 130 42136	BC848C
7302	5322 130 42136	BC848C
7303	5322 130 42136	BC848C
7304	4822 209 30909	TDA8732/C1
7305	4822 209 32959	SAA7282AZP
7306	5322 130 42136	BC848C
7307	5322 130 42136	BC848C

1) nicam I
2) Pal BG
3) Pal BG nicam
4) Pal/secam BG/LI
5) Pal/secam BG/DK

Service
Service
Service

GR 2
AA

Service Manual

GB

Contents

		Page
2.	Technical data and connection facilities	2.1
3.	Warnings and notes	3.1
4.	Mechanical instructions	4.1
5.	Connection diagram	5.1
	Adjustment diagram	5.2
6.	Electrical diagrams and PC-board layouts	
	Power supply (Diagram L)	6.3
	Satellite control (Diagram M)	6.8
	Satellite front end (Diagram N)	6.9
	FSS video & sound (Diagram O)	6.12
	Euro module SAT (Diagram P)	6.17
7.	Electrical adjustments	7.1
8.	Repair tips	8.1
9.	Survey of menus	9.1
10.	Electrical spare parts lists	10.2

Published by Consumer Electronics Printed in The Netherlands ©Copyright reserved Subject to modification GB D F 4822 727 18984

(D)

Inhaltsverzeichnis

		Seite
2.	Technische Daten und Anschlußmöglichkeiten	2.2
3.	Warnungen und Anmerkungen	3.2
4.	Mechanische Anweisungen	4.1
5.	Schaltdiagramm	5.1
	Einstellungsdiagramm	5.2
6.	Elektrische Schaltpläne und Leiterplatten-Layout	
	Stromversorgung (Schaltplan L)	6.3
	Satellitkontrolle (Schaltplan M)	6.8
	Satellitvorderseite (Schaltplan N)	6.9
	FSS Video und Ton (Schaltplan O)	6.12
	Euro-AV-Platte SAT (Schaltplan P)	6.17
7.	Elektrische Abgleicharbeiten	7.1
8.	Reparaturhinweise	8.1
9.	Übersicht über die Menüs	9.2
10.	Stücklisten für elektrische Bauteile	10.2

(F)

Sommaire

		Page
2.	Fiche technique et possibilités de connexion	2.3
3.	Avertissements et remarques	3.3
4.	Instructions d'ordre mécanique	4.2
5.	Schéma des connexions	5.1
	Schéma des réglages	5.2
6.	Schémas électriques et agencement des circuits	
	Alimentation (schéma L)	6.3
	Contrôle satellite (schéma M)	6.8
	Avant satellite (schéma N)	6.9
	FSS vidéo et son (schéma O)	6.12
	Module Prise Péritélévision SAT (schéma P)	6.17
7.	Réglages électriques	7.1
8.	Conseils pour réparations	8.2
9.	Aperçu des menus	9.3
10.	Nomenclature des pièces électriques	10.2

Technical data and connection facilities

GB

GENERAL:

Mains voltage	: 300V DC ± 10%
Power consumption	: 18W

SATELLITE FRONT-END:

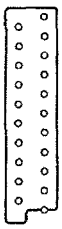
Antenna input impedance	: 75Ω
Frequency range	: 950-1750MHz (SF914D); 950-2000MHz (SF916D)
Minimum antenna input voltage	: 158µV
Maximum antenna input voltage	: 8.9mV
LNC power supply	: 0, 14 or 18V, max. 350mA
Satellite transmission systems	: PAL (D2MAC via external decoder)

PAL:

Audio:

MONO audio carriers	: 5.80MHz; 6.50MHz; 6.60MHz; 6,65MHz 50µs de-emphasis.
STEREO audio carriers	: stereo 1: 7.02MHz + 7.20MHz stereo 2: 7.38MHz + 7.56MHz stereo 3: 7.74MHz + 7.92MHz
LANGUAGE SELECTION	: All the preceding sound carriers
BLANKING VIDEO	: If a radio channel is chosen, the video signal can be blanked (if required)
NO PICTURE NO SOUND	: auto mute for terrestrial, **no** mute for satellite

SCART DECODER:



1 -Audio ⊖→ R (0,5V RMS ≤ 1kΩ)
2 -Audio ⊕→ R (0,2-2V RMS ≥ 10kΩ)
3 -Audio ⊖→ L (0,5V RMS ≤ 1kΩ)
4 -Audio ⊥
5 --
6 -Audio ⊕→ L (0,2-2V RMS ≥ 10kΩ)
7 --
8 -0-2V: Low level (≥ 10kΩ)
4,5-7V: 16:9 Aspect Ratio
9,5-12V: 4:3 Aspect Ratio
9 --



10 --
11 --
12 --
13 --
14 --
15 --
16 --
17 -Base band signal ⊥
18 --
19 -Base band signal ⊖→ ($1V_{pp}$/75Ω)
20 -Base band signal ⊕→ ($1V_{pp}$/75Ω)
21 -Earthscreen



CLICK FIT CONNECTIONS:

1 (red) - 5V6 (present when pulse polarizer selected)
2 (white) - Skew pulse (present when pulse polarizer selected, only for a limited time)
3 (black) - Earth
4 (blue) - +80mA to -40mA current source Rload 902 (present when magnetic polarizer selected)
5 (grey) - 12V for antenna relais (when selected)

2.2 GR2-SAT Technischen Daten und Anschlußmöglichkeiten

(D)

ALLGEMEIN:

Netzspannung	: 300V DC ± 10%
Leistungsaufnahme	: 18W

EINGANGSTEIL SATELLIT:

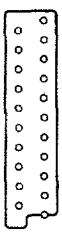
Antenneneingangsimpedanz	: 75Ω
Frequenzbereich	: 950-1750MHz (SF914D); 950-2000MHz (SF916D)
Minimale Antenneneingangsspannung	: 158µV
Maximale Antenneneingangsspannung	: 8.9mV
LNC-Netzteil	: 0, 14 or 18V, max. 350mA
Satellitenübertragungssysteme	: PAL (D2MAC via externem Dekoder)

PAL:

Audioteil:

MONO Tonträger	: 5.80MHz; 6.50MHz; 6.60MHz; 6,65MHz 50µs de-emphasis.
STEREO Tonträger	: stereo 1: 7.02MHz + 7.20MHz stereo 2: 7.38MHz + 7.56MHz stereo 3: 7.74MHz + 7.92MHz
MEHRKANALTON	: sämtliche obenstehenden Tonträger
BLANKING VIDEO	: Wenn ein Rundfunksignal gewählt wird, läßt sich das Videosignal (falls gewünscht) austasten
KEIN BILD KEIN TON	: automatische Stummschaltung für Erde, **keine** Stummschaltung für Satellit

SCART DECODER:



1	-Audio ⊖→ R (0,5V RMS ≤ 1kΩ)
2	-Audio →⊖ R (0,2-2V RMS ≥ 10kΩ)
3	-Audio ⊖→ L (0,5V RMS ≤ 1kΩ)
4	-Audio ⊥
5	--
6	-Audio →⊖ L (0,2-2V RMS ≥ 10kΩ)
7	--
8	-0-2V: Niedriger Pegel (≥ 10kΩ) 4,5-7V: 16:9 Bildseitenverhältnis 9,5-12V: 4:3 Bildseitenverhältnis
9	--
10	--
11	--
12	--
13	--
14	--
15	--
16	--
17	-Basisband-Signal ⊥
18	--
19	-Basisband-Signal ⊖→ ($1V_{pp}$/75Ω)
20	-Basisband-Signal →⊖ ($1V_{pp}$/75Ω)
21	-Erdabschirmung



KLICK-VERBINDUNGEN:

1 (Rot)	- 5V6 (anwesend wenn Impuls-Polarisator gewählt)
2 (Weiß)	- Schrägimpuls (vorhanden wenn Impuls-Polarisator gewählt wurde, nur für eine begrenzte Zeit)
3 (Schwarz)	- Erdung
4 (Blau)	- +80mA bis -40mA Stromquelle Rload ≤ 90Ω (vorhanden wenn ein magnetischer Polarisator gewählt wurde)
5 (Grau)	- 12V für Antennenrelais (wenn gewählt)

Fiche technique et possibilités de connexion

Ⓕ

GENERALITES:

Tension secteur	: 300V DC ± 10%
Puissance absorbée	: 18W

PLATINE COMPLETE SATELLITE:

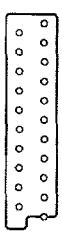
Impédance d'antenne	: 75Ω
Plage de fréquence	: 950-1750MHz (SF914D); 950-2000MHz (SF916D)
Tension d'entrée d'antenne minimale	: 158µV
Tension d'entrée d'antenne maximale	: 8.9mV
Alimentation LNC	: 0, 14 or 18V, max. 350mA
Systèmes de transmission satellite	: PAL (D2MAC par le biais d'un décodeur externe)

PAL:

Audio:

Porteuses audio MONO	: 5.80MHz; 6.50MHz; 6.60MHz; 6,65MHz 50µs de-emphasis.
Porteuses audio STEREO	: stéréo 1: 7.02MHz + 7.20MHz stéréo 2: 7.38MHz + 7.56MHz stéréo 3: 7.74MHz + 7.92MHz
CHOIX DE LANGUE	: toutes les porteuses de son précédentes
SUPPRESSION VIDEO	: si un canal radio a été sélectionné, le signal vidéo peut être supprimé si souhaité
PAS D'IMAGE NI DE SON	: 'auto mute' (= sourdine automatique) pour transmission terrestre, **pas de** 'mute' pour satellite

SCART DECODER:



1	-Audio ⊖→ R (0,5V RMS ≤ 1kΩ)
2	-Audio ⊕→ R (0,2-2V RMS ≥ 10kΩ)
3	-Audio ⊖→ L (0,5V RMS ≤ 1kΩ)
4	-Audio ⊥
5	--
6	-Audio ⊕→ L (0,2-2V RMS ≥ 10kΩ)
7	--
8	-0-2V: Niveau bas (≥ 10kΩ) 4,5-7V: 16:9 Format d'image 9,5-12V: 4:3 Format d'image
9	--
10	--
11	--
12	--
13	--
14	--
15	--
16	--
17	-Signal de bande de base ⊥
18	--
19	-Signal de bande de base ⊖→ ($1V_{pp}/75\Omega$)
20	-Signal de bande de base ⊕→ ($1V_{pp}/75\Omega$)
21	-Blindage de mise à la terre



CONNEXIONS A CLIQUET:

1 (rouge)	- 5V6 (présent si polarisateur d'impulsions sélectionné)
2 (blanc)	- Impulsion de biais (présente si polarisateur d'impulsions sélectionné, pour un temps limité seulement)
3 (noir)	- Terre
4 (bleu)	- +80mA jusqu'à -40mA Résistance ≤ 90Ω (présent si polarisateur magnétique sélectionné)
5 (gris)	- 12V pour relais d'antenne (si sélectionné)

3.1 GR2-SAT Warnings and notes

(GB)

Warnings

1. When repairing a unit, always connect it to the mains voltage via an isolating transformer.

2. Safety regulations require that the unit should be returned in its original condition and that components identical to the original components are used. The safety components are indicated by the symbol ⚠.

3. **ESD** 

   All ICs and many other semiconductors are sensitive to electrostatic discharges (ESD). Careless handling during repair can drastically shorten the life. Make sure that during repair you are connected by a wrist wrap with resistance to the same potential as the earth of the unit. Keep components and tools also at this same potential.

4. Never replace modules or other components while the unit is switched on.

5. Use plastic instead of metal alignment tools. This in order to preclude short-circuit or to prevent a specific circuit from being rendered unstable.

Notes

1. GR2 TV-sets with a satellite box do not have the following features:
   * Hotel mode
   * Demo mode

2. **Removing satellite box**

   Without sattelite box the TV can be operated without problems; but:
   * only an error message will be displayed on screen.
   * the user menu and the installation menu will only be in english.

3. **Service mode**

   In case the Service Mode for the GR2 is entered (briefly connect the two service pins M33 and M34 (SERVICE) behind the INSTALL key on the main carrier of the GR2 while switching on the set with the mains switch), automatically the Service Mode of the GR2-SAT-box is activated. **SER** is displayed to indicate that the service mode is active. The TV and the SAT BOX will stay in the Service Mode until the standby command is given (so the Service Mode is not left after switching off the mainspower). After entering the Service Mode automatically the service Default Mode is selected.

4. **Service Default Mode**

   Besides the Service Default Mode settings of the standard GR2, in addition for the Sat-box the following default settings are created:

Input frequency LNC	1214 MHz (exclusive AFC
LNC supply	14V by SAT BOX (horizontal polarization)
LNC	LNC SAT1 is selected
Polarisation	Horizontal
System	FSS
Antenna control voltage	off
Sound	Mono 1
Descrambler	Audio and Video internal
Polariser type	Pulse polariser
Selected channel	ScreenSport on ASTRA satellite

5. **Options**

   After pressing the keys 'PROGRAM UP' and 'VOLUME DOWN' on the local control keys simultaneously, the main service menu is displayed. To make it possible via this mode to do the correct chroma adjustments, the automatic cut-off circuitry will be disabled. The main service menu contains the following items:

red	OPTION 1
green	OPTION 2
yellow	WHITE BALANCE
cyan	CUT-OFF

   Via selecting the corresponding colour button, a new menu will appear. Via the 'MENU ON/OFF' command the main service menu can be recalled. After setting the options the main service menu can be left also via the 'MENU ON/OFF' command. All parameters will be stored in the EEPROM (see chapter 9).

6. **DC voltages and oscillograms**

   DC voltages and oscillograms are measured with the SERVICE DEFAULT MODE switched on.

7. **DC voltages and oscillograms on the Sat Power Supply Panel**

   DC voltages and oscillograms on the Sat Power Supply Panel are to be measured:
   * in relation to the nearest earth point of the PCB
   * in respect of ⊥↯ (hot ground) in the primary circuit of the power supply

Warnungen und Anmerkungen

8. Oscillograms on the Sat Panel

Oscillograms are measured without antenna signal (⊁), unless indicated otherwise.

* Video processing:
  Connect a scart cable from the back of the PM5518 to the decoder socket of the Sat Box. Set VIDEO DESCRAMBLING and AUDIO DESCRAMBLING to AUTOMATIC or EXTERNAL in the Install Menu (now the set is not in the Service Default Mode any more). Apply a colour bar.
* Audio processing:
  In order to measure the oscillograms on the Audio Processing part of the Sat Panel besides of an oscilloscope also a function generator (e.g. PM5138) is required. Deliver an antennasignal to the antenna plug or to the decoder socket to deactivate the MUTE. Remove SMD-jumper 4152. Inject the sound signal from the PM5138 at SOUND SAT BB straight "after" 4152 (between 4152 and 3304). Adjust the PM5138 for:
  - TP5 at 6,575 MHz carrier freq. (mono reception)
  - TP1, [10] and [12] at 7,02 MHz carrier freq. (language 1 right channel)
  - [9] and [11] at 7,20 MHz carrier freq. (language 2 left channel)
  - FM-modulation
  - 0,1 V_{rms} or 0,14V_{pp}
  - deviation 0,38%

9.

The parts which are indicated in the parts lists are completely interchangeable with the parts in the unit, regardless of the possible type indications.

(D)

Warnungen

1. Das zu reparierende Gerät stets über einen Trenntransformator an die Netzspannung anschließen.

2. Sicherheitsbestimmungen erfordern, daß das Gerät wieder in seinen ursprünglichen Zustand versetzt wird und daß Bauteile, die mit den ursprünglichen identisch sind, verwendet werden. Die Sicherheitsbauteile sind mit dem Symbol ⚠ gekennzeichnet.

3. **ESD**

   Alle ICs und viele andere Halbleiter sind anfällig für elektrostatische Entladungen (ESD). Werden sie während der Reparatur nicht sorgfältig behandelt, so kann dies ihre Lebensdauer erheblich herabsetzen. Sorgen Sie dafür, daß Sie während der Reparatur über ein Handgelenkband mit Widerstand mit dem gleichen Potential verbunden sind, wie die Masse des Geräts. Bauteile und Hilfsmittel müssen ebenfalls auf diesem Potential gehalten werden.

4. Module oder andere Bauteile niemals bei eingeschaltetem Gerät auswechseln!

5. Zum Einstellen Plastik- statt Metallwerkzeuge benutzen, um Kurzschlüssen oder Instabilitäten bei bestimmten Schaltkreisen vorzubeugen.

Anmerkungen:

1. GR2 Fernsehgeräte mit einem Satellit Empfänger sind nicht beschäftigt mit die nächsten Moglichkeiten:
   * Hotel mode
   * Demo mode

2. **Entfernung des Satellit Boxes**

   Das Fernsehgerät kann problemlos ohne Satellit-Box laufen; aber:
   * auf dem Bildschirm erscheint jedoch eine Fehlermeldung.
   * das Bedienungs- und Programmierungsmenu wird nur in Englisch sein.

3. **Service Modus**

   Falls der Service-Modus für das GR2 eingegeben ist (kurz die zwei Servicestifte M33 und M34 (SERVICE) hinter der INSTALL Taste auf dem Hauptträger des GR2 verbinden, während Sie das Gerät mit dem Hauptschalter einschalten),
   der Service-Modus der GR2-SAT-Box ist somit automatisch aktiviert.

SER wird angezeigt, um mitzuteilen, daß der Service-Modus aktiv ist. Der Fernseher und die SAT-Box bleiben im Service-Modus bis das Stand-by-Kommando gegeben wurde (der Service-Modus ist nach dem Ausschalten des Netzstroms nicht verlassen). Nach Eintritt in den Service-Modus ist automatisch der Service-Standard-Modus gewählt.

4. Service-default-Betribsart.

Außer den Service-Standard-Einstellungen des Standard GR2, wurden zusätzlich fur die SAT-Box die folgenden Standard-Einstellungen vorgenmmen

Eingangs frequenz LNC	1214 MHz (exklusive AFC)
LNC Speisung	14V für SAT-Box (horizontale Polarisation)
LNC	LNC SAT1 wenn gewählt.
Polarisation	Horizontal
System	FSS
Antenne control	
Spannung	Aus.
Ton	Mono 1
Descrambler	Audio und Video intern
Polariser Typ	pulsgesteuerter Polariser
Kanalwahl	Screen Sport auf ASTRA Satellit

5. Optionen

Nach dem gleichzeitigen Eindrücken der Tasten 'PROGRAM UP' und 'VOLUME DOWN' auf der lokalen Kontrolltaste, erscheint das Haupt-Servicemenü. Damit mit diesem Modus die korrekte Farbeinstellung vorgenommen werden kann, wird der automatische Aus-Schaltkreis gesperrt.
Das Haupt-Servicemenü enthält die folgenden Punkte:

Rot	OPTION 1
Grün	OPTION 2
Gelb	WHITE BALANCE
Zyan	AUS

Durch wählen der korrespondierenden Farbtasten erscheint ein neues Menü. Über das 'MENÜ EIN/AUS' Kommando kann das Haupt-Servicemenü wieder aufgerufen werden. Nach Einstellung der Optionen kann das Haupt-Servicemenü auch über das Kommando 'MENÜ EIN/AUS' verlassen werden. Alle Parameter werden im EEPROM (siehe Kapitel 9) gespeichert.

6. Gleichstrom-Spannung und Oszillogramme

Gleichstrom-Spannung und Oszillogramme werden mit dem eingeschalteten SERVICE STANDARD MODUS gemessen.

7. Gleichstrom-Spannungen und Oszillogramme auf der Sat-Stromnetz-Platine

Gleichstrom-Spannungen und Oszillogramme auf der Sat-Stromnetz-Platine müssen folgendermaßen gemessen werden:

* im Bezug auf die naheliegenste Erde des PCBs.
* in Bezug auf ⏚ (heißer Boden) in der primären Schaltung des Stromnetzes.

8. Oszillogramme auf der Sat Platine

Oszillogramme werden ohne Antennensignal ( ) gemessen, falls nicht anders vorgeschrieben.

* Video Bearbeitung:
  Verbinden Sie ein Verbindungskabel von der Rückseite des PM5518 zur Dekoder-Buchse der Sat-Box. VIDEO DEKODIERUNG und AUDIO DEKODIERUNG auf AUTOMATISCH ODER EXTERN im Install-Menü einstellen (das Gerät befindet sich jetzt nicht mehr in dem Service-Standard-Modus). Einen Farbbalken anwenden.
* Audio Bearbeitung:
  Um die Oszillogramme bei dem Audio-Bearbeitungsteil der Sat-Platine zu messen, wird außer einem Oszilloskop auch ein Funktionsgenerator benötigt (z.B. PM5138). Senden Sie ein Antennensignal zum Antennenstecker oder zur Dekoder-Buchse um die Stummschaltung zu deaktivieren. Entfernen Sie die SMD-Brücke 4152. Fügen Sie das Ton-Signal vom PM138 bei TON SAT BB direkt "nach" 4152 (zwischen 4152 und 3304) ein.
  Stellen Sie das PM5138 ein auf:
  - TP5 bei 6,575 MHz Übertragungsfrequenz (Mono-Empfang)
  - TP1, [10] und [12] bei 7,02 MHz Übertragungsfrequenz (Sprache 1 rechter Kanal)
  - [9] und [11] bei 7,20 MHz Übertragungsfrequenz (Sprache 2 linker Kanal).
  - FM-Modulation
  - 0,1 V_{rms} oder 0,14 V_{pp}
  - Abweichung 0,38 %

9.

Bei den Bauelelementen, die in den Ersatzteillisten aufgeführt sind, handelt es sich pro Position um Typen, die ungeachtet der eventuellen Typenangaben mit den im Gerät befindlichen Bauelementen völlig kompatibel sind.

Avertissements et remarques

(F)

Avertissements

1. Un appareil en cours de réparation doit toujours être branché à la tension-secteur par l'intermédiaire d'un transformateur d'isolement.

2. Les impératifs de sécurité exigent que l'appareil soit rétabli dans son état d'origine et que des composants identiques à ceux d'origine soient appliqués. Les éléments de sécurité sont désignés par le symbole ⚠.

3. Décharge électrostatique **ESD** 
Tous les circuits intégrés et de nombreux autres semi-conducteurs sont sensibles aux décharges électrostatiques. Un traitement non approprié au cours d'une réparation peut réduire sensiblement la durée de vie. Pour procéder à une réparation, vous devrez porter un bracelet serti à résistance pour éviter toute différence de potentiel entre vous-même et la masse de l'appareil. Les composants et les auxiliaires devront également se trouver au même potentiel.

4. Ne procédez jamais au remplacement de modules ou d'autres éléments alors que l'appareil est sous tension.

5. Pour l'ajustage, utiliser des outils en plastique au lieu d'instruments métalliques.
Ceci afin d'éviter les court-circuits et exclure l'instabilité dans certains circuits.

Remarques

1. Dans les GR2 appereiles avec recépteur satellite il n'y a plus possible d'entrer:
   * la mode hotel
   * la mode demonstration

2. **Ecartez module satellite**

   Sans module satellite, le téléviseur peut fonctionner sans problèmes; mais:
   * qu'un message d'erreur sera affiché sur l'écran.
   * la menu commande et installation seulement en anglais.

3. **Mode d'Entretien**

   Dans le cas où le Mode d'Entretien est entré pour le GR2 (connecter brièvement les deux griffes d'entretien M33 et M34 (SERVICE) derrière la touche INSTALL sur le support principal du GR2 tout en allumant l'appareil avec le bouton d'alimentation électrique), le Mode d'Entretien du module SAT-GR2 est automatiquement activé. **SER** est visualisé pour indiquer que le mode d'entretien est actif. La TV et le MODULE SAT restent en Mode d'Entretien jusqu'à ce que la commande de mise en attente (stand-by) soit donnée (ainsi on ne quitte pas le Mode d'Entretien après avoir débranché le courant). Après avoir entré le Mode d'Entretien, le Mode d'Entretien Implicite (= Service Default Mode) est automatiquement sélectionné.

4. **Mode Service par défault.**

   Outre les réglages du Mode d'Entretien Implicite du standard GR2, en plus pour le module SAT, ont été créés les réglages implicites suivants:
   Fréquence d'entree LNC14V pour SAT-box (polarisation horizontale)

LNC	LNC SAT1 si sélectionné
Polarisation	horizontale
Système	FSS
Tensione control d'antenne	OFF
Son	Mono 1
désembrouilleur	audio et vidéo interne.
Type de polariseur	polariseur d'impulsion.
choix du canal	Screen sport sur ASTRA satellit

5. **Options**

   Après pression simultanée des touches 'PROGRAM UP' et 'VOLUME DOWN' sur les touches de commande locales, le menu d'entretien principal est affiché. Afin que l'on puisse, par le biais de ce mode, procéder aux réglages corrects des effets chroma, le système de circuits de déconnexion automatique sera inactivé.
   Le menu d'entretien principal contient les éléments suivants:

rouge	OPTION 1
vert	OPTION 2
jaune	WHITE BALANCE
cyan	CUT-OFF

   En sélectionnant le bouton de couleur correspondant, un nouveau menu apparaît. Par le biais de la commande 'MENU ON/OFF', le menu d'entretien principal peut être rappelé. Après avoir défini les options, on peut également quitter le menu d'entretien principal par le biais de la commande 'MENU ON/OFF'. Tous les paramètres seront stockés dans l'EEPROM (voir chapitre 9).

6. **Tensions CC et oscillogrammes**

   Tensions CC et oscillogrammes sont mesurés avec le SERVICE DEFAULT MODE (= mode d'entretien implicite) allumé.

7. **Tensions CC et oscillogrammes sur la platine d'Alimentation Sat**

   Tensions CC et oscillogrammes au niveau de la Platine d'Alimentation Sat doivent être mesurés:
   * par rapport au contact terre le plus proche du PCB.
   * par rapport à ⊥ (terre chaude) dans le circuit primaire de l'alimentation.

Avertissements et remarques

8. Oscillogrammes au niveau de la platine Sat

Les oscillogrammes sont mesurés sans signal d'antenne ( ), à moins d'une indication contraire.

* Traitement vidéo:
  Relier un câble scart entre l'arrière du PM5518 et la prise du décodeur du Module Sat. Dans le Menu Install, mettre VIDEO DESCRAMBLING et AUDIO DESCRAMBLING (= désembrouillage vidéo et sonore) sur AUTOMATIC ou EXTERNAL (maintenant l'appareil n'est plus en Mode d' Entretien Implicite). Appliquer une barre de couleur.
* Traitement sonore:
  Afin de mesurer les oscillogrammes au niveau de la partie de Traitement Sonore de la Platine Sat, outre un oscilloscope, un générateur de fonctions (par ex. PM5138) est également nécessaire.
  Envoyer un signal d'antenne à la fiche d'antenne ou à la prise du décodeur afin de désactiver la sourdine (MUTE). Enlever le cavalier-SMD 4152. Injecter le signal sonore à partir du PM5138 au niveau du SOUND SAT BB, juste "après" 4152 (entre 4152 et 3304).
  Régler le PM5138 pour:
  - TP5 à une fréquence porteuse de 6,575 MHz (réception monophonique).
  - TP1, [10] et [12] à une fréquence porteuse de 7,02 MHz (langue 1, canal de droite).
  - [9] et [11] à une fréquence porteuse de 7,20 MHz (langue 2, canal de gauche).
  - modulation FM.
  - 0,1 V_{rms} ou à 0,14V_{pp}.
  - déviation 0,38%

9.

Les pièces citées dans les nomenclatures de pièces sont entièrement interchangeables par position avec les pièces de l'appareil, quelles que soient les indications éventuelles de type.

Mechanical instructions/Mechanische Anweisungen

(GB)

1. Removing the rear cover (see Fig. 4.1)

Before removing the rear cover of the TV-set, the satellite box has to be removed. The satellite box is fixed with two screws to the rear cover. These screws are allocated on the bottom-side of the satellite box. Remove this screws and take out the satellite box while disconnecting the 300V supply cable (on the Sat Power Supply Panel) and the interface cable (on the Euro connector Panel). Remove the rear cover and in case of a subwoofer assembly remove the subwoofer wire as well.

Without satellite box the TV can be operated without problems; but:

* an error message will be displayed on screen.
* the user menu and the installation menu will only be in english.

2. Removing transformer cover (see Fig. 4.2)

The transformer cover can be removed from the Sat Power Supply Panel when the fixation lug (besides the 300V supply voltage connector) is loosened. While loosing the fixation lug, the cover can be slided about 1 cm and the cover can be removed. When mounting the transformer cover again, take care that all lugs are positioned well.

Note: the transformer cover has a safety function!

3. Dismounting both panels out of the satellite box (see Fig. 4.3)

Both panels can be removed out of the satellite box by removing 4 fixation screws. Place the entire satellite box with it's back on the table. The four fixation screws are by now allocated at the four outside corners of the lower mounted Sat Panel.

4. Service position and Test points (see Fig. 4.4)

If the two satellite panels are removed out of the satellite box, both panels can be put simultaneously in their service position: place the panels upright with the satellite front-end on the table side. Test points are now available on the component side of the Sat Power Supply Panel and on the SMD side of the Sat Panel (audio and video processing).

For servicing, connect the satellite box to the television and place the box in its service position.

(D)

1. Entfernung der Rückwand (siehe Abb. 4.1)

Bevor Sie die Rückwand des Fernsehgerätes entfernen, muß die Satellit-Box entfernt werden. Die Satellit-Box ist mit zwei Schrauben an der Rückwand befestigt. Diese Schrauben befinden sich am Boden der Satellit-Box. Entfernen Sie diese Schrauben und entnehmen Sie die Satellit-Box während Sie den 300 V Netzstrom (auf der Sat Stromzufuhr-Platine) und den Interface-Strom unterbrechen.
Entfernen Sie die Rückwand und falls ein Sub-Tieftonlautsprecher angebracht ist, entfernen Sie auch das Sub-Tieftonkabel.

Das Fernsehgerät kann problemlos ohne Satellit-Box laufen; aber:

* auf dem Bildschirm erscheint jedoch ein Fehlermeldung.
* das Bedienungs- und Programmierungsmenu wird nur in Englisch sein.

2. Entfernung des Transformator-Gehäuses (siehe Abb. 4.2)

Das Transformator-Gehäuse kann von der Sat-Netz-Platine entfernt werden wenn die Befestigung des Kabelschuhs (neben der 300 V Netzschaltung) gelockert ist. Beim Lockern des Befestigungsschuhs, kann das Gehäuse ungefähr 1 cm verschoben und anschließend entfernt werden. Wenn das Transformator-Gehäuse wieder befestigt wird, achten Sie bitte darauf, daß sich alle Kabelschuhe an der richtigen Stelle befinden.

Achtung: das Transformator-Gehäuse hat eine Sicherheitsfunktion!

3. Lösen beider Platinen aus der Satellit-Box (siehe Abb. 4.3)

Beide Platinen können aus der Satellit-Box durch die Entnahme von 4 Befestigungsschrauben entfernt werden.
Legen Sie die ganze Satellit-Box mit dem Rücken auf den Tisch. Die vier Befestigungsschrauben sind jetzt aus den vier äußeren Ecken der tiefer montierten Platine entfernt.

4. Service-Position und Test-Stellen (siehe Abb. 4.4)

Wenn die zwei Satellit-Platinen aus der Satellit-Box entfernt sind, können beide Platinen gleichzeitig in die Service-Einstellung gebracht werden: legen Sie die Platinen aufrecht mit der Satellit-Vorderseite auf den Tisch. Die Test-Stellen befinden sich jetzt an der Elementseite der Sat-Stromnetz-Platine und an der SMD-Seite der Sat-Platine (Audio und Video-Bearbeitung).

Für die Wartung verbinden Sie die Satellit-Box mit dem Fernsehgerät und bringen Sie die Box in ihrer Service-Stellung.

Instructions d'ordre mécanique

(F)

1. Retrait du couvercle arrière (voir fig. 4.1)

Avant de retirer le couvercle arrière du téléviseur, le module satellite doit être retiré. Le module satellite est fixé par deux vis au couvercle arrière. Ces vis se trouvent du côté inférieur du module satellite. Oter ces vis et retirer le module satellite en débranchant le câble d'alimentation de 300 V (sur la Platine d'Alimentation Sat) et le câble d'interface (sur la Platine du connecteur Euro).
Retirer le couvercle arrière et dans le cas d'un assemblage d'un subwoofer, retirer également le fil du subwoofer.

Sans module satellite, le téléviseur peut fonctionner sans problèmes; mais:

* qu'un message d'erreur sera affiché sur l'écran.
* la menu commande et installation seulement en anglais.

2. Retrait du couvercle du transformateur (voir fig. 4.2)

Le couvercle du transformateur peut être enlevé de la Platine d'Alimentation Sat lorsque le tenon de fixation (outre le connecteur d'alimentation de 300 V) est détaché. Pendant le détachement du tenon de fixation, le couvercle peut être glissé de 1 cm puis retiré. Pendant la remise en place du couvercle du transformateur, veiller à ce que tous les tenons soient bien positionnés.

Attention: le couvercle du transformateur à une fonction de protection!

3. Démontage des deux platines hors du module satellite (voir fig. 4.3)

Les deux platines peuvent être retirées du module satellite en ôtant les 4 vis de fixation. Disposer le module satellite entier, son côté arrière sur la table. Les quatre vis de fixation se trouvent alors dans les 4 coins extérieurs de la Platine Sat montée inférieure.

4. Position d'entretien et contacts à tester (voir figure 4.4)

Si les deux platines satellites sont retirées du module satellite, les deux platines peuvent être mises simultanément dans leur position d'entretien: placer les platines verticalement, l'avant satellite du côté table. Les contacts à tester se trouvent alors du côté composants de la Platine d'Alimentation Sat et le côté SMD de la Platine Sat (traitement sonore et vidéo).

Pour l'entretien, relier le module satellite au téléviseur et mettre le module dans sa position d'entretien.

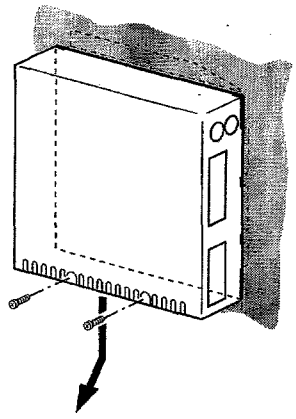


Fig 4.1

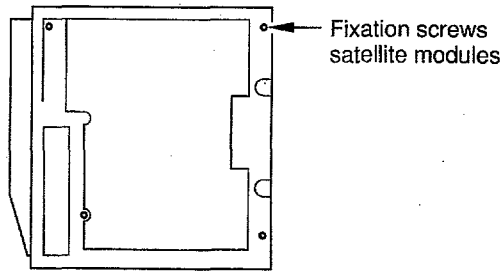


Fig 4.3

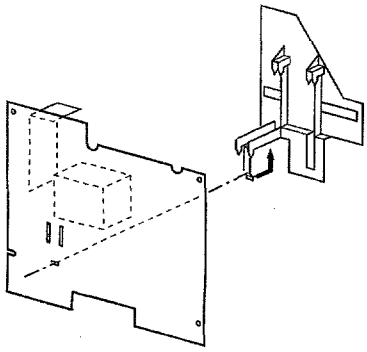


Fig 4.2

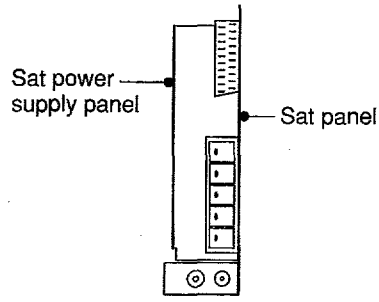
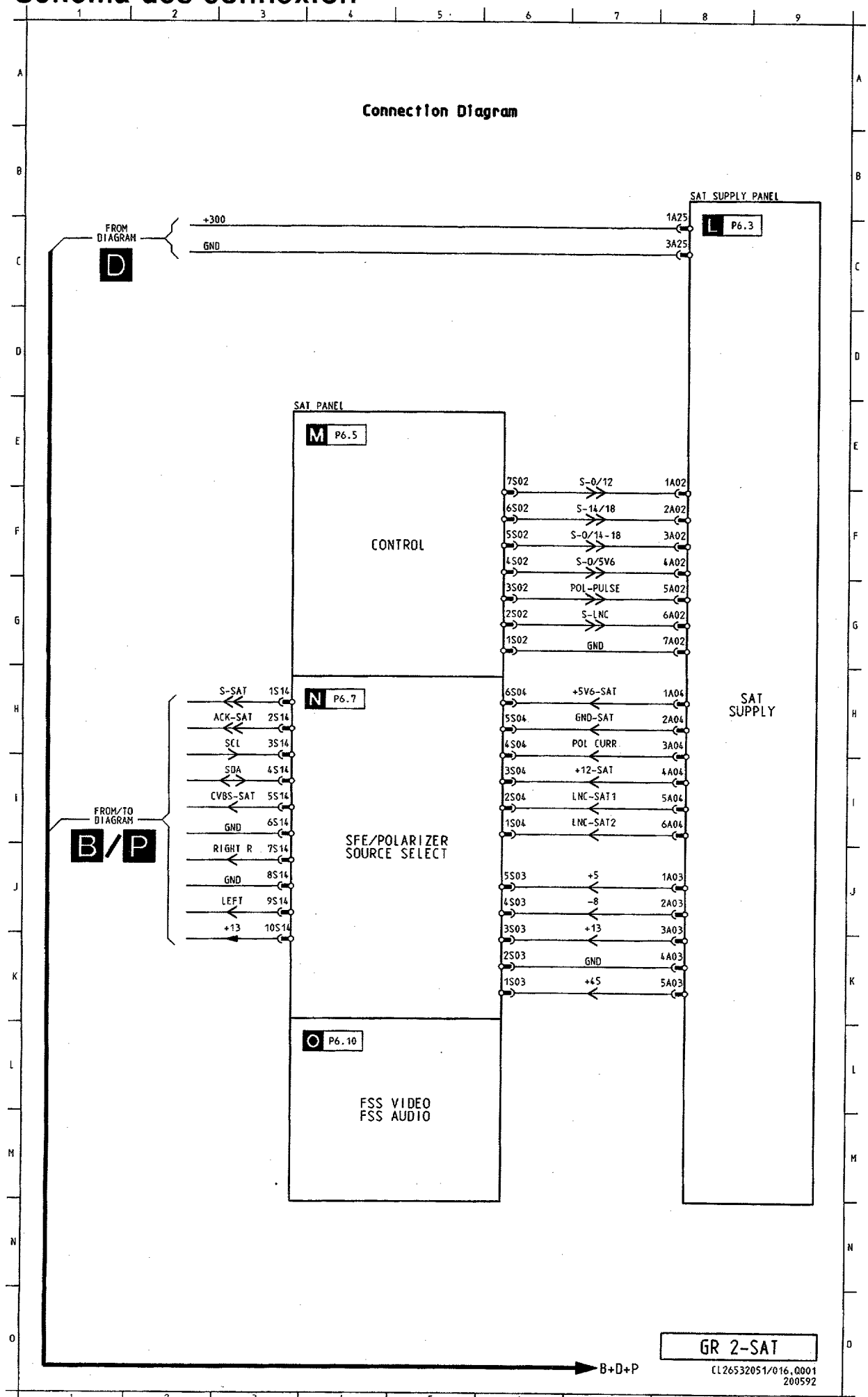


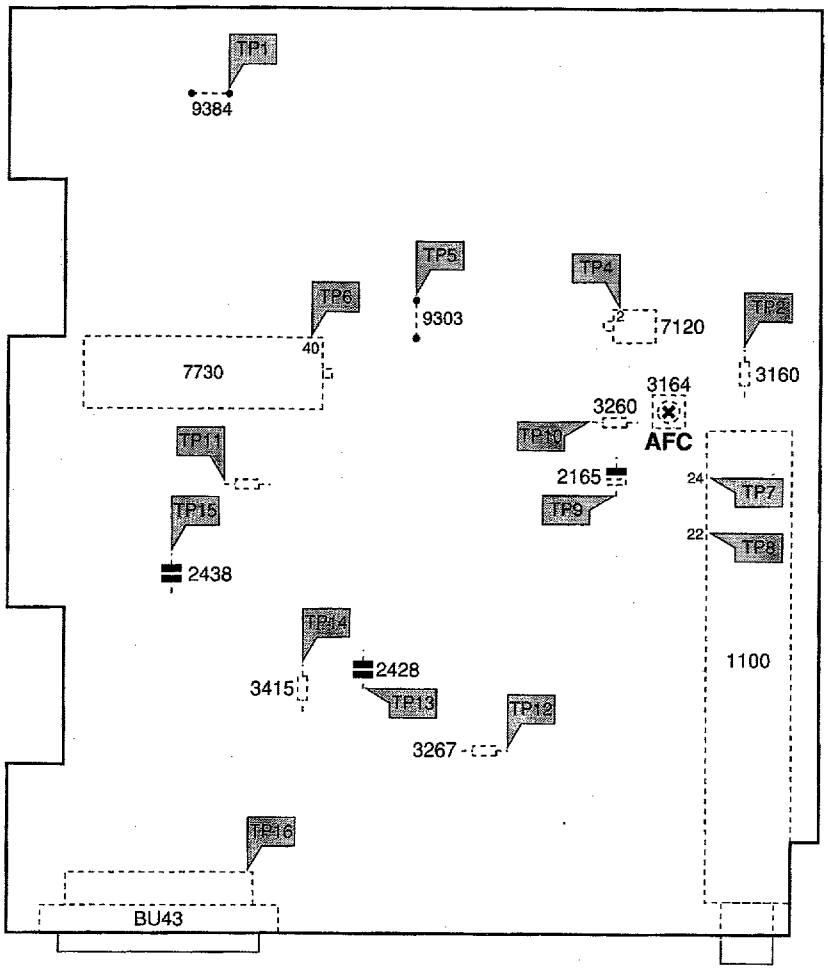
Fig 4.4

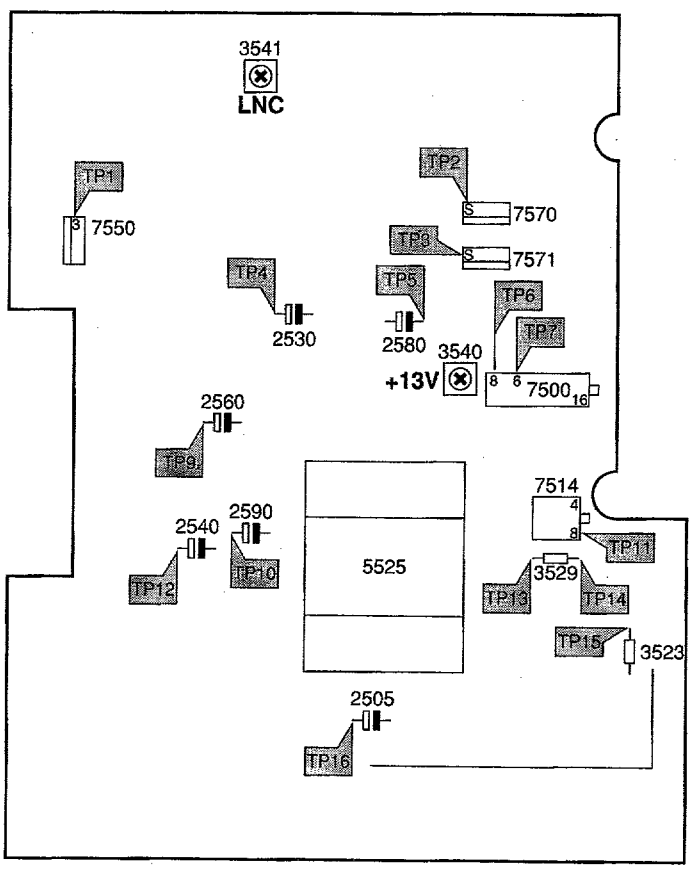
CL 26532051/025
190592

Connection diagram/Schaltdiagramm/ Schéma des connexion



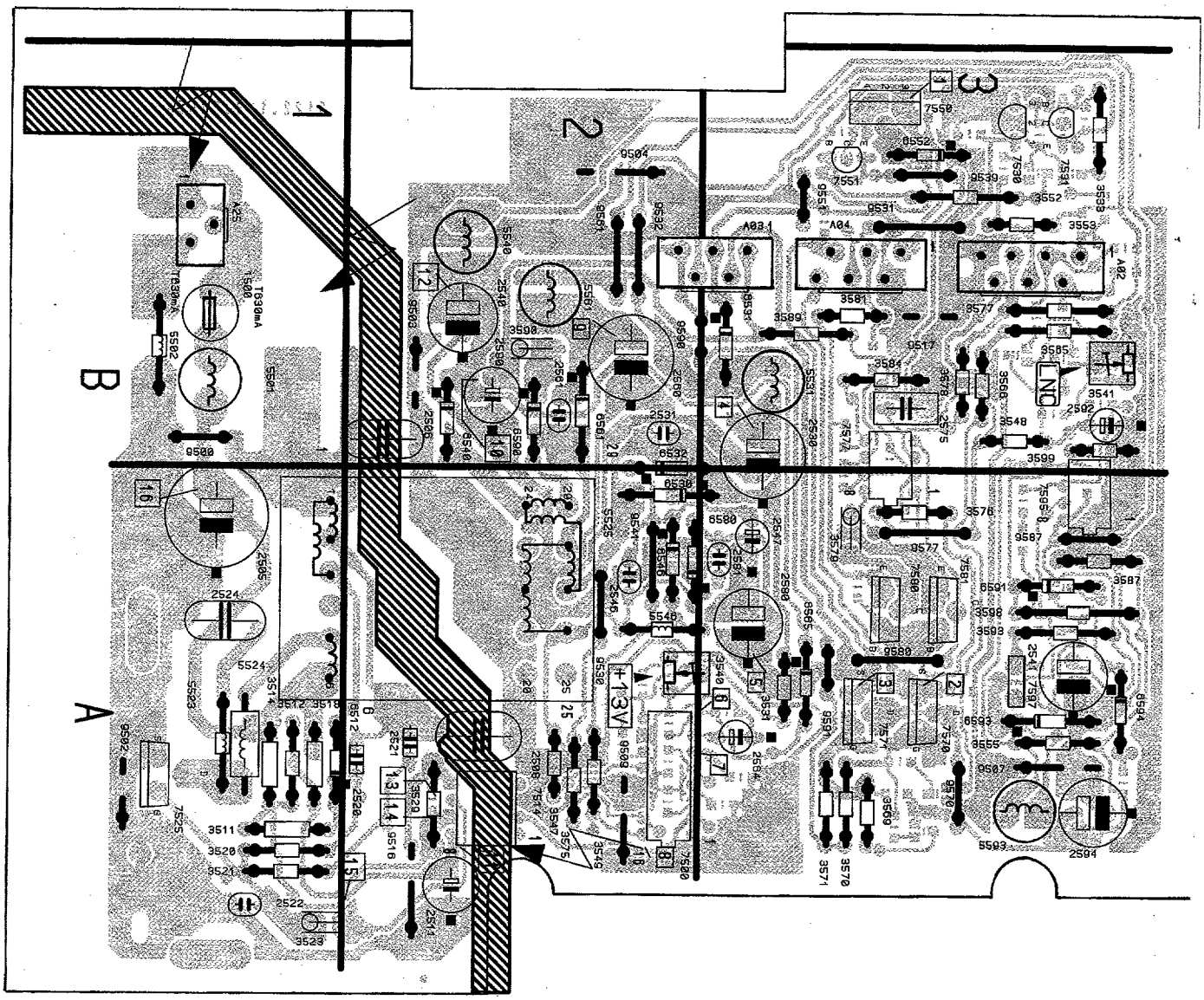
Adjustment diagram/Einstellungsdiagramm/ Schéma des réglages





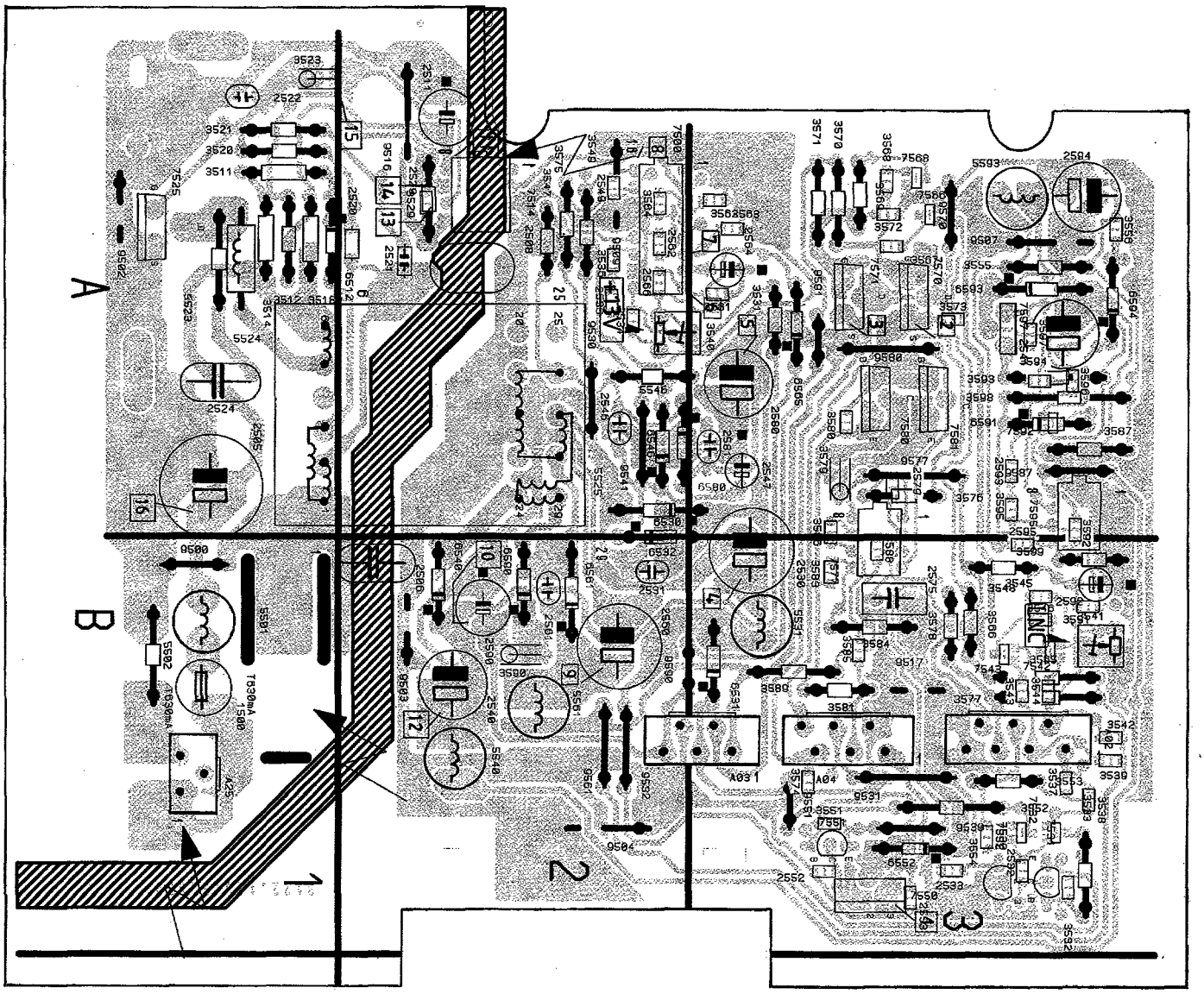
CL 26532051/035
190592

Power supply/Stromversorgung/Alimentation

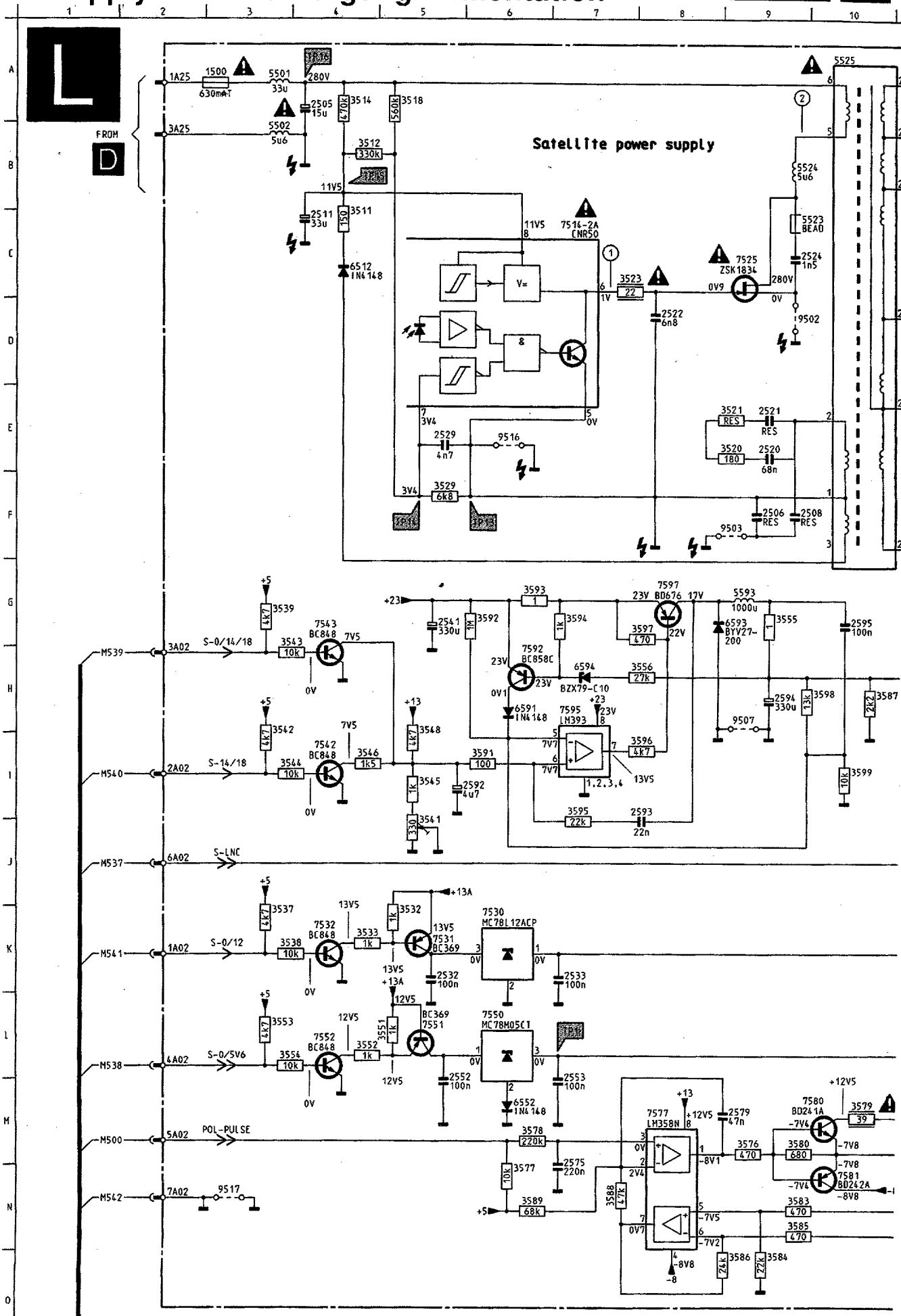


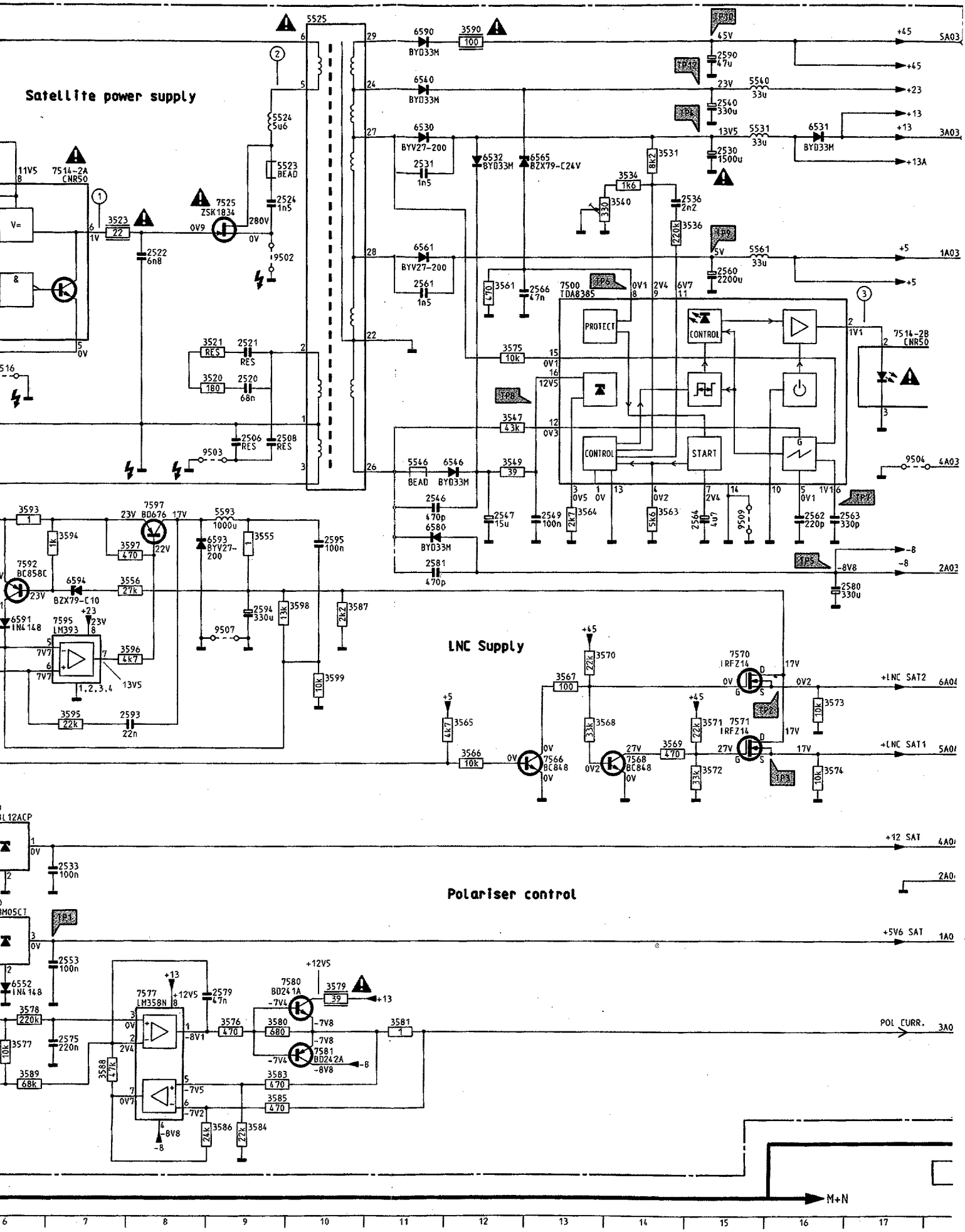
1500	B1	2592	B3	3569	A3	5540	B2	7531	B3	9541	A2
2505	A1	2594	A3	3570	A3	5546	A2	7550	B3	9551	B3
2506	B2	3511	A1	3571	A3	5561	B2	7551	B3	9561	B2
2508	A2	3512	A1	3575	A2	5593	A3	7570	A3	9570	A3
2511	A2	3514	A1	3576	A3	6512	A1	7571	A3	9577	A3
2520	A2	3518	A1	3577	B3	6530	A2	7577	A3	9580	A3
2521	A2	3520	A1	3578	B3	6531	B3	7580	A3	9587	A3
2522	A1	3521	A1	3579	A3	6532	B2	7581	A3	9590	B2
2524	A1	3523	A1	3581	B3	6540	B2	7595	A3	9591	A3
2530	B3	3529	A2	3584	B3	6546	A2	7597	A3	A02	B3
2531	B2	3531	A3	3587	A3	6552	B3	9500	B1	A03	B3
2540	B2	3533	B3	3589	B3	6561	B2	9502	A1	A04	B3
2541	A3	3540	A2	3590	B2	6565	A3	9503	B2	A25	B1
2546	A2	3541	B3	3593	A3	6580	A2	9504	B2		
2547	A3	3547	A2	3598	A3	6590	B2	9507	A3		
2560	B2	3548	B3	3599	B3	6591	A3	9509	A2		
2561	B2	3549	A2	5501	B1	6593	A3	9516	A2		
2564	A3	3552	B3	5502	B1	6594	A3	9517	B3		
2575	B3	3553	B3	5523	A1	7500	A2	9530	A2		
2580	A3	3555	A3	5524	A1	7514	A2	9531	B3		
2581	A3	3565	B3	5525	A2	7525	A1	9532	B2		
2590	B2	3566	B3	5531	B3	7530	B3	9539	B3		

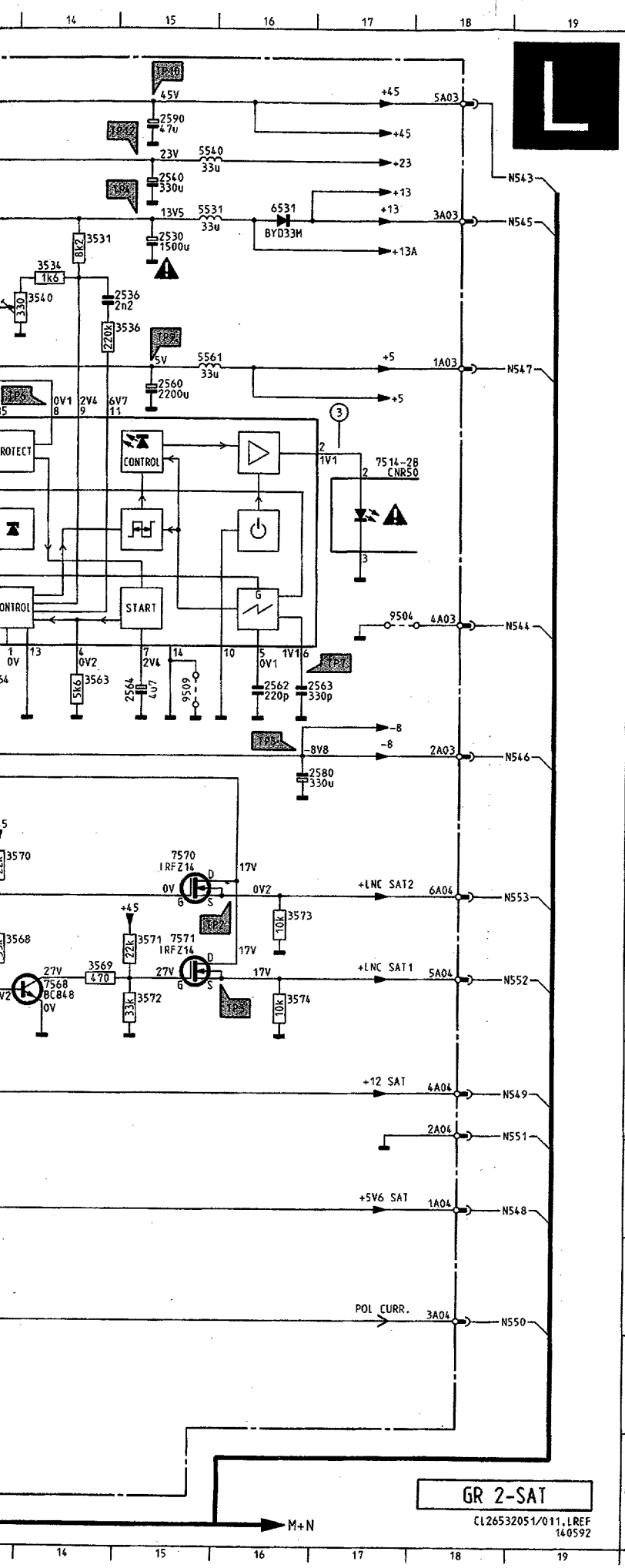
6.2 GR2-SAT Power supply/Stromversorgung/Alimentation



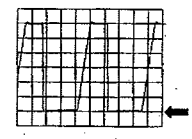
1500	B1	2564	A3	3538	B3	3570	A3	3597	A3	6594	A3	9504	B2
2505	A1	2566	A2	3539	B3	3571	A3	3598	A3	7500	A2	9507	A3
2506	B2	2575	B3	3540	A2	3572	A3	3599	B3	7514	A2	9509	A2
2508	A2	2579	A3	3541	B3	3573	A3	5501	B1	7525	A1	9516	A2
2511	A2	2580	A3	3542	B3	3574	B3	5502	B1	7530	B3	9517	B3
2520	A2	2581	A3	3543	B3	3575	A2	5523	A1	7531	B3	9530	A2
2521	A2	2590	B2	3544	B3	3576	A3	5524	A1	7532	B3	9531	B3
2522	A1	2592	B3	3545	B3	3577	B3	5525	A2	7542	B3	9532	B2
2524	A1	2593	A3	3546	B3	3578	B3	5531	B3	7543	B3	9539	B3
2529	A2	2594	A3	3547	A2	3579	A3	5540	B2	7550	B3	9541	A2
2530	B3	2595	B3	3548	B3	3580	A3	5546	A2	7551	B3	9551	B3
2531	B2	2600	B1	3549	A2	3581	B3	5561	B2	7552	B3	9561	B2
2532	B3	3511	A1	3551	B3	3583	B3	5593	A3	7566	A3	9570	A3
2533	B3	3512	A1	3552	B3	3584	B3	6512	A1	7568	A3	9577	A3
2536	A2	3514	A1	3553	B3	3585	B3	6530	A2	7570	A3	9580	A3
2540	B2	3518	A1	3554	B3	3586	B3	6531	B3	7571	A3	9587	A3
2541	A3	3520	A1	3555	A3	3587	A3	6532	B2	7577	A3	9590	B2
2546	A2	3521	A1	3556	A3	3588	B3	6540	B2	7580	A3	9591	A3
2547	A3	3523	A1	3561	A3	3589	B3	6546	A2	7581	A3	A02	B3
2549	A2	3529	A2	3563	A3	3590	B2	6552	B3	7592	A3	A03	B3
2552	B3	3531	A3	3564	A2	3591	B3	6561	B2	7595	A3	A04	B3
2553	B3	3532	B3	3565	B3	3592	B3	6565	A3	7597	A3	A25	B1
2560	B2	3533	B3	3566	B3	3593	A3	6580	A2	7600	B1		
2561	B2	3534	A2	3567	A3	3594	A3	6590	B2	9500	B1		
2562	A2	3536	A2	3568	A3	3595	A3	6591	A3	9502	A1		
2563	A3	3537	B3	3569	A3	3596	A3	6593	A3	9503	B2		


L
FROM D
Satellite power supply
1A25
1500
630mAT
5501
33u
280V
2505
15u
3A25
5502
5u6
3514
470k
3518
560k
3512
330k
11V5
2511
33u
3511
150
6512
1N4148
7514-2A
CNR50
V=
&
3523
22
1V
2522
6n8
7525
ZSK1834
0V9
280V
0V
19502
5525
5524
5u6
5523
BEAD
2524
1n5
3521
RES
2521
RES
3520
180
2520
68n
2529
4n7
9516
3529
6k8
3V4
2506
RES
2508
RES
9503
+5
+23
+13
+13A
+12V5
3539
4k7
7543
BC848
7V5
3543
10k
0V
M539
3A02
S-0/14/18
2541
330u
1M
3592
3593
1
3594
1k
7597
BD676
23V
17V
22V
3597
470
5593
1000u
6593
BYV27-
200
3555
2595
100n
7592
BC858C
23V
6594
BZX79-C10
3556
27k
0V1
6591
1N4148
7595
LM393
3596
4k7
7V7
1,2,3,4
13V5
2594
330u
13k
3598
2k2
3587
9507
10k
3599
3542
7542
BC848
3544
3546
1k5
M540
2A02
S-14/18
3548
3591
100
3545
1k
2592
4u7
330
3541
3595
22k
2593
22n
M537
6A02
S-LNC
3537
3538
7532
BC848
3533
7531
BC369
3532
7530
MC78L12ACP
2532
100n
2533
100n
M541
1A02
S-0/12
3553
3554
7552
BC848
3552
3551
7550
MC78M05CT
2552
100n
2553
100n
6552
1N4148
M538
4A02
S-0/5V6
M500
5A02
POL-PULSE
M542
7A02
9517
3578
220k
3577
10k
2575
220n
3589
68k
3588
47k
7577
LM358N
2579
47n
3576
470
7580
BD241A
-7V4
3579
39
-7V8
3580
680
7581
BD242A
-8V8
3583
470
3585
470
3586
24k
3584
22k
-8V1
-7V5
-7V2
-8

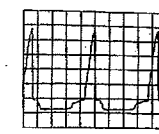

Satellite power supply
LNC Supply
Polariser control
PROTECT
CONTROL
START
+45
+23
+13
+13A
+5
+LNC SAT2
+LNC SAT1
+12 SAT
+5V6 SAT
POL CURR.
M+N



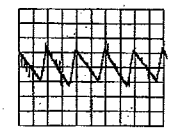
	1500	A 3	6512	C 4
	2505	A 4	6530	B11
	2506	F 9	6531	B16
	2508	F 9	6532	C12
A	2511	C 4	6540	B11
	2520	E 9	6546	F12
	2521	E 9	6552	M 6
	2522	D 8	6561	D11
	2524	C 9	6565	C13
	2529	E 5	6580	G11
	2530	B15	6590	A11
	2531	C11	6591	H 6
B	2532	K 5	6593	G 9
	2533	K 7	6594	H 7
	2536	C14	7500	D13
	2540	B15	7514	C 7
	2541	G 5	7514	E18
	2546	G11	7525	C 9
	2547	G12	7530	K 6
	2549	G13	7531	K 5
C	2552	M 5	7532	K 4
	2553	M 7	7542	I 4
	2560	D15	7543	G 4
	2561	D11	7550	L 6
	2562	G16	7551	L 5
	2563	G16	7552	L 4
	2564	G15	7566	J13
D	2566	D13	7568	J14
	2575	N 7	7570	I15
	2579	M 9	7571	J15
	2580	H16	7577	M 8
	2581	H11	7580	M10
	2590	A15	7581	N10
	2592	I 5	7592	H 6
	2593	I 8	7595	H 7
E	2594	H 9	7597	G 8
	2595	G10	9502	D 9
	3511	B 4	9503	F 9
	3512	B 4	9504	F17
	3514	A 4	9507	H 9
	3518	A 5	9509	G15
	3520	E 9	9516	E 6
	3521	E 9	9517	N 3
F	3523	C 7		
	3529	F 5		
	3531	B14		
	3532	J 5		
	3533	K 4		
	3534	C14		
	3536	C14		
G	3537	J 3		
	3538	K 3		
	3539	G 3		
	3540	C14		
	3541	I 5		
	3542	H 3		
	3543	H 3		
H	3544	I 3		
	3545	I 5		
	3546	I 4		
	3547	F12		
	3548	H 5		
	3549	F12		
	3551	L 5		
	3552	L 4		
I	3553	L 3		
	3554	L 3		
	3555	G 9		
	3556	H 8		
	3561	D12		
	3563	G14		
	3564	G13		
	3565	I12		
J	3566	J12		
	3567	I13		
	3568	I13		
	3569	J14		
	3570	I13		
	3571	I15		
	3572	J15		
K	3573	I16		
	3574	J16		
	3575	E12		
	3576	M 9		
	3577	M 6		
	3578	M 6		
	3579	M10		
L	3580	M 9		
	3581	M11		
	3583	N 9		
	3584	O 9		
	3585	N 9		
	3586	O 9		
	3587	H10		
	3588	N 7		
M	3589	N 6		
	3590	A12		
	3591	I 6		
	3592	G 6		
	3593	G 6		
	3594	G 7		
	3595	I 7		
	3596	I 8		
N	3597	G 8		
	3598	H10		
	3599	I10		
	5501	A 3		
	5502	B 3		
	5523	C 9		
	5524	B 9		
	5525	A10		
O	5531	B15		
	5540	B15		
	5546	F11		
	5561	D15		
	5593	G 9		



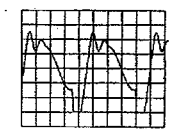
TP 7
0,5 V/div DC
5 µS/div



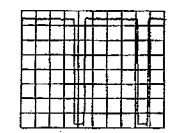
① 2 V/div DC
5 µS/div



TP 14
50 mV/div AC
5 mS/div

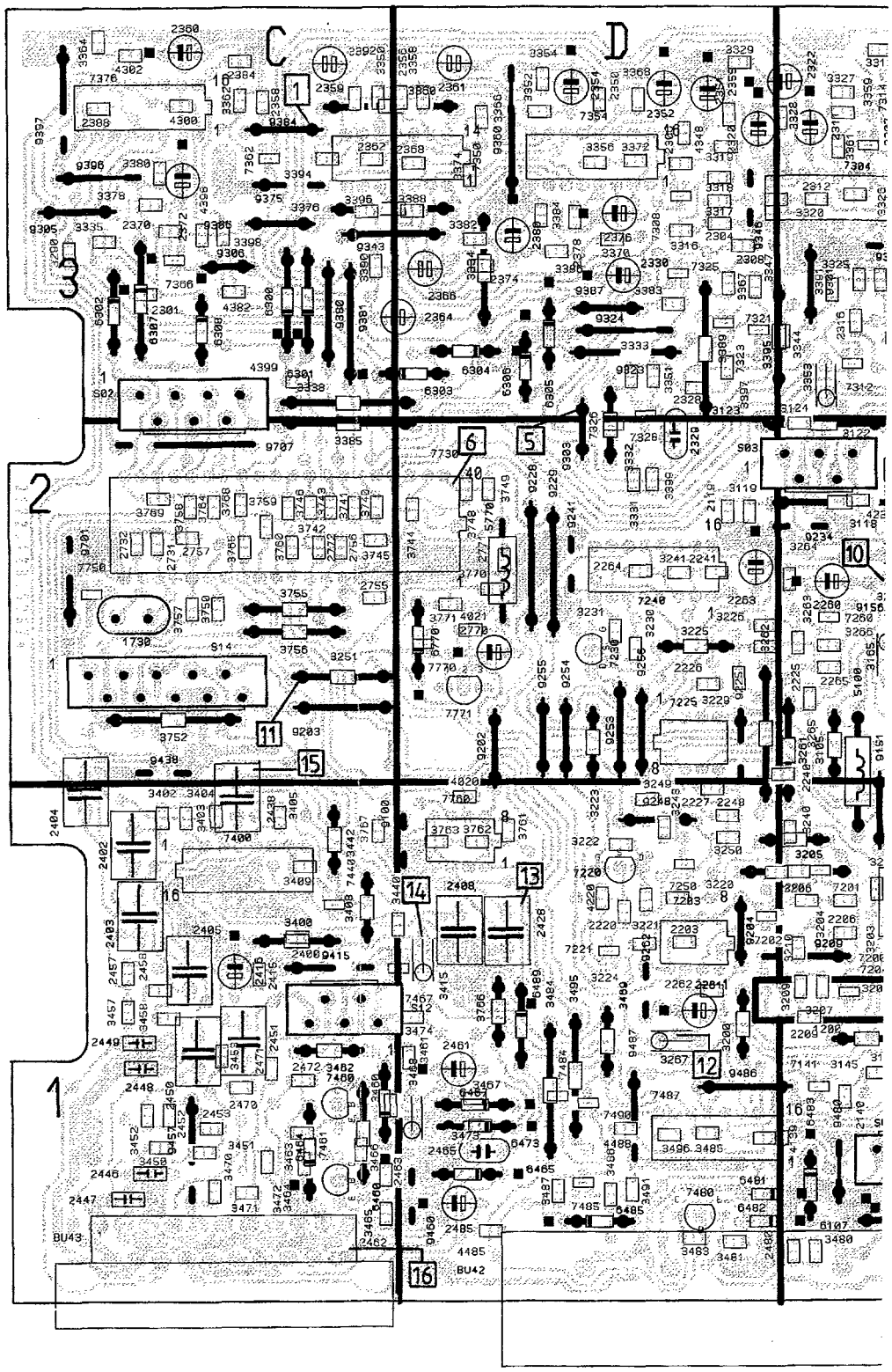


② 100 V/div DC
5 µS/div



③ 0,2 V/div DC
5 µS/div

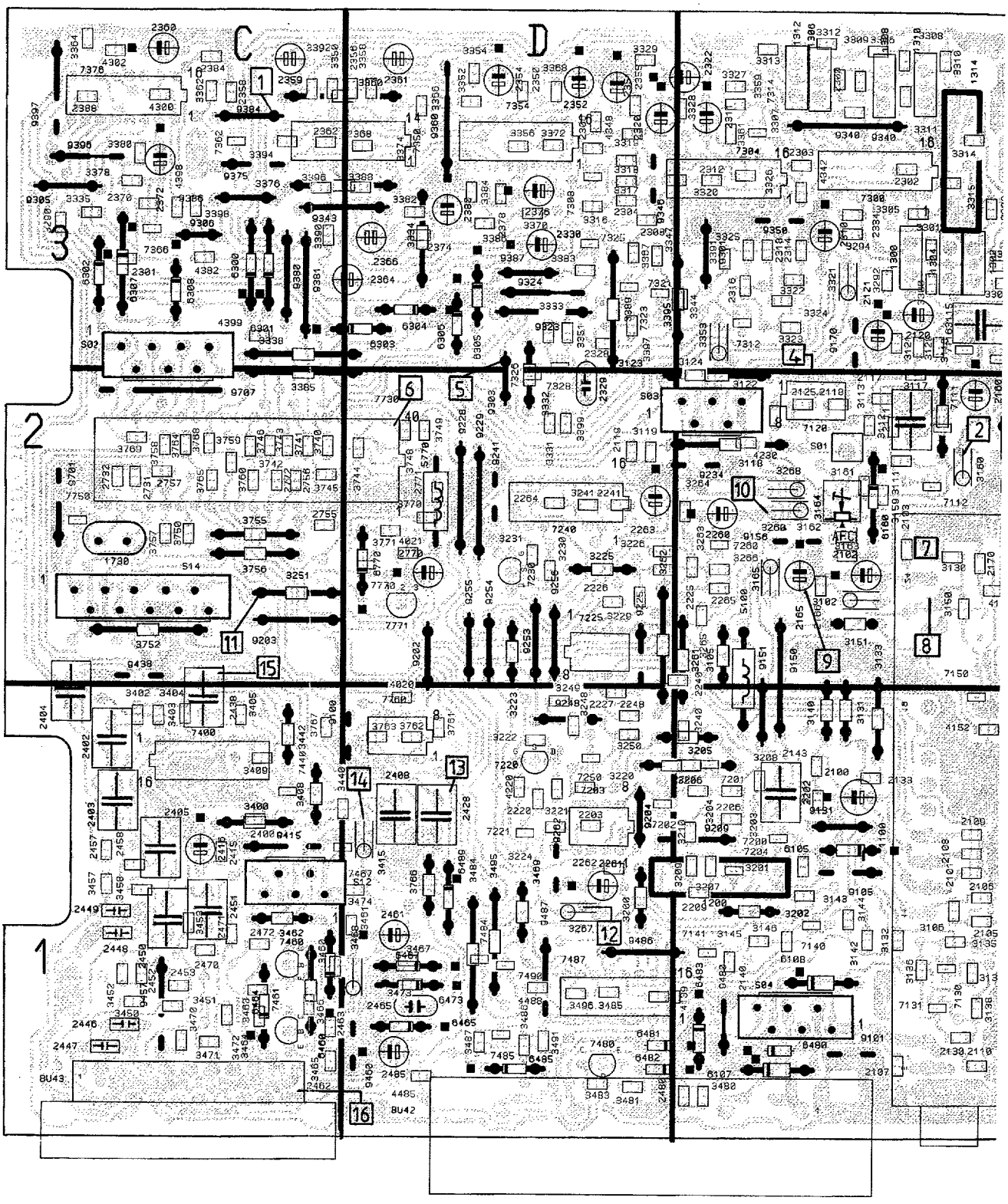
SAT panel/SAT Platine/Platine SAT



1100 E1	2446 C1	3300 E3							
1200 E1	2447 C1	3301 E3							
1300 E3	2448 C1	3302 E3							
1302 E3	2449 C1	3303 E3							
1304 E3	2450 C1	3304 E3							
1306 E3	2451 C1	3305 E3							
1308 E3	2452 C1	3306 E3							
1310 E3	2453 C1	3307 E3							
1312 E3	2457 C1	3308 E3							
1314 E3	2458 C1	3309 E3							
1730 C2	2461 D1	3310 E3							
2100 E1	2462 C1	3311 E3							
2101 E1	2463 C1	3312 E3							
2102 E2	2465 D1	3313 E3							
2103 E2	2470 C1	3314 E3							
2105 E1	2471 C1	3315 E3							
2106 E1	2472 C1	3316 D3							
2107 E1	2480 E1	3317 D3							
2108 E1	2485 D1	3318 D3							
2109 E1	2731 C2	3319 D3							
2110 E1	2732 C2	3320 E3							
2111 E2	2755 C2	3321 E3							
2115 E3	2756 C2	3322 E3							
2117 E2	2757 C2	3323 E3							
2118 E2	2770 D2	3324 E3							
2119 D2	2771 D2	3325 E3							
2120 E3	2772 C2	3326 E3							
2121 E3	3102 E2	3327 E3							
2125 E2	3105 E2	3328 E3							
2130 E1	3106 E1	3329 D3							
2133 E1	3111 E2	3331 D2							
2140 E1	3112 E2	3332 D2							
2143 E1	3113 E2	3333 D3							
2160 E2	3115 E3	3334 D3							
2165 E2	3116 E2	3335 C3							
2166 E2	3117 E2	3338 C3							
2170 E2	3118 E2	3344 E3							
2202 E1	3119 D2	3347 D3							
2203 D1	3120 E3	3350 C3							
2205 E1	3121 E3	3351 D3							
2206 E1	3122 E2	3352 D3							
2209 E1	3123 E2	3353 E3							
2220 D1	3124 E2	3354 D3							
2225 D2	3130 E2	3356 D3							
2226 D2	3131 E1	3358 D3							
2227 D1	3132 E1	3359 E3							
2240 E2	3133 E1	3360 D3							
2241 D2	3135 E1	3361 E3							
2248 D1	3136 E1	3362 C3							
2260 E2	3137 E1	3364 C3							
2261 D1	3138 E1	3366 D3							
2262 D1	3140 E1	3367 D3							
2263 D2	3141 E1	3368 D3							
2264 D2	3142 E1	3370 D3							
2265 E2	3143 E1	3372 D3							
2300 E3	3144 E1	3374 D3							
2301 C3	3145 E1	3376 D3							
2302 E3	3146 E1	3378 C3							
2303 E3	3150 E2	3380 C3							
2304 D3	3151 E2	3382 D3							
2306 D3	3159 E2	3383 D3							
2308 D3	3160 E2	3384 D3							
2310 E3	3161 E2	3385 C2							
2311 E3	3162 E2	3386 D3							
2312 E3	3163 E2	3388 D3							
2314 E3	3164 E2	3389 D3							
2316 E3	3165 E2	3390 C3							
2318 E3	3200 D1	3391 E3							
2320 D3	3201 E1	3392 C3							
2322 E3	3202 E1	3394 C3							
2328 D3	3203 E1	3395 E3							
2329 D2	3204 E1	3396 C3							
2330 D3	3205 E1	3397 D3							
2334 E3	3206 E1	3398 C3							
2350 D3	3207 E1	3399 D2							
2351 D3	3208 E1	3400 C1							
2352 D3	3209 E1	3402 C1							
2354 D3	3210 E1	3403 C1							
2355 D3	3220 D1	3404 C1							
2356 D3	3221 D1	3405 C1							
2358 C3	3222 D1	3408 C1							
2359 C3	3223 D2	3409 C1							
2360 C3	3224 D1	3415 D1							
2361 D3	3225 D2	3440 D1							
2362 C3	3226 D2	3442 C1							
2364 D3	3229 D2	3450 C1							
2366 D3	3230 D2	3451 C1							
2368 D3	3231 D2	3452 C1							
2370 C3	3240 E1	3453 C1							
2372 C3	3241 D2	3457 C1							
2374 D3	3248 D1	3458 C1							
2376 D3	3249 D1	3460 C1							
2378 D3	3250 D1	3461 D1							
2380 D3	3251 C2	3462 C1							
2384 C3	3260 E2	3463 C1							
2388 C3	3261 E2	3464 C1							
2400 C1	3262 D2	3465 C1							
2402 C1	3263 E2	3466 C1							
2403 C1	3264 E2	3467 D1							
2404 C1	3265 E2	3468 D1							
2405 C1	3266 E2	3469 D1							
2408 D1	3267 D1	3470 C1							
2415 C1	3268 E2	3471 C1							
2416 C1	3290 C3	3472 C1							
2428 D1	3292 E3	3473 D1							
2438 C1	3294 E3	3474 D1							

3480 E1	3748 D2	3768 C2	4399 C3	6308 C3	7120 E2	7260 E2	7440 C1	9131 E1	
3481 D1	3749 D2	3769 C2	4485 D1	6460 C1	7130 E1	7300 E3	7460 C1	9150 E2	
3483 D1	3750 C2	3770 D2	4488 D1	6464 C1	7131 E1	7304 E3	7461 C1	9151 E1	
3484 D1	3752 C2	3771 D2	5100 E2	6465 D1	7140 E1	7308 D3	7467 D1	9155 E2	
3485 D1	3755 C2	4020 D1	5770 D2	6467 D1	7141 E1	7312 E3	7480 D1	9156 E2	
3486 D1	3756 C2	4021 D2	6105 E1	6473 D1	7150 E1	7314 E3	7484 D1	9170 E3	
3487 D1	3757 C2	4139 D1	6107 E1	6480 E1	7200 E1	7321 D3	7485 D1	9202 D2	
3491 D1	3758 C2	4152 E1	6108 E1	6481 D1	7201 E1	7323 D3	7487 D1	9203 C2	
3495 D1	3759 C2	4154 E2	6160 E2	6482 D1	7202 D1	7325 D3	7490 D1	9204 D1	
3496 D1	3760 C2	4220 D1	6300 C3	6483 E1	7203 D1	7326 D2	7730 C2	9209 E1	
3740 C2	3761 D1	4230 E2	6301 C3	6485 D1	7204 E1	7328 D2	7750 C2	9225 D2	
3741 C2	3762 D1	4300 C3	6302 C3	6489 D1	7220 D1	7350 D3	7760 D1	9228 D2	
3742 C2	3763 D1	4302 C3	6303 D3	6770 D2	7221 D1	7354 D3	7770 D2	9229 D2	
3743 C2	3764 C2	4342 E3	6304 D3	7111 E2	7225 D2	7362 C3	7771 D2	9234 E2	
3744 D2	3765 C2	4348 D3	6305 D3	7112 E2	7230 D2	7366 C3	9100 D1	9241 D2	
3745 C2	3766 D1	4382 C3	6306 D3	7115 E3	7240 D2	7376 C3	9101 E1	9248 D1	
3746 C2	3767 C1	4398 C3	6307 C3	7116 E3	7250 D1	7400 C1	9105 E1	9253 D2	

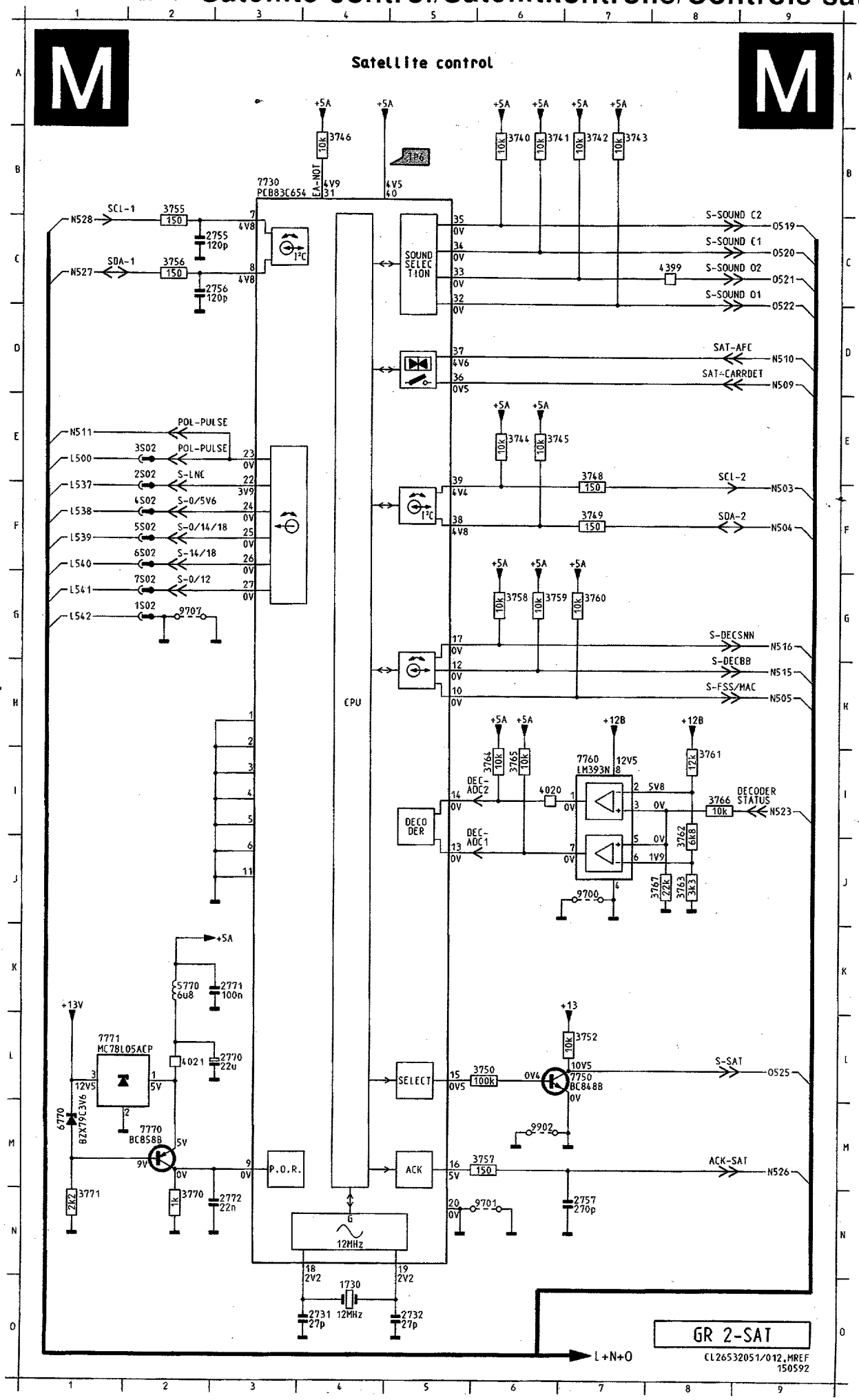
SAT panel/SAT Platine/Platine SAT



3300 E3
3301 E3
3302 E3
3303 E3
3304 E3
3305 E3
3306 E3
3307 E3
3308 E3
3309 E3
3310 E3
3311 E3
3312 E3
3313 E3
3314 E3
3315 E3
3316 D3
3317 D3
3318 D3
3319 D3
3320 E3
3321 E3
3322 E3
3323 E3
3324 E3
3325 E3
3326 E3
3327 E3
3328 E3
3329 D3
3331 D2
3332 D2
3333 D3
3334 D3
3335 C3
3338 C3
3344 E3
3347 D3
3350 C3
3351 D3
3352 D3
3353 E3
3354 D3
3356 D3
3358 D3
3359 E3
3360 D3
3361 E3
3362 C3
3364 C3
3366 D3
3367 D3
3368 D3
3370 D3
3372 D3
3374 D3
3376 D3
3378 C3
3380 C3
3382 D3
3383 D3
3384 D3
3385 C2
3386 D3
3388 D3
3389 D3
3390 C3
3391 E3
3392 C3
3394 C3
3395 E3
3396 C3
3397 D3
3398 C3
3399 D2
3400 C1
3402 C1
3403 C1
3404 C1
3405 C1
3408 C1
3409 C1
3415 D1
3440 D1
3442 C1
3450 C1
3451 C1
3452 C1
3453 C1
3457 C1
3458 C1
3460 C1
3461 D1
3462 C1
3463 C1
3464 C1
3465 C1
3466 C1
3467 D1
3468 D1
3469 D1
3470 C1
3471 C1
3472 C1
3473 D1
3474 D1

3480 E1
3481 D1
3483 D1
3484 D1
3485 D1
3486 D1
3487 D1
3491 D1
3495 D1
3496 D1
3740 C2
3741 C2
3742 C2
3743 C2
3744 D2
3745 C2
3746 C2
3748 D2
3749 D2
3750 C2
3752 C2
3755 C2
3756 C2
3757 C2
3758 C2
3759 C2
3760 C2
3761 D1
3762 D1
3763 D1
3764 C2
3765 C2
3766 D1
3767 C1
3768 C2
3769 C2
3770 D2
3771 D2
4020 D1
4021 D2
4139 D1
4152 E1
4154 E2
4220 D1
4230 E2
4300 C3
4302 C3
4342 E3
4348 D3
4382 C3
4398 C3
4399 C3
4485 D1
4488 D1
5100 E2
5770 D2
6105 E1
6107 E1
6108 E1
6160 E2
6300 C3
6301 C3
6302 C3
6303 D3
6304 D3
6305 D3
6306 D3
6307 C3
6308 C3
6460 C1
6464 C1
6465 D1
6467 D1
6473 D1
6480 E1
6481 D1
6482 D1
6483 E1
6485 D1
6489 D1
6770 D2
7111 E2
7112 E2
7115 E3
7116 E3
7120 E2
7130 E1
7131 E1
7140 E1
7141 E1
7150 E1
7200 E1
7201 E1
7202 D1
7203 D1
7204 E1
7220 D1
7221 D1
7225 D2
7230 D2
7240 D2
7250 D1
7260 E2
7300 E3
7304 E3
7308 D3
7312 E3
7314 E3
7321 D3
7323 D3
7325 D3
7326 D2
7328 D2
7350 D3
7354 D3
7362 C3
7366 C3
7376 C3
7400 C1
7440 C1
7460 C1
7461 C1
7467 D1
7480 D1
7484 D1
7485 D1
7487 D1
7490 D1
7730 C2
7750 C2
7760 D1
7770 D2
7771 D2
9100 D1
9101 E1
9105 E1
9131 E1
9150 E2
9151 E1
9155 E2
9156 E2
9170 E3
9202 D2
9203 C2
9204 D1
9209 E1
9225 D2
9228 D2
9229 D2
9234 E2
9241 D2
9248 D1
9253 D2
9254 D2
9255 D2
9256 D2
9262 D1
9301 E3
9303 D2
9305 C3
9306 C3
9323 D3
9324 D3
9340 E3
9343 D3
9346 D3
9350 E3
9360 D3
9375 C3
9380 C3
9381 C3
9384 C3
9386 C3
9387 D3
9396 C3
9397 C3
9415 C1
9438 C2
9457 C1
9460 D1
9480 E1
9486 D1
9487 D1
9701 C2
9707 C2
BU42 D1
BU43 C1
S01
S02
S03
S04
S12
S14

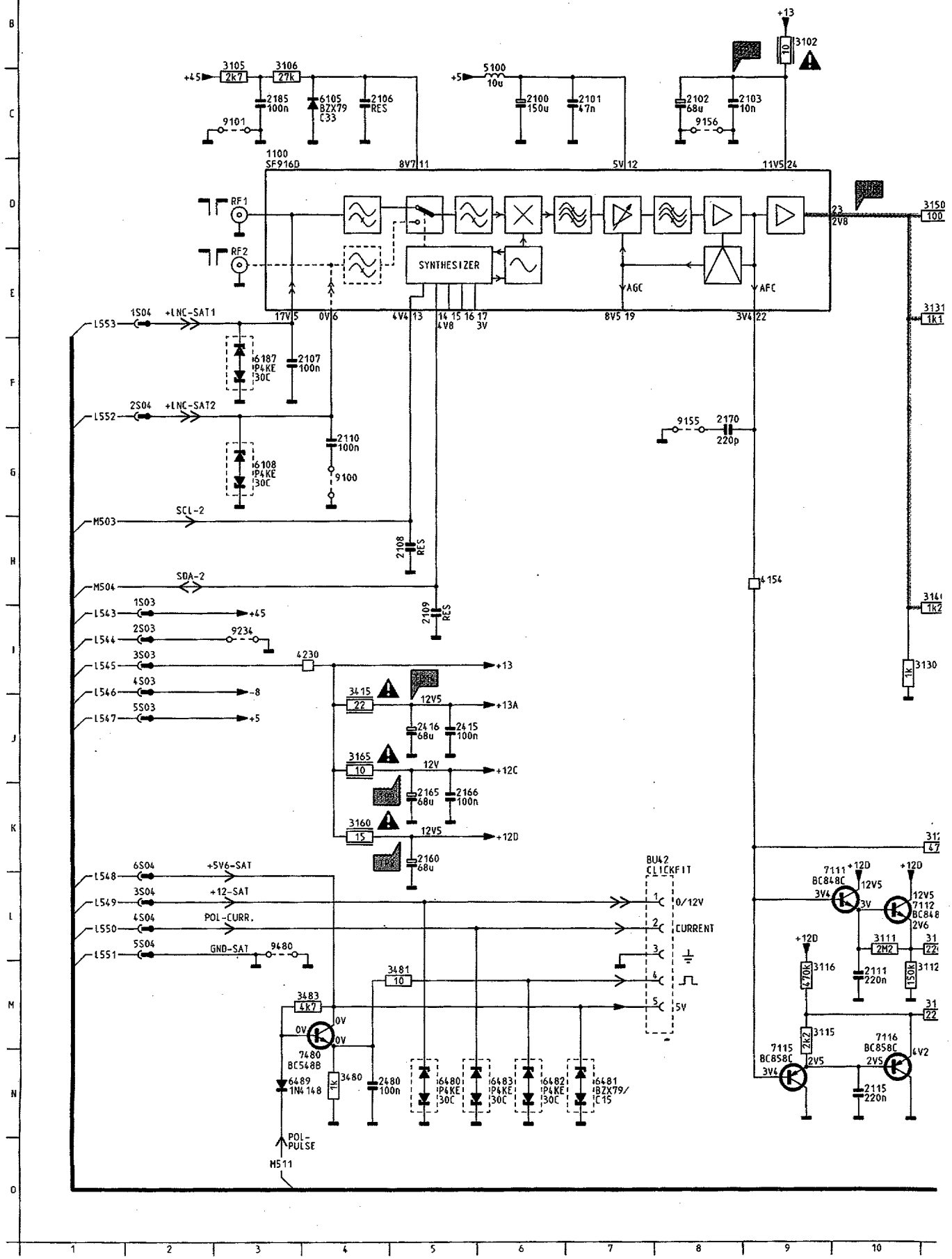
6.8 GR2-SAT Satellite control/Satellitkontrolle/Contrôle satellite



1730 O 4
2731 O 4
2732 O 5
2755 C 2
2756 C 2
2757 N 7
2770 L 3
2771 K 3
2772 N 3
3740 B 6
3741 B 6
3742 B 7
3743 B 7
3744 E 6
3745 E 6
3746 B 4
3748 E 7
3749 F 7
3750 L 6
3752 L 7
3755 B 2
3756 C 2
3757 M 6
3758 G 6
3759 G 6
3760 G 7
3761 I 8
3762 I 8
3763 J 8
3764 I 6
3765 I 6
3766 I 8
3767 J 8
3770 N 2
3771 N 1
4020 I 6
4021 L 2
4399 C 8
5770 K 2
6770 M 1
7730 B 3
7750 L 7
7760 I 7
7770 M 2
7771 L 1
9700 J 7
9701 N 6
9707 G 2
9902 M 6

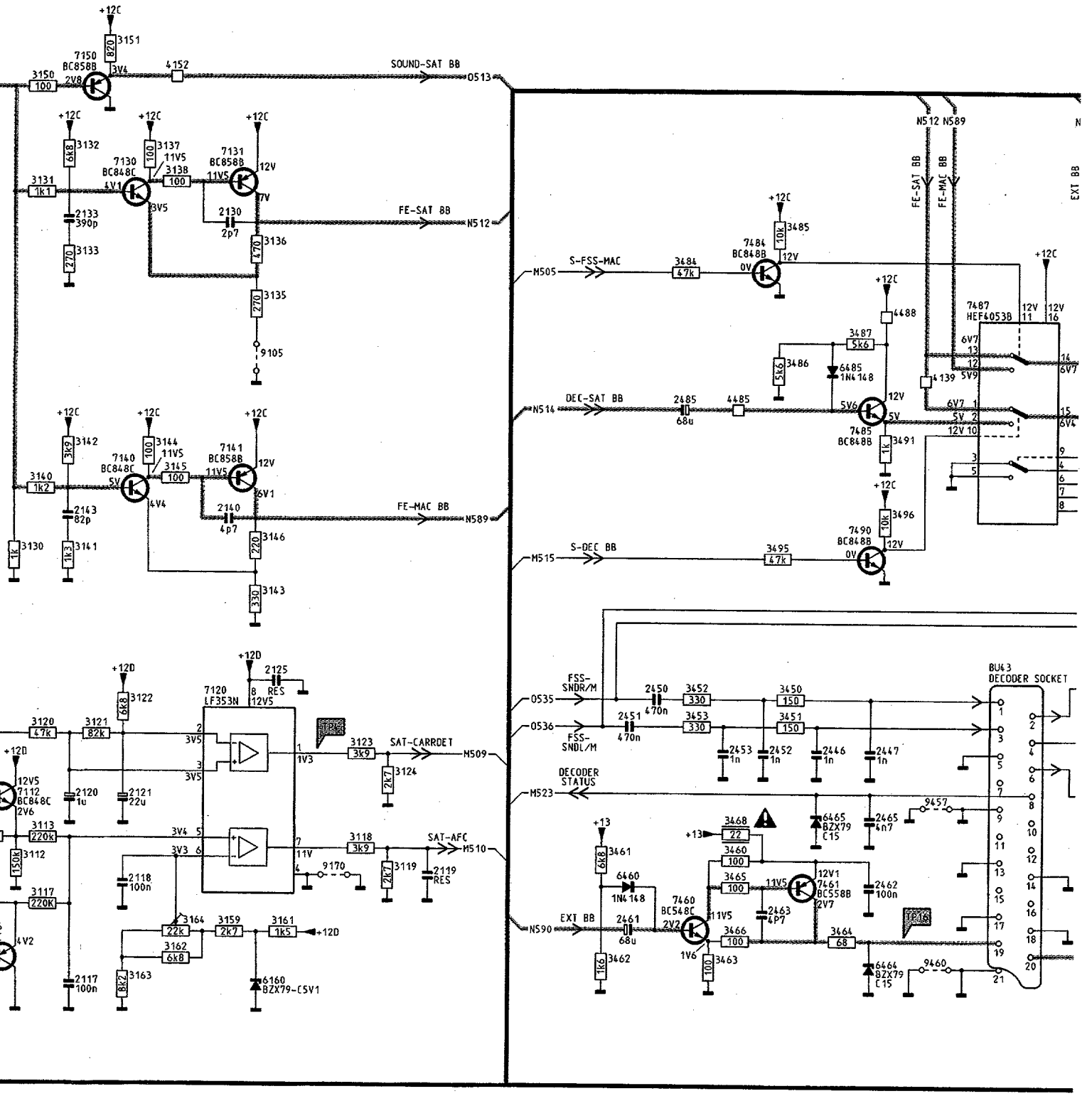
N

Satellite Front-end + Polariser Connection

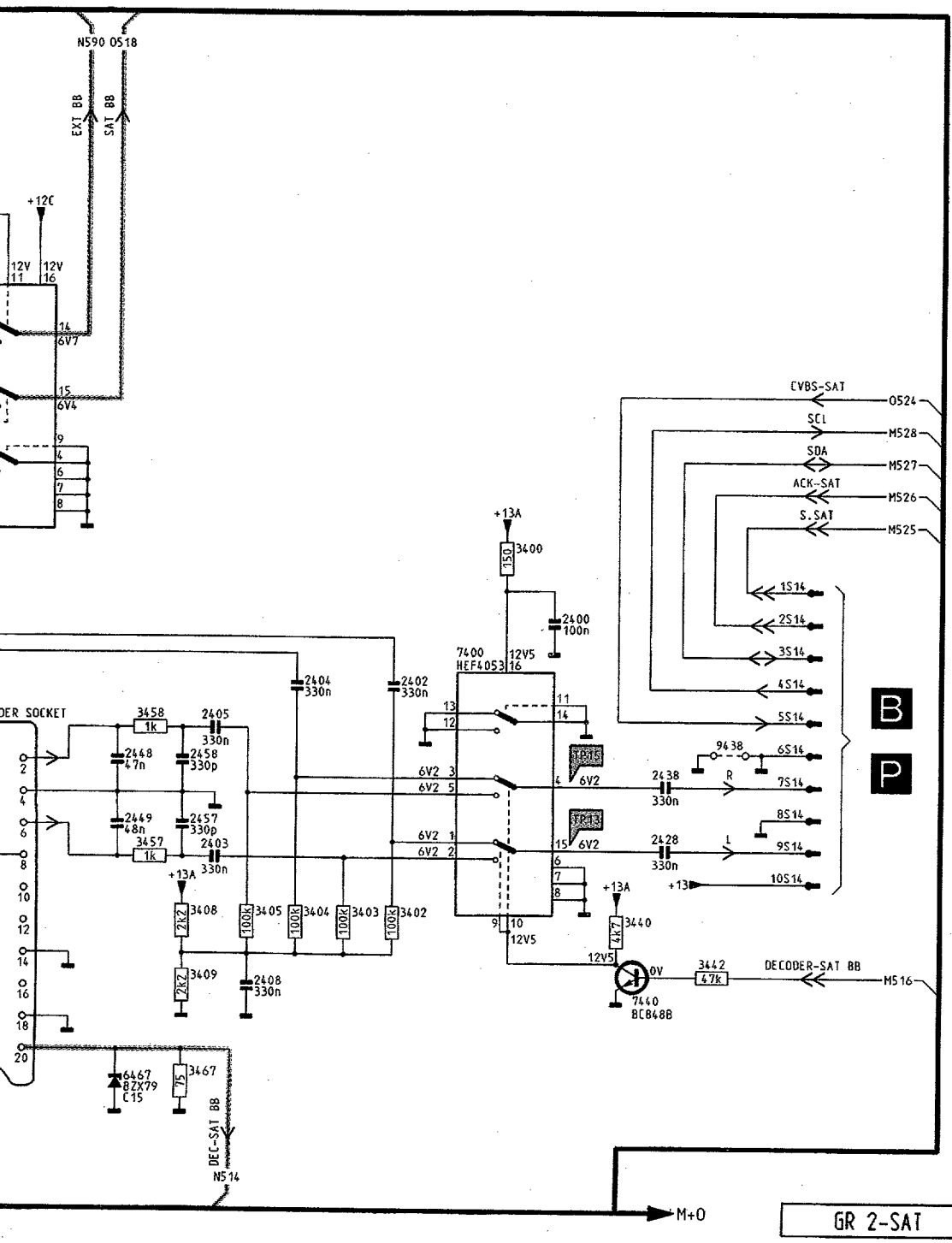


Polariser connection/Polarisator Anschluß/ Connexion polarisateur

Decoder Connection



Decoder connection/Decoder Anschluß/ Connexion decodeur

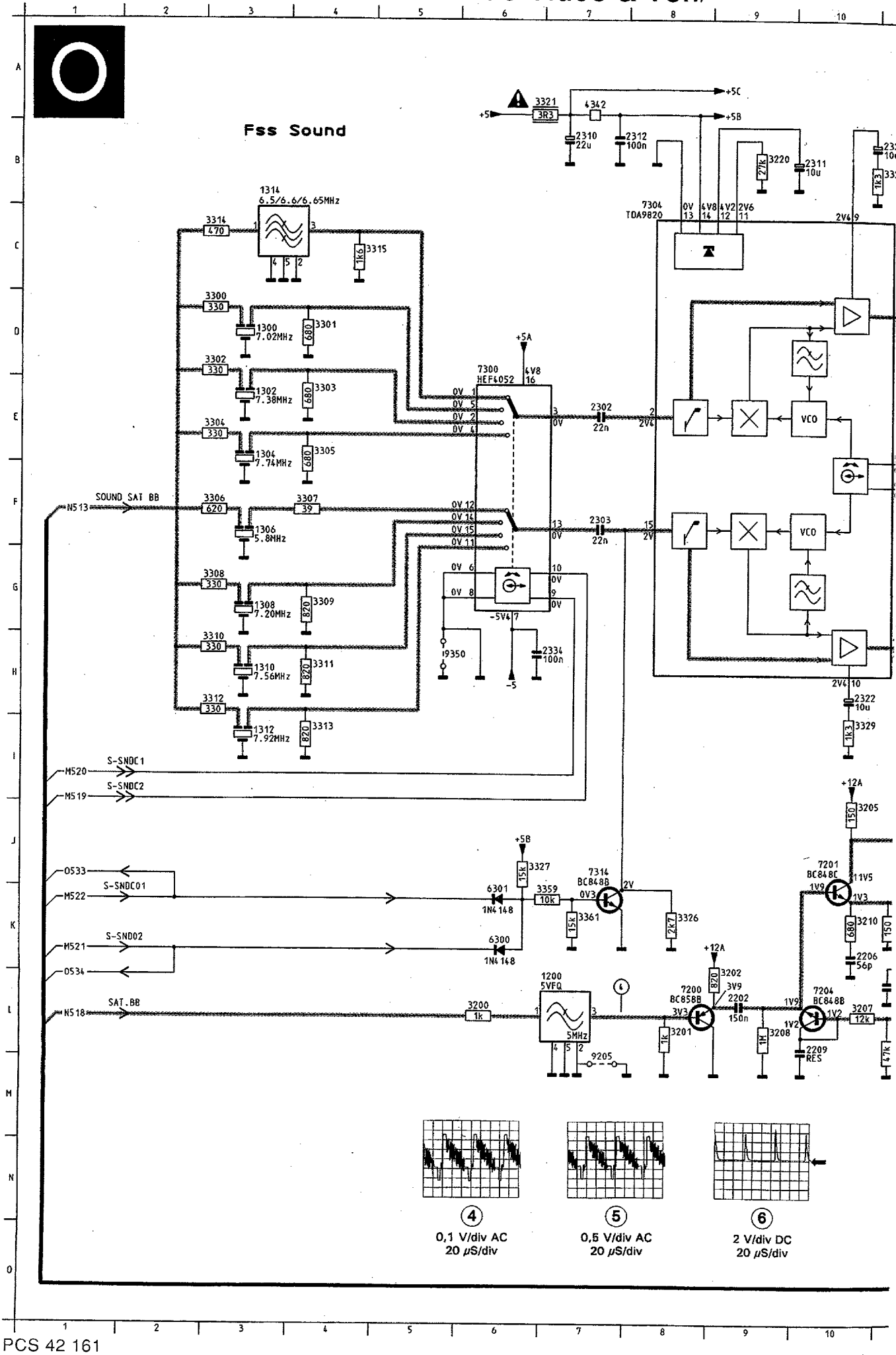


GR 2-SAT

CL26532051/013,NREF 150592

	1100	C 3	3467	N23
	2100	C 6	3468	L18
	2101	C 7	3480	N 4
	2102	C 8	3481	M 5
A	2103	C 8	3483	M 4
	2106	C 4	3484	F18
	2107	F 3	3485	F19
	2108	H 5	3486	G19
	2109	I 5	3487	G20
	2110	G 4	3491	H20
	2111	M10	3495	I19
	2115	N10	3496	I20
B	2117	N11	4139	G20
	2118	M12	4152	D12
	2119	M15	4154	H 9
	2120	L11	4230	I 4
	2121	L12	6485	H18
	2125	K13	6488	G20
	2130	F13	5100	C 6
	2133	F11	6105	C 4
C	2140	I13	6108	G 3
	2143	I11	6160	N13
	2160	K 5	6187	F 3
	2165	K 5	6460	M17
	2166	K 5	6464	N20
	2170	F 8	6465	L19
	2185	C 3	6467	N23
D	2400	J27	6480	N 5
	2402	J25	6481	N 7
	2403	L23	6482	N 6
	2404	J24	6483	N 6
	2405	K23	6485	G19
	2408	M24	6489	N 3
	2415	J 5	7111	L10
	2416	J 5	7112	L10
E	2428	L27	7115	N 9
	2438	K27	7116	M10
	2446	K19	7120	K12
	2447	K20	7130	E12
	2448	K23	7131	E13
	2449	L23	7140	H12
	2450	K17	7141	H13
F	2451	K17	7150	D11
	2452	K19	7440	M27
	2453	K18	7460	M18
	2457	L23	7461	M19
	2458	K23	7480	N 4
	2461	M17	7484	F19
	2462	M20	7485	H20
	2463	M19	7487	G21
G	2465	L20	7490	I20
	2480	N 4	9100	G 4
	2485	H18	9101	C 3
	3102	B 9	9105	G13
	3105	C 3	9155	F 8
	3106	C 3	9156	C 8
	3111	L10	9170	M14
H	3112	M10	9234	I 3
	3113	L11	9438	K28
	3115	M 9	9457	L21
	3116	M 9	9460	N21
	3117	M11	9480	L 3
	3118	L14		
	3119	M15		
	3120	K11		
I	3121	K11		
	3122	K12		
	3123	K14		
	3124	L15		
	3130	I10		
	3131	E11		
	3132	E11		
J	3133	F11		
	3135	F13		
	3136	F13		
	3137	E12		
	3138	E12		
	3140	H11		
	3141	I11		
	3142	H11		
K	3143	J13		
	3144	H12		
	3145	H12		
	3146	I13		
	3150	D11		
	3151	D11		
	3159	M13		
	3160	K 4		
L	3161	M13		
	3162	N12		
	3163	N12		
	3164	M12		
	3165	J 4		
	3400	I26		
	3402	L25		
M	3403	L25		
	3404	L24		
	3405	L24		
	3408	L23		
	3409	M23		
	3415	J 4		
	3440	L27		
	3442	M28		
N	3450	K19		
	3451	K19		
	3452	K18		
	3453	K18		
	3457	L23		
	3458	K23		
	3460	M18		
	3461	L17		
O	3462	N17		
	3463	N18		
	3464	M20		
	3465	M18		
	3466	M18		

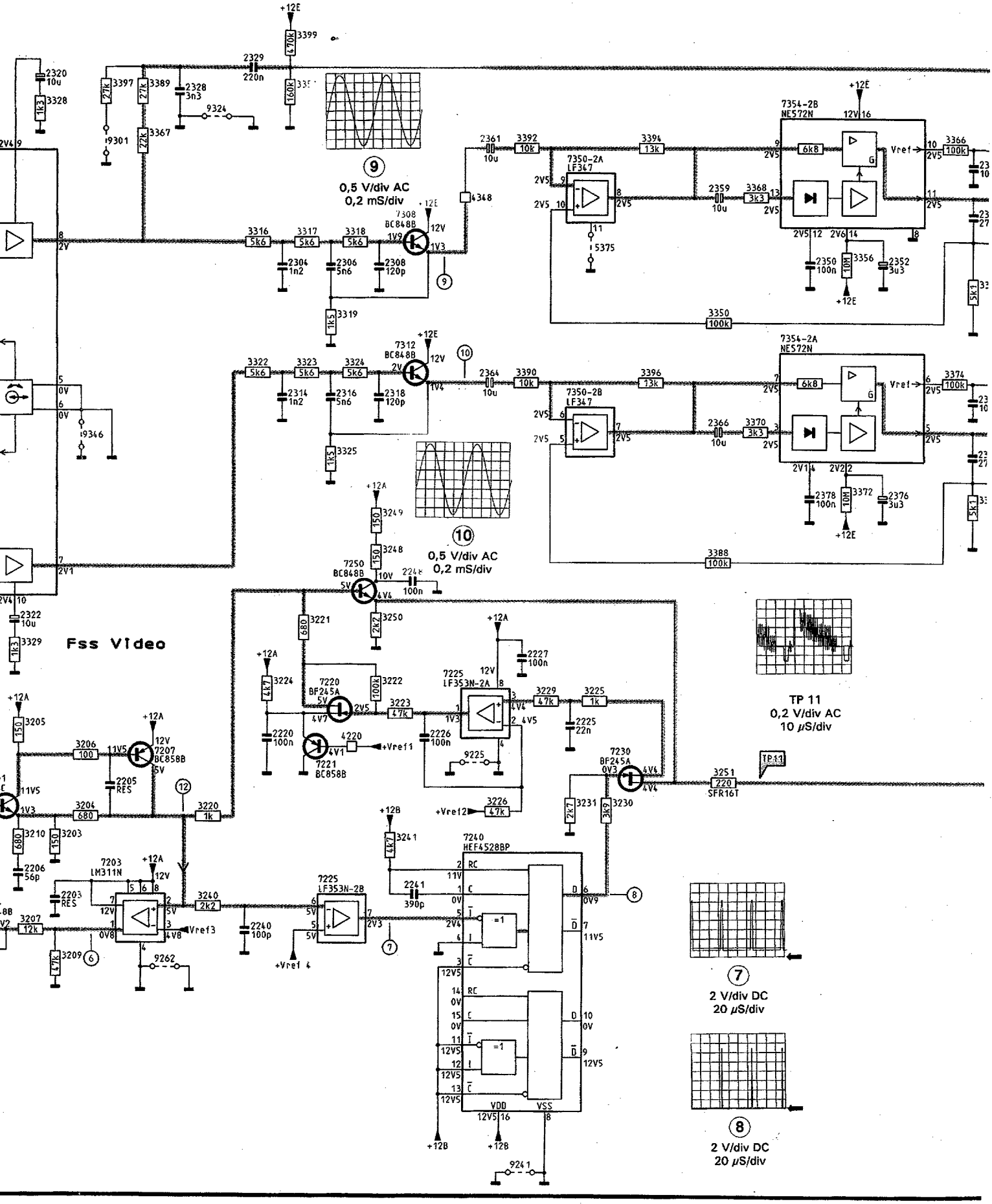
FSS video & sound/FSS Video & Ton/

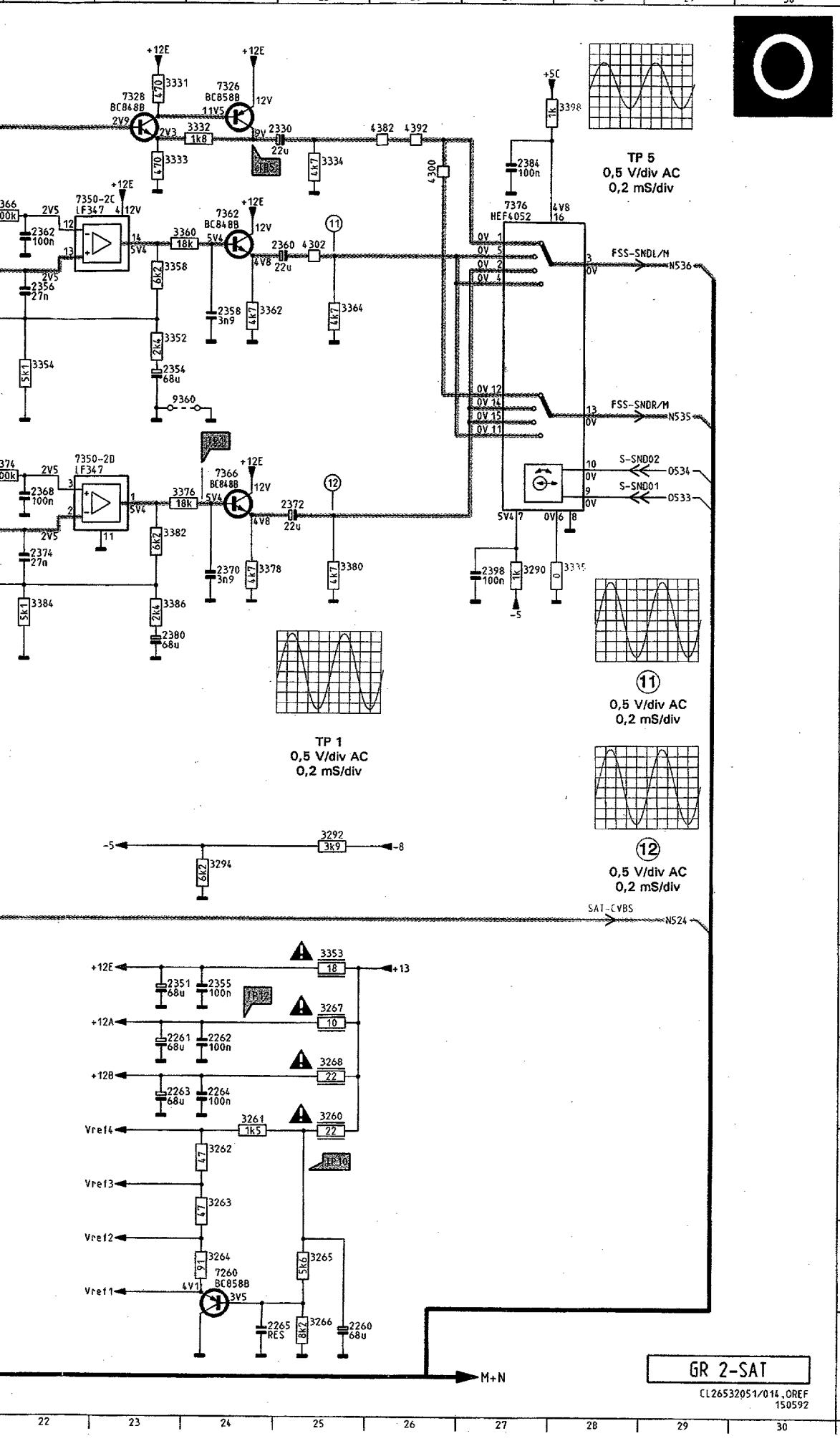


④
0,1 V/div AC
20 µS/div

⑤
0,5 V/div AC
20 µS/div

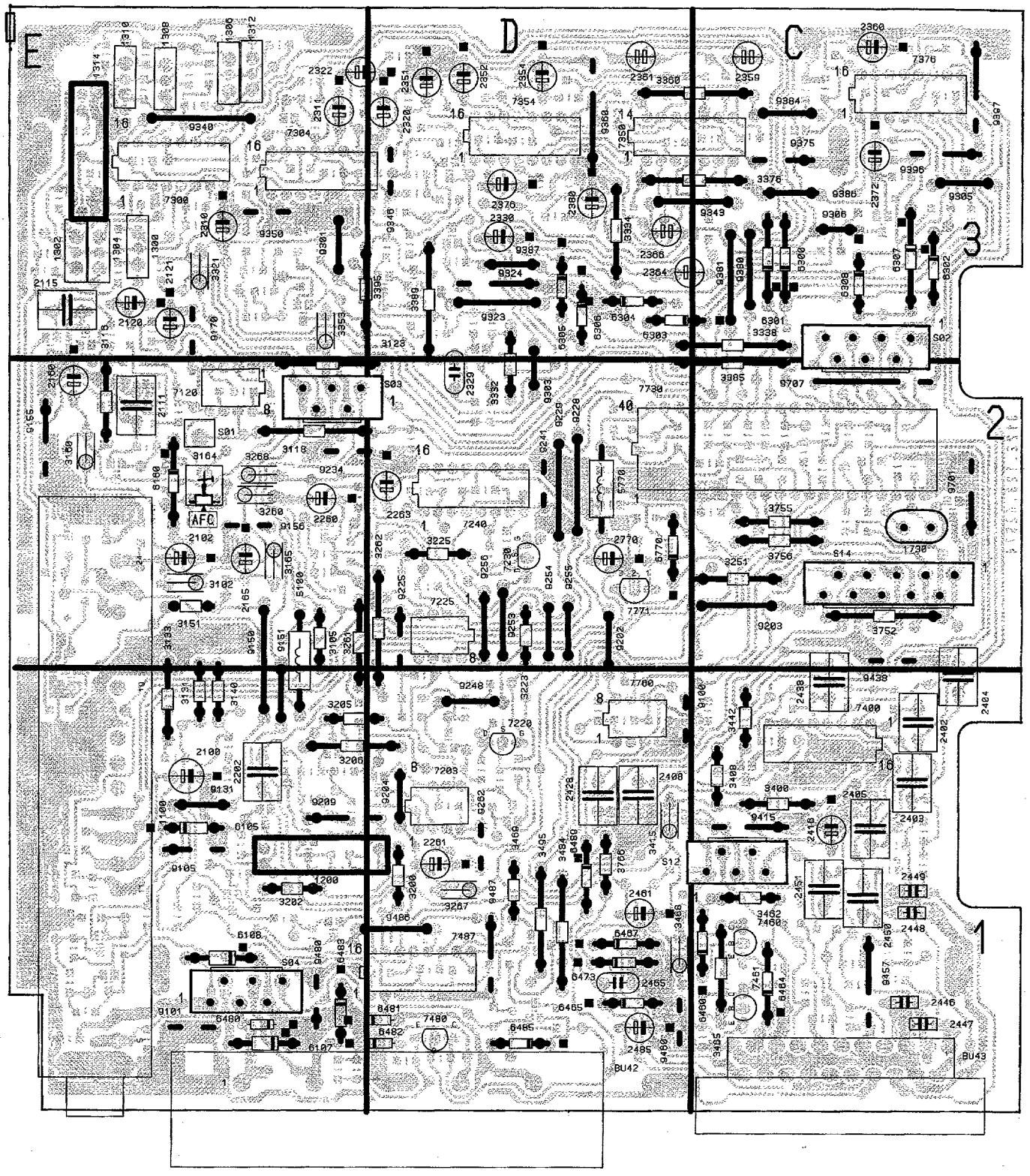
⑥
2 V/div DC
20 µS/div


Fss Video
9
0,5 V/div AC
0,2 mS/div
10
0,5 V/div AC
0,2 mS/div
TP 11
0,2 V/div AC
10 µS/div
7
2 V/div DC
20 µS/div
8
2 V/div DC
20 µS/div



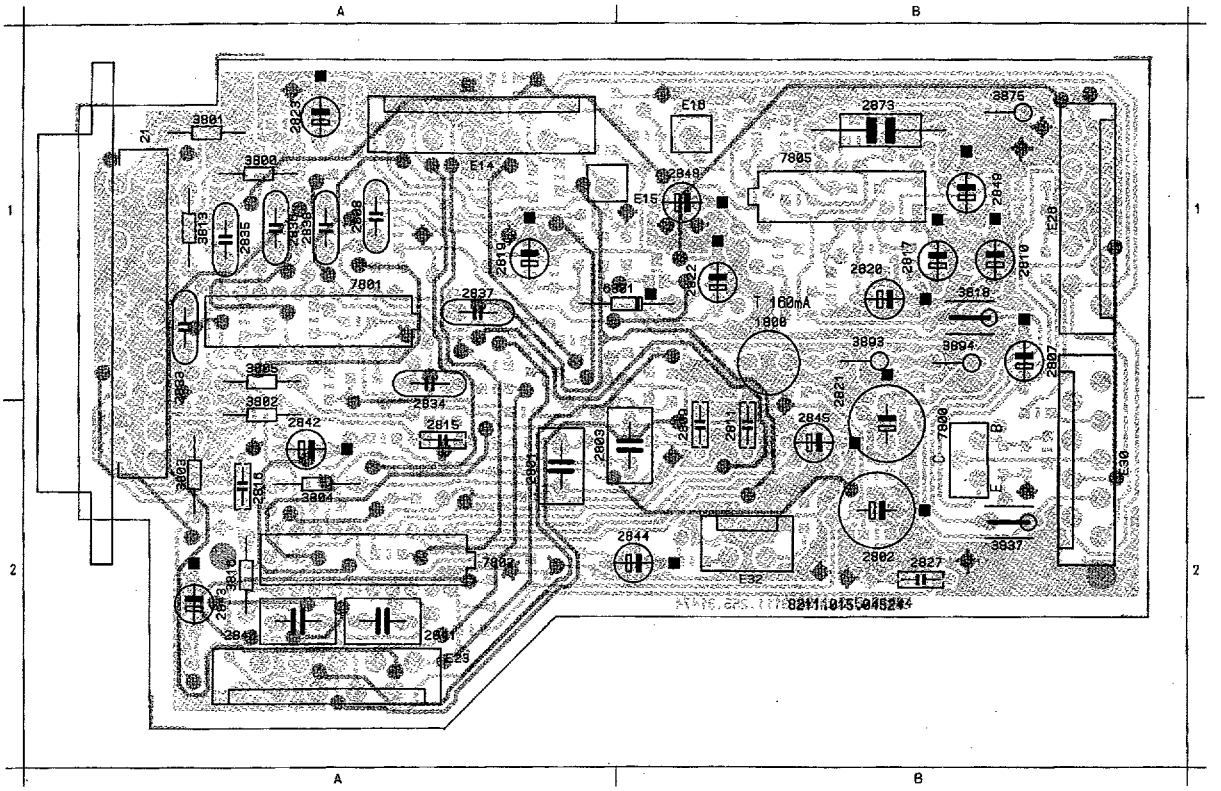
	1200	L 7	3310	H 3
	1300	D 3	3311	H 4
	1302	E 3	3312	H 3
	1304	E 3	3313	I 4
A	1306	F 3	3314	C 3
	1308	G 3	3315	C 4
	1310	H 3	3316	D13
	1312	I 3	3317	D14
	1314	B 3	3318	D14
	2202	L 9	3319	E14
	2203	L11	3321	A 6
	2205	J11	3322	E13
B	2206	K10	3323	E14
	2209	L10	3324	E14
	2220	J13	3325	F14
	2225	J17	3326	K 8
	2226	J15	3327	J 6
	2227	I16	3328	B11
	2240	L13	3329	I10
	2241	L15	3331	A23
C	2248	H15	3332	B24
	2260	O25	3333	B23
	2261	L23	3334	B25
	2262	L24	3335	F28
	2263	L23	3350	E19
	2264	L24	3351	B14
	2265	O24	3352	D23
D	2302	E 7	3353	K25
	2303	F 7	3354	D22
	2304	D13	3356	D20
	2306	D14	3358	C23
	2308	D15	3359	K 7
	2310	B 7	3360	C23
	2311	B10	3361	K 7
	2312	B 7	3362	D24
E	2314	F13	3364	D25
	2316	F14	3366	C22
	2318	F15	3367	B12
	2320	B11	3368	C19
	2322	H10	3370	F19
	2328	B12	3372	G20
	2329	B13	3374	E22
F	2330	B25	3376	F23
	2334	H 7	3378	F24
	2350	D20	3380	F25
	2351	K23	3382	F23
	2352	D21	3384	G22
	2354	D23	3386	G23
	2355	K24	3388	H19
	2356	C22	3389	B12
G	2358	D24	3390	E16
	2359	C19	3392	C16
	2360	C25	3394	C18
	2361	C16	3396	E18
	2362	C22	3397	B11
	2364	E16	3398	A28
	2366	F19	3399	A14
H	2368	F22	4220	J14
	2370	F24	4300	B26
	2372	F25	4302	C25
	2374	F22	4342	A 7
	2376	G21	4348	C16
	2378	G20	4382	B26
	2380	G23	4392	B26
	2384	B27	6300	K 6
I	2398	F27	6301	K 6
	3200	L 6	7200	L 8
	3201	L 8	7201	J10
	3202	K 9	7203	K11
	3203	K11	7204	L10
	3204	K11	7207	J12
	3205	I10	7220	I14
	3206	J11	7221	J14
J	3207	L10	7225	K14
	3208	L 9	7225	I15
	3209	L11	7230	J18
	3210	K10	7240	K16
	3220	K12	7250	H14
	3220	B 9	7260	N24
	3221	H14	7300	D 6
K	3222	I15	7304	C 8
	3223	I15	7308	C15
	3224	I13	7312	E15
	3225	I17	7314	J 7
	3226	K16	7326	A24
	3229	I17	7328	A23
	3230	J17	7350	C17
	3231	J17	7350	B22
L	3240	L12	7350	F17
	3241	K15	7350	E22
	3248	G15	7354	E19
	3249	G15	7354	B19
	3250	H15	7362	C24
	3251	J19	7366	E24
	3260	L25	7376	C27
M	3261	L24	9225	J16
	3262	M24	9241	O16
	3263	M24	9262	L12
	3264	N24	9324	B13
	3265	N25	9346	F11
	3266	O25	9346	C11
	3267	K25	9350	H 5
	3268	L25	9360	E23
N	3290	F27		
	3292	I25		
	3294	J24		
	3300	D 3		
	3301	D 4		
	3302	D 3		
	3303	E 4		
	3304	E 3		
O	3305	E 4		
	3306	F 3		
	3307	F 4		
	3308	G 3		
	3309	G 4		

SAT panel/SAT Platine/Platine SAT

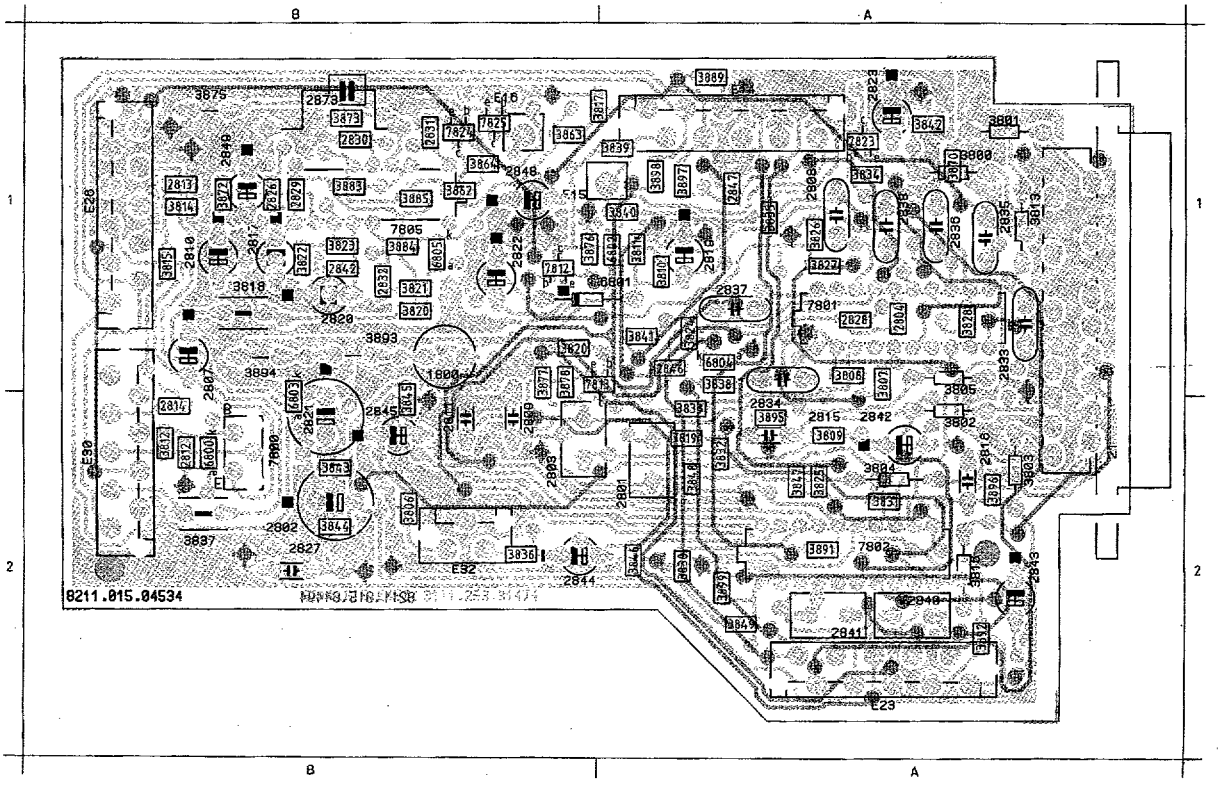


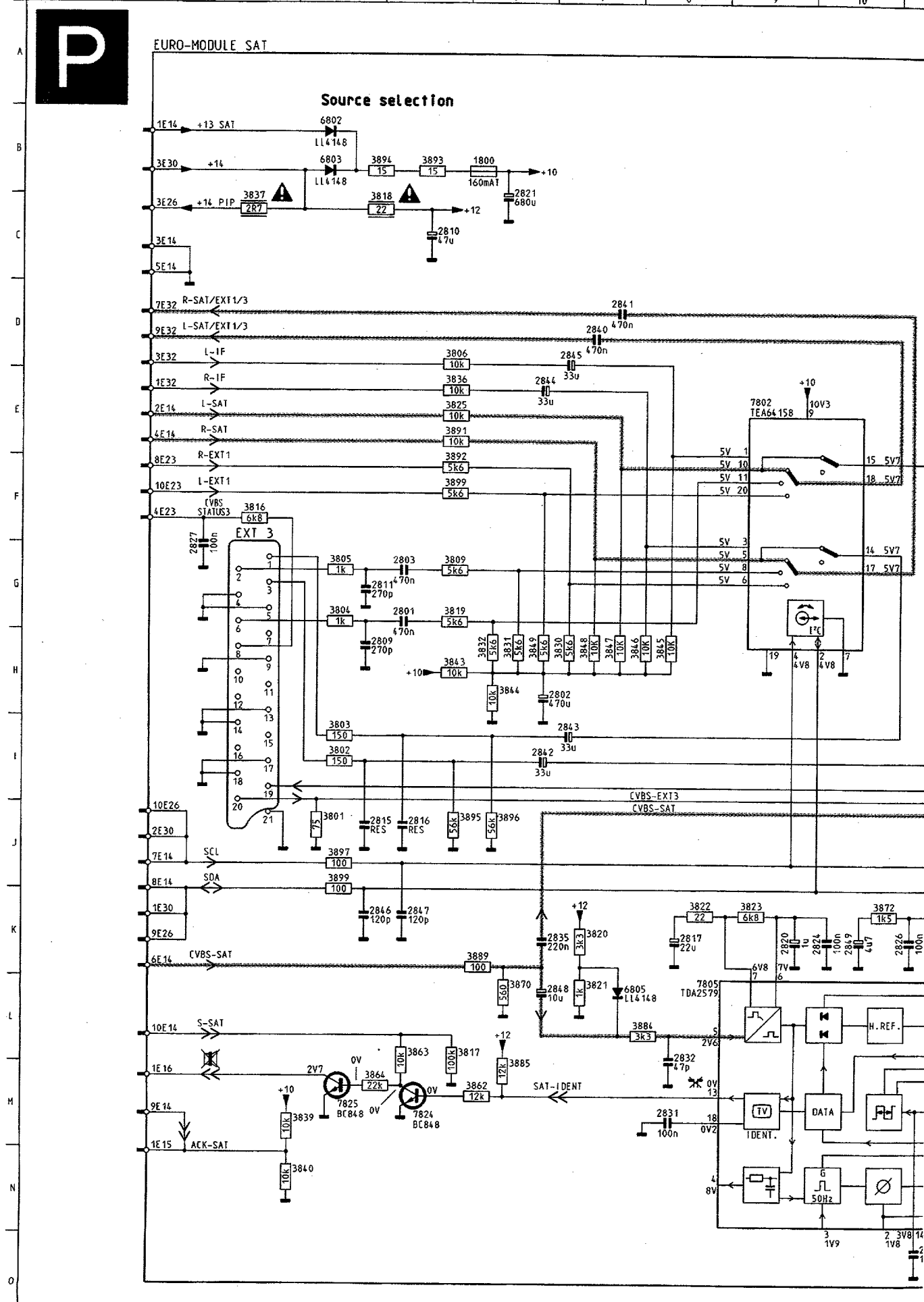
1100 E1	2121 E3	2359 C3	2446 C1	3133 E1	3267 D1	3462 C1	6300 C3	6482 D1	7400 C1	9170 E3	9301 E3	9387 D3	S03 E2	
1200 E1	2160 E2	2360 C3	2447 C1	3140 E1	3268 E2	3465 C1	6301 C3	6483 E1	7460 C1	9202 D2	9303 D2	9396 C3	S04 E1	
1300 E3	2165 E2	2361 D3	2448 C1	3151 E2	3321 E3	3468 D1	6302 C3	6485 D1	7461 C1	9203 C2	9305 C3	9397 C3	S12 C1	
1302 E3	2202 E1	2364 D3	2449 C1	3160 E2	3332 D2	3469 D1	6303 D3	6489 D1	7480 D1	9204 D1	9306 C3	9415 C1	S14 C2	
1304 E3	2260 E2	2366 D3	2450 C1	3164 E2	3334 D3	3484 D1	6304 D3	6770 D2	7487 D1	9209 E1	9323 D3	9438 C2		
1306 E3	2261 D1	2372 C3	2451 C1	3165 E2	3338 C3	3495 D1	6305 D3	7120 E2	7730 C2	9225 D2	9324 D3	9457 C1		
1308 E3	2263 D2	2376 D3	2461 D1	3200 D1	3353 E3	3752 C2	6306 D3	7203 D1	7760 D1	9228 D2	9340 E3	9460 D1		
1310 E3	2310 E3	2380 D3	2465 D1	3202 E1	3360 D3	3755 C2	6307 C3	7220 D1	7771 D2	9229 D2	9343 D3	9480 E1		
1312 E3	2311 E3	2402 C1	2485 D1	3205 E1	3376 D3	3756 C2	6308 C3	7225 D2	9100 D1	9234 E2	9346 D3	9486 D1		
1314 E3	2320 D3	2403 C1	2770 D2	3206 E1	3385 C2	3766 D1	6460 C1	7230 D2	9101 E1	9241 D2	9350 E3	9487 D1		
1730 C2	2322 E3	2404 C1	3102 E2	3223 D2	3389 D3	5100 E2	6464 C1	7240 D2	9105 E1	9248 D1	9360 D3	9701 C2		
2100 E1	2329 D2	2405 C1	3105 E2	3225 D2	3395 E3	5770 D2	6465 D1	7300 E3	9131 E1	9253 D2	9375 C3	9707 C2		
2102 E2	2330 D3	2408 D1	3116 E2	3251 C2	3400 C1	6105 E1	6467 D1	7304 E3	9150 E2	9254 D2	9380 C3	BU42 D1		
2111 E2	2351 D3	2416 C1	3118 E2	3260 E2	3408 C1	6107 E1	6473 D1	7350 D3	9151 E1	9255 D2	9381 C3	BU43 C1		
2115 E3	2352 D3	2428 D1	3123 E2	3261 E2	3415 D1	6108 E1	6480 E1	7354 D3	9155 E2	9256 D2	9384 C3	S01 E2		
2120 E3	2354 D3	2438 C1	3131 E1	3262 D2	3442 C1	6160 E2	6481 D1	7376 C3	9156 E2	9262 D1	9386 C3	S02 C3		

6.16 GR2-SAT Euro module SAT/Euro-AV-Platte SAT/ Module Prise Péritélévision SAT



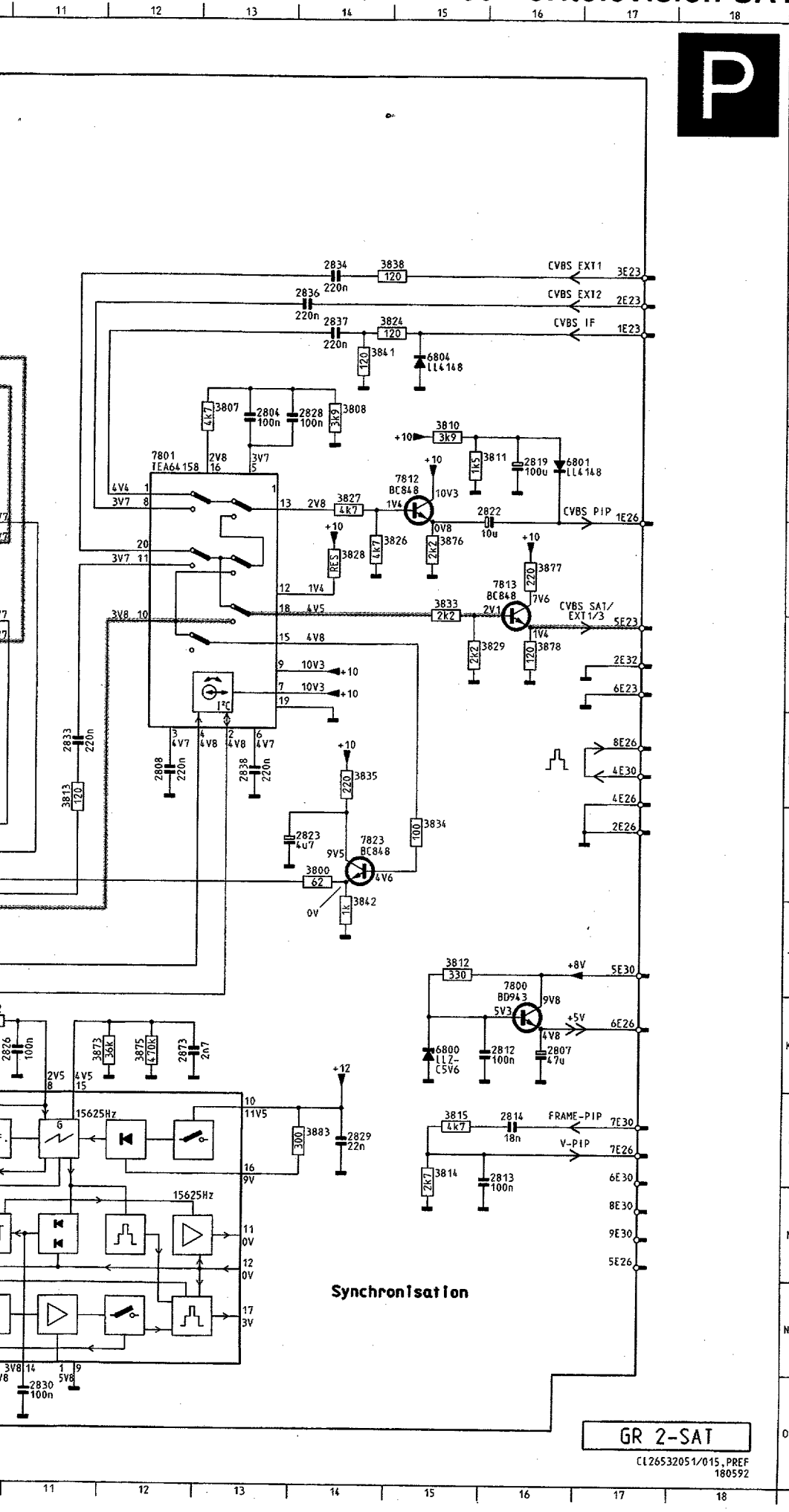
1800 B1	2821 B2	2841 A2	3808 A1	3826 A1	3844 B2	3885 B1	7801 A1
2801 A2	2822 B1	2842 A2	3809 A2	3827 A1	3845 B2	3889 A1	7802 A2
2802 B2	2823 A1	2843 A2	3810 A1	3828 A1	3846 A2	3891 A2	7805 B1
2803 B2	2824 B1	2844 B2	3811 A1	3829 B1	3847 A2	3892 A2	7812 B1
2804 A1	2826 B1	2845 B2	3812 B2	3830 A2	3848 A2	3893 B1	7813 A1
2807 B1	2827 B2	2846 A1	3813 A1	3831 A2	3849 A2	3894 B1	7823 A1
2808 A1	2828 A1	2847 A1	3814 B1	3832 A2	3862 B1	3895 A2	7824 B1
2809 B2	2829 B1	2848 B1	3815 B1	3833 A2	3863 B1	3896 A2	7825 B1
2810 B1	2830 B1	2849 B1	3816 A2	3834 A1	3864 B1	3897 A1	E14 A1
2811 B2	2831 B1	2873 B1	3817 A1	3835 A1	3870 A1	3898 A1	E15 B1
2812 B2	2832 B1	3800 A1	3818 B1	3836 B2	3872 B1	3899 A2	E16 B1
2813 B1	2833 A1	3801 A1	3819 A2	3837 B2	3873 B1	6800 B2	E23 A2
2814 B2	2834 A1	3802 A2	3820 B1	3838 A1	3875 B1	6801 B1	E26 B1
2815 A2	2835 A1	3803 A2	3821 B1	3839 A1	3876 B1	6802 A1	E30 B2
2816 A2	2836 A1	3804 A2	3822 B1	3840 A1	3877 B1	6803 B2	E32 B2
2817 B1	2837 A1	3805 A1	3823 B1	3841 A1	3878 B1	6804 A1	
2819 A1	2838 A1	3806 B2	3824 A1	3842 A1	3883 B1	6805 B1	
2820 B1	2840 A2	3807 A1	3825 A2	3843 B2	3884 B1	7800 B2	




EURO-MODULE SAT
Source selection
1E14 +13 SAT
6802 LL4148
3E30 +14
6803 LL4148
3894 15
3893 15
1800 160mAT
+10
2821 680u
3E26 +14 PIP
3837 2R7
3818 22
+12
2810 47u
3E14
5E14
7E32 R-SAT/EXT1/3
9E32 L-SAT/EXT1/3
2841 470n
2840 470n
3E32 L-IF
1E32 R-IF
2E14 L-SAT
4E14 R-SAT
8E23 R-EXT1
10E23 L-EXT1
4E23 CVBS STATUS3
3816 6k8
3806 10k
3836 10k
3825 10k
3891 10k
3892 5k6
3899 5k6
2845 33u
2844 33u
7802 TEA6415B
10V3
5V 1
5V 10
5V 11
5V 20
5V 3
5V 5
5V 8
5V 6
15 5V7
18 5V7
14 5V7
17 5V7
I²C
EXT 3
2827 100n
3805 1k
2803 470n
2811 270p
3809 5k6
3804 1k
2801 470n
2809 270p
3819 5k6
3832 5k6
3831 5k6
3849 5k6
3830 5k6
3848 10k
3847 10k
3846 10k
3845 10k
3843 10k
3844 10k
2802 470u
3803 150
3802 150
2843 33u
2842 33u
CVBS-EXT3
CVBS-SAT
10E26
2E30
7E14 SCL
8E14 SDA
1E30
9E26
6E14 CVBS-SAT
3801 75
2815 RES
2816 RES
3895 56k
3896 56k
3897 100
3899 100
2846 120p
2847 120p
3889 100
3870 560
+12
2835 220n
3820 3k3
2848 10u
3821 1k
6805 LL4148
3822 22
3823 6k8
2817 22u
3872 1k5
2820 1u
2824 100n
2849 4u7
2826 100n
7805 TDA2579
6V8
7V
3884 3k3
2832 47p
H.REF.
DATA
IDENT.
2831 100n
10E14 S-SAT
1E16
9E14
1E15 ACK-SAT
2V7
0V
3863 10k
3817 100k
3885 12k
3864 22k
3862 12k
SAT-IDENT
7825 BC848
7824 BC848
3839 10k
3840 10k
G 50Hz
8V
1V9
3V8
1V8

Module Prise Péritélévision SAT

P



GR 2-SAT

CL26532051/015,PREF
180592

	1800	B 6	3899	F 5
	2801	G 5	6800	K15
	2802	H 6	6801	E16
	2803	G 5	6802	B 4
A	2804	D13	6803	B 4
	2807	K16	6804	D15
	2808	H12	6805	L 7
	2809	H 4	7800	J16
	2811	G 4	7801	E12
	2812	K16	7802	E 9
	2813	L16	7805	L 8
	2814	L16	7812	E15
B	2815	J 4	7813	F16
	2816	J 5	7823	I14
	2817	K 8	7824	M 5
	2819	E16	7825	M 4
	2820	K 9		
	2821	C 6		
	2822	E16		
	2823	I14		
C	2824	K10		
	2826	K11		
	2827	G 2		
	2828	D14		
	2829	L14		
	2830	O11		
	2831	M 8		
D	2832	L 8		
	2833	H11		
	2834	C14		
	2835	K 6		
	2836	C14		
	2837	D14		
	2838	H13		
	2840	D 7		
E	2841	D 7		
	2842	I 6		
	2843	I 7		
	2844	E 6		
	2845	D 7		
	2846	K 4		
	2847	K 5		
F	2848	L 6		
	2849	K10		
	2873	K12		
	3800	I14		
	3802	I 4		
	3803	I 4		
	3804	G 4		
	3805	G 4		
G	3806	D 5		
	3807	D13		
	3808	D14		
	3809	G 5		
	3810	E15		
	3811	E15		
	3812	J15		
	3813	H11		
H	3814	L15		
	3815	L15		
	3816	F 3		
	3817	L 5		
	3818	C 4		
	3819	G 5		
	3820	K 7		
I	3821	L 7		
	3822	K 8		
	3823	K 9		
	3824	C14		
	3825	E 5		
	3826	F14		
	3827	E14		
	3828	F14		
J	3829	G15		
	3830	H 7		
	3831	H 6		
	3832	H 6		
	3833	F15		
	3834	I15		
	3835	H14		
K	3836	E 5		
	3837	C 3		
	3838	C14		
	3839	M 3		
	3840	N 3		
	3841	D14		
	3842	I14		
	3843	H 5		
L	3844	H 6		
	3845	H 8		
	3846	H 7		
	3847	H 7		
	3848	H 7		
	3849	H 6		
	3862	M 6		
M	3863	L 5		
	3864	M 4		
	3870	L 6		
	3872	K10		
	3873	K12		
	3875	K12		
	3876	F15		
	3877	F16		
N	3878	G16		
	3883	L14		
	3884	L 8		
	3885	L 6		
	3889	K 6		
	3891	E 5		
	3892	F 5		
	3893	B 5		
O	3894	B 4		
	3895	J 5		
	3896	J 6		
	3897	J 4		
	3899	J 4		

Electrical adjustments/Elektrische Abgleicharbeiten/ Réglages électriques

(GB)

1. Adjustments on the Sat Power Supply Panel

1.1 +13V
Connect a voltmeter to the +13V and ground (3A03 resp. 4A03). Adjust R3540 for an output voltage of +13.0V DC.

1.2 +LNC SAT2
Connect a LNC (or a 502/5W load) and a voltmeter to the +LNC SAT2 and ground (6A04 resp. 4A04). Adjust R3541 for an output voltage of +17.6V DC.

2. Adjustments on the Sat Panel

2.1 AFC
Select a PAL transmission system. Turn the dish antenna so that the signal-to-noise ratio decreases until speaks appear in the picture.
Adjust potmeter R3164 so that the voltage on pin 7 of IC7120 switches between 5V and 0V. The voltage may not be continuously 5V or 0V.
Turn the dish back to its original position for an optimal signal.

(D)

1. Einstellungen auf der Sat-Netz-Platine

1.1 +13 V
Verbinden Sie einen Spannungsmesser an die +13 V und erden Sie (3A03 bzw. 4A03). Stimmen Sie R3540 auf eine Ausgangsspannung von +13,0 V Gleichstrom ab.

1.2 +LNC SAT2
Verbinden Sie ein LNC (oder eine 502/5W Ladung) und einen Spannungsmesser zu dem +LNC SAT2 und erden Sie (6A04 bzw. 4A04). Stimmen Sie R 3541 auf eine Ausgangsspannung von +17,6 V Gleichspannung ab.

2. Abstimmung auf der Sat-Platine

2.1 AFC
Wählen Sie ein PAL Übertragungssystem. Drehen Sie die Tellerantenne so, daß sich das Signal-Geräusch-Verhältnis reduziert bis die Werte auf dem Bildschirm erscheinen.
Stellen Sie den Potentiometer R3164 so ein, daß die Spannung auf Stift 7 oder IC7120 sich zwischen 5 V und 0 V umschaltet. Die Spannung darf nicht kontinuierlich 5 V oder 0 V betragen.
Drehen Sie die Tellerantenne in ihre Originaleinstellung zurück, Sie erhalten dann ein optimales Signal.

(F)

1. Réglages au niveau de la Platine d'Alimentation Sat

1.1 +13 V
Connecter un voltmètre au +13 V et à la terre (3A03 ou 4A03). Régler R3540 pour une tension de sortie de +13,0 V CC.

1.2 +LNC SAT2
Connecter un LNC (ou une charge 502/5W) et un voltmètre au +LNC SAT2 et à la terre (6A04 ou 4A04). Régler R3541 pour une tension de sortie de +17.6 V CC.

2. Réglages au niveau de la Platine Sat

2.1 AFC
Choisir un système de transmission PAL. Tourner l'antenne parabolique de façon que le rapport signal-bruit diminue jusqu'à ce que des pics apparaissent sur l'image.
Régler le potentiomètre R3164 de manière que la tension sur la broche 7 de l'IC7120 varie entre 5 V et 0 V. La tension ne peut pas être constamment de 5 V ou 0 V en continu.
Faire revenir l'antenne parabolique à sa position initiale pour recevoir le signal optimal.

8.1 GR2-SAT Repair tips/Reparaturhinweise/ Conseils pour réparations

(GB)

Error messages

The default language for error messages is English. For error messages generated in the standard GR2.2 chassis, reference is made to service manual GR2.2.

Below the additional error messages for the satellite box are present:

Error indication:	Description:	Possible fault:
OSD: ERR SAT	Communication error with satellite box	Microprocessor IC7730
OSD: 6415	I^2C error IC7801	IC7801, TEA6415B
OSD: 6415A	I^2C error IC7802	IC7802, TEA6415B
OSD: SAT RAM	Internal satellite processor RAM	IC7730, microprocessor
OSD: SAT TUNER POR	Satellite tuner has no power on reset	IC7730, +13V, TS7770, IC7771
OSD: SAT TUNER LOCK	Satellite tuner can not lock on current frequency	U1100, trying to tune outside specified area. Check option codes
OSD: SAT GENERAL I^2C	General I^2C error	Check I^2C bus
OSD: SAT TUNER I^2C	Communication error with satellite tuner	U1100, I^2C problem

(D)

Fehlermeldungen

Die Standardsprache für Fehlermeldungen ist Englisch. Für Fehlermeldungen, die im Standard GR2.2 Chassis generiert wurden, muß an das Service-Handbuch GR2.2 referiert werden.

Untenstehend sind die zusätzlichen Fehlermeldungen für die Satellit-Box aufgeführt:

Fehlerindikation:	Beschreibung:	Mögliche Fehler:
OSD: ERR SAT	Kommunikationsfehler mit der Satellit-Box	Mikroprozessor IC7730
OSD: 6415	I^2C Fehler IC7801	IC7801, TEA6415B
OSD: 6415A	I^2C Fehler IC7802	IC7802, TEA6415B
OSD: SAT RAM	Interner Satellit-Prozessor RAM	IC7730, Mikroprozessor
OSD: SAT TUNER POR	Satellit-Tuner hat keinen Strom bei Reset	IC7730, +13 V, TS7770, IC7771
OSD: SAT TUNER LOCK	Satellit-Tuner kann auf der Strom-Frequenz nicht sperren	U1100, versucht außerhalb des spezifizierten Bereichs abzustimmen. Wahlkodes kontrollieren.
OSD: SAT GENERAL I^2C	Allgemeiner I^2C Fehler	I^2C Leitung kontrollieren
OSD: SAT TUNER I^2C	Kommunikationsfehler mit dem Satellit-Tuner	U1100, I^2C Problem

(F)

Messages d'erreurs

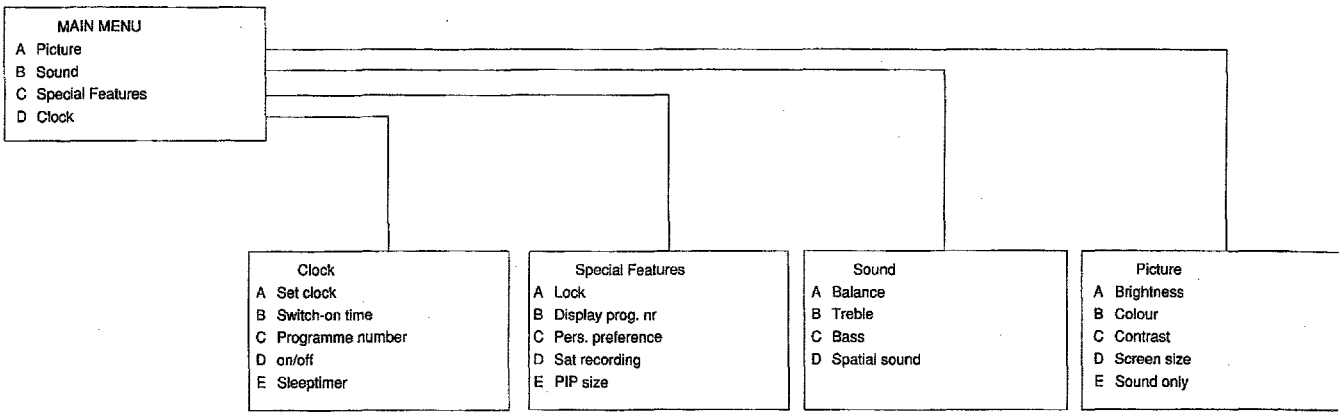
Le langage implicite des messages d'erreurs est l'anglais. Pour les messages d'erreurs générés dans le châssis standard GR2.2, se reporter au manuel d'entretien GR2.2.Les messages d'erreurs additionnels pour le module satellite sont les suivants:

Indication d'erreur:	**Description:**	Défaut possible:
OSD: ERR SAT	Erreur de communication avec le module satellite	Microprocesseur IC7730
OSD: 6415	I^2C erreur IC7801	IC7801, TEA6415B
OSD: 6415A	I^2C erreur IC7802	IC7802, TEA6415B
OSD: SAT RAM	RAM interne processeur satellite	IC7730, microprocesseur
OSD: SAT TUNER POR	A la remise à zéro, le courant ne passe pas dans le tuner satellite	IC7730, +13 V, TS7770, IC7771
OSD: SAT TUNER LOCK	Le tuner satellite ne peut pas se verrouiller à la fréquence du courant	U1100, essai de réglage à l'extérieur de la zone spécifiée. Contrôler les codes optionnels
OSD: SAT GENERAL I^2C	Erreur I^2C générale	Contrôler le bus I^2C
OSD: SAT TUNER I^2C	Erreur de communication avec le tuner satellite	U1100, problème I^2C

9.1 GR2-SAT Survey of menus/Übersicht über die Menüs/

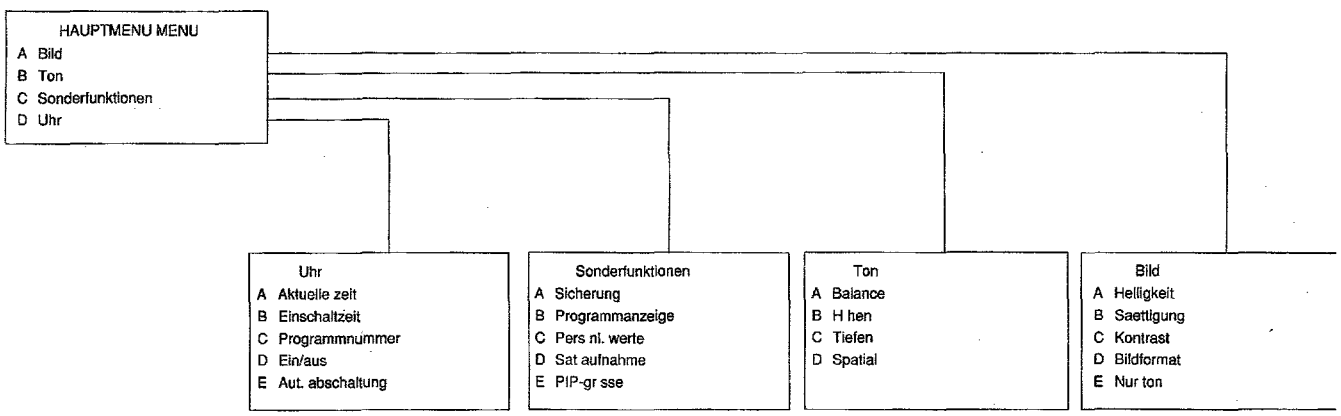
(GB)

USER MENU



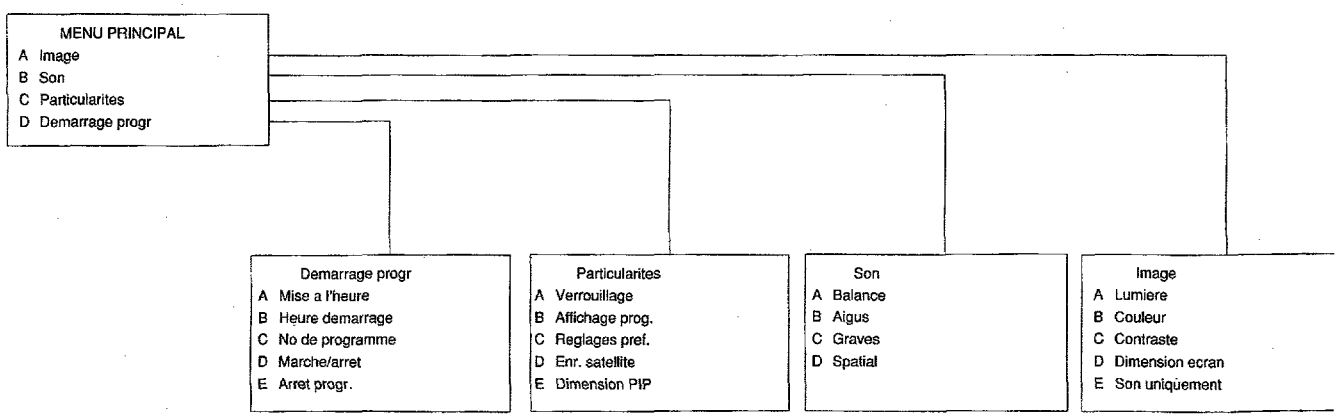
(D)

BEDIENUNG



(F)

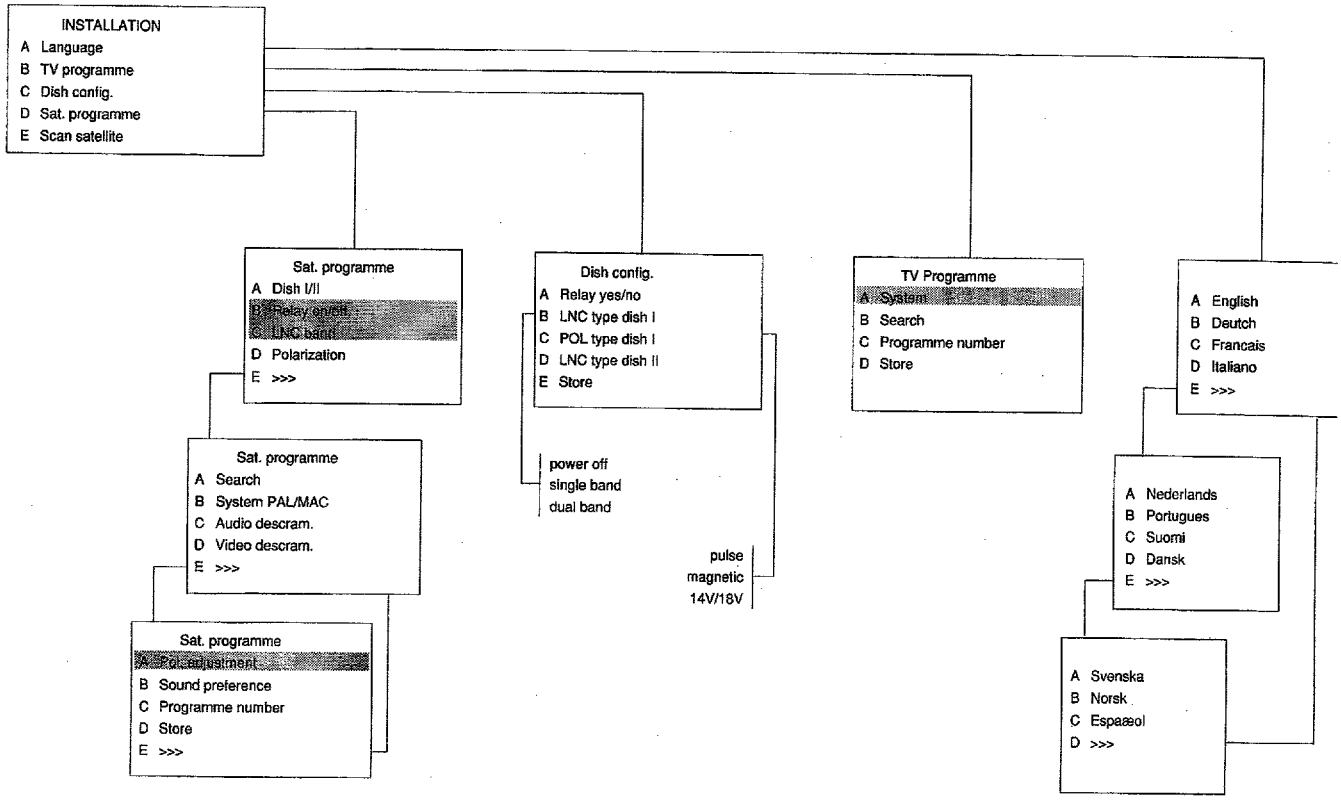
COMMANDE



Aperçu des menus

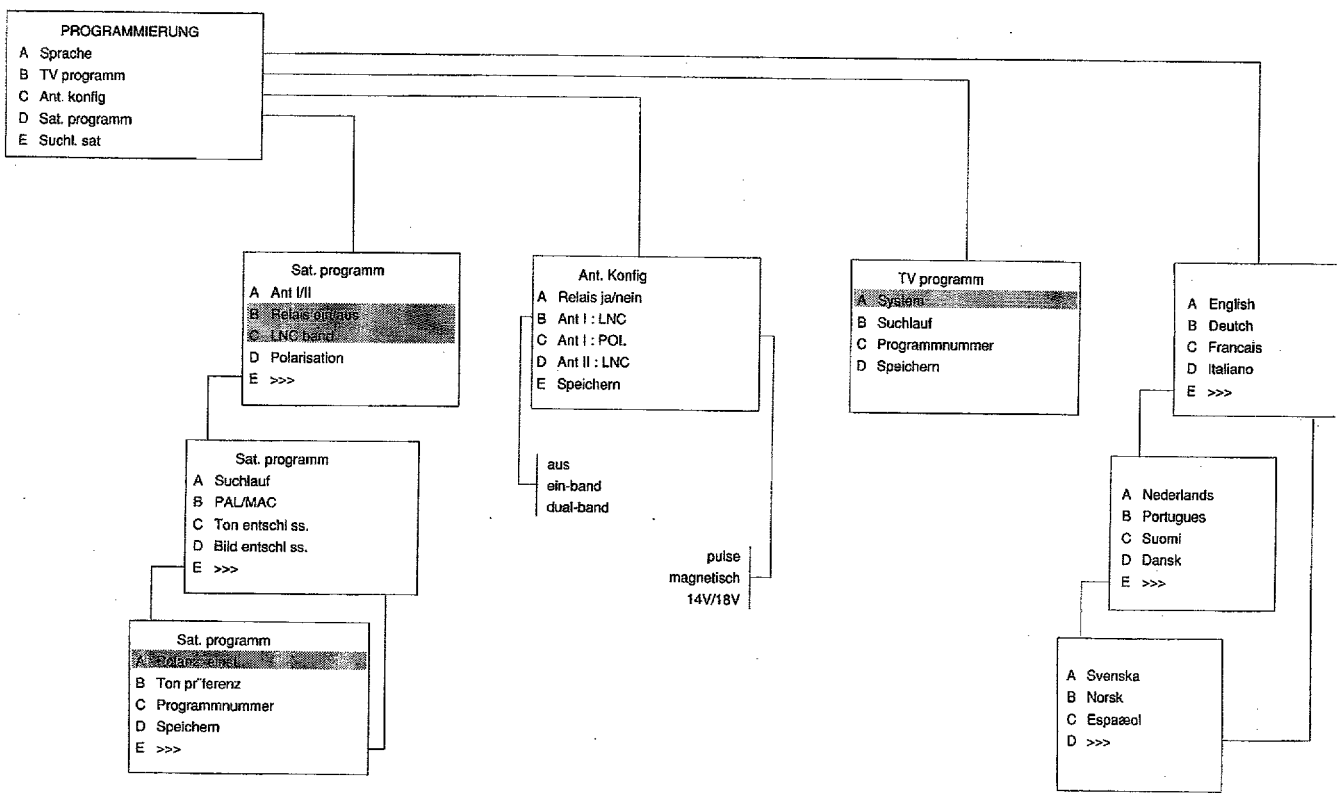
GB

INSTALLATION



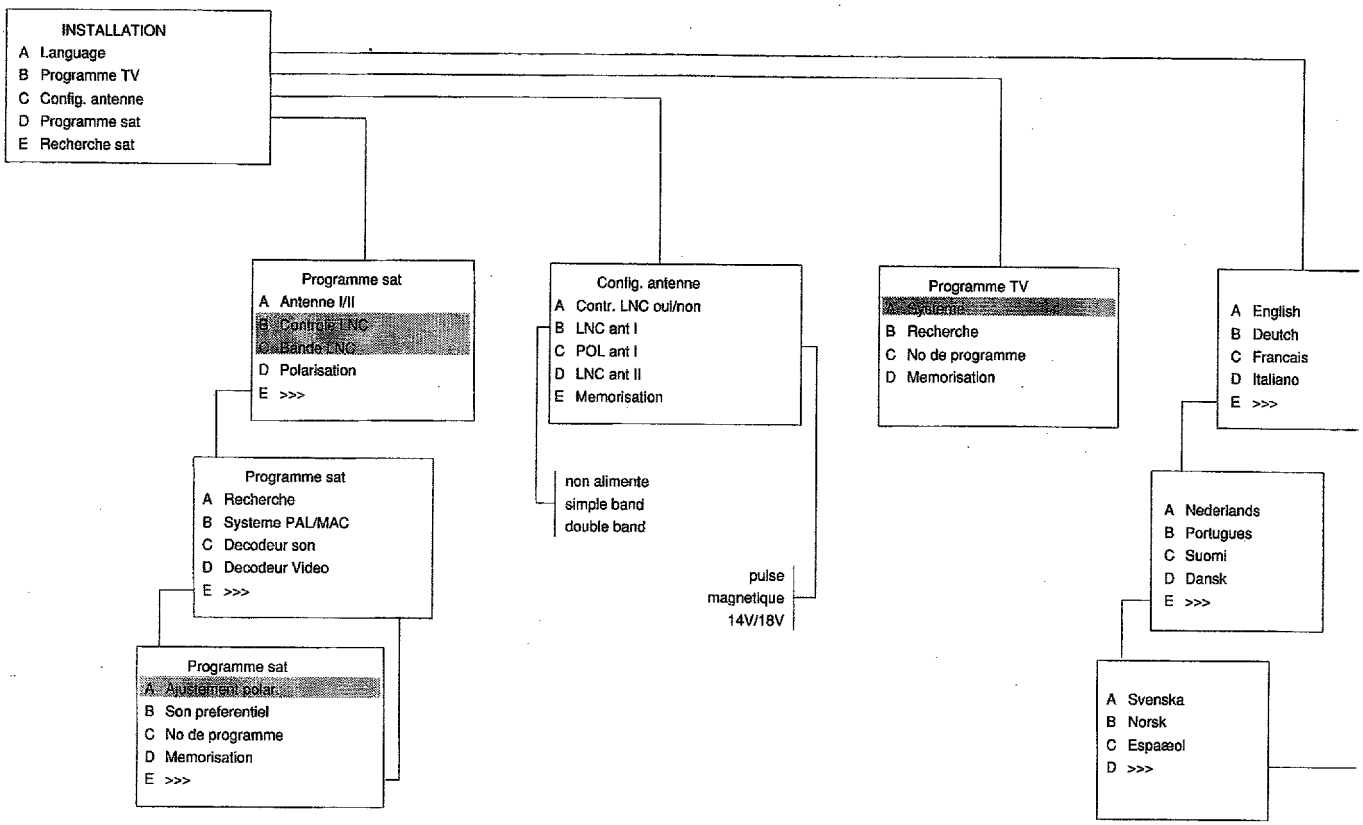
D

PROGRAMMIERUNG

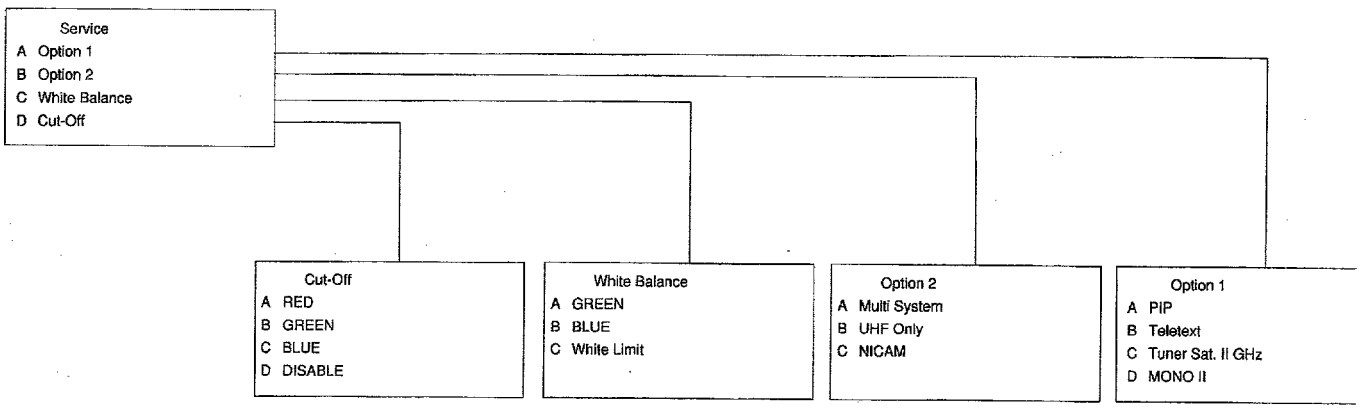


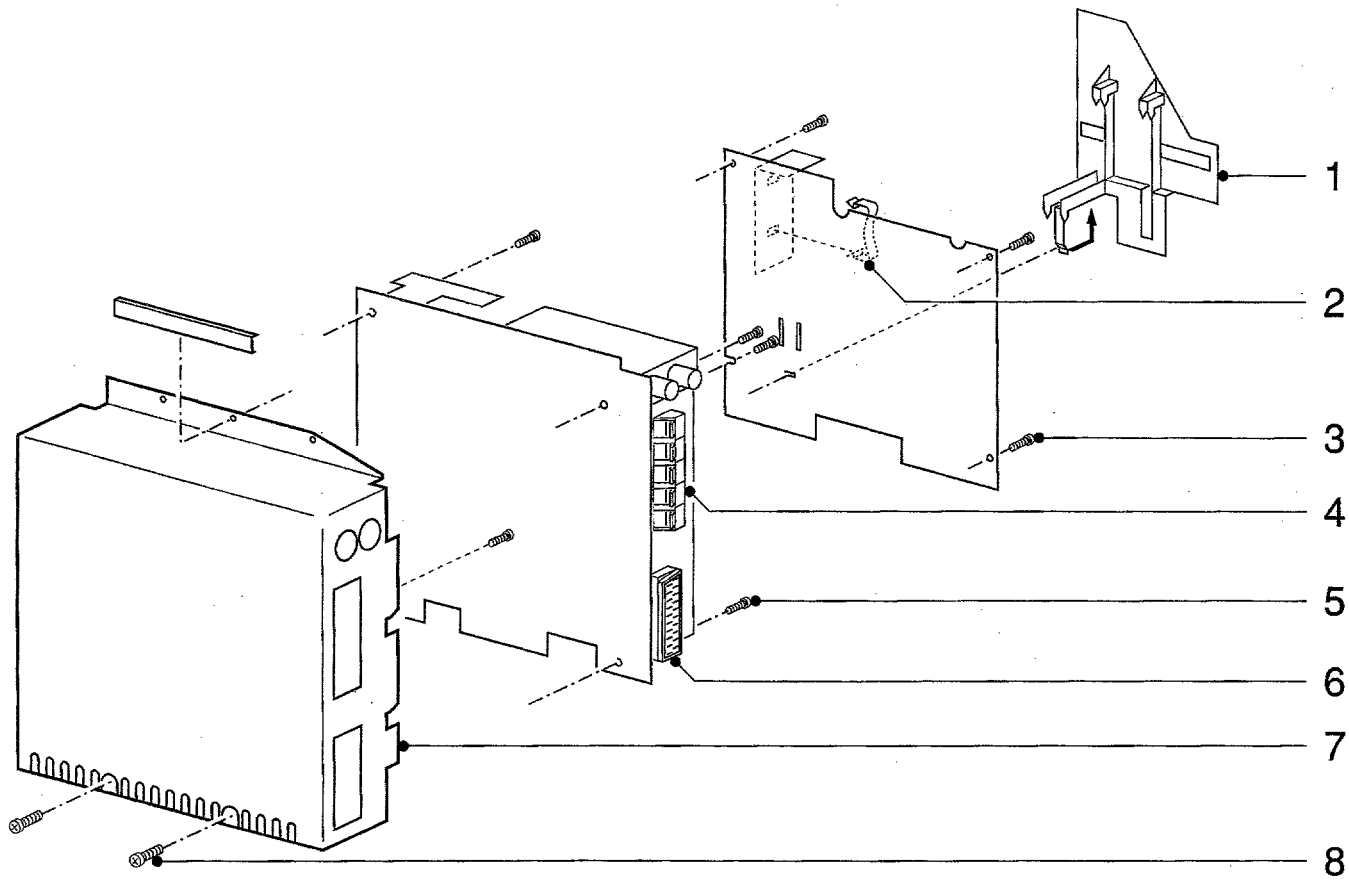
F

INSTALLATION



SERVICE MENU





CL 26532051/024
260592

1	4822 432 92947	Cover transformer	5	4822 502 30689	Screw (3 x 8)
2	4822 492 62076	Fixation spring	6	4822 267 70319	Scart connector
3	4822 532 10917	Screw (3.2 x 7)	7	4822 432 92895	Satellite box
4	4822 267 41044	Click fit connector (5x)	8	4822 502 13712	Screw

Spare parts list / Stückliste / Liste

Satellite Power Supply Panel

13	4822 492 62076	spring for transistor
15	▲4822 265 30887	conn. 3p mains
16	4822 265 30351	conn. 5p
17	4822 265 40421	conn. 6p
18	4822 290 40295	conn. 7p

Various

1500!	4822 071 56301	fuse T630mA

2505	▲4822 124 42054	15µF 20% 385V
2511	4822 124 40252	33µF 20% 63V
2520	5322 121 42465	68nF 5% 63V
2522	4822 121 51093	6,8nF 5% 250V
2524	4822 122 40592	
2529	4822 122 31784	4,7nF 10% 50V
2530	▲4822 124 40202	1500µF 20% 16V
2531	4822 126 11501	1,5nF 10% 500V
2532	4822 122 31947	100nF 20% 63V
2533	4822 122 31947	100nF 20% 63V
2536	4822 122 31644	2,2nF 10% 63V
2540	4822 124 40738	330µF 20% 25V
2541	4822 124 40738	330µF 20% 25V
2546	4822 126 11502	470pF 10% 500V
2547	4822 124 42131	15µF 20% 50V
2549	4822 122 31947	100nF 20% 63V
2552	4822 122 31947	100nF 20% 63V
2553	4822 122 31947	100nF 20% 63V
2560	4822 124 80114	2200µF 20% 10V
2561	4822 126 11501	1,5nF 10% 500V
2562	4822 122 31965	220pF 5% 63V
2563	5322 122 31842	330pF 5% 63V
2564	4822 124 41577	4,7µF 20% 50V
2566	4822 122 32542	47nF 10% 63V
2575	4822 121 42408	220nF 5% 63V
2579	4822 122 32542	47nF 10% 63V
2580	4822 124 40738	330µF 20% 25V
2581	4822 126 11502	470pF 10% 500V
2590	4822 124 41069	47µF 20% 63V
2592	4822 124 41577	4,7µF 20% 50V
2593	4822 122 31797	22nF 10% 63V
2594	4822 124 40738	330µF 20% 25V
2595	4822 122 31947	100nF 20% 63V

3511	4822 116 52211	150Ω 5% 0,5W
3512	4822 116 52272	330k 5% 0,5W
3514	4822 050 24704	470k 1% 0,6W
3518	4822 050 25604	560k 1% 0,6W
3520	4822 116 52213	180Ω 5% 0,5W
3523	▲4822 052 10229	22Ω 5% 0,33W
3529	4822 116 52296	6k8 5% 0,5W
3531	4822 050 18202	8k2 1% 0,4W
3532	4822 051 10102	1k 2% 0,25W
3533	4822 050 11002	1k 1% 0,4W
3534	4822 051 10162	1k6 2% 0,25W
3536	4822 051 10224	220k 2% 0,25W
3537	4822 051 10472	4k7 2% 0,25W
3538	4822 051 10103	10k 2% 0,25W
3539	4822 051 10472	4k7 2% 0,25W
3540	4822 100 11391	330Ω LIN.
3541	4822 100 11391	330Ω LIN.
3542	4822 051 10472	4k7 2% 0,25W
3543	4822 051 10103	10k 2% 0,25W
3544	4822 051 10103	10k 2% 0,25W
3545	4822 051 10102	1k 2% 0,25W
3546	4822 051 10152	1k5 2% 0,25W
3547	4822 050 14303	43k 1% 0,4W
3548	4822 116 52229	750Ω 5% 0,5W
3549	4822 116 52193	39Ω 5% 0,5W
3551	4822 051 10102	1k 2% 0,25W
3552	4822 050 11002	1k 1% 0,4W
3553	4822 116 52283	4k7 5% 0,5W
3554	4822 051 10103	10k 2% 0,25W
3555	4822 116 80176	1Ω 5% 0,5W
3556	4822 051 10273	27k 2% 0,25W
3561	4822 051 10471	470Ω 2% 0,25W
3563	4822 051 10472	4k7 2% 0,25W
3564	4822 051 10272	2k7 2% 0,25W
3565	4822 116 52283	4k7 5% 0,5W
3566	4822 116 52233	10k 5% 0,5W
3567	4822 051 10101	100Ω 2% 0,25W
3568	4822 051 10333	33k 2% 0,25W
3569	4822 116 52224	470Ω 5% 0,5W
3570	4822 116 52257	22k 5% 0,5W
3571	4822 116 52257	22k 5% 0,5W
3572	4822 051 10333	33k 2% 0,25W
3573	4822 051 10103	10k 2% 0,25W
3574	4822 051 10103	10k 2% 0,25W
3575	4822 116 52233	10k 5% 0,5W
3576	4822 116 52224	470Ω 5% 0,5W
3577	4822 116 52233	10k 5% 0,5W
3578	4822 116 52258	220k 5% 0,5W
3579	4822 052 10399	39Ω 5% 0,33W
3580	4822 051 10681	680Ω 2% 0,25W
3581	4822 116 80176	1Ω 5% 0,5W
3583	4822 051 10471	470Ω 2% 0,25W
3584	4822 116 52257	22k 5% 0,5W
3585	4822 051 10471	470Ω 2% 0,25W
3586	4822 051 10243	24k 2% 0,25W
3587	4822 116 52256	2k2 5% 0,5W
3588	4822 051 10473	47k 2% 0,25W
3589	4822 116 52297	68k 5% 0,5W
3590	▲4822 052 10101	100Ω 5% 0,33W
3591	4822 051 10101	100Ω 2% 0,25W
3592	4822 051 10105	1M 5% 0,25W
3593	4822 116 80176	1Ω 5% 0,5W
3594	4822 051 10102	1k 2% 0,25W
3595	4822 051 10223	22k 2% 0,25W
3596	4822 051 10472	4k7 2% 0,25W
3597	4822 051 10471	470Ω 2% 0,25W
3598	4822 116 52241	13k 5% 0,5W
3599	4822 116 52233	10k 5% 0,5W

5501!	4822 157 52505	33µH 10%
5502	4822 157 52077	5,6µH
5523!	4822 157 60124	ferrite bead
5524	4822 157 52077	5,6µH
5525	4822 146 31075	trafo mains
5531!	4822 157 52505	33µH 10%
5540!	4822 157 52505	33µH 10%
5546!	4822 157 60124	ferrite bead
5561!	4822 157 52505	33µH 10%
5593	4822 157 62336	100µH 10%

6512	4822 130 30621	1N4148
6530	5322 130 31938	BYV27-200
6531	4822 130 32896	BYD33M
6532	4822 130 32896	BYD33M
6540	4822 130 32896	BYD33M
6546	4822 130 32896	BYD33M
6552	4822 130 30621	1N4148
6561	5322 130 31938	BYV27-200
6565	4822 130 34398	BZX79-C24
6580	4822 130 32896	BYD33M
6590	4822 130 32896	BYD33M
6591	4822 130 30621	1N4148
6593	5322 130 31938	BYV27-200
6594	4822 130 61219	BZX79-C10

7500	4822 209 63735	TDA8385/N2
7514!	4822 209 30992	CNR50
7525!	4822 130 62999	2SK1834
7530	5322 209 81148	MC78L12ACP
7531	5322 130 44593	BC369
7532	4822 130 61207	BC848
7542	4822 130 61207	BC848
7543	4822 130 61207	BC848
7550	4822 209 80891	MC78M05CT
7551	5322 130 44593	BC369
7552	4822 130 61207	BC848
7566	4822 130 61207	BC848
7568	4822 130 61207	BC848
7570	4822 130 63001	IRFZ14
7571	4822 130 63001	IRFZ14
7577	4822 209 81472	HCBLM358N
7580	4822 130 62732	BD241A
7581	4822 130 62733	BD242A
7592	4822 130 42513	BC858C
7595	4822 209 80797	LM393N
7597	5322 130 61573	BD676

Spare parts list / Stückliste / Liste

Satellite Panel

1 1	4822 265 40252	7p female
1 2	4822 267 30546	6p female
1 3	4822 265 30275	5p female
20	4822 267 41044	click fit
21	4822 267 70319	scart grey
22	4822 265 30351	5p male
23	4822 265 40421	6p male
25	4822 290 40295	7p male
26	4822 267 51054	10p male

Various

1100	4822 210 10427	SF914D
1100	4822 210 10493	SF916D
1200	4822 242 72461	H316LTM
1300	4822 242 80313	SFE7,02MHz
1302	4822 242 80334	SFE7,38MHz
1304	4822 242 80316	SFE7,74MHz
1306	4822 242 81284	SFE5.8MHz
1308	4822 242 80314	SFE7,20MHz
1310	4822 242 80315	SFE7,56MHz
1312	4822 242 80317	SFE7,92MHz
1314	4822 242 72303	TH316BQM
1730	4822 242 71663	12,000 MHz

⊣⊢

2100	4822 124 40684	150µF 20% 6,3V
2101	4822 122 32542	47nF 10% 63V
2102	4822 124 22606	68µF 20% 16V
2103	4822 122 32442	10nF 50V
2105	4822 122 33496	100nF 10% 63V
2107	4822 122 33496	100nF 10% 63V
2110	4822 122 33496	100nF 10% 63V
2111	4822 121 42408	220nF 5% 63V
2115	4822 121 42408	220nF 5% 63V
2117	4822 122 33496	100nF 10% 63V
2118	4822 122 33496	100nF 10% 63V
2120	4822 124 40242	1µF 20% 63V
2121	4822 124 22633	22µF 20% 35V
2130	4822 122 32505	2,7pF 5% 50V
2133	4822 122 31771	390pF 5% 50V
2140	4822 122 32082	4,7pF 5% 50V
2143	4822 122 31839	82pF 10% 50V
2160	4822 124 22606	68µF 20% 16V
2165	4822 124 22606	68µF 20% 16V
2166	4822 122 33496	100nF 10% 63V
2170	4822 122 31965	220pF 5% 63V
2202	4822 121 41854	150nF 5% 63V
2206	4822 122 31774	56pF 5% 50V
2220	4822 122 33496	100nF 10% 63V
2225	4822 122 31797	22nF 10% 63V
2226	4822 122 33496	100nF 10% 63V
2240	4822 122 31765	100pF 5% 50V
2241	4822 122 31771	390pF 5% 50V
2248	4822 122 33496	100nF 10% 63V
2260	4822 124 22606	68µF 20% 16V
2261	4822 124 22606	68µF 20% 16V
2262	4822 122 33496	100nF 10% 63V
2263	4822 124 22606	68µF 20% 16V
2264	4822 122 33496	100nF 10% 63V
2302	4822 122 31797	22nF 10% 63V
2303	4822 122 31797	22nF 10% 63V
2304	4822 122 32808	1,2nF 10% 63V
2306	4822 122 31916	5,6nF 10% 63V
2308	4822 122 31766	120pF 5% 50V
2310	4822 124 22633	22µF 20% 35V
2311	4822 124 40248	10µF 20% 63V
2312	4822 122 33496	100nF 10% 63V
2314	4822 122 32808	1,2nF 10% 63V
2316	4822 122 31916	5,6nF 10% 63V
2318	4822 122 31766	120pF 5% 50V
2320	4822 124 40248	10µF 20% 63V
2322	4822 124 40248	10µF 20% 63V
2328	5322 122 33446	3,3nF 10% 63V
2329	5322 121 42661	330nF 5% 63V
2330	4822 124 22633	22µF 20% 35V
2334	4822 122 33496	100nF 10% 63V
2350	4822 122 33496	100nF 10% 63V
2351	4822 124 22606	68µF 20% 16V
2352	4822 124 40749	3,3µF 20% 63V
2354	4822 124 40744	68µF 20% 40V
2355	4822 122 33496	100nF 10% 63V
2356	4822 122 32541	27nF 10% 63V
2358	4822 122 32566	3,9nF 10% 63V
2359	4822 124 10482	10µF 10% 16V
2360	4822 124 22633	22µF 20% 35V
2361	4822 124 10482	10µF 10% 16V
2362	4822 122 33496	100nF 10% 63V
2364	4822 124 10482	10µF 10% 16V
2366	4822 124 10482	10µF 10% 16V
2368	4822 122 33496	100nF 10% 63V
2370	4822 122 32566	3,9nF 10% 63V
2372	4822 124 22633	22µF 20% 35V
2374	4822 122 32541	27nF 10% 63V
2376	4822 124 40749	3,3µF 20% 63V
2378	4822 122 33496	100nF 10% 63V
2380	4822 124 40744	68µF 20% 40V
2384	4822 122 33496	100nF 10% 63V
2388	4822 122 33496	100nF 10% 63V
2400	4822 122 33496	100nF 10% 63V
2402	5322 121 42661	330nF 5% 63V
2403	5322 121 42661	330nF 5% 63V
2404	5322 121 42661	330nF 5% 63V
2405	5322 121 42661	330nF 5% 63V
2408	5322 121 42661	330nF 5% 63V
2415	4822 122 33496	100nF 10% 63V
2416	4822 124 22606	68µF 20% 16V
2428	5322 121 42661	330nF 5% 63V
2438	5322 121 42661	330nF 5% 63V
2446	4822 122 31175	1nF 10% 500V
2447	4822 122 31175	1nF 10% 500V
2448	4822 122 31175	1nF 10% 500V
2449	4822 122 31175	1nF 10% 500V
2450	4822 121 51252	470nF 5% 63V
2451	4822 121 51252	470nF 5% 63V
2452	5322 122 31647	1nF 10% 63V
2453	5322 122 31647	1nF 10% 63V
2457	5322 122 31842	330pF 5% 63V
2458	5322 122 31842	330pF 5% 63V
2461	4822 124 22606	68µF 20% 16V
2462	4822 122 33496	100nF 10% 63V
2463	4822 122 32082	4,7pF 5% 50V
2465	4822 121 43856	4.7nF 5% 250V
2480	4822 122 33496	100nF 10% 63V
2485	4822 124 22606	68µF 20% 16V
2731	4822 122 31825	27pF 10% 50V
2732	4822 122 31825	27pF 10% 50V
2755	4822 122 31766	120pF 5% 50V
2756	4822 122 31766	120pF 5% 50V
2757	4822 122 32142	270pF 5% 63V
2770	4822 124 22633	22µF 20% 35V
2771	4822 122 33496	100nF 10% 63V
2772	4822 122 31797	22nF 10% 63V

⊣□⊢

3102▲	4822 052 10109	10Ω 5% 0,33W
3105	4822 116 52263	2k7 5% 0,5W
3106	4822 051 10273	27k 2% 0,25W
3111	4822 051 10225	2M2 5% 0,25W
3112	4822 051 10154	150k 2% 0,25W
3113	4822 051 10224	220k 2% 0,25W
3115	4822 051 10225	2M2 5% 0,25W
3116	4822 116 52285	470k 5% 0,5W
3117	4822 051 10224	220k 2% 0,25W
3118	4822 116 52276	3k9 5% 0,5W
3119	4822 051 10272	2k7 2% 0,25W
3120	4822 051 10473	47k 2% 0,25W
3121	4822 051 10823	82k 2% 0,25W
3122	4822 051 10685	6M8 5% 0,25W
3123	4822 116 52276	3k9 5% 0,5W
3124	4822 051 10272	2k7 2% 0,25W
3130	4822 051 10102	1k 2% 0,25W
3131	4822 116 52205	1k1 5% 0,5W
3132	4822 051 10682	6k8 2% 0,25W
3133	4822 116 52217	270Ω 5% 0,5W
3135	4822 051 10271	270Ω 2% 0,25W
3136	4822 051 10471	470Ω 2% 0,25W
3137	4822 051 10101	100Ω 2% 0,25W
3138	4822 051 10101	100Ω 2% 0,25W
3140	4822 116 52207	1k2 5% 0,5W
3141	4822 051 10132	1k3 2% 0,25W
3142	4822 051 10392	3k9 2% 0,25W
3143	4822 051 10331	330Ω 2% 0,25W
3144	4822 051 10101	100Ω 2% 0,25W
3145	4822 051 10101	100Ω 2% 0,25W
3146	4822 051 10221	220Ω 2% 0,25W
3150	4822 051 10101	100Ω 2% 0,25W
3151	4822 116 52231	820Ω 5% 0,5W
3159	4822 051 10272	2k7 2% 0,25W
3160▲	4822 052 10159	15Ω 5% 0,33W
3161	4822 051 10152	1k5 2% 0,25W
3162	4822 051 10682	6k8 2% 0,25W
3163	4822 051 10822	8k2 2% 0,25W

Spare parts list / Stückliste / Liste

3164	4822 100 11213	22k 30%
3165⚠	4822 052 10109	10Ω 5% 0,33W
3200	4822 050 11002	1k 1% 0,4W
3201	4822 051 10102	1k 2% 0,25W
3202	4822 116 52231	820Ω 5% 0,5W
3203	4822 051 10151	150Ω 2% 0,25W
3204	4822 051 10681	680Ω 2% 0,25W
3205	4822 116 52211	150Ω 5% 0,5W
3206	4822 116 52175	100Ω 5% 0,5W
3207	4822 051 10123	12k 2% 0,25W
3208	4822 051 10105	1M 5% 0,25W
3209	4822 051 10473	47k 2% 0,25W
3210	4822 051 10681	680Ω 2% 0,25W
3220	4822 051 10102	1k 2% 0,25W
3221	4822 051 10681	680Ω 2% 0,25W
3222	4822 051 10104	100k 2% 0,25W
3223	4822 116 52284	47k 5% 0,5W
3224	4822 051 10472	4k7 2% 0,25W
3225	4822 050 11002	1k 1% 0,4W
3226	4822 051 10473	47k 2% 0,25W
3229	4822 051 10473	47k 2% 0,25W
3230	4822 051 10392	3k9 2% 0,25W
3231	4822 051 10272	2k7 2% 0,25W
3240	4822 051 20222	2k2 5% 0,1W
3241	4822 051 10472	4k7 2% 0,25W
3248	4822 051 10151	150Ω 2% 0,25W
3249	4822 051 10151	150Ω 2% 0,25W
3250	4822 051 20222	2k2 5% 0,1W
3251	4822 116 52215	220Ω 5% 0,5W
3260⚠	4822 052 10229	22Ω 5% 0,33W
3261	4822 116 52243	1k5 5% 0,5W
3262	4822 116 52195	47Ω 5% 0,5W
3263	4822 051 10479	47Ω 2% 0,25W
3264	4822 051 10919	91Ω 2% 0,25W
3265	4822 051 10562	5k6 2% 0,25W
3266	4822 051 20222	2k2 5% 0,1W
3267⚠	4822 052 10109	10Ω 5% 0,33W
3268⚠	4822 052 10229	22Ω 5% 0,33W
3290	4822 051 10102	1k 2% 0,25W
3292	4822 051 10392	3k9 2% 0,25W
3294	4822 051 10622	6k2 2% 0,25W
3300	4822 051 10331	330Ω 2% 0,25W
3301	4822 051 10681	680Ω 2% 0,25W
3302	4822 051 10331	330Ω 2% 0,25W
3303	4822 051 10681	680Ω 2% 0,25W
3304	4822 051 10331	330Ω 2% 0,25W
3305	4822 051 10681	680Ω 2% 0,25W
3306	4822 051 10621	620Ω 2% 0,25W
3307	4822 051 10399	39Ω 2% 0,25W
3308	4822 051 10331	330Ω 2% 0,25W
3309	4822 051 10821	820Ω 2% 0,25W
3310	4822 051 10331	330Ω 2% 0,25W
3311	4822 051 10821	820Ω 2% 0,25W
3312	4822 051 10331	330Ω 2% 0,25W
3313	4822 051 10821	820Ω 2% 0,25W
3314	4822 051 10471	470Ω 2% 0,25W
3315	4822 051 10162	1k6 2% 0,25W
3316	4822 051 10562	5k6 2% 0,25W
3317	4822 051 10562	5k6 2% 0,25W
3318	4822 051 10562	5k6 2% 0,25W
3319	4822 051 10152	1k5 2% 0,25W
3320	4822 051 10273	27k 2% 0,25W
3321⚠	4822 052 10338	3Ω3 5% 0,33W
3322	4822 051 10562	5k6 2% 0,25W
3323	4822 051 10562	5k6 2% 0,25W
3324	4822 051 10562	5k6 2% 0,25W
3325	4822 051 10152	1k5 2% 0,25W
3326	4822 051 10272	2k7 2% 0,25W
3327	4822 051 10153	15k 2% 0,25W
3328	4822 051 10132	1k3 2% 0,25W
3329	4822 051 10132	1k3 2% 0,25W
3331	4822 051 10471	470Ω 2% 0,25W
3332	4822 116 52249	1k8 5% 0,5W
3333	4822 051 10471	470Ω 2% 0,25W
3334	4822 116 52283	4k7 5% 0,5W
3335	4822 051 10008	0Ω 5% 0,25W
3350	4822 051 10104	100k 2% 0,25W
3351	4822 051 10164	160k 2% 0,25W
3352	4822 051 10242	2k4 2% 0,25W
3353	4822 052 10189	18Ω 5% 0,33W
3354	4822 051 10512	5k1 2% 0,25W
3356	4822 051 10106	10M 5% 0,25W
3358	4822 051 10622	6k2 2% 0,25W
3359	4822 051 10103	10k 2% 0,25W
3360	4822 116 52251	18k 5% 0,5W
3361	4822 051 10153	15k 2% 0,25W
3362	4822 051 10472	4k7 2% 0,25W
3364	4822 051 10472	4k7 2% 0,25W
3366	4822 051 10104	100k 2% 0,25W
3367	4822 051 10223	22k 2% 0,25W
3368	4822 051 10332	3k3 2% 0,25W
3370	4822 051 10332	3k3 2% 0,25W
3372	4822 051 10106	10M 5% 0,25W
3374	4822 051 10104	100k 2% 0,25W
3376	4822 116 52251	18k 5% 0,5W
3378	4822 051 10472	4k7 2% 0,25W
3380	4822 051 10472	4k7 2% 0,25W
3382	4822 051 10622	6k2 2% 0,25W
3384	4822 051 10512	5k1 2% 0,25W
3386	4822 051 10242	2k4 2% 0,25W
3388	4822 051 10104	100k 2% 0,25W
3389	4822 116 52264	27k 5% 0,5W
3390	4822 051 10103	10k 2% 0,25W
3392	4822 051 10103	10k 2% 0,25W
3394	4822 051 10133	13k 2% 0,25W
3396	4822 051 10133	13k 2% 0,25W
3397	4822 051 10273	27k 2% 0,25W
3398	4822 051 10102	1k 2% 0,25W
3399	4822 051 10474	470k 2% 0,25W
3400	4822 116 52211	150Ω 5% 0,5W
3402	4822 051 10104	100k 2% 0,25W
3403	4822 051 10104	100k 2% 0,25W
3404	4822 051 10104	100k 2% 0,25W
3405	4822 051 10104	100k 2% 0,25W
3408	4822 116 52256	2k2 5% 0,5W
3409	4822 051 20222	2k2 5% 0,1W
3415⚠	4822 052 10229	22Ω 5% 0,33W
3440	4822 051 10472	4k7 2% 0,25W
3442	4822 116 52284	47k 5% 0,5W
3450	4822 051 10151	150Ω 2% 0,25W
3451	4822 051 10151	150Ω 2% 0,25W
3452	4822 051 10331	330Ω 2% 0,25W
3453	4822 051 10331	330Ω 2% 0,25W
3457	4822 051 10102	1k 2% 0,25W
3458	4822 051 10102	1k 2% 0,25W
3460	4822 051 10101	100Ω 2% 0,25W
3461	4822 051 10682	6k8 2% 0,25W
3462	4822 116 52246	1k6 5% 0,5W
3463	4822 051 10101	100Ω 2% 0,25W
3464	4822 051 10689	68Ω 2% 0,25W
3465	4822 116 52175	100Ω 5% 0,5W
3466	4822 051 10101	100Ω 2% 0,25W
3467	4822 051 10759	75Ω 2% 0,25W
3468⚠	4822 052 10229	22Ω 5% 0,33W
3480	4822 051 10102	1k 2% 0,25W
3481	4822 051 10109	10Ω 2% 0,25W
3483	4822 051 10472	4k7 2% 0,25W
3484	4822 116 52284	47k 5% 0,5W
3485	4822 051 10103	10k 2% 0,25W
3486	4822 051 10562	5k6 2% 0,25W
3487	4822 051 10562	5k6 2% 0,25W
3491	4822 051 10102	1k 2% 0,25W
3495	4822 116 52284	47k 5% 0,5W
3496	4822 051 10103	10k 2% 0,25W
3740	4822 051 10103	10k 2% 0,25W
3741	4822 051 10103	10k 2% 0,25W
3742	4822 051 10103	10k 2% 0,25W
3743	4822 051 10103	10k 2% 0,25W
3744	4822 051 10103	10k 2% 0,25W
3745	4822 051 10103	10k 2% 0,25W
3746	4822 051 10103	10k 2% 0,25W
3748	4822 051 10151	150Ω 2% 0,25W
3749	4822 051 10151	150Ω 2% 0,25W
3750	4822 051 10473	47k 2% 0,25W
3752	4822 116 52233	10k 5% 0,5W
3755	4822 050 21501	150Ω 1% 0,6W
3756	4822 050 21501	150Ω 1% 0,6W
3757	4822 051 10151	150Ω 2% 0,25W
3758	4822 051 10103	10k 2% 0,25W
3759	4822 051 10103	10k 2% 0,25W
3760	4822 051 10103	10k 2% 0,25W
3761	4822 051 10123	12k 2% 0,25W
3762	4822 051 10682	6k8 2% 0,25W
3763	4822 051 10332	3k3 2% 0,25W
3764	4822 051 10103	10k 2% 0,25W
3765	4822 051 10103	10k 2% 0,25W
3766	4822 050 21003	10k 1% 0,6W
3767	4822 051 10223	22k 2% 0,25W
3770	4822 051 10102	1k 2% 0,25W
3771	4822 051 20222	2k2 5% 0,1W

Spare parts list / Stückliste / Liste

4020	4822 051 10008	0Ω 5% 0,25W
4021	4822 051 10008	0Ω 5% 0,25W
4139	4822 051 10008	0Ω 5% 0,25W
4152	4822 051 10008	0Ω 5% 0,25W
4154	4822 051 10008	0Ω 5% 0,25W
4220	4822 051 10008	0Ω 5% 0,25W
4230	4822 051 10008	0Ω 5% 0,25W
4300	4822 051 10008	0Ω 5% 0,25W
4302	4822 051 10008	0Ω 5% 0,25W
4342	4822 051 10008	0Ω 5% 0,25W
4348	4822 051 10008	0Ω 5% 0,25W
4382	4822 051 10008	0Ω 5% 0,25W
4398	4822 051 10008	0Ω 5% 0,25W
4399	4822 051 10008	0Ω 5% 0,25W
4485	4822 051 10008	0Ω 5% 0,25W
4488	4822 051 10008	0Ω 5% 0,25W

5100	5322 157 53016	
5770	4822 157 60123	6,8µH

6105	4822 130 34142	BZX79-C33
6107	4822 209 73095	P4KE30C-7000
6108	4822 209 73095	P4KE30C-7000
6160	4822 130 34233	BZX79-C5V1
6300	4822 130 30621	1N4148
6301	4822 130 30621	1N4148
6460	4822 130 30621	1N4148
6464	4822 130 34281	BZX79-C15
6465	4822 130 34281	BZX79-C15
6467	4822 130 34281	BZX79-C15
6480	4822 209 73095	P4KE30C-7000
6481	4822 130 34281	BZX79-C15
6482	4822 209 73095	P4KE30C-7000
6483	4822 209 73095	P4KE30C-7000
6485	4822 130 30621	1N4148
6489	4822 130 30621	1N4148
6770	5322 130 34834	BZX79-C3V6

7111	5322 130 42136	BC848C
7112	5322 130 42136	BC848C
7115	4822 130 42513	BC858C
7116	4822 130 42513	BC858C
7120	4822 209 61115	LF353N
7130	5322 130 42136	BC848C
7131	5322 130 41983	BC858B
7140	5322 130 42136	BC848C
7141	5322 130 41983	BC858B
7150	5322 130 41983	BC858B
7200	5322 130 41983	BC858B
7201	5322 130 42136	BC848C
7202	5322 130 41983	BC858B
7203	5322 209 85503	LM311N
7204▲	5322 130 41982	BC848B
7220	5322 130 44499	BF245A
7221	5322 130 41983	BC858B
7225	4822 209 61115	LF353N
7230	5322 130 44499	BF245A
7240	4822 209 10866	HEF4528BP
7250▲	5322 130 41982	BC848B
7260	5322 130 41983	BC858B
7300	4822 209 10263	4052B
7304	4822 209 163998	TDA9820
7308	5322 130 41982	BC848B
7312▲	5322 130 41982	BC848B
7314▲	5322 130 41982	BC848B
7326	5322 130 41983	BC858B
7328▲	5322 130 41982	BC848B
7350	4822 209 73324	LF347N
7354	5322 209 73938	NE572N
7362▲	5322 130 41982	BC848B
7366▲	5322 130 41982	BC848B
7376	4822 209 10263	4052B
7400	5322 209 10576	4053B
7440▲	5322 130 41982	BC848B
7460	4822 130 44196	BC548C
7461	4822 130 44197	BC558B
7480	4822 130 40937	BC548B
7484▲	5322 130 41982	BC848B
7485▲	5322 130 41982	BC848B
7487	5322 209 10576	4053B
7490▲	5322 130 41982	BC848B
7730	4822 209 31126	PCB83C654P
7750▲	5322 130 41982	BC848B
7760	4822 209 80797	LM393N
7770	5322 130 41983	BC858B
7771	4822 209 72042	MC78L05ACP

Spare parts list / Stückliste / Liste

Satellite Euro Module

14	4822 267 51054	10p male
2 15	4822 266 20156	1p male
3 15	4822 266 30364	1p female
21	4822 267 60247	scart
23	4822 265 40442	10p male
26	4822 265 40442	10p male
30	4822 265 41086	9p male
32	4822 267 40666	3p male
1 50	4822 267 51084	9p female
1 51	4822 290 40285	3p female
1 52	4822 267 50637	10p female
100	4822 256 91879	holder
1 8109	4822 290 40285	3p female
1 8105	4822 267 51084	9p female

various

1800	4822 071 51601	fuse T160mA

2801	4822 121 51252	470nF 5% 63V
2802	4822 124 40198	470µF 20% 16V
2803	4822 121 51252	470nF 5% 63V
2804	4822 122 33496	100nF 10% 63V
2807	4822 124 41506	47µF 20% 16V
2808	4822 121 42408	220nF 5% 63V
2809	4822 122 30107	270pF 2% 100V
2810	4822 124 41506	47µF 20% 16V
2811	4822 122 30107	270pF 2% 100V
2812	4822 122 33496	100nF 10% 63V
2813	4822 122 33496	100nF 10% 63V
2814	4822 122 31759	18nF
2815	4822 121 51256	39nF 10% 50V
2816	4822 121 51256	39nF 10% 50V
2817	4822 124 41596	22µF 20% 50V
2819	4822 124 41525	100µF 20% 25V
2820	4822 124 40242	1µF 20% 63V
2821	4822 124 40432	1500µF 20% 25V
2822	4822 124 40435	10µF 20% 50V
2823	4822 124 41577	4,7µF 20% 50V
2824	4822 122 33496	100nF 10% 63V
2826	4822 122 33496	100nF 10% 63V
2827	5322 121 42386	100nF 5% 63V
2828	4822 122 33496	100nF 10% 63V
2829	4822 122 31797	22nF 10% 63V
2830	4822 122 33496	100nF 10% 63V
2831	4822 122 33496	100nF 10% 63V
2832	4822 122 31772	47pF 5% 50V
2833	4822 121 42408	220nF 5% 63V
2834	4822 121 42408	220nF 5% 63V
2835	4822 121 42408	220nF 5% 63V
2836	4822 121 42408	220nF 5% 63V
2837	4822 121 42408	220nF 5% 63V
2838	4822 121 42408	220nF 5% 63V
2840	4822 121 51252	470nF 5% 63V
2841	4822 121 51252	470nF 5% 63V
2842	4822 124 41509	33µF 20% 35V
2843	4822 124 41509	33µF 20% 35V
2844	4822 124 41509	33µF 20% 35V
2845	4822 124 41509	33µF 20% 35V
2846	4822 122 31766	120pF 5% 50V
2847	4822 122 31766	120pF 5% 50V
2848	4822 124 40435	10µF 20% 50V
2849	4822 124 40246	4,7µF 20% 63V
2873	4822 121 42937	2.7nF 1% 250V

3800	4822 116 52201	75Ω 5% 0,5W
3801	4822 116 52201	75Ω 5% 0,5W
3802	4822 116 52219	330Ω 5% 0,5W
3803	4822 116 52219	330Ω 5% 0,5W
3804	4822 050 11002	1k 1% 0,4W
3805	4822 050 11002	1k 1% 0,4W
3806	4822 051 10103	10k 2% 0,25W
3807	4822 051 10122	1k2 2% 0,25W
3808	4822 051 10182	1k8 2% 0,25W
3809	4822 051 10562	5k6 2% 0,25W
3810	4822 051 10392	3k9 2% 0,25W
3811	4822 051 10152	1k5 2% 0,25W
3812	4822 051 10331	330Ω 2% 0,25W
3813	4822 050 11201	120Ω 1% 0,4W
3814	4822 051 10152	1k5 2% 0,25W
3815	4822 051 10472	4k7 2% 0,25W
3816	4822 116 52296	6k8 5% 0,5W
3817	4822 051 10104	100k 2% 0,25W
3818 ⚠	4822 052 10229	22Ω 5% 0,33W
3819	4822 051 10562	5k6 2% 0,25W
3820	4822 051 10332	3k3 2% 0,25W
3821	4822 051 10102	1k 2% 0,25W
3822	4822 051 10229	22Ω 2% 0,25W
3823	4822 051 10682	6k8 2% 0,25W
3824	4822 051 10122	1k2 2% 0,25W
3825	4822 051 10103	10k 2% 0,25W
3826	4822 051 10332	3k3 2% 0,25W
3827	4822 051 10472	4k7 2% 0,25W
3829	4822 051 20222	2k2 5% 0,1W
3830	4822 051 10562	5k6 2% 0,25W
3831	4822 051 10562	5k6 2% 0,25W
3832	4822 051 10562	5k6 2% 0,25W
3833	4822 051 20222	2k2 5% 0,1W
3834	4822 051 10101	100Ω 2% 0,25W
3835	4822 051 10221	220Ω 2% 0,25W
3836	4822 051 10103	10k 2% 0,25W
3837 ⚠	4822 052 10278	2Ω7 5% 0,33W
3838	4822 051 51201	120Ω 1% 0,125W
3839	4822 051 10103	10k 2% 0,25W
3840	4822 051 10103	10k 2% 0,25W
3841	4822 051 10182	1k8 2% 0,25W
3842	4822 051 10102	1k 2% 0,25W
3843	4822 051 10103	10k 2% 0,25W
3844	4822 051 10103	10k 2% 0,25W
3845	4822 051 10103	10k 2% 0,25W
3846	4822 051 10103	10k 2% 0,25W
3847	4822 051 10103	10k 2% 0,25W
3848	4822 051 10103	10k 2% 0,25W
3849	4822 051 10562	5k6 2% 0,25W
3862	4822 051 10123	12k 2% 0,25W
3863	4822 051 10103	10k 2% 0,25W
3864	4822 051 10223	22k 2% 0,25W
3870	4822 051 10561	560Ω 2% 0,25W
3872	4822 051 10152	1k5 2% 0,25W
3873	4822 051 10363	36k 2% 0,25W
3875	4822 111 50601	470k 2%
3876	4822 051 20222	2k2 5% 0,1W
3877	4822 051 10221	220Ω 2% 0,25W
3878	4822 051 51201	120Ω 1% 0,125W
3883	4822 051 10301	300Ω 2% 0,25W
3884	4822 051 10332	3k3 2% 0,25W
3885	4822 051 10123	12k 2% 0,25W
3889	4822 051 10101	100Ω 2% 0,25W
3891	4822 051 10103	10k 2% 0,25W
3892	4822 051 10562	5k6 2% 0,25W
3893	4822 111 50602	15Ω 2%
3894	4822 111 50602	15Ω 2%
3895	4822 051 10563	56k 2% 0,25W
3896	4822 051 10563	56k 2% 0,25W
3897	4822 051 10101	100Ω 2% 0,25W
3898	4822 051 10101	100Ω 2% 0,25W
3899	4822 051 10562	5k6 2% 0,25W

6800	4822 130 80954	LLZ-C5V6
6801	4822 130 30621	1N4148
6802	4822 130 80446	LL4148
6803	4822 130 80446	LL4148
6804	4822 130 80446	LL4148
6805	4822 130 80446	LL4148

7800	5322 130 44921	BD943
7801	4822 209 31145	TEA6415B
7802	4822 209 31145	TEA6415B
7805	4822 209 63423	TDA2579B/N1
7812	4822 130 61207	BC848
7813	4822 130 61207	BC848
7823	4822 130 61207	BC848
7824	4822 130 61207	BC848
7825	4822 130 61207	BC848