

ORION

TV-325DF

MODEL

SERVICE MANUAL



ORIO-00306

Spare parts list

Ersatzteilliste

Chassis Professional 7300

Part No. ET-Nr.	Description	Bezeichnung
S087170009	CHASSIS HOLDER SIDE	HALTER CHASSIS SEITE
S087170509	CHASSIS HOLDER FRONT	HALTER CHASSIS FRONT
S087171009	CHASSIS REAR CONNECTOR COVER	BUCHSENPLATTE RÜCKSEITE
S017133009	CONDENSATOR 330 PF 1000 V	KONDENSATOR 330 PF 1000 V
S034332219	CONDENSATOR 22 NF 250 V	KONDENSATOR 22 NF 250 V
S036211509	CONDENSATOR 150 PF 2000 V	KONDENSATOR 150 PF 2000 V
S036222709	CONDENSATOR 2,7 NF 2000 V	KONDENSATOR 2,7 NF 2000 V
S036228209	CONDENSATOR 8,2 NF 2000 V	KONDENSATOR 8,2 NF 2000 V
S047001009	FUSIBLE RESISTOR 1 OHM	SICHERRUNGSWIDERSTAND 1 OHM
S047004709	FUSIBLE RESISTOR 4,7 OHM	SICHERRUNGSWIDERSTAND 4,7 OHM
S047010009	FUSIBLE RESISTOR 10 OHM	SICHERRUNGSWIDERSTAND 10 OHM
S048002209	FUSIBLE RESISTOR 2,2 OHM	SICHERRUNGSWIDERSTAND 2,2 OHM
S048005609	FUSIBLE RESISTOR 5,6 OHM	SICHERRUNGSWIDERSTAND 5,6 OHM
S048222009	FUSIBLE RESISTOR 2,2 KOHM	SICHERRUNGSWIDERSTAND 2,2 KOHM
S053910279	WIRE WOUND RESISTOR 27 OHM 3 W	DRAHTWIDERSTAND 27 OHM 3 W
S055408209	WIRE WOUND RESISTOR 5,6 OHM 7 W	DRAHTWIDERSTAND 5,6 OHM 7 W
S061284619	DIODE BA 159	DIODE BA 160
S061303209	DIODE BYW 96D	DIODE BYW 96D
S061316879	DIODE BY 228	DIODE BY 229
S061401339	DIODE BYD 33 J	DIODE BYD 33 J
S061961409	ZENER DIODE 5,1 V	ZENER DIODE 5,1 V
S061961619	ZENER DIODE 6,8 V	ZENER DIODE 6,8 V
S061961709	ZENER DIODE BZV 85C33	ZENER DIODE BZV 85C34
S061961819	ZENER DIODE 8,2 V	ZENER DIODE 8,2 V
S061963019	ZENER DIODE 33 V	ZENER DIODE 33 V
S061963309	ZENER DIODE 51 V	ZENER DIODE 51 V
S062530009	TRANSISTOR BD 436	TRANSISTOR BD 437
S062756109	TRANSISTOR S2000AF	TRANSISTOR S2000AF
S063126169	I.C. TDA 2616	I.C. TDA 2616
S063145669	I.C. TDA 4566	I.C. TDA 4566
S063445389	I.C. HEF 4538-BP	I.C. HEF 4538-BP
S063574009	I.C. 74HC4053D	I.C. 74HC4053D
S063170519	I.C. TDA 7050T	I.C. TDA 7050T
S063181389	I.C. TDA 8138A	I.C. TDA 8138A
S063181409	I.C. TDA 8140	I.C. TDA 8140
S063183509	I.C. TDA 8350Q	I.C. TDA 8350Q

Part No. ET-Nr.	Description	Bezeichnung
S063183599	I.C. 87C055 (SOFT. 7300 1.0)	I.C. 87C055 (SOFT. 7300 1.0)
S063183769	I.C. TDA 8376	I.C. TDA 8376
S063198609	I.C. TDA 9860	I.C. TDA 9860
S063210509	I.C. L 7808CV	I.C. L 7808CV
S063285949	I.C. ST 24C04 AB1 (4K)	I.C. ST 24C04 AB1 (4K)
S063183959	I.C. TDA8395 (SECAM ONLY)	I.C. TDA8395 (NUR SECAM)
S063546659	I.C. TDA 4665T	I.C. TDA 4665T
S065621409	FLYBACK TRANSFORMER 7000	ZEILENTRAFO 7000
S066900159	QUARZ 3,58 MHZ	QUARZ 3,58 MHZ
S066900259	QUARZ 4,43 MHZ	QUARZ 4,43 MHZ
S066901209	QUARZ 12 MHZ	QUARZ 12 MHZ
S067071009	EW COIL 13,5 MH	OST/WEST SPILE 13,5MH
S067081009	BRIDGE COIL AT 4043/100	BRÜCKENSPULE AT 4043/100
S067081409	LINEARITY COIL	LINEARITÄTSSPULE
S071013409	EXTERNAL SPEAKER CONNECTOR	EXTERNE LAUTSPRECHERBUCHSE
S071014209	SCART CONNECTOR	SCARTBUCHSE
S000567009	IF VIDEO/AUDIO PCB CPL. (A2)	ZF PLATINE KPL. (A2)
S063598149	I.C. TDA 9814T	I.C. TDA 9814T
S063598409	I.C. TDA 9840T	I.C. TDA 9840T
S063372839	I.C. SAA 7283	I.C. SAA 7283
S066900409	QUARZ 10 MHZ	QUARZ 10 MHZ
S067320709	SAW FILTER G3964M	SAW FILTER G3964M
S067321509	SAW FILTER G9353M	SAW FILTER G9353M
S067400529	CERAMIC FILTER SFT 5,5 MA	KERAMIK FILTER SFT 5,5 MA
S067400539	CERAMIC FILTER SFT 5,74 MA	KERAMIK FILTER SFT 5,74 MA
S067401089	CERAMIC FILTER SFT 6,0 MA	KERAMIK FILTER SFT 6,0 MA
S067401109	CERAMIC FILTER SFT 6,5 MA	KERAMIK FILTER SFT 6,5 MA
S067401059	CERAMIC FILTER TPS 5,5 MWA	KERAMIK FILTER TPS 5,5 MWA
S067400009	CERAMIC FILTER TPWA 01B	KERAMIK FILTER TPWA 01B
S067407809	COIL	SPULE
S067430009	CHOKE 4,7 MH 2%	SPULE 4,7MH 2%
S069024409	TUNER	TUNER
S000667319	POWER PCB CPL.	NETZTEILPLATINE KPL.
S014182009	CONDENSATOR 820 PF NPO	KONDENSATOR 820 PF NPO
S017133009	CONDENSATOR 330 PF 1000 V	KONDENSATOR 330 PF 1000 V
S017222009	CONDENSATOR 2,2 NF 1000 V	KONDENSATOR 2,2 NF 1000 V
S020222009	CONDENSATOR 2,2 NF 4000 V	KONDENSATOR 2,2 NF 4000 V
S029621209	CONDENSATOR 1,2 NF 1%	KONDENSATOR 1,2 NF 1%

Part No. ET-Nr.	Description	Bezeichnung
S030236809	CONDENSATOR 68 NF 250 VAC	KONDENSATOR 68 NF 250 VAC
S030242209	CONDENSATOR 220 NF 250 VAC	KONDENSATOR 220 NF 250 VAC
S034322219	CONDENSATOR 2,2 NF 250 VAC	KONDENSATOR 2,2 NF 250 VAC
S047003309	FUSIBLE RESISTOR 3,3 OHM	SICHERUNGSWIDERSTAND 3,3 OHM
S053051009	SAFETY RESISTOR 1 MOHM VR37	SICHERHEITSWIDERSTAND 1 MOHM VR37
S053210709	SAFETY RESISTOR 4,7 MOHM VR68	SICHERHEITSWIDERSTAND 4,7 MOHM VR68
S054000279	WIRE WOUND RESISTOR 0,27 OHM 3 W	DRAHTWIDERSTAND 0,27 OHM 3 W
S055491009	WIRE WOUND RESISTOR 1 KOHM 9 W	DRAHTWIDERSTAND 1 KOHM 9 W
S056590209	NTC RESISTOR 4,7 OHM	NTC WIDERSTAND 4,7 OHM
S056591909	PTC RESISTOR	PTC WIDERSTAND
S061111329	DIODE 1N4007	DIODE 1N4007
S061284619	DIODE BA159	DIODE BA159
S061300509	DIODE BYW29/200	DIODE BYW29/200
S061302409	DIODE BYW95B	DIODE BYW95B
S061302609	DIODE BYW95C	DIODE BYW95C
S061401339	DIODE BYD33 J	DIODE BYD33 J
S061912239	ZENER DIODE 6,2 V	ZENER DIODE 6,2 V
S061961079	ZENER DIODE 3,6 V	ZENER DIODE 3,6 V
S062756109	TRANSISTOR S 2000AF	TRANSISTOR S 2000AF
S063164509	I.C. TEA 2261	I.C. TEA 2261
S063411019	OPTOCOUPLER TCDT1101GB	OPTOKOPPLER TCDT1101GB
S065707109	POWER SWITCH TRANSFORMER 7000	NETZTRAFO 7001
S066541709	LINE FILTER	NETZFILTER
S070506309	FUSE T 2,5A H	SICHERUNG T2,5A
S087171509	SECURITY COVER	SICHERHEITSBLENDE
S000677209	RGB AMPLIF. PCB CPL.	BILRÖHRENPLATINE KPL.
S017233009	CONDENSATOR 3,3 NF 1000 V	KONDENSATOR 3,3 NF 1000 V
S035931019	CONDENSATOR 10 NF 1000 V	KONDENSATOR 10 NF 1000 V
S040590229	ELKO 2,2 UF 250 V	ELKO 2,2 UF 250 V
S061281059	DIODE BAV 103-GS08	DIODE BAV 103-GS08
S062740869	TRANSISTOR BF 871	TRANSISTOR BF 871
S063151019	I.C. TEA 5101A	I.C. TEA 5101A
S070001209	CRT SOCKET	BILDRÖHRENSOCKEL
S070001609	CRT SOCKET (DYNAMIC FOCUS ONLY)	BILDRÖHRENSOCKEL (NUR DYNAMIC FOKUS)
S000797009	DYNAMIC FOCUS PCB CPL.	DYNAMIC FOKUS PLATINE KPL.
S056592109	VDR RESISTOR	VDR WIDERSTAND
S058549009	DYNAMIC FOCUS VARIABLE RESISTOR	DYNAMIC FOKUS REGLER
S065625719	FOCUS CABLE	FOKUSKABEL

Part No. ET-Nr.	Description	Bezeichnung
S065625819	G2 CABLE	G2-KABEL
S066830109	DYN. FOCUS MODUL. COIL AT4043/67A	DYNAMIC FOKUS SPULE AT4043/67A
S000747139	TELETEXT TOP/FLOF/ATS PCB CPL.	VIDEOTEXTPLATINE
S063185719	I.C. ST 24C02 (2K)	I.C. ST 24C02 (2K)
S063283519	I.C. 87C652-4N40 (UP ATS)	I.C. 87C652-4N40 (UP ATS)
S063285949	I.C. ST 24C04 AB1 (4K)	I.C. ST 24C04 AB1 (4K)
S063352819	I.C. SAA 5281 P/E	I.C. SAA 5281 P/E
S063574009	I.C. 74HC4053D	I.C. 74HC4053D
S066901209	QUARZ 12 MHZ	QUARZ 12 MHZ
S066902709	QUARZ 27 MHZ	QUARZ 27 MHZ
S000807019	SUBWOOFER BOOSTER PCB CPL.	SUBWOOFER BOOSTER PLATINE KPL.
S063126169	I.C. TDA 2616	I.C. TDA 2616
S000807009	DOLBY PRO LOGIC PCB CPL.	DOLBY PRO LOGIC MODUL KPL.
S061961959	ZENER DIODE 10V	ZENER DIODE 10V
S063126169	I.C. TDA2616	I.C. TDA2616
S063363009	I.C. M51132L	I.C. M51132L
S063363309	I.C. M65830BP	I.C. M65830BP
S063363509	I.C. M69032P	I.C. M69032P
S063540479	I.C. HEF4047BT	I.C. HEF4047BT
S067330309	CERAMIC RESONATOR CSA 2.00 MG	KERAMIC RESONATOR CSA 2.00 MG
S068070909	RELAY SVR 12	RELAY SVR 13
S068500309	SWITCH SK 22F01G9	SCHALTER SK 22F01G9
S071013409	EXTERNAL SPEAKER CONNECTOR	EXTERNE LAUTSPRECHERBUCHSE
S000817049	SAT RECEIVER PCB CPL.	SAT RECEIVER MODUL KPL.

Spare parts list Ersatzteilliste

TV2810 / TV8210
LT7055VT / TVC16997

Chassis Professional 7300

Part No. ET-Nr.	Description	Bezeichnung
S00054G509	MAIN PCB 7300 16:9 CPL.	CHASSIS 7300 16:9 KPL.
S00054G759	MAIN PCB 7300 16:9 CPL. (TVC16997)	CHASSIS 7300 16:9 KPL. (TVC16997)
S000847309	MANUALS CONTROLS PCB CPL.	BEDIENTEIL KPL.
S062000409	LED DIODE RED/GREEN	LED ROT/GRÜN
S068057009	MAINS SWITCH	NETZSCHALTER
S068056309	PUSCH EKPT 1105 S	TASTER EKPT 1105S
S068149109	IR RECEIVER TFMS 5360	IR EMPFÄNGER TFMS 5360
S071015309	EARPHONE JACK	KOPFHÖRERBUCHSE
S078970209	MANUALS CONTROLS HOLDER	HALTER BEDIENTEIL
S000847529	DOOR	DOOR
S000847709	DOOR (LH7055VT / TVC16997)	DOOR (LH7055VT / TVC16997)
S082811409	DOOR HOLDER	HALTER DOOR
S082900009	DOOR PUSH-PUSH BLOCK	VERSCHLUßEINHEIT DOOR
S083307009	MAINS SWITCH BUTTON	KNOPF NETZSCHALTER
S007864819	CABINET FRONT	GEHÄUSEFRONT
S007814509	CABINET	MITTELGEHÄUSE
S080154309	BACK COVER	RÜCKWAND
S060328509	CRT 28" W66EDX013X010	BILDRÖHRE 28" W66EDX013X010
S067203419	DEGAUSS COIL	ENTMAGNETISIERUNGSSPULE
S068270509	REMOTE CONTROL	FERNBEDIENUNG
S068270309	REMOTE CONTROL	FERNBEDIENUNG
S073173709	SPEAKER 8 OHM	LAUTSPRECHER 8 OHM

Service procedure - Chassis Professional 7300

Power supply

Adjust with PP1 for 157V+/- 0,5V at CP36.

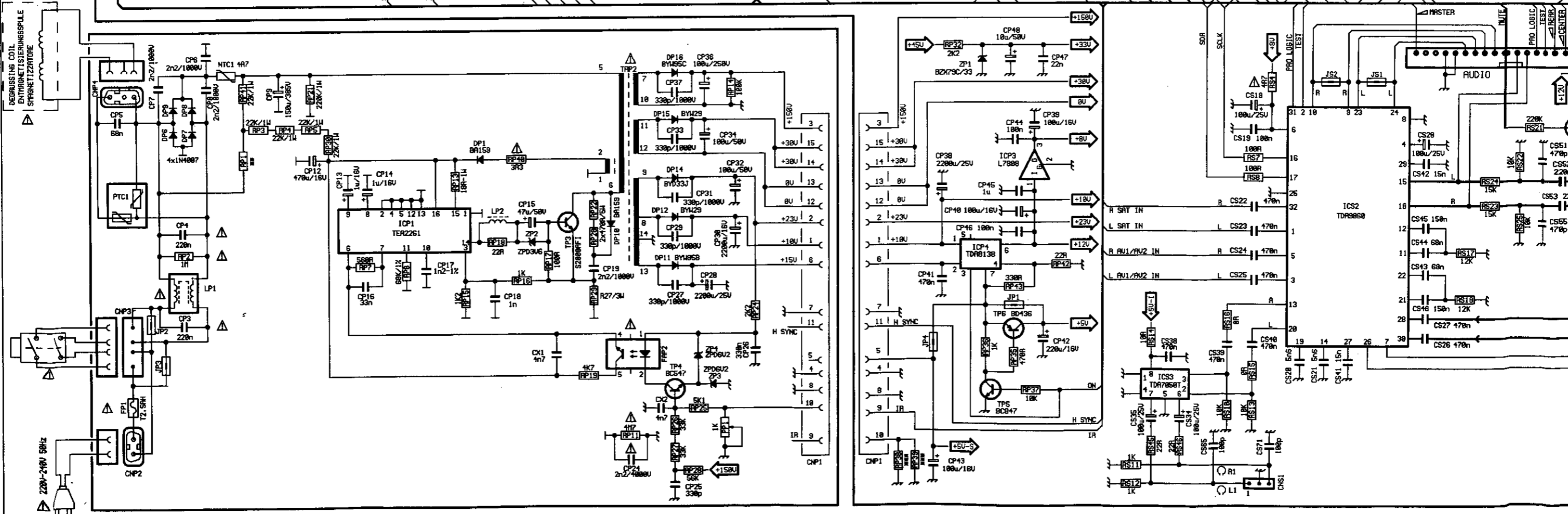
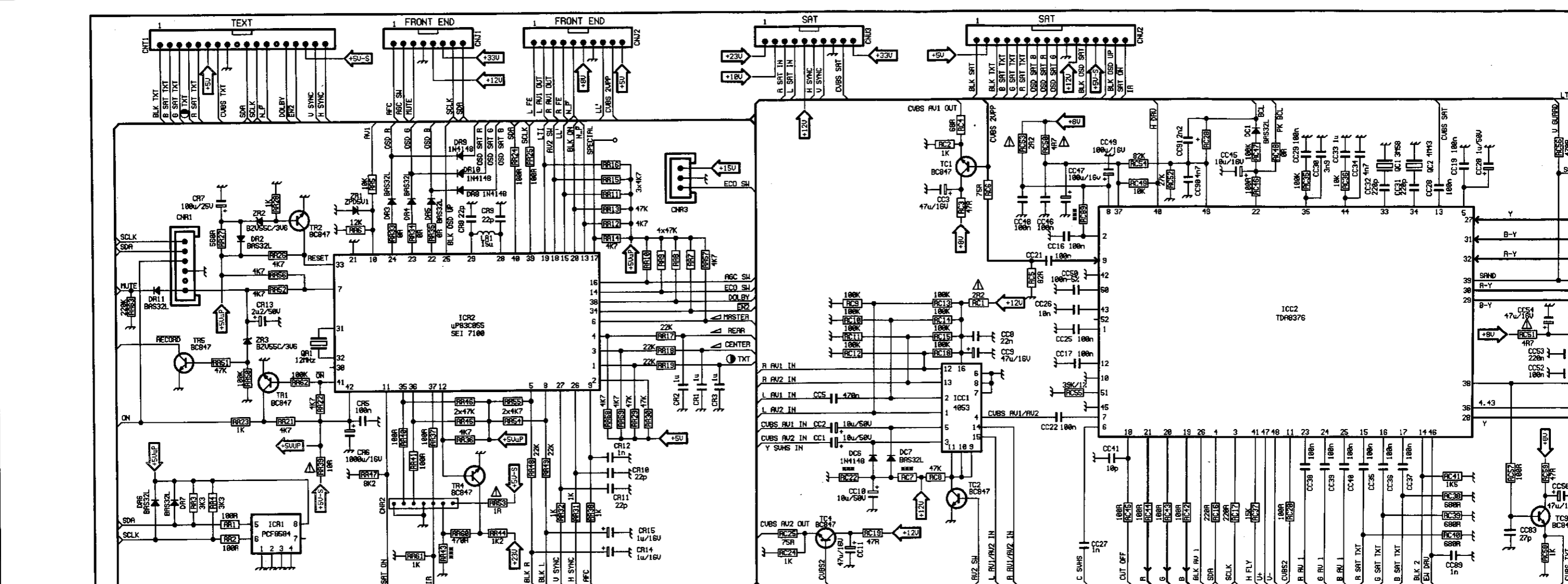
Screen grid voltage (Vg2)

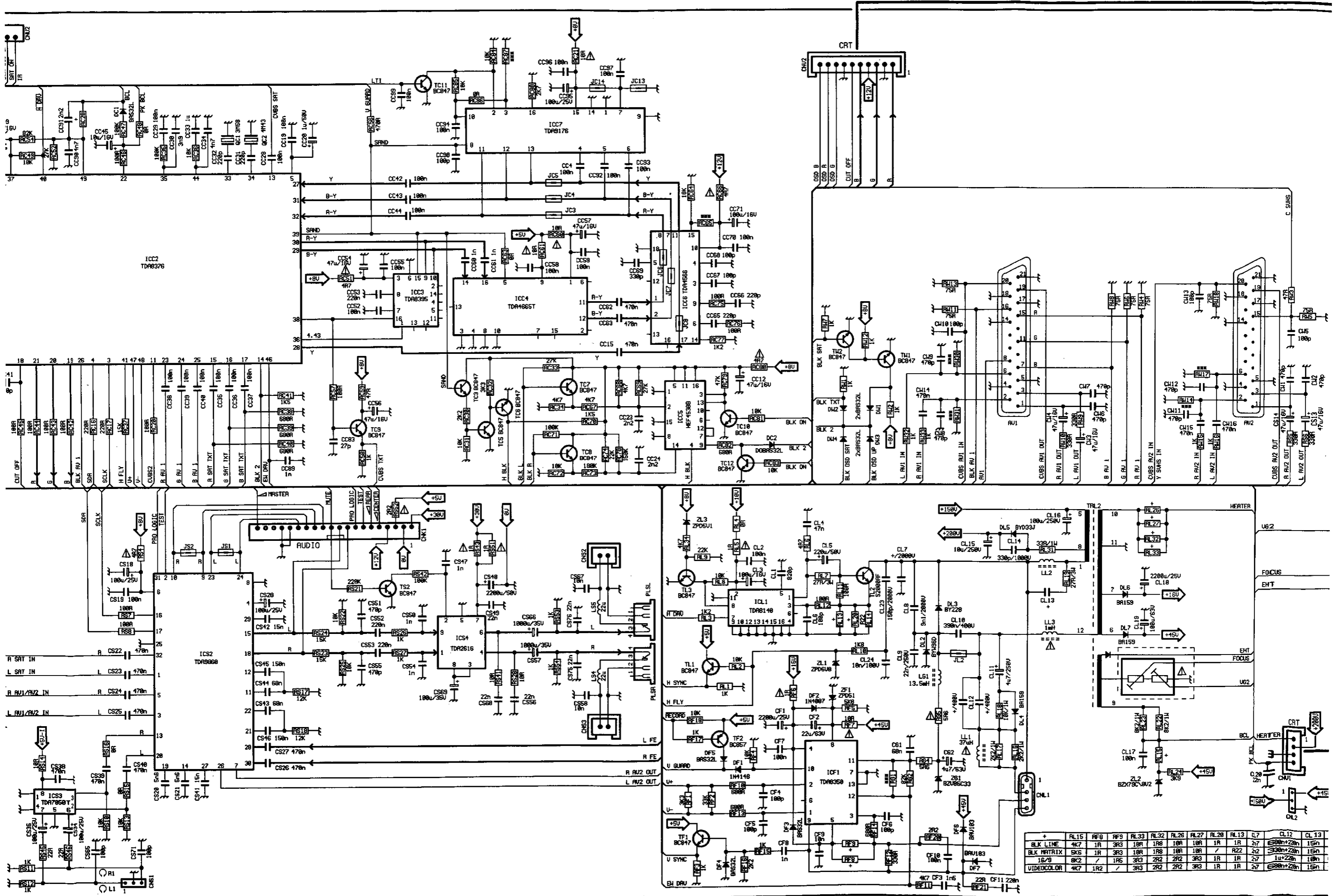
Contrast and brightness to min. Adjust potentiometer G2 for 175V+/- 0,5V at cathode with highest voltage.

When replacing the picture tube and NVM memory (ICR1), certain adjustments may be necessary. The procedure is as follows:

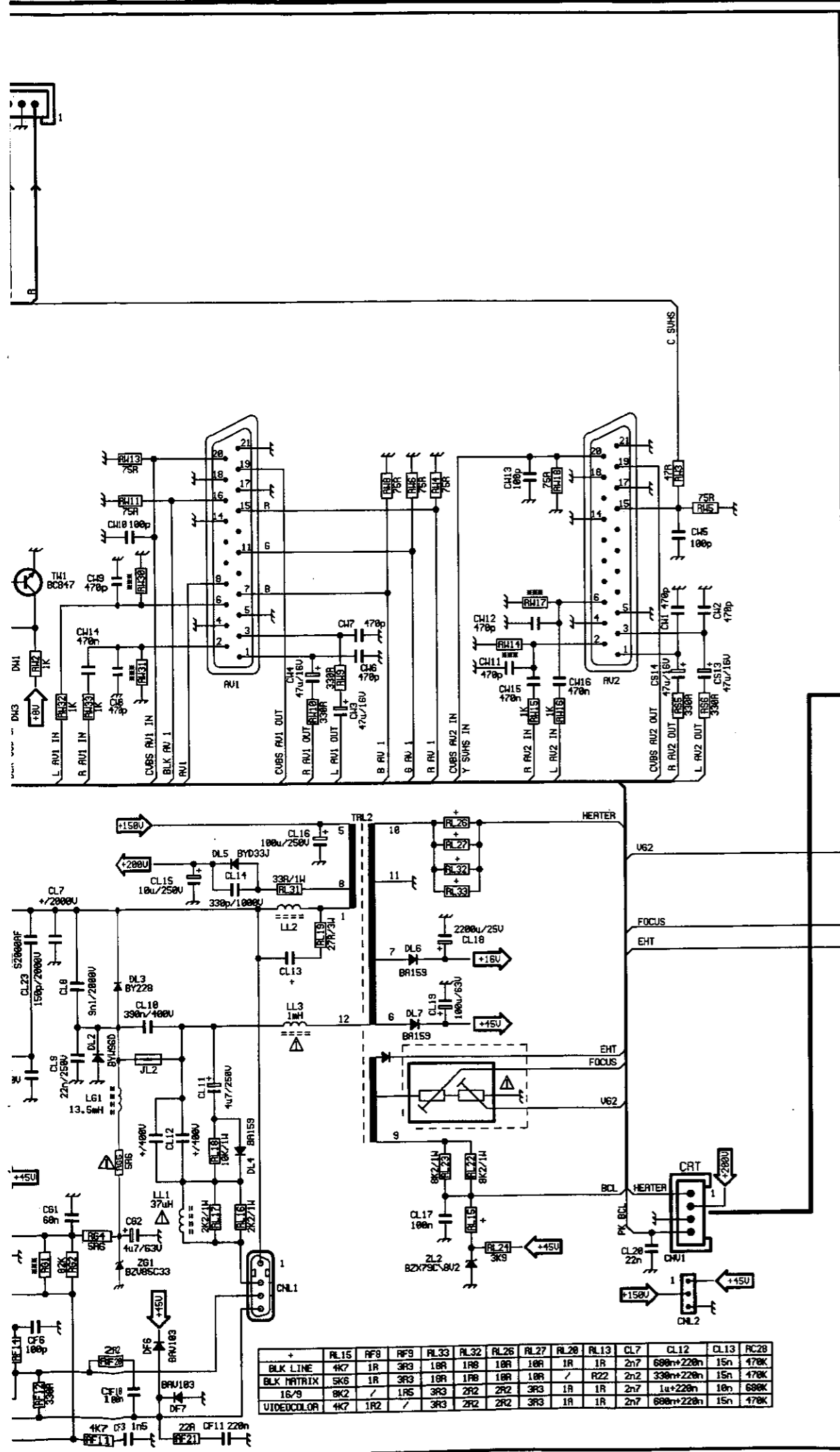
1. Select service mode by switching on (main power switch) while at the same time pressing and holding the MENU key at the receiver until the red LED lights up.
2. Press the standby button at the remote control: the receiver will come into operation either on programme 1, or in position AV1 if the voltage at pin 8 of the SCART 1 connector is +12V. Accordingly, it is important to establish that the test signal needed for adjustment purposes is available either on prog 1 or at the SCART 1 input, since no further source selection can be made in service mode.
3. The accessible functions are listed below: the increase and decrease buttons [\uparrow] and [\downarrow] on the remote control are used to select the function, and the adjustment can then be made with the remote control volume buttons [+] and [-].
it is good policy to make a note of the initial value before making any alteration, so that former settings can be reinstated with ease if necessary.
4. Pressing the SAT button of the remote control accesses an option byte (OP) which is used to adapt the software functions to the various types of receiver configuration (4:3 or 16:9 tube, Dolby decoder, etc.).
OP has a hexadecimal value which is altered using the volume buttons [+] and [-] of the remote control. The correct value to enter is indicated alongside the caption OPTION BYTE on a label affixed to the back of every receiver.
5. The vertical geometrie of the picture is adjusted beginning with the VSL function (vertical slope), which must be set a that the horizontal centre line of the test signal is exactly on the border diving the picture area from the black area at bottom. This done, VSL **should not be moved again**.
6. SA and LA are used to adjust the separation between left and right hand audio channels, and the sound level, respectively. A stereo RF generator is therefore required. Remove modulation from the left hand channel and adjust LA to give 1.4 Vpp at pin 1 of the SCART 1 connector. Next, adjust SA to obtain a minimum residual signal at pin 3 of SCART 1. If there is no stereo generator available, a reasonable approximation will be LA=01 and SA=07.
7. Having finished the necessary adjustments, press the TV button of the remote control to save all the new settings and restore normal operation of the receiver.

SA	Audio stereo adjustment	VAM	Vertical amplitude
LA	Audio level adjustment	VSH	Vertical shift
HSH	Horizontal shift	SC	Vertical S correction (linearity)
EW	Horizontal amplitude		
PW	Parabola correction	WPR	White balance correction
CP	Corner parabola correction	WPG	White balance correction
TC	Trapeze correction	WPB	White balance correction
VSL	Vertical Slope	DLY	Luma-chroma delay
BLK R	Right side 4:3 blanking window	BLK L	Left side 4:3 blanking window



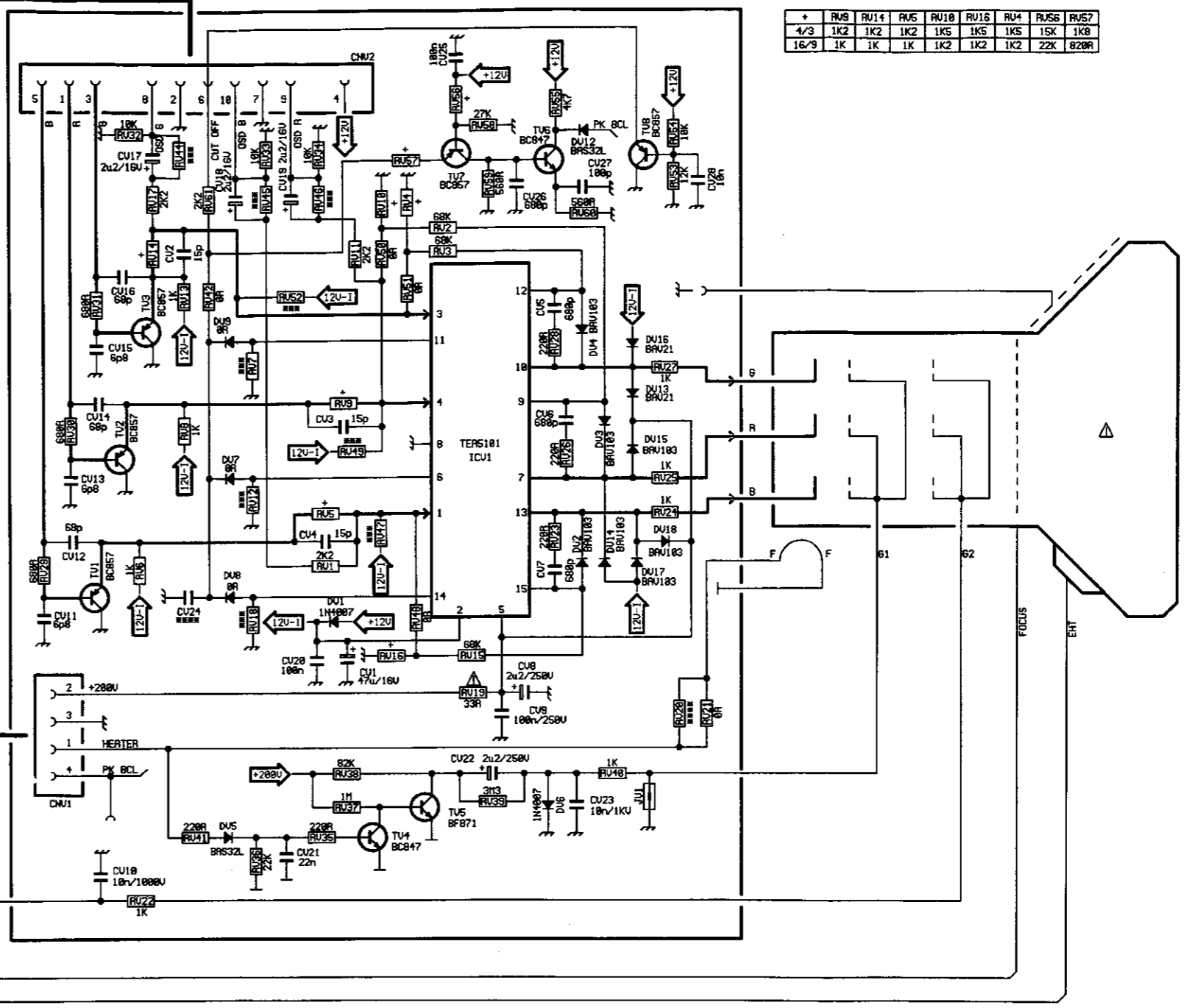


+	AL15	RF8	RF9	RL33	RL32	RL26	RL27	RL20	RL13	DL7	CL12	CL13
BLK LINE	4K7	1R	3R3	1R8	1R8	1R8	1R8	1R	1R	27	500u/250	15n
BLK MATRIX	5K6	1R	3R3	1R8	1R8	1R8	1R8	1R	1R	R22	22	500u/250
16/9	8K2	7	1R5	3R3	2R2	2R2	3R3	1R	1R	27	1u/250	10n
VIDEOCOLOR	4K7	1R2	7	3R3	2R2	2R2	3R3	1R	1R	27	500u/250	15n

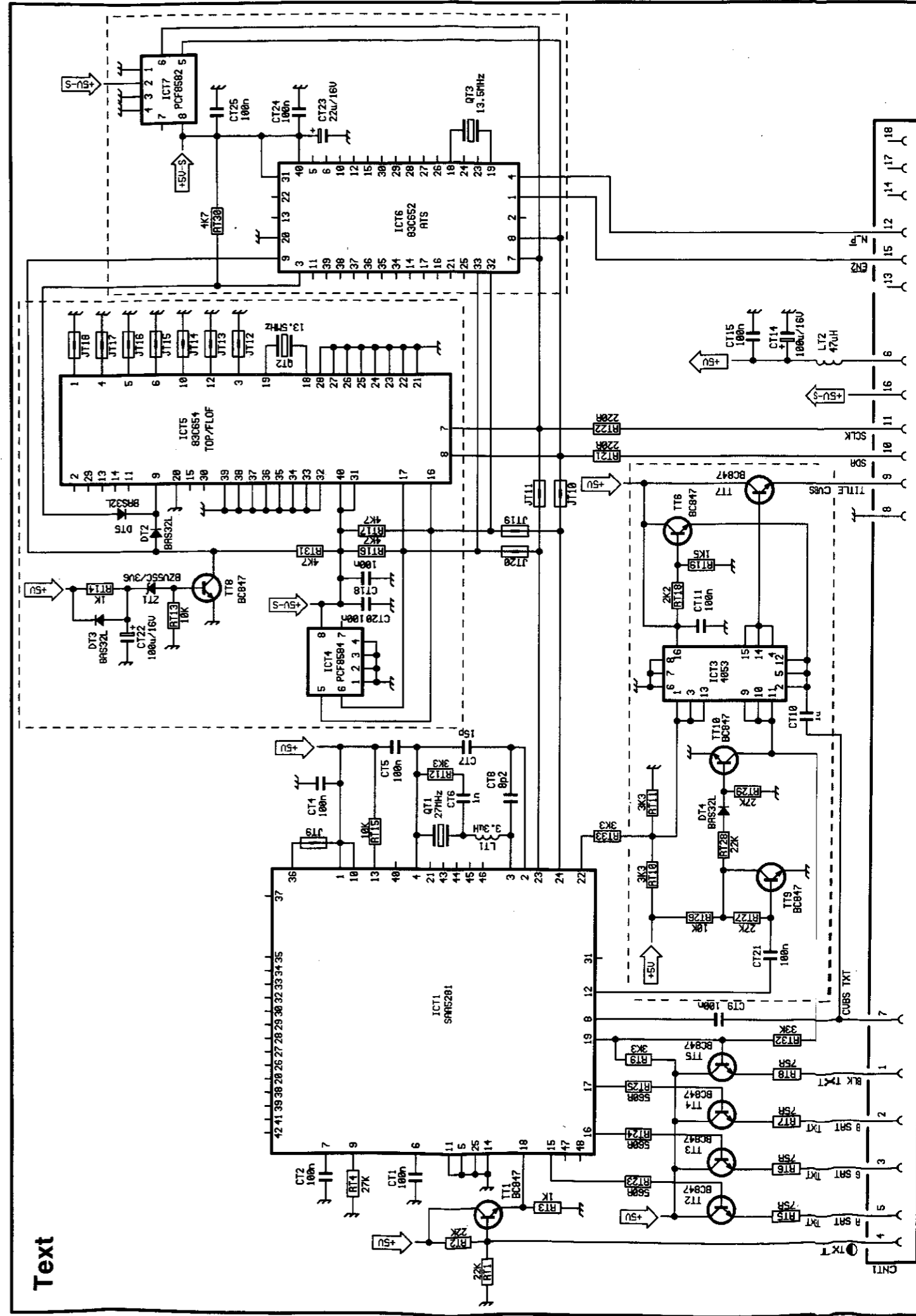
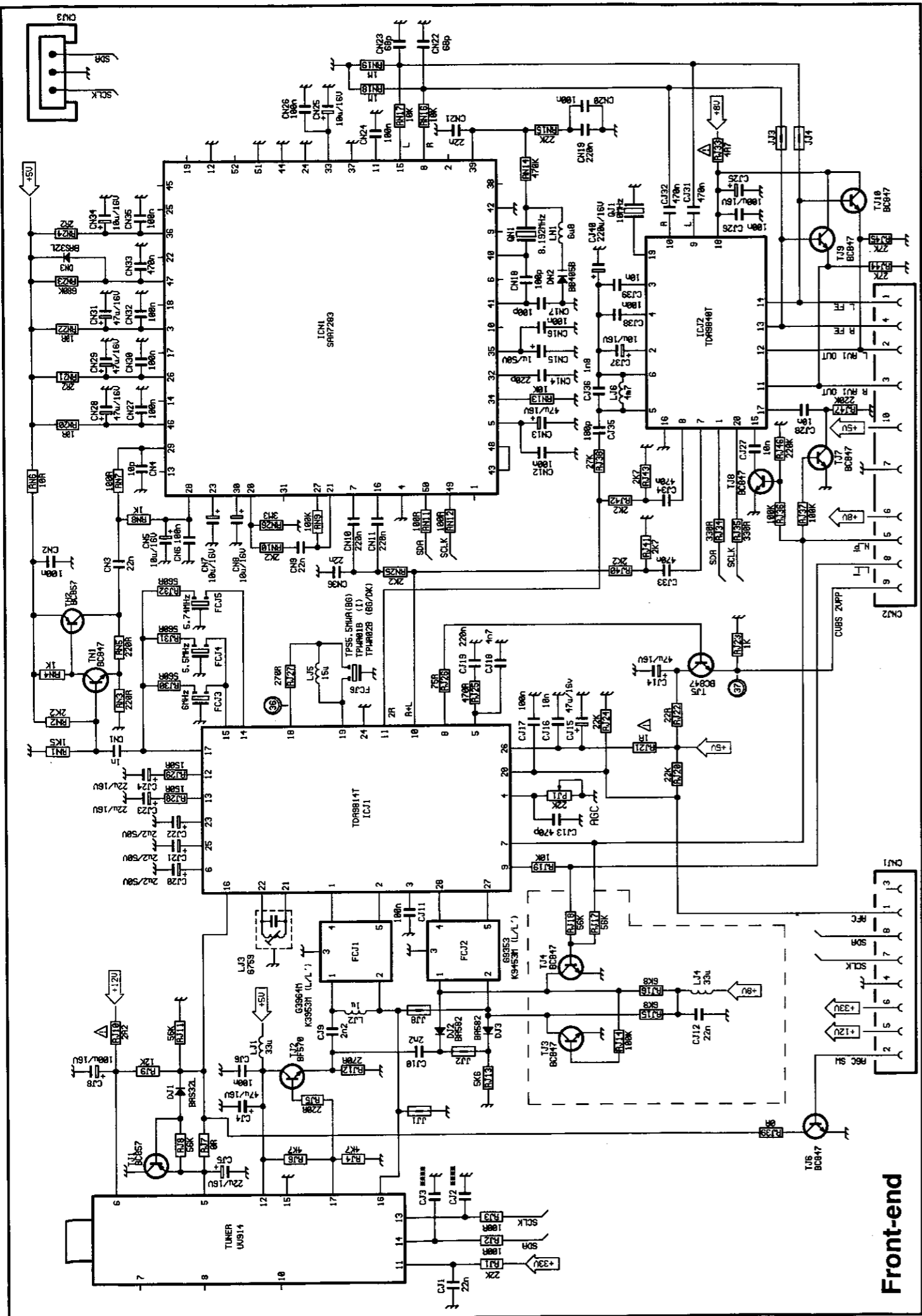


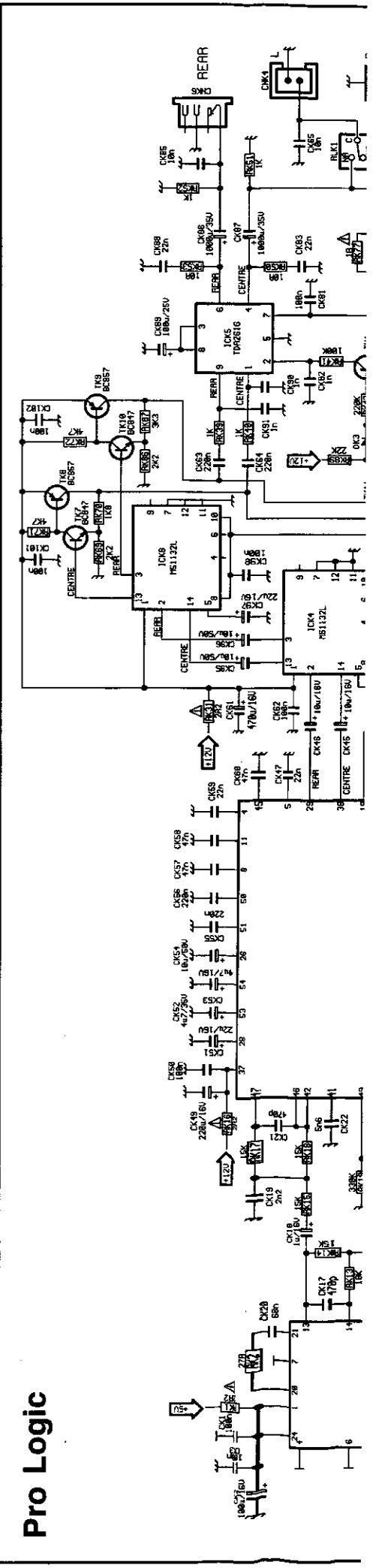
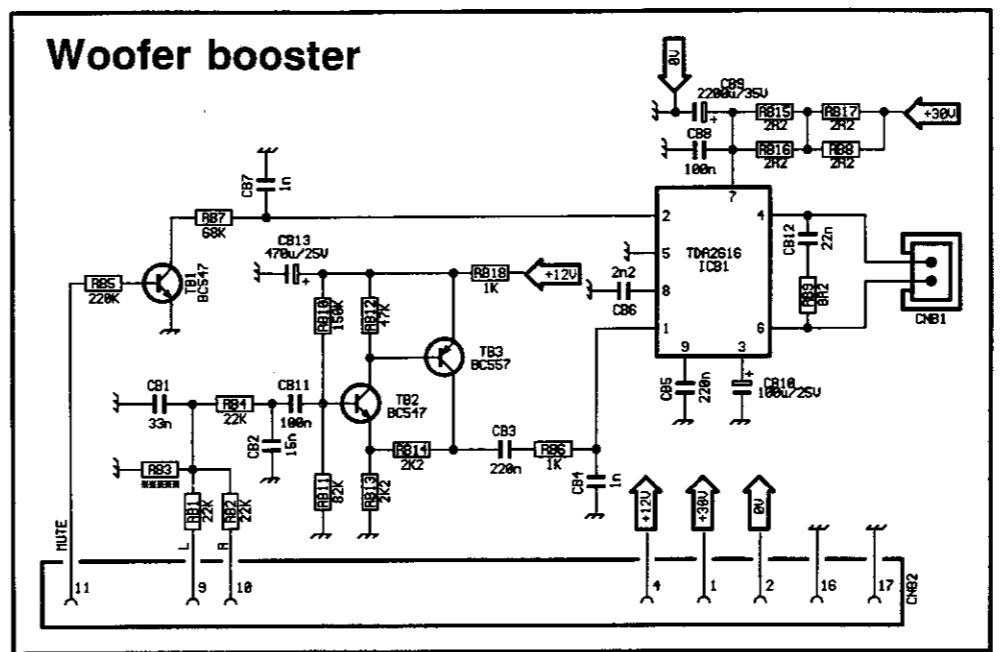
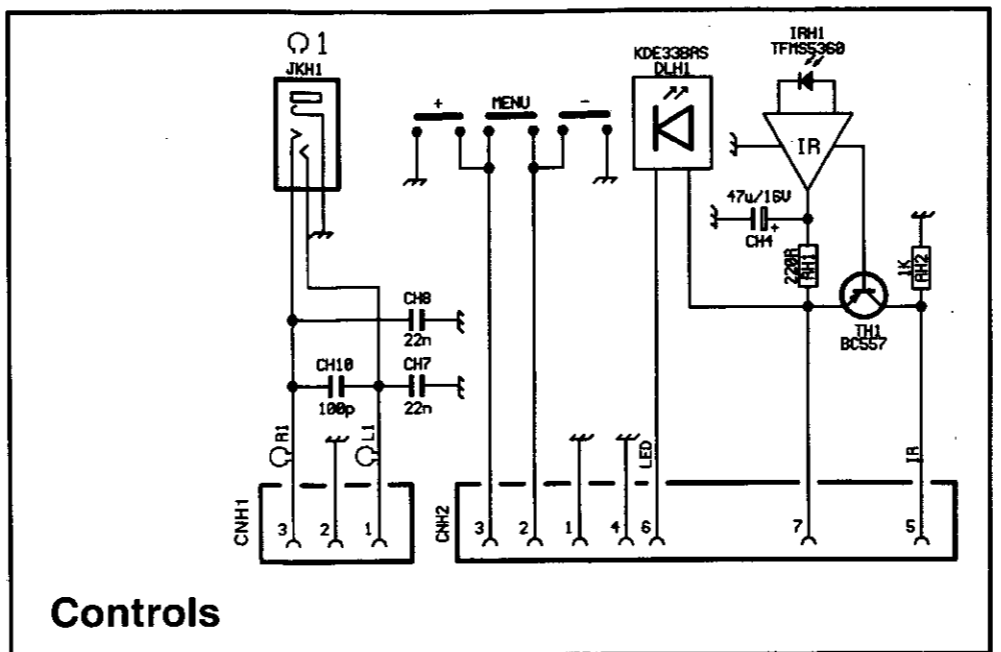
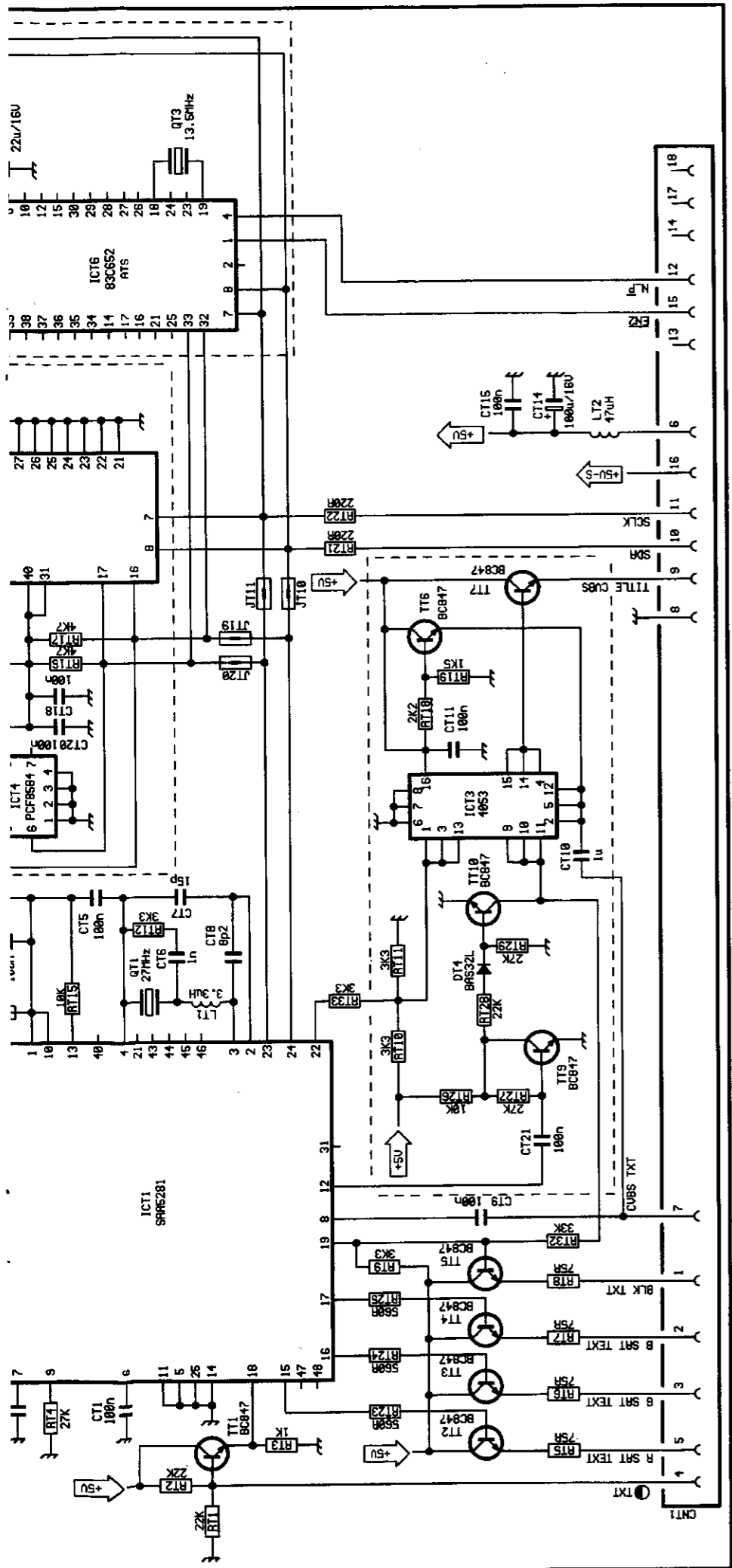
+	RL15	RF8	RF9	RL33	RL32	RL26	RL27	RL28	RL13	CL7	CL12	CL13	RC28
BLK LINE	4K7	1R	3R3	1R8	1R8	1R8	1R	1R	2n7	680n+220n	15n	470K	
BLK MATRIX	5K6	1R	3R3	1R8	1R8	1R8	1R	1R	R22	330n+220n	15n	470K	
16/9	8K2	/	1R5	3R3	2R2	2R2	3R3	1R	1R	2n7	1u+220n	10n	680K
VIDEOCOLOR	4K7	1R2	/	3R3	2R2	2R2	3R3	1R	1R	2n7	680n+220n	15n	470K

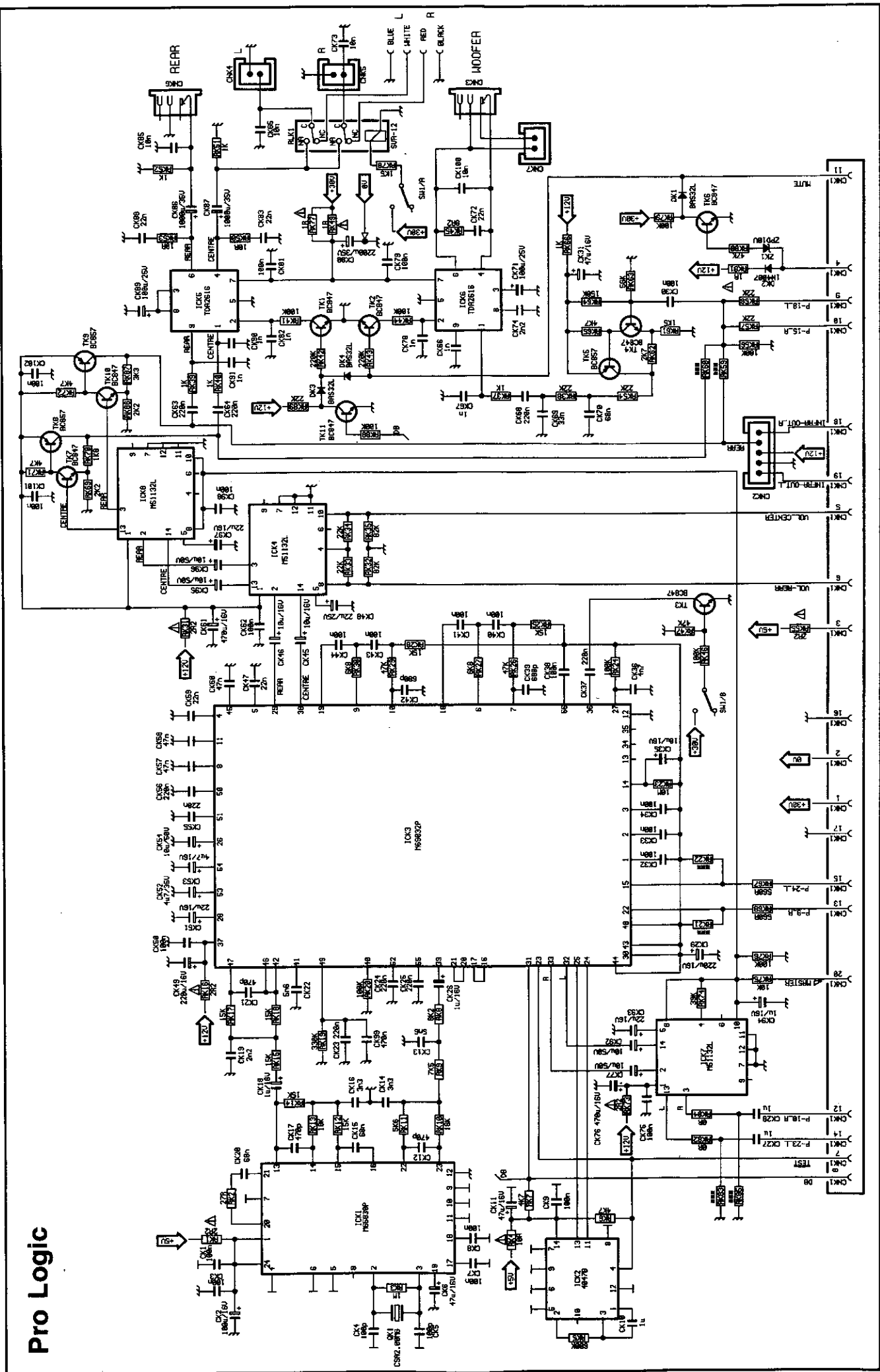
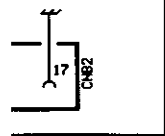
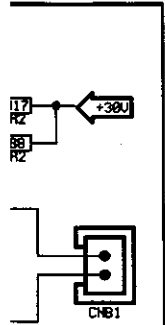
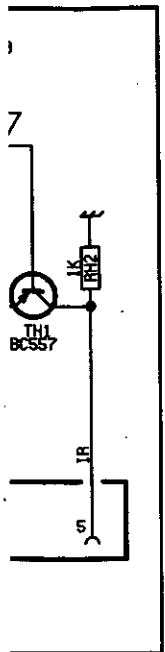
+	RU9	RU14	RU5	RU10	RU16	RU4	RU6	RU7
4/3	1K2	1K2	1K2	1K5	1K5	1K5	15K	1K8
16/9	1K	1K	1K	1K2	1K2	22K	820R	



Chassis Professional 7300







Pro Logic