

SALORA 'K' Series Chassis, Models 20K30, 20K37, 21K70, 21K7 22K30, 22K37, 24K70, 24K7 26K30, 26K37, 26K70, 28K70, 28K7

General Description: A colour television receiver chassis with optional Teletext, P.A.L./S.E.C.A.M. transcoder, F.M. radio, videotext, satellite tuner and direct signal connection via a SCART socket. The circuit is capable of driving 90° or 110° cathode ray tubes and is powered from a switch-mode power supply which is 'live' on the primary side of the switched transformer irrespective of mains connections. This section is located on the lower part of the 'mother' board.

Mains Supply: 240 volts, 50Hz.

Module codes (See Fig. T112):

STB — Mother board

STC — Voltage synthesizer module STH — Picture tube base panel

STD — Video and sound IF module SCS — Control unit

STE — Sound module

STUL — Remote control transmitter

In addition, components on the mother board STB — are grouped according to their function as follows:

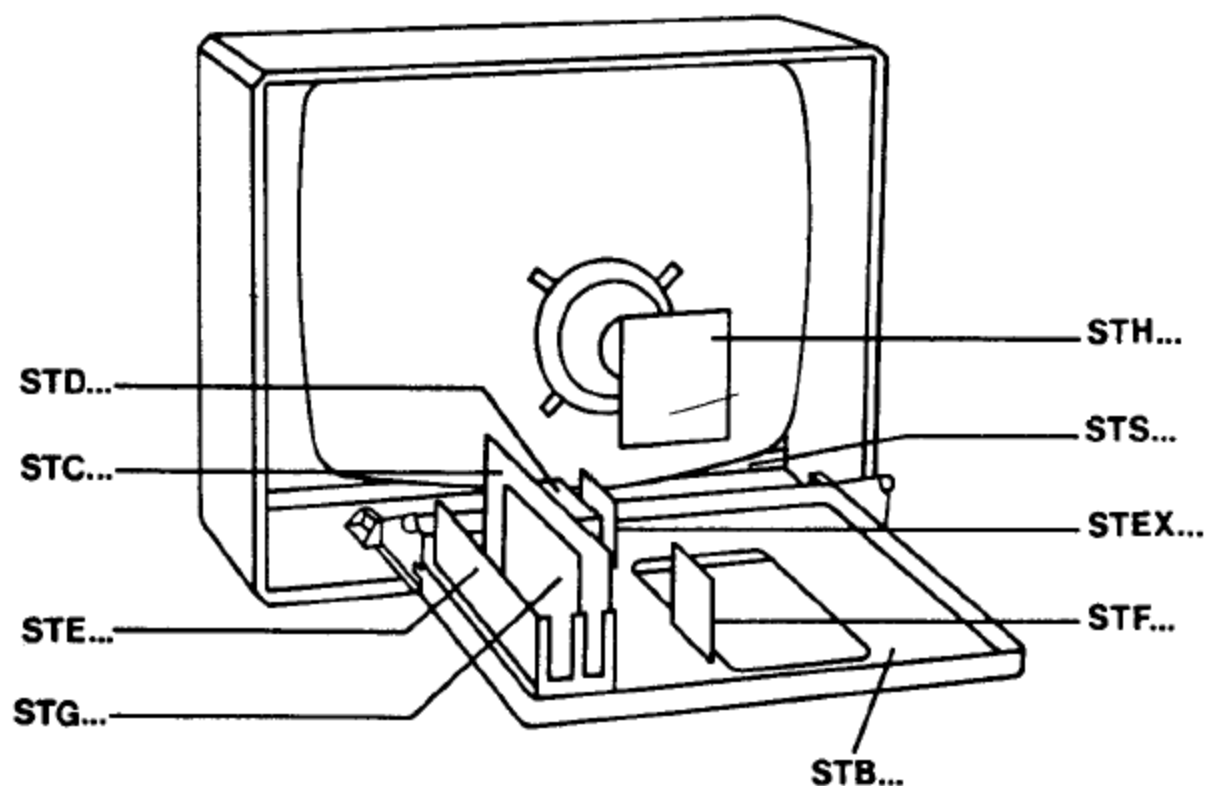
100 — Mother board interface comp's

200 — Colour section

500 — Deflection section

600 — Power section, mains isolated

700 — Power section, mains non-isolated



(T112) LOCATION OF PANELS — 'K' SERIES CHASSIS

Voltage Checks

Operating Point (24kV E.H.T.): Operating point is set by the factory to the following values (test point B4 on hybrid HB600 pins 5 and 6); in receivers with 110° deflection to 140V \pm 3V; in receivers with 90° deflection to 120V \pm 3V.

12.5V Supply: Connect the voltmeter to test point B5 (ICB601 pin 3). Check that the voltage is 12.5V \pm 0.6V.

Adjustments

Line Oscillator Frequency (Hor. Freq.): Connect pin 5 of line oscillator circuit ICB500 to ground potential (connector B14).

Set picture upright with RTB541 (Hor. Freq.).

Remove the short.

Horizontal Linearity (Hor. Lin.): Adjust the picture to its widest position with coil LB503 (Hor. Lin.) then turn the same coil anti-clockwise to set horizontal linearity to optimum. Make sure that both the right and left side squares are similar in width and that there is no dark shadow on the left hand side of the picture.

Horizontal Centering (line oscillator phase): Centre the picture horizontally with trimmer RTB542.

Alignment of Diode Modulator

This adjustment does not exist in 90° sets: Adjust picture width to minimum using trimmer RTB501.

Adjust picture as narrow as possible using coil LB502.

Re-adjust trimmer RTB501 to set the correct picture width.

Picture Width: Set Brightness, Contrast and Colour saturation for normal picture. Adjust picture width using trimmer RTB501 (in receivers with 90° deflection using coil LB502).

Vertical Centering: Set Brightness and Contrast for normal picture.

Adjust vertical centering with trimmer RTB571.

Picture Height (Vert. Ampl.): Set Brightness and Contrast so that the picture height is reduced to its minimum.

Adjust picture height with trimmer RTB543 (Vert. Ampl.).

East-West Raster Correction (E-W Ampl.): This adjustment is not possible in 90° sets.

Check picture width adjustment. Straighten the vertical lines with trimmer RTB502 (E-W Ampl.).

Focus: Set Contrast close to maximum and Brightness for a well balanced greyscale.

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Adjust focus to optimum using Focus potentiometer of the trimming unit RTH1 on the picture tube base panel.

Screen Grid Voltage (G2): Connect a test picture to the receiver set Brightness, Contrast and Colour saturation to minimum.

Check, using a voltmeter, which of the output voltages of test points TP1 (R), TP2 (G) and TP3 (B) is the highest.

Connect the voltmeter to the output of the highest voltage and adjust trimmer G2 on the trimmer unit RTH1 for a black level of 160V.

Highlight Greyscale Tracking: Connect the oscilloscope to testpoint TP2 (G).

Adjust Contrast control for a voltage of 60V from black level to peak on the green cathode.

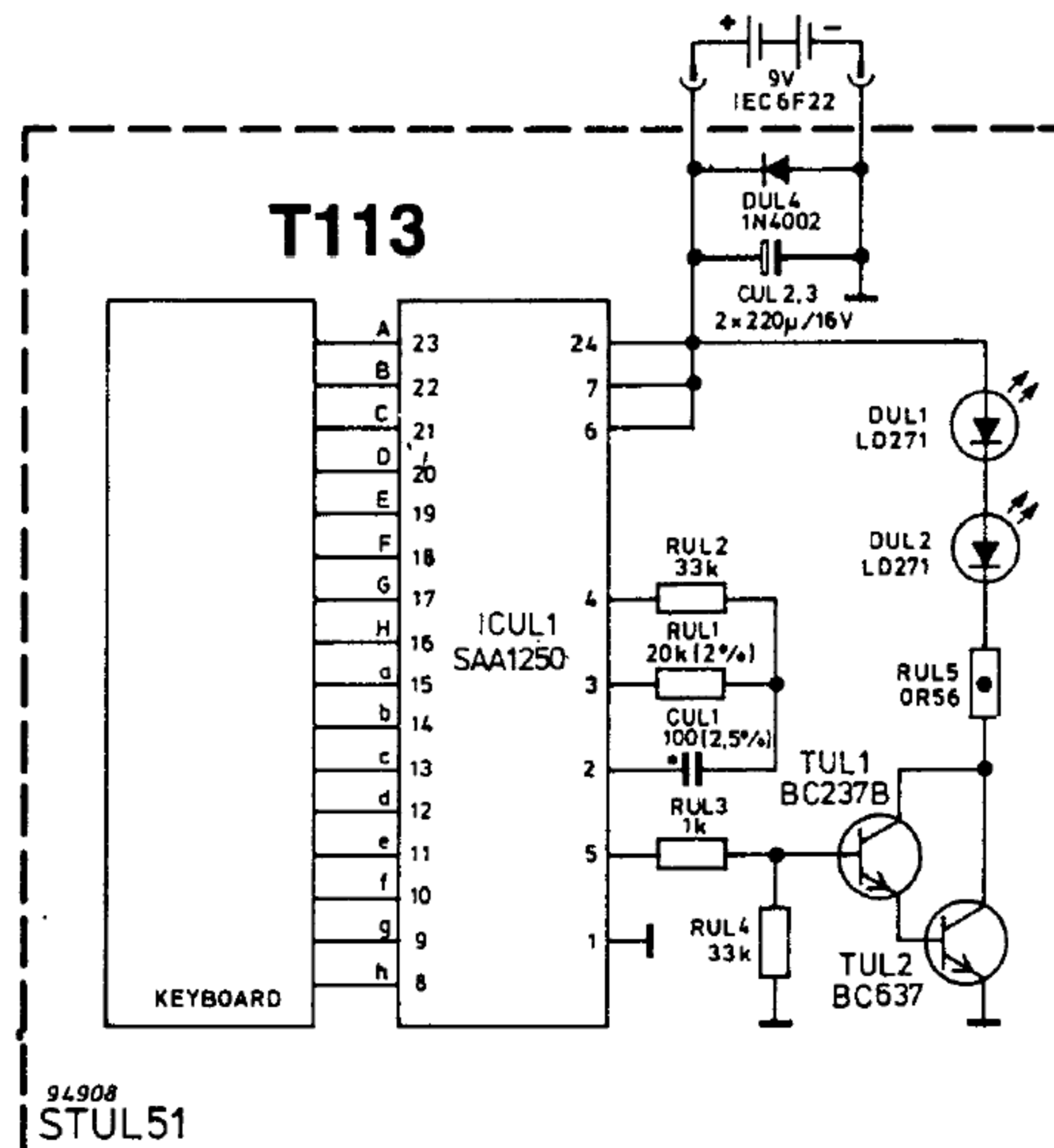
Disconnect the oscilloscope from TP2.

Adjust Brightness for normal picture. Adjust, using trimmers RTH10 (R-Ampl.) and RTH30 (B-Ampl.), the white parts of the test picture to obtain white.

The lowlight greyscale will be adjusted automatically by the receiver.

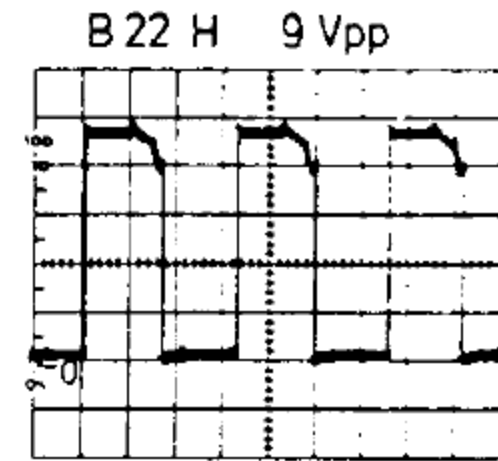
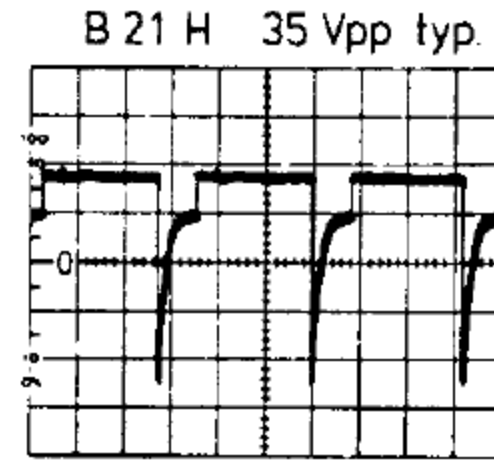
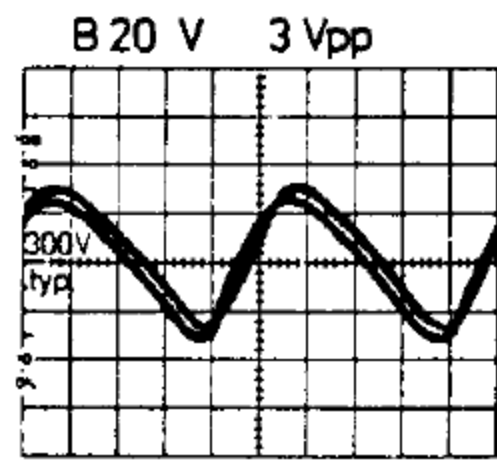
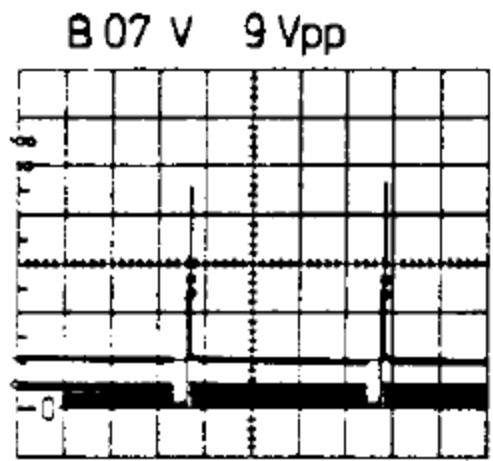
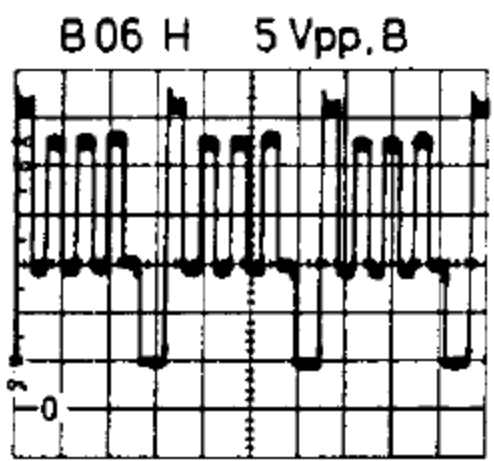
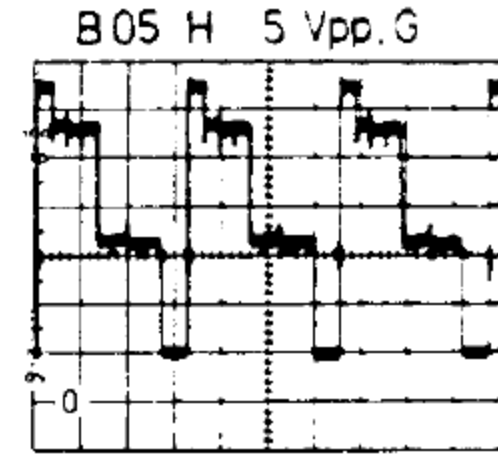
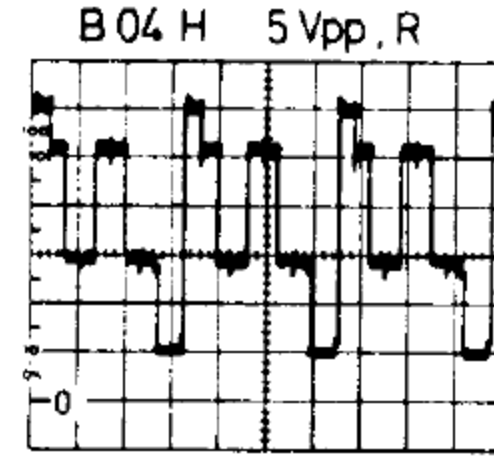
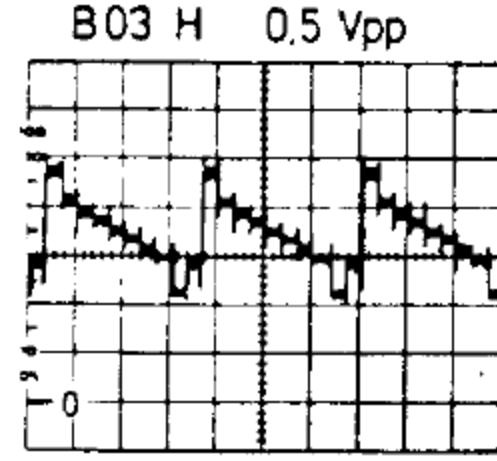
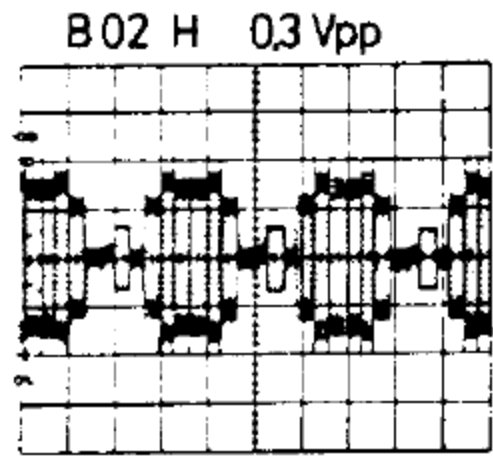
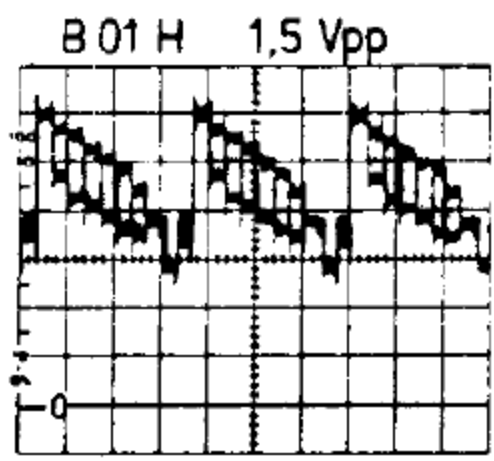
Adjustment of Tuner A.G.C. (Tuner A.G.C.)

Using a Colour Test Transmission: Adjust RTD1 according to receiving conditions so that no picture noise is visible and no overloading takes place.

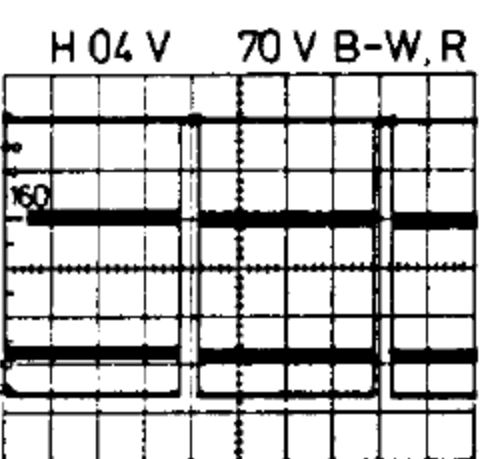
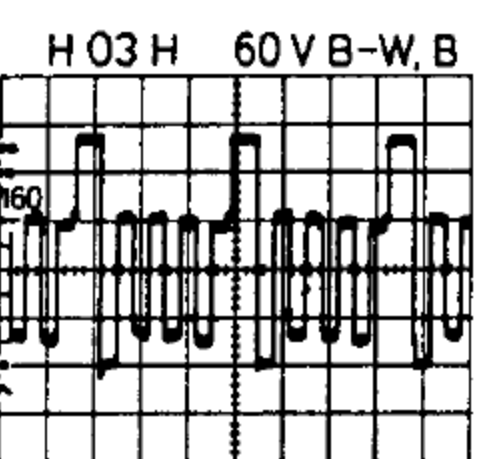
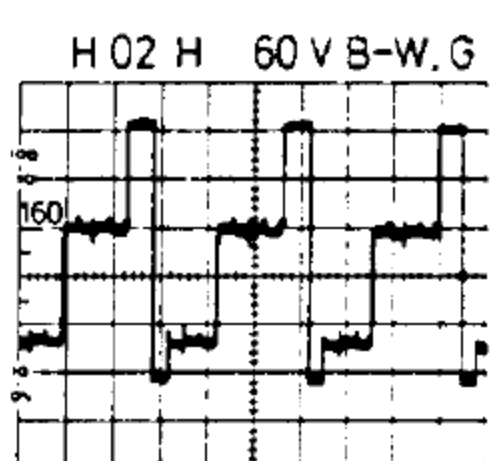
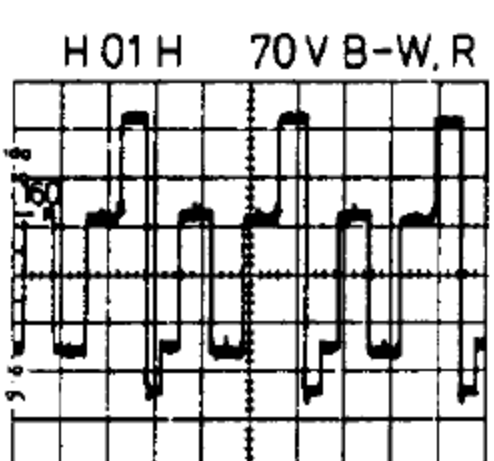
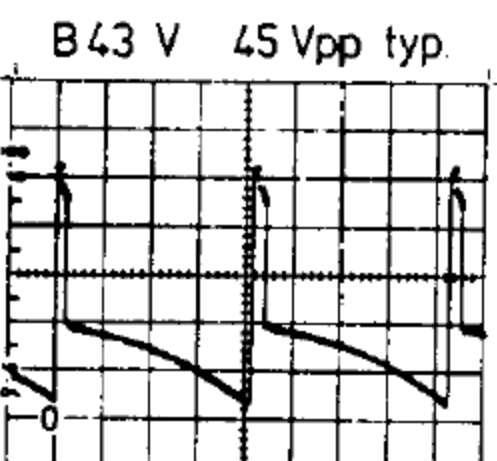
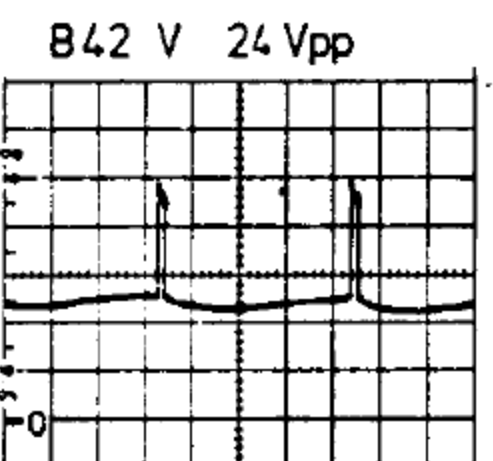
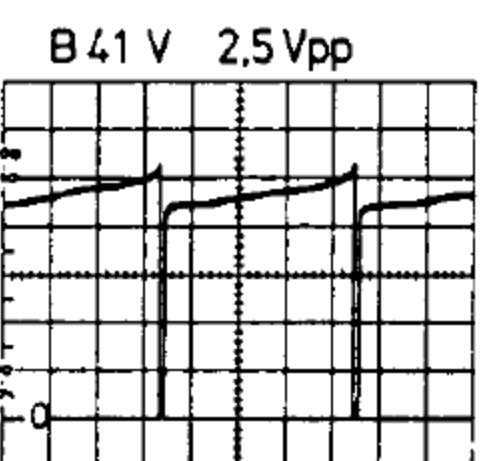
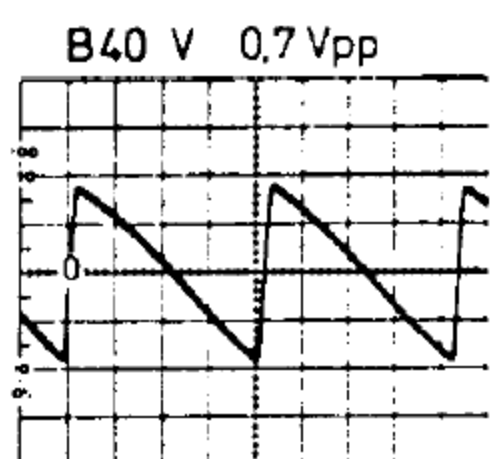
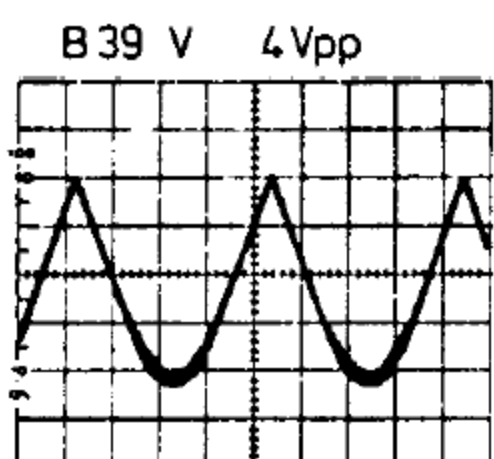
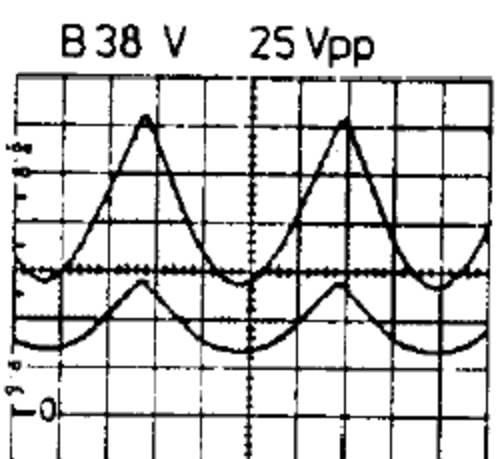
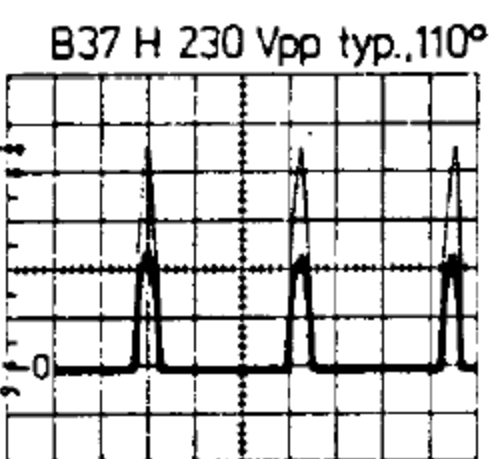
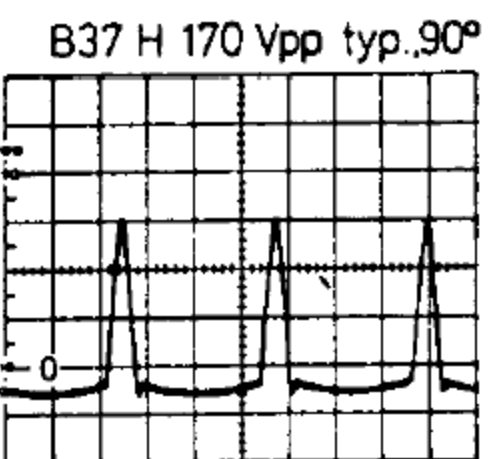
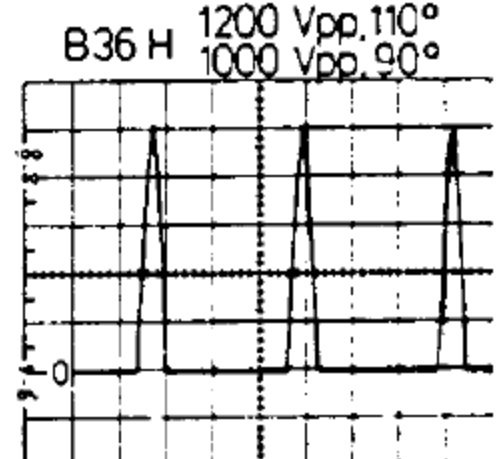
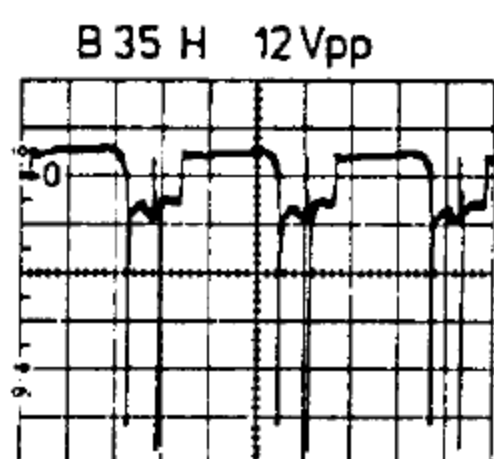
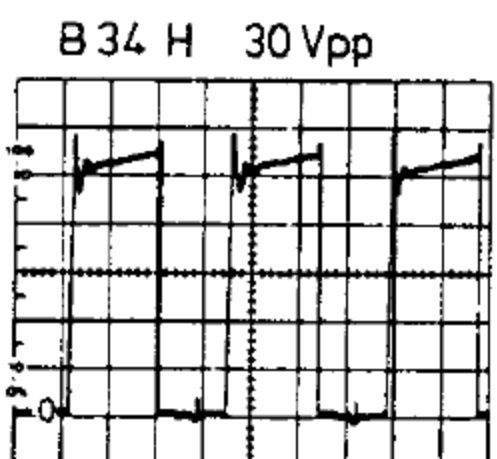
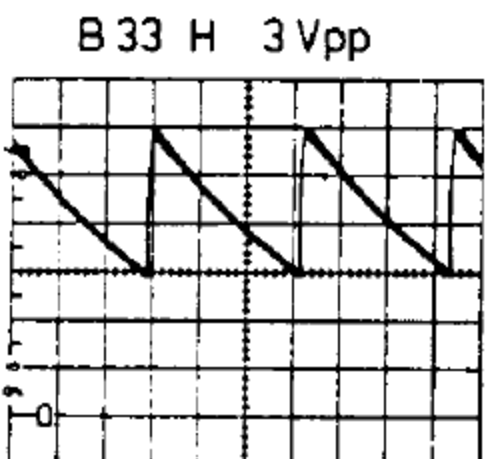
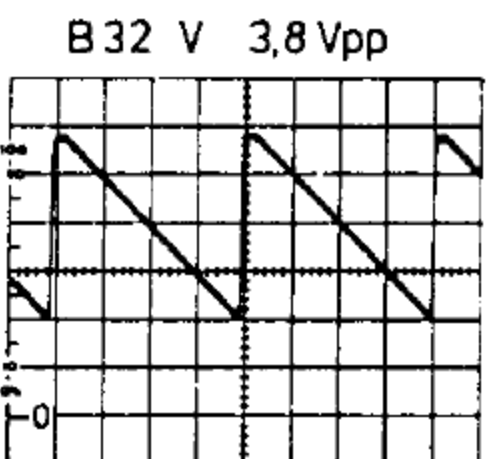
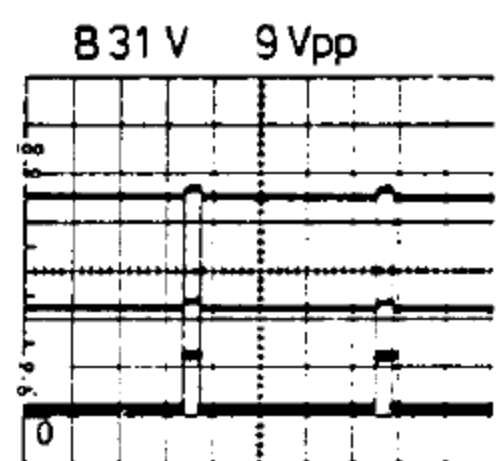
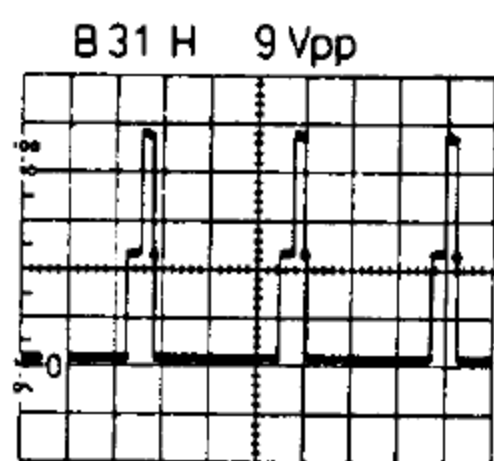
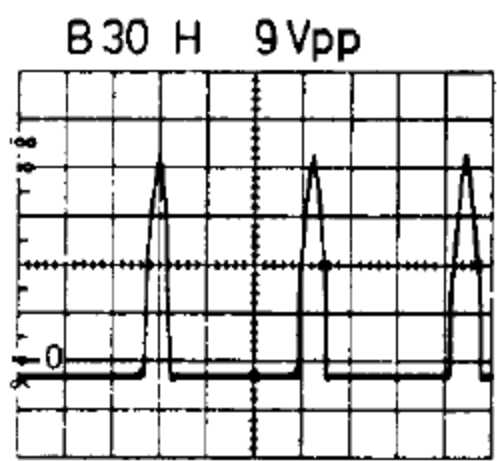
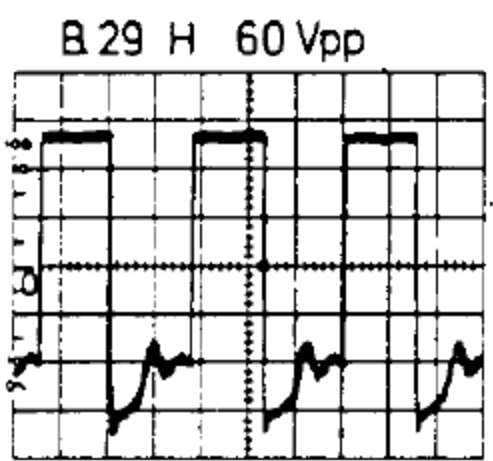
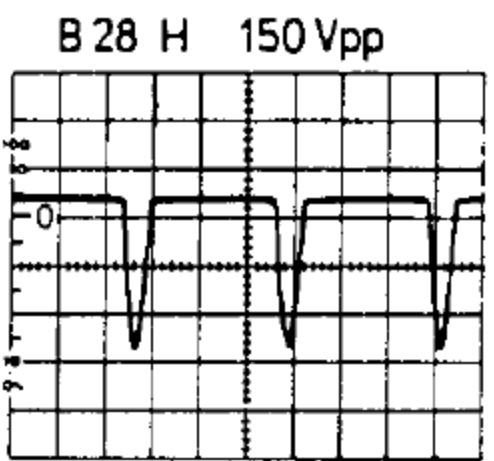
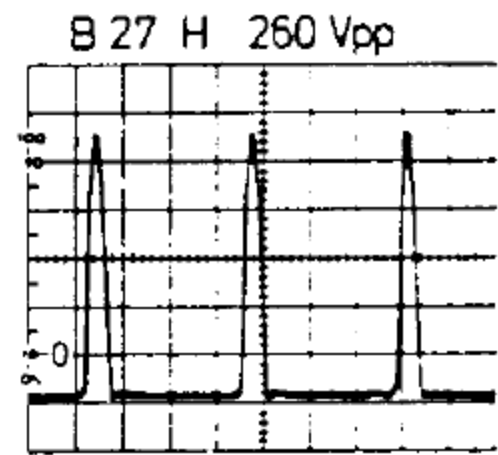
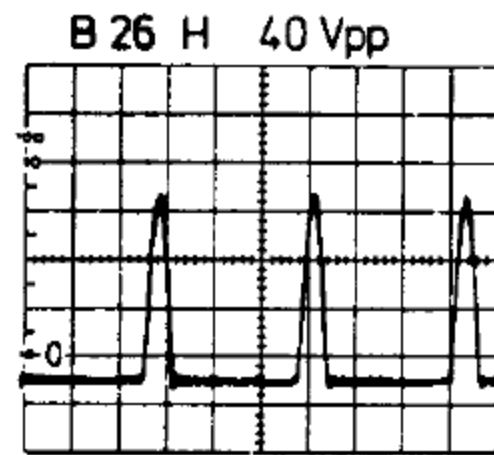
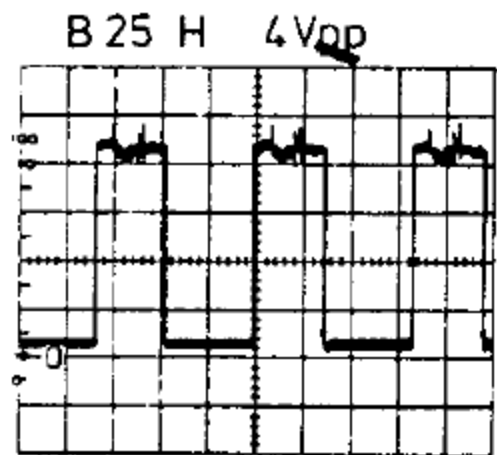
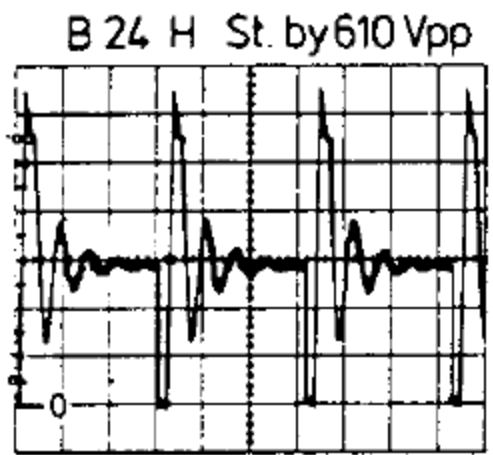
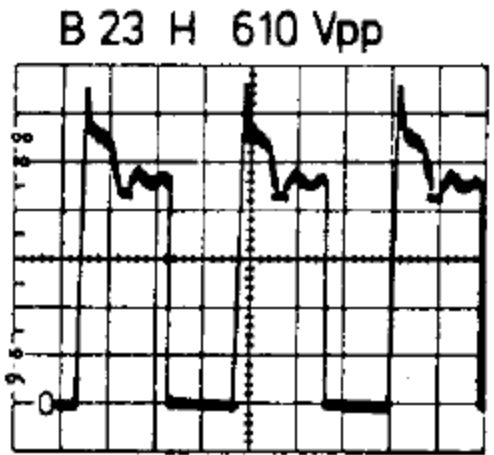


(T113) CIRCUIT DIAGRAM (REMOTE CONTROL UNIT)
— 'K' SERIES CHASSIS

SALORA

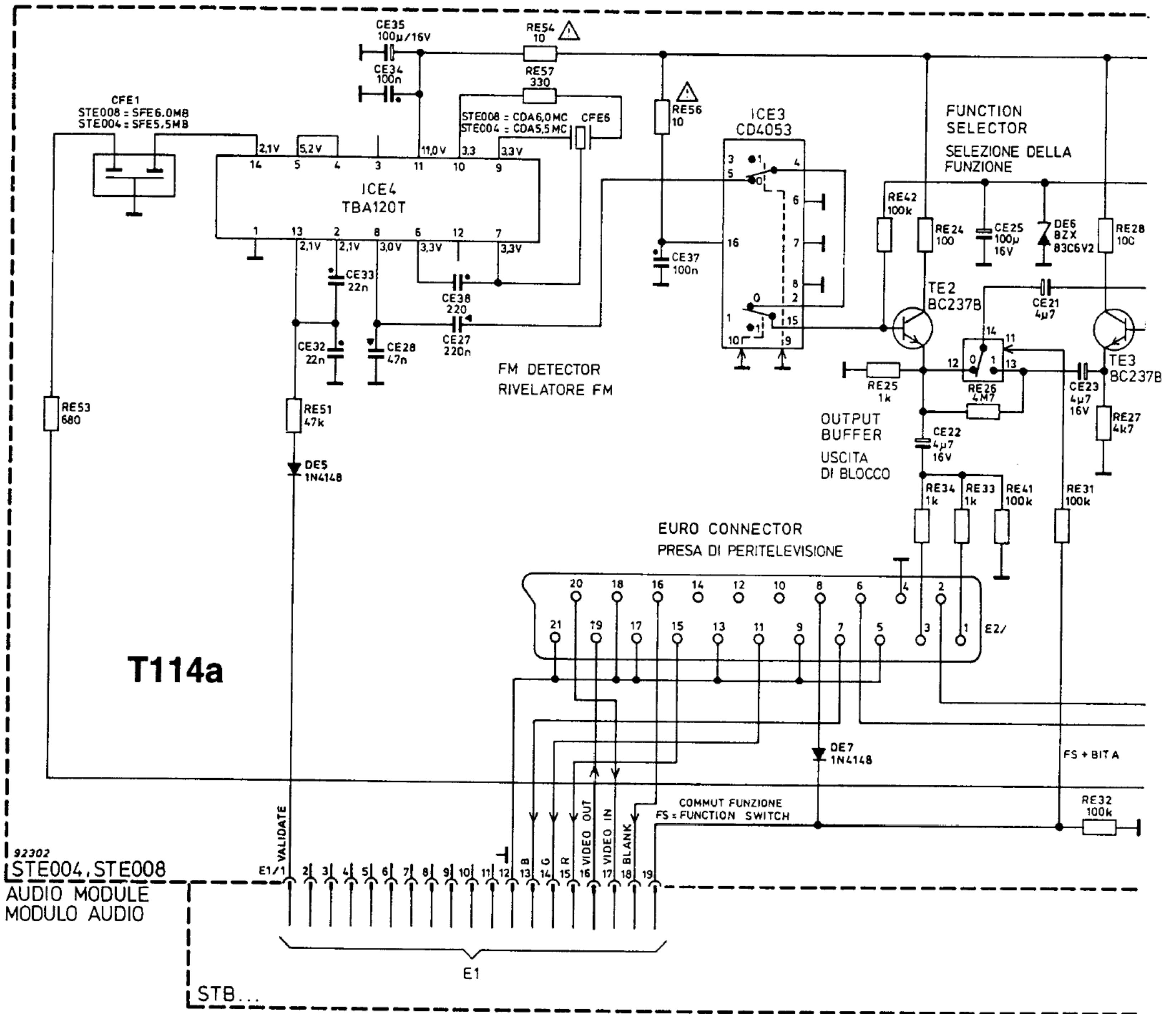


T67



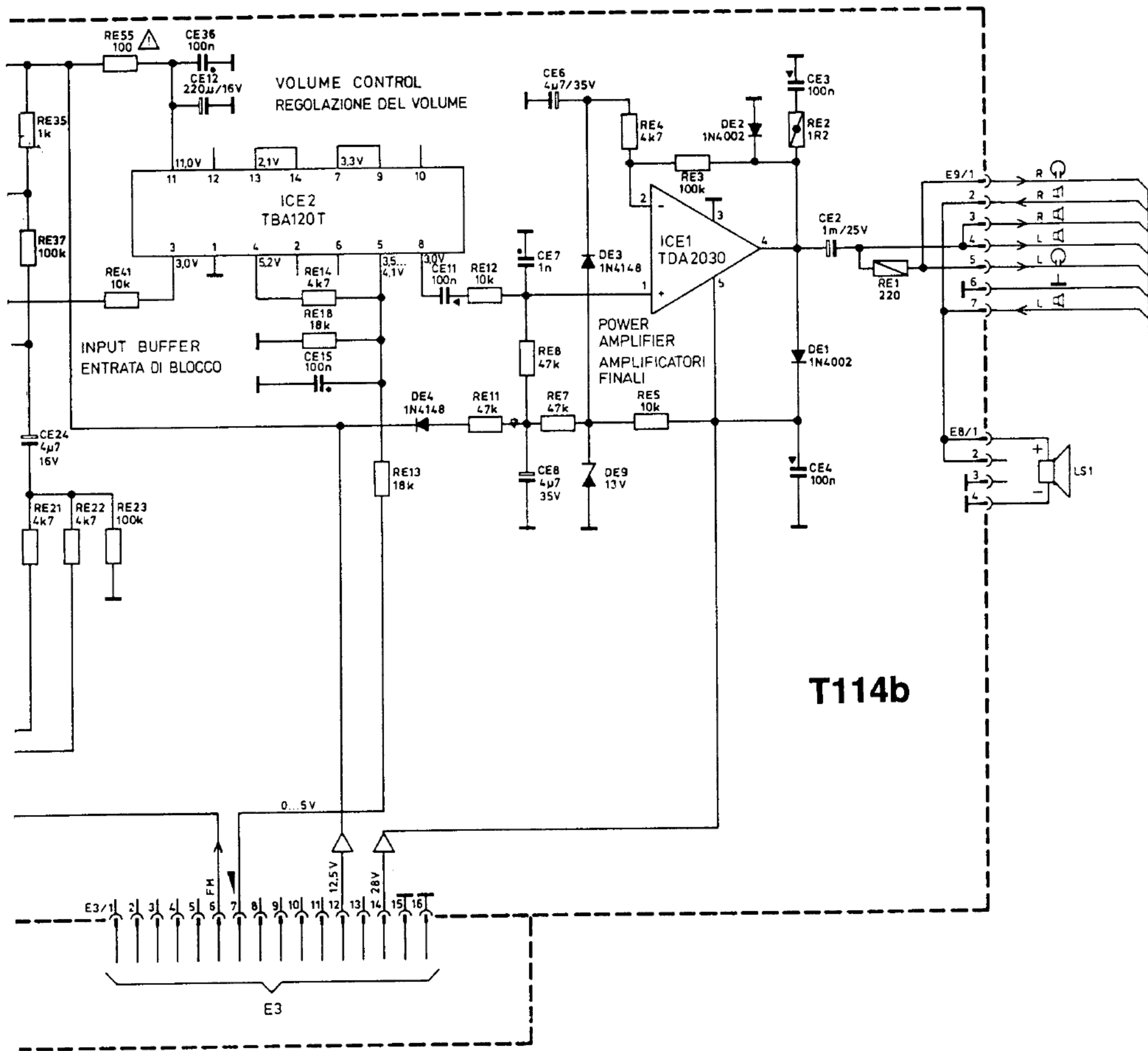
(T67) CIRCUIT WAVEFORMS — 'K' SERIES CHASSIS

TELEVISION SERVICING

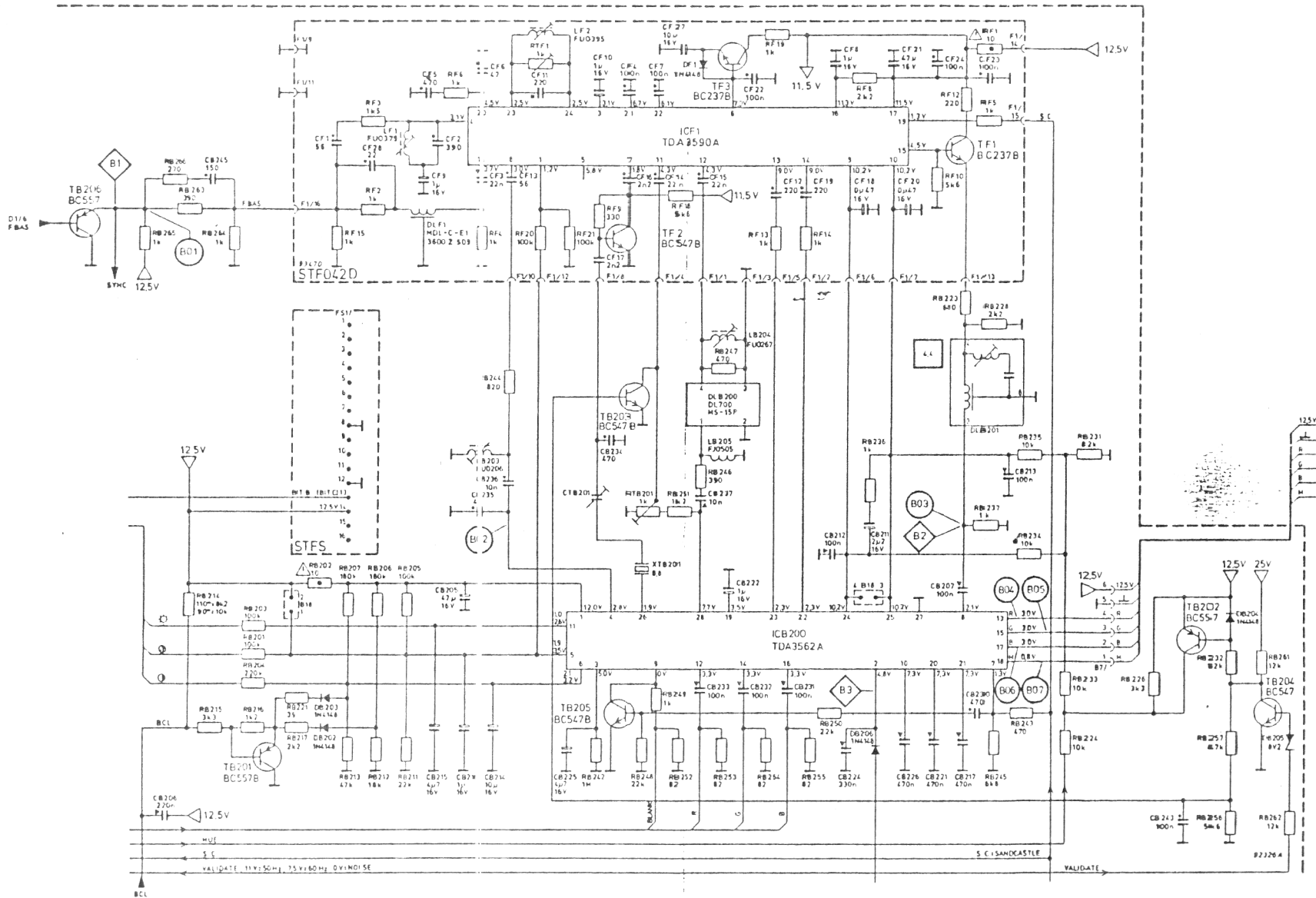


(T114a) CIRCUIT DIAGRAM (AUDIO MODULE) — 'K' SERIES CHASSIS (PART)

SALORA



(T114b) CIRCUIT DIAGRAM (AUDIO MODULE) — 'K' SERIES CHASSIS (CONTINUED)

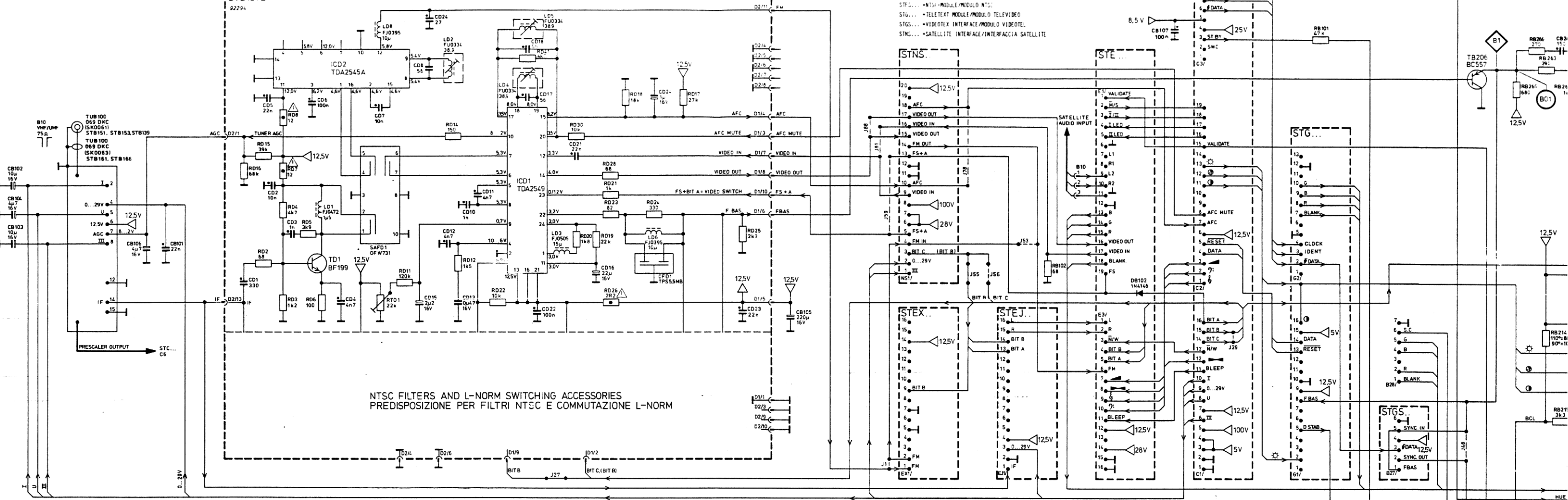


The manufacturer reserves the right to change the design and specification without prior notice or warning.

K PAL/SECAM
 ZB8200 01.B6 92326A

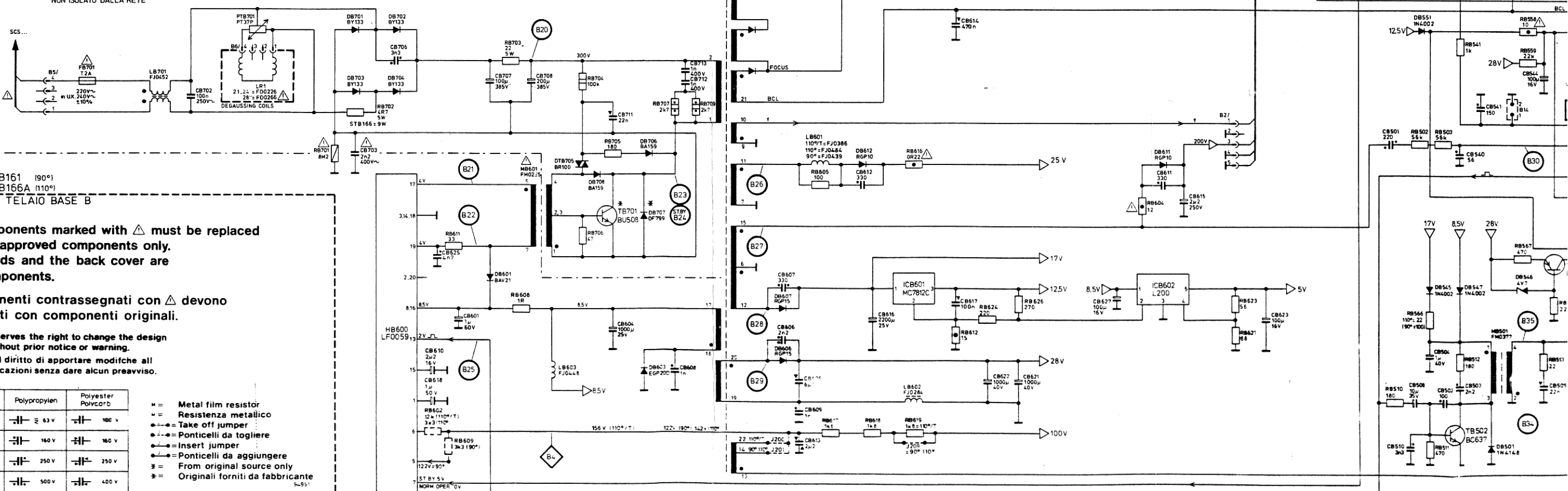
VIDEO AND SOUND IF MODULE MODULO MF
STD131B
92294

STC... = FREQ. SYNTH. WITH REMOTE CONTROL /
MOD. SINTESI DI FREQUENZA CON TELECOMANDO
STE... = AUDIO MODULE / MODULO AUDIO
STEJ... = AM-MODULE OR FM-RADIO INTERFACE /
MODULO AM OPPURE INTERFACCIA RADIO-FM
STEX... = FM-MOD. TUNING MODULE / MODULO FM-TUNING
STF... = SET-AM TRANSCODER MODULE / DECODIFICA SET-AM
STF... = NTSC-MODULE / MODULO NTSC
STG... = TELETEXT MODULE / MODULO TELEVIDEO
STGS... = VIDEO TEXT INTERFACE / MODULO VIDEO TEL.
STNS... = SATELLITE INTERFACE / INTERFACCIA SATELLITE



NTSC FILTERS AND L-NORM SWITCHING ACCESSORIES
PREDISPOSIZIONE PER FILTRI NTSC E COMMUTAZIONE L-NORM

MAINS ISOLATED ISOLATO DALLA RETE
MAINS NON ISOLATED NON ISOLATO DALLA RETE



STB139 (110°/T)
STB151K (90°) STB161 (90°)
STB153G (110°) STB166A (110°)
MOTHER BOARD B TELAIO BASE B

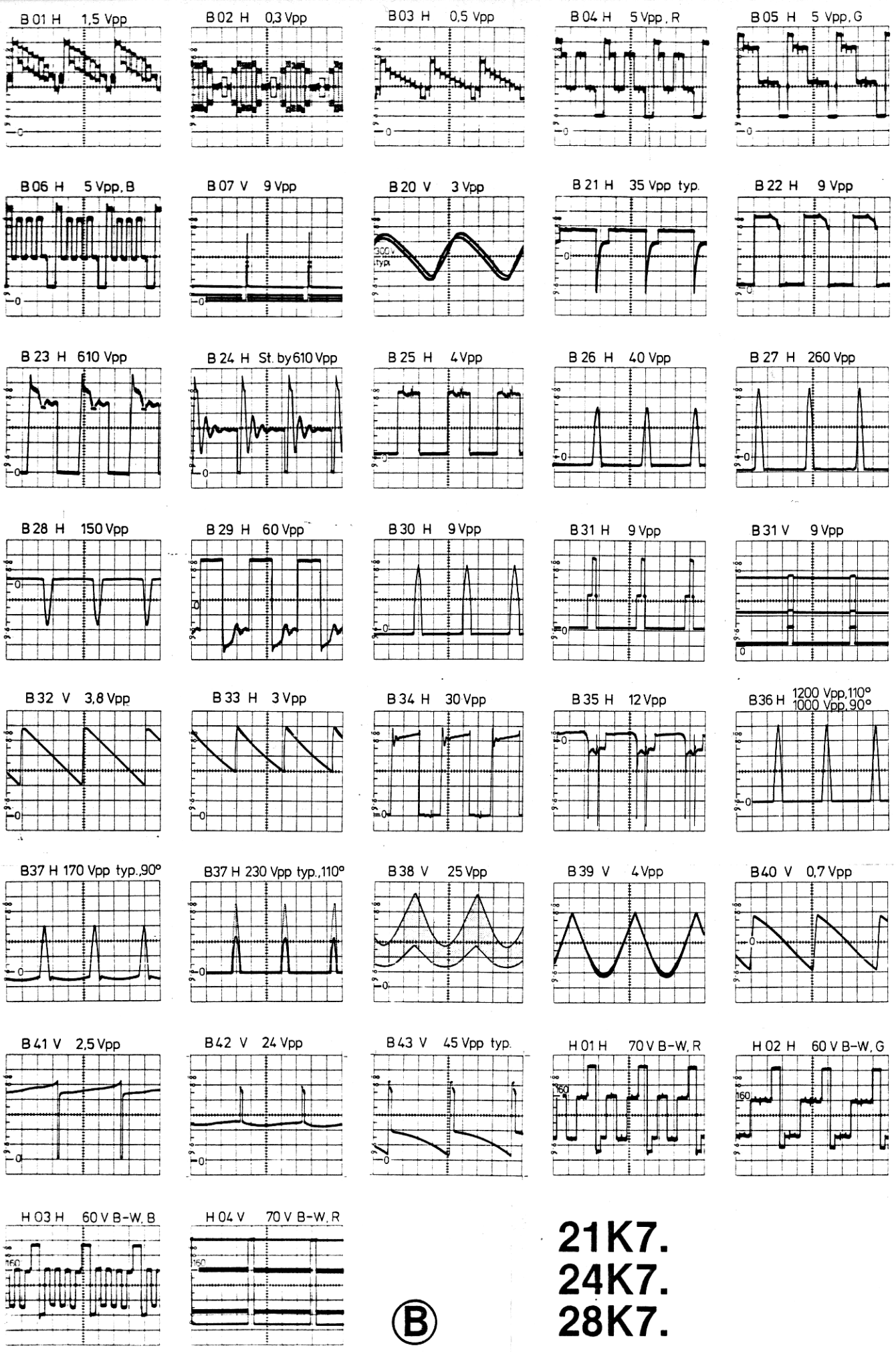
NB. Safety components marked with Δ must be replaced with original or approved components only. All printed boards and the back cover are also safety components.

NOTA: I componenti contrassegnati con Δ devono essere sostituiti con componenti originali.

The manufacturer reserves the right to change the design and specification without prior notice or warning.
La fabbrica si riserva il diritto di apportare modifiche allo schema e alle specificazioni senza dare alcun preavviso.

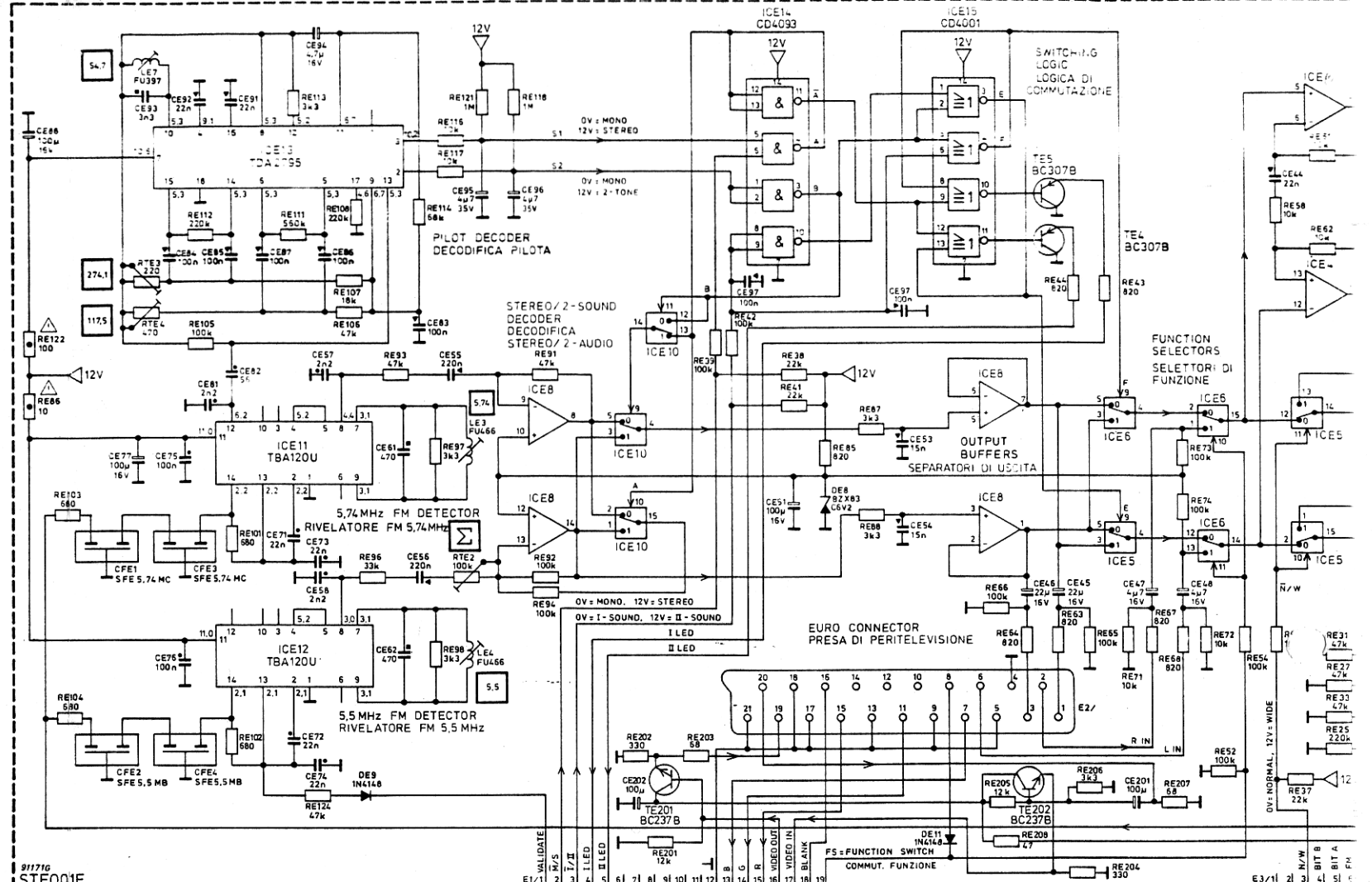
	Ceram	Polypropylen	Polyester Polycarb.

- Δ = Metal film resistor / Resistenza metallica
- Δ = Take off jumper
- Δ = Ponticelli da togliere
- Δ = Insert jumper
- Δ = Ponticelli da aggiungere
- Δ = From original source only
- Δ = Originali forniti da fabbricante



**21K7.
24K7.
28K7.**

ZB8281 04.87 90199F, 90232B



STEREO MODULE

TRANSMISSION TYPE	SELECTION S1	S2	M/S	I/II	LOGICAL OUTPUTS	A	B	E	F	I LED	II LED
MONO	0	0	X	X	1	1	0	0	0	OFF	OFF
2-TONE	0	1	X	0	1	0	0	1	0	OFF	OFF
STEREO	1	0	0	X	1	1	0	0	0	ON	ON

X = DON'T CARE
0 = 0V
1 = 12V

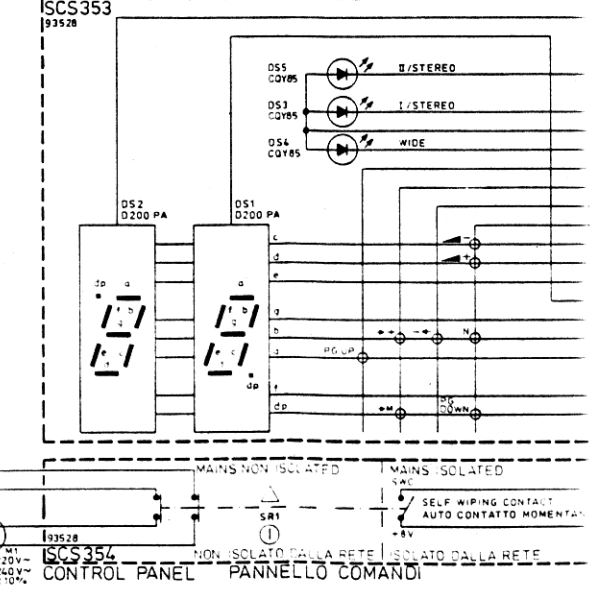
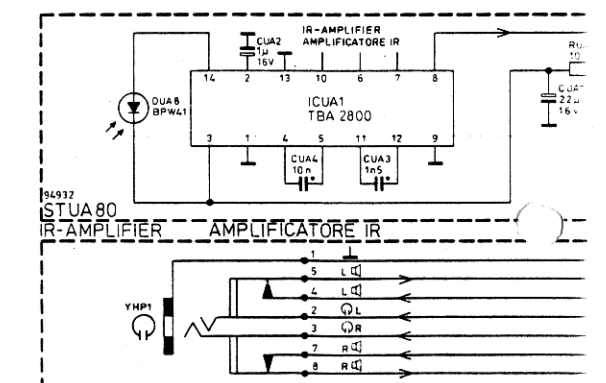
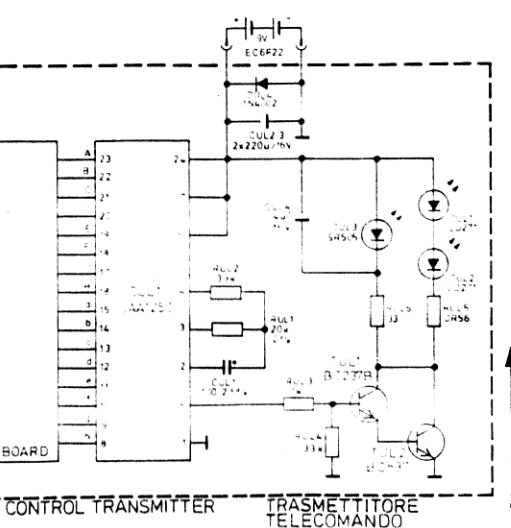
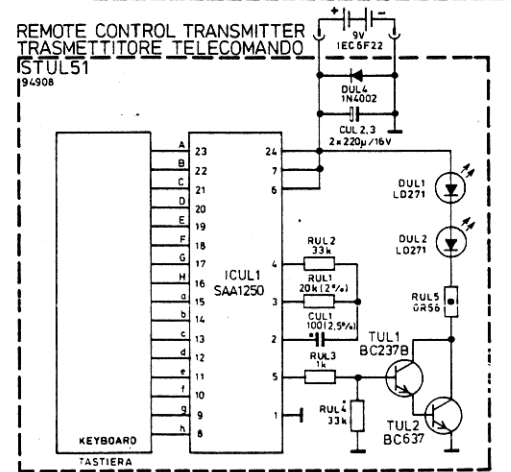
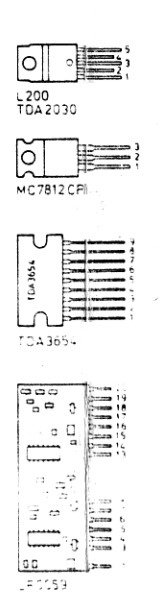
MODULO STEREO

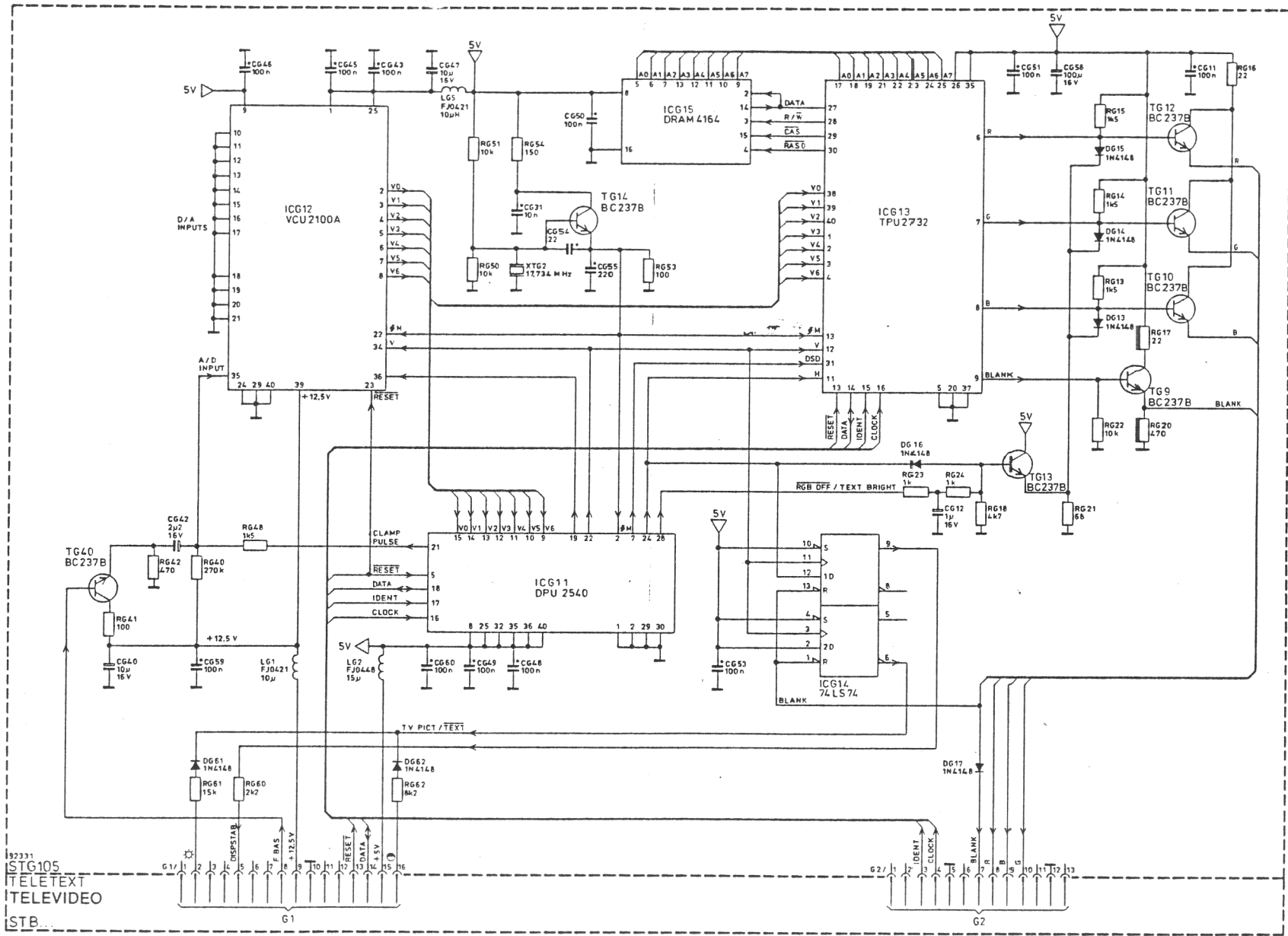
TIPO DI TRASMISSIONE	SELEZIONE S1	S2	M/S	I/II	USCITA DELLA LOGICA	A	B	E	F	I LED	II LED
MONO	0	0	X	X	1	1	0	0	0	OFF	OFF
2-TONE	0	1	X	0	1	0	0	1	0	OFF	OFF
STEREO	1	0	0	X	1	1	0	0	0	ON	ON

X = NON IMPORTANTE
0 = 0V
1 = 12V

Service Mode:
P. N. O. n. 34951

Parole di servizio:
P. N. O. n. 34951

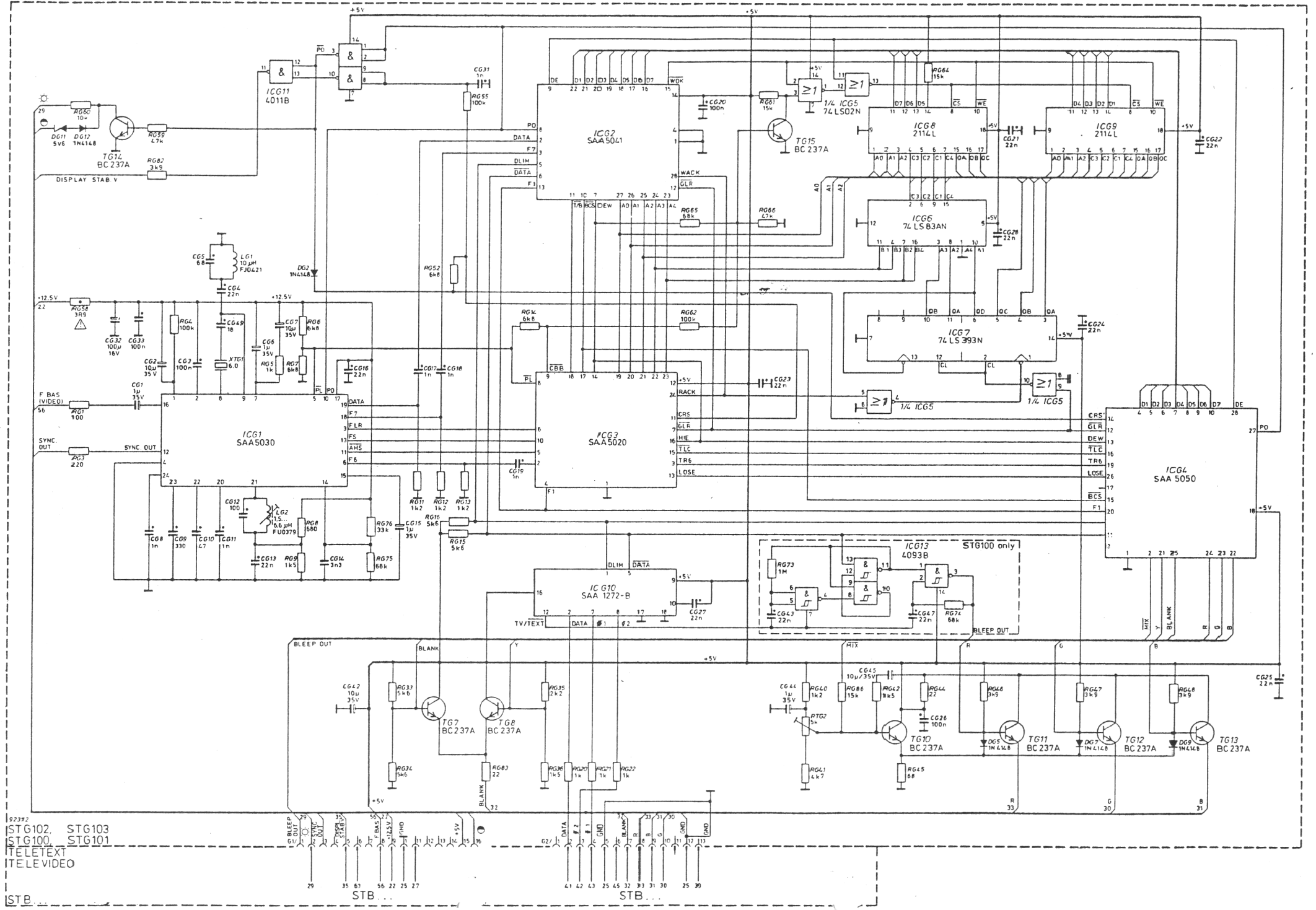




92331
STG105
TELETEXT
TELEVIDEO
STB

The manufacturer reserves the right to change the design and specification without prior notice or warning.

K TELETEXT
ZB8210 01.86 92331



62292
 STG102, STG103
 STG100, STG101
 TELETEXT
 TELEVIDEO
 STB

BLEEP OUT
 BLANK
 Y
 G
 B
 STB...

DATA
 F2
 F1
 GND
 STB...

CG25 22n
 CG24 22n
 CG23 22n
 CG22 22n
 CG21 22n
 CG20 100n
 CG19 1n
 CG18 1n
 CG17 1n
 CG16 22n
 CG15 35V
 CG14 35V
 CG13 22n
 CG12 100
 CG11 11n
 CG10 7
 CG9 330
 CG8 1n
 CG7 35V
 CG6 35V
 CG5 100n
 CG4 22n
 CG3 100n
 CG2 100n
 CG1 35V

RG1 100
 RG2 220
 RG3 100
 RG4 100k
 RG5 1k
 RG6 6k8
 RG7 33k
 RG8 680
 RG9 1k5
 RG10 3n3
 RG11 1k2
 RG12 1k2
 RG13 1k2
 RG14 6k8
 RG15 5k6
 RG16 35V
 RG17 6k8
 RG18 100V
 RG19 6k8
 RG20 15k
 RG21 15k
 RG22 15k
 RG23 15k
 RG24 15k
 RG25 15k
 RG26 15k
 RG27 15k
 RG28 15k
 RG29 15k
 RG30 15k
 RG31 15k
 RG32 15k
 RG33 5k6
 RG34 5k6
 RG35 2k2
 RG36 1k5
 RG37 1k
 RG38 1k
 RG39 1k
 RG40 1k2
 RG41 4k7
 RG42 8k5
 RG43 22
 RG44 1u
 RG45 68
 RG46 9k5
 RG47 3k5
 RG48 3k5

TG7 BC237A
 TG8 BC237A
 TG10 BC237A
 TG11 BC237A
 TG12 BC237A
 TG13 BC237A

ICG1 SAA5030
 ICG2 SAA5041
 ICG3 SAA5020
 ICG4 SAA5050
 ICG5 74LS02N
 ICG6 74LS83AN
 ICG7 74LS393N
 ICG8 2114L
 ICG9 2114L
 ICG10 SAA1272-B
 ICG13 4093B

STG100 only
 STG102
 STG103