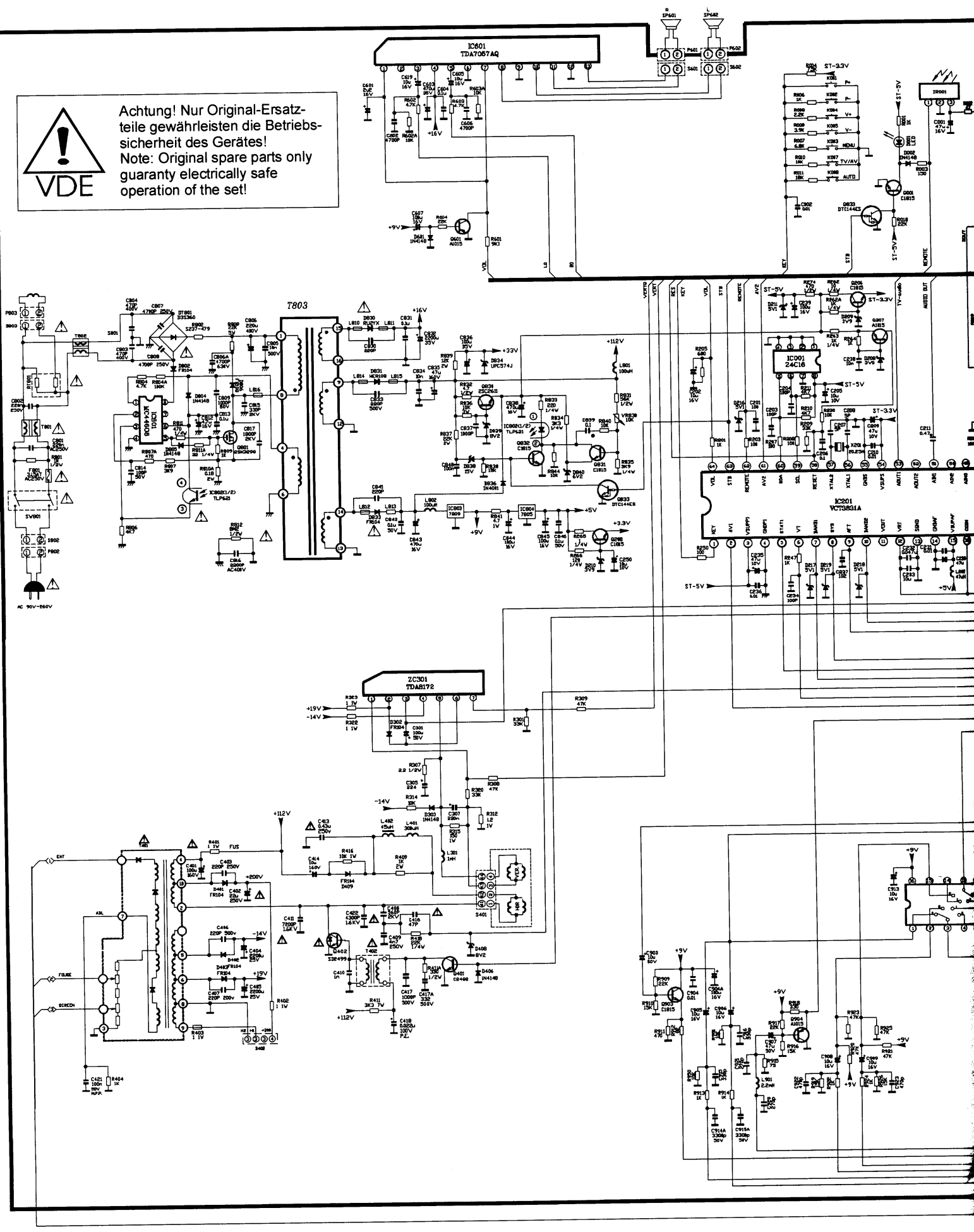


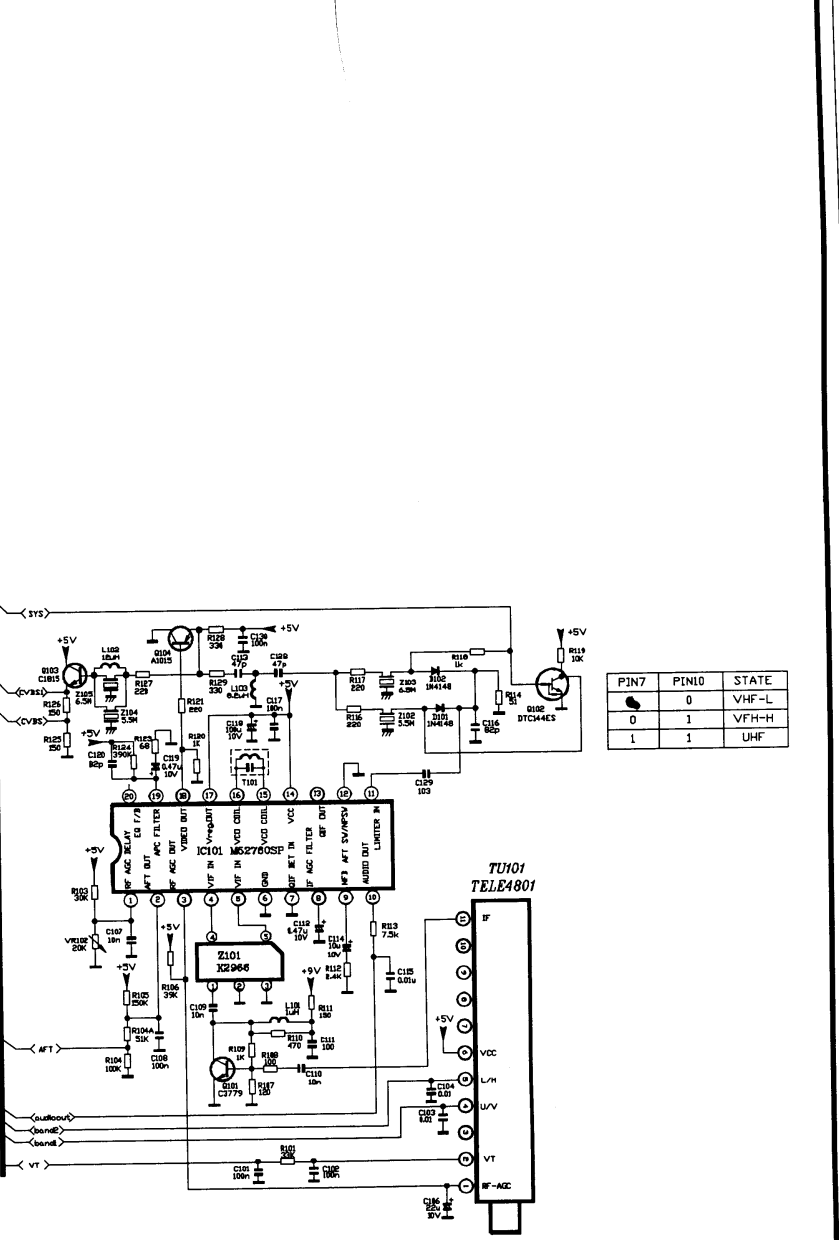
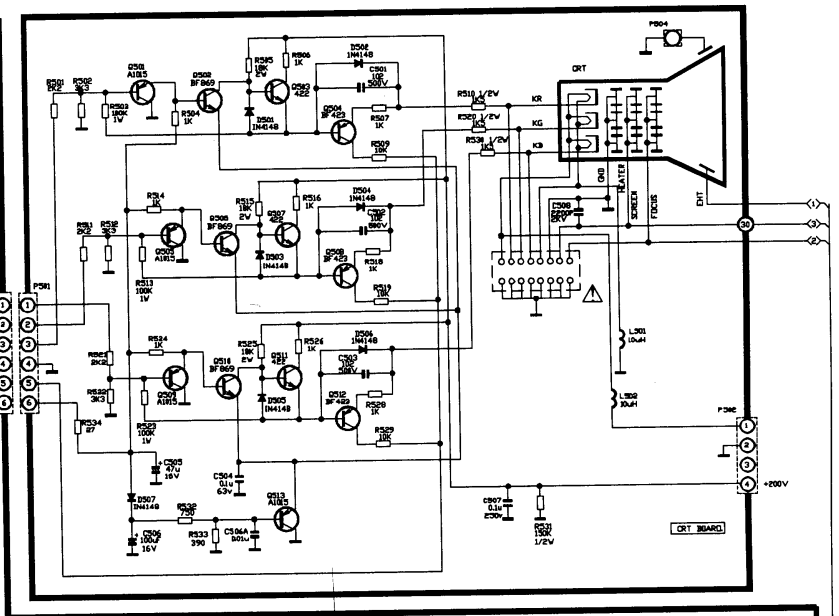
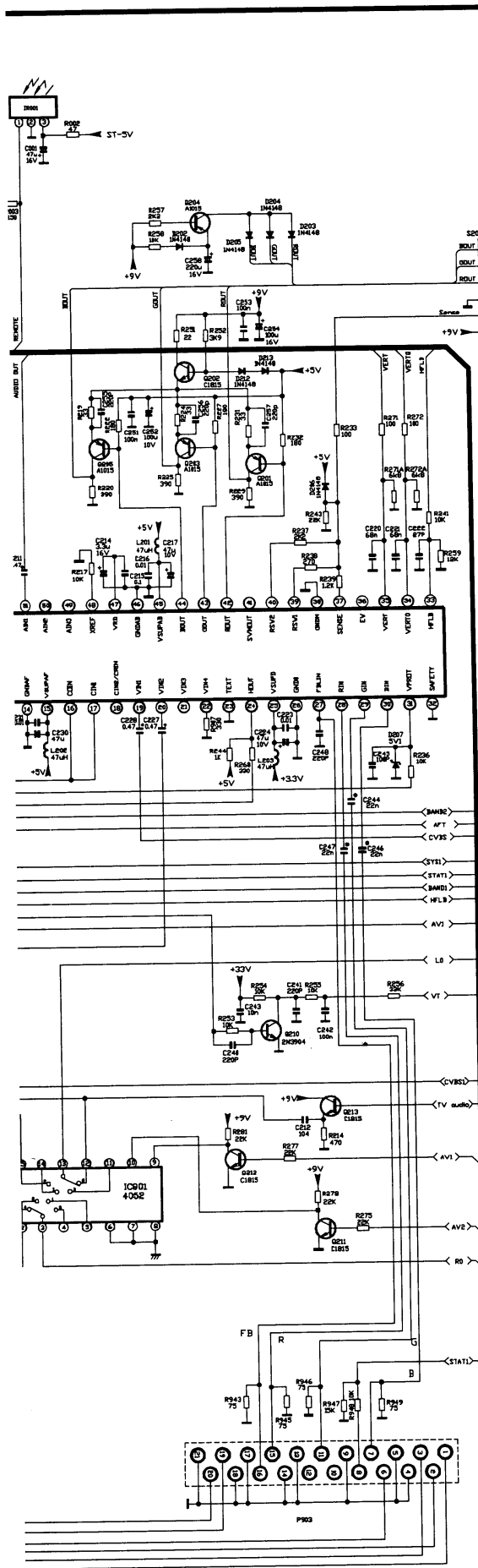
# Schaltbild Chassis M35

## Circuit diagram chassis M35



Achtung! Nur Original-Ersatzteile gewährleisten die Betriebssicherheit des Gerätes!  
 Note: Original spare parts only guaranty electrically safe operation of the set!





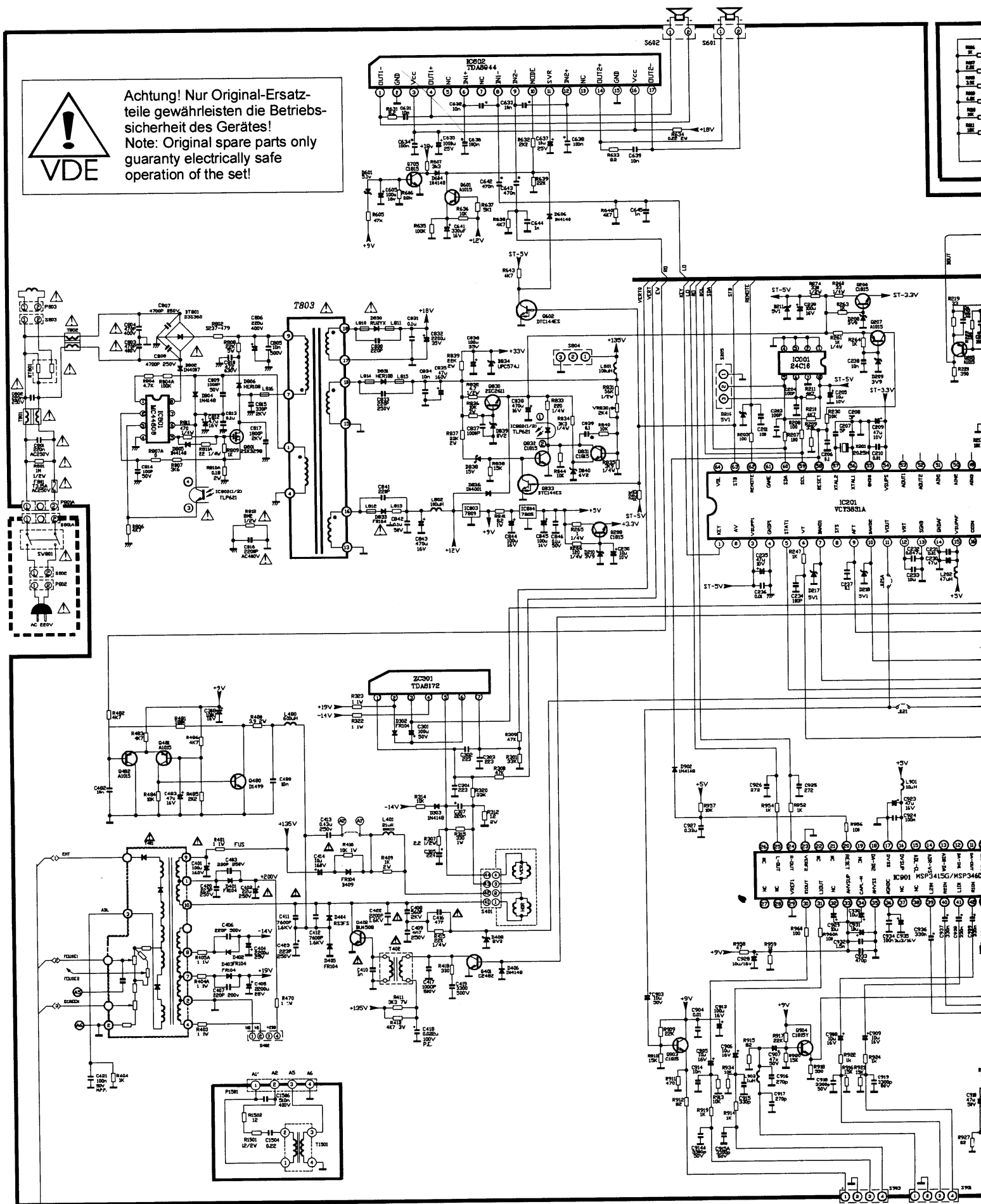
PIN7	PIN10	STATE
0	0	VHF-L
0	1	VHF-H
1	1	UHF

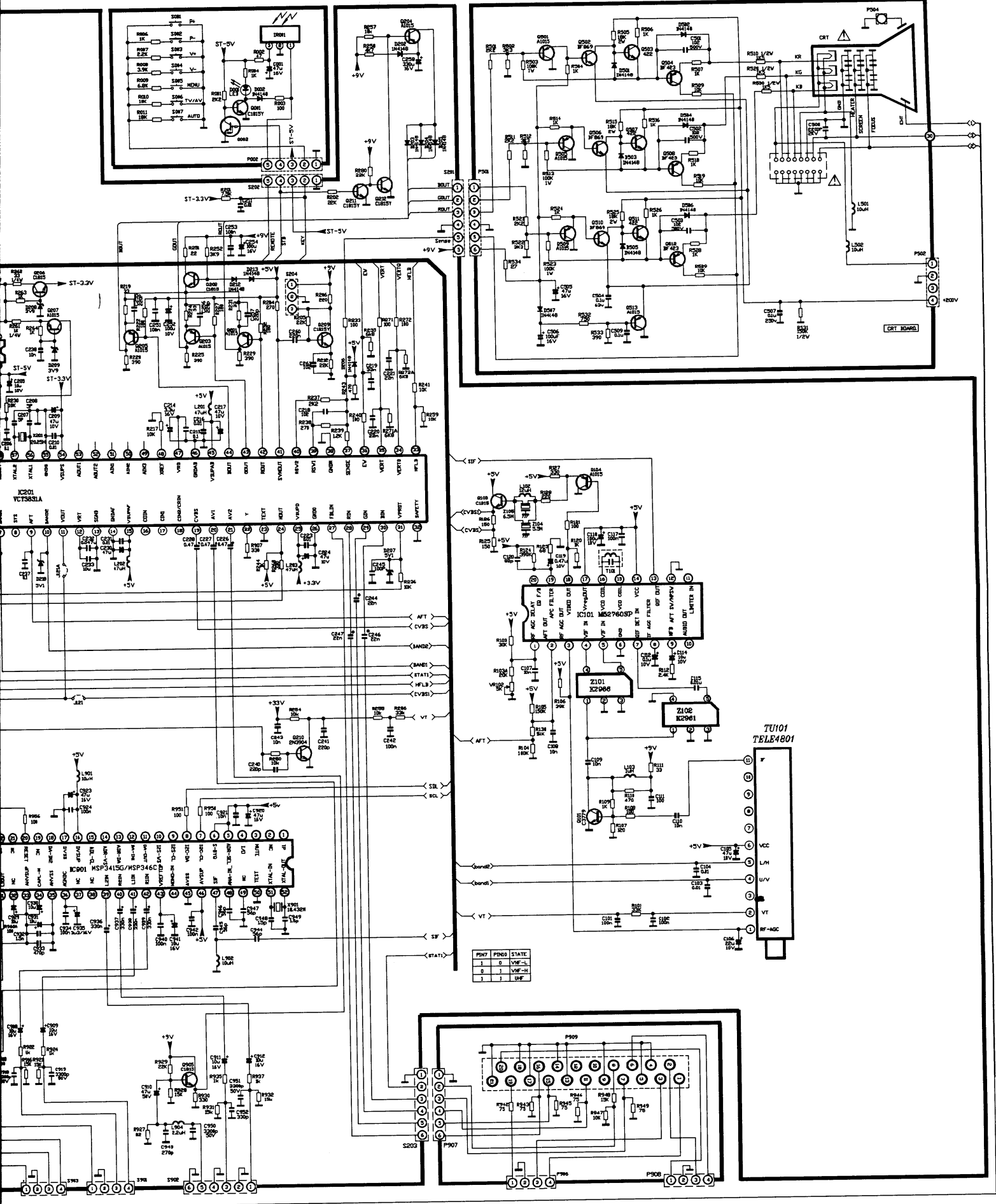
# Schaltbild Chassis M36

## Circuit diagram chassis M36



Achtung! Nur Original-Ersatzteile gewährleisten die Betriebssicherheit des Gerätes!  
 Note: Original spare parts only guaranty electrically safe operation of the set!





# Adjustment procedure

## Power supply voltage

- Connect a standard test pattern on RF-input.
- **Connect a DC voltmeter and adjust VR 830 until voltage is:**  
M35: 112V +/- 0,5V  
M36: 140V +/- 0,5V

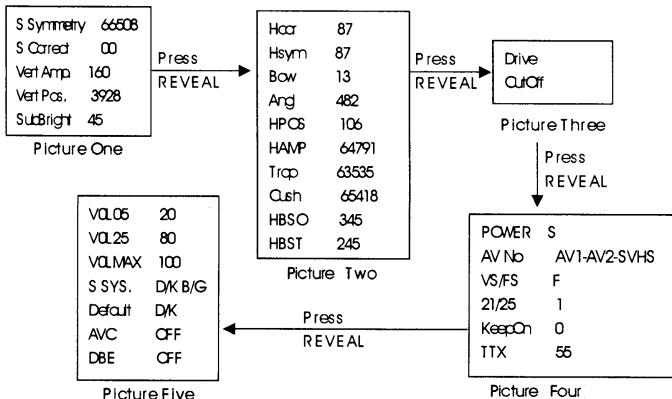
## AFC-adjustment

- Disconnect IF of tuner
- Apply a 38.9 MHz gray scale & color bar test pattern to IF input across C110.
- Connect a DC voltmeter at Pin2 on IC101 and adjust T101 until voltage becomes 2,5V.

## AGC-adjustment

- Connect IF of tuner and IC101.
- Apply a (60dB) gray scale & color bar test pattern from tuner.
- Adjust VR102 to exactly position that the noise (snow dot) just came up

## The Service-menu



## Service-mode

**Hinweis:** To call Service-mode, the OSD language must be English.

Press **MENU** on Remote control, to display side „Preset“. Now change OSD language to English.

### Call the Service-mode:

**Hinweis:** The keys are still on remote control!

- Press key **MENU** 4 times
- Press key **P-** 3 times
- Press key **V+** drücken
- Press key **CAPS** drücken
- Taste key **REVEAL** drücken

„Picture One will display in screen“ (see Service-menu)

### The keys in menu:

- **P+ / P-**: Choose item
- **V+ / V-**: Change/adjust the value/Mode, or Enter into the submenu
- **REVEAL**: Choose Submenu („Picture One“; „Picture Two“; ...
- **OK**: Save and Quit Service-menu

## Adjustment screen voltage:

- Press key **REVEAL** to enter „Picture Three“
- Press key **P+ / P-** to choose „Cutoff“ and press **V+** to select.
- Press **P-** to change in „Cathode Current (G2)“-mode, press **PIC** and adjust it with the keys **V+ / V-** until the screen will become a horizontal line.
- Press **PIC** to quit the mode.

## Vertical adjustment

- Connect a test pattern to aerial input.
- Press **REVEAL** to enter into „Picture One“ and adjust the parameters to make the picture in best status.
- Apply a 8 level gray scales pattern to aerial input and adjust the item „SubBr“. The best status means that the 2nd dark bar just can be seen.

## Horizontal adjustment

### Adjust PAL:

- Apply a PAL test pattern to aerial input  
Press **REVEAL** to enter „Picture Two“ and adjust the following items to make the picture in best status (only 25" or above 25" TV-units): **Hcor; Hsym; Bow; Angle; HAMP; Trap; Cush**
- Apply a RGB color bar pattern via Scart connector
  - Enter into **HPOS** on menu „Picture Two“ and adjust it with **V+ / V-** until the halftone picture overlap the screen picture.
  - Press **P+** to change into RGB hor. pos.
  - Press **V+ / V-** to make picture in best position
  - Press **OK** to save and quit
  - Enter menu „Picture Two“
  - Apply a pure bleu test pattern on aerial input
  - Adjust „**HBSo**“ with **V+ / V-** and adjust „**HBST**“ with **Display(+)** / **Color SYS.(-)** until picture is in best status.

### Adjust NTSC:

- Apply a NTSC test pattern to aerial input.  
Press **REVEAL** to enter „Picture Two“ and adjust the following items to make the picture in best status (only 25" or above 25" TV-units): **Hcor; Hsym; Bow; Angle; HAMP; Trap; Cush**
- Apply a RGB color bar pattern via Scart connector
- Repeat points a to g (see Adjust PAL) to adjust.

## Adjust white balance

- Press **REVEAL** to enter „Picture Five“

There are following adjustments:

DRIVE	Drive ref:	128(H)	128(G)	128(B)
	Controlled:	800	800	800
	Measured:	128	128	128
CutOff	Cutoff ref:	128(H)	128(G)	128(B)
	Controlled:	130	130	130
	Measured:	128	128	128

## NVM-menu

- Press **REVEAL** to enter „Picture One“
- Press **V+** to enter **S Symmetry**
- Press **P+** until below dialogue appears:  
„NVM: adress=xxx, data=xx, step-size=+-0.“  
At this time, it means it entered into **NVM**

There are following adjustments available:

Anode current	Press <b>V-</b> to address=184; Press <b>[Color sys (-)] oder [Display (+)]</b> to adjust the Data (initial data: 60)
Deleting anode current	Press <b>V-</b> drücken to address=490 in version2; at version1 address=492; Press <b>[Color sys (-)] oder [Display (+)]</b> to adjust the Data (initial data: 200)
OSD brightness	Press <b>V-</b> drücken to address=209; Press <b>[Color sys (-)] oder [Display (+)]</b> to adjust the Data
OSD transparent	Press <b>V-</b> drücken to address=14; Press <b>[Color sys (-)] oder [Display (+)]</b> to adjust the Data

## Service-menu settings

- Call Service-menu (see Service-mode)
- Press **REVEAL** to enter „Picture Four“.

There are following adjustments available:

Item in „Picture Four“	Detail description
POWER S	O: Skip Standby when power On S: Standby On when Power On
AV No. AV1-AV2-SVHS	AV1-AV2 AV1 SCART-AV2 SCART-AV2-SVHS SCART AV1-AV2-SVHS AV1-AV2-YUV
Code ON	ON: when you want to enter into service mode, first must press MENU to enter into „Preset“ page, then make the OSD Language to be „English“, here, you can enter into service mode when press CAPS & REVEAL key within 3 sec. (Hint: When finishing all the alignment procedure, please make „code“ to be „ON“) OFF: You can enter into service mode directly when press CAPS & REVEAL key within 3 sec.
21/25 1	1: 21" and below 21" 5: 25" and above 25"
KeepOn 0	0: Blue background when no signal, and auto standby if no signal in 15 minutes 1: Noise background
TTX 55	128; 70; 55; 40; 38; 6 Choose different area/countries (the code see appendix)
L/C/A Latin	L: Latin C: Cyrillic A: Arabian
Bio ON	ON: turn on biologic function OFF: turn off biologic clock function
Heb OFF	ON: have Rabbinc OFF: without Rabbinc

Note: When TTX set to „128“, the relevant addresses of NVM must set to:  
491: 0 ; 492: 1 ; 496: 21 ; 498: 20 ; 499: 20 ; 500: 20 ; 504: 20 ; 506: 1

## Appendix teletext

6	38	40	55	70	128
English	Polish	English	English	English	
French	French	French	French	Slovakian	Latin
Swedish	Swedish	Swedish	Swedish	Hungarian	Arabic
Czech	Czech	Czech	Czech	Serbian	Farsi
<b>German</b>	German	German	German	Albanian	Russian
Spanish	Serbian	Spanish	Spanish	Polish	
Italian	Italian	Italian	Italian	Turkish	
Estonian	Estonian	Estonian	Estonian	Rumanian	