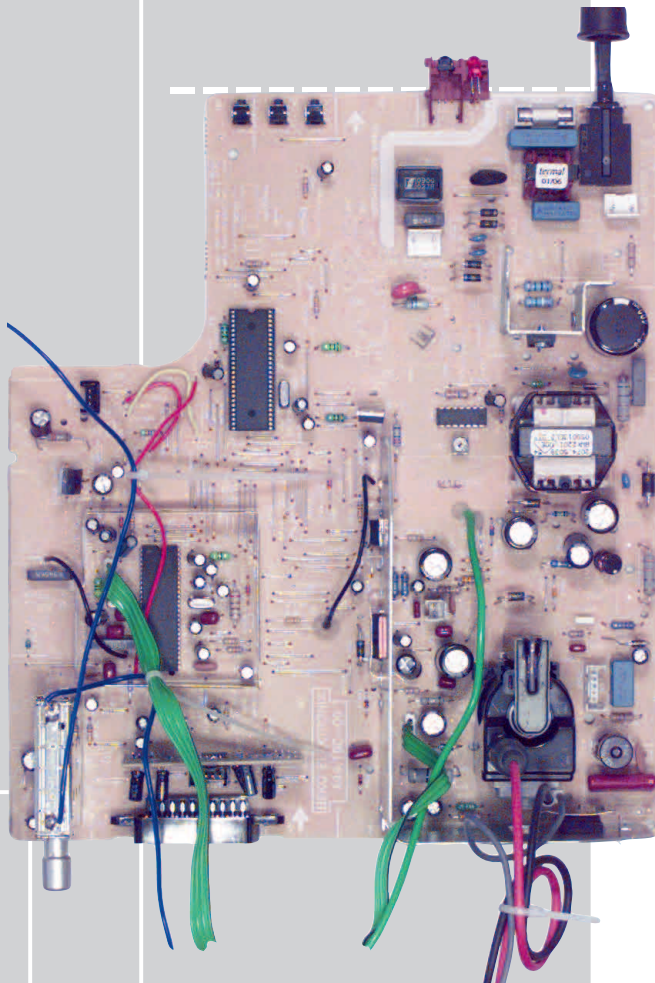




## P 37-1101/5 TXT

GCN9400

## T 51-1101/5 TXT

GCN9500

## T 55-1101/5 TXT

GCN9600

Additionally required Service Documents for the Complete Service

### Service Manual

### Safety

Part No.  
720108000000

Part Number 720100425000

Subject to alteration • Printed in Germany

E-BS-SA13 • 1001

<http://www.grundig.com>

## Grundig Service

Hotline Deutschland...  
...Mo.-Fr. 8.00-18.00 Uhr

### Technik:

|                   |               |
|-------------------|---------------|
| TV                | 0180/52318-41 |
| TV                | 0180/52318-49 |
| SAT               | 0180/52318-48 |
| VCR/LiveCam       | 0180/52318-42 |
| HiFi/Audio        | 0180/52318-43 |
| Car Audio         | 0180/52318-44 |
| Telekommunikation | 0180/52318-45 |
| Fax:              | 0180/52318-51 |

Planatron (8.00-22.00 Uhr) 0180/52318-99

Ersatzteil-Verkauf: Mo.-Fr. 8.00-19.00 Uhr

Telefon: 0180/52318-40  
Fax: 0180/52318-50

Kundendienst/Werkstätten: Mo.-Fr. 8.00-18.00 Uhr

Telefon: 0180/52318-52  
Fax: 0180/52318-46

gebührenpflichtig

The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 72010 800 0000, as well as the respective national deviations.



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## General Section

### Test Equipment

Please note the Grundig Catalog "Test and Measuring Equipment" obtainable from:

Grundig AG  
Geschäftsbereich Instruments  
Test- und Mess-Systeme  
Würzburger Str. 150  
D-90766 Fürth  
Tel.: 0911 / 703-4540  
Fax: 0911 / 703-4130  
eMail: [instruments@grundig.com](mailto:instruments@grundig.com)  
Internet: <http://www.grundig-instruments.de>

### General Notes

#### Before opening the cabinet disconnect the mains plug!

##### Wiring

Before disconnecting any leads and especially the earth connecting leads observe the way they are routed to the individual assemblies like the chassis, mains switch panel, keyboard control panel, picture tube panel, deflection unit, loudspeaker and so on.

On completion of the repairs the leads must be laid out as originally fitted at the factory to avoid later failures or disturbances.

##### Mains Cable

The TV receiver must only be operated with an original mains connecting cable with an interference suppressor choke integrated in the mains plug. This mains cable prevents interference from the mains supply and is part of the product approval. For replacement please order exclusively the mains connecting cable specified in the spare parts list.

## TECHNICAL SPECIFICATIONS AND THE FEATURES

|                                |                                                                                       |                    |
|--------------------------------|---------------------------------------------------------------------------------------|--------------------|
| <b>Power source:</b>           | 220-240V AC, 50-60Hz                                                                  |                    |
| <b>Power consumption:</b>      | 40W                                                                                   | 14"                |
|                                | 50W                                                                                   | 20"                |
|                                | 50W                                                                                   | 21"                |
| <b>Aerial impedance :</b>      | 75Ohm, Coaxial type                                                                   |                    |
| <b>Receiving system*:</b>      | PAL BG<br>PAL SECAM BG<br>PAL SECAM BG DK<br>PAL SECAM BG LL'<br>PAL I                |                    |
| <b>Receiving channels:</b>     | VHF BAND I, CH2-4<br>VHF BAND III, CH5-12<br>CATV CHANNELS S1-S41<br>UHF BAND CH21-69 |                    |
| <b>Audio outputs :</b>         | 2.5W RMS at %10 THD<br>16 OHM SPEAKER                                                 |                    |
| <b>High Voltage :</b>          | 23KV $\pm 0.5$ KV<br>25.5KV $\pm 0.5$ KV                                              |                    |
| <b>Focus voltage :</b>         | %25.6 $\pm$ %38 of EHT                                                                |                    |
| <b>Grid 2 voltage :</b>        | 0-1400V                                                                               |                    |
| <b>Heater voltage :</b>        | 6.3 $\pm$ 0.2Vrms                                                                     |                    |
| <b>Video/Audio Terminals :</b> |                                                                                       |                    |
| AV1 IN                         | Video 1 Vpp, 75Ohm<br>Audio 0.5Vrms, >10Kohm<br>RGB                                   |                    |
| AV1 OUT                        | Video 1Vpp, 75Ohm<br>Audio 0.5Vrms, >1Kohm                                            |                    |
| AV2 IN (RCA-OPTIONAL)          | Video 1Vpp, 75Ohm<br>Audio 0.5Vrms, >10Kohm                                           |                    |
| <b>Operating temperature :</b> | 0-45 Degrees                                                                          |                    |
| <b>Safety</b>                  | :                                                                                     | IEC 65/BS P2N      |
| <b>X-Ray radiation</b>         | :                                                                                     | ACC. IEC 65/BS P2N |

- : TV set is produced to receive "one" of these colour and sound systems.

## FEATURES

- 100 Program memory
- On-Screen-Display
- Programmable Off Timer
- Auto switch off at no signal condition (5 min.)
- Scart socket (AV in/out, RGB)
- Demo mode
- NTSC playback with tint control (NTSC44.3 via scart)
- Infrared remote control
- CATV channels
- Additional AV input via cinch
- Normalization system to recall the setting in memory after analog settings have been changed
- Teletxt program, national and international text programs
- 16:9 picture format selections
- Menu with **18** languages
- Swapping between two programs with single key stroke (SWAP)

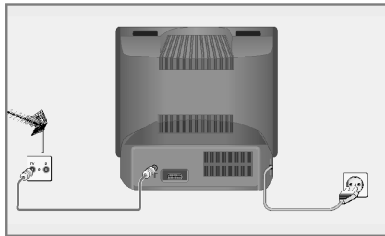
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**Operating Hints**

This chapter contains excerpts from the operating instructions. For further particulars please refer to the appropriate user instructions the part number of which is indicated in the relevant spare parts list.

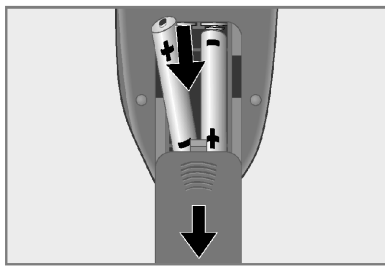
## CONNECTION AND PREPARATION

### Connecting the antenna and the mains cable



- 1 Insert the telescopic antenna in the recess in the rear panel (only for P 37-1101/5 TXT).
- 2 Plug the roof antenna cable or the telescopic antenna into the antenna socket »TГ« on the television set.
- 3 Plug the power cord into the mains socket.

### Inserting batteries in the remote control



- 1 Open the battery compartment by removing the lid.
- 2 Insert batteries (UM-3 or AA, 2 x 1.5 V).  
Observe the polarity (marked on the base of the battery compartment).

**Note:**

If the television no longer reacts properly to remote control commands, the batteries may be flat. Always remove flat batteries. No liability is accepted for damage resulting from leaking batteries.

**Environmental note:**

Batteries, including those which are heavy metal-free, may not be disposed of with household waste. Please dispose of used batteries in an environmentally sound manner. Find out about the legal regulations which apply in your area.

## OVERVIEW

### Operating controls on the television set

- ① Switches the television to stand-by mode.
- ◀ P Switches on the television from stand-by mode;  
Preset button for volume and channel selection.
- ▼ Channel select down;  
Lower volume.
- ▲ Channel select up;  
Raise volume.
- 🎧 Headphone jack, 3.5 mm ø jack plug.  
– Connecting a headphone set deactivates the loudspeakers.
- AUDIO** Audio signal input.
- VIDEO** Video signal input.

**Note:**

When the device is switched on for the first time, "demo mode" is automatically selected. The device shows you all menus and setting options.

## OVERVIEW

### The remote control



- Sound on/off (mute).
- Switches off the television (standby).
- 1...0** Switch the television on from stand-by mode; select channels directly.
- AV/TV** Selects the AV preset stations AV1 and AV2.
- /--** Switches from single-digit channel selection to two-digit selection and back.
- MENU** Calls up the menus »PICTURE«, »SETUP« and »FEATURES« successively.
- TEXT** Switches between teletext and TV mode; terminates the menu function.
- ▲ PR ▼** Switches the television on from stand-by mode; selects stations step by step; move the cursor in the menus up and down.
- OK** Saves various functions.
- ◀ VOL ▶** Adjust the volume; moves the cursor left/right.
- SWAP** Switches to the previously selected television station and back.
- 16:9** Picture format adjustment
- i** Switches on preset station information.
- (red)** Scrolls back a page in teletext mode.
- (green)** Scrolls to the next page in teletext mode.
- ⌚ (yellow)** In television mode: switch-off timer on/off; in teletext mode: selects desired chapter or page stop.
- ↔ (blue)** In television mode: switches to the factory settings; in teletext mode: selects desired topic; overrides wait times.
- STOP** Stops in teletext pages.
- REVEAL** Reveals answer in teletext.
- DOUBLE** Enlarges teletext page.
- SUB** In television mode: time display on/off; in teletext mode: selects subtitles.
- MIX** Mix mode in teletext.
- UPDATE** For overriding wait times in teletext mode.

# SETTINGS

## Assigning channel positions automatically (with the station search)

The television set is equipped with an automatic station search system.

100 preset positions are provided, to which you can assign television stations from the antenna or from the cable connection.

- 1 Press the »Ⓜ« button on the television set to switch to stand-by mode.
- 2 Switch on the television set with the »PR▲« button.

### Note:

When you turn the television on for the first time, it automatically selects "demo mode" and shows you all the menus and settings options. Then the »SETUP« menu is displayed, the »AUTOPROGRAM« line is highlighted.

- 3 Activate automatic station search with »OK«.
  - The station search begins and »AUTOPROGRAM WORKING« is displayed in the menu; the »SEARCH« indicator flashes.
  - The automatic search may last a minute or longer, depending on the number of television stations received.
  - After the search is completed, the »SETUP« menu is displayed, the television switches to channel position 1.

### Note:

If the television finds a TV station with the BG audio norm (the sound is not clearly audible), the BG audio norm must be entered manually, see the next section, step 3.

## Assigning channel positions manually

- 1 Select the »SETUP« menu by pressing »MENU« twice.
  - The »SETUP« menu is displayed, the »CHANNEL« line is highlighted.
- 2 Enter the desired channel number with »◀VOL« or »VOL▶« or »1...0«;  
or select the »SEARCH« line with »PR▼« and start the station search with »◀VOL« or »VOL▶«.

### Note:

Repeat the search until the desired channel appears on the screen.

- 3 Select the »SYSTEM« line with »PR▲« or »PR▼« and select the required audio norm (BG or DK) with »◀VOL« or »VOL▶«.
- 4 To fine tune the picture (if it is necessary), select the »FINE TUNE« line using »PR▲« or »PR▼« and then use »◀VOL« or »VOL▶« to adjust the fine tuning.
- 5 Select the »PROG NUMBER« line with »PR▲« or »PR▼« and select the desired channel position using »◀VOL« or »VOL▶« or »1...0«.
- 6 Select the »STORE« line using »PR▲« or »PR▼« and save the settings by pressing »OK«.
- 7 Conclude the setting by pressing »TXT«.

# TELEVISION MODE



## Switching on/off

- 1 Switch the television to stand-by mode by pressing »**⏻**« on the television set.
- 2 Switch the television out of stand-by mode with »**1...0**« or »**▲PR**« or »**PR▼**«.  
– The television switches on to the most recently selected station.
- 3 Press the »**⏻**« button to switch the television set to stand-by mode.
- 4 Switch the television off completely by pressing »**⏻**« on the television set.  
– In this way you save electricity.

## Selecting channel positions

- 1 Select channel positions directly with the »**1...0**« buttons.
- 2 Press »**▲PR**« or »**PR▼**« to move up and down channel positions one at a time.
- 3 Select channel positions »AV1« and »AV2« with »**AV/TV**«.

## Zap function

This function allows you to switch back and forth between two television stations (zapping).

- 1 Select a television channel using »**1 ... 0**«.
- 2 Select another television channel using »**1 ... 0**«.
- 3 You can now use »**SWAP**« to switch back and forth (zap) between these two television stations.

## Adjusting the volume

- 1 Adjust the volume with »**◀VOL**« or »**VOL▶**«.

### Note:

The modified value can be saved in the »**PICTURE**« menu.

To return to the factory setting, press »**⏻**«.

## Muting

- 1 Switch the sound on/off (mute) with the »**⏻**« button.

## Displaying/concealing the time

- 1 You can display or conceal the time by pressing the »**SUB**« button (only for stations with teletext).

## Displaying the channel position number

- 1 Display/conceal the channel position number with the »**i**« button.  
– The colour system and the status of the switch-off timer is also displayed.

# TELETEXT MODE

## TOP text and FLOF text mode

- 1 Press »**TXT**« to switch to teletext mode.  
– At the bottom of the screen, you will see an info line consisting of a red, green, yellow and blue text field. Your remote control possesses buttons with the corresponding colours.
- 2 Selecting chapters, topics and pages:  
To scroll back a page or select a chapter, press the »○« button (red).  
To scroll to the next page or select a topic, press the »○« button (green).  
To select a chapter, press the »⌚« button (yellow).  
To select a topic, press the »⌚« button (blue).

### Note:

Teletext pages can be selected directly with the »1...0« buttons or one at a time with »▲PR« or »PR▼«.

To return to menu page 100, press »i«.

- 3 Switch out of teletext mode by pressing »**TXT**«.

## Normal text (basic text) mode

### Selecting teletext pages

- 1 Press »**TXT**« to switch to teletext mode.
- 2 Press »○« (red) to scroll backwards a page.
- 3 Press »○« (green) to scroll to the next page.

### Note:

Teletext pages can be selected directly with the »1...0« buttons or one at a time with »▲PR« or »PR▼«.

To return to menu page 100, press »i«.

### Overriding wait time

The wait time for calling up a teletext page can be overridden:

- 1 Enter the teletext page number using the »1...0« buttons.
- 2 Switch to the currently set television station with »**UPDATE**«.  
– At the top of the screen you will see »P xxx«.  
– When a page number appears in place of »P xxx«, the teletext page has been found.
- 3 Switch to the teletext page with »**UPDATE**«.

### Enlarging teletext page

- 1 You can enlarge a teletext page by repeatedly pressing »**DOUBLE**«.



## TELETEXT MODE



### Calling up a sub-page

- 1 Call up a sub-page with »**SUB**«.
- 2 Enter the four-digit number for the desired sub-page with the »**1...0**« buttons.  
– After a short time the selected sub-page appears.

### Page stop for multiple pages

A multiple page may contain several sub-pages, which are automatically scrolled by the transmitting station.

- 1 To stop at a sub-page, press the »**STOP**« button.
- 2 Undo the function by pressing »**STOP**«.

### Reveal answer

Certain teletext pages can contain "concealed answers" or information which can be called up.

- 1 Display information with »**REVEAL**«.
- 2 Conceal information with »**REVEAL**«.

### Mix mode

- 1 To view a teletext page and a television station simultaneously, press the »**MIX**« button.
- 2 If you only want to see the teletext page, press the »**MIX**« button again.

# CONVENIENCE FUNCTIONS

## Entering the switch-off time

You can enter a switch-off time. After the set time has elapsed, the television switches to stand-by mode.

- 1 Select the »FEATURES« menu by pressing »MENU« three times.  
– The »FEATURES« menu appears.
- 2 Select the »SLEEP TIMER« line by pressing »PR▼« or »▲PR«.
- 3 Enter the required time (in 15 minute intervals from 15 to 120 minutes) by pressing »◀VOL« or »VOL▶«.
- 4 Save and conclude the setting by pressing »MENU«.

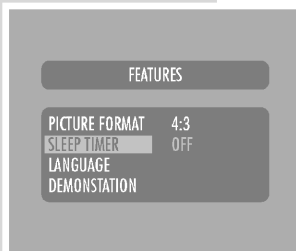
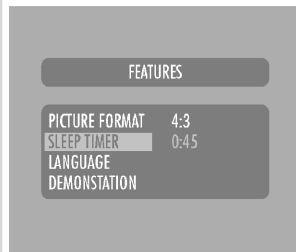
### Note:

When the switch-off timer is activated, the 30 seconds before switch-off time are displayed on the screen.

Then the television switches to stand-by mode.

The time remaining before deactivation can be called up with the »i« button.

To deactivate the switch-off timer, repeat steps 1 and 2 and in step 3 select »OFF« by pressing »◀VOL« or »VOL▶«.



## Selecting the language of the screen menu

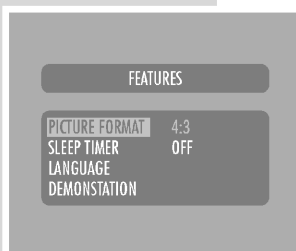
This function allows you to select the "language" of the menu on the television screen.

- 1 Select the »FEATURES« menu by pressing »MENU« three times.  
– The »FEATURES« menu appears.
- 2 Select the »LANGUAGE« line with »PR▼« or »▲PR« and call up the »LANGUAGE« menu by pressing »OK«.
- 3 Select your language of choice using »◀VOL«, »VOL▶« or »PR▼«, »▲PR«.
- 4 Press »OK« to confirm the setting.
- 5 Press »MENU« to conclude the setting.



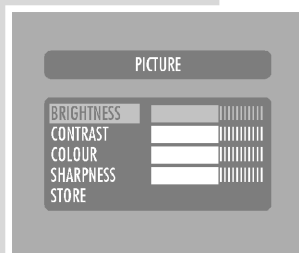
## Setting the picture format

- 1 Select the »FEATURES« menu by pressing »MENU« three times.  
– The »FEATURES« menu appears.
- 2 Select the »PICTURE FORMAT« line with »PR▼« or »▲PR«.
- 3 Select the desired picture format (4:3 or 16:9) with »◀VOL« or »VOL▶«.
- 4 Save and conclude the setting by pressing »MENU«.



## CONVENIENCE FUNCTIONS

### Setting brightness, colour, contrast and focus



- 1 Select the »PICTURE« menu by pressing »MENU« once.
- 2 Select the »BRIGHTNESS«, »CONTRAST«, »COLOUR« or »SHARPNESS« line with »PR▲« or »PR▼«.
- 3 Set the value by pressing »◀VOL« or »VOL▶«.
- 4 Select the »STORE« line using »PR▲« or »PR▼« and press »OK« to save.  
– The message »STORED« appears briefly in the »PICTURE« menu.

#### Note:

The volume setting, described in the chapter "Adjusting the volume" on page 7, is now saved.

### Sorting television stations

If any channels were saved more than once during the process of setting television channels with the automatic station search, or if you want to re-assign particular stations to another preset position, you can perform this setting in the »SETUP« menu.



- 1 Select the TV channel to be re-assigned to another preset position by pressing »PR▲«, »PR▼« or »1...0«.
- 2 Select the »SETUP« menu by pressing »MENU« twice.  
– The »SETUP« menu appears with the »CHANNEL« line highlighted.
- 3 Select the »PROG NUMBER« line with »PR▲« or »PR▼« and select the desired channel position using »◀VOL« or »VOL▶« or »1...0«.
- 4 Select the »STORE« line with »PR▲« or »PR▼« and save the settings by pressing »OK«.
- 5 Press »TXT« to conclude the setting.

### Re-starting the station search



- 1 Select the »SETUP« menu by pressing »MENU« twice.  
– The »SETUP« menu appears with the »CHANNEL« line highlighted.
- 2 Select the »AUTOPROGRAM« line with »PR▲« or »PR▼« and start the automatic station search by pressing »OK«.  
– The station search begins and »AUTOPROGRAM WORKING« is displayed in the menu; the »SEARCH« indicator flashes.

### Activating demo mode

- 1 Select the »FEATURES« menu by pressing »MENU« three times.  
– The »FEATURES« menu appears with the »PICTURE FORMAT« line highlighted.
- 2 Select the »DEMONSTRATION« line using »PR▲« or »PR▼« and activate demo mode by pressing »OK«.

# USING EXTERNAL DEVICES

## Decoder or satellite receiver

In order for the television to receive encoded programs from a privately operated station, a decoder is needed.

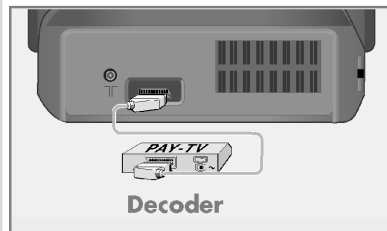
### Connecting a decoder or satellite receiver

- 1 Connect the EURO-AV socket on the television set with the corresponding socket on the decoder using a EURO/AV-cable.

#### Note:

A satellite receiver can also be connected to this socket.

If you want to use both a satellite receiver and a decoder, the decoder must be connected to the satellite receiver.



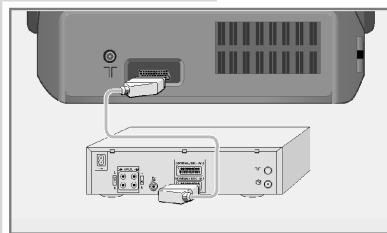
## Video recorder or SET-TOP box

### Connecting a video recorder or SET-TOP box

- 1 Connect the EURO-AV socket on the television set with the corresponding socket on the video recorder or SET-TOP box using a EURO/AV (Scart) cable.

### Using a video recorder or SET-TOP box

- 1 Switch on the video recorder or SET-TOP box and select the desired function.
- 2 Select channel position »AV1« with the »AV/TV« button.
  - The video and audio information from the video recorder or the SET-TOP box can now be seen and heard on the television set.



## Camcorder

### Connecting a camcorder

- 1 Connect the »AUDIO« and »VIDEO« sockets on the front of the device (T55 and T51) or on the right side of the device (P37) and the equivalent sockets on the camcorder by means of a standard cable (cinch cable).

### Using a camcorder

- 1 Switch on the camcorder and select the function you wish to use.
- 2 Select channel position »AV2« with the »AV/TV« button.
  - The video and audio information from the camcorder can now be seen and heard on the television set.

# INFORMATION

## Technical data

|                    |                                                                                                                                                                               |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mains voltage:     | 220 – 240V, 50/60 Hz                                                                                                                                                          |
| Power consumption: | P 37-1101/5 TXT: during operation 40 W, in stand-by 4 W<br>T 51-1101/5 TXT: during operation 50 W, in stand-by 4 W<br>T 55-1101/5 TXT: during operation 50 W, in stand-by 4 W |
| Sound output:      | 5 Watts music (2.5 Watts sine)                                                                                                                                                |
| Reception ranges:  | C01 ... C99, special channels S01 ... S41, frequency band 1 ... 4                                                                                                             |
| Channel positions: | 100 and 2 AV                                                                                                                                                                  |



## Service information for dealers:

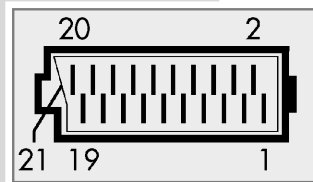
The television set may only be operated with the mains cable set supplied. It prevents problems from the mains supply and is part of the device certification. Please order only replacement mains cable sets with the designation »item number 75955-045.0200« from customer service locations.

The product complies with the following EU directives:

73/23/EEC directive for electrical equipment to be used within defined voltage ranges.  
89/336/EEC directive on electromagnetic compatibility.

The television set complies with the following standards: EN 60065, EN 55013, EN 55020

## Contact assignments of the EURO-AV socket



| Pin | Signal               | Pin | Signal                               |
|-----|----------------------|-----|--------------------------------------|
| 1   | = Audio output right | 12  | = –                                  |
| 2   | = Audio input right  | 13  | = Red ground                         |
| 3   | = Audio output left  | 14  | = Ground                             |
| 4   | = Audio ground       | 15  | = RGB red input, (S-Video = Chroma)  |
| 5   | = Blue ground        | 16  | = RGB switch voltage                 |
| 6   | = Audio input left   | 17  | = Video ground                       |
| 7   | = RGB blue input     | 18  | = RGB switch voltage ground          |
| 8   | = Switch voltage     | 19  | = Video output                       |
| 9   | = Green ground       | 20  | = Video input, (S-Video = luminance) |
| 10  | = –                  | 21  | = Shielding/ground                   |
| 11  | = RGB green input    |     |                                      |

## INFORMATION

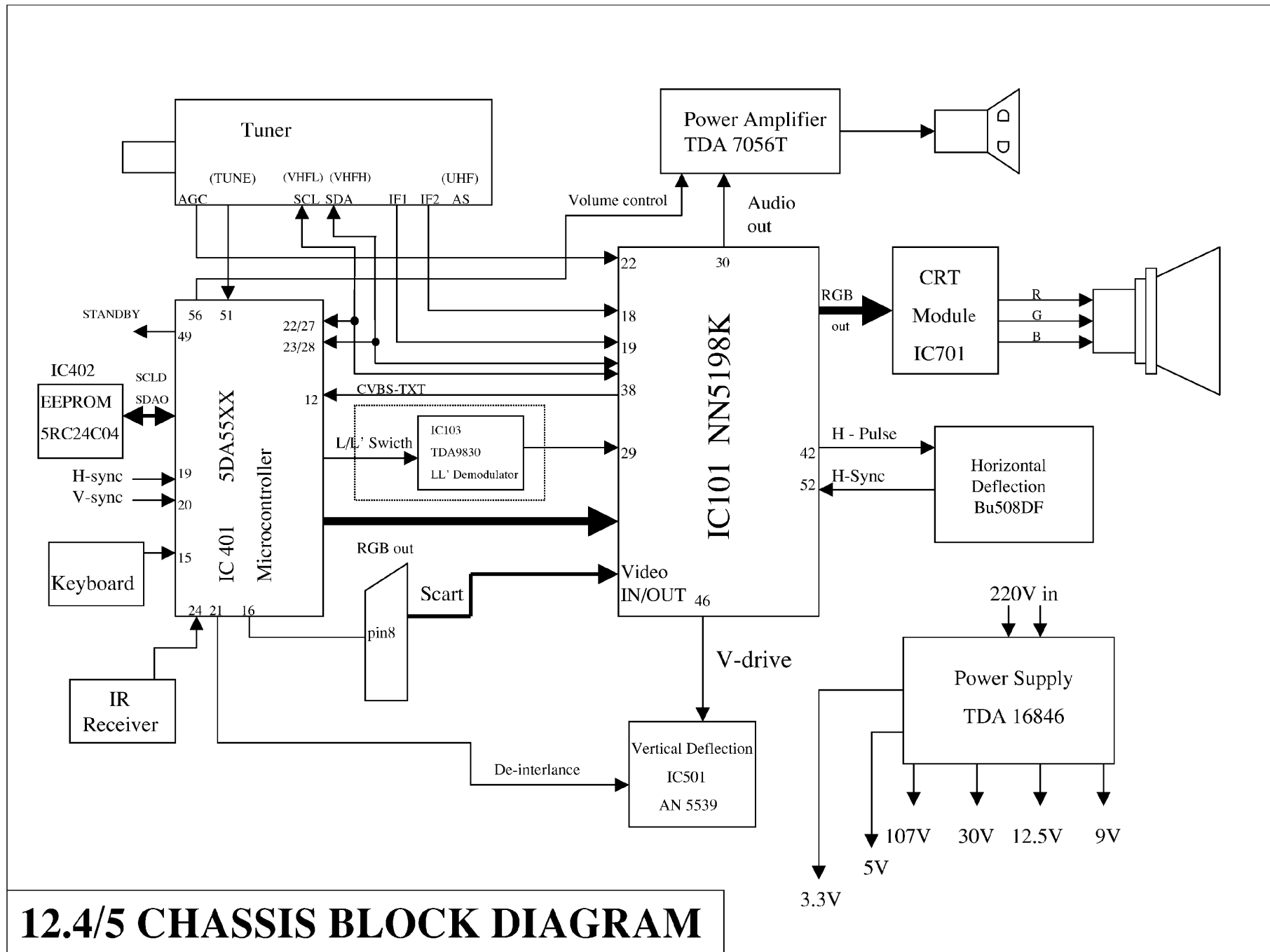
### Rectifying minor problems

If the remedies given below do not work, please consult an authorised GRUNDIG dealer. Please bear in mind that malfunctions can also be caused by external devices such as video recorders or satellite receivers.

If the picture is poor, it may help to reset the television to the factory picture settings by pressing »|◀«.

| Fault                                             | Possible cause                                        | Remedy                                                                                                                                                      |
|---------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Screen lit (snow),<br>but no transmission visible | Antenna cable                                         | Is antenna cable connected?                                                                                                                                 |
|                                                   | No station is set                                     | Start station search                                                                                                                                        |
| Poor picture contrast                             | Picture settings incorrectly set                      | Adjust brightness, contrast or colour setting                                                                                                               |
|                                                   | Problem at station                                    | Test with another channel                                                                                                                                   |
| Interference to picture and/or sound              | Interference by other devices                         | Move the devices                                                                                                                                            |
| Ghosting, reflection                              | Channel setting                                       | Automatic or manual channel setting/fine tuning                                                                                                             |
|                                                   | Antenna                                               | Have antenna cable or system checked                                                                                                                        |
| No sound                                          | Audio norm setting                                    | Set correct audio norm                                                                                                                                      |
| No colour                                         | Colour intensity at minimum                           | Turn colour up                                                                                                                                              |
|                                                   | TV norm setting (if setting option available)         | Select correct colour norm                                                                                                                                  |
|                                                   | Problem at station                                    | Test with another channel                                                                                                                                   |
| Inappropriate colour, colour spots                | Strong magnetic field due for example to loudspeakers | Move the loudspeakers away from the television.<br>If colour spots remain, switch off the television set at the mains and switch on again after 10 minutes. |
| Picture but no sound                              | Volume set to minimum                                 | Turn up/switch on loudspeaker                                                                                                                               |
|                                                   | Problem at station                                    | Test with another channel                                                                                                                                   |
| Teletext missing or faulty                        | Television station (has no teletext) or aerial system | Test another channel for fine tuning and ghosting                                                                                                           |
|                                                   | Station signal too weak                               | Check aerial system                                                                                                                                         |
| Remote control does not work                      | No optical connection                                 | Point the remote control at the television set                                                                                                              |
|                                                   | Remote control batteries                              | Check the batteries, change if necessary                                                                                                                    |
|                                                   | Operating condition undefined                         | Switch off the television with the main power button for ca. 2 min.                                                                                         |

## Description



## BASIC SPECIFICATION AND DESCRIPTION OF TDA16846 (IC601)

### Description

The TDA16846 is optimized to control free running or fixed frequency flyback converters with or without Power Factor Correction (Current Pump). To provide low power consumption at light loads, this device reduces the switching frequency continuously with load, towards an adjustable minimum (e.g. 20kHz in standby mode). Additionally, the start up current is very low. To avoid switching stresses of the power devices, the power transistor is always switched on at minimum voltage. A special circuit is implemented to avoid jitter. The device has several protection functions: VCC over- and undervoltage, mains undervoltage, current limiting and 2 free usable fault comparators. Regulation can be done by using the internal error amplifier or an opto coupler feedback (additional input). The out-put driver is ideally suited for driving a power MOSFET, but it can also be used for a bipolar transistor. Fixed frequency and synchronized operation are also possible.

### Pin Description

| Pin | Symbol | Function                            |
|-----|--------|-------------------------------------|
| 1   | OTC    | Off Time Circuit                    |
| 2   | PCS    | Primary Current Simulation          |
| 3   | RZI    | Regulation and Zero Crossing Input  |
| 4   | SRC    | Soft-Start and Regulation Capacitor |
| 5   | OCI    | Opto Coupler Input                  |
| 6   | FC2    | Fault Comparator 2                  |
| 7   | SYN    | Synchronization Input               |
| 8   |        | N. C.                               |
| 9   | REF    | Reference Voltage and Current       |
| 10  | FC1    | Fault Comparator 1                  |
| 11  | PVC    | Primary Voltage Check               |
| 12  | GND    | Ground                              |
| 13  | OUT    | Output                              |
| 14  | VCC    | Supply Voltage                      |

### Short Description of the Pin Functions

**Pin 1:** A parallel RC- circuit between this pin and ground determines the ringing suppression time and the standby- frequency.

**Pin 2:** A capacitor between this pin and ground and a resistor between this pin and the anode of the primary elcap quantifies the max. possible output power of the SMPS.

**Pin 3:** This is the input of the error amplifier and the zero crossing input. The output of a voltage divider between the control winding and ground is connected to this input. If the pulses at pin 3 exceed a 5V threshold, the control voltage at pin 4 is lowered.

**Pin 4:** This is the pin for the control voltage. A capacitor has to be connected between this pin and ground. The value of this capacitor determines the duration of the softstart and the speed of the control.

**Pin 5:** If an opto coupler for the control is used, it's output has to be connected between this pin and ground. The voltage divider at pin 3 has then to be changed, so that the pulses at pin 3 are below 5V.

**Pin 6:** Fault comparator 2: If a voltage > 1.2 V is applied to this pin, the SMPS stops.

**Pin 7:** If fixed frequency mode is wanted, a parallel RC circuit has to be connected between this pin and ground. The RC- value determines the frequency. If synchronized mode is wanted, sync pulses have to be fed into this pin.

**Pin 8:** Not connected.

**Pin 9:** Output for reference voltage (5 V). With a resistor between this pin and ground the fault comparator 2 (pin 6) is enabled.

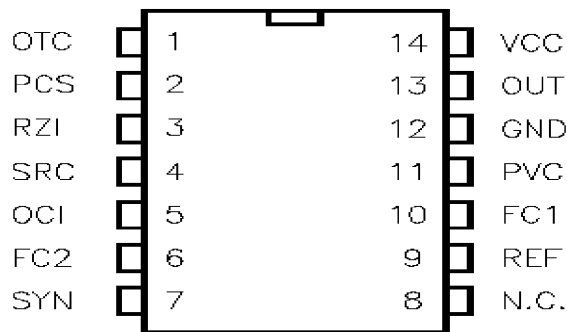
**Pin 10:** Fault comparator 1: If a voltage > 1 V is applied to this pin, the SMPS stops.

**Pin 11:** This is the input of the primary voltage check. The voltage at the anode of the primary elcap has to be fed to this pin via a voltage divider. If the voltage of this pin falls below 1V, the SMPS is switched off. A second function of this pin is the primary voltage dependent fold back point correction (only active in free running mode).

**Pin 12:** Common ground.

**Pin 13:** Output signal. This pin has to be connected across a serial resistor with the gate of the power transistor.

**Pin 14:** Connection for supply voltage and startup capacitor. After startup the supply voltage is produced by the control winding of the transformer and rectified by an external diode.



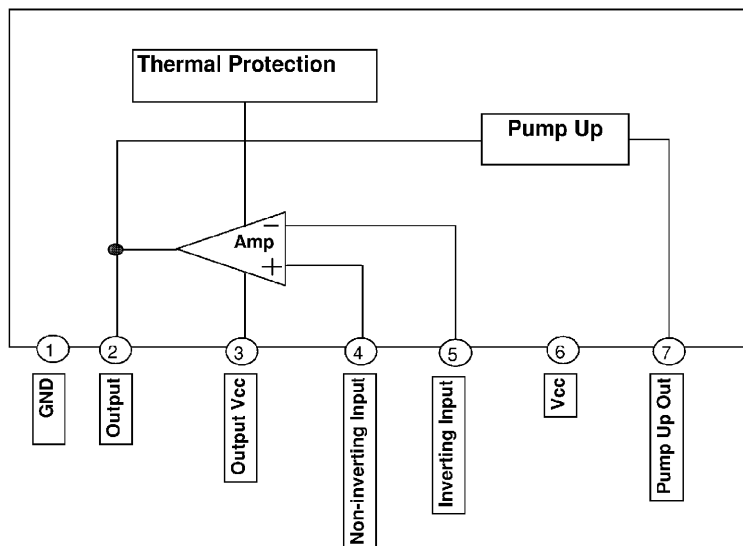
#### Absolute maximum ratings

| Parameter                              | Symbol            | Min  | Max | Unit     | Remark                                   |
|----------------------------------------|-------------------|------|-----|----------|------------------------------------------|
| Supply Voltage at Pin 14               | V <sub>CC</sub>   | -0.3 | 17  | V        |                                          |
| Voltage at Pin 1, 4, 5, 6, 7, 9, 10    |                   | -0.3 | 6   | V        |                                          |
| Voltage at Pin 2, 8, 11                |                   | -0.3 | 17  | V        |                                          |
| Voltage at Pin 3<br>Current into Pin 3 | RZI               | -10  | 6   | V<br>mA  | V3 < -0.3V                               |
| Current into Pin 9                     | REF               | -1   |     | mA       |                                          |
| Current into Pin 13                    | OUT               | -100 | 100 | mA<br>mA | V13 > V <sub>CC</sub><br>V13 < 0 V       |
| ESD Protection                         |                   |      |     | kV       | MIL STD 883C method 3015.6, 100pF, 1500Ω |
| Operating Ambient Temperature          | T <sub>A</sub>    | 0    | 70  | °C       |                                          |
| Storage Temperature                    | T <sub>stg</sub>  | -65  | 125 | °C       |                                          |
| Operating Junction Temperature         | T <sub>J</sub>    |      | 125 | °C       |                                          |
| Thermal Resistance Junction-Ambient    | R <sub>thJA</sub> |      |     | K/W      | P-DIP-14-3                               |
| Soldering Temperature                  |                   |      | 260 | °C       |                                          |
| Soldering Time                         |                   |      | 10  | s        |                                          |

All voltages listed are referenced to ground (0V, V<sub>SS</sub>) except where noted.

| IC101 NN5198K/50991K VIDEO CONTROLLER IC |                           |                    |         |                                           |                    |
|------------------------------------------|---------------------------|--------------------|---------|-------------------------------------------|--------------------|
| PIN NO.                                  | Pin Description           | PIN VOLTAGES (VDC) | PIN NO. | Pin Description                           | PIN VOLTAGES (VDC) |
| 1                                        | TEST                      | -                  | 27      | QIF DETECT OUTPUT                         | 3.60               |
| 2                                        | SCL                       | 2.39               | 28      | SIF INPUT                                 | 3.40               |
| 3                                        | CHROMA APC FILTER         | 5.60               | 29      | EXTERNAL AUDIO INPUT                      | 3.90               |
| 4                                        | ABCL                      | 3.28               | 30      | AUDIO OUTPUT                              | 4.21               |
| 5                                        | Ys INPUT                  | 0.38               | 31      | BLACK LEVEL DETECT FILTER                 | 4.41               |
| 6                                        | EXTERNAL R INPUT          | 4.85               | 32      | DE - EMPHASIS FILTER/AUDIO MONITOR OUTPUT | 4.32               |
| 7                                        | EXTERNAL G INPUT          | 4.85               | 33      | VCC1 (CHROMA)                             | 9                  |
| 8                                        | EXTERNAL B INPUT          | 5.10               | 34      | VIF DETECT OUTPUT                         | 5.30               |
| 9                                        | VCC1 (VCJ)                | 9.20               | 35      | VCC3 (DAC)                                | 4.65               |
| 10                                       | R OUTPUT                  | 3.05               | 36      | VIDEO OUTPUT                              | 5.24               |
| 11                                       | G OUTPUT                  | 3.05               | 37      | TEST 2                                    | 0                  |
| 12                                       | B OUTPUT                  | 2.95               | 38      | Y INPUT/VERTICAL SYNC, INPUT              | 4.18               |
| 13                                       | GND (VCJ)                 | 0.12               | 39      | HORIZONTAL SYNC, INPUT                    | 4.10               |
| 14                                       | CHROMA VCX 01 (4,43MHz)   | 0.24               | 40      | CHROMA VCX 02 (3.58 MHz)                  | 2.68               |
| 15                                       | SECAM PLL REF, FILTER     | 0.05               | 41      | VCC2 (HORIZONTAL VCC)                     | 6.15               |
| 16                                       | VCC1 ( VIF/SIF )          | 9.00               | 42      | HORIZONTAL PULSE OUTPUT                   | 1.25               |
| 17                                       | SECAM BELL REF, FILTER    | 0.13               | 43      | HORIZONTAL AFC1 FILTER                    | 3.32               |
| 18                                       | VIF INPUT (1)             | 2.80               | 44      | AUDIO DE - COUPLING FILTER                | 3.09               |
| 19                                       | VIF INPUT (2)             | 2.80               | 45      | VERTICAL SAW TOOTH                        | 1.17               |
| 20                                       | GND (VIF/SIF)             | -                  | 46      | VERTICAL OUTPUT                           | 3.20               |
| 21                                       | QIF INPUT                 | 2.66               | 47      | VERTICAL AGC FILTER                       | 3.10               |
| 22                                       | RF AGC OUTPUT             | 4.84               | 48      | VDD1 (CMOS)                               | 4.97               |
| 23                                       | AFT OUTPUT                | 4.05               | 49      | SCP/CW OUTPUT/X - RAY                     | 0.68               |
| 24                                       | EXTERNAL VIDEO/CHROMA INP | 3.14               | 50      | VSS (CMOS)                                | 0                  |
| 25                                       | IF AGC FILTER             | 6.71               | 51      | SDA                                       | 1.85               |
| 26                                       | VIF APC FILTER            | 3.40               | 52      | FBP INPUT                                 | 0.38               |

## IC501 AN5539LF

**Pin Descriptions**

| Pin No. | Pin Name                     |
|---------|------------------------------|
| 1       | GND                          |
| 2       | Vertical Output              |
| 3       | Vertical Output Power Supply |
| 4       | Non-inverting Input          |
| 5       | Inverting Input              |
| 6       | Power Supply                 |
| 7       | Pump-up Output               |

| IC401 SDA5552/SDA5521 MICROCONTROLLER IC |                                               |         |                                                    |
|------------------------------------------|-----------------------------------------------|---------|----------------------------------------------------|
| PIN NO.                                  | Pin Description                               | PIN NO. | Pin Description                                    |
| 1                                        | I/O PIN -open collector                       | 27      | SDA1-OUT                                           |
| 2                                        | TV INT- Multimedia mode                       | 28      | SDA1-IN                                            |
| 3                                        | ON-LINE-Multimedia mode                       | 29      | GND                                                |
| 4                                        | LL' SWITCH                                    | 30      | VDD-3.3V SUPPLY                                    |
| 5                                        | BAND SELECT (no function for 12.5 models)     | 31      | NO CONNECTION                                      |
| 6                                        | BAND SELECT (no function for 12.5 models)     | 32      | NO CONNECTION                                      |
| 7                                        | LL' AV Selection                              | 33      | RESET PIN                                          |
| 8                                        | SERVICE PIN (no fuction for normal operation) | 34      | NO CONNECTION                                      |
| 9                                        | VDD_2.5 supply pin                            | 35      | XTAL1- INPUT OF THE INVERTING OSCILLATOR AMPLIFIER |
| 10                                       | GND                                           | 36      | XTAL2- INPUT OF THE INVERTING OSCILLATOR AMPLIFIER |
| 11                                       | VDD_3.3 supply pin                            | 37      | VDD_2.5 supply pin                                 |
| 12                                       | CVBS-TXT input                                | 38      | R OUTPUT FOR OSD AND TXT                           |
| 13                                       | VDDA_2.5 supply pin                           | 39      | G OUTPUT FOR OSD AND TXT                           |
| 14                                       | GND                                           | 40      | B OUTPUT FOR OSD AND TXT                           |
| 15                                       | LOCAL KEYBOARD INPUT                          | 41      | FBL OUT                                            |
| 16                                       | STATUS PIN                                    | 42      | VDDA_2.5 supply pin                                |
| 17                                       | AFT                                           | 43      | GND                                                |
| 18                                       | POWER CTRL                                    | 44      | VDD_3.3 supply pin                                 |
| 19                                       | HORIZONTAL SYNC INPUT                         | 45      | AV SELECTION                                       |
| 20                                       | VERTICAL SYNC INPUT                           | 46      | RGB SELECTION                                      |
| 21                                       | ODD/EVEN OUTPUT                               | 47      | NO CONNECTION                                      |
| 22                                       | SCL1-OUT                                      | 48      | GND                                                |
| 23                                       | SCL1-IN                                       | 49      | STAND BY (ON-OFF) PIN                              |
| 24                                       | INFRARED RECEIVER INPUT                       | 50      | NO CONNECTION                                      |
| 25                                       | SCL0-SDA0 INPUT                               | 51      | TUNING VOLTAGE (NO CONNECTION FOR 12.5 MODELS)     |
| 26                                       | SCL0-SDA0 INPUT                               | 52      | VOLUME CONTROL PIN                                 |

**IC103 TDA9830 TV SOUND AM DEMODULATOR AND AUDIO SWITCH****FEATURES**

- Adjustment free wideband synchronous AM demodulator
- Audio source-mute switch (low noise)
- Audio level according EN50049
- 5 to 8 V power supply or 12 V alternative
- Low power consumption.

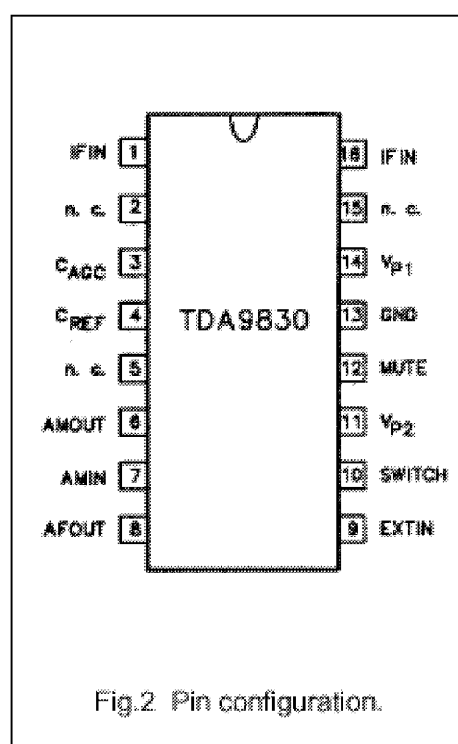
**GENERAL DESCRIPTION**

The TDA9830, a monolithic integrated circuit, is designed for AM-sound demodulation used in L- and L'-standard.

The IC provides an audio source selector and also mute switch.

**PINNING**

| SYMBOL           | PIN | DESCRIPTION                                  |
|------------------|-----|----------------------------------------------|
| IFIN             | 1   | sound IF differential input signal           |
| n.c.             | 2   | not connected                                |
| C <sub>AGC</sub> | 3   | AGC capacitor                                |
| C <sub>REF</sub> | 4   | REF voltage filtering capacitor              |
| n.c.             | 5   | not connected                                |
| AMOUT            | 6   | AM demodulator output                        |
| AMIN             | 7   | input signal (from AM) to audio switch       |
| AFOUT            | 8   | output signal from audio switch              |
| EXTIN            | 9   | input signal (from external) to audio switch |
| SWITCH           | 10  | switch input select control                  |
| V <sub>p2</sub>  | 11  | Supply voltage +12 V (alternative)           |
| MUTE             | 12  | mute control                                 |
| GND              | 13  | ground (0 V)                                 |
| V <sub>p1</sub>  | 14  | supply voltage +5 to +8 V                    |
| n.c.             | 15  | not connected                                |
| IFIN             | 16  | sound IF differential input signal           |



## Adjustment

### ELECTRICAL ADJUSTMENTS

**ENTERING THE SERVICE MODE:** Press the "MENU" button to switch to the "PICTURE" menu, then enter the digits "8 5 0 0" in this menu (this entry is not visible). Exit the Service Mode with the "0" button. When exiting the Service Mode, the software version is briefly indicated and changes will be stored automatically.

#### 1-POWER SUPPLY VOLTAGE

Connect a digital voltmeter to the cathode of D610 diode at the AV1 mode of the TV and set the screen voltage to the minimum. Adjust the main supply voltage +B with P601 potentiometer to the following voltage value.

|         |               |         |
|---------|---------------|---------|
| 14 inch | A33LPE02X01   | 106V DC |
| 20 inch | A4ECR143X51   | 118V DC |
| 21 inch | A51EER 133X41 | 118V DC |

Adjust the screen potentiometer to the level where a picture is just visible.

#### 2- INTERMEDIATE FREQUENCY ADJUSTMENTS

Before starting this adjustment follow this procedure:

Enter service mode, change "VIDEO" header to "NEW". Then exit from service mode.

**ATTENTION!!! : Above procedure must be done after replacing the Video IC (IC101) or EEPROM IC. IF adjustment must be repeated after "VIDEO" header displays "NEW".**

**For BG, DK, I standard:** Adjust the frequency of pattern generator to the 38.9Mhz and switch it to colour bar pattern. Connect the RF output of pattern generator to the pin 1 of F101. Enter service mode. Adjust the "AFT38" item of service menu to read the voltage value 1.45VDC  $\pm$  100mV DC at the pin#23 of IC101. Exit from service mode.

**For SECAM LL' Standart :** Adjust the frequency of pattern generator to the 33.9 MHz and switch it to colour bar pattern. Connect the RF output of pattern generator to the pin 1 of F101. Enter service mode. Adjust the "AFT33" item of service menu to read the voltage value 1.45VDC  $\pm$  100mV DC at the pin#23 of IC101. Exit from service mode.

#### 3-AGC ADJUSTMENTS

Apply a signal at the channel 32 with 60 $\pm$ 1dBuV level to the antenna input (switch sound carrier Off and switch "Video Ext" On).

Connect an oscilloscope to the pin#11 (IF2) of Tuner and ground.

Enter service mode and go "AGC" header.

Adjust the amplitude to the value given below (which is monitored on oscilloscope) using the Volume+/Volume- key of remote control.

|                          |            |                      |
|--------------------------|------------|----------------------|
| 12.5 chassis for BG,DK,I | Standards: | 630mVpp $\pm$ 20mVpp |
| 12.5 chassis for LL'     | Standards: | 450mVpp $\pm$ 20mVpp |
| 12.4 chassis for BG,DK,  | Standards: | 630mVpp $\pm$ 20mVpp |
| 12.4 chassis for LL'     | Standards: | 450mVpp $\pm$ 20mVpp |
| 12.4 chassis for I'      | Standards: | 500mVpp $\pm$ 20mVpp |

#### 4- SERVICE MODE SETUP

| <u>ITEM</u>               | <u>SELECTION</u>                                                    |
|---------------------------|---------------------------------------------------------------------|
| TUNER                     | SHARP&ALPS<br>PHILLIPS<br>P.SONIC<br>TEMIC<br>FULL BAND<br>UHF ONLY |
| FULL BAND and<br>UHF ONLY | items are valid only for 12.4<br>(voltage synthezirs) chassis.      |
| AV2                       | NO: Single scart<br>YES: Single scart+front AV                      |
| CLR.S                     | PAL<br>PAL/NTSC : SECAM is iden<br>tified automatically.            |
| SND.S                     | BG<br>I<br>BG+DK<br>BG+LL'                                          |
| TEXT                      | DEFAULT : Teletext<br>FASTEXT : Fastext                             |

#### 5- GEOMETRY ADJUSTMENTS

Enter service mode. Select Green Button in Service Menu. "H.POS" is for horizontal position, "V.HEI" is for vertical size, "LNRTY" is for vertical linearity, "S.COR" is for S-correction adjustment.

#### 6- SCREEN ADJUSTMENT

Enter service mode. Select Yellow Button in Service Menu. Select "SCRN" item. Press Vol + or - button. You will see white horizontal line at center of the screen. Adjust the screen potentiometer to the just visiable level of horizontal line. Return to PICTURE MODE by pressing VOL+

#### 7- WHITE BALANCE ADJUSTMENT

Enter the service mode. Select Yellow Button in Service Menu. Select and adjust "G.CUT" to the 128. Adjust "R.CUT" and "B.CUT" for cut off adjustment. Select and adjust "R.DRV" and "B.DRV" for white balace. Exit from service mode.

#### 8- PRESET VALUES OF SERVICE MENU ITEMS

Below given values are average values and can vary according to the CRT type and chassis type.

|      | RED<br>Menu Button |       |       | GREEN<br>Menu Button |       |       |           |       |       | YELLOW<br>Menu Button |       |       |       |       |      |      | BLUE<br>Menu Button |       |
|------|--------------------|-------|-------|----------------------|-------|-------|-----------|-------|-------|-----------------------|-------|-------|-------|-------|------|------|---------------------|-------|
| SIZE | AGC                | ST.BY | VIDEO | H.POS                | V.POS | V.HEI | LNRT<br>V | S.COR | Y.DLY | G.CUT                 | R.CUT | B.CUT | R.DRV | B.DRV | SCRN | SECB | AFT38               | AFT33 |
| 14"  | 19                 | NO    | OLD   | 14                   | 4     | 64    | 46        | 0     | 1     | 128                   | 127   | 124   | 59    | 53    | 0    | 48   | 40                  | 61    |
| 20"  | 19                 | NO    | OLD   | 13                   | 4     | 80    | 47        | 0     | 1     | 128                   | 128   | 119   | 58    | 59    | 0    | 48   | 40                  | 61    |
| 21"  | 19                 | NO    | OLD   | 14                   | 4     | 81    | 47        | 0     | 1     | 128                   | 128   | 121   | 55    | 56    | 0    | 48   | 40                  | 61    |

## CONVERGENCE ADJUSTMENTS

**Note:** Before attempting any convergence adjustments, the receiver should be operated for at least fifteen minutes.

### • Centre Convergence Adjustment

1. Receive crosshatch pattern with a colour bar signal generator.
2. Adjust the BRIGHTNESS and CONTRAST Controls for well defined pattern.
3. Adjust two tabs of the 4-Pole Magnets to change the angle between them (See figure 16) and superimpose red and blue vertical lines in the centre area of the picture screen. (See figure).
4. Turn the both tabs at the same time keeping the constant angle to superimpose red and blue horizontal lines at the centre of the screen. (See figure)
5. Adjust two tabs of 6-Pole Magnets to superimpose red/blue line and green one. Adjusting the angle affects the vertical lines and rotating both magnets affects the horizontal lines.
6. Repeat adjustments 3,4,5 to ensure best convergence, the adjustment must be undertaken with great care because of the interaction between 4 and 6 pole magnets.

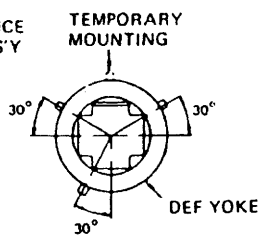
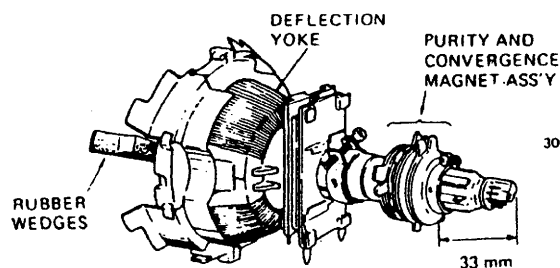
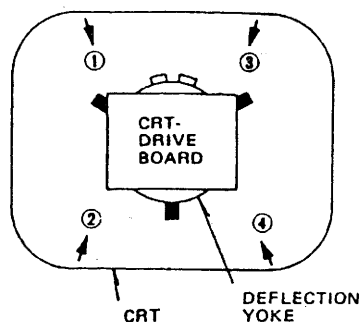
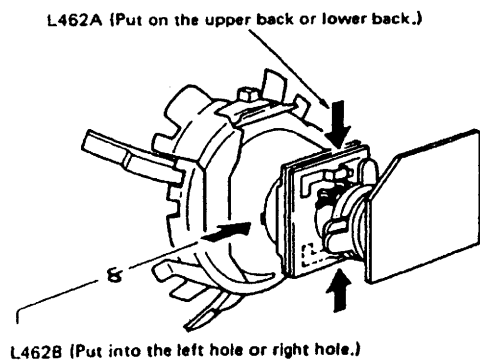
### • Circumference Convergence Adjustment

1. Loosen the clamping screw of deflection yoke to allow the yoke to tilt.
2. Put a wedge as shown in figure 15 temporarily. (Do not remove cover paper on adhesive part of the wedge.)
3. Tilt front of the deflection yoke up or down to obtain better convergence in circumference. (See figure) Push the mounted wedge into the space between picture tube and the yoke to fix the yoke temporarily.
4. Put other wedge into bottom space and remove the cover paper to stick.
5. Tilt front of the yoke right or left to obtain better convergence in circumference. (See figure)
6. Keep the yoke position and put another wedge in either upper space. Remove cover paper and stick the wedge on picture tube to fix the yoke.
7. Detach the temporarily mounted wedge and put it in another upper space. Stick it on picture tube to fix the yoke.
8. After fixing three wedges, recheck overall convergence. Tighten the screw firmly to fix the yoke and check the yoke is firm.
9. Stick 3 adhesive tapes on wedges.

## CONVERGENCE COMPENSATOR

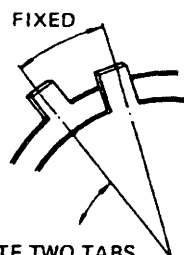
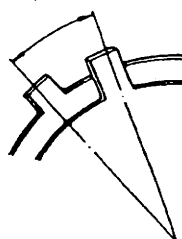
Compensators L462A and L462B are used to correct misconvergence (Red-Green) at the top center or bottom center on screen, when the misconvergence is still evident even though the yoke adjustment is tried. Compensator L462C is also used to correct misconvergence (Vertical shift of Red or Blue) at four corners on screen.

1. To correct horizontal misconvergence (Red-Green), put compensator L462A on the yoke back (see figure right) to find a position for minimizing misconvergence. Mark the position and remove protective paper on the rear of L462A to stick it in place. Apply adhesives on both yoke and L462A.
2. To correct vertical misconvergence (Red-Green), put the tips of compensator L462B into either of the holes on the yoke core and apply adhesives.
3. To correct up or down shift of Red at top right or bottom right corner, put compensator L462C at point 1 or 2 on the picture tube (see figure right.) to find a position for minimizing misconvergence. Mark the position and remove protective paper on the rear of L462C to stick it in place.

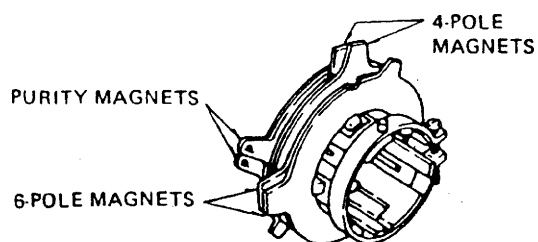


RUBBER WEDGES LOCATION

ADJUST THE ANGLE (VERTICAL LINES)

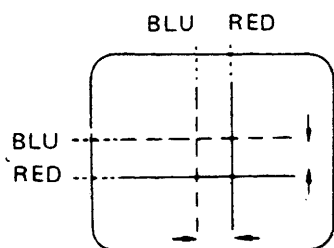


ROTATE TWO TABS AT THE SAME TIME (HORIZONTAL LINES)

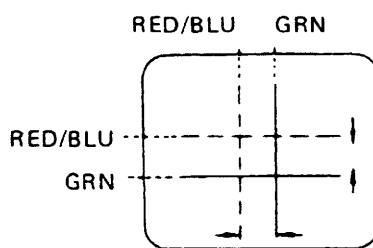


CONVERGENCE MAGNET ASSEMBLY

ADJUSTMENT OF MAGNETS

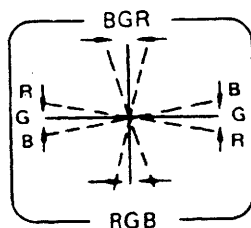


4-POLE MAGNETS MOVEMENT

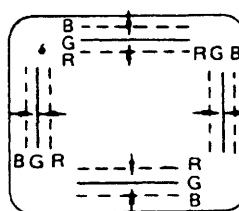


6-POLE MAGNETS MOVEMENT

Centre Convergence by Convergence Magnets



INCLINE THE YOKE UP (OR DOWN)



INCLINE THE YOKE RIGHT (OR LEFT)

Circumference Convergence by DEF Yoke

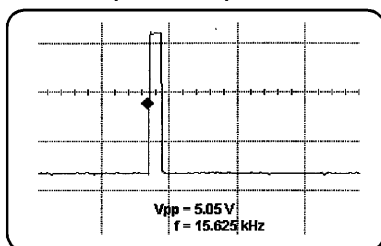
Dot Movement Pattern



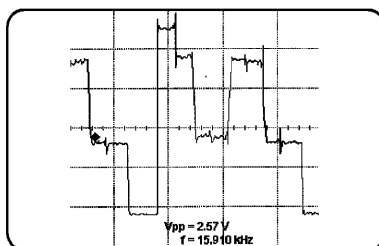
*GRUNDIG Service*

## WAVE FORMS

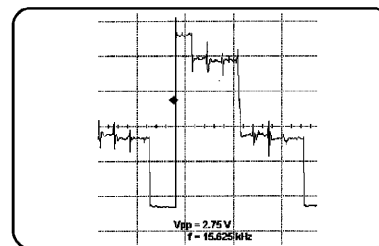
### 1. IC 101 (NN 5198K)



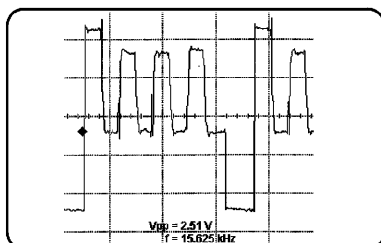
Pin no: 5 (OSD ON)



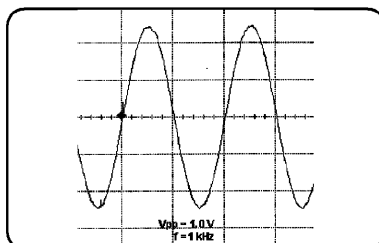
Pin no: 10



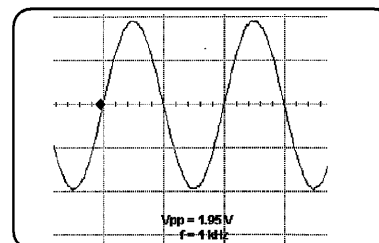
Pin no: 11



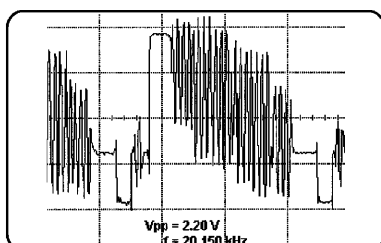
Pin no: 12



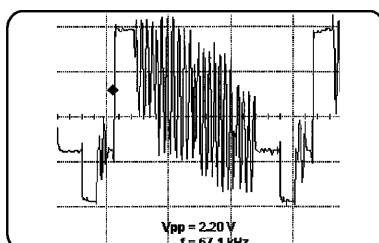
Pin no: 30



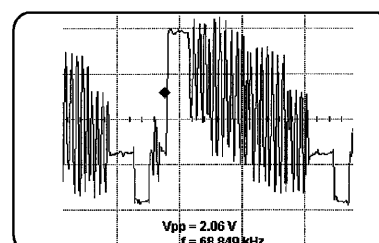
Pin no: 32



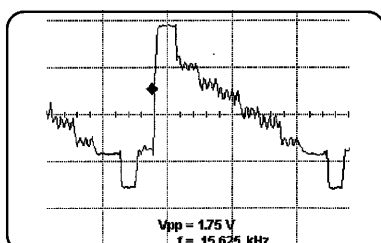
Pin no: 34



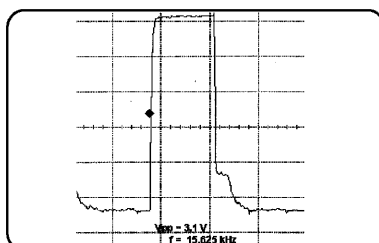
Pin no: 36



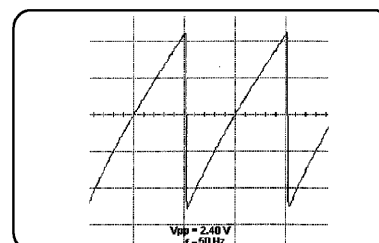
Pin no: 38



Pin no: 39

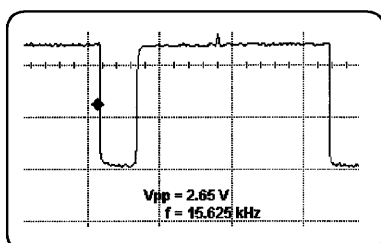


Pin no: 42

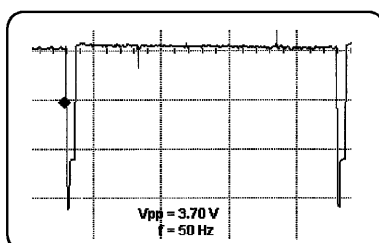


Pin no: 46

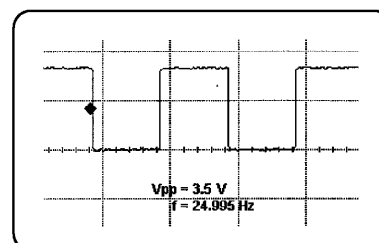
### 2. IC 401 (SDA 555XL)



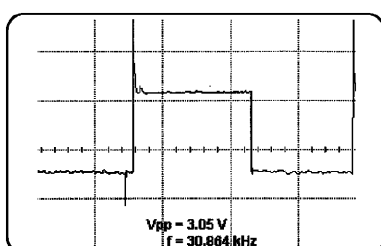
Pin no: 19



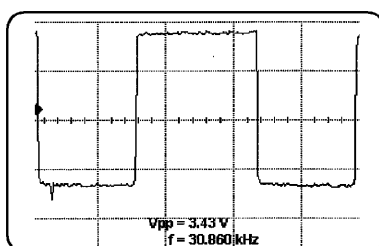
Pin no: 20



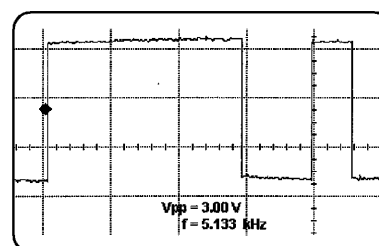
Pin no: 21



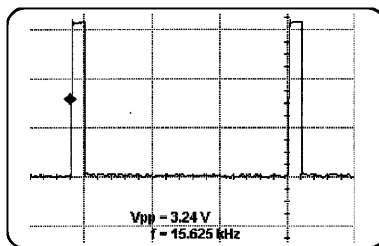
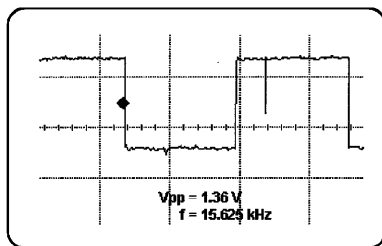
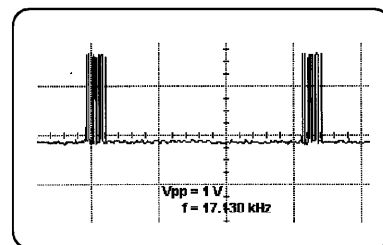
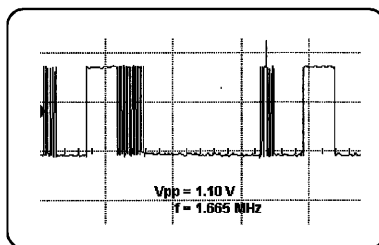
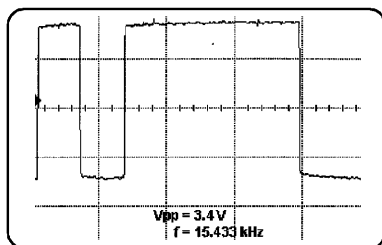
Pin no: 22



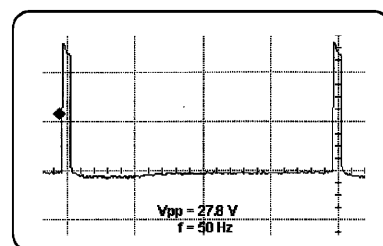
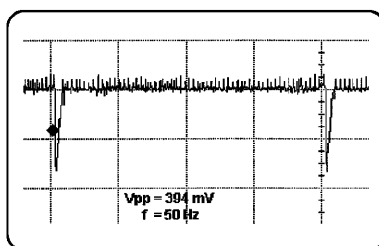
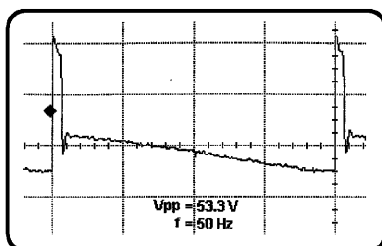
Pin no: 23



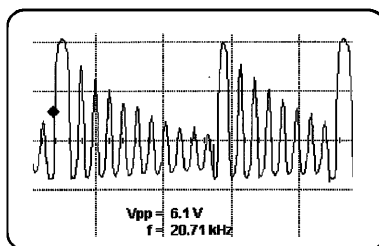
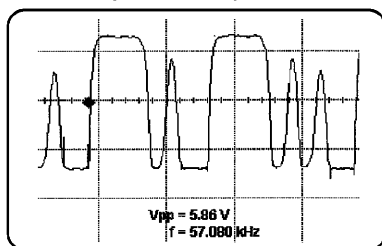
Pin no: 27



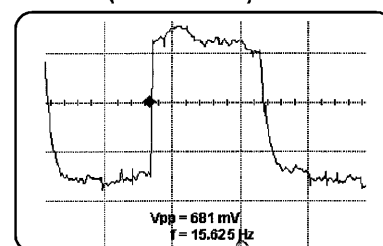
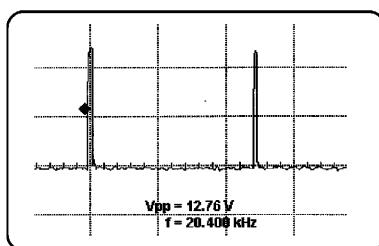
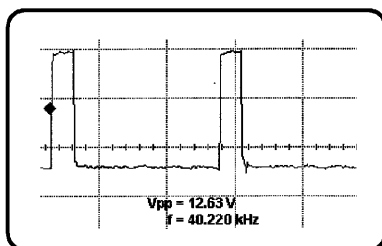
### 3. IC 501 (AN 5539)



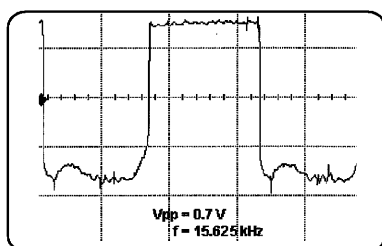
### 4. IC 601 (TDA 16846)



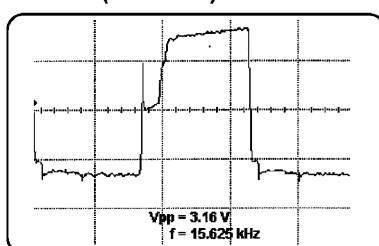
### 5. T 503 (BC 848 NPN)



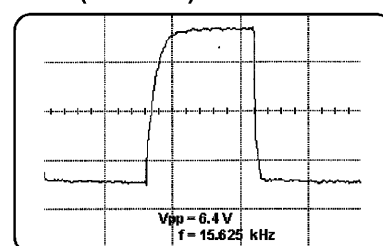
### 6. T 504 (BC 848 NPN)



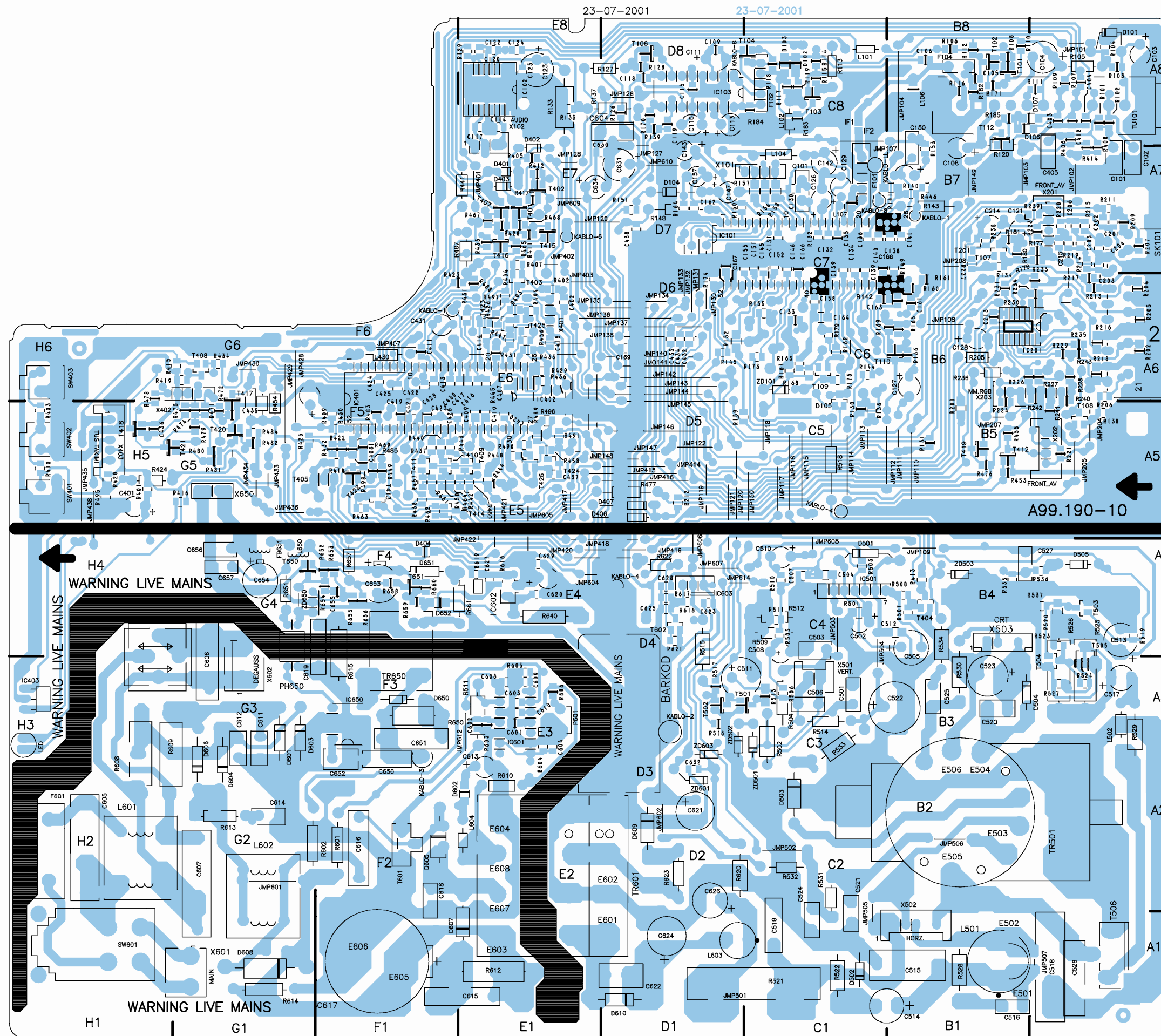
### 7. T 505 (2 SK3065)



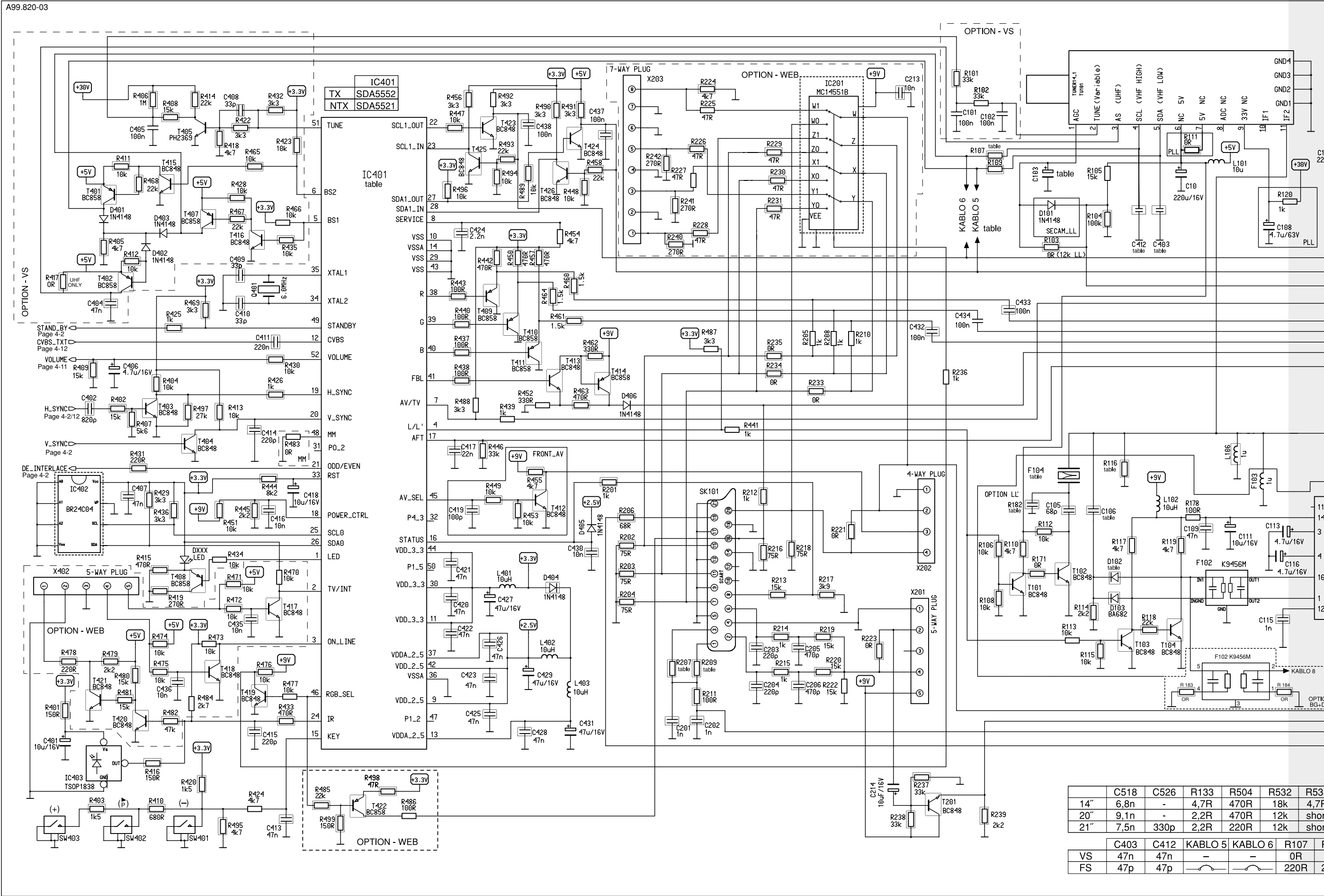
### T 505 (2 SK3065)

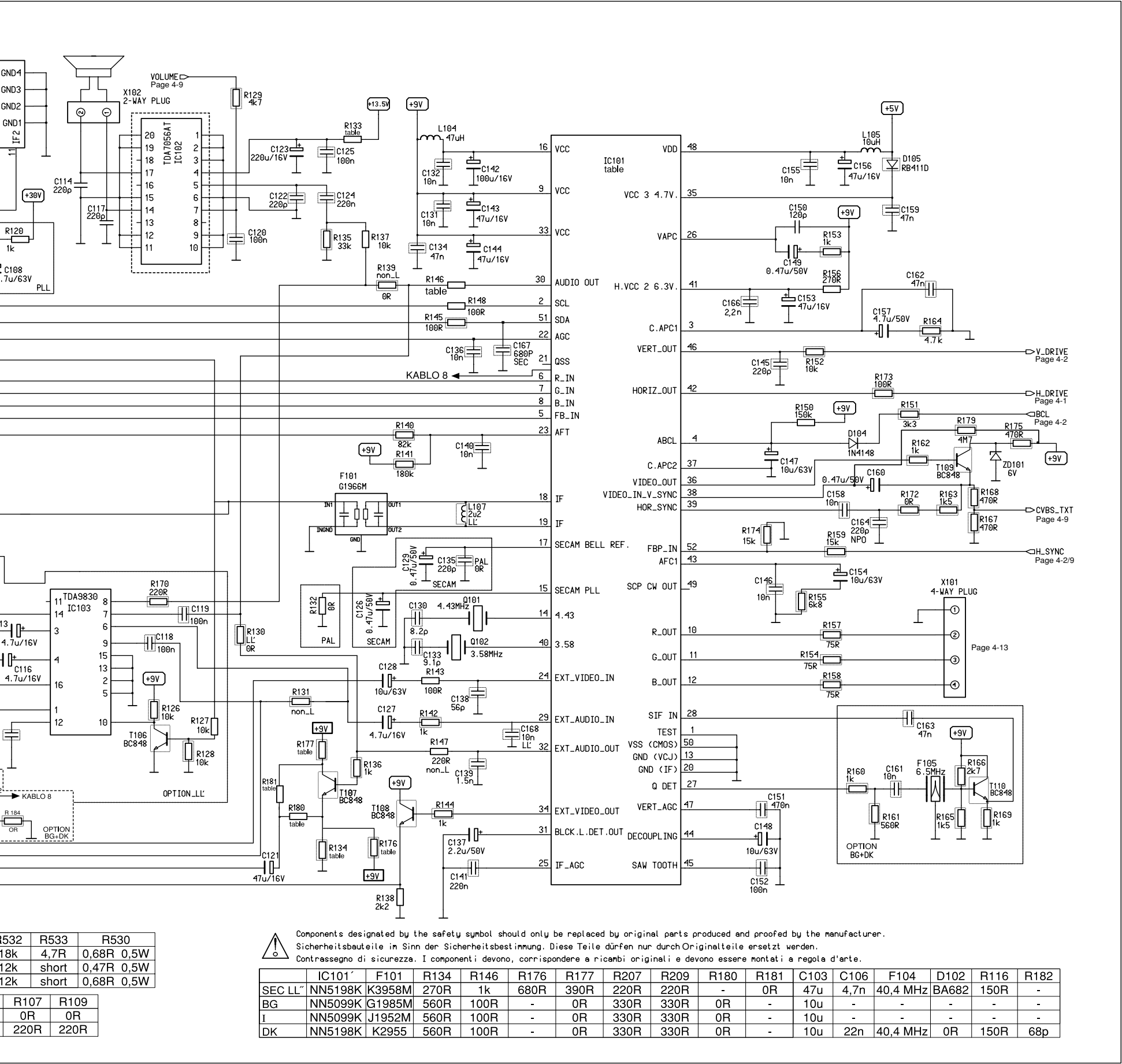


### Solder Side, Bottom View



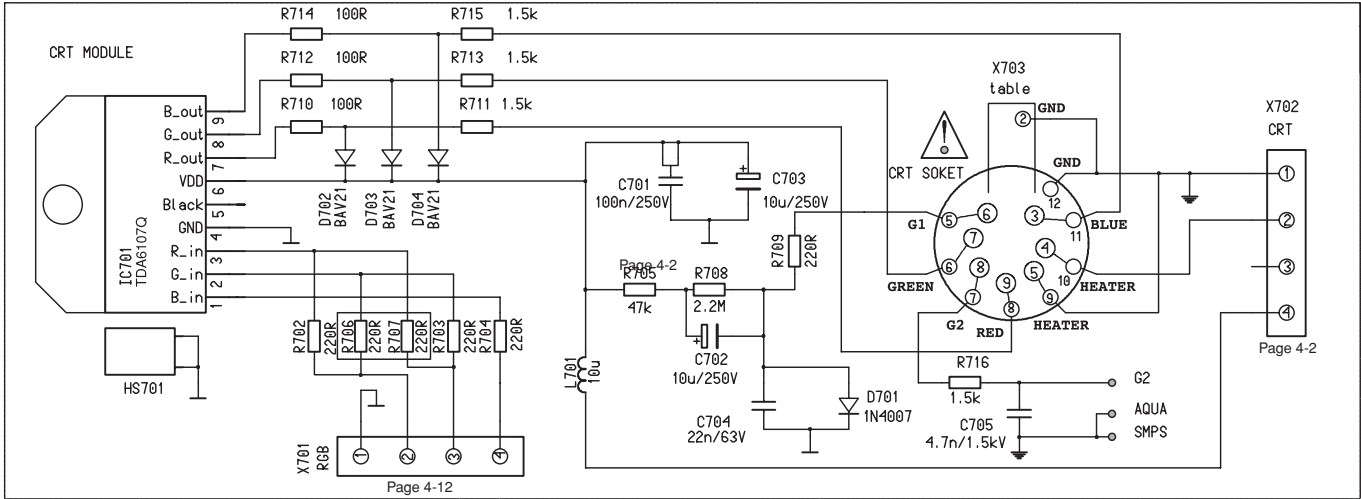
Circuit Diagram



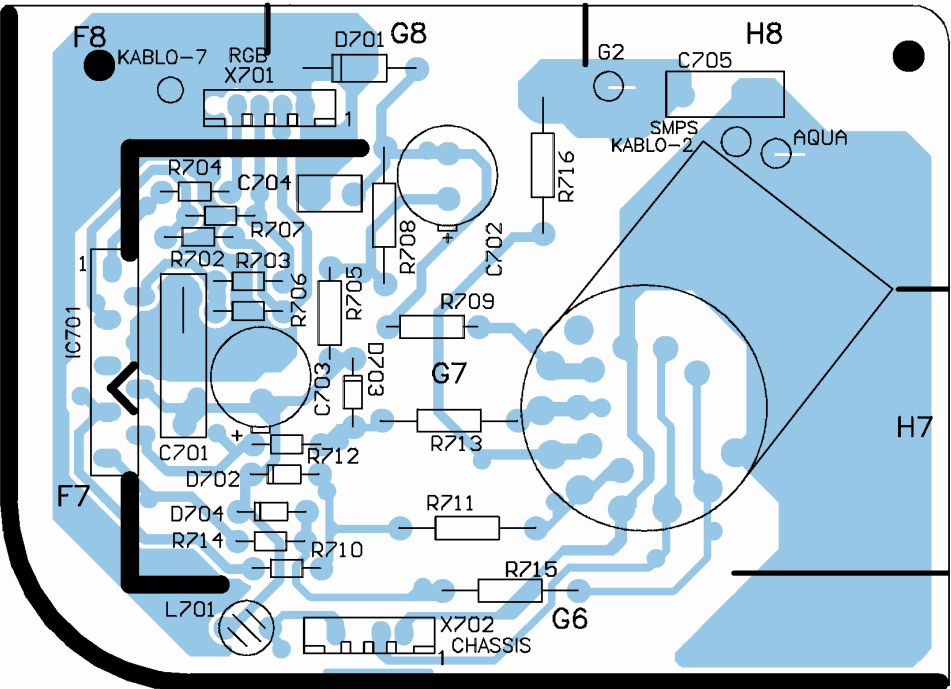


Subject to change without notice

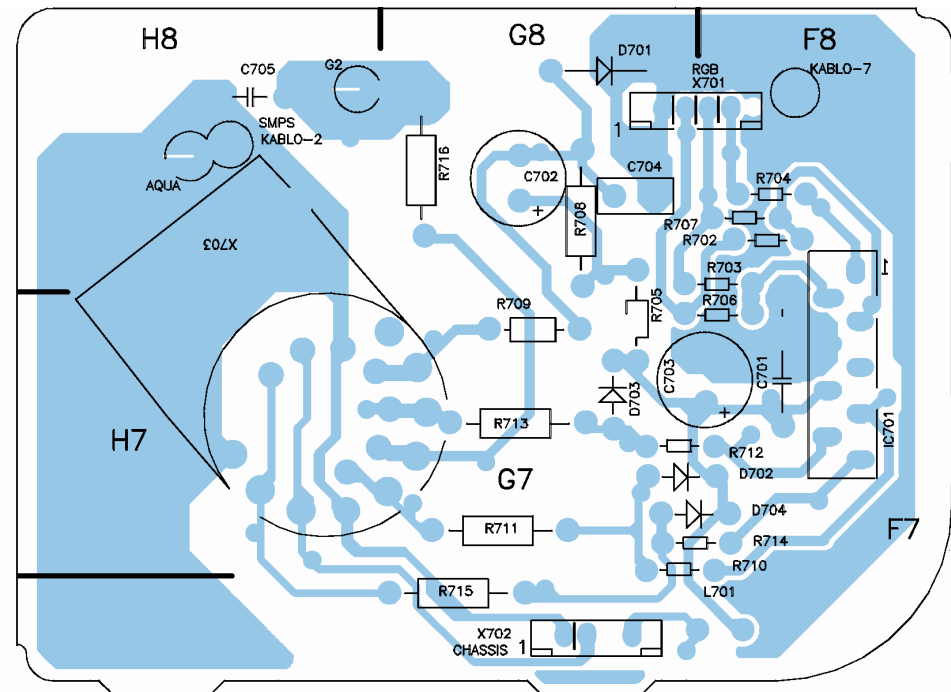
CRT Panel



Component Side, Top View



Solder Side, Bottom View



Ersatzteilliste  
Spare Parts List

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P 37-1101/5 TEXT

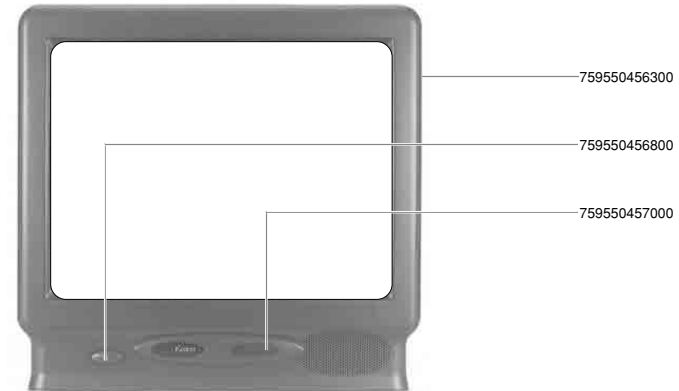
MATERIAL-NR. / PART NO.: 772501508900 BESTELL-NR. / ORDER NO.: GCN9400 CORONA SILBER/CORONA SILVER

| POS. NR.<br>POS. NO. | ABB.<br>FIG. | MATERIAL-NR.<br>PART NUMBER | ANZ.<br>QTY. | BEZEICHNUNG<br>D                              | DESCRIPTION<br>GB                               |
|----------------------|--------------|-----------------------------|--------------|-----------------------------------------------|-------------------------------------------------|
|                      |              | 772501508900                |              | P 37-1101/5 TEXT CORONA SILBER<br>KEIN E-TEIL | P 37-1101/5 TEXT CORONA SILVER<br>NO SPARE PART |
| 0200.000             | 1            | 759550456300                |              | GEH-VORDERTEIL SILBER 14"                     | CABINET FRONT SILVER 14"                        |
| 0201.000             |              | 759550454400                |              | LAUTSPRECHER 16OHM3W                          | SPEAKER 16OHM3W                                 |
| 0250.000             |              | 759550456700                |              | ABDECKUNG BEDRUCKT                            | COVER PRINTED                                   |
| 0255.000             |              | 759550456900                |              | ABDECKUNG SEITE                               | COVER SIDE                                      |
| 0300.000             |              | 759550455800                |              | GEH-RUECKTEIL SILBER 14"                      | CABINET REAR PART SILVER 14"                    |
| 0330.000             |              | 759550456600                |              | ANTENNE TELESKOP                              | ANRENNNA TELESCOPE                              |
| 0700.000             | △            | 759550454900                |              | SPULE ENTMAGNETISIERUNG 14"                   | COIL DEGAUSSING 14"                             |
| 1100.000             | △            | 759550454600                |              | BILDR. PH A34EAC01X06DY-BR                    | PICT.TUBE PH A34EAC01X06DY-BR                   |
| 1311.000             | 1            | 759550457000                |              | KNOPF PROGRAMM/LAUTSTAERKE                    | KNOB PROGRAM/VOLUME                             |
| 1370.000             | 1            | 759550456800                |              | KNOPF NETZ                                    | KNOB POWER                                      |
| 2100.000             | △            | 759550450200                |              | NETZKABEL M.DR.2,3M                           | POWER CABLE W.DR.2,3M                           |
| 2400.000             |              | 759550450100                |              | FERNBEDIENUNG                                 | REMOTE CONTROL                                  |
|                      |              | 720107620000                |              | BEDIENUNGSANLEITUNG SI,RO,COR,BUL             | OPERATING INSTRUCTIONS SI,RO,COR,BUL            |
|                      |              | 720107621000                |              | BEDIENUNGSANLEITUNG GB,PL,CZ,SK,H             | OPERATING INSTRUCTIONS GB,PL,CZ,SK,H            |
|                      |              | 720100425000                |              | SERVICE MANUAL GB                             | SERVICE MANUAL GB                               |

| POS. NR.<br>POS. NO. | MATERIAL-NR.<br>PART NUMBER | BEZEICHNUNG<br>DESCRIPTION   | POS. NR.<br>POS. NO. | MATERIAL-NR.<br>PART NUMBER | BEZEICHNUNG<br>DESCRIPTION |
|----------------------|-----------------------------|------------------------------|----------------------|-----------------------------|----------------------------|
| C 00511              | 845299864700                | ELKO 1000UF 20% 25V RM5 C    | D 00610              | 759550455400                | DIODE RGP30MS              |
| C 00522              | 845324218700                | ELKO 1000UF 35V 105C RM5     | D 00701              | 830921503300                | DIODE 1N4007 ITT/SES/TFK   |
| C 00605              | 851179381800                | FOKO MKP336.2 0,1UF 20% 275V | D 00702              | 830920002100                | DIODE BAV21 ITT/ TFK AV61  |
| C 00607              | 851179381800                | FOKO MKP336.2 0,1UF 20% 275V | D 00703              | 830920002100                | DIODE BAV21 ITT/ TFK AV61  |
| C 00611              | 759902001800                | KONDENS. 1NF 1KV             | D 00704              | 830920002100                | DIODE BAV21 ITT/ TFK AV61  |
| C 00612              | 759902001800                | KONDENS. 1NF 1KV             |                      |                             |                            |
| C 00615              | 853151068700                | MKT 15 0,033UF 20% 630V      | F 00101              | 759550450500                | FILTER OWA J1985M          |
| C 00618              | 759880523200                | CER 470PF 2KV                | F 00601              | 831562150300                | SI 5X20 T2,5A H 250V       |
| C 00619              | 759880450800                | KONDENS. 2.2NF 20% 250V      |                      |                             |                            |
| C 00621              | 845299864700                | ELKO 1000UF 20% 25V RM5 C    | IC 00010             | 830577345300                | SMD IC 74HCT4053 AV215-G1  |
| C 00622              | 759880644200                | KONDENS. 220PF 10% 2KV       | IC 00101             | 759550454300                | IC NN5198K                 |
| C 00705              | 865009051900                | KERKO HV A 2200PF 20% 2KV    | IC 00101             | 759550455500                | IC NN5099K                 |
|                      |                             |                              | IC 00102             | 759550454100                | SMD IC TDA7056AT           |
| D 00104              | 830921504500                | DIODE 1N4148 AV619 -GA       | IC 00401             | 759550455700                | IC SDA5552 (IRA SOFTWARE   |
| D 00105              | 759550453300                | SMD DIODE RB411D T146        | IC 00402             | 759550455600                | CIC BR24C04 (SOP8)         |
| D 00404              | 830953414900                | MELF-DIODE LL 4148 TFK/IT    | IC 00403             | 830546183600                | IC TSOP1836 VISHAY         |
| D 00405              | 830921504500                | DIODE 1N4148 AV619 -GA       | IC 00501             | 759550454500                | IC AN5539LF                |
| D 00406              | 830921504500                | DIODE 1N4148 AV619 -GA       | IC 00601             | 830533464600                | IC TDA16846 SIE            |
| D 00501              | 725511823600                | DIODE RF2007                 | IC 00602             | 759880752800                | IC LM317T                  |
| D 00502              | 830920100500                | DIODE BA157 AV619 -AMMO      | IC 00603             | 759880752800                | IC LM317T                  |
| D 00503              | 759880511100                | DIODE RGP15J                 | IC 00604             | 759550454000                | IC TDB7805CT               |
| D 00504              | 830920100500                | DIODE BA157 AV619 -AMMO      | IC 00701             | 759550454200                | IC TDA6170Q                |
| D 00505              | 830921504500                | DIODE 1N4148 AV619 -GA       |                      |                             |                            |
| D 00601              | 725511823600                | DIODE RF2007                 | L 00001              | 759550452000                | SPULE 50MHZ 600RPH-WB      |
| D 00602              | 830953414900                | MELF-DIODE LL 4148 TFK/IT    | L 00002              | 759550452000                | SPULE 50MHZ 600RPH-WB      |
| D 00603              | 725511823600                | DIODE RF2007                 | L 00003              | 759862006100                | DR 0309 10UH 4-253T-15020  |
| D 00604              | 725511823600                | DIODE RF2007                 | L 00010              | 759550451700                | SMD SPULE 18UH K/12        |
| D 00606              | 725511823600                | DIODE RF2007                 | L 00101              | 759813083500                | DR 0207 10UH 5% AX         |
| D 00607              | 830956550700                | DIODE RGP10J/1A4937 MOT/G    | L 00104              | 814052632600                | DR AX 0411-GA 47UH 5%      |
| D 00609              | 759550453500                | DIODE RGB15D                 | L 00105              | 814052632600                | DR AX 0411-GA 47UH 5%      |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

| POS. NR.<br>POS. NO. | MATERIAL-NR.<br>PART NUMBER | BEZEICHNUNG<br>DESCRIPTION | POS. NR.<br>POS. NO. | MATERIAL-NR.<br>PART NUMBER | BEZEICHNUNG<br>DESCRIPTION |
|----------------------|-----------------------------|----------------------------|----------------------|-----------------------------|----------------------------|
| L 00106              | 759550451600                | SMD SPULE 1UH              | SW 00401             | 759550451400                | TASTSCHALTER               |
| L 00401              | 814052641200                | DR AX 0411 10UH 10% <<<    | SW 00402             | 759550451400                | TASTSCHALTER               |
| L 00402              | 814052641200                | DR AX 0411 10UH 10% <<<    | SW 00403             | 759550451400                | TASTSCHALTER               |
| L 00403              | 814052641200                | DR AX 0411 10UH 10% <<<    | SW 00901             | 759550450300                | NETZSCHALTER               |
| L 00501              | 759550455100                | SPULE H-LIN 55UH           |                      |                             |                            |
| L 00502              | 759550451900                | SPULE 2,2UH LAL04          | T 00011              | 830100484800                | SMD TRANS BC848B/ BC847B   |
| L 00601              | 759550451200                | FILTER LINE 27MH           | T 00201              | 830100484800                | SMD TRANS BC848B/ BC847B   |
| L 00603              | 759550451800                | SPULE 50UH                 | T 00408              | 830100385800                | SMD TRANS BC858B/ BC857B   |
| L 00604              | 759520307800                | DR 0309 100UH 5% AX LALO3  | T 00409              | 830100385800                | SMD TRANS BC858B/ BC857B   |
| L 00701              | 759550451500                | SPULE 10UH R0814           | T 00410              | 830100385800                | SMD TRANS BC858B/ BC857B   |
|                      |                             |                            | T 00411              | 830100385800                | SMD TRANS BC858B/ BC857B   |
|                      |                             |                            | T 00414              | 830100385800                | SMD TRANS BC858B/ BC857B   |
|                      |                             |                            | T 00503              | 830100484800                | SMD TRANS BC848B/ BC847B   |
|                      |                             |                            | T 00504              | 830100484800                | SMD TRANS BC848B/ BC847B   |
|                      |                             |                            | T 00505              | 759550453800                | SMD TRANS 2SK3065          |
|                      |                             |                            | T 00506              | 759550453900                | TRANS BU808DFI             |
|                      |                             |                            | T 00601              | 759550453700                | TRANS STP3NB60FP           |
|                      |                             |                            | T 00602              | 830100484800                | SMD TRANS BC848B/ BC847B   |
|                      |                             |                            |                      |                             |                            |
|                      |                             |                            | TR 00501             | 759550450800                | TRAFO DIODEN-SPLIT FBT14"  |
|                      |                             |                            | TR 00601             | 759550450600                | TRAFO SPERRWANDLER 14"     |
|                      |                             |                            |                      |                             |                            |
|                      |                             |                            | TU 00101             | 759550451300                | TUNER UV1316/ALG-3         |
|                      |                             |                            |                      |                             |                            |
|                      |                             |                            | X 00703              | 759550451000                | BILDRÖHRFASSUNG            |
|                      |                             |                            |                      |                             |                            |
|                      |                             |                            | ZD 00101             | 759550449100                | Z-DIODE UZ6,2BSB           |
|                      |                             |                            | ZD 00501             | 759550453600                | Z-DIODE MTZJ39B            |
|                      |                             |                            | ZD 00502             | 759550453600                | Z-DIODE MTZJ39B            |
|                      |                             |                            | ZD 00503             | 759866515100                | DIODE MTZ 9,1-B T77 HDMO   |
|                      |                             |                            | ZD 00601             | 759550453400                | Z-DIODE UZT33V             |
|                      |                             |                            |                      |                             |                            |
|                      |                             |                            | SK 00101             | 759550450400                | EURO-AV BUCHSENLL21POL/SW  |



Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!



The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

# Ersatzteilliste Spare Parts List

## 9 / 2001

# GRUNDIG

# TV

## T 51-1101/5 TEXT

MATERIAL-NR. / PART NO.: 772501518900 BESTELL-NR. / ORDER NO.: GCN9500 CORONA SILBER/CORONA SILVER

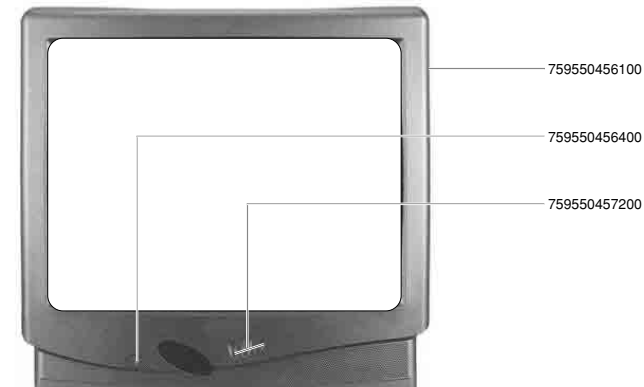
| POS. NR.<br>POS. NO. | ABB.<br>FIG. | MATERIAL-NR.<br>PART NUMBER | ANZ.<br>QTY. | BEZEICHNUNG<br>(D)                            | DESCRIPTION<br>(GB)                             |
|----------------------|--------------|-----------------------------|--------------|-----------------------------------------------|-------------------------------------------------|
|                      |              | 772501518900                |              | T 51-1101/5 TEXT CORONA SILBER<br>KEIN E-TEIL | T 51-1101/5 TEXT CORONA SILVER<br>NO SAPRE PART |
| 0200.000             | 1            | 759550456100                |              | GEH-VORDERTEIL SILBER 20"                     | CABINET FRONT SILVER 20"                        |
| 0201.000             |              | 759550454400                |              | LAUTSPRECHER 16OHM3W                          | SPEAKER 16OHM3W                                 |
| 0250.000             |              | 759550457100                |              | ABDECKUNG                                     | COVER                                           |
| 0300.000             |              | 759550455900                |              | GEH-RUECKTEIL SILBER 20"                      | CABINET REAR PART SILVER 20"                    |
| 0700.000             | △            | 759550455000                |              | SPULE ENTMAGNETISIERUNG 20"                   | COIL DEGAUSSING 20"                             |
| 1100.000             | △            | 759550454700                |              | BILDR.SEB A48ECR43X51                         | PICT.TUBE SEB A48ECR43X51                       |
| 1311.000             | 1            | 759550457200                |              | KNOPF PROGRAMM/LAUTSTAEKERE                   | KNOB PROGRAM/VOLUME                             |
| 1370.000             | 1            | 759550456400                |              | TASTE NETZ                                    | KEY POWER                                       |
| 2100.000             | △            | 759550450200                |              | NETZKABEL M.DR.2,3M                           | POWER CABLE W.DR.2,3M                           |
| 2400.000             |              | 759550450100                |              | FERNBEDIENUNG                                 | REMOTE CONTROL                                  |
|                      |              | 720107620000                |              | BEDIENUNGSANLEITUNG SI,RO,COR,BUL             | OPERATING INSTRUCTIONS SI,RO,COR,BUL            |
|                      |              | 720107621000                |              | BEDIENUNGSANLEITUNG GB,PL,CZ,SK,H             | OPERATING INSTRUCTIONS GB,PL,CZ,SK,H            |
|                      |              | 720100425000                |              | SERVICE MANUAL GB                             | SERVICE MANUAL GB                               |

| POS. NR.<br>POS. NO. | MATERIAL-NR.<br>PART NUMBER | BEZEICHNUNG<br>DESCRIPTION   | POS. NR.<br>POS. NO. | MATERIAL-NR.<br>PART NUMBER | BEZEICHNUNG<br>DESCRIPTION |
|----------------------|-----------------------------|------------------------------|----------------------|-----------------------------|----------------------------|
| C 00511              | 845299864700                | ELKO 1000UF 20% 25V RM5 C    | D 00610              | 759550455400                | DIODE RGP30MS              |
| C 00522              | 845324218700                | ELKO 1000UF 35V 105C RM5     | D 00701              | 830921503300                | DIODE 1N4007 ITT/SES/TFK   |
| C 00605              | 851179381800                | FOKO MKP336.2 0,1UF 20% 275V | D 00702              | 830920002100                | DIODE BAV21 ITT/ TFK AV61  |
| C 00607              | 851179381800                | FOKO MKP336.2 0,1UF 20% 275V | D 00703              | 830920002100                | DIODE BAV21 ITT/ TFK AV61  |
| C 00611              | 759902001800                | KONDENS. 1NF 1KV             | D 00704              | 830920002100                | DIODE BAV21 ITT/ TFK AV61  |
| C 00612              | 759902001800                | KONDENS. 1NF 1KV             |                      |                             |                            |
| C 00615              | 853151068700                | MKT 15 0,033UF 20% 630V      | F 00101              | 759550450500                | FILTER OWA J1985M          |
| C 00618              | 759880523200                | CER 470PF 2KV                | F 00601              | 831562150300                | SI 5X20 T2,5A H 250V       |
| C 00619              | 759880450800                | KONDENS. 2.2NF 20% 250V      | IC 00010             | 830577345300                | SMD IC 74HCT4053 AV215-G1  |
| C 00621              | 845299864700                | ELKO 1000UF 20% 25V RM5 C    | IC 00101             | 759550454300                | IC NN5198K                 |
| C 00622              | 759880644200                | KONDENS. 220PF 10% 2KV       | IC 00101             | 759550455500                | IC NN5099K                 |
| C 00705              | 865009051900                | KERKO HV A 2200PF 20% 2KV    | IC 00102             | 759550454100                | SMD IC TDA7056AT           |
| D 00104              | 830921504500                | DIODE 1N4148 AV619 -GA       | IC 00401             | 759550455700                | IC SDA5552 (IRA SOFTWARE   |
| D 00105              | 759550453300                | SMD DIODE RB411D T146        | IC 00402             | 759550455600                | CIC BR24C04(SOP8)          |
| D 00404              | 830953414900                | MELF-DIODE LL 4148 TFK/IT    | IC 00403             | 830546183600                | IC TSOP1836 VISHAY         |
| D 00405              | 830921504500                | DIODE 1N4148 AV619 -GA       | IC 00501             | 759550454500                | IC AN5539LF                |
| D 00406              | 830921504500                | DIODE 1N4148 AV619 -GA       | IC 00601             | 830533464600                | IC TDA16846 SIE            |
| D 00501              | 725511823600                | DIODE RF2007                 | IC 00602             | 759880752800                | IC LM317T                  |
| D 00502              | 830920100500                | DIODE BA157 AV619 -AMMO      | IC 00603             | 759880752800                | IC LM317T                  |
| D 00503              | 759880511100                | DIODE RGP15J                 | IC 00604             | 759550454000                | IC TDB7805CT               |
| D 00504              | 830920100500                | DIODE BA157 AV619 -AMMO      | IC 00701             | 759550454200                | IC TDA6170Q                |
| D 00505              | 830921504500                | DIODE 1N4148 AV619 -GA       |                      |                             |                            |
| D 00601              | 725511823600                | DIODE RF2007                 | L 00001              | 759550452000                | SPULE 50MHZ 600RPH-WB      |
| D 00602              | 830953414900                | MELF-DIODE LL 4148 TFK/IT    | L 00002              | 759550452000                | SPULE 50MHZ 600RPH-WB      |
| D 00603              | 725511823600                | DIODE RF2007                 | L 00003              | 759862006100                | DR 0309 10UH 4-253T-15020  |
| D 00604              | 725511823600                | DIODE RF2007                 | L 00010              | 759550451700                | SMD SPULE 18UH K/12        |
| D 00606              | 725511823600                | DIODE RF2007                 | L 00101              | 759813083500                | DR 0207 10UH 5% AX         |
| D 00607              | 830956550700                | DIODE RGP10J/1N4937 MOT/G    | L 00104              | 814052632600                | DR AX 0411-GA 47UH 5%      |
| D 00609              | 759550453500                | DIODE RGB15D                 | L 00105              | 814052632600                | DR AX 0411-GA 47UH 5%      |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

| POS. NR.<br>POS. NO. | MATERIAL-NR.<br>PART NUMBER | BEZEICHNUNG<br>DESCRIPTION |
|----------------------|-----------------------------|----------------------------|
| L 00106              | 759550451600                | SMD SPULE 1UH              |
| L 00401              | 814052641200                | DR AX 0411 10UH 10% <<<    |
| L 00402              | 814052641200                | DR AX 0411 10UH 10% <<<    |
| L 00403              | 814052641200                | DR AX 0411 10UH 10% <<<    |
| L 00501              | 759550451100                | SPULE H-LIN 70UH           |
| L 00501              | 759550451100                | SPULE H-LIN 70UH           |
| L 00502              | 759550451900                | SPULE 2,2UH LAL04          |
| L 00601              | △ 759550451200              | FILTER LINE 27MH           |
| L 00603              | 759550451800                | SPULE 50UH                 |
| L 00604              | 759520307800                | DR 0309 100UH 5% AX LALO3  |
| L 00701              | 759550451500                | SPULE 10UH R0814           |
| LED                  | 759540365800                | LED 5MM K-504 HL ROT       |
| P 00601              | 759550453100                | REGLER 2,2KOHM             |
| Q 00101              | 759813163300                | QUARZ 4,433619 MHZ HC 18   |
| Q 00102              | 759813163400                | QUARZ 3,579545 MHZ HC 18   |
| Q 00401              | 838224609600                | QUARZ 6,0 MHZ Q 270/2A     |
| R 00133              | 759550452800                | WIDERST 2,2OHM1W           |
| R 00521              | 759550452900                | WIDERST 3,3OHM2W           |
| R 00526              | 759550452100                | WIDERST 82OHM3W            |
| R 00530              | 759875238900                | WIDERSTAND 0,47 5% 1W      |
| R 00601              | 759550452500                | WIDERST 3,9MOHM1W          |
| R 00602              | 759550452400                | WIDERST 1MOHM1W            |
| R 00607              | △ 759550457500              | PTC 9OHM 2PIN              |
| R 00608              | △ 759550453200              | NTC WIDERST 5,1OHM         |
| R 00612              | 759550452300                | WIDERST 68KOHM1,5W         |
| R 00615              | △ 759550452600              | WIDERST 4,7MOHM1/2W        |
| R 00623              | △ 759550452700              | WIDERST 0,1OHM0,4W         |
| R 00640              | △ 759550453000              | WIDERST 22OHM1/2W          |
| SK 00101             | 759550450400                | EURO-AV BUCHSEN.21POL/SW   |

| POS. NR.<br>POS. NO. | MATERIAL-NR.<br>PART NUMBER | BEZEICHNUNG<br>DESCRIPTION   |
|----------------------|-----------------------------|------------------------------|
| SW 00401             | 759550451400                | TASTSCHALTER                 |
| SW 00402             | 759550451400                | TASTSCHALTER                 |
| SW 00403             | 759550451400                | TASTSCHALTER                 |
| SW 00901             | △ 759550450300              | NETZSCHALTER                 |
| T 00011              | 830100484800                | SMD TRANS BC848B/ BC847B     |
| T 00201              | 830100484800                | SMD TRANS BC848B/ BC847B     |
| T 00408              | 830100385800                | SMD TRANS BC858B/ BC857B     |
| T 00409              | 830100385800                | SMD TRANS BC858B/ BC857B     |
| T 00410              | 830100385800                | SMD TRANS BC858B/ BC857B     |
| T 00411              | 830100385800                | SMD TRANS BC858B/ BC857B     |
| T 00414              | 830100385800                | SMD TRANS BC858B/ BC857B     |
| T 00503              | 830100484800                | SMD TRANS BC848B/ BC847B     |
| T 00504              | 830100484800                | SMD TRANS BC848B/ BC847B     |
| T 00505              | 759550453800                | SMD TRANS 2SK3065            |
| T 00506              | 759550453900                | TRANS BU808DFI               |
| T 00601              | 759550453700                | TRANS STP3NB60FP             |
| T 00602              | 830100484800                | SMD TRANS BC848B/ BC847B     |
| TR 00501             | △ 759550450900              | TRAFO DIODEN-SPLIT FBT20/21" |
| TR 00601             | △ 759550450700              | TRAFO SPERRWANDLER 20/21"    |
| TU 00101             | 759550451300                | TUNER UV1316/ALG-3           |
| X 00703              | △ 759550451000              | BILDROHRFASSUNG              |
| ZD 00101             | 759550449100                | Z-DIODE UZ6,2BSB             |
| ZD 00501             | 759550453600                | Z-DIODE MTZJ39B              |
| ZD 00502             | 759550453600                | Z-DIODE MTZJ39B              |
| ZD 00503             | 759866515100                | DIODE MTZ 9,1 B-T 77 HDM0    |
| ZD 00601             | 759550453400                | Z-DIODE UZT33V               |



Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!



The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

Ersatzteilliste  
Spare Parts List

9 / 2001

T 55-1101/5 TEXT

MATERIAL-NR. / PART NO.: 772501528900 BESTELL-NR. / ORDER NO.: GCN9600 CORONA SILBER/CORONA SILVER

| POS. NR.<br>POS. NO. | ABB.<br>FIG. | MATERIAL-NR.<br>PART NUMBER | ANZ.<br>QTY. | BEZEICHNUNG<br>D                              | DESCRIPTION<br>GB                               |
|----------------------|--------------|-----------------------------|--------------|-----------------------------------------------|-------------------------------------------------|
|                      |              | 772501528900                |              | T 55-1101/5 TEXT CORONA SILBER<br>KEIN E-TEIL | T 55-1101/5 TEXT CORONA SILVER<br>NO SPARE PART |
| 0200.000             | 1            | 759550456200                |              | GEH-VORDETEIL SILBER 21"                      | CABINET FRONT SILVER 21"                        |
| 0201.000             |              | 759550454400                |              | LAUTSPRECHER 16OHM3W                          | SPEAKER 16OHM3W                                 |
| 0300.000             |              | 759550456000                |              | GEH-RUECKTEIL SILBER 21"                      | CABINET REAR PART SILVER 21"                    |
| 0700.000             | △            | 759550456500                |              | SPULE ENTMAGNETISIERUNG 21"                   | COIL DEGAUSSING 21"                             |
| 1100.000             |              | 759550454800                |              | BILDR.VC A51EFS83X191                         | PICT.TUBE VC A51EFS83X191                       |
| 1311.000             | 1            | 759550457400                |              | KNOPF PROGRAMM/LAUTSTÄRKE                     | KNOB PROGRAM/VOLUME                             |
| 1370.000             | 1            | 759550457300                |              | KNOPF NETZ                                    | KNOB POWER                                      |
| 2100.000             | △            | 759550450200                |              | NETZKABEL M.DR.2,3M                           | POWER CABLE W.DR.2,3M                           |
| 2400.000             |              | 759550450100                |              | FERNBEDIENUNG                                 | REMOTE CONTROL                                  |
|                      |              | 720107620000                |              | BEDIENUNGSANLEITUNG SI,RO,COR,BUL             | OPERATING INSTRUCTIONS SI,RO,COR,BUL            |
|                      |              | 720107621000                |              | BEDIENUNGSANLEITUNG GB,PL,CZ,SK,H             | OPERATING INSTRUCTIONS GB,PL,CZ,SK,H            |
|                      |              | 720100425000                |              | SERVICE MANUAL GB                             | SERVICE MANUAL GB                               |

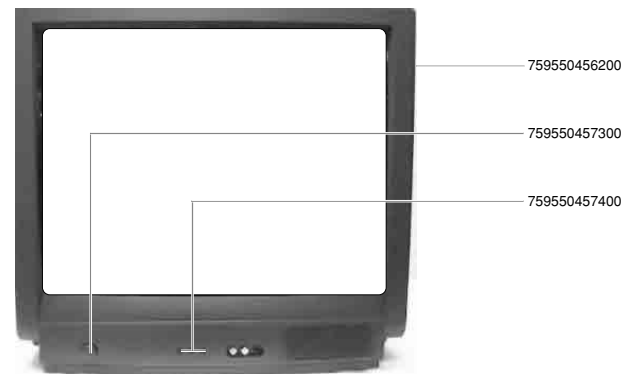
| POS. NR.<br>POS. NO. | MATERIAL-NR.<br>PART NUMBER | BEZEICHNUNG<br>DESCRIPTION   | POS. NR.<br>POS. NO. | MATERIAL-NR.<br>PART NUMBER | BEZEICHNUNG<br>DESCRIPTION |
|----------------------|-----------------------------|------------------------------|----------------------|-----------------------------|----------------------------|
| C 00511              | 845299864700                | ELKO 1000UF 20% 25V RM5 C    | D 00610              | 759550455400                | DIODE RGP30MS              |
| C 00522              | 845324218700                | ELKO 1000UF 35V 105C RM5     | D 00701              | 830921503300                | DIODE 1N4007 ITT/SES/TFK   |
| C 00605              | △ 851179381800              | FOKO MKP336.2 0,1UF 20% 275V | D 00702              | 830920002100                | DIODE BAV21 ITT/ TFK AV61  |
| C 00607              | △ 851179381800              | FOKO MKP336.2 0,1UF 20% 275V | D 00703              | 830920002100                | DIODE BAV21 ITT/ TFK AV61  |
| C 00611              | 759902001800                | KONDENS. 1NF 1KV             | D 00704              | 830920002100                | DIODE BAV21 ITT/ TFK AV61  |
| C 00612              | 759902001800                | KONDENS. 1NF 1KV             |                      |                             |                            |
| C 00615              | 853151068700                | MKT 15 0,033UF 20% 630V      | F 00101              | 759550450500                | FILTER OWA J1985M          |
| C 00618              | 759880523200                | CER 470PF 2KV                | F 00601              | △ 831562150300              | SI 5X20 T2,5A H 250V       |
| C 00619              | △ 759880450800              | KONDENS. 2.2NF 20% 250V      | IC 00010             | 830577345300                | SMD IC 74HCT4053 AV215-G1  |
| C 00621              | 845299864700                | ELKO 1000UF 20% 25V RM5 C    | IC 00101             | 759550454300                | IC NN5198K                 |
| C 00622              | 759880644200                | KONDENS. 220PF 10% 2KV       | IC 00101             | 759550455500                | IC NN5099K                 |
| C 00705              | 865009051900                | KERKO HV A 2200PF 20% 2KV    | IC 00102             | 759550454100                | SMD IC TDA7056AT           |
| D 00104              | 830921504500                | DIODE 1N4148 AV619 -GA       | IC 00401             | 759550455700                | IC SDA5552 (IRA SOFTWARE   |
| D 00105              | 759550453300                | SMD DIODE RB411D T146        | IC 00402             | 759550455600                | CIC BR24C04 (SOP8)         |
| D 00404              | 830953414900                | MELF-DIODE LL 4148 TFK/IT    | IC 00403             | 830546183600                | IC TSOP1836 VISHAY         |
| D 00405              | 830921504500                | DIODE 1N4148 AV619 -GA       | IC 00501             | 759550454500                | IC AN5539LF                |
| D 00406              | 830921504500                | DIODE 1N4148 AV619 -GA       | IC 00601             | 830533464600                | IC TDA16846 SIE            |
| D 00501              | 725511823600                | DIODE RF2007                 | IC 00602             | 759880752800                | IC LM317T                  |
| D 00502              | 830920100500                | DIODE BA157 AV619 -AMMO      | IC 00603             | 759880752800                | IC LM317T                  |
| D 00503              | 759880511100                | DIODE RGP15J                 | IC 00604             | 759550454000                | IC TDB7805CT               |
| D 00504              | 830920100500                | DIODE BA157 AV619 -AMMO      | IC 00701             | 759550454200                | IC TDA6170Q                |
| D 00505              | 830921504500                | DIODE 1N4148 AV619 -GA       |                      |                             |                            |
| D 00601              | 725511823600                | DIODE RF2007                 | L 00001              | 759550452000                | SPULE 50MHZ 600RPH-WB      |
| D 00602              | 830953414900                | MELF-DIODE LL 4148 TFK/IT    | L 00002              | 759550452000                | SPULE 50MHZ 600RPH-WB      |
| D 00603              | 725511823600                | DIODE RF2007                 | L 00003              | 759862006100                | DR 0309 10UH 4-253T-15020  |
| D 00604              | 725511823600                | DIODE RF2007                 | L 00010              | 759550451700                | SMD SPULE 18UH K/12        |
| D 00606              | 725511823600                | DIODE RF2007                 | L 00101              | 759813083500                | DR 0207 10UH 5% AX         |
| D 00607              | 830956550700                | DIODE RGP10J/1N4937 MOT/G    | L 00104              | 814052632600                | DR AX 0411-GA 47UH 5%      |
| D 00609              | 759550453500                | DIODE RGB15D                 | L 00105              | 814052632600                | DR AX 0411-GA 47UH 5%      |

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

GRUNDIG

TV

| POS. NR.<br>POS. NO. | MATERIAL-NR.<br>PART NUMBER | BEZEICHNUNG<br>DESCRIPTION | POS. NR.<br>POS. NO. | MATERIAL-NR.<br>PART NUMBER | BEZEICHNUNG<br>DESCRIPTION   |
|----------------------|-----------------------------|----------------------------|----------------------|-----------------------------|------------------------------|
| L 00106              | 759550451600                | SMD SPULE 1UH              | SW 00401             | 759550451400                | TASTSCHALTER                 |
| L 00401              | 814052641200                | DR AX 0411 10UH 10% <<<    | SW 00402             | 759550451400                | TASTSCHALTER                 |
| L 00402              | 814052641200                | DR AX 0411 10UH 10% <<<    | SW 00403             | 759550451400                | TASTSCHALTER                 |
| L 00403              | 814052641200                | DR AX 0411 10UH 10% <<<    | SW 00901             | △ 759550450300              | NETZSCHALTER                 |
| L 00501              | 759550451100                | SPULE H-LIN 70UH           |                      |                             |                              |
| L 00502              | 759550451900                | SPULE 2,2UH LAL04          | T 00011              | 830100484800                | SMD TRANS BC848B/ BC847B     |
| L 00601              | △ 759550451200              | FILTER LINE 27MH           | T 00201              | 830100484800                | SMD TRANS BC848B/ BC847B     |
| L 00603              | 759550451800                | SPULE 50UH                 | T 00408              | 830100385800                | SMD TRANS BC858B/ BC857B     |
| L 00604              | 759520307800                | DR 0309 100UH 5% AX LALO3  | T 00409              | 830100385800                | SMD TRANS BC858B/ BC857B     |
| L 00701              | 759550451500                | SPULE 10UH R0814           | T 00410              | 830100385800                | SMD TRANS BC858B/ BC857B     |
|                      |                             |                            | T 00411              | 830100385800                | SMD TRANS BC858B/ BC857B     |
|                      |                             |                            | T 00414              | 830100385800                | SMD TRANS BC858B/ BC857B     |
| LED                  | 759540365800                | LED 5MM K-504 HL ROT       | T 00503              | 830100484800                | SMD TRANS BC848B/ BC847B     |
| P 00601              | 759550453100                | REGLER 2,2KOHM             | T 00504              | 830100484800                | SMD TRANS BC848B/ BC847B     |
| Q 00101              | 759813163300                | QUARZ 4,433619 MHZ HC 18   | T 00505              | 759550453800                | SMD TRANS 2SK3065            |
| Q 00102              | 759813163400                | QUARZ 3,579545 MHZ HC 18   | T 00506              | 759550453700                | TRANS BU808DFI               |
| Q 00401              | 838224609600                | QUARZ 6,0 MHZ Q 270/2A     | T 00601              | 759550453700                | TRANS STP3NB60FP             |
|                      |                             |                            | T 00602              | 830100484800                | SMD TRANS BC848B/ BC847B     |
| R 00133              | 759550452800                | WIDERST 2,2OHM1W           | TR 00501             | △ 759550450900              | TRAFO DIODEN-SPLIT FBT20/21" |
| R 00521              | 759550452900                | WIDERST 3,3OHM2W           | TR 00601             | △ 759550450700              | TRAFO SPERRWANDLER 20/21"    |
| R 00526              | 759550452100                | WIDERST 82OHM3W            |                      |                             |                              |
| R 00530              | 759550326400                | WIDERST 0,22OHM1W          | TU 00101             | 759550451300                | TUNER UV1316/ALG-3           |
| R 00601              | 759550452500                | WIDERST 3,9OHM1W           |                      |                             |                              |
| R 00602              | 759550452400                | WIDERST 1MOHM1W            | X 00703              | △ 759550451000              | BILDROHRFASSUNG              |
| R 00607              | △ 759550457500              | PTC 9OHM 2PIN              |                      |                             |                              |
| R 00608              | △ 759550453200              | NTC WIDERST 5,1OHM         | ZD 00101             | 759550449100                | Z-DIODE UZ6.2BSB             |
| R 00612              | 759550452300                | WIDERST 68KOHM1,5W         | ZD 00501             | 759550453600                | Z-DIODE MTZJ39B              |
| R 00615              | △ 759550452600              | WIDERST 4,7MOHM1/2W        | ZD 00502             | 759550453600                | Z-DIODE MTZJ39B              |
| R 00623              | △ 759550452700              | WIDERST 0,1OHM0,4W         | ZD 00503             | 759866515100                | DIODE MTZ 9,1 B-T 77 HDMO    |
| R 00640              | △ 759550453000              | WIDERST 22OHM1/2W          | ZD 00601             | 759550453400                | Z-DIODE UZT33V               |
| SK 00101             | 759550450400                | EURO-AV BUCHSENL.21POL/SW  |                      |                             |                              |



Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat-Nummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!



The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION