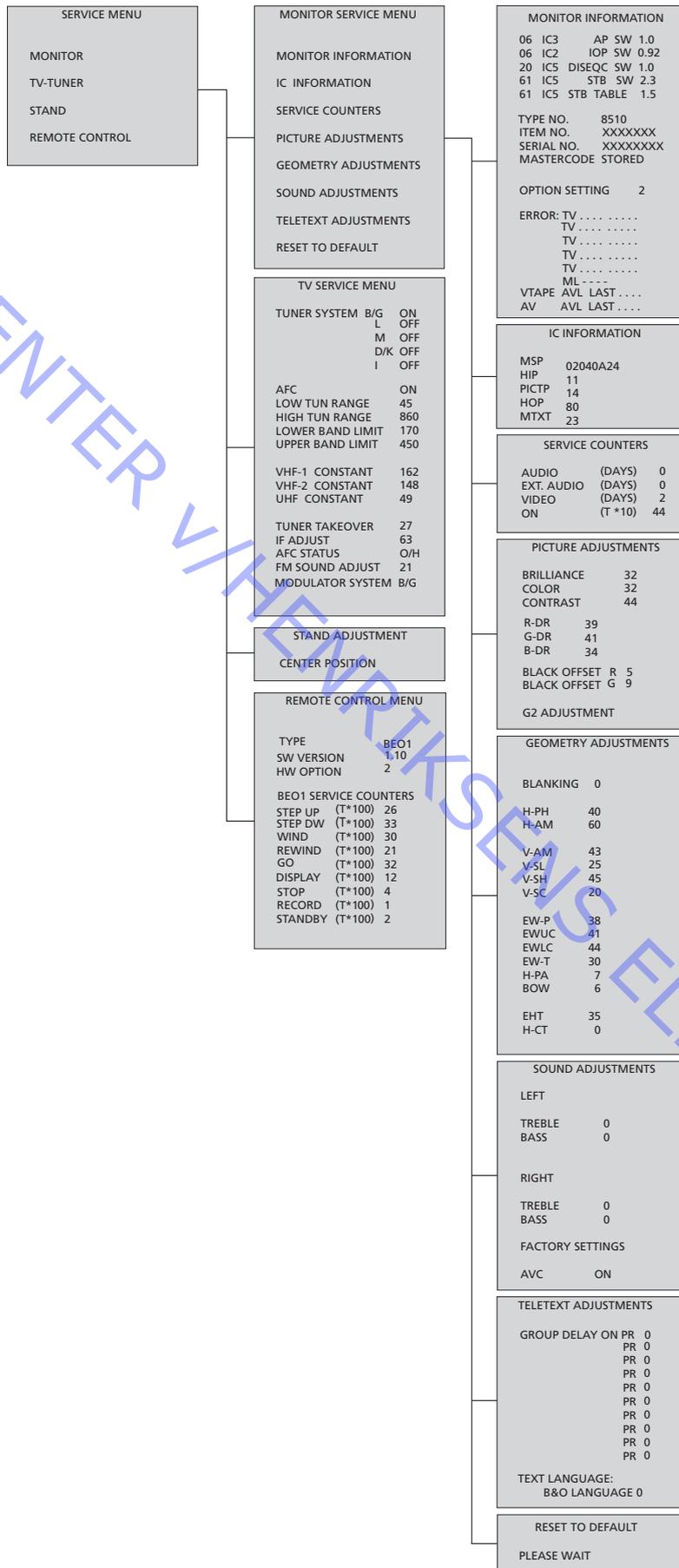


ADJUSTMENTS & SERVICE MODE Below see an overview of the Service Mode menus.



R-DR 10

G2 OK

Monitor information menu

After adjustment of G2 - press GO, and the menu will open

H-PH 40

ABO-CENTER VILVETEK ELEKTRONIK

Only items that are not described chapter 5 and 8 are described in this chapter.

Please refer to page 9.16 for an overview of the Service Mode menus.

For operation in Service Mode see page 5-2.

ADJUSTMENTS

Important!

When replacing the electrical chassis including PCB1 AV signal processing, PCB3 Video output, PCB4 Power supply & deflection and PCB6 Main microcomputer, to avoid loss of data the old EEPROM 6IC6 must be moved to the new PCB6.

At the bottom left-hand corner of PCB1, AV signal processing, there is a small label where the adjustment values for TUNER TAKEOVER, IF ADJUST and FM SOUND ADJUST are written. These values must be written into the old EEPROM.

When replacing PCB6 the old EEPROM 6IC6 also must be moved to the new PCB6.

Geometry adjustments

For geometry adjustments a standard 4:3 test pattern (e.g. Philips) should be used. Geometry adjustments have to be done in format 1 (4:3) and format 2 (16:9).

Operation

- Select a SETUP menu.
- Press **STOP STOP GO** within 3 seconds on Beo1 to get access to SERVICE MENU.
- Select MONITOR and select GEOMETRY ADJUSTMENTS.
- Select the parameter to change and press **GO**. Change the parameter setting with **◀** and **▶**. Press **GO** when the parameter setting is ok.

Some of the adjustments are fixed and should not be adjusted:

Vertical S-Correction (V-SC) Must always be set to 20

Horizontal sensitivity (EHT) Must always be set to 38

The adjustments must be done first in format 1 (4:3).

- Enter Service Mode and select the MONITOR line.
- Select the PICTURE ADJUSTMENTS line.
- Select the BRILLIANCE line and set the brilliance to max. (62). Then press **GO**.
- Select the GEOMETRY ADJUSTMENTS line.
- Select the BOW (Horizontal BOW) line and set it to 8.
- Select the H-AM (Horizontal AMplitude) line and adjust until the phosphor edge is visible at both sides of the picture. Select the H-CT (Horizontal Centering) line and adjust to one of the three positions that gives the best centering of the picture. Select the H-AM line and adjust to correct picture width. Then press **GO** and **▲** to select the PICTURE ADJUSTMENTS line.
- Select the BRILLIANCE line and set the value to the same as before the adjustment. Then press **GO**.
- Select the GEOMETRY ADJUSTMENTS line.

Vertical Shift (V-SH)

- Set BLANKING to 1. Adjust V-SH until the blanking is at the vertical centre of the screen. Set BLANKING to 0.

Vertical Amplitude (V-AM)

- Adjust V-AM so that the picture fits at the top.

Vertical Slope (V-SL)

- Adjust V-SL so that the picture fits at the bottom.

Horizontal Phase (H-PH)

- Adjust H-PH to the correct centering of the picture.

Horizontal Amplitude (H-AM)

- Adjust H-AM to the correct width of the picture.

East/West Parabola (EW-P)

- Adjust EW-P to the correct geometry at the sides. The middle part of the vertical lines must be as straight as possible.

East/West Upper Corner (EWUC)

- Adjust EWUC to the correct geometry at the upper corners.

East/West Lower Corner (EWLC)

- Adjust EWLC to the correct geometry at the lower corners.

East/West Trapezium (EW-T)

- Adjust EW-T to the correct geometry.

Horizontal PARallelogram (H-PA)

- Adjust H-PA to the correct geometry.

Horizontal BOW (BOW)

- Adjust BOW until the vertical lines at both sides of the picture are straight.

It may be necessary to repeat some of the adjustments.

- Press **GO** to store the adjustments.

Exit Service Mode.

Geometry adjustments in format 2 (16:9)

Only the adjustments mentioned has to be done.

- Switch the TV ON.
- Press the **DISPLAY** button for approx. 3 seconds.
- Press **▶** until **FORMAT** is displayed then press **GO**.
- Press **▲** to select **FORMAT 2**.
- Enter Service Mode and select the **MONITOR** line.
- Select the **GEOMETRY ADJUSTMENTS** line.

When selecting an adjustment item the picture must change to 16:9.

Vertical Amplitude (V-AM)

- Adjust V-AM so that the picture fits at the top.

Vertical Slope (V-SL)

- Adjust V-SL until there is approx 10cm. from the bottom of the circle to the bottom of the visible screen.

Horizontal Amplitude (H-AM)

- Adjust H-AM to the correct width of the picture.

Vertical SHift/centering (V-SH)

- Adjust V-SH until there is approx. 8mm. from the top of the circle to the top of the visible screen.

East/West Parabola (EW-P)

- Adjust EW-P to the correct geometry at the sides. The middle part of the vertical lines must be as straight as possible.

East/West Upper Corner (EWUC)

- Adjust EWUC to the correct geometry at the upper corners.

East/West Trapezium (EW-T)

- Adjust EW-T to the correct geometry.

Horizontal PArallelogram (H-PA)

- Adjust H-PA to the correct geometry.

It may be necessary to repeat some of the adjustments.

- Press **GO** to store the adjustments.

Exit Service Mode.

For other adjustments see chapter 5.

SERVICE MODE

MONITOR INFORMATION

- Software version numbers
The "20 IC5 DiSEqC SW 1.0" line is only shown if the TV is fitted with satellite receiver.
The "61 IC5 STB SW 1.0" line is only shown if the TV is fitted with set-top box controller.
The "61 IC5 STB TABLE 1.0" line shows the version of conversion of set-top box remote control codes into Beo1 and Beo4 codes.
- Type, item and serial numbers
- Theft protection status. Shows if the Master code is correctly entered (STORED/ NOT STORED)
- Option programming
- Latest five TV errors
- Latest ML error
- Latest AVL error from the V.TAPE and AV sockets

OPTION SETTING

Option 0 = The IR receiver of the TV is disconnected.

Option 1 = The TV and the Audio system (BeoLink system) are placed in the same room.

Option 2 = The TV and Audio system (BeoLink system) are placed in different rooms.

Option 5 = The TV and Audio system (BeoLink system) are placed in the same link room.

Option 6 = The TV is the only product in the link room.

Option programming can only be done by using a Beo4 remote control.

After having replaced the faulty chassis, please read out error codes, write them down and let them follow the chassis going for repair. After that clear the error codes. This is done by pressing **GO** in the MONITOR INFORMATION menu.

RESET TO DEFAULT

When this line is selected the settings will be defined.

- All TV and satellite programmes are cleared.
- The V.TAPE and AV sockets are set to NONE.
- In the PICTURE ADJUSTMENT service menu the values for brilliance, color and contrast are set to default.
- All programme lists are cleared.
- The TV SETUP TUNE menu (if there is no satellite receiver) will be shown the first time the TV is switched on.
- OPTION is set to 1.
- The motor stand is set to centre position.
- The theft protection setup is not changed.

When RESET TO DEFAULT is selected a text "PLEASE WAIT" is displayed. While the text is displayed no operation must be done. When the text disappears Service Mode is exited.

SERVICE MENU

TV SERVICE MENU

In TUNER SYSTEM it is possible to set only relevant tuner systems to ON (only multi standard TV's). This is done to reduce the tuning time.

AFC ON/OFF is used in connection with adjustments but it may also be useful in other situation.

The AFC is set to ON when the TV has been turned off by means of the mains switch.

LOW TUN RANGE	45
HIGH TUN RANGE	860
LOWER BAND LIMIT	170
UPPER BAND LIMIT	450

VHF-1 CONSTANT	162
VHF-2 CONSTANT	148
UHF CONSTANT	49

These items are for factory use.

TUNER TAKEOVER	27
IF ADJUST	63
AFC STATUS	I/L
FM SOUND ADJUST	14

These items are described in the section on adjustments.

MODULATOR SYSTEM

Used to switch between modulator system B/G or I.