

MANUAL ADJUSTMENT PROCEDURES OF THE 11AK20S CHASSIS

How to enter and exit the SERVICE Menu:

- Enter the Main Menu
- Press the digits 4, 7, 2, and 5, respectively
- Press MENU key to exit
- There're two selections in the Service Menu: 'ADJUST...' and 'OPTIONS...'

How to use the ADJUST Menu:

- Enter the Service Menu,
- Move the selection bar on the item 'ADJUST...' using the " Δ " or " ∇ " keys,
- Select the item 'ADJUST...' using the "<" or ">" keys,
- The items below will be displayed (one of them at one time),

1) AGC (Automatic Gain Control) 2) VA1 (Vertical Amplitude for 4:3, 50Hz) 3) VA2 (Vertical Amplitude for 16:9, 50Hz) 4) VA3 (Vertical Amplitude for 4:3, 60Hz) 5) VA4 (Vertical Amplitude for 16:9, 60Hz) 6) VSH (Vertical Shift) 7) VL (Vertical Linearity)	8) HSH (Horizontal Shift) 9) WG (White Point GREEN) 10) WR (White Point RED) 11) WB (White Point BLUE) 12) CR (Cut-off Red) 13) CG (Cut-off Green) 14) OSH (OSD Horizontal Position)
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- Press " Δ " or " ∇ " keys till the desired item is displayed,
- Press "<" or ">" keys to change the values.

NOTE: The Service Menu below shows the ranges of the adjustment parameters.

AGC Adjustment:

- Enter a 60dBmV RF signal level from channel C-12,
- Connect a digital voltmeter to AGC test point (or to pin1 of the tuner),
- Set the AGC parameter to zero and note the AGC voltage value,
- Increase the AGC parameter till the AGC voltage decreases 1V below the noted voltage value,
- Check that picture is normal at 90dBmV signal level.

Vertical Amplitude Adjustments:

- There're four adjustment parameters: Two for 50Hz and two for 60Hz.
- Enter a PAL B/G test pattern via RF,
- Change vertical slope till horizontal black lines on both the upper and lower part of the test pattern become very close to the upper and lower horizontal sides of picture tube and nearly about to disappears,
- Check and do the same adjustment if it becomes improper after some other geometric adjustments.

Vertical Shift and Horizontal Shift Adjustments:

- Enter a test pattern for geometric adjustments via RF,
- Change Vertical Shift till the test pattern is centred vertically and horizontally
- Check and do the same adjustment if it becomes improper after some other geometric adjustments

Vertical Linearity Adjustment:

- Enter a cross-hatch pattern via RF,
- Change VL parameter till the size of squares on both the upper and lower part of test pattern become equal to the squares laying on the vertical centre of the test pattern,
- Check and do the same adjustment if it becomes improper after some other geometric adjustments.

White Point Adjustment:

- Enter a white pattern via RF,
- Set all of the 3 parameters (WR, WG, WB) firstly to zero,
- Set the values till you get a pure white screen. (To to do a correct adjustment use a colour analyser).

Black point Adjustment:

- Set CR and CG parameter values firstly to zero,
- Set the values to do this adjustment.