

Service Mode (electronic controls)

This receiver has electronic technology using the IC bus concept. It performs as a control function and it replaces many mechanical controls. Instead of adjusting mechanical controls individually, many of the control functions are now performed by using "on screen display menu". (The service adjustment mode.)

NOTE:

It is suggested that the technician reads all the way through and understand the following procedure for entering/exiting the service adjustment mode; then proceed with the instructions working with the receiver. When becoming familiar with the procedure, the flow chart for service mode may be used as a quick guide.

14.1. Entering to service mode:

When minor adjustments need to be done to the electronic controls, the method for entering the service mode without removal of the cabinet back is as follows, using the remote control:

Alternate method to enter service mode:

Press "VOL" (-) on TV and "RECALL" button on remote control simultaneously for at least 3 seconds.

Usual method to enter service mode

1. Select SET-UP icon and select CABLE mode.
2. Select TIMER icon and set SLEEP time for 30 Min.
3. Press "OK" then "VOL" (+) to exit menus.
4. Tune to the Channel 124.
5. Adjust VOLUME to minimum (0).
6. Press "VOL" (-) on receiver. Red "CHK" appears in upper left corner.

To toggle between aging and service modes:

While the "CHK" is displayed on the left top corner of the screen, press "TV/VIDEO" and "VOL (+)" on the TV simultaneously will toggle between the modes. Red "CHK" for service mode and yellow "CHK" for aging.

7. Press POWER on the remote control to display the service adjustment modes menu, select adjustment by pressing the "VOL" right/left buttons and "CH" up/down buttons on the remote and OK to enter the adjustment.

MODE	480i	JUST	4:3	ZOOM
MTS	DW	MTSIN	SEPAL	SEPAH
CLOCK	CLOCK	COLOR	B-Y_G	TINT
VIDEO	BRIGHT	CONTR		R-Y_A
ADV	Y-G	PR-G	PB-G	WB
	Y-OS	PR-OS	PB-OS	
	H-POS	V-POS	CW-I	
OTHER	DDP	JPEG		
EFP	AREA	IN ▶ EX	EX ▶ IN	

Service mode menu

NOTE:

Some adjustments are available only in some modes (480i, 480p, 1080i); it is needed to apply the format; A 1080i, 480p, 480i pattern can be obtained from Panasonic's TU-DST51 set-top box DTV decoder.

14.2. Exiting the service mode:

This TV goes out from service mode when it is turned OFF.

Resetting

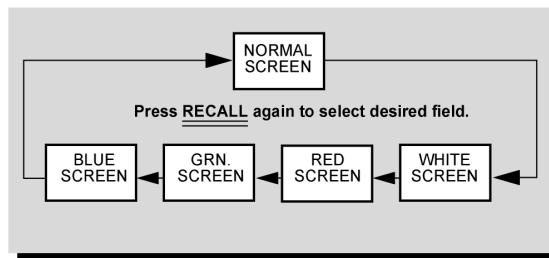
Press VOLUME (-) on TV and OK on the remote simultaneously for at least 3 seconds. The receiver momentarily shuts off; then comes back on tuned to channel 3 with a preset level of sound. Any programmed channels, channels caption data and some other user defined settings will be erased when exited receiver is reset.

IMPORTANT NOTE

Always check that TV exits the service mode.

To check colors:

When in service mode (red "CHK" displayed) press RECALL on the remote control to enter the purity field check mode.



Color check

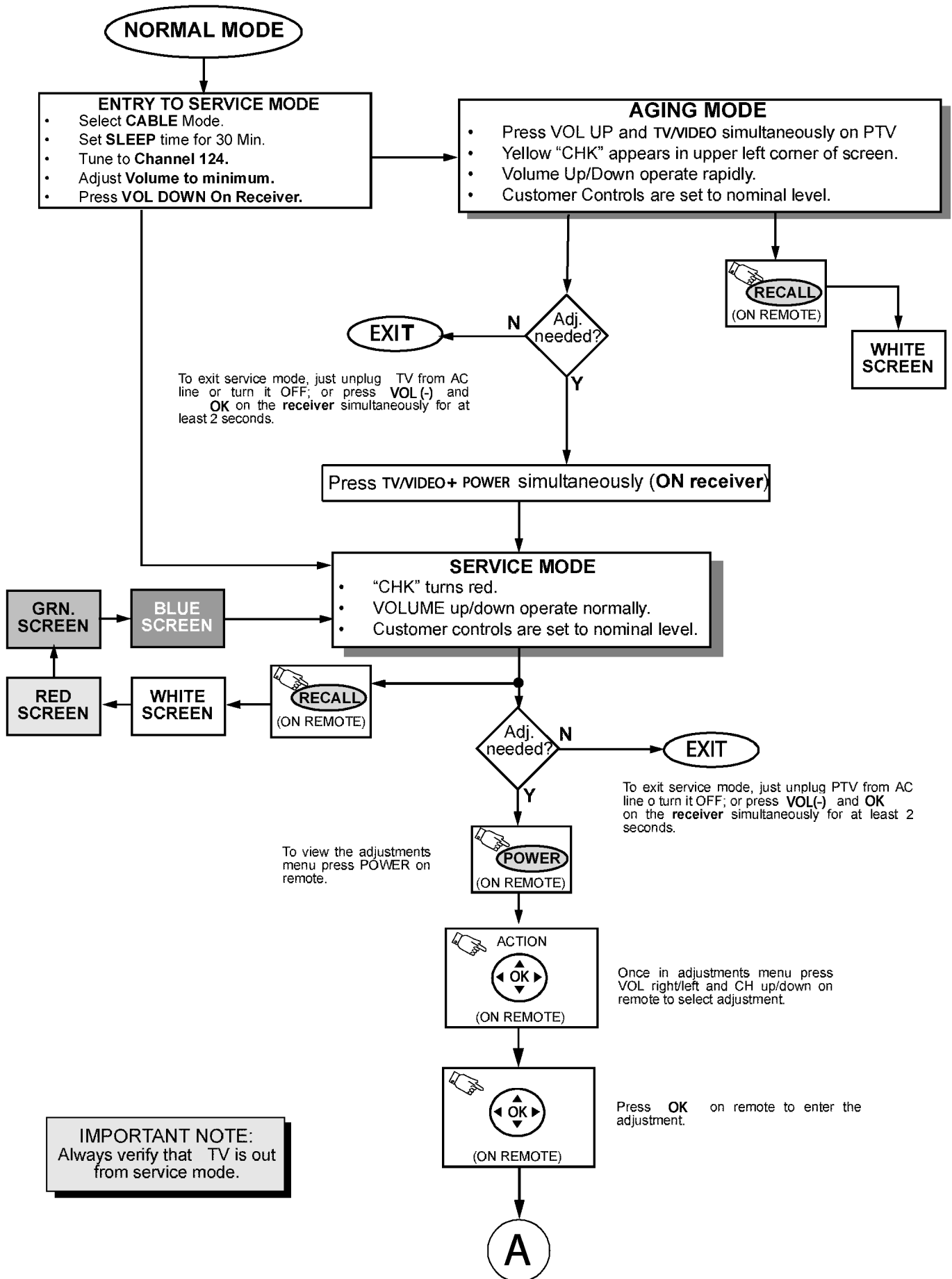
14.3. Service adjustment default values for items

REGISTER	DESCRIPTION	FORMAT		
		480p	4:3, FULL, JUST, SPLIT	ZOOM
MTSIN	INPUT LEVEL		1F	N/A
SEPAL	LOW-LEVEL SEPARATION		06	N/A
SEPAH	HIGH-LEVEL SEPARATION		20	N/A
CLOCK	CLOCK		128	N/A
COLOR	COLOR		20	N/A
B-Y_G	MAGENTA TINT ADJ		3D	N/A
TINT	TINT		80	N/A
R-Y_A	YELLOW TINT ADJ		80	N/A
BRIGH	BRIGHT		08 00	N/A
CONT	CONTRAST		01 EE	N/A
Y-G	Y-G	00 BB		N/A
PR-G	PR-G	00 B0		N/A
PB-G	PB-G	00 B0		N/A
Y-OS	Y-OS	00 29		N/A
PR-OS	PR-OS	02 00		N/A
PB-OS	PB-OS	02 00		N/A
WB	WHITE BALANCE		00	
H-POS	HORIZONTAL POSITION		1F	
V-POS	VERTICAL POSITION		1F	
CW-I	COLOR WHEEL INDEX		00 EE	
DDP	SELECT THIS DAC, THEN PRESS "RECALL" TO DISPLAY AND CHANGE INTERNAL PATTERNS			

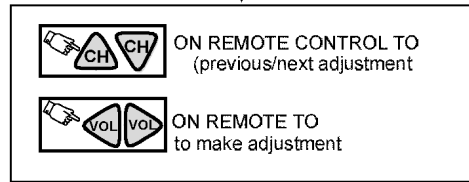
NOTE:

The above table shows the default values for the service items, this values can change depending on the serviced TV.

14.4. Instructional flow for service mode



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Press POWER or **OK** on remote to exit the adjustment.



IMPORTANT NOTE:
Always verify that TV is out from service mode.

To exit service mode, just unplug TV from AC line or turn it OFF; or press **VOL(-)** and **OK** on the receiver simultaneously for at least 2 seconds.