

ADJUSTMENT INSTRUCTIONS

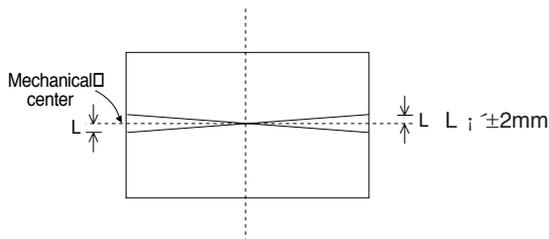
● Raster Slope/Focus 1th Adjustment

1. Preliminary steps

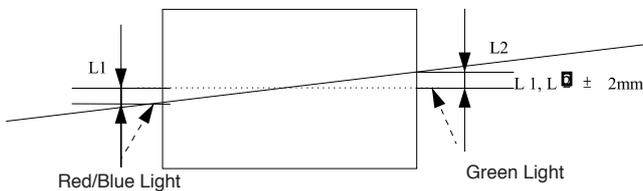
- 1) Receive the EU 05 CH signal.
- 2) Adjustment Lens focus and Electric provisionally.
- 3) Set the convergence on RESET.
 - a. Adjustment mode: Press the SVC key and then press the \equiv M key.
 - b. Data reset : Press 5 KEY and then OK key.
 - c. Adjustment mode cancellation : Press the \equiv M key.

2. Adjustment

- 1) Display only the Green raster using lens covers to block Red and Blue.
- 2) Rotate the Green DY and tilt the screen like the figure below.



- 3) Make 2color raster with Red or Blue and Green.
- 4) Superimpose the slope of red and blue raster onto that of the Green.



Note)

When adjusting raster slope, loosen the DY and retighten it after adjusting. Never rotate and adjust the fixed DY without loosening it.

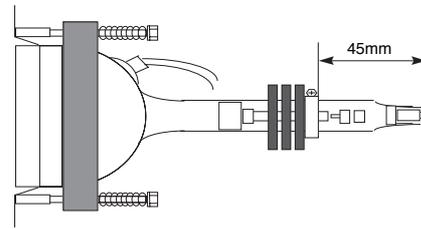
● Beam Alignment Adjustment

1. Test Equipment

Signal Generator that can produce DOT pattern (401NPS or 5518/5418)

2. Preparation

- 1) Heat run over 60 minutes.
- 2) Pre-adjust Raster slope, Raster position & Lens focus & centering Magnet.
- 3) Verify that the Magnet is located 45mm from the end of PRT.
- 4) Receive DOT pattern.

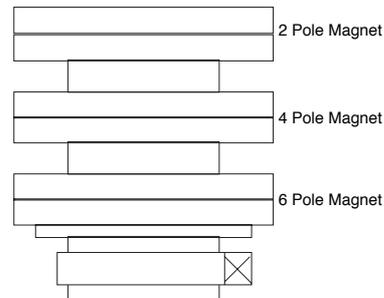


3. 2-Pole Magnet Adjustment

- 1) Display only the Green raster using lens covers to block Red and Blue.
- 2) Check the center position of DOT pattern on the center of the screen after turning Green focus volume left.
- 3) Turning green focus volume right and adjust 2-Pole magnet so the position to coincide that of item 2).
- 4) Adjust not to shift the screen by turning green focus volume left & right.
- 5) If the screen shifts, readjust 2)~4).
- 6) Do the same method in Red and Blue. Here, be careful not to be stained.

4. Beam Shape (4 & 6-Pole Magnet) Adjustment

- 1) Do after adjustment of the 2-Pole magnet .
- 2) Display only the Green raster using lens covers to block Red and Blue and turn the focus volume right.
- 3) Using the 4 & 6-pole magnets make adjustments so the DOT in the center is a perfect circle.
- 4) Follow the same method in Red & Blue.
- 5) Fasten the Magnet after adjustment.
- 6) Adjust focus volume accurately and then adjust raster center.



● Centering Magnet Adjustment

1. Preliminary steps

- 1) Tune the TV set to receive a EU 05 CH.
- 2) Press the keys of Remote Controller for adjustment to reset the convergence.
 - a. Adjustment mode: Press the SVC key and then press the \equiv M key.
 - b. Data reset : Press 5 KEY and then OK key.
 - c. Adjustment mode cancellation : Press the \equiv M key.

2. Adjustment

- 1) Operate adjustment about Red,Green,Blue centering magnet.
- 2) SGS-THOMSON Convergence assy
Adjust until the center of blue signal is shifted up to 40mm left from that of green signal and center of red signal is shifted up to 40mm right from that of green signal with turning the centering magnet.
- 3) After adjustment, re-adjust convergence data and exit the adjusting mode.
 - a.Adjustment mode:Press the SVC key and then press the \equiv M key.
 - b.Data reset : Press 0 KEY and then OK key.
 - c.Adjustment mode cancellation : Press the \equiv M key.

● High Voltage Regulation Adjustment

1. Test Equipment

Digital Multi-Meter(DMM)

2. Preparation for Adjustment.

Select picture mode to 'DYNAMIC' in no signal input.

3. Adjustment

- 1) Connect "+" terminal(Red) of DMM to the P416A of the Deflection PCB, [+] and the "-" terminal(Black) to the P416B,[-].
- 2) Adjust VR401 so that the voltage of multimeter to be below voltage.
Model except for German model: $21.6 \pm 0.1V$.
German Model: $20.5 \pm 0.1V$.

● CUT-OFF Adjustment

1.Preliminary steps

- 1) Adjustment must be operated in a dark room(simple dark room).
- 2) Turn the screen volume to the left so that the screen voltage to be MIN. (Entering the horizontal mode when the screen voltage is high may occur the horizontal burning of PRT.)

2.Adjustment.

- 1) Press the "SVC"key and then press the \equiv key. on the remote controller for adjustment to display horizontal line. (Even though it enter into the Adjustment mode,the horizontal line might not be seen according to the position of Screen Volume.)
- 2) Adjust Screen Volume (R/G/B) in Focus Pack until brightness of red/blue/green horizontal line is hardly seen. (At the moment,brightness of red,blue or green horizontal line should be equal to one another.)
- 3) Exit the adjustment mode by pressing the \equiv key.

● Deflection Adjustment

1. Preliminary steps

- 1) NTSC mode should be adjusted after adjusting PAL mode.
- 2) NTSC adjustment should be done in STANDARD mode of picture after receiving 13CH signal or MULTI 48CH signal,and PAL adjustment should be done in STANDARD mode of picture after receiving EU05 CH.

- 3) Reset the data in convergence adjustment mode,quit the mode.
Adjustment Mode : Press the "SVC" key and then \equiv M key.
Data reset : Press the "5" key and then OK key.
Adjustment mode cancellation :Press the \equiv M key.
- 4) Display only the Green raster using lens covers to block Red and Blue.

2. PAL Mode Deflection adjustment

Do not adjust VS ,HS ,VL ,A-ANG ,A-BOW ,SC ,V-ASP in PAL MODE. At SVC mode,press the YELLOW key get into the deflection adjustment mode.

1) VS (Vertical Shift)

Adjust until the geometric vertical center line is accord with the vertical center line of screen JIG in EU 05 CH by pressing the VOLUME $\blacktriangleleft, \blacktriangleright$ key.

2) VA (Vertical Amplitude)

Adjust until fifth vertical line from upper and lower center of the screen is accord with the last point of the frame.

3) HS (Horizontal Shift)

Adjust until the geometric horizontal center line is accord with the horizontal center line of screen JIG.

4) EW (East-west Width)

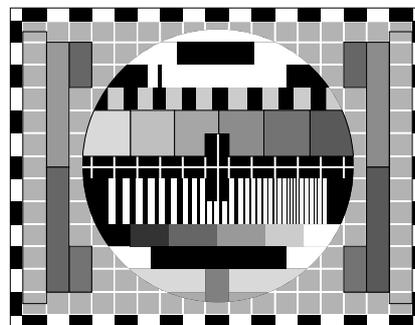
Adjust until the outermost left and right vertical line of the screen is accord with the last point of the frame.

5) EP (East-west Parabola)

Adjust so that middle portion of the outermost left and right vertical line looks like parallel with vertical lines of the PRT.

6) ET(East-west Trapezium)

Adjust to make the width of top horizontal line same with it of the bottom horizontal line.



Fifth Vertical Line ↑

7) A-ANG(AFC Angle)

Vertical slope adjustment

8) A-BOW(AFC BOW)

Vertical get bending adjustment

9) U-C(Upper Corner Pincushion)

Upper part pin cushion adjustment

10) L-C(Lower Corner Pincushion)

Lower part pin cushion adjustment

11) U-VL(Upper Vertical Linearity)

Adjust vertical linearity of upper screen

12) L-VL(Lower Vertical Linearity)

Adjust vertical linearity of lower screen

13) VL (Vertical Linearity)

Adjust the top/bottom size of circle to be same in the EU 05CH.

14) SC (Vertical "S" Correction)

Adjust so that all distance between each horizontal lines are to be the same.

15) V-ASP(Vertical Aspect Ratio)

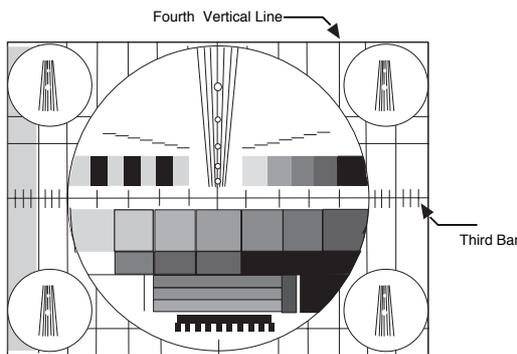
Adjust the vertical aspect ratio.

16) Store the adjusted data in EEPROM by pressing the "OK" key before exiting adjustment mode.

17) Exit the Adjustment mode by pressing the 'TV/AV' key.

3. NTSC Mode Deflection Adjustment

- 1) Adjust vertical size (VA Adjustment) until fifth vertical bar from upper and lower center screen is accord with the edge of the frame.
- 2) Adjust horizontal size (EW Adjustment) until third bar to indicate horizontal size of circle is accord with the edge of the frame.
- 3) Do other adjustments the same as in PAL mode.



● Lens Focus & Electronic Focus Adjustment

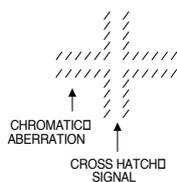
1. Preliminary steps

- 1) Electronic focus, Raster slope & Raster position must be pre-adjusted.
- 2) Heat-run over 60 minutes.
- 3) Receive Crosshatch pattern. (PAL:EU07(PR 8) or NTSC:09CH(PR 13))

* Note: Loosen the butterfly nut in the lens tub slightly, being careful that it is not loosened to the point that the lens can move out of focus.

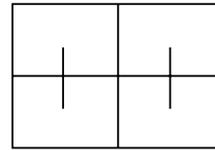
- 4) Adjustment must be done in a dark room (simple dark room) Be careful not to touch the lens during adjustment.
- 5) Make any one color raster using lens covers.
- 6) Rotating lens right from the front side chromatic haze occurs beside Cross-hatch line changes as follows;

Lens	Change of chromatic aberration
Red	Orange ⇄ Scarlet
Green	Blue ⇄ Red
Blue	Purple ⇄ Green



2. G-lens Adjustment

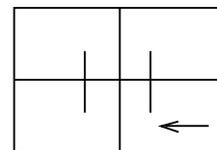
- 1) Rotate the lens until the chromatic haze changes from blue to red.
- 2) Viewing the all screen, in no case of the chromatic aberration appeared slimly within 3.5 cross-Hatch of the picture center. At this time, in case that the red chromatic aberrations bright line isn't equal, adjust Green lens so that the red chromatic aberration is appeared more than previous time.



- 3) Switching the signal to 13CH and operate adjustment minutely.
- 4) Adjust Green focus control volume of focus pack so that the external big circle's part appeared clearly.
- 5) Adjust accurately by repeat the upper control.
- 6) Especially, noting to the Green light because it influenced on picture's function.

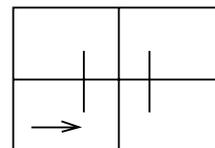
3. R-lens adjustment

- 1) Rotate the RED lens until the chromatic haze changes from orange to scarlet.
- 2) Adjust to appear Red chromatic aberration in right 3.5 cross-hatch section at center screen. Adjust the chromatic aberration so that it located center correctly.
- 3) Switching the signal to 13CH and adjust it as same method of Green lens.
- 4) Adjust as same method of Green lens with Red focus control volume of focus pack.



4. B- lens adjustment

- 1) Rotate the lens until the chromatic aberration of 3.5 Cross-Hatch left from center point changes from Violet to Green. Adjust the chromatic aberration to be center point between violet and green.



- 2) Adjust as same as method of Green lens with Red focus control volume of focus pack.

5. Focus checking

After adjustment Red, Green & Blue lens, remove lens cover and receive Cross-Hatch pattern and check the overall focus. If needed, repeat above.

● Convergence Adjustment

1. Preliminary steps

This adjustment should be performed after warming up 60 minutes.

- 1) Adjust after Horizontal/Vertical Raster position, Beam alignment magnet, and focus adjustments have been completed.
- 2) Do it always with crosshatch pattern.
- 3) Adjust for both PAL and NTSC system.
- 4) Use the JIG screen with the cross hatch pattern for Adjustment.

2. Convergence Key

- 1) Convergence Mode : SVC,≡M
- 2) Cursor shift : ◀, ▶, ▲, ▼
- 3) Cursor Movement/Adjustment Selection : OK
- 4) Cursor Color Selection : TV/AV
- 5) Adjustment mode out : ≡M

*Note: When cursor flashes, set is in adjustment mode When R, G or B selected color flashes, the set is in cursor movement mode.

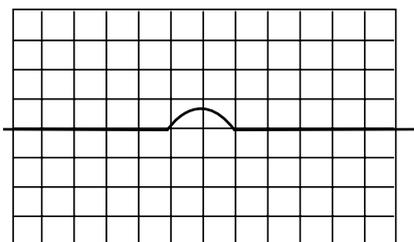
● PAL Mode Adjustment

1. Preliminary steps

- 1) Receive the EU 05CH signal.
- 2) Press the buttons SVC & ≡M of Remote Controller for adjustment to get into the convergence adjustment mode.

2. Horizontal/Vertical phase adjustment

- 1) Press the buttons 9 & 5 to get into the phase adjustment mode.
- 2) Horizontal Phase Adjustment.
Move the convex part to the middle of TV screen.



- 3) Press the OK button to escape from the adjustment.

3. Pattern position adjustment

- 1) Change into pattern shift mode.
(Press numeric buttons "9" & "4")
- 2) Make sure to overlap pattern and image.
(Use MUTE button)
- 3) Accord the center of image and pattern.
(Use ◀, ▶, ▲, ▼ buttons)
- 4) Quit pattern shift mode. (Press "OK" button)
- 5) Save adjusted phase/pattern position adjustment mode. (Press "9", "2" & "OK" buttons)

4. Auto convergence

*Convergence is based on the auto adjustment using PC and Camera while applying the THOMSON convergence Assy and if need, adjust manually like below method.

5. Green convergence adjustment

- 1) Show the OSD on screen by pressing 2 button, then change the OSD to green(G) adjustment mode with pressing TV/AV button.
- 2) Close the cover of red PRT and blue PRT so that green display on screen only.
- 3) Adjust to coincide green pattern with screen JIG pattern.
(Use ◀, ▶, ▲, ▼ buttons)
At this time move cursor from center to around and adjust convergence.

6. Red convergence adjustment

- 1) Show the OSD on screen by pressing 2 button, then change the OSD to red(R) adjustment mode with pressing TV/AV button.
- 2) If the need arises, close the cover of the blue lens.
- 3) Coincide the red screen with the green screen in same way with that of green convergence adjustment.

7. Blue convergence adjustment

- 1) Show the OSD on screen by pressing 2 button, then change the OSD to blue(B) adjustment mode with pressing TV/AV button.
- 2) Coincide the blue screen with the green screen in same way with that of red convergence adjustment.

8. Saving adjusted data

- 1) To save the data after adjustment, Press "9", "1" & "OK" button.
- 2) Quit convergence adjustment mode. ("≡M" button)

9. NTSC mode adjustment

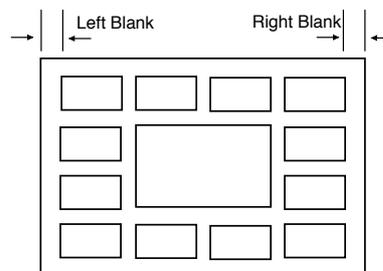
- 1) Receive the 13CH or Multi 48 CH signal.
- 2) Adjust as same method of PAL mode.

10. Auto-Convergence measuring

- 1) Operate the auto-convergence measuring separately in PAL, NTSC mode.
- 2) Operate in the condition of 'Zero magnetometer' in room after correcting convergence manually.
- 3) How to measuring
Press the 'SVC ->≡M ->MENU->3 key to operate Auto convergence measuring.

11. PIP-Position adjustment

- 1) Press the WD2 9/4PIP button so that the screen to be Multi-picture 12SCAN after receiving the PAL signal.
- 2) Check the R/L space is to 20±5mm.



- 3) If not, press SVC key on R/C to enter adjustment mode and then press the YELLOW key to move into 'SERVICE ADJUSTMENT 5'
- 4) Adjust M-HOR and M-VER so that left/right space to be symmetry.
- 5) Press the OK key to store the data.

● White Balance Adjustment

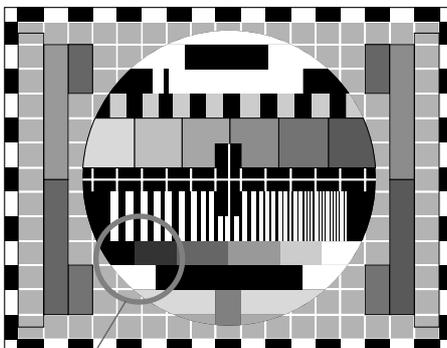
1. Test Equipment

Brightness meter(CA110)

2. Adjustment

- 1) This adjustment must be operated in a dark room or equivalent.
- 2) Adjust after Cut-Off and Focus adjustment.
- 3) The brightness meter must be located in 20 ± 5 cm distance from the center of the screen.
- 4) Receive WINDOW signal.
 - * High Light : 200±3 cd/m²
 - * Low Light : 10±3 cd/m²
- 5) Set BRIGHT to H/Light adjustment mode in 4) and enter SVC mode by pressing the "SVC" button. Adjust RG (R Gain) and BG (B Gain) until color coordinate becomes X=0.280 and Y=0.300 (Deviation : ±0.01).
- 6) Set BRIGHT to L/Light adjustment mode and adjust CR (R Cut Off) and CB (B Cut Off) until color coordinate becomes X=0.282 and Y=0.286 (Deviation : ±0.01).
- 7) Repeat adjusting until the color coordinate of H/Light and L/Light is satisfied.
- 8) Save the data after adjustment.
(Press "OK" button)
- 9) Quit adjustment mode. ("TV/AV" button)

● Sub-Bright Adjustment



Fifth Vertical Line
100% and 80% GRAY PATTERN

- 1) Tune the TV set to receive a EU 05 CH.
- 2) Enter SVC mode by pressing the "SVC" button. Adjust S-BRI data until 100% and 80% GRAY PATTERN is classified.
(Use ◀, ▶, ▲, ▼, OK buttons)

● DVCO Adjustment

- 1) Tune the TV set to receive a EU 05 CH.
- 2) Enter the adjustment mode by pressing SVC button of Remote Controller for adjustment, then select DVCO menu.
Operate auto adjustment with VOL ▶ button.
If DVCO data is changed, auto adjustment has finished.
- 3) After finishing DVCO adjustment, save the data by pressing OK button.

● Auto-Convergence Check

- 1) Check the Auto-Convergence in PAL/NTSC mode separating.
- 2) Press the SVC key on R/C for adjustment and press the  to check whether Auto-Convergence works normally in each mode.
- 3) If not, check the Convergence condition or Measuring condition and SENSOR condition.
- 4) The shipment must be done after restoring the final auto convergence data value.

* Restore a Convergence data

SVC -> ≡M -> TEXT

● Check the Option Adjustment

- 1) Check the OPTION1~4 data of attach 6 is well recorded.
- 2) The option value of each suffix is started on JOB EXP of 3141VMN chassis Assy.

● Convergence Adjustment Mode

- SVC -> ≡M -> MENU

* This Mode is for engineering. So, don't change before permission from Design Department.

0.AC POSITION READ : Distance data(After auto convergence measuring)

1.Save to 50Hz/60Hz : Save (convergence adjustment data)

It's same 9,1,OK.

2.Save Control data : Save (A phase adjustment data)

It's same 9,2,OK.

3.AC Position Meas. : Execute(auto convergence measuring)

4.Pattern : Adjust location of convergence pattern.

It's same 9,4,OK.

5.Phase : Adjust a phase of convergence pattern.

It's same 9,5,OK.

6.GRID Border

Item	Description	(PAL)	(NTSC)
HGD	Horizontal Grid Distance	27	27
HRD	Horizontal Retrace Distance	55	55
VGD	Vertical Grid Adjustment	22	38
BPH	Border Position Horizontal	20	18
BPV	Border Position Vertical	14	26

7.ADJUST: Set the Dynamic focus data&auto-convergence data

Item	Description	(PAL/NT)
FV1	Focus parabola top value	44
FV2	Focus parabola middle value	19
FV3	Focus parabola bottom value	41
VFP	Focus parabola position	21
FSB	Start of the retrace value	40
FVR	Focus value during frame retrace	45
STA	Force the video pattern fast blanking	110
ACO	Auto convergence offset	60
OPT	EEPROM/MICOM	MICOM
INIT	Initialization	NO

8.OSD POSITION

9.AC PATTERN ADJ :Assign location for pattern start

<PAL mode>

<NTSC mode>

H,V	H,V	H,V
17,16	4,7	8,17
17,15	3,7	10,15
18,17	3,6	11,14
14,17		11,16
14,17		13,17
15,16		13,17
18,9	6,18	9,5
18,8	5,20	10,7
19,6	4,18	10,9

H,V	H,V	H,V
14,30	5,17	10,33
14,32	3,15	12,31
15,33	3,15	13,28
11,31		14,27
11,29		15,29
12,29		15,30
15,11	6,28	12,5
15,9	5,28	13,6
16,10	4,28	13,10

* 39" 16:9 WIDE MODEL

<PAL mode>

<NTSC mode>

H,V	H,V	H,V
12,12	4,5	12,15
12,12	3,2	15,13
12,13	2,3	15,13
9,19		20,18
8,19		20,17
9,19		20,19
14,11	3,20	16,7
14,11	2,20	16,9
14,11	1,20	16,11

H,V	H,V	H,V
10,26	4,12	15,27
10,27	3,9	17,27
9,27	1,9	17,25
8,33		20,31
8,33		20,31
8,33		20,31
9,15	3,28	17,10
9,15	2,30	19,13
9,15	1,30	19,15

● SVC Adjustment mode & Initial data

1. White Balance adjustment data (IC:CXA2100)

Menu	Description	Range	Default
RD	Red Drive		12
GD	Green Drive		1F
BD	Blue Drive		19
RC	Red Cut-off		0C
GC	Green Cut-off		3F
BC	Blue Cut-off		19
S-BRI	Sub BRIGHT		10
DVCO	Digital VCO		

2. Deflection adjustment data (IC:CXA2100)

Menu	Description	Range	Default	
			PAL	NTSC
VS	Vertical Shift		11	11
VA	Vertical Amp		0E	0B
HS	Horizontal Shift		1F	30
EW	East-West Width		23	23
EP	East-West Parabola		1A	1C
ET	East-West Trapezium		4	4
U-C	UP Corner Pincushion		10	11
L-C	LO Corner Pincushion		10	11
U-VL	UP Vertical Lineality		D	B
L-VL	LO Vertical Lineality		9	7
VL	Vertical Lineality		6	6
A-ANG	AFC Angle		7	7
A-BOW	AFC Bow		7	7
SC	Vertical S-Correction		3	3
V-ASP	Aspect ratio control		1F	1F

3. Picture adjustment data (IC:CXA2100)

Menu	Description	Range	Default
D-COL	Dynamic Color ON/OFF		1
COLAX	Color matrix		2
DCOL	Dynamic Color Temperate		1
LIMLE	RGB Amplitude Limiter Level		1
CTILE	CTI Level		1
GAMMA	GAMMA correction		2
LTILE	LTI Level		1
BLKBO	RGB Bottom Limiter Level		0
ABLTH	ABL threshold		3
ABLMO	ABL Mode		3
VM-LE	VM Level		2
PREOV	Pre/Over-Shoot Control		3
DPIC	Auto Pedestal level		1

Menu	Description	Range	Default
DC-TR	DC transmission control		3
LRGB2	RGB2 output level control		A
DL-PA	DElay Line switching		0
SHPF0	Sharpness f0		1
CB-F1	INput1 CB signal DC Offset		7
CR-F1	INput1 CR signal DC Offset		4
CB-F2	INput2 CB signal DC Offset		7
CR-F2	INput2 CR signal DC Offset		4
VCOMP	A-SAW output gain control		0
EW-DC	EW output DC level		1
AKBT2	AKB time shift		0
HCOMP	EW output DC control		0
VBLKW	VBLK width control		0
LE-BL	Left HBLK width control		37
RI-BL	Right HBLK width control		1B
S-CON	Sub contrast		A
P-ABL	PEAK ABL		C

4. Sound adjustment data (IC:MSP3411)

Menu	Description	Range	Default
FM	FM Prescaler		1B
NP	NICAM Prescaler		73
SP	SCART Prescaler		18
S1 VOL	SCART 1 Volume		50
S2 VOL	SCART 2 Volume		50
MDB-ST	MDB Effect Bass Strength		24
MDB-LIM	MDB Amplitude Limit		FD
MDB-HMC	MDB Harmonic Content		64
MDB-LP	MDB Low Pass		09
MDB-HP	MDB High Pass		06

5. Picture adjustment data (IC:SDA9410)

Menu	Description	Range	Default
VDELM	Vsync input delay		13
NRVY	Temporal Noise Reduction of Y		0E
NRC	Temporal Noise Reduction of C		0A
NRKY			00
NRKC			00
ODELM	Output Processing delay master		AA
VDELS	Vsync input delay(sub)		13
FSEL	Filter Select		3
RF AGC	RF AGC Level		A2
M-HOR	Horizontal PIP Position		7
M-VER	Vertical PIP Position		7

6.OPTION Data Adjustment

	Range	Description	Default
option1	200 PRO	1: 200 Program(CHINA Only)	
		0: 100 Program	
	TSEAR	1: With TURBO Search	
		0: Without TURBO Search	
	I/II SV	1: Save Dual Sound Condition	
		0: Not Save Dual Sound	
	TOP	1: TOP + FLOF TEXT	
		0: FLOF TEXT	
	39W	1: 39W	
		0: 44/49/56W	
	A2 ST	1: With FM Stereo	
		0: Without FM Stereo	
	SYS	0: BG//DK(PE-)	
		1: BG/L(PL-)	
2: BG//DK/M(PT-)			
3: RESERVED			
option2	ACMS	1: With Channel Name Display (All Countries except Australia)	
		0: Without Channel Name Display (Australia)	
	VOL	1: Rushed Sound Curve (Middle East ASIA,ASIA)	
		0: Standard Sound Curve (Other countries)	
	AV4	1: With AV4 Input	
		0: Without AV4 Input	
	EU	1: PE/PL Model	
		0: PT Model	
	DVD i	1: With COMPONENT1 Input	
		0: Without COMPONENT1 Input	
	DVD p	1: With COMPONENT2 Input	
		0: Without COMPONENT2 Input	
VGA	1: With VGA Input		
	0: Without VGA Input		
option3	C SPK	1: With CENTER SPK	
		0: Without CENTER SPK	
	VFD	1: Digital Index button	
		0: SOUND MUTE button	
	C MUTE	1: RF Normal Sound Modulation(Others)	
		0: High Deviation Modulation(CHINA)	
	DOLBY	1: With DOLBY Pro LOGic	
		0: Without DOLBY Pro LOGic	
	V-DOL	1: With DOLBY Virtual Surround	
		0: Without DOLBY Virtual Surround	

	Range	Description	Default
option3	TEXT	1: With Teletext	
		0: Without Teletext(CHINA)	
	SCART	1: RF 54% Modulation INput	
		0: RF 100% Modulation INput	
	CH + AU	1: China+AUST.Channel Table	
		0: Other countries Channel table	

	State	Language	Function	Default
option4	LANG	0:ENG Only	English	
		1:EU 5EA	English/German/French/Italy/Spanish	
		2:EU ETC	Pol./Hungary/Czecho/Russia/Eng	
		3:PARSI	English/Parsi	
		4:ARAB URDU	English/French/Arab+Urdu	
		5:English+Hindi	English/Hindi	
		6:English+I+M+V	English/Indonesian/Malaysian/Vietnamese	
		7:English+THAI	English/Thai	
	8:English+China	English/China		
	T-LAN	0:West Europe	English/French/Swedish/Czech/German/Spanish/Italian	
		1:East Europe	Polish/French/Swedish/Czech/German/Slovenian/Italian/Rumanian	
		2:Turkey EU	English/French/Swedish/Turkish/German/Spanish/Italian	
		3:EAST EU2	English/Hungarian/Serbian/Czech/German/Polish/Spanish/Italian/ Rumanian	
		4:Cyrillic 1		
		5:Cyrillic 2		
		6:Cyrillic 3	Russia	
		7:Turkey/Greek 1		
		8:Turkey/Greek 2		
		9:Turkey/Greek 3		
		10:Arab/France		
		11:Arab/English		
		12:Arab/Hebrew 1		
		13:Arab/Hebrew 2		
		14:Farsi/English		
		15:Farsi/France		
		16:Farsi all		