

4. Alignment and Adjustments

4-1 Adjustments

4-1-1 General Alignment Instructions

Usually, a color TV needs only slight touch-up adjustment upon installation. Check the basic characteristics such as vertical size, horizontal size, and focus. Observe the picture and check for good black and white details. There must be no objectionable color shading: If color shading is present, demagnetize the receiver. If color shading persists, re-do purity and convergence adjustments.

Note :

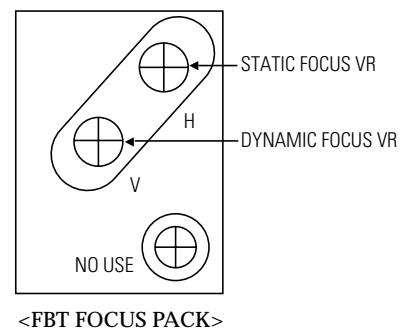
1. This '4. Alignment and Adjustments' applies to KS4A chassis applications.
2. AC Power Supply: 220 V only
3. This service manual has been written on the basis of domestic remote-control model adopting KS4A chassis. Depending on sales location and product specifications, some of specifications herein may be changed.

4-1-2 Focus Adjustment

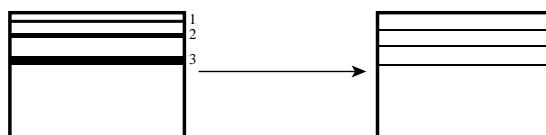
KS4A contains a dynamic focus circuit. When CRT PCB, FBT or CRT is replaced, be sure to adjust in the following sequence:

Dynamic Focus Adjustment

1. Input a crosshatch pattern.
2. Select "Standard" from the menu,
3. Turn the Static Focus VR clockwise to set it to its maximum.
4. Turn the Dynamic Focus VR counterclockwise to set it to its maximum.
5. Turn the Static Focus VR counterclockwise slowly for the clearest center vertical line.



6. Turn the Dynamic Focus VR clockwise slowly for the clearest third line.



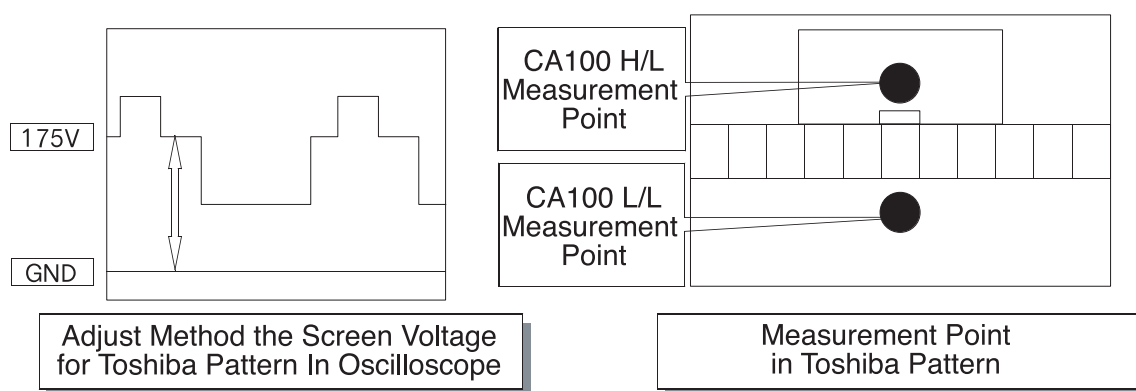
7. Check for the FOCUS of entire screen. If necessary, re-do adjustments 3~6.

4-1-3 Screen Voltage Adjustment

1. Enter the Service Mode by pressing the remote control keys in the following sequence
: Power Off → Mute → 1 → 8 → 2 Power On
2. Initialize all set data.
3. Input a Toshiba pattern.
4. Use an oscilloscope to identify RK, BK, GK. And then adjust FBT Screen VR so that the voltage of pedestal level doesn't exceed 175V.
If a Toshiba pattern is not available, cancel the blue screen and input "No Signal" to AV IN so the voltage of pedestal level doesn't exceed 188V.
If an oscilloscope is not available, use a DC multi-meter in No Signal (black screen) to adjust RK, BK, GK so that the highest voltage becomes 175Vp-p.

4-1-4 White Balance Adjustment

1. Warm up the TV set for at least 30 minutes.
2. Enter the Service Mode by pressing the remote control keys in the following sequence: Power Off -> Mute → 1 → 8 → 2 → Power On
3. Initialize all set data.
4. Input a Toshiba pattern.
5. Using a probe (CA100), do the White Balance adjustments.
 - a) Adjust Low-Light.
 - Adjust Sub Brightness to set Y.
 - Adjust B Cutoff to set y.
 - Adjust R Cutoff to set x.
 - b) Adjust High-Light.
 - Adjust Sub Contrast to set Y.
 - Adjust B Drive to set y.
 - Adjust R Drive to set x.
 - c) Check the value of Low-Light. If necessary, readjust Low-Light.
 - d) Check the value of High-Light. If necessary, readjust High-Light.15



4-1-5 When adjusting Screen Voltage and White Balance

1. Screen Voltage and White Balance are related each other. Make sure both adjustments are correct.
2. Adjust Screen Voltage before White Balance Adjustments. Make sure Screen Voltage is correct.
3. If White Balance has been readjusted, re-check Screen Voltage.
4. After adjustments are complete, check the following.
 - If spots appear on the screen after pressing the Power On/Off key, readjust Screen Voltage.
 - If flyback lines appear on the screen, readjust Screen Voltage.

4-2 MICOM PORT

PIN	FUNCTION	FIRST STATE	ASSIGNMENT												
1	W-POR	HIGH	- RESET Control jack during E2PROM latch UP (Function: Low)SERIAL H												
2	ROM SDA	SERIAL H	- E2PROM only SDA LINE												
3	ROM SCL	SERIAL H	- E2PROM only SCL LINE												
4	BUS-STOP	HIGH	- Automation and after-sales service related BUS STOP (STOP: LOW)												
5	MAIN SDA	SERIAL H	- CXA2150Q / CXA2151Q /VSP940X / BA7657F / MSP34XX / TUNER Control jack												
6	MAIN SCL	SERIAL H	- CXA2150Q / CXA2151Q /VSP940X / BA7657F / MSP34XX / TUNER Control jack												
7	S-RESET	HIGH	- Reset when MSP34XX IC (SOUND PROCESS IC) has an error (Active: LOW)												
8	V-RESET	HIGH	- Reset when VSP940X IC (1-chip IC) has an error												
9	VDD 2.5V	HIGH													
10	GND		- Analog GND												
11	VDD 3.3V	HIGH													
12	CVBS IN	IV p-p	- TTX and USA Caption Input source Line (1V p-p)												
13	VDD 2.5V	HIGH													
14	GND														
15	AFT		- Main AFT Control jack (0 - 3.3V)												
16	SC1-ID		<table><tr><th rowspan="2"></th><th rowspan="2">TV MODE</th><th colspan="2">AV MODE</th></tr><tr><th>16 : 9 MODE</th><th>4 : 3 MODE</th></tr><tr><td>RANGE</td><td>0 ~ 2V</td><td>4.5 ~ 7V</td><td>9.5 ~ 12V</td></tr></table>		TV MODE	AV MODE		16 : 9 MODE	4 : 3 MODE	RANGE	0 ~ 2V	4.5 ~ 7V	9.5 ~ 12V		
	TV MODE	AV MODE													
		16 : 9 MODE	4 : 3 MODE												
RANGE	0 ~ 2V	4.5 ~ 7V	9.5 ~ 12V												
17	SC-2-ID														
18	KEY-1	HIGH	<table><tr><th></th><th>MENU</th><th>VOL-</th><th>VOL+</th><th>CH-</th><th>CH+</th></tr><tr><td>PHILIPS</td><td>0 ~ 0.1V</td><td>0.1 ~ 0.7V</td><td>0.7V ~ 13V</td><td>1.3V ~ 1.9V</td><td>0.9 ~ 2.4V</td></tr></table>		MENU	VOL-	VOL+	CH-	CH+	PHILIPS	0 ~ 0.1V	0.1 ~ 0.7V	0.7V ~ 13V	1.3V ~ 1.9V	0.9 ~ 2.4V
	MENU	VOL-	VOL+	CH-	CH+										
PHILIPS	0 ~ 0.1V	0.1 ~ 0.7V	0.7V ~ 13V	1.3V ~ 1.9V	0.9 ~ 2.4V										
19	H-SYNC	POSITIVE	- MICOM "H-SYNC" Input, POSITIVE Input (3.3 V p-p)												
20	V-SYNC	POSITIVE	- MICOM "V-SYNC" Input, POSITIVE Input (3.3 V p-p)												
21	KEY-3	HIGH	- Power ON/OFF Control jack												
22	KEY-2	HIGH	- TV/VIDEO switching control jack												
23	X-RAY	HIGH	- Function: Low												
24	IR-IN		- Remote Control Input Jack												
25	STD-LED	HIGH	- STANDBY: Hight, OFF: LOW												
26	TIM-LED	LOW	- TIME ON: H TIME OFF: L												
27	RELAY		- DEGAUSSING COIL CONTROL: Based on standard specifications												
28	SW1	HIGH	- H: IN1, L: IN2 (BA7657F) PIN (#16) Control jack												
29	GND														
30	VDD 3.3V	HIGH													
31(33)	RESET	LOW	- Reset active : HIGH												
32(34)	X-IN		- Crystal oscillation input jack												
33(35)	X-OUT		- Crystal oscillation output jack												
34(36)	GND														
35(37)	VDD 2.5V	HIGH													
36(38)	OSD-R	1.2V p-p	- OSD R-OUT OUTPUT jack (0.38V p-p) ,half tone: 0.9V p-p												
37(39)	OSD-G	1.2V p-p	- OSD G-OUT OUTPUT jack (0.38V p-p) ,half tone: 0.9V p-p												

PIN	FUNCTION	FIRST STATE	ASSIGNMENT			
37(40)	OSD-B	1.2V p-p	- OSD B-OUT OUTPUT jack (0.38V p-p) ,half tone: 0.9V p-p			
38(41)	CORE	0.9V p-p	- OSD F/B OUTPUT jack (Clamped at SAND PULSE, Half Tone: "LOW")			
39(42)	VDD 2.5V	HIGH				
40(43)	GND					
41(44)	VDD 3.3V	HIGH				
42(45)	PX, Y	HIGH	- V-SYNC INPUT			
43(46)	PX, Y	HIGH	- F/B INPUT JACK			
44(47)	SW3	H	F1	F0	fH	LOW: GNDHIGH : OPEN STATUS Initially, these pins select an input source at LOW state
45(48)	SW2	L	L	M	1.75KHz (480i/480P)	
			M	L	33.75KHz (1080i)	
46(49)	S-MUTE		- System (NTSC/PAL) MUST be separated			
47(50)	POWER		- Active "LOW"			
48(51)	H.P-ID		- 1080I control jack: 1080i (LOW), RF (High)			
49(52)	TILT	HIGH	- Magnetic field control			

4-3 Factory Adjustment Values and White Balance Settings

4-3-1 Factory Adjustment Values

SERVICE

Deflection

480P Offset

1080i Offset

PC Offset

Video Adjust 1

Video Adjust 2

Option (2EH 00H)

Reset

4-3-2 White Balance Settings

W/B Value		SDI CRT	LG CRT	TOSHIBA CRT	SDI CRT	SDI CRT	SDI CRT	SDI CRT	TOSHIBA CRT
	INCH	29" WIDE	32" WIDE	34" FLAT	32" WIDE	34" FLAT	29" FLAT	32" WIDE	34" FLAT
	Model	TXM2796HFX	TXM3096HFX	TXM3296HFX	TXM3096HFX	TXM3296HFX	CT29Z7PGX	CT32Z7PGX	CT34Z7PGX
		TXM2796HFX TXM2798HFX	TXM3097HFX TXM3098HFX	TXM3297HFX TXM3298HFX	TXM3097HFX TXM3098HFX	TXM3297HFX TXM3298HFX			
H		275/265 45FL	275/265 50FL	275/265 40FL	275/265 45FL	275/265 40FL	275/265 45FL	275/265 45FL	275/265 40FL
L		275/265 1.0FL	275/265 1.5FL	275/265 1.0FL	275/265 1.0FL	275/265 1.0FL	275/265 1.0FL	275/265 1.0FL	275/265 1.0FL

4-4 Functions of Each Port in Service Mode



DEFLECTION

 : Fixed Value

ITEM	Model	SDI CRT	LG CRT	TOSHIBA CRT	SDI CRT	SDI CRT	SDI CRT	SDI CRT	TOSHIBA CRT
		INCH	INCH	INCH	INCH	INCH	INCH	INCH	INCH
		29" WIDE	32" WIDE	34" FLAT	32" WIDE	34" FLAT	29" FLAT	32" WIDE	34" FLAT
		TXM2796HFX TXM2796HFX TXM2798HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	CT29Z7PGX	CT32Z7PGX	CT34Z7PGX
V-AMP		45	30	50	30	42	45	30	50
V-SHIFT		26	30	28	30	29	26	30	28
H-EW		46	30	30	30	20	46	30	30
H-SHIFT		27	25	25	30	31	27	30	25
V-LIN		5	6	5	6	10	5	6	5
UP-LIN		6	4	7	4	15	6	4	7
LOW-LIN		6	4	7	4	5	6	4	7
V-SC		3	3	3	3	5	3	3	3
H-PAR		24	32	40	32	45	24	32	40
UP-COR		27	35	40	35	38	27	35	40
LOW-COR		26	35	35	35	41	26	35	35
H-TRA		37	35	45	35	28	37	35	45
BOW		32	30	32	30	31	32	30	32
ANGLE		32	32	32	32	30	32	32	32
V-POSI		32	32	32	32	32	32	32	32
CXA Left BLK		30	30	30	30	30	30	30	30
CXA Right BLK		37	37	37	37	37	37	37	37

**480P OFFSET**


ITEM		SDI CRT	LG CRT	TOSHIBA CRT	SDI CRT	SDI CRT	SDI CRT	SDI CRT	TOSHIBA CRT
	INCH	29" WIDE	32" WIDE	34" FLAT	32" WIDE	34" FLAT	29" FLAT	32" WIDE	34" FLAT
	Model	TXM2796HFX TXM2796HFX TXM2798HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	CT29Z7PGX	CT32Z7PGX	CT34Z7PGX
V-AMP		0	0	2	0	1	0	0	2
V-SHIFT		-2	-1	-1	-1	0	-2	-1	-1
H-EW		7	6	4	6	4	7	6	4
H-SHIFT		8	3	8	3	4	8	3	8
V-LIN		0	0	0	0	0	0	0	0
UP-LIN		0	0	0	0	0	0	0	0
LOW-LIN		0	0	0	0	0	0	0	0
V-SC		0	0	0	0	0	0	0	0
H-PAR		0	2	-2	2	-2	0	2	-2
UP-COR		0	0	0	0	0	0	0	0
LOW-COR		0	0	0	0	0	0	0	0
H-TRA		0	0	0	0	0	0	0	0
BOW		0	0	0	0	0	0	0	0
ANGLE		0	0	0	0	0	0	0	0
V-POSI		0	0	0	0	0	0	0	0
CXA Left BLK		28	28	28	28	28	28	28	28
CXA Right BLK		36	36	36	36	36	36	36	36

**1080i OFFSET**

ITEM		SDI CRT	LG CRT	TOSHIBA CRT	SDI CRT	SDI CRT	SDI CRT	SDI CRT	TOSHIBA CRT
	INCH	29" WIDE	32" WIDE	34" FLAT	32" WIDE	34" FLAT	29" FLAT	32" WIDE	34" FLAT
	Model	TXM2796HFX TXM2796HFX TXM2798HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	CT29Z7PGX	CT32Z7PGX	CT34Z7PGX
V-AMP		-14	-13	-15	-13	-12	-14	-13	-15
V-SHIFT		-5	-4	-4	-4	-3	-5	-4	-4
H-EW		8	0	10	0	9	8	0	10
H-SHIFT		1	-1	-1	-1	-1	1	-1	1
V-LIN		0	0	0	0	0	0	0	0
UP-LIN		0	0	0	0	0	0	0	0
LOW-LIN		0	0	0	0	0	0	0	0
V-SC		0	0	0	0	0	0	0	0
H-PAR		0	-7	-3	-7	7	0	-7	-3
UP-COR		0	-3	0	-3	-1	0	-3	0
LOW-COR		-2	-1	0	-1	1	-2	-1	0
H-TRA		3	-3	-3	-3	-3	3	-3	-3
BOW		4	0	-2	0	1	4	0	-2
ANGLE		2	0	0	0	0	2	0	0
V-POSI		0	0	0	0	0	0	0	0
CXA Left BLK		50	50	50	50	50	50	50	50
CXA Right BLK		27	27	27	27	27	27	27	27

**PC OFFSET**

ITEM		SDI CRT	LG CRT	TOSHIBA CRT	SDI CRT	SDI CRT	SDI CRT	SDI CRT	TOSHIBA CRT
	INCH	29" WIDE	32" WIDE	34" FLAT	32" WIDE	34" FLAT	29" FLAT	32" WIDE	34" FLAT
	Model	TXM2796HFX TXM2796HFX TXM2798HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	CT29Z7PGX	CT32Z7PGX	CT34Z7PGX
V-AMP		*	*	*	*	*	-22	-16	-16
V-SHIFT		*	*	*	*	*	0	0	0
H-EW		*	*	*	*	*	-26	-20	-21
H-SHIFT		*	*	*	*	*	19	18	16
V-LIN		*	*	*	*	*	0	0	0
UP-LIN		*	*	*	*	*	0	0	0
LOW-LIN		*	*	*	*	*	0	0	0
V-SC		*	*	*	*	*	0	0	0
H-PAR		*	*	*	*	*	8	4	7
UP-COR		*	*	*	*	*	2	5	2
LOW-COR		*	*	*	*	*	2	2	2
H-TRA		*	*	*	*	*	0	0	0
BOW		*	*	*	*	*	0	0	0
ANGLE		*	*	*	*	*	0	0	0
V-POSI		*	*	*	*	*	0	0	0
CXA Left BLK		*	*	*	*	*	20	20	20
CXA Right BLK		*	*	*	*	*	10	10	10

**VIDEO ADJUST 1**
 : Fixed Value

ITEM		SDI CRT	LG CRT	TOSHIBA CRT	SDI CRT	SDI CRT	SDI CRT	SDI CRT	TOSHIBA CRT
	INCH	29" WIDE	32" WIDE	34" FLAT	32" WIDE	34" FLAT	29" FLAT	32" WIDE	34" FLAT
	Model	TXM2796HFX TXM2796HFX TXM2798HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	CT29Z7PGX	CT32Z7PGX	CT34Z7PGX
R-Cutoff		32	32	32	32	32	32	32	32
G-Cutoff		32	32	32	32	32	32	32	32
B-Cutoff		32	32	32	32	32	32	32	32
Color on/off		1	1	1	1	1	1	1	1
CR offset		31	31	31	31	31	31	31	31
CB offset		31	31	31	31	31	31	31	31
R-Drive		32	32	32	32	32	32	32	32
G-Drive		32	24	32	32	32	32	32	32
B-Drive		32	32	32	32	32	32	32	32
Sub-Bright		23	25	10	20	10	23	20	10
Sub-Contrast		10	10	10	10	5	10	10	10
Sub-Color		18	18	18	18	18	18	18	18
Sub-Tint		7	7	7	7	7	7	7	7
CTI-Level		1	1	1	1	1	1	1	1
COL AXIS		2	2	2	2	2	2	2	2
LTI-Level		1	1	1	1	1	1	1	1
PC DPIC Level		*	*	*	*	*	0	0	0
PC DC Trans		*	*	*	*	*	0	0	0
PC VM Level		*	*	*	*	*	0	0	0

**VIDEO ADJUST21**

ITEM		SDI CRT	LG CRT	TOSHIBA CRT	SDI CRT	SDI CRT	SDI CRT	SDI CRT	TOSHIBA CRT
	INCH	29" WIDE	32" WIDE	34" FLAT	32" WIDE	34" FLAT	29" FLAT	32" WIDE	34" FLAT
	Model	TXM2796HFX TXM2796HFX TXM2798HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	CT29Z7PGX	CT32Z7PGX	CT34Z7PGX
ABL Mode		3	3	3	3	3	3	3	3
Gamma		1	1	1	2	2	1	1	2
DPIC Level		3	3	3	3	3	3	3	3
DC Trans		3	3	3	3	3	3	3	3
ABL-TH		7	12	7	15	15	7	12	7
VM-Level		2	2	1	2	2	2	2	1
VM-Coring		1	0	0	3	0	1	0	0
VM-f0		2	2	2	2	2	2	2	2
VM-Limit		3	3	0	3	0	3	3	0
VM-Delay		3	3	1	3	1	3	3	1
SHP CD		1	1	1	1	1	1	1	1
SHP f0		0	0	0	0	0	0	0	0
SHP f1&p/o		11	14	4	14	14	11	14	4
AKB Time		16	16	16	16	16	16	16	16
YC Delay		30	30	30	30	30	30	30	30
PIP YC Delay		3	3	3	3	3	3	3	3
Band Pass F		2	2	1	2	2	2	2	1
High Pass F		4	4	3	4	4	4	4	3



VIDEO ADJUST 3

ITEM		SDI CRT	LG CRT	TOSHIBA CRT	SDI CRT	SDI CRT	SDI CRT	SDI CRT	TOSHIBA CRT
	INCH	29" WIDE	32" WIDE	34" FLAT	32" WIDE	34" FLAT	29" FLAT	32" WIDE	34" FLAT
	Model	TXM2796HFX TXM2796HFX TXM2798HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	TXM3096HFX TXM3097HFX TXM3098HFX	TXM3296HFX TXM3297HFX TXM3298HFX	CT29Z7PGX	CT32Z7PGX	CT34Z7PGX
VSU		2	2	2	2	2	2	2	2
Melody Volume		4	4	4	4	4	4	4	4
H comp		5	8	8	8	10	5	8	8
V comp		3	5	5	5	10	3	5	5
PIN comp		0	0	3	0	6	0	0	3
AFC comp		0	0	0	0	0	0	0	0
Sync Phase		0	0	0	0	0	0	0	0
NR Off Value		7	7	5	7	5	7	7	5
480P CR		35	35	35	35	35	35	35	35
480P CB		35	35	35	35	35	35	35	35
480P S Color		15	18	15	18	18	15	18	15
480P S Tint		10	10	10	10	10	10	10	10
1080i CR		33	33	33	33	33	33	33	33
1080i CB		33	33	33	33	33	33	33	33
1080i S Color		15	18	15	18	18	15	18	15
1080i S Tint		10	10	10	10	10	10	10	10
V-MUTE (X100ms)		3	3	3	3	3	3	3	3
PC H Comp		*	*	*	*	*	10	10	10
PC V Comp		*	*	*	*	*	5	5	5

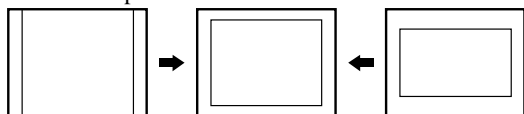


OPTION BYTE

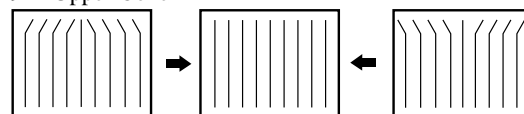
Option \ Model	TXM3297HFX	TXM2796HFX TXM3296HFX	TXM2797HFX	TXM2798HFX TXM3298HFX	TXM3096HFX	TXM3097HFX	TXM3098HFX	CT29Z7PGX CT34Z7PGX	TXM3098HFX
1. CRT	4 : 3	4 : 3	4 : 3	4 : 3	WIDE	WIDE	WIDE	4 : 3	WIDE
2. PIP(D/W)	ON	OFF	OFF	ON	OFF	ON	ON	ON	ON
3. 3D-COMB Filter	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON
4. Blue Screen	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
5. BBE Effect	ON	OFF	ON	ON	OFF	ON	ON	ON	ON
6. Equalizer	ON	ON	ON	ON	ON	ON	ON	ON	ON
7. Auto Power On	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
8. Sytem	CT(EN+SP+FR)	CT(EN+SP+FR)	CT(EN+SP+FR)	CT(EN+SP+FR)	CT(EN+SP+FR)	CT(EN+SP+FR)	CT(EN+SP+FR)	CT(EN+SP+FR)	CT(EN+SP+FR)
9. Virtual Dolby	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
10. ACS	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
11. V Chip (CT,CTA)	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
12. V Chip Area	USA	USA	USA	USA	USA	USA	USA	USA	USA
13. SUB Woofer	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	ON
14. No Sync Mute	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
15. X-Ray	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
16. AGC	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
17. Turbo Effect	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
18. Burst Screen	ON	ON	ON	ON	ON	ON	ON	ON	ON
19. LNA Option	ON	OFF	OFF	ON	OFF	ON	ON	ON	ON
20. PC Option	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON

4-8 Screen Change (I2C Bus Geometric Adjustment)

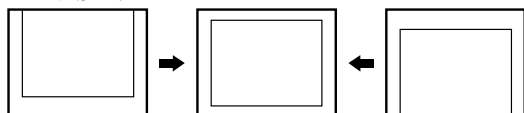
0 V - Amp



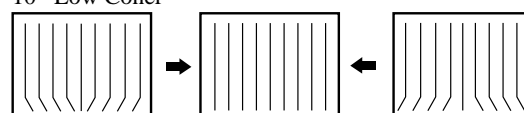
9 Upper Coner



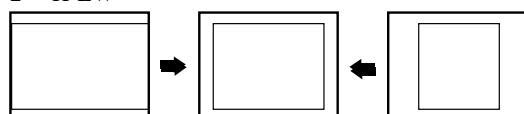
1 V-Shift



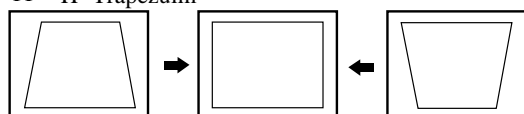
10 Low Coner



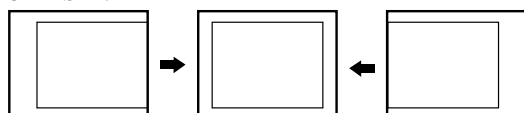
2 H-EW



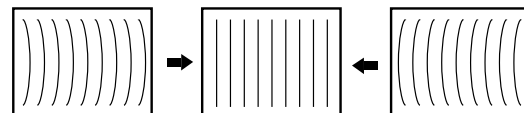
11 H- Trapezuim



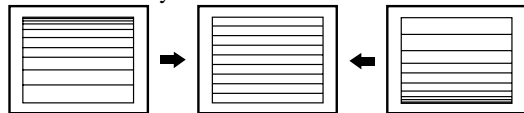
3 H-Shift



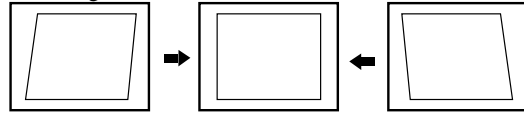
12 Bow



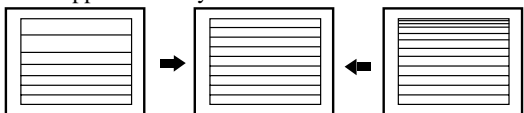
4 V-Linearity



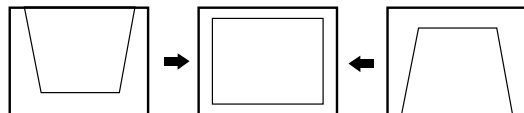
13 Angle



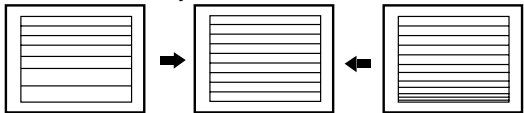
5 Upper Linearity



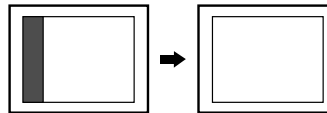
14 V Position



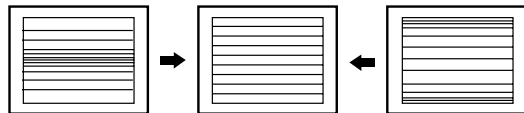
6 Low Linearity



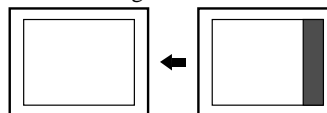
15 CXA Left BLK



7 V SC



16 CXA Right BLK



8 H-Parabola



MEMO