

## ADJUSTMENT PRECAUTIONS

This model's setting are adjusted in two different ways: through the I2C bus control and in the conventional analog manner. The adjustments via the I2C bus control include preset-only items and variable data.

### 1. Setting the service mode by the microprocessor.

- 1 Press and hold the local key "VOL DOWN" & "CH UP" when power on the main switch, TV will enter into the SERVICE MODE.
- 2 Press the CH DOWN / UP key on the remote controller to get ready to select the mode one by one.
- 3 Press the CH DOWN / UP key on the remote controller to select the modes reversibly one by one.
- 4 Using the VOLUME UP/ DOWN key on the remote controller, the data can be modified.
- 5 Use the MENU Key on the remote controller to select the mode as shown in the next page.
- 6 When press the local key "VOL DOWN" & "CH UP" at the same time, it will be released from the service mode.

### 2. Factory Presetting.

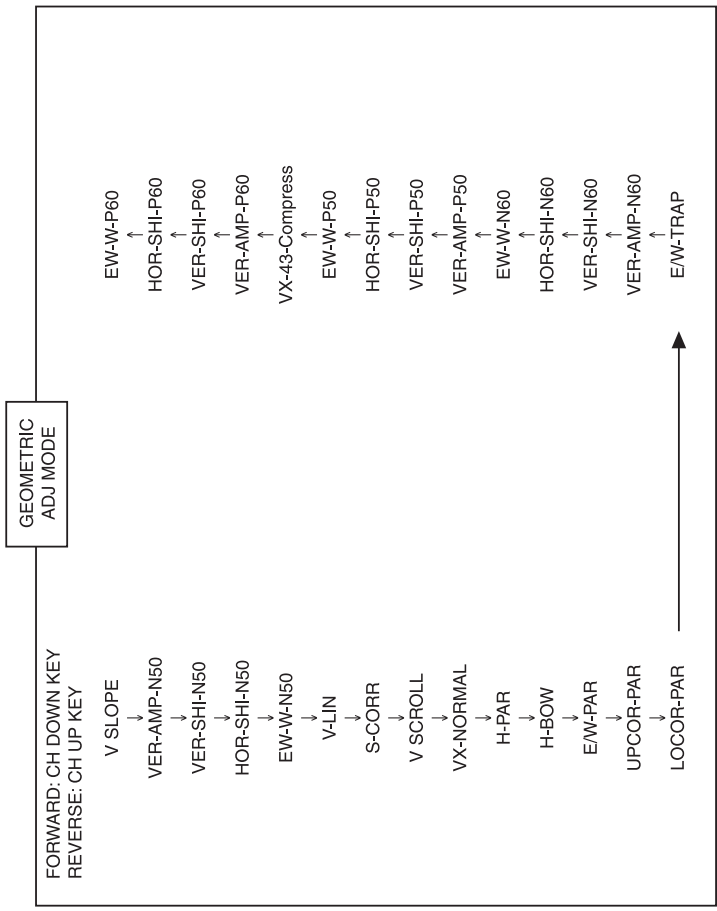
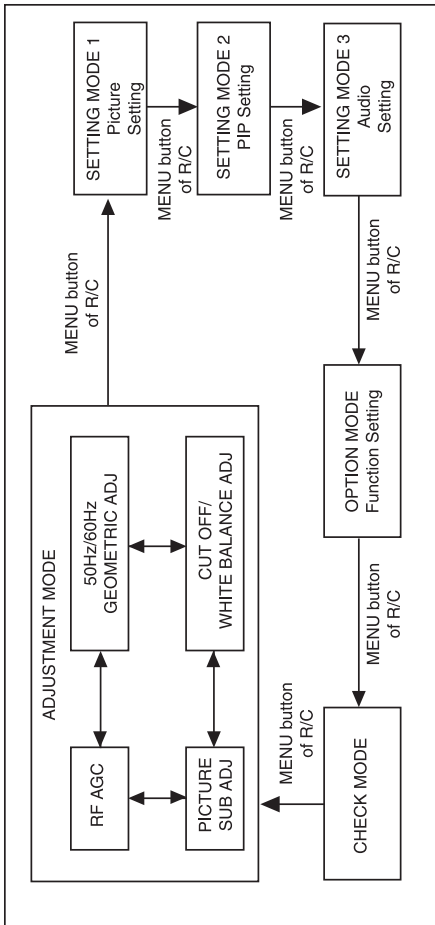
- 1 After enter into the SERVICE MODE, change data "INIT EEPROM" from 0 ---> 1 (which is under "CHECK MODE" section) and then switch off the main power, the initial values are automatically preset (only when a new EEPROM is used).
- 2 The initial data are preset as listed in page 4 to 11.
- 3 Make sure whether the data need to modify or not (Initial data).

**Note:** Once the chassis has been assembly together and in ready condition, please make sure it's go through initialize process (see sect 2-(1) above)

**Precaution:** If haven't done this initialization, malfunction might be happen.

## SERVICE MODE

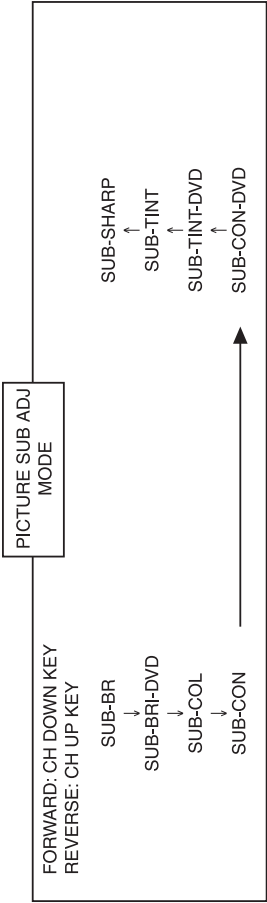
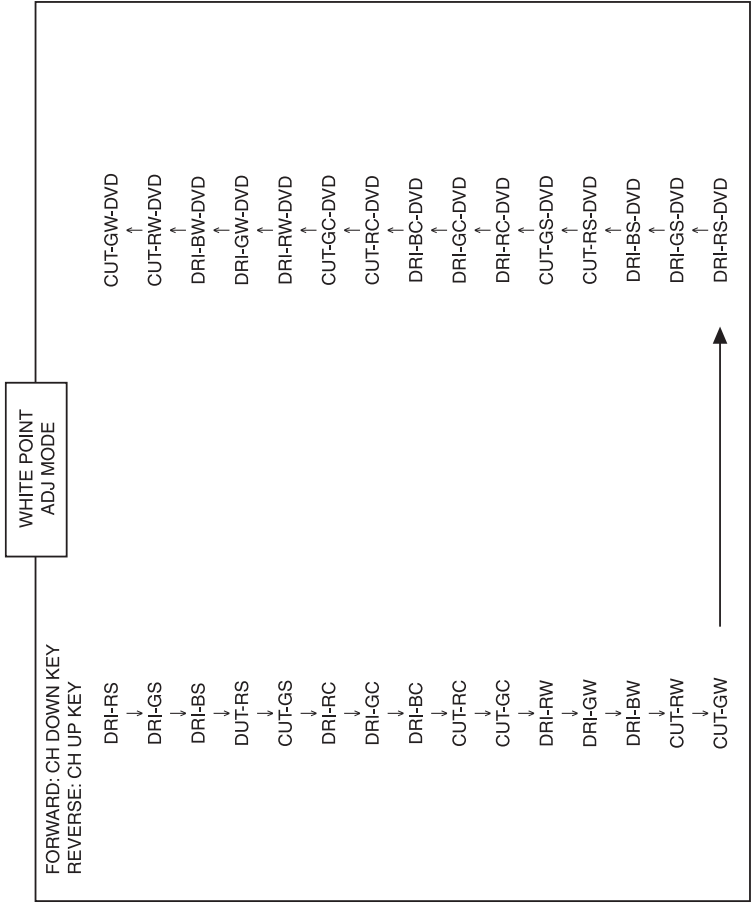
- (1) In the Service Mode, Key is used to select the mode in the following order.



INITIAL SETTING

(1) Execute MCL 1/2 key to set the following data in EEPROM.

R/C CODE		SREC(SRAC/SYI/STTM)			SREC-SCA (SKD)		
TV-CH.	CH-NO.	Fv (MHz)	S-SYSTEM	CH-NO.	Fv (MHz)	S-SYSTEM	
0	E-2	48.25	5.5	48.25	5.5	B/G	
1	E-2	48.25	5.5	48.25	5.5	B/G	
2	E-4/B-3	62.25	5.5	62.25	5.5	B/G	
3	OIR-3	77.25	6.5	77.25	6.5	D/K	
4	E-5	175.25	5.5	175.25	5.5	B/G	
5	E-6/B-5	182.25	5.5	182.25	5.5	B/G	
6	OIR-7	183.25	6.5	183.25	6.5	D/K	
7	OIR-8	191.25	6.5	191.25	6.5	D/K	
8	E-8/B-7	196.25	5.5	196.25	5.5	B/G	
9	J-9	199.25	4.5	199.25	4.5	M	
10	E-10/B-9	210.25	5.5	210.25	5.5	B/G	
11	E-12/B-1	224.25	5.5	224.25	5.5	B/G	
12	E-21	471.25	5.5	471.25	5.5	B/G	
13	I-23	487.25	6.0	487.25	6.0	I	
14	E-25	503.25	5.5	503.25	5.5	B/G	
15	E-34	575.25	5.5	575.25	5.5	B/G	
16	E-35	583.25	5.5	583.25	5.5	B/G	
17	E-37	599.25	5.5	599.25	5.5	B/G	
18	J-38	621.25	4.5	621.25	4.5	M	
19	OIR-42	639.25	6.5	639.25	6.5	D/K	
20	B-50	703.25	5.5	703.25	5.5	B/G	
21	I-54	735.25	6.0	735.25	6.0	I	
22	E-58	767.25	5.5	767.25	5.5	B/G	
23	E-64	815.25	5.5	815.25	5.5	B/G	
24	I-69	855.25	6.0	855.25	6.0	I	
25	E-69	855.25	5.5	855.25	5.5	B/G	
26	US-2	55.25	4.5	55.25	4.5	M	
27	A-6	83.25	4.5	83.25	4.5	M	
28	JA-6	183.25	4.5	183.25	4.5	M	
29	JA-8	193.25	4.5	193.25	4.5	M	
30	JA-12	217.25	4.5	217.25	4.5	M	
31	US-14	471.25	4.5	471.25	4.5	M	
32	JA-14	477.25	4.5	477.25	4.5	M	
33	JA-50	693.25	4.5	693.25	4.5	M	
34	US-83	885.25	4.5	885.25	4.5	M	
35	S-2	112.25	5.5	112.25	5.5	B/G	
36	S-10	168.25	5.5	168.25	5.5	B/G	
37		SKIP OFF FREE		SKIP OFF FREE			
38	S-20	294.25	5.5	294.25	5.5	B/G	
39	S-41	463.25	5.5	463.25	5.5	B/G	
40		SKIP OFF FREE		SKIP OFF FREE			
41	B-43	647.25	5.5	647.25	5.5	B/G	
42	B-45	663.25	5.5	663.25	5.5	B/G	
43	B-47	679.25	5.5	679.25	5.5	B/G	
44	E-5	174.95	5.5	174.95	5.5	B/G	
45	E-5	175.55	5.5	175.55	5.5	B/G	
46		SKIP OFF FREE		SKIP OFF FREE			
47		SKIP OFF FREE		SKIP OFF FREE			
48		SKIP OFF FREE		SKIP OFF FREE			
49		SKIP OFF FREE		SKIP OFF FREE			
50		SKIP OFF FREE		SKIP OFF FREE			
51		SKIP OFF FREE		SKIP OFF FREE			



SHIPPING SETTING & CHECKING

(1) The following default data has been factory-set for the E2PROM.

Model-Set: The data in table below (1.1). Model set overview is updated to the respective EEPROM location base on RC key input Model Set 1~9.

MODEL-SET KEY	OSD LANGUAGE	SOUND SYSTEM
1	Chinese	(AUTO)
2	Chinese	(AUTO)
3	English	(AUTO)
4	Arabic	(AUTO)
5	Russian	(AUTO)
6	Malay	(AUTO)
7	French	(AUTO)
8	English	*
9	Thai	(AUTO)

For model Set 8 processing only, the respective EEPROM position is updated again with MCL2 data (just like MCL2 key has been pressed)

R/C CODE TV-CH	SREC/SPAC/SY/STTM		SREC-SCA (SKD)	
	CH-No.	MCL 1 (R/C CODE 117h) Fv (MHz)	CH-No.	MCL 2 (R/C CODE 169h) Fv (MHz)
52	SKIP OFF FREE		E-37	599.25
53	SKIP OFF FREE		JPN-38	621.25
54	SKIP OFF FREE		OL-42	639.25
55	SKIP OFF FREE		I-54	735.25
56	SKIP OFF FREE		E-58	767.25
57	SKIP OFF FREE		WE-64	815.25
58	SKIP OFF FREE		I-69	855.25
59	SKIP OFF FREE		JA-1	91.25
60	SKIP OFF FREE		JA-6	183.25
61	SKIP OFF FREE		JA-8	193.25
62	SKIP OFF FREE		JA-12	217.25
63	SKIP OFF FREE		US-14	471.25
64	SKIP OFF FREE		JA-50	693.25
65	SKIP OFF FREE		S-2	112.25
66	SKIP OFF FREE		S-10	168.25
67	SKIP OFF FREE		S-20	294.25
68	SKIP OFF FREE		S-41	463.25
69	SKIP OFF FREE		E-5	174.95
70	SKIP OFF FREE		E-5	175.55
71	SKIP OFF FREE			
72	SKIP OFF FREE			
73	SKIP OFF FREE			
74	SKIP OFF FREE			
75	SKIP OFF FREE			
76	SKIP OFF FREE			
77	SKIP OFF FREE			
78	SKIP OFF FREE			
79	SKIP OFF FREE			
80	SKIP OFF FREE			
81	SKIP OFF FREE			
82	SKIP OFF FREE			
83	SKIP OFF FREE			
84	SKIP OFF FREE			
85	SKIP OFF FREE			
86	SKIP OFF FREE			
87	SKIP OFF FREE			
88	SKIP OFF FREE			
89	SKIP OFF FREE			
90	SKIP OFF FREE			
91	SKIP OFF FREE			
92	SKIP OFF FREE			
93	SKIP OFF FREE			
94	SKIP OFF FREE			
95	SKIP OFF FREE			
96	SKIP OFF FREE			
97	SKIP OFF FREE			
98	SKIP OFF FREE			
99	SKIP OFF FREE			

ITEMS	DEFAULT SETTINGS
Last power	ON
Last TV/AV mode	Program 1
Last position-TV	Program 1
Flashback Program-TV	Program 1
Flashback Program-RADIO	Program 1
Favorite Program A	Program 10
Favorite Program B	Program 20
Favorite Program C	Program 30
Favorite Program D	Program 40
1 / 2 digit entry	2 digit entry
Volume	0
GAME Volume	0
PIP	OFF
PIP location	Lower-Right
Last position-PIP	Program 1
AFT	All Programs ON
NICAM STEREO mode	All Programs STEREO
NICAM BILINGUAL mode	All Programs M1
NICAM MONO mode	All Programs MONO
A2 STEREO mode	All Programs STEREO
A2 BILINGUAL mode	All Programs MAIN
VIDEO MODE	PICTURE menu
CONTRAST	DYNAMIC
COLOUR	60
BRIGHTNESS	+6
TINT	0
SHARPNESS	+6
PICTURE NR	OFF
WHITE TEMP	0 (CENTER)
SURROUND	SOUND menu
BBE	OFF
BALANCE	ON
AVL	0
SUPER BASS/BASS+	ON

Note : The CHILD LOCK PASSWORD and VIEW TIMER PASSWORD are common use.

Refer to next page for setting of each destination.

ITEMS	DEFAULT SETTINGS
MODE	EQUALIZER menu
	MOVIE
INSET menu (for PIP model)	
BRIGHTNESS	0
TINT	0
BLUE BACK	FEATURE menu
AUTO SELECT	OFF
POWER SAVE *1	OFF
COMFY VIEW *2	OFF
SAFETY MODE *3	OFF
ROTATION	0
16:9 MODE	OFF
DEMO	OFF
CHILD LOCK menu	
LOCK TV	OFF
LOCK STATUS	OFF
LOCK GAME *4	OFF
PASSWORD	0000
CLOCK	TIMER menu
DAY	..:.. AM
ON TIMER	SUN
STATUS	..:.. AM
POSITION	ONCE
VOLUME	..:..
OFF TIMER	..:.. AM
REMINDER	..:..
BEEP REMINDER	OFF
VIEW TIMER menu	
VIEWING TIME	..:..
LOCK	..:..
PASSWORD	0000
CH SETTING menu	
POSITION NAME	BLANK (For all position)
COLOUR	All Programs AUTO
SOUND	All Programs AUTO
SKIP	All Programs OFF
FM RADIO menu	
SKIP	All Programs OFF

Refer to next page for \*1 ~ \*4.

OPTION MODE MENU

MODEL	MAGNETIC FIELD (V.H) nT	BACKGROUND	LANGUAGE	S-SYS	FACTORY SET
HONG KONG	20,000	17,000K	CHINESE	AUTO	SET 2
SINGAPORE	-10,000	40,000	ENGLISH	AUTO	SET 3
MIDDLE EAST	30,000	18,000K	ARABIC	AUTO	SET 4
AUSTRALIA	-50,000	20,000	ENGLISH	AUTO	SET 8
RUSSIA	45,000	20,000	RUSSIAN	AUTO	SET 5

Table 2.1

(2) Refer to below table (2-2) for NORMAL setting of each AV mode.

MODE	DYNAMIC	STANDARD	SOFT
CONTRAST	60	60	50
COLOR	+6	+1	-5
BRIGHT	0	0	0
TINT	0	0	0
SHARPNESS	+6	1	-4
PICTURE NR	OFF	OFF	OFF
WHITE TEMP	0 (center)	0 (center)	0 (center)

Table 2.2

- (3) Refer to below note for \*1 ~ \*4.  
(\*1) : Only available for model with POWER SAVE function.  
(\*2) : Only available for model with COMFY VIEW function.  
(\*3) : Only available for model with SAFETY MODE function.  
(\*4) : Only available for model with GAME function.

ITEM	SERVICE MODE	EEPROM ITEM	OSD	DATA	INITIAL DATA	SETTING DATA
1	Option Mode	Picture Tube Used Type	TUBE-TYPE	0/1	1	1
2		PIF Frequency Setting	PIF	0..7	2	2
3		Sound M	SND-M	0/1	0	1
4		Sound DK	SND-DK	0/1	0	1
5		Sound I	SND-I	0/1	1	1
6		Sound BG	SND-BG	0/1	1	1
7		Colour System SECAM	SECAM	0/1	1	1
8		Colour System NTSC358	NTSC358	0/1	0	1
9		Colour System NTSC443	NTSC443	0/1	1	1
10		Game IC	GAME-IC	0/1	0	1
11		Picture In Picture	PIP	0/1	0	0
12		Headphone	HEADPHONE	0/1	0	1
13		Equalizer	EQUALIZER	0/1	1	1
14		Sub Woofer	WOOFER	0/1	1	0
15		BBE	BBE	0/1	1	0
16		SRS	SRS	0/1	1	0
17		DOLBY	DOLBY	0/1	0	0
18		Audio Configuration	AUDIO-CFG	0..4	2	2
19		Mono Bilingual	BILINGUAL	0/1	0	0
20		Hotel Mode	HOTEL	0/1	0	0
21		Hotel Volume	HTL-VOL	0..60	30	30
22		Hotel Program Number	HTL-PRG	0..99	1	1
23		HTL-USE-LAST	HTL-USE-LAST	0/1	1	1
24		OPC	OPC	0/1	0	1
25		Rotation Functionality	ROTATION	0/1	0	0
26		Childlock	CHILD	0/1	0	1
27		Wide Screen Signalling	WSS	0/1	0	0
28		Golden SCART	GLD-SCART	0/1	0	0
29		Thailand OSD Language	THAI	0/1	0	0
30		Arabic OSD Language	ARABIC	0/1	1	0
31		Iranian OSD Language	IRANIAN	0/1	0	0
32		Malay OSD Language	MALAY	0/1	1	0
33		Chinese OSD Language	CHINESE	0/1	1	0
34		Russian OSD Language	FRENCH	0/1	1	0
35		Power On Last Status	RUSSIAN	0..2	1	1
36		Background	PWLAST	0..2	1	1
37		Tuner 2	BACK-GND	0/1	0	0
38		FM Radio	TUNER2	0/1	1	0
39		Curtain Effect	FM-RADIO	0/1	1	0
40		Curtain Colour	CURTAIN	0/1	1	1
41		AV1-IN	CURT-COLOUR	0..7	7	7
42		AV1S-IN	AV1-IN	0/1	1	1
43		AV2-IN	AV1S-IN	0/1	1	1
44		Component Input	DVD1-IN	0/1	1	1
45		AV3-IN	DVD1-IN	0/1	1	1
46		INCL-AV	AV3-IN	0/1	1	1
47		Reminder Timer	AV3S-IN	0/1	1	1
48		View Timer	INCL-AV	0/1	1	1
49		Switch Timer	TIM-REMINDER	0/1	1	1
50		Time Format	TIM-VIEW	0/1	1	1
51		Off Timer	TIM-SWITCH	0/1	1	1
52		Commercial Skip Timer	TIME-FORMAT	0/1	1	0
53		Teletext Pan-european	TIM-OFF	0/1	1	1
54		Teletext Western	TIM-SKIP	0/1	1	0
55		Teletext On	TXT-EURO	0/1	1	1
56		Teletext Split	TXT-WEST	0/1	1	1
57		Virgin Mode	TXT-ON	0/1	1	1
58		ERR-1-8-SUP	TXT-SPLIT	0/1	1	1
59		ERR-XRAY	VIRGIN MODE	0/1	0	0
60		ERR-SUPVOL	ERR-1-8-SUP	0/1	1	1
61		ERR-VERTG	ERR-XRAY	0/1	1	1
62		LOGO	ERR-SUPVOL	0/1	1	1
63			ERR-VERTG	0/1	1	1
64			LOGO	0/1	0	0

Adjustment Mode Items

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
A001	RF-AGC	0...63	UOC-TV	RF-AGC	32	19
A002	RF AGC PIP	0...63	PIP-IF	RF AGC PIP	0	0
A003	V SLOPE	0...63	UOC-TV	V SLOPE	40	35
A004	VER-AMP-N60	0...63	UOC-TV	VER-AMP-N60	32	21
A005	VER-SHI-N50	0...63	UOC-TV	VER-SHI-N50	25	25
A006	HOR-SHI-N50	0...63	UOC-TV	HOR-SHI-N50	45	44
A007	EW-W-N50	0...63	UOC-TV	EW-W-N50	40	40
A008	V-LIN	0...63	UOC-TV	V-LIN	32	32
A009	S-COR	0...63	UOC-TV	S-COR	30	32
A010	V SCROLL	0...63	UOC-TV	V SCROLL	32	32
A011	VX-NORMAL	0...63	UOC-TV	VX-NORMAL	32	32
A012	H-PAR	0...63	UOC-TV	H-PAR	35	24
A013	H-BOW	0...63	UOC-TV	H-BOW	25	28
A014	EW-PAR	0...63	UOC-TV	EW-PAR	35	42
A015	UPCOR-PAR	0...63	UOC-TV	UPCOR-PAR	45	47
A016	LOCOR-PAR	0...63	UOC-TV	LOCOR-PAR	42	44
A017	EW-TRAP	0...63	UOC-TV	EW-TRAP	32	32
A018	VER-AMP-N60	0...63	UOC-TV	VER-AMP-N60	32	22
A019	VER-SHI-N60	0...63	UOC-TV	VER-SHI-N60	25	24
A020	HOR-SHI-N60	0...63	UOC-TV	HOR-SHI-N60	45	49
A021	EW-W-N60	0...63	UOC-TV	EW-W-N60	40	41
A022	VER-AMP-P50	0...63	UOC-TV	VER-AMP-P50	32	21
A023	VER-SHI-P50	0...63	UOC-TV	VER-SHI-P50	32	25
A024	HOR-SHI-P50	0...63	UOC-TV	HOR-SHI-P50	32	32
A025	EW-W-P50	0...63	UOC-TV	EW-W-P50	32	44
A026	VX-43-COMPRESS	0...63	UOC-TV	VX-43-COMPRESS	32	5
A027	VER-AMP-F50	0...63	UOC-TV	VER-AMP-F50	32	32
A028	VER-SHI-F50	0...63	UOC-TV	VER-SHI-F50	32	32
A029	HOR-SHI-F50	0...63	UOC-TV	HOR-SHI-F50	32	32
A030	EW-W-F50	0...63	UOC-TV	EW-W-F50	32	32
A031	VER-AMP-S50	0...63	UOC-TV	VER-AMP-S50	32	32
A032	VER-SHI-S50	0...63	UOC-TV	VER-SHI-S50	32	32
A033	HOR-SHI-S50	0...63	UOC-TV	HOR-SHI-S50	32	32
A034	EW-W-S50	0...63	UOC-TV	EW-W-S50	32	32
A035	SUB-SLOPE-S	0...63	UOC-TV	SUB-SLOPE-S	32	32
A036	SUB-VX-S	0...63	UOC-TV	SUB-VX-S	32	32
A037	VER-AMP-C50	0...63	UOC-TV	VER-AMP-C50	32	32
A038	VER-SHI-C50	0...63	UOC-TV	VER-SHI-C50	32	32
A039	HOR-SHI-C50	0...63	UOC-TV	HOR-SHI-C50	34	34
A040	EW-W-C50	0...63	UOC-TV	EW-W-C50	32	32
A041	SUB-SLOPE-C	0...63	UOC-TV	SUB-SLOPE-C	32	32
A042	SUB-VX-C	0...63	UOC-TV	SUB-VX-C	32	32
A043	VER-AMP-P60	0...63	UOC-TV	VER-AMP-P60	32	22
A044	VER-SHI-P60	0...63	UOC-TV	VER-SHI-P60	32	24
A045	HOR-SHI-P60	0...63	UOC-TV	HOR-SHI-P60	32	49
A046	EW-W-P60	0...63	UOC-TV	EW-W-P60	32	41
A047	VER-AMP-F60	0...63	UOC-TV	VER-AMP-F60	32	32
A048	VER-SHI-F60	0...63	UOC-TV	VER-SHI-F60	32	32
A049	HOR-SHI-F60	0...63	UOC-TV	HOR-SHI-F60	32	32
A050	EW-W-F60	0...63	UOC-TV	EW-W-F60	32	32
A051	VER-AMP-S60	0...63	UOC-TV	VER-AMP-S60	32	32
A052	VER-SHI-S60	0...63	UOC-TV	VER-SHI-S60	32	32
A053	HOR-SHI-S60	0...63	UOC-TV	HOR-SHI-S60	32	32
A054	EW-W-S60	0...63	UOC-TV	EW-W-S60	32	32
A055	VER-AMP-C60	0...63	UOC-TV	VER-AMP-C60	32	32
A056	VER-SHI-C60	0...63	UOC-TV	VER-SHI-C60	32	32
A057	HOR-SHI-C60	0...63	UOC-TV	HOR-SHI-C60	32	32
A058	EW-W-C60	0...63	UOC-TV	EW-W-C60	32	32
A059	OF-ROTATE	0...127	UOC-TV	OF-ROTATE	63	0

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
A060	DRI-RS	0...63	UOC-TV	DRI-RS	32	32
A061	DRI-GS	0...63	UOC-TV	DRI-GS	32	32
A062	DRI-BS	0...63	UOC-TV	DRI-BS	32	32
A063	CUT-RS	0...63	UOC-TV	CUT-RS	32	32
A064	CUT-GS	0...63	UOC-TV	CUT-GS	32	32
A065	DRI-RC	0...63	UOC-TV	DRI-RC	32	32
A066	DRI-GC	0...63	UOC-TV	DRI-GC	32	32
A067	DRI-BC	0...63	UOC-TV	DRI-BC	32	32
A068	CUT-RC	0...63	UOC-TV	CUT-RC	32	32
A069	CUT-GC	0...63	UOC-TV	CUT-GC	32	32
A070	DRI-RW	0...63	UOC-TV	DRI-RW	32	32
A071	DRI-GW	0...63	UOC-TV	DRI-GW	32	32
A072	DRI-BW	0...63	UOC-TV	DRI-BW	32	32
A073	CUT-RW	0...63	UOC-TV	CUT-RW	32	32
A074	CUT-GW	0...63	UOC-TV	CUT-GW	32	32
A075	DRI-RS-DVD	0...63	UOC-TV	DRI-RS-DVD	32	32
A076	DRI-GS-DVD	0...63	UOC-TV	DRI-GS-DVD	32	32
A077	DRI-BS-DVD	0...63	UOC-TV	DRI-BS-DVD	32	32
A078	CUT-RS-DVD	0...63	UOC-TV	CUT-RS-DVD	32	32
A079	CUT-GS-DVD	0...63	UOC-TV	CUT-GS-DVD	32	32
A080	DRI-RC-DVD	0...63	UOC-TV	DRI-RC-DVD	32	32
A081	DRI-GC-DVD	0...63	UOC-TV	DRI-GC-DVD	32	32
A082	DRI-BC-DVD	0...63	UOC-TV	DRI-BC-DVD	32	32
A083	CUT-RC-DVD	0...63	UOC-TV	CUT-RC-DVD	32	32
A084	CUT-GC-DVD	0...63	UOC-TV	CUT-GC-DVD	32	32
A085	DRI-RW-DVD	0...63	UOC-TV	DRI-RW-DVD	32	32
A086	DRI-GW-DVD	0...63	UOC-TV	DRI-GW-DVD	32	32
A087	DRI-BW-DVD	0...63	UOC-TV	DRI-BW-DVD	32	32
A088	CUT-RW-DVD	0...63	UOC-TV	CUT-RW-DVD	32	32
A089	CUT-GW-DVD	0...63	UOC-TV	CUT-GW-DVD	32	32
A090	SUB-BRI	0...63	UOC-TV	SUB-BRI	32	39
A091	SUB-BRI-DVD	0...63	UOC-TV	SUB-BRI-DVD	32	38
A092	SUB-COL	0...63	UOC-TV	SUB-COL	32	34
A093	SUB-CON	0...63	UOC-TV	SUB-CON	32	48
A094	SUB-CON-DVD	0...63	UOC-TV	SUB-CON-DVD	32	49
A095	SUB-TINT-DVD	0...63	UOC-TV	SUB-TINT-DVD	32	34
A096	SUB-TINT	0...63	UOC-TV	SUB-TINT	32	34
A097	SUB-SHARP	0...63	UOC-TV	SUB-SHARP	32	12
A098	P-POSOFH-50	0...31	PIP	P-POSOFH-50	0	16
A099	P-POSOFV-50	0...7	PIP	P-POSOFV-50	0	3
A100	P-POSOFH-60	0...31	PIP	P-POSOFH-60	0	16
A101	P-POSOFV-60	0...7	PIP	P-POSOFV-60	0	3
A102	P-SUB-TINT	0...63	PIP	P-SUB-TINT	0	32
A103	P-CON-CTM	0...15	PIP	P-CON-CTM	0	4
A104	P-CON-DYN	0...15	PIP	P-CON-DYN	0	4
A105	P-CON-STD	0...15	PIP	P-CON-STD	0	4
A106	P-CON-SOFT	0...15	PIP	P-CON-SOFT	0	4
A107	P-SUB-BRI	0...15	PIP	P-SUB-BRI	0	4
A108	P-BKGD-R	0...15	PIP	P-BKGD-R	0	4
A109	P-BKGD-G	0...15	PIP	P-BKGD-G	0	4
A110	P-BKGD-B	0...15	PIP	P-BKGD-B	0	4
A111	P-SUB-COL	0...15	PIP	P-SUB-COL	0	7
A112	P-SUB-SHP	0...7	PIP	P-SUB-SHP	0	3
A113	VSD	0/1	UOC-TV	VSD	0	0
A114	CUT OFF VG2	0...63	UOC-TV	CUT OFF VG2	6	6
A115	DCXO	0/1	UOC-TV	DCXO	0	1
A116	DCXO-AUTO	0...127	UOC-TV	DCXO-AUTO	79	69
A117	DCXO-AUTO	0/1	UOC-TV	DCXO-AUTO	0	0

Setting Mode 1-1

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S001	V-LINCTRL	0...2	UOC-TV	V-LINCTRL	0	0
S002	IFPLL	0...63	UOC-TV	IFPLL	32	32
S003	SOC1-0	0...3	UOC-TV	SOC1-0	0	1
S004	WHITE LMT	0...15	UOC-TV	WHITE LMT	0	12
S005	GD	0/1	UOC-TV	GD	1	1
S006	AGC0-1	0...3	UOC-TV	AGC0-1	1	1
S007	FFI	0/1	UOC-TV	FFI	0	0
S008	CFA0	0/1	UOC-TV	CFA0	0	0
S009	YD PAL	0...15	UOC-TV	YD PAL	7	11
S010	YD SECAM	0...15	UOC-TV	YD SECAM	7	11
S011	YD N358	0...15	UOC-TV	YD N358	7	9
S012	YD N443	0...15	UOC-TV	YD N443	7	7
S013	YD AV-PAL	0...15	UOC-TV	YD AV-PAL	7	7
S014	YD AV-SECAM	0...15	UOC-TV	YD AV-SECAM	7	7
S015	YD AV-N358	0...15	UOC-TV	YD AV-N358	7	7
S016	YD AV-N443	0...15	UOC-TV	YD AV-N443	7	7
S017	YD SAV-PAL	0...15	UOC-TV	YD SAV-PAL	7	7
S018	YD SAV-SECAM	0...15	UOC-TV	YD SAV-SECAM	7	7
S019	YD SAV-N358	0...15	UOC-TV	YD SAV-N358	7	7
S020	YD SAV-N443	0...15	UOC-TV	YD SAV-N443	7	7
S021	YD COMP-PAL	0...15	UOC-TV	YD COMP-PAL	7	7
S022	YD COMP-SECAM	0...15	UOC-TV	YD COMP-SECAM	7	7
S023	YD COMP-N358	0...15	UOC-TV	YD COMP-N358	7	7
S024	YD COMP-N443	0...15	UOC-TV	YD COMP-N443	7	7
S025	SBO1-0	0...3	UOC-TV	SBO1-0	1	1
S026	CHSE1-0	0...3	UOC-TV	CHSE1-0	2	1
S027	FCO	0/1	UOC-TV	FCO	0	0
S028	OSO	0/1	UOC-TV	OSO	1	1
S029	DFL	0/1	UOC-TV	DFL	1	1
S030	EVG	0/1	UOC-TV	EVG	1	1
S031	HCO	0/1	UOC-TV	HCO	1	1
S032	SVMA	0/1	UOC-TV	SVMA	1	1
S033	FBC	0/1	UOC-TV	FBC	0	0
S034	SLG1-0	0...3	UOC-TV	SLG1-0	1	1
S035	CL3-0	0...15	UOC-TV	CL3-0	7	7
S036	GAM	0/1	UOC-TV	GAM	1	1
S037	TFR	0/1	UOC-TV	TFR	0	1
S038	CLD	0/1	UOC-TV	CLD	0	0
S039	BKS	0/1	UOC-TV	BKS	1	1
S040	BSD	0/1	UOC-TV	BSD	0	1
S041	AAS	0...3	UOC-TV	AAS	1	1
S042	DSK	0/1	UOC-TV	DSK	1	1
S043	BLS	0/1	UOC-TV	BLS	0	1
S044	LLB	0/1	UOC-TV	LLB	0	0
S045	DSA	0/1	UOC-TV	DSA	0	1
S046	RPA1-0	0...2	UOC-TV	RPA1-0	0	2
S047	RPO1-0	0...3	UOC-TV	RPO1-0	3	3
S048	COR1-0	0...3	UOC-TV	COR1-0	2	1
S049	CRA0	0/1	UOC-TV	CRA0	0	0
S050	SPR2-0	0...6	UOC-TV	SPR2-0	0	5
S051	SVM2-0	0...7	UOC-TV	SVM2-0	5	3
S052	SMD1-0	0...3	UOC-TV	SMD1-0	3	3
S053	PEAKFREQPAL443	0...3	UOC-TV	PEAKFREQPAL443	0	0
S054	PEAKFREQPALM	0...3	UOC-TV	PEAKFREQPALM	0	0
S055	PEAKFREQPALN	0...3	UOC-TV	PEAKFREQPALN	0	0
S056	PEAKFREQTSC443	0...3	UOC-TV	PEAKFREQTSC443	0	1
S057	PEAKFREQTSCM	0...3	UOC-TV	PEAKFREQTSCM	0	0
S058	PEAKFREQSECAM	0...3	UOC-TV	PEAKFREQSECAM	0	0
S059	PEAKFREQAV	0...3	UOC-TV	PEAKFREQAV	0	3

Setting Mode 1-2

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S060	OF-COL-TV	0...31...62	UOC-TV	OF-COL-TV	31	45
S061	OF-COL-AV	0...31...62	UOC-TV	OF-COL-AV	31	46
S062	OF-COL-DVD	0...31...62	UOC-TV	OF-COL-DVD	31	45
S063	OF-COL-P	0...31...62	UOC-TV	OF-COL-P	31	40
S064	OF-COL-S	0...31...62	UOC-TV	OF-COL-S	31	31
S065	OF-COL-N4	0...31...62	UOC-TV	OF-COL-N4	31	31
S066	OF-COL-N3	0...31...62	UOC-TV	OF-COL-N3	31	46
S067	OF-SHP-TV	0...31...62	UOC-TV	OF-SHP-TV	36	23
S068	OF-SHP-AV	0...31...62	UOC-TV	OF-SHP-AV	36	49
S069	OF-SHP-DVD	0...31...62	UOC-TV	OF-SHP-DVD	31	35
S070	OF-SHP-P	0...31...62	UOC-TV	OF-SHP-P	31	35
S071	OF-SHP-S	0...31...62	UOC-TV	OF-SHP-S	31	31
S072	OF-SHP-N4	0...31...62	UOC-TV	OF-SHP-N4	31	31
S073	OF-SHP-N3	0...31...62	UOC-TV	OF-SHP-N3	31	40
S074	OF-TINT-TV	0...31...62	UOC-TV	OF-TINT-TV	31	31
S075	OF-TINT-AV	0...31...62	UOC-TV	OF-TINT-AV	31	34
S076	OF-TINT-DVD	0...31...62	UOC-TV	OF-TINT-DVD	31	32
S077	OF-TINT-ADJ	0...31...62	UOC-TV	OF-TINT-ADJ	31	31
S078	BB-TINT	0...63	UOC-TV	BB-TINT	32	32
S079	VMA-SOFT	0...3	UOC-TV	VMA-SOFT	0	0
S080	WS-SOFT	0...3	UOC-TV	WS-SOFT	0	1
S081	VMA-STD	0...3	UOC-TV	VMA-STD	1	1
S082	WS-STD	0...3	UOC-TV	WS-STD	1	1
S083	VMA-DYN	0...3	UOC-TV	VMA-DYN	3	2
S084	WS-DYN	0...3	UOC-TV	WS-DYN	3	1
S085	VMA-CTM	0...3	UOC-TV	VMA-CTM	2	2
S086	WS-CTM	0...3	UOC-TV	WS-CTM	2	1
S087	U-COL-SOFT	0...31...62	UOC-TV	U-COL-SOFT	26	25
S088	U-COL-STD	0...31...62	UOC-TV	U-COL-STD	31	31
S089	U-COL-DYN	0...31...62	UOC-TV	U-COL-DYN	36	36
S090	U-CON-SOFT	0...63	UOC-TV	U-CON-SOFT	50	50
S091	U-CON-STD	0...63	UOC-TV	U-CON-STD	60	60
S092	U-CON-DYN	0...63	UOC-TV	U-CON-DYN	60	60
S093	U-SHP-SOFT	0...31...62	UOC-TV	U-SHP-SOFT	26	26
S094	U-SHP-STD	0...31...62	UOC-TV	U-SHP-STD	31	31
S095	U-SHP-DYN	0...31...62	UOC-TV	U-SHP-DYN	36	36
S096	VOL5-0	0...63	UOC-TV	VOL5-0	32	35
S097	HOP1-0	0...3	UOC-TV	HOP1-0	2	0
S098	TAS5-0-NORM	0...63	UOC-TV	TAS5-0-NORM	10	10
S099	TAS5-0-A	0...63	UOC-TV	TAS5-0-A	23	23
S100	BR13-0	0...31	UOC-TV	BR13-0	16	25
S101	HSD6-0	0...127	UOC-TV	HSD6-0	63	3
S102	VSD6-0	0...127	UOC-TV	VSD6-0	63	63
S103	HOPB1-0	0...3	UOC-TV	HOPB1-0	1	1
S104	TASB5-0	0...63	UOC-TV	TASB5-0	2	2
S105	PGB5-0	0...127	UOC-TV	PGB5-0	73	73
S106	VOLB5-0	0...63	UOC-TV	VOLB5-0	32	32
S107	SMTHB	0/1	UOC-TV	SMTHB	0	0
S108	SMTH	0/1	UOC-TV	SMTH	0	0
S109	RANGE1-0	0...3	UOC-TV	RANGE1-0	1	0
S110	RANGEB1-0	0...3	UOC-TV	RANGEB1-0	1	1
S111	PWR-SAVING	0/1	UOC-TV	PWR-SAVING	1	1
S112	PWR-TIME	0...3	UOC-TV	PWR-TIME	0	3
S113	I-TIME	0...3	UOC-TV	I-TIME	0	0
S114	GAME-HON	0...255	GAME IC	GAME-HON	6	10
S115	GAME-VERT-1	0...255	GAME IC	GAME-VERT-1	23	27
S116	GAME-VERT-2	0...255	GAME IC	GAME-VERT-2	0	0
S117	GAME-ORIV	0...255	GAME IC	GAME-ORIV	192	192
S118	GAME-MODE	0...255	GAME IC	GAME-MODE	1	1

Setting Mode 1-3

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S119	PHI FORCE	0/1	UOC-TV	PHI FORCE	1	1
S120	PHI	0...3	UOC-TV	PHI	3	3
S121	BPD	0/1	UOC-TV	BPD	0	0
S122	E2D	0/1	UOC-TV	E2D	0	0
S123	ACL	0/1	UOC-TV	ACL	1	1
S124	MUS	0/1	UOC-TV	MUS	0	0
S125	CB	0/1	UOC-TV	CB	1	1
S126	SVM-OSD-PW	0...3	UOC-TV	SVM-OSD-PW	3	3
S127	SMD-OSD-TM	0...7	UOC-TV	SMD-OSD-TM	2	2
S128	XDT	0/1	UOC-TV	XDT	0	1
S129	HBL	0/1	UOC-TV	HBL	1	1
S130	WBF	0...15	UOC-TV	WBF	10	6
S131	WBR	0...15	UOC-TV	WBR	8	13
S132	FSL	0/1	UOC-TV	FSL	0	0
S133	HP2	0/1	UOC-TV	HP2	0	0
S134	CUR.VPOS	0.63	UOC-TV	CUR.VPOS	20	20
S135	OSVE	0/1	UOC-TV	OSVE	0	1
S136	GAIN-RED	0..127	UOC-TV	GAIN-RED	20	20
S137	GAIN GREEN	0..127	UOC-TV	GAIN GREEN	20	20
S138	GAIN BLUE	0..127	UOC-TV	GAIN BLUE	20	20

Setting Mode 2-1

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S201	P-POSHOR	0...255	PIP	P-POSHOR	44	44
S202	P-POSERVER-50	0...255	PIP	P-POSERVER-50	30	30
S203	P-POSERVER-60	0...255	PIP	P-POSERVER-60	26	26
S204	P-HFP	0...15	PIP	P-HFP	0	0
S205	P-VFP	0...15	PIP	P-VFP	0	0
S206	P-VSPDEL-50	0...31	PIP	P-VSPDEL-50	13	13
S207	P-VSPDEL-60	0...31	PIP	P-VSPDEL-60	13	13
S208	P-VERBLK	0/1	PIP	P-VERBLK	0	0
S209	P-SELDEL	0...15	PIP	P-SELDEL	8	8
S210	P-CLPDEL	0...31	PIP	P-CLPDEL	6	6
S211	P-AGCMD	0...3	PIP	P-AGCMD	3	3
S212	P-AGCVL	0...15	PIP	P-AGCVL	8	8
S213	P-CLMPID	0...3	PIP	P-CLMPID	3	3
S214	P-BLKVCHYS	0/1	PIP	P-BLKVCHYS	0	0
S215	P-BLKCVL	0/1	PIP	P-BLKCVL	0	0
S216	P-LMOFST	0...3	PIP	P-LMOFST	0	0
S217	P-PLITC-TV	0...3	PIP	P-PLITC-TV	2	2
S218	P-PLITC-AV	0...3	PIP	P-PLITC-AV	1	1
S219	P-BLKVCFIL	0/1	PIP	P-BLKVCFIL	0	0
S220	P-YCD-TV-P	0...15	PIP	P-YCD-TV-P	8	8
S221	P-YCD-TV-N3	0...15	PIP	P-YCD-TV-N3	8	8
S222	P-YCD-TV-N4	0...15	PIP	P-YCD-TV-N4	8	8
S223	P-YCD-TV-S	0...15	PIP	P-YCD-TV-S	8	8
S224	P-YCD-AV-P	0...15	PIP	P-YCD-AV-P	8	8
S225	P-YCD-AV-N3	0...15	PIP	P-YCD-AV-N3	8	8
S226	P-YCD-AV-N4	0...15	PIP	P-YCD-AV-N4	8	8
S227	P-YCD-AV-S	0...15	PIP	P-YCD-AV-S	8	8
S228	P-LOCKSP	0/1	PIP	P-LOCKSP	0	0
S229	P-CKILL	0...3	PIP	P-CKILL	0	0
S230	P-BGPOS	0/1	PIP	P-BGPOS	1	1
S231	P-DEEMP	0...3	PIP	P-DEEMP	0	0
S232	P-COLON	0/1	PIP	P-COLON	0	0
S233	P-CHRBW	0...3	PIP	P-CHRBW	0	0
S234	P-IFCOMP	0...3	PIP	P-IFCOMP	2	2
S235	P-SATNR	0/1	PIP	P-SATNR	1	1
S236	P-SCADJ-P	0...31	PIP	P-SCADJ-P	7	7
S237	P-SCADJ-N3	0...31	PIP	P-SCADJ-N3	7	7
S238	P-SCADJ-N4	0...31	PIP	P-SCADJ-N4	7	7
S239	P-SCADJ-S	0...31	PIP	P-SCADJ-S	7	7
S240	P-PKLR	0...255	PIP	P-PKLR	80	80
S241	P-PKLG	0...255	PIP	P-PKLG	80	80
S242	P-PKLB	0...255	PIP	P-PKLB	80	80
S243	P-YCOR	0/1	PIP	P-YCOR	1	1
S244	P-PALIDL2	0/1	PIP	P-PALIDL2	0	0
S245	P-PALIDL1	0...3	PIP	P-PALIDL1	1	1
S246	P-PALIDL0	0/1	PIP	P-PALIDL0	0	0
S247	P-PKBOOST	0/1	PIP	P-PKBOOST	1	1
S248	P-CLPLEN	0...3	PIP	P-CLPLEN	0	0
S249	P-SCMREL	0...3	PIP	P-SCMREL	2	2
S250	P-SCMIDL	0...7	PIP	P-SCMIDL	5	5
S251	P-SECDIV	0/1	PIP	P-SECDIV	1	1
S252	P-BELLIIR	0/1	PIP	P-BELLIIR	1	1
S253	P-PALINC1	0/1	PIP	P-PALINC1	0	0
S254	P-PALINC2	0/1	PIP	P-PALINC2	0	0
S255	P-LOCKSP	0...3	PIP	P-LOCKSP	3	3
S256	P-SECACCL	0...7	PIP	P-SECACCL	5	5
S257	P-SECACC	0/1	PIP	P-SECACC	1	1
S258	P-ADLCK	0/1	PIP	P-ADLCK	1	1
S259	P-ADLCKSEL	0/1	PIP	P-ADLCKSEL	1	1

Setting Mode 2-2

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S260	P-ADCLKCC	0/1	PIP	P-ADCLKCC	1	1
S261	P-CLRANGE	0...3	PIP	P-CLRANGE	1	1
S262	P-NADJ	0...7	PIP	P-NADJ	3	3
S263	P-NSRED	0...7	PIP	P-NSRED	6	6
S264	P-SLLTHD	0...3	PIP	P-SLLTHD	0	0
S265	P-ISHTF	0...3	PIP	P-ISHTF	3	3
S266	P-ENLIM	0/1	PIP	P-ENLIM	1	1
S267	P-DTECT5060	0/1	PIP	P-DTECT5060	1	1
S268	P-VTHRL50	0...127	PIP	P-VTHRL50	41	41
S269	P-BCOROFF	0/1	PIP	P-BCOROFF	0	0
S270	P-VTHRL60	0...127	PIP	P-VTHRL60	60	60
S271	P-VTHRH50	0...15	PIP	P-VTHRH50	8	8
S272	P-VTHRH60	0...15	PIP	P-VTHRH60	13	13
S273	P-CLMSTGY	0/1	PIP	P-CLMSTGY	0	0
S274	P-SLLTHDV	0...7	PIP	P-SLLTHDV	0	0
S275	P-VFLYWHLM	0...3	PIP	P-VFLYWHLM	1	1
S276	P-VFLYWHL	0/1	PIP	P-VFLYWHL	1	1
S277	P-CLMPCHRY	0...3	PIP	P-CLMPCHRY	0	0
S278	P-VDETIFS	0/1	PIP	P-VDETIFS	1	1
S279	P-VDETITC	0/1	PIP	P-VDETITC	0	0
S280	P-VLP	0...3	PIP	P-VLP	1	1
S281	P-LATENCY	0...3	PIP	P-LATENCY	3	3
S282	P-FILTBRS	0/1	PIP	P-FILTBRS	1	1
S283	P-CLMPST	0...31	PIP	P-CLMPST	26	26
S284	P-UVSEQ	0/1	PIP	P-UVSEQ	0	0
S285	P-ABRTHD	0...15	PIP	P-ABRTHD	0	0
S286	P-ABRSPD	0...7	PIP	P-ABRSPD	0	0
S287	P-CZMEN	0/1	PIP	P-CZMEN	0	0
S288	P-CZMSP	0...3	PIP	P-CZMSP	0	0
S289	P-U-COL-DYN	-30...0...+30	PIP	P-U-COL-DYN	0	0
S290	P-U-COL-STD	-30...0...+30	PIP	P-U-COL-STD	0	0
S291	P-U-COL-SOFT	-30...0...+30	PIP	P-U-COL-SOFT	0	0
S292	P-U-SHP-DYN	-30...0...+30	PIP	P-U-SHP-DYN	0	0
S293	P-U-SHP-STD	-30...0...+30	PIP	P-U-SHP-STD	0	0
S294	P-U-SHP-SOFT	-30...0...+30	PIP	P-U-SHP-SOFT	0	0

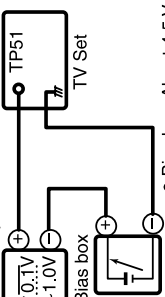
Setting Mode 3-1

ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S301	FMI	0/1	DSP	FMI	0	0
S302	BPB	0/1	DSP	BPB	0	0
S303	BPB2	0/1	DSP	BPB2	1	1
S304	FILTBW-M	0...3	DSP	FILTBW-M	0	0
S305	ID-BYBPF	0/1	DSP	ID-BYBPF	0	0
S306	ID-PGAIN	0/1	DSP	ID-PGAIN	0	0
S307	MPX-P-BW	0/1	DSP	MPX-P-BW	0	0
S308	FMSUB-BW	0/1	DSP	FMSUB-BW	0	0
S309	EIAJ-DEL	0...3	DSP	EIAJ-DEL	0	0
S310	NDETBP	0/1	DSP	NDETBP	0	0
S311	NICDEEM	0/1	DSP	NICDEEM	0	0
S312	NLOERLIM	0...255	DSP	NLOERLIM	100	100
S313	NUPERLIM	0...255	DSP	NUPERLIM	200	200
S314	FILTBW	0...3	DSP	FILTBW	0	0
S315	OVMTHR	0...3	DSP	OVMTHR	1	1
S316	DECLEV	0...31	DSP	DECLEV	16	7
S317	MONOLEV	0...31	DSP	MONOLEV	16	5
S318	NICLEV	0...31	DSP	NICLEV	16	18
S319	SAPLEV	0...31	DSP	SAPLEV	16	6
S320	ADCLEV	0...31	DSP	ADCLEV	16	13
S321	IISLEV	0...31	DSP	IISLEV	16	0
S322	BBEC-ON	0...15	DSP	BBEC-ON	0	15
S323	BBEC-OFF	0...15	DSP	BBEC-OFF	0	8
S324	BBEP-ON	0...15	DSP	BBEP-ON	0	5
S325	BBEP-OFF	0...15	DSP	BBEP-OFF	0	7
S326	MAINLOUD	0/1	DSP	MAINLOUD	0	0
S327	MAINLONA	0...7	DSP	MAINLONA	3	0
S328	MAINLOCH	0...3	DSP	MAINLOCH	0	0
S329	INSOEF	0...7	DSP	INSOEF	3	4
S330	AVLMOD	0...7	DSP	AVLMOD	0	5
S331	AVLWGT	0/1	DSP	AVLWGT	1	1
S332	AVLLE	0...15	DSP	AVLLE	7	10
S333	SRS3DCEN	0...15	DSP	SRS3DCEN	1	7
S334	SRS3DSP	0...15	DSP	SRS3DSP	0	0
S335	SRS3DBYP	0/1	DSP	SRS3DBYP	0	0
S336	CLIPMANAGE	0...4	DSP	CLIPMANAGE	0	4
S337	VDSMIXLEV	0...5	DSP	VDSMIXLEV	3	5
S338	DBEADR	0...63	DSP	DBEADR	0	0
S339	DBECOEF-LBS	0...255	DSP	DBECOEF-LBS	0	0
S340	DBECOEF-MBS	0...15	DSP	DBECOEF-MBS	0	0
S341	DUBADR	0...255	DSP	DUBADR	0	0
S342	DUBCOEF-LSB	0...255	DSP	DUBCOEF-LSB	0	0
S343	DUBCOEF-MSB	0...15	DSP	DUBCOEF-MBS	0	0
S344	BAMAMO	0...3	DSP	BAMAMO	0	1
S345	BAMASUB	0/1	DSP	BAMASUB	0	0
S346	BAMAFB	0...15	DSP	BAMAFB	0	12
S347	BASS-MV	0...31	DSP	BASS-MV	16	31
S348	TREB-MV	0...31	DSP	TREB-MV	16	25
S349	EQ100-MV	0...31	DSP	EQ100-MV	12	20
S350	EQ300-MV	0...31	DSP	EQ300-MV	12	16
S351	EQ1K-MV	0...31	DSP	EQ1K-MV	12	19
S352	EQ3K-MV	0...31	DSP	EQ3K-MV	12	16
S353	EQ8K-MV	0...31	DSP	EQ8K-MV	12	20
S354	BASS-MS	0...31	DSP	BASS-MS	16	31
S355	TREB-MS	0...31	DSP	TREB-MS	16	25
S356	EQ100-MS	0...31	DSP	EQ100-MS	12	20
S357	EQ300-MS	0...31	DSP	EQ300-MS	12	17
S358	EQ1K-MS	0...31	DSP	EQ1K-MS	12	13

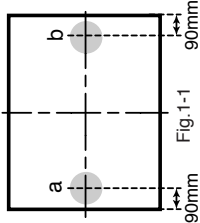
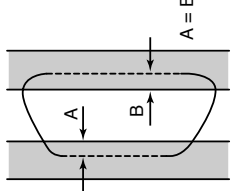
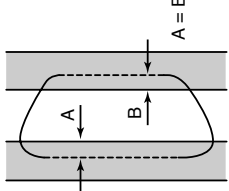


## PIF ADJUSTMENT

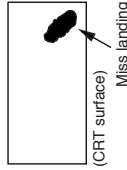
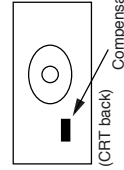
ITEM	EEPROM SETTING	DATA RANGE	IC	OSD	INITIAL DATA	SETTING DATA
S359	EQ3K-MS	0...31	DSP	EQ3K-MS	12	17
S360	EQ8K-MS	0...31	DSP	EQ8K-MS	12	20
S361	BASS-NW	0...31	DSP	BASS-NW	16	31
S362	TREB-NW	0...31	DSP	TREB-NW	16	25
S363	EQ100-NW	0...31	DSP	EQ100-NW	12	13
S364	EQ300-NW	0...31	DSP	EQ300-NW	12	16
S365	EQ1K-NW	0...31	DSP	EQ1K-NW	12	19
S366	EQ3K-NW	0...31	DSP	EQ3K-NW	12	16
S367	EQ8K-NW	0...31	DSP	EQ8K-NW	12	13
S368	BASS-CT	0...31	DSP	BASS-CT	16	31
S369	TREB-CT	0...31	DSP	TREB-CT	16	25
S370	IDMOD-SE	0...3	DSP	IDMOD-SE	0	0
S371	BPR-VOL	0...60	DSP	BPR-VOL	20	30
S372	DEMOD-DLAY	0...16	DSP	DEMOD-DLAY	8	8
S373	AV-OUT LV	0...255	DSP	AV-OUT LV	16	18

No.	Adjustment point	Adjustment condition/procedure	Waveform or remarks
1	RF-AGC TAKE OVER POINT AD- JUSTMENT (I <sup>2</sup> C BUS CONTROL)	<p>1. Receive "PAL COLOR BAR" signal. Signal Strength: <math>54 \pm 1\text{dB}_V</math> (75 ohm termination)</p> <p>2. Connect the oscilloscope to TP53 (Tuner's AGC Terminal) as shown in figure 3-1.</p>  <p>Fig. 3</p> <p>• Bias box: About 4.5 V</p> <p>3. Select "RF-AGC" item in the Adjustment Mode. Adjust the "RF-AGC" bus data to obtain the Tuner output pin drop 0.1V ~ 1.0V below maximum voltage.</p> <p>4. Change the antenna input signal to 63 ~ 67dB<sub>V</sub>, and make sure there is no noise.</p> <p>5. Set the RF AGC to 0 ~ 6 V with no saturation with the waveform.</p> <p>6. Turn up the input signal to 90 ~ 95 dB<sub>V</sub> to be sure that there is no cross modulation beat.</p>	

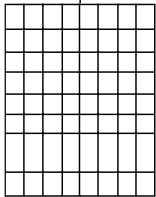
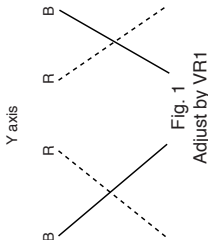
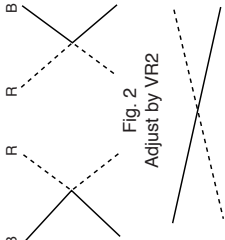
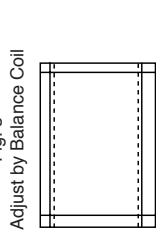

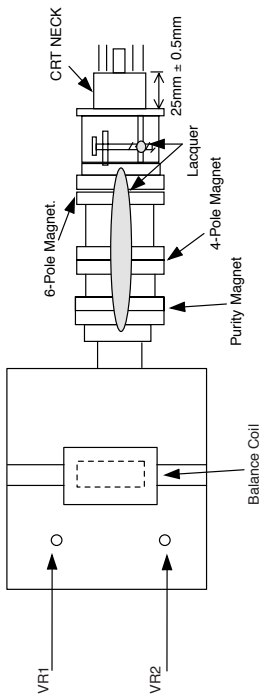
PURITY ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	PURITY ADJ.	<p>1. Select the green monocolour screen with remote controller, and set the beam current of 1.7mA with the contrast control.</p> <p>2. Degauss the CRT enough with the degaussing coil.</p> <p>NOTE: Follow the job instruction manual to adjust the magnetic field.</p> <p>3. The purity magnet must be previously set at the 0 magnetic field, and the convergence must be adjusted to be rough.</p> <p>With P-MAG, adjust it to the center - rank A.</p> <p>4. Observe the points a,b, as shown in Fig.1-1 through the microscope.</p> <p>Move DY fore and aft to set the landing at the point (Rank A).</p> <p>5. If the a/b balance is poor, compensate it to the center "Rank AB".</p> <p>6. Aline it to zero, keeping the raster rotation in the east direction.</p> <p>6. Tighten the deflection coil fastening screws.</p> <p>● Tightening torque : 108N ± 20N (11Kgf ± 2Kgf)</p> <p>8. Checking the CRT corner area, bond the magnetic sheet to set the landing at rank A for compensation.</p> <p><b>Note: Apply the adjustment after aging with the beam current 1700 ± 50μA or more for 30 minutes or more.</b></p> <p><b>Note: Select the service mode, and press the monocolour key of R/C for process, and the monocolour screen (green) will be selected.</b></p> <p>* Every push of the monocolour key changes the screen as follows.</p> <div><div>Monocolour GREEN screen</div><div>Monocolour BLUE screen</div><div>Monocolour RED screen</div></div> <div>Monocolour screen release</div> <p>* Adjustment for uniformity is change to another content. Please refer to the following page.</p> <p>*Even with TEXT key or "R/G/B" key, it can be directly switched to each monocolour screen.</p>	 <p>Fig. 1-1</p>  <p>Fig. 1-2 Rank "A" (on the right of the CRT)</p>  <p>Fig. 1-3 Rank "A" (on the left of the CRT)</p> <p>* Continuously press the monocolour key 1 second or more, and the monocolour mode will be selected without the service mode.</p>

PURITY ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
2	Uniformity (To perform after the purity and convergence adjustment.)	<p>Before adjustment begin, Horizontal magnetic field = 0G</p> <p>Vertical magnetic field = Each destination's adjustment magnetic field.</p> <p>Make sure to degauss it.</p> <p>(North direction Red uniformity)</p> <p>1. Horizontal mf = Set to monocolour screen red and adjust to +0.25G.</p> <p>2. Pay attention to the edge of CRT, if the landing is poor adjust by attaching the compensation magnet at the back of CRT. (refer to Fig-1)</p> <p>(South direction Red uniformity)</p> <p>1. Horizontal mf = Set to monocolour screen red and adjust to -0.25G.</p> <p>2. Pay attention to the edge of CRT, if the landing is poor adjust by attaching the compensation magnet at the back of CRT.</p> <p>(The same method is applied for adjustment of monocolour screen blue for blue uniformity, and changing both the magnetic field for north and south direction.)</p> <p>* During the pasting of compensation magnet, use the crosshatch pattern. Make sure there is no blur or bendlines occur. If the blur or bend are serious, adjust the location of compensation magnet to make it better.</p>	 <p>(CRT surface) Miss landing</p>  <p>(CRT back) Compensation magnet</p> <p>Fig. 1</p>

CONVERGENCE ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	CONVERGENCE ADJ. ( To be done after the purity adjustment.)	<p>1. Receive the " Crosshatch Pattern" signal.</p> <p>2. Using the remote controller, call NORMAL mode.</p> <p><b>( Static convergence )</b></p> <p>1. Overlap blue and red with the open-/closing angle and rotation of the 4 pole magnet.</p> <p>2. Overlap green on blue and red with the open-/closing angle and rotation of the 6 pole magnet.</p> <p><b>( Dynamic convergence )</b></p> <p>1. Fix the wedges in a position so that the deflection yoke neck is at the center of top bottom and left right. ( Straight line and without any blur horizontal / vertical line).</p> <p>2. Adjust the Red, Blue, upper and lower of the centre y axis on the screen by using the Volume (VR2, VR1)at the deflection yoke.</p> <p>(Refer to fig.1 and fig.2)</p> <p>3. If the Horizontal Red, Blue(XV) on the screen centre X axis shifted, correct the Red Blue (XV) by adjusting the balance coil on the deflection yoke. (Refer to Fig. 3)</p> <p>4. After confirm that there is no problems on the entire screen ,bond each wedge on CRT and glass tape on it. Fastening the screws of DY and magnet unit ( purity , 4 - pole and 6 pole ), then coat the lacquer paint on DY fastening screw and magnet unit fastening screw.</p> <p><b>Note:</b></p> <p>In case of poor convergence adjustment on the top and bottom and of the screen , adjust DY by swing rightward and leftward. (Refer to Fig-4)</p>	     

FOCUS ADJUSTMENT

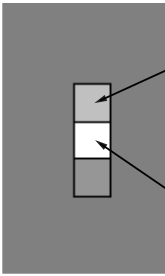
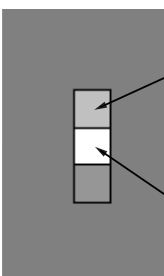
No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	FOCUS ADJUSTMENT	<p>1. Receive E-5CH (Monoscop pattern).</p> <p>2. With the remote controller, make the image normal.</p> <p>3. Adjust the focus VR to make the character"575" on left bottom of monoscope as fine as possible.</p>	

## CUT-OFF, BACKGROUND AND SUB-CONTRAST ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	CRT CUTOFF ADJUSTMENT (I'C BUS CONTROL)	<p><b>Note :</b></p> <p>1. Before CRT cutoff adjustment, make sure following items are in INITIAL DATA.</p> <p>a) A063 CUT-RS = 32</p> <p>b) A064 CUT-GS = 32</p> <p>c) A114 CUT OFF = 6</p> <p>1. Switch TV to video mode , blue back off , with no video signal and Press R/C to set picture into normal condition.</p> <p>2. Go to service mode at adjustment mode item A115 (VG2).</p> <p>3. Adjust screen voltage until retrace line appear, the following OSD will appear at bottom of screen.</p> <p>UNSTABLE</p> <p>OUT</p> <p>ABOVE</p> <p>4. Finally , slowly decrease the screen variable resistor until following OSD appear.</p> <p>STABLE</p> <p>IN</p> <p>ABOVE / BELOW *</p> <p>* The last OSD row is the indication of the screen voltage value. If it show "BELOW", please increase the screen voltage and vice versa until "STABLE" AND "IN" OSD appear.</p> <p>Note :No matter the indication of last row's OSD is indicate "ABOVE" or "BELOW", the important thing is OSD change to "STABLE" and "IN".</p>	
2	WHITE BAL- ANCE BACK- GROUND I'C BUS ADJUSTMENT (AV-IN SIGNAL)	<p>1. Receive the internal RF monoscope pattern.</p> <p>2. Make the picture normal with the remote controller.</p> <p>3. Connect the beam ammeter between terminal of R623.</p> <p>4. Coarsely confirm the beam current to approx. 1.7mA.</p> <p>5. Receive the window pattern with AV input.</p> <p>6. With the data of DRI-GS and DRI-BS, adjust the color temperature of the 50% white.</p> <p>7. Adjust the right dark area of the window to 12300K with CUT-RS and CUT-GS.</p> <p>8. Go back to 50% white area to check colour temperature, if out of range, please go back to step (6).</p> <p>Note 1 : Apply this adjustment after aging 30 min or more with the beam current 1700 ± 50 .A. (On the white or green monocolour screen)</p> <p>2:The colour temperature is based on the shipment destination as shown in Table 2.1 at page 6-1.</p> <p>3: Adjust DRI-GO/GW, DRI-BC/BW , CUT-RW/C and CUT-GW/C as following DATA, after finishing DRI-BS and DRI-GS DATA adjustment</p> <p>CUT-RW/C = CUT-RS</p> <p>CUT-GW/C = CUT-GS</p> <p>DRI-RW = 32 (FIXED), DRI-RS = 32 (FIXED)</p> <p>DRI-BC = "DRI-BS"</p> <p>(For 7500_K, 12300_K, 17000_K and 18000_K Condition)</p>	<p>7500K X : 0.300 Y : 0.310</p> <p>18000K X : 0.255 Y : 0.255</p> <p>17000K X : 0.261 Y : 0.261</p> <p>12300K X : 0.272 Y : 0.275</p> <p>( With Minolta color thermometer CA-100)</p> <p>* 12300_K</p> <p>DRI-GW = "DRI-GS" - 7</p> <p>DRI-BW = "DRI-BS" - 7</p> <p>DRI-GC = "DRI-GS" - 7</p> <p>DRI-RC = 25</p> <p>* 17000_K &amp; 18000_K</p> <p>DRI-GW = "DRI-GS" - 7</p> <p>DRI-BW = "DRI-BS" - 7</p> <p>DRI-GC = "DRI-GS" - 5</p> <p>DRI-RC = 27</p> <p>* 7500_K</p> <p>DRI-GW = "DRI-GS" - 5</p> <p>DRI-BW = "DRI-BS" - 5</p> <p>DRI-GC = "DRI-GS" - 7</p> <p>DRI-RC = 25</p>

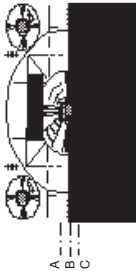
14-1

## CUT-OFF, BACKGROUND AND SUB-CONTRAST ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
3	WHITE BAL- ANCE BACK- GROUND I'C BUS ADJUSTMENT (DVD SIGNAL)	<p>1. The window pattern is received with DVD signal ( component signal).</p> <p>2. Apply the adjustment in the same manners as 2 (AV-IN SIGNAL) and subsequence above. (DRI-GS-DVD, DRI-BS-DVD, CUT-RS-DVD, CUT-GS-DVD)</p> <p>3. Select the SUB-CONTRAST adjustment mode with the remote controller, and adjust 50% white to 165 ± 10cd.</p> <p>Apply the adjustment after the end of 2 (AV-IN SIGNAL).</p> <p>Note: 1. All of the DRI-GW/C-DVD &amp; DRI-BW/C-DVD can be obtain by using same calculation as white balance adjustment above (No.2). CUT-RW/C-DVD and CUT-GW/C-DVD setting data are as follow.</p> <p>CUT-RW/C-DVD = CUT-RS-DVD</p> <p>CUT-GW/C-DVD = CUT-GS-DVD</p>	<p>Note 1: Use the window pattern of the signal generator SX-1006 for adjustment.</p> 
4	SUB-BRIGHT- NESS ADJUSTMENT (I'C BUS CONTROL) (AV-IN SIGNAL)	<p>1. Receive the window pattern with AV input.</p> <p>2. Make the image normal with the remote controller.</p> <p>3. Select the sub- bright adjustment mode with the remote controller, and adjust the right dark white area of the window pattern to 3.0 cd ± 0.5cd.</p>	<p>Note 1: Use "Y" of Minolta color analyzer CA-100 in adjustment.</p> <p>Note 2: Use the window pattern of the signal.</p>
5	SUB-BRIGHT- NESS ADJUSTMENT (I'C BUS CONTROL) (DVD SIGNAL)	<p>1. Select DVD mode.</p> <p>2. Receive the signal of the DVD signal generator . ( Component signal ) ( Window Pattern)</p> <p>3. Make the image normal with the remote controller.</p> <p>4. Select the SUB-BRIGHT adjustment mode (DVD) , and adjust the right dark white area of the window pattern to 3.0 cd ± 0.5cd of the window pattern.</p>	<p>generator SX-1006 for adjustment.</p> 
6	SUB-CON- TRAST I'C BUS ADJUSTMENT (AV-IN SIGNAL)	<p>1. Receive the window pattern with AV input.</p> <p>2. Make the image normal with the remote controller.</p> <p>3. Select the SUB-CONTRAST adjustment mode with the remote controller, and adjust 50% white to 130 ± 10cd.</p> <p>Note : Make sure the TV set already in the RF receiving state before changing to AV mode to continue with this adjustment (no POWER OFF from the previous adjustment.)</p>	
7	SUB-CON- TRAST I'C BUS ADJUSTMENT (DVD SIGNAL)	<p>1. Select the DVD mode.</p> <p>2. Receive the signal of the DVD signal generator. ( Component signal ) ( Window Pattern)</p> <p>3. Select the SUB-CONTRAST adjustment mode (DVD) with the remote controller, and adjust 50% white to 130 ± 10cd.</p> <p>Note : Make sure the TV set already in the RF receiving state before changing to AV mode to continue with this adjustment. (no POWER OFF from the previous adjustment.)</p>	

14-2

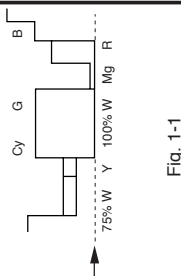
## HORIZONTAL AND VERTICAL DEFLECTION LOOP ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	<b>MAIN SCREEN ADJUSTMENT</b>		 <p>A : Out of spec B : OK C : Out of spec</p>
	<b>V-SLOPE</b>	Adjust V-Slope by Volume Up / Down Remote Control. Refer to Fig. 1-1.	
	<b>VER-AMP-N50</b>	Adjust the overscan to 8.5%. (monoscope)	
	<b>VER-SHI-N50</b>	Align the center of the screen to the geometric center of CRT. (monoscope)	
	<b>HOR-SHI-N50</b>	Align the center of the screen to the geometric center of CRT.	
	<b>EW-W-N50</b>	Adjust the overscan to 8.5%. (monoscope)	
	<b>V-LINE</b>	Adjust the linearity to the best. (monoscope)	
	<b>V-S CORR</b>	Already preset. (Adjust this unless the linearity is achieved.) (monoscope)	
	<b>V-SCROLL</b>	Already preset..	
	<b>VX-NORMAL</b>	Already preset .	
	<b>H-PAR</b>	Adjust the 2nd vertical line from the end of the crosshatch pattern. Refer to Fig 1-6. (crosshatch)	Fig. 1-3
	<b>H-BOW</b>	Adjust the 2nd vertical line from the end of the crosshatch pattern. Refer to Fig 1-7. (crosshatch)	Fig. 1-4
	<b>EW-PAR</b>	Adjust the 2nd vertical line from the right end of the crosshatch pattern so that the middle 4 blocks are straight. Refer to Fig 1-2. (crosshatch)	Fig. 1-5
	<b>UPCOR-PAR</b>	Adjust the 2nd upper vertical line from the right end of the crosshatch pattern so that the upper line are straight. Refer to Fig 1-3. (crosshatch)	
	<b>LOCOR-PAR</b>	Adjust the 2nd lower vertical line from the right end of the crosshatch pattern so that the bottom line are straight. Refer to Fig 1-4. (crosshatch)	
	<b>EW-TRAP</b>	Adjust the 2nd vertical line from the right end of the crosshatch pattern so that the D1 (center area of the second vertical line - edge of screen) and D2 (top area of the second vertical line - edge of screen) are same. Refer to Fig 1-5. (crosshatch)	Fig. 1-6
	<b>VER-AMP-N60</b>	Adjust the overscan to 10%. (monoscope)	
	<b>VER-SHI-N60</b>	Align the center of the screen to the geometric center of CRT. (monoscope)	Fig. 1-7

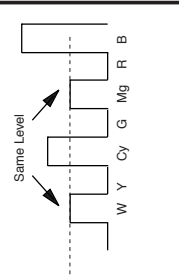
## HORIZONTAL AND VERTICAL DEFLECTION LOOP ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
	<b>VHOR-SHI-N60</b>	Align the center of the screen to the geometric center of CRT.	
	<b>EW-W-N60</b>	Align the center of the screen to the geometric center of CRT.  <b>NOTE :</b> There are no separate adjustment for 16:9 mode and Normal mode adjustment. The 16:9 (Panorama mode 50/60Hz) data need to follow the adjusted data for Normal mode (50/60Hz). Please set the data as below.  VER-AMP-P50 = VER-AMP-N50 VER-SHI-P50 = VER-SHI-N50 HOR-SHI-P50 = HOR-SHI-N50 EW-W-P50 = EW-W-N50 VER-AMP-P60 = VER-AMP-N60 VER-SHI-P60 = VER-SHI-N60 HOR-SHI-P60 = HOR-SHI-N60 EW-W-P60 = EW-W-N60	

## PAL CHROMA ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	<b>SUB COLOUR (FC BUS CONTROL)</b>	<ol style="list-style-type: none"> <li>1. Receive the "PAL Color Bar" signal.</li> <li>2. Make the image normal with the remote controller.</li> <li>3. Connect the oscilloscope to TP48R (IC851 #9). (Use Probe 10:1) Range : 2 V/Div Sweep Time : 20 <math>\mu</math>sec/Div</li> <li>4. Set the sub color adjustment mode with the remote controller, and vary the sub color data to make 100% W of the color bar and RED at the same level for adjustment shown in Fig. 1-1.</li> </ol>	 <p>Fig. 1-1</p>

## NTSC CHROMA ADJUSTMENT

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	<b>SUB-TINT (FC BUS CONTROL)</b>	<ol style="list-style-type: none"> <li>1. Receive the "NTSC 3.58 Colour Bar" signal through AV IN.</li> <li>2. Connect the oscilloscope to TP47B (P860 Pin6) BLUE-OUT.  <ul style="list-style-type: none"> <li>• Range : 100mV/Div. (AC)(Use Probe 10:1)</li> <li>• Sweep time : 10 <math>\mu</math>sec/Div.</li> </ul> </li> <li>3. Select the "SUB-TINT" item in the ADJUSTMENT MODE. Adjust the "SUB-TINT" data to obtain the waveform shown as Figure 1-1 (W and Mg same level)</li> </ol>	 <p>Fig. 1-1</p>

GAME OPERATION CHECK

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	( For models with GAME only.)	<div>1. Use the "GAME" key (R/C) to enter the Game Mode.</div> <div>2. Press the TREBLE UP (code=46H) key (direct key to enter "The Rock" game), and then confirm the position and the function of the game.</div> <div>Note : (A) For the HORIZONTAL position, enter service mode and choose "Setting Mode 1". Key in the alphabetic number 114 to enter GAME-HON. Adjust to the proper horizontal position.</div> <div>(B) For the VERTICAL position, remain in same "Setting Mode 1". Key in the alphabetic number 115 to enter GAME-VERT-1. Adjust to the proper vertical position.</div> <div>3. If adjustment OK, then press the "GAME MODE" key to exit to previously viewed channel from the game mode.</div>	

FM RADIO OPERATION CHECK

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	( For models with RADIO only.)	<div>1. Use the signal generator to set carrier frequency of 89.5 MHz with sound modulation 400Hz.</div> <div>2. Connect the signal to the FM radio tuner using the RF coaxial cable with female adaptor.</div> <div>3. Press the "FM RADIO" button of R/C to access the FM RADIO menu.</div> <div>4. Select the "FREQUENCY" in menu and press the VOL+ key to search the frequency of 89.5 MHz.</div> <div>5. Confirm the 400 Hz audio is clearly detected.</div> <div>6. Press the "FM RADIO" button of R/C to exit.</div>	

FUNCTION OPERATION CHECKING (VIDEO AND AUDIO)

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	CONTRAST key	<div>1. Receive "Monoscope Pattern" signal.</div> <div>2. Press to MENU mode, then Select Picture Mode and set to select CONTRAST.</div> <div>3. Press Volume Up/Down key to check whether the CONTRAST effect is OK or not.</div>	
2	COLOUR key	<div>1. Receive "Color Bar" signal.</div> <div>2. Press to MENU mode, then Select Picture Mode and set to select COLOUR.</div> <div>3. Press Volume Up/Down key to check whether the COLOUR effect is OK or not.</div>	
3	BRIGHTNESS key	<div>1. Receive "Monoscope Pattern" signal.</div> <div>2. Press to MENU mode, then Select Picture Mode and set to select BRIGHTNESS.</div> <div>3. Press Volume Up/Down key to check whether the BRIGHTNESS effect is OK or not.</div>	
4	TINT key	<div>1. Receive the "NTSC Colour Bar" signal thru AV in.</div> <div>2. Press to MENU mode, then Select Picture Mode and set to select TINT.</div> <div>3. Press Volume Up/Down key to check TINT. UP for GREEN direction and DOWN for RED direction whether is OK or not.</div>	
5	SHARPNESS Key	<div>1. Receive "Monoscope Pattern" signal.</div> <div>2. Press to MENU mode, then Select Picture Mode and set to select SHARPNESS.</div> <div>3. Press Volume Up/Down key to check whether the SHARPNESS effect is OK or not.</div>	
6	NORMAL Key	<div>1. Once in PICTURE Mode, and the NORMAL key is pressed, all the settings will be present to normal setting.</div> <div>(Normal setting value for every mode, refer to Table 2.2 on page 6-1).</div>	Notes:if nothing is display mean contrast, colour, bright, tint, sharpness are all in normal setting.
7	WHITE TEMP	<div>1. Receive "Monoscope Pattern" signal.</div> <div>2. Set FUNCTION to select WHITE TEMP.</div> <div>3. Press Volume Up/Down key to check WHITE TEMP Option, STANDARD: NORMAL SETTING, WARM for more REDDISH direction changing, COOL for more BLUISH direction changing.</div>	

## FUNCTION OPERATION CHECKING (VIDEO AND AUDIO) (Continued)

No.	Adjusting point	Adjusting procedure/conditions	Waveform and others
9	COLOUR SYSTEM	<ol style="list-style-type: none"> <li>1. Receive the "PAL COLOUR BAR" signal, press the COLOUR SYSTEM key to select modes except PAL, check the COLOUR is not working properly. Then, select the "PAL" mode. Check again its colour so that it is working properly.</li> <li>2. Receive "SECAM COLOUR BAR" signal, press COLOUR SYSTEM key to select modes except SECAM, check the COLOUR is not working properly. Then, select the "SECAM" mode. Check again its colour so that it is working properly.</li> <li>3. Receive "NTSC 4.43" signal, press COLOUR SYSTEM key to select modes except NTSC4.43, check the COLOUR is not working properly. Then, select the "NTSC 4.43" mode. Check again its colour so that it is working properly.</li> <li>4. Receive "NTSC 4.43/3.58 COLOUR BAR" signal thru AV, press COLOUR SYSTEM key to select modes except N4.43/3.58, check the COLOUR is not working properly. Then, select the "NTSC 4.43/3.58" mode. Check again its colour so that it is working properly.</li> </ol>	
10	SOUND SYSTEM	<ol style="list-style-type: none"> <li>1. Receive "PAL-D/K" signal, press the "SOUND SYSTEM" to select B/G, I. Check the sound output is not working properly. Select D/K and check the sound output to make sure it is working properly.</li> <li>2. Receive "PAL-I" signal, press the "SOUND SYSTEM" to select B/G, D/K. Check the sound output is not working properly. Select I and check the sound output to make sure it is working properly.</li> <li>3. Receive "PAL-B/G" signal, press the "SOUND SYSTEM" to select I, D/K. Check the sound output is not working properly. Select B/G and check the sound output to make sure it is working properly.</li> </ol>	
11	HEADPHONE OUTPUT CHECKING	<ol style="list-style-type: none"> <li>1. Receive PAL COLOUR BAR with SOUND 400Hz, 100% MODULATION (<math>\pm 50\text{kHz}</math> Dev).</li> <li>2. Maximum volume, and check the headphone output with 400Hz sound and no sound out from speaker.</li> </ol> <p>Ref : OUTPUT level of HEADPHONE is as following. Apx. 500mVp-p</p>	
12	NOISE MUTE CHECKING	<ol style="list-style-type: none"> <li>1. Receive "PAL COLOUR BAR" signal.</li> <li>2. Turn up the volume control to maximum, make sure the sound is heard from the speakers. Then put the unit in no signal state.</li> <li>3. Check the sound mute is effective.</li> <li>4. Finally turn sound level of CTV to minimum.</li> </ol>	

## PROTECTOR OPERATION CHECKING

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks
1	H, V PROTECTOR	<ol style="list-style-type: none"> <li>1. Receive E-5ch(Monoscopepattern).</li> <li>2. Connect the bias box to the cathode side (R607) of D604.</li> <li>3. Set the voltage of the bias box at 10V, and verify that the protector does not operate.</li> <li>4. Set the voltage of the bias box at 18V, and verify that the protector operate.</li> </ol>	Ref : Apx.13.3V.

## SOUND OUTPUT CHECKING

No.	Adjustment point	Adjustment conditions/procedure	Waveform or remarks																								
1	Front speaker output checking	<div>1. Receive the E-10ch (PAL colour bar).</div> <div>2. Set the volume to maximum and set the other sound setting as follow.</div> <table><thead><tr><th>Setting item</th><th>#1</th><th>#2</th></tr></thead><tbody><tr><td>Equalizer</td><td>Music</td><td>Music</td></tr><tr><td>Surround</td><td>OFF</td><td>OFF</td></tr><tr><td>BBE</td><td>OFF</td><td>-</td></tr><tr><td>Balance</td><td>0</td><td>0</td></tr><tr><td>AVL</td><td>OFF</td><td>OFF</td></tr><tr><td>Super Bass</td><td>OFF</td><td>-</td></tr><tr><td>Bass +</td><td>-</td><td>ON</td></tr></tbody></table> <div>3. Connect the voltmeter to the speaker terminal and make sure the reading is <math>9 \pm 1</math> Vrms.</div>	Setting item	#1	#2	Equalizer	Music	Music	Surround	OFF	OFF	BBE	OFF	-	Balance	0	0	AVL	OFF	OFF	Super Bass	OFF	-	Bass +	-	ON	<div>#1 : Sound setting for model with BBE and Super Bass in the sound menu.</div> <div>#2 : Sound setting for model without BBE and with Bass + in the sound menu.</div>
Setting item	#1	#2																									
Equalizer	Music	Music																									
Surround	OFF	OFF																									
BBE	OFF	-																									
Balance	0	0																									
AVL	OFF	OFF																									
Super Bass	OFF	-																									
Bass +	-	ON																									
2	Rear woofer output checking (For model with woofer box only)	<div>1. Receive the E-10ch (PAL colour bar).</div> <div>2. Connect the woofer wire from P303 to a 16 ohm dummy load.</div> <div>3. Set the volume to maximum and set the other sound setting as follow.</div> <table><thead><tr><th>Equalizer</th><th>Music</th></tr></thead><tbody><tr><td>Surround</td><td>OFF</td></tr><tr><td>BBE</td><td>OFF</td></tr><tr><td>Balance</td><td>0</td></tr><tr><td>AVL</td><td>OFF</td></tr><tr><td>Super Bass</td><td>ON</td></tr></tbody></table> <div>4. Connect the voltmeter to the dummy load and make sure the reading is <math>15 \pm 1</math> Vrms.</div>	Equalizer	Music	Surround	OFF	BBE	OFF	Balance	0	AVL	OFF	Super Bass	ON													
Equalizer	Music																										
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