

ADJUSTMENT

■ Safety Precautions

1. It is safe to adjust after using insulating transformer between the power supply line and chassis input to prevent the risk of electric shock and protect the instrument.
2. Never disconnect leads while the TV receiver is on.
3. Don't short any portion of circuits while power is on.
4. The adjustment must be done by the correct appliances. But this is changeable in view of productivity.
5. Unless otherwise noted, set the line voltage to 230Vac±10%, 50Hz.

■ Test Equipment required

1. RF signal generator (with pattern generator)
2. DC Power Supply
3. Multimeter (volt meter)
4. Oscilloscope
5. Color analyzer

• RF AGC (Automatic Gain Control) Adjustment

Test Point	: AGC TP (J2)
Adjust	: Remote Control

The RF AGC was aligned at the time of manufacture for optimum performance over a wide range conditions. Readjustment of RF AGC should not be necessary unless unusual local conditions exist, such as ;

- 1) Channel interference in a CATV system.
- 2) Picture bending and/or color beats, which are unusually due to excessive RF signal input when the receiver is too close to a transmitting tower or when the receiver is connected to an antenna distribution system where the RF signal has been amplified. In this case, the input signal should be attenuated (with pad or filter) to a satisfactory level.
- 3) Picture noise caused by "broadcast noise" or weak signal. If the broadcast is "clean" and the RF signal is at least 1mV (60dBu), the picture will be noise free in any area.

Adjusting RF AGC to one end of rotation will usually cause a relatively poor signal to noise ratio; Adjusting to the other end of rotation will usually cause a degradation of over load capabilities resulting in color beats or adjacent channel interference.

Adjustment

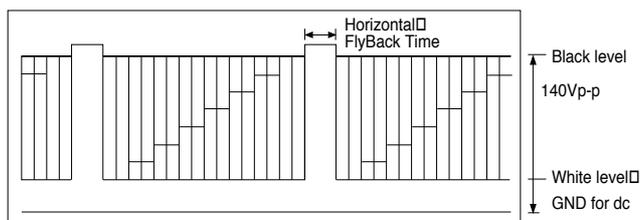
1. Connect RF signal (60dB±1dB) and turn on the TV.
2. Press OK buttons on TV set and Remote Controller at the same time to get into SVC mode.
3. Press Channel UP/DOWN button on the Remote Controller several times to find AGC ??.
4. Press Volume UP/DOWN button until the AGC Voltage is the same as the Table below.
5. Press OK(■) button to memorize the data.

TUNER	6700VPF002A(ALPS)	6700VPF003B(LGEC)
AGC Voltage	3.5 ± 0.1V	2.7 ± 0.1V

• Screen Voltage Adjustment

Test Point	: RK (Red Cathode of CPT Board)
Adjust	: Screen Control of FBT

- 1) Tune the TV set to receive a digital pattern.
- 2) Press PSM (RED) button on remote controller. (standard picture)
- 3) Connect the probe of oscilloscope to the RK (Red Cathode) of CPT Board.
- 4) Adjust Screen Volume of FBT so that the waveform is the same as below figure.



The waveform of RK(Red Cathode) of CPT Board

• Focus Adjustment

NOTE: This adjustment should be performed after warming up for 10 minutes.

Test Point	: Observing Display
Adjust	: Focus control of FBT

- 1) Tune the TV set to receive an inactive channel station.
- 2) Adjust the Focus control of FBT for best overall focus.

• **Deflection Data Adjustment (Line SVC-1)**

NOTE: To enter SVC mode, press "OK" buttons on both TV set and the Remote control at the same time.

1. Preparation for Deflection Adjustment

- 1) At SVC mode, press the Yellow colored button.
If the Remote Controller doesn't have the Yellow button, you should use a Service Remote Control (105-201G) and press SVC button.
And then, deflection data adjustment OSD (SVC1 mode) will be displayed.
- 2) Press Channel UP/DOWN button for desirous function Adjustment.
- 3) Press Volume UP/DOWN button to adjust the data.

2. Deflection Adjustment Procedure

- 1) **Vertical Adjustment**
Slect VS and adjust until the mechanical center of CPT and that of screen coincides and select VA and adjust to coincide the inner circle of screen with outer frame of CPT.
- 2) **Horizontal Adjustment**
Select HS and adjust until the mechanical center of CPT and that of screen coincides.
- 3) **Vertical S Correction Adjustment**
Select SC and adjust until top-bottom side pincushion are equal.
- 4) Press OK(■) button to memorize the data.

3. Deflection Initial Setup Data

Status	Default	21" LG	20" LG	14" LG	ORION 14"	ORION 16"	ORION 20"	ORION 21"
VL	34	34	34	34	34	34	34	34
VS	25	25	25	25	25	25	25	25
VA	43	43	43	43	43	43	43	43
HS	36	36	36	36	36	36	36	36
SC	10	10	10	5	5	5	5	5

• **Stereo Amp Adjustment(LINE SVC-2)**

* Real Stereo Model ONLY

Average ADJ. Data List		
FP	FM Prescaller	18
NP	Nicam Prescaller	72
SP	Scart Prescaller	40
SV	Scart Volume	55

* INABLE HOTEL TV(LIMIT VOLUME)

MAXVOL	1-100	
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• **White Balance Adjustment.(LINE SVC-0)**

NOTE : This adjustment should be performed after screen voltage adjustment.

- 1) Tune the TV set to receive an 100% white pattern.
- 2) Press OK(■) buttons on TV set and remote controller at the same time to get into SVC mode.
- 3) Press Channel UP/DOWN button for desirous function adjustment.
- 4) Adjust VOL+ or VOL- button for GG031.
- 5) Adjust VOL+ or VOL-button in each status of "Rg--"/"Bg--" for X=281±8, Y=288±8 with color analyzer.
- 6) Press OK(■) button to memorize the adjustment data.

Status	Adjustment	Range	Initial Data	Remark
RG	R-Drive	0~63	32	
GG	G-Drive	0~63	31	
BG	B-Drive	0~63	27	

• **Hold Down check**

Short J139 and ZD747 and check if the TV set turns into stand-by.

• **OPTION Adjustment (SVC MODE:OPTION-1, OPTION-2)**

NOTE: When the EEPROM has been replaced, the Option data should be restored as the function of individual system and specification.

- 1) Press OK buttons on both TV set and Remote Controller at the same time to get into SVC mode.
- 2) Press the Yellow button several times to find OPTION-1 or OPTION-2.
- 3) Input the correspond OPTION data referring to Table below with the numeric buttons 0~9.

Table 1. OPTION 1 Function

Option	Code	Function	Remark
SYSTEM	00	BG+I+DK	W/O RF 3.58(CF-, CZ-)
	01	BG+I+DK+M	with RF3.58(CT-, CD-)
	10	ONLY	Single SYSTEM(CA-)
	11	ONLY+DUAL	South East Asian DUAL
SCART	0	PHONO JACK (AV1)	
	1	SCART JACK (AV1)	with RGB Input
EYE	0	W/O EYE	
	1	with EYE	
UBB	0	W/O UBB	UBB for S-MAX(MONO) MODEL
	1	with UBB	
AV2	0	W/O AV2 (Front)	TOOL Option
	1	with AV2 (Front)	

Table 2. Specifications for OPTION-1 data

OPTION Data	SYSTEM	SCART	EYE	UBB	AV2
0	00	0	0	0	0
1	00	0	0	0	1
2	00	0	0	1	0
3	00	0	0	1	1
4	00	0	1	0	0
5	00	0	1	0	1
6	00	0	1	1	0
7	00	0	1	1	1
8	00	1	0	0	0
9	00	1	0	0	1
10	00	1	0	1	0
11	00	1	0	1	1
12	00	1	1	0	0
13	00	1	1	0	1
14	00	1	1	1	0
15	00	1	1	1	1
16	01	0	0	0	0
17	01	0	0	0	1
18	01	0	0	1	0
19	01	0	0	1	1

OPTION Data	SYSTEM	SCART	EYE	UBB	AV2
20	01	0	1	0	0
21	01	0	1	0	1
22	01	0	1	1	0
23	01	0	1	1	1
24	01	1	0	0	0
25	01	1	0	0	1
26	01	1	0	1	0
27	01	1	0	1	1
28	01	1	1	0	0
29	01	1	1	0	1
30	01	1	1	1	0
31	01	1	1	1	1
32	10	0	0	0	0
33	10	0	0	0	1
34	10	0	0	1	0
35	10	0	0	1	1
36	10	0	1	0	0
37	10	0	1	0	1
38	10	0	1	1	0
39	10	0	1	1	1
40	10	1	0	0	0
41	10	1	0	0	1
42	10	1	0	1	0
43	10	1	0	1	1
44	10	1	1	0	0
45	10	1	1	0	1
46	10	1	1	1	0
47	10	1	1	1	1
48	11	0	0	0	0
49	11	0	0	0	1
50	11	0	0	1	0
51	11	0	0	1	1
52	11	0	1	0	0
53	11	0	1	0	1
54	11	0	1	1	0
55	11	0	1	1	1
56	11	1	0	0	0
57	11	1	0	0	1
58	11	1	0	1	0
59	11	1	0	1	1
60	11	1	1	0	0
61	11	1	1	0	1
62	11	1	1	1	0
63	11	1	1	1	1

Table 3. OPTION 2 Function

Option	Code	Function	Remark
FFI	0	Normal Condition	Fast Filter IF-PLL (for excessive RF signal)
	1	FFI Active	
CHINA	0	W/O Chinese NICAM	Chinese Model only
	1	Chinese NICAM	
LANG.	M	Multi Language (M=0)	Language varies by MICOM Part No.
	E	English Only (E=1)	
HOTEL	0	W/O HOTEL	for Buyer 's request
	1	For HOTEL	
GAME	0	W/O GAME	POWER BALL
	1	With GAME function	

Table 4. Specifications for OPTION-2 data

OPTION Data	FFI	CHINA	LANG.	HOTEL	GAME
0	0	0	M	0	0
1	0	0	M	0	1
2	0	0	M	1	0
3	0	0	M	1	1
4	0	0	E	0	0
5	0	0	E	0	1
6	0	0	E	1	0
7	0	0	E	1	1
8	0	1	M	0	0
9	0	1	M	0	1
10	0	1	M	1	0
11	0	1	M	1	1
12	0	1	E	0	0
13	0	1	E	0	1
14	0	1	E	1	0
15	0	1	E	1	1
16	1	0	M	0	0
17	1	0	M	0	1
18	1	0	M	1	0
19	1	0	M	1	1
20	1	0	E	0	0
21	1	0	E	0	1
22	1	0	E	1	0
23	1	0	E	1	1
24	1	1	M	0	0
25	1	1	M	0	1
26	1	1	M	1	0
27	1	1	M	1	1
28	1	1	E	0	0
29	1	1	E	0	1
30	1	1	E	1	0
31	1	1	E	1	1

• HOTEL TV Mode

NOTE: This mode is useful for HOTEL TV MODEL. Dealer or HOTEL manager can use this option.
HOTEL TV FUNCTION has two powerful function

1. AFTER SELECTING HOTEL MODE, CAN NOT CHANGE INITIAL SET UP CONDITION.

- CHANNEL PROGRAM(AUTO PROGRAM, MANUAL PROGRAM, EDIT FUNCTION) and OSD LANGUAGE set up condition is fixed so the HOTEL lodger cannot change and remove initial set up data condition at his pleasure.

This function prevents HOTEL lodger from needless changing channel memory data and OSD language condition.

It will be helpful for maintaining the best suitable condition of TV SET

2. Limit MAX. VOLUME LEVEL.

- The HOTEL lodger can only use limited range of volume level because loud TV sound can disturb other lodger's private business.

The HOTEL manager select maximum volume level proper for HOTEL.

*** HOTEL mode operating guide**

1. SET UP(CH.SEARCH AND EDIT) the Channel Program
2. SET UP Proper max volume level in SVC Mode.
3. SET UP HOTEL option in SVC Mode(OPTION-2).