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¡À 10%, 50Hz.
6. The adjustment of TV should be performed afther warming up for 15 minutes.

¡ Test Equipment required

1. Multimeter (volt meter)
2. Oscilloscope
3. 10:1 PROBE
4. Color Analyzer

¡ RF AGC (Automatic Gain Control) Adjustment

Test Point	: AGC TP (J10)
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 (65dB¡À 0.2dB) and turn on the TV.
   ¡ Standard adjustment Channel
   - EU 05 Ch. (f_{rf} = 175.25MHz) : CE,CL,CF,CT
   - EU 41 Ch. (f_{rf} = 631.25MHz) : CI
2. Press OK buttons on TV set and Remote Controller at the same time to get into SVC-0 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(¡À) button to memorize the data.

Model	CE-	CL-
System	B/G,D/K,I	B/G,LL'
Tuner P/N	6700VPF005D	6700VPF005D
Marker	LG Innotek	LG Innotek
AGC Voltage	2.5¡À 0.05V	2.5¡À 0.05V

Model	CF-	CT-
System	B/G,D/K,I	B/G,D/K,I,M
Tuner P/N	6700VPF009G(W/O TBS)	6700VPF009G(W/O TBS)
	6700VPV002B(W/TBS)	6700VPV002B(W/TBS)
Marker	LG Innotek	LG Innotek
AGC Voltage	2.5¡À 0.05V	2.5¡À 0.05V

¡ Screen Voltage Adjustment

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

1) Connect the probe of oscilloscope to the RK (Red Cathode) of CPT Board.
2) Set the oscilloscope to 50V/div and 20Us/div and after putting GND line upon the lowest grid line of the scope by pressing GND button,enter into DC mode.
3) Tune the TV set to receive a PAL-B/G 05CH STANDARD Picture(PAL I model: 41CH).
4) Adjust Screen Volume of FBT so that the waveform is the same as below figure (DC 140¡À 3V).
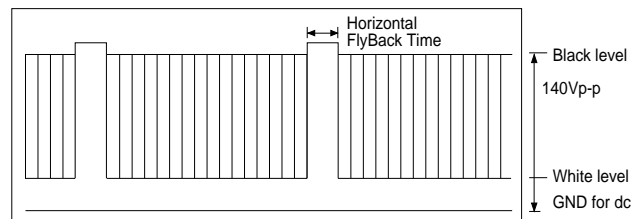
The waveform of Screen Voltage

¡ Focus Adjustment

Test Point	: Observing Display
Adjust	: Focus Volume of FBT

1) Tune the TV set to receive a PAL 05CH.
2) Adjust the Focus Volume of FBT for best focus of A.
3) Repeat above step 2) for best overall focus.
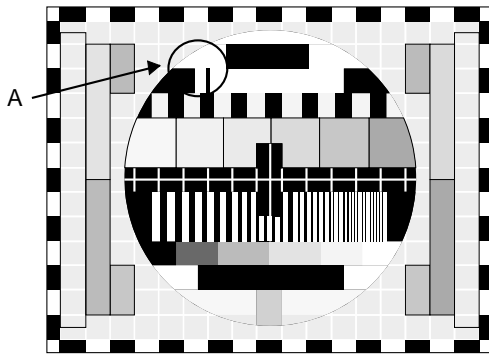
¡ White Balance Adjustment.(LINE SVC-1)

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

1) Tune the TV set to receive an 100% white pattern.
2) Press OK(¡Æ) buttons on TV set and remote controller at the same time to get into SVC mode.
3) Press Yellow button on remote controller. (Standard mode)
4) Press Channel UP/DOWN button for desirous function adjustment.
5) Adjust VOL+ or VOL- button for GG031.
6) Adjust VOL+ or VOL-button in each status of "Rg--"/"Bg--" for X=293¡8, Y=295¡8 with color analyzer.
7) Press OK(¡Æ) button to memorize the adjustment data.

Status	Adjustment	Initial Data	Remark
RG	R-Drive	28	
GG	G-Drive	31	
BG	B-Drive	25	

¡ Deflection Data Adjustment (Line SVC-2)

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 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

VL (Vertical Linearity)
Adjust so that the boundary line between upper and lower half is in accord with geometric horizontal center of the CPT.

VA (Vertical Amplitude)
Adjust so that the circle of a digital circle pattern may be

located within the effective screen of the CPT.

SC (Vertical "S" Correction)
Adjust so that all distance between each horizontal lines are to be the same.

VS (Vertical Shift)
Adjust so that the horizontal center line of a digital circle pattern is in accord with geometric horizontal center of the CPT.

HS (Horizontal Shift)
Adjust so that the vertical center line of a digital circle pattern is in accord with geometric vertical center of the CPT.

Press OK(¡Æ) button to memorize the data.

3. Deflection Initial Setup Data

Status	Default	21" SEB	20" SEB
VL	41		
VA	10		
VS	35		
HS	35		
SC	11		

¡ LINE SVC-3 Adjustment

ITEM	Data
FP(FM Mono Sound Prescale)	20
NP(NICAM Prescale)	80
SP(Scart Audio Input Prescale, AV1)	17
S1 VOL	93
S2 COL	93

¡ PSM Data

Adjust Data	PSM Mode				
	DYNAMIC	STANDARD	MILD	GAME	USER
CONTRAST	100	90	60	50	80
BRIGHTNESS	55	50	50	60	60
COLOUR	70	50	50	60	50
SHARPNESS	60	50	50	30	50

¡ 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.

Table 1. OPTION 1 Function

Option	Code	Function	Remark
AV2	0	W/O AV2	
	1	WITH AV2	
GAME	0	W/O GAME	for BUYER'S
	1	WITH GAME	request
TOP	0	TOP OFF	W/O TXT
	1	TOP ON	Swiss,Austria, Poland,Dutch
TEXT	0	W/O TEXT	
	1	WITH TEXT	
ACMS	0	W/O ACMS	
	1	WITH ACMS	
TBS	0	W/O LNA	
	1	WITH LNA	
EYE	0	W/O EYE	
	1	WITH EYE	
TURBO	0	TURBO SEARCH OFF	
	1	TURBO SEARCH ON	

Table 2. OPTION 2 Function

Option	Code	Function	Remark
200 PRO	0	W/O 200 PRO	
	1	WITH 200 PRO	
4 KEY	0	6/8 KEY	
	1	4 KEY	
CH + AU	0	CH + AU OFF	
	1	CH + AU ON	
I/II SV	0	DUAL SAVE OFF	
	1	DUAL SAVE ON	
A2 ST	0	MONO	
	1	A2 & NICAM	
MONO	0		
	1	MONO	

Option	Code	Function	Remark
VOL	0	EUROPE STANDARD	VOL CURVE
	1		
T P/S	0	TURBO P/S OFF	
	1	TURBO P/S ON	

Table 3. OPTION 3

ITEM	DATA	Remark
HOTEL	0	HOTEL OFF
	1	HOTEL ON
SYS	0	BG/L
	1	BG/I/DK
	2	BG/I/DK/M
	3	BG ONLY
	4	BG DUAL
	5	I ONLY
LANG	0	ENG ONLY
	1	EU-5EA
	2	EU ETC
	3	FARSI
	4	ARAB URDU
	5	E + INDIA
	6	E+I+M+V
	7	E+THAI
	8	E+CHINA
TEXT	0	WEST EU
	1	EAST EU1
	2	TURKEY EU
	3	EAST EU2
	4	CYRILLTC1
	5	CYRILLTC2
	6	CYRILLTC3
	7	TURK GRE1
	8	TURK GRE2
	9	TURK GRE3
	10	ARAB FRA
	11	ARAB ENG
	12	ARAB HEB1
	13	ARAB HEB2
	14	FARSI ENG
	15	FARSI FRA
	16	FARSI ALL
TBS ON	128	
M-VOL	50	HOTEL TV MAX.VOL Limit