
4-3. Factory Mode Adjustments

4-3-1 Entering Factory Mode

To enter 'Service Mode' Press the remote -control keys in this sequence :

- If you do not have Factory remote - control



- If you have Factory remote - control



- The buttons are active in the service mode.

1. Remote - Control Key : Power, Arrow Up, Arrow Down, Arrow Left

Arrow Right, Menu, Enter, Number Key(0~9)

2. Function - Control Key : Power, CH +, CH -, VOL +, VOL -,

Menu, TV/VIDEO(Enter)

4-3-2 Panel Check

You have to check Panel Maker Because of different adjustments as follows.

First of all, Check the label rating!

1) Label Rating File

- LCD PANEL MARK

A:ACER(AUO) S : SEC C : CMO

* If not printed you could consider S(sec) panel mark.

4-3-3 Factory Data

■ Option

Option	Factory Reset	OPTION	RANGE
Type	32D_AG		22D_T,22I_T,22L_T,26D_AG, 26L_AG, 32L_AG, 32D_AG, 37L_AG, 40L_AG, 32A_AG_F, 32L_AG_F, 32D_AG_F, 32I_AG_F, 37L_AG_F, 37D_AG_F, 40A_AG_F, 40L_AG_F, 40D_AG_F, 46A_AG_F, 46L_AG_F, 46D_AG_F, 32A_AG_FF, 32L_AG_FF, 32D_AG_FF, 40A_AG_FF, 40L_AG_FF, 40D_AG_FF, 46A_AG_FF, 46D_AG_FF, 52A_AG_FF, 52L_AG_FF
Model	B550_FBE		PB350, PB430, PB450, PB550, PB550_FBE, L_BASIC, LB350, LB360, LB360_22, LB450, LB450_22, LB460, LB480, LB480_22, LB530, LB550, B550_FBE, LB622, LB550_FBE_NM
Tuner Select	SEMCO		SEMCO, XUGUANG
DDR	Samsung		Samsung
Ch Table	SUWON		SUWON, SESK, SHE, TTSEC, SEIN, SDMA, TSED, SAVINA, SIEL, TSE
Local Set	East Asia		Vietnam, Philippines, China, India, Iran, Israel, Middle Asia, East Asia, Thailand, Africa
P&P Language	English		English, China, French, Arabic, Persia, Hebrew, Russian
PDP Group	P55A_50SP		P55A_50SP

■ ADC/WB

ADC		Success	Success/Failure
	AV Calibration	Success	Success/Failure
	Comp Calibration	Success	Success/Failure
	PC Calibration	Success	Success/Failure
	HDMI Calibration	Success	Success/Failure

ADC Target			
	1st_AV_Low	17	0 ~ 255
	1st_AV_High	234	0 ~ 255
	1st_AV_Delta	3	0 ~ 255
	1st_Comp_Low	17	0 ~ 255
	1st_Comp_High	234	0 ~ 255
	1st_Comp_Delta	3	0 ~ 255
	1st_PC_Low	1	0 ~ 255
	1st_PC_High	235	0 ~ 255
	1st_PC_Delta	3	0 ~ 255
	2nd_Low	2	0 ~ 255
	2nd_High	235	0 ~ 255
	2nd_Delta	1	0 ~ 255

ADC Result	1st_AV_Gain	132	0 ~ 255
	1st_AV_Offset	139	0 ~ 255
	1st_Comp_Gain	67	0 ~ 255
	1st_Comp_Gain_Cb	67	0 ~ 255
	1st_Comp_Gain_Cr	67	0 ~ 255
	1st_Comp_Offset	128	0 ~ 255
	1st_Comp_Offset_Cb	128	0 ~ 255
	1st_Comp_Offset_Cr	128	0 ~ 255
	1st_PC_R_Gain	85	0 ~ 255
	1st_PC_G_Gain	85	0 ~ 255
	1st_PC_B_Gain	86	0 ~ 255
	1st_PC_R_Offset	140	0 ~ 255
	1st_PC_G_Offset	142	0 ~ 255
	1st_PC_B_Offset	142	0 ~ 255
	2nd_R_Offset	57	0 ~ 255
	2nd_G_Offset	57	0 ~ 255
	2nd_B_Offset	57	0 ~ 255
	2nd_R_Gain	114	0 ~ 255
	2nd_G_Gain	114	0 ~ 255
	2nd_B_Gain		0 ~ 255

WB	Sub Brightness	128	0 ~ 255
	Red Offset	128	0 ~ 255
	Green Offset	128	0 ~ 255
	Blue Offset	128	0 ~ 255
	Sub Contrast	128	0 ~ 255
	Red Gain	128	0 ~ 255
	Green Gain	128	0 ~ 255
	Blue Gain	128	0 ~ 255

■ Control

EDID	EDID Protect	On	On/Off
	EDID Type	L13_1920_1080	P12_1024_768, P13_1024_768, P12_1366_768, P13_1366_768, P12_1920_1080, P13_1920_1080, L12_1366_768, L13_1366_768, L12_1920_1080, L13_1920_1080
	EDID Write(0x4D,0)	L13_1920_1080 SUCCESS	P12_1024_768, P13_1024_768, P12_1366_768, P13_1366_768, P12_1920_1080, P13_1920_1080, L12_1366_768, L13_1366_768, L12_1920_1080, L13_1920_1080

Sub Option			
Video Mute Time	8	0~99	
Inch	32"	19, 22, 23, 26, 27, 32, 37, 40, 42, 46, 50, 52, 57	
Dimm Type	EXT	EXT, INT, INT_NEG, EXT_POS, EXT_NEG	
D.Gamma	Off	Off, 0.85, 0.88, 0.90, 0.93, 0.95, 0.98, M1, M2, M3, M4	
Anynet+	On	On/Off	
TTX	On	On/Off	
TTX List	Flof	Flof/List	
TTX Group	Lang OSD	"Lang OSD, W Europe, E Europe, Russia, Greek, Turkey, Arab, Farsi, ArabHbrw"	
Carrier Mute	Off	On/Off	
High Devi	Off	On/Off	
Volume Curve	EA	EA, INDIA	
NT Conversion	Off	On/Off	
Auto Power	On	On/Off	
LVDS Format	DEFAULT	DEFAULT, VESA, JEIDA	
LNA Menu	Off	On/Off	
WatchDog	Off	On/Off	
Bus Stop			
Panel Auto Setting			
HotPlug	On	On/Off	
HotPlugCtrl	On	On/Off	
HotPlugDelay	12	0~63	
USB Upgrade	Off	On/Off	
Spread Spectrum			

Spread Spectrum			
Spread Spectrum	On	On/Off	
Step 1	30	0~255	
Step 2	9	0~255	
Range 1	0	0~255	
Range 2	44	0~255	
FBE SSC	5	On/Off	

■ PDP Option

PDP Option	
PDP Filter	

■ Hotel Option

Hotel Option	Hotel Mode	Off	On/Off
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■ Shop Option

Shop Option	Shop Mode	Off	On/Off
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■ Sound

SOUND	Detection Threshold			OPTION	RANGE
		Pilot Threshold	M2S Thr High	2	0~255
		M2S Thr Low	144	0~255	
		S2M Thr High	1	0~255	
		S2M Thr Low	176	0~255	
	Carrier1 Threshold	Amp On Thr High	2	0~255	
		Amp On Thr Low	0	0~255	
		Amp Off Thr High	1	0~255	
		Amp Off Thr Low	0	0~255	
		NSR On Thr High	16	0~255	
		NSR On Thr Low	0	0~255	
		NSR Off Thr High	32	0~255	
		NSR Off Thr Low	0	0~255	
	Carrier2 Threshold	Amp On Thr High	2	0~255	
		Amp On Thr Low	0	0~255	
		Amp Off Thr High	1	0~255	
		Amp Off Thr Low	0	0~255	
		NSR On Thr High	13	0~255	
		NSR On Thr Low	0	0~255	
		NSR Off Thr High	24	0~255	
		NSR Off Thr Low	0	0~255	
	FM Prescale	23	0~40		
	AM Prescale	22	0~40		
	NICAM Prescale	33	0~40		
	FM M Prescale	23	0~40		
	SC1 Vol	16	0~40		
	SC2 Vol	16	0~40		
	Audio Delay Normal	8	0~255		
	Audio Delay Game	8	0~255		
	Num Of Check	10	0~60		
	Stereo Cnt	10	0~60		
	MP3 Level	0	0~60		
	Ext Volume Scale	2	0~100		
	R2E Scart2 Offset	2	0~40		
	NTP Master Volume	32	0~48		
	NTP PWM Modulation	254	0~255		
	NTP DRC Thresh1	55	0~127		
	NTP DRC Thresh2	80	0~127		
	NTP Speaker EQ	On	On/Off		

■ MST69A84HQ

VDEC	SYNC_LVL	255	0~255
	HPLL_MD	0	0~1
	HPLL_SPD1	16	0~63
	HPLL_SPD2	32	0~255
	CBCRLP_MD	1	0~3
	YC_DLY	1	0~3
	IFCOMP	0	0~63
	SAT_ADJ	128	0~255
	YSEPFLT	7	0~7
	NOISE_LVL	0	0~255

IPC/MJC	Film Det Speed NT	80	0~255
	Film Det Speed PAL	80	0~255
	Motion Hist	5	0~7
	Motion History	3	0~7

Color Space	Red Sat	25	0~30
	Red Hue	64	0~127
	Green Sat	34	0~30
	Green Hue	127	0~127
	Blue Sat	37	0~30
	Blue Hue	80	0~127
	Cyan Sat	37	0~30
	Cyan Hue	80	0~127
	Magenta Sat	25	0~30
	Magenta Hue	64	0~127
	Yellow Sat	23	0~30
	Yellow Hue	64	0~127
	FWC Blue	21	0~30
	FWC Red	21	0~30

■ FBE

FBE	Pattern Select		0~25
	B-Slope Gain		0~255
	B-Tilt Min		0~255
	B-Tilt Max		0~255
	LFuc-Basis		0~255
	HFuc-Basis		0~255
	Mean-Offset1		0~255
	Mean-Offset2		0~255
	Mean-Slope		0~255
	ACR Offset		0~127
	ACR Th1		0~255
	ACR Th2		0~255
	Skin Enable		0~255
	Skin Uv		0~255
	Mskin Uv		0~255
	Sub Color		0~255
	Msub Color		0~255

■ WB Movie

WB Movie	WB Moive	Off	On/Off
	Color Mode	Movie	Dynamic, Standard, Movie
	Color Tone	Cool	Cool, Normal, Warm1, Warm2
	Msub Brigh	128	0~255
	Msub Contr	128	0~255
	W1_RGAIN	138	0~255
	W1_BGAIN	109	0~255
	W1_ROFFS	128	0~255
	W1_BOFFS	128	0~255
	W2_RGAIN	144	0~255
	W2_BGAIN	84	0~255
	W2_ROFFS	128	0~255
	W2_BOFFS	128	0~255
	NO_RGAIN	134	0~255
	NO_BGAIN	109	0~255
	NO_ROFFS	128	0~255
	NO_BOFFS	128	0~255
	Movie_Contr	100	0~100
	Movie_Brigh	45	0~100
	Moive_Color	55	0~100
	Moive_Sharp	75	0~100
	Moive_Tint	50	0~100
	Mv BkLight	10	0~10
M.Gamma	Off	-5~5	
M.S.Gamma	-3	-3~3	

■ EPA Standard

EPA Standard	Std Contr	95	0~100
	Std Bright	45	0~100
	Std Sharp	40	0~100
	Std Color	50	0~100
	Std Tint	50	0~100
	Std Backlight	7	0~10

■ Adjsut

Adjsut	Dynamic Dimming Dynamic CE	Off	On/Off		
			Dynamic CE B Slope	Off Off	On/Off On/Off
	LNA Plus		RF Db 0 Level RF Db 1 Level RF Db 2 Level RF Db 3 Level	3 8 13 25	0~255 0~255 0~255 0~255
	Megazine LNA UART Select Debug Mode BackEndMute PixelShift Test Hp Detect ????? PDP FRC Visual Test	Off Off Normal Off Off High On Off	On/Off On/Off Normal, NONE, MSTAR, Run Time On/Off On/Off High/Low On/Off On/Off		

■ YC_Delay

YC Delay	PAL BG	1	0~3
	PAL DK	1	0~3
	PAL I	1	0~3
	SECAM BG	4	0~7
	SECAM DK	4	0~7
	SECAM L	4	0~7
	NTSC 358	1	0~3
	NTSC 443	1	0~3
	AV PAL	0	0~3
	AV SECAM	4	0~7
	AV NT358	1	0~3
	AV NT443	1	0~3
	AV PAL60	1	0~3

■ Sharpness

Sharpness	H1 Gain	44	0~63
	H2 Gain	8	0~63
	H3Gain	8	0~63
	H4 Gain	8	0~63
	V1 Gain	48	0~63
	V2 Gain	8	0~63
	H Overshoot B1	16	0~255
	H Overshoot B2	16	0~255
	V Overshoot B5	16	0~255
	V Overshoot B8	16	0~255
	H Undershoot B1	16	0~255
	H Undershoot B2	16	0~255
	V Undershoot B5	16	0~255
	V Undershoot B8	16	0~255
	Coring TH2	1	0~15
	Coring TH1	1	0~15

■ PE

PE	Skin X	0	0~11
	Skin Y	0	0~11
	B Slope	160	0~255
	DLC ML	96	0~255
	DLC_MH	160	0~255
	DLC_H	240	0~255
	Skin_SAT	0	0~15
	Skin_Hue	0	0~127
	M_Skin_Hue	0	
	M_Skin_X	0	0~11
	M_Skin_Y	0	0~11
	Mid_color_level	176	0~255
	M_Mid_color_level	176	0~255

■ EEPROM Reset

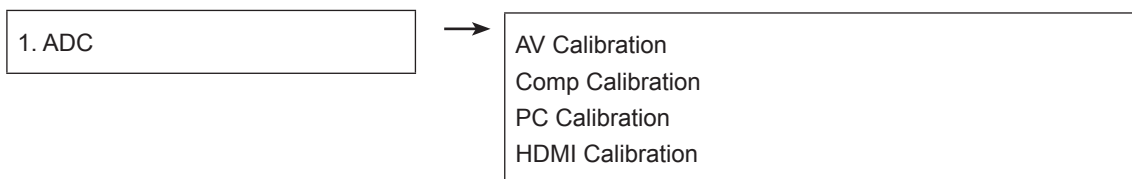
EEPROM Reset	EEPROM Reset	Off	OK
	NVR All Clear		On/Off

■ Defect Log

Defect Log	LogList1
	LogList2
	LogList3

4-4. White Balance - Calibration

4-4-1 White Balance -Calibration

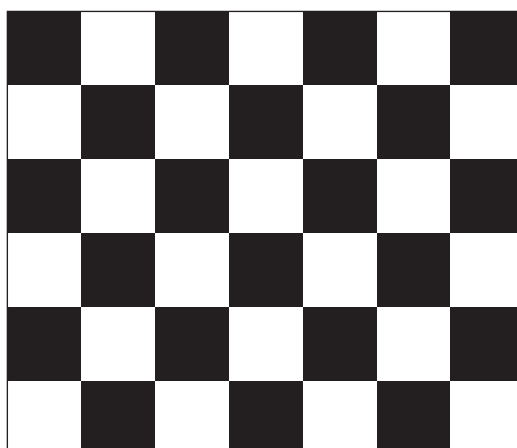


4-4-2 Service Adjustment - You must perform Calibration in the Lattice Pattern before adjusting the White Balance.

■ Color Calibration

Adjust spec.

1. Source : HDMI
2. Setting Mode : 1280*720@60Hz
3. Pattern : Pattern #24 (Chess Pattern)



(Chess Pattern)

4. Use Equipment : CA210 & Master MSPG925 Generator

- Use other equipment only after comparing the result with that of the Master equipment.

Input mode	Calibration	Pattern
CVBS IN (Model_#1)	Perform in NTSC B&W Pattern #24	Lattice
Component IN (Model_#6)	Perform in 720p B&W Pattern #24	Lattice
PC Analog IN (Model_#21)	Perform in VESA XGA (1024x768) B&W Pattern #24	Lattice
HDMI IN	Perform in 720p B&W Pattern #24	Lattice

<Table 1>

■ Method of Color Calibration (AV)

- 1) Apply the PAL Lattice (NO. 2) pattern signal to the AV IN 1 port
- 2) Press the Source key to switch to "AV1" mode
- 3) Enter Service mode
- 4) Select the "ADC" menu
- 5) Select the "AV Calibration" menu.
- 6) In "AV Calibration Off" status, press the "▶" key to perform Calibration.
- 7) When Calibration is complete, it returns to the high-level menu.
- 8) You can see the change of the "AV Calibration" status from Failure to Success.

■ Method of Color Calibration (Component)

- 1) Apply the 720p Lattice (NO. 6) pattern signal to the Component IN 1 port
- 2) Press the Source key to switch to "Component1" mode
- 3) Enter Service mode
- 4) Select the "ADC" menu
- 5) Select the "Comp Calibration" menu.
- 6) In "Comp Calibration Off" status, press the "▶" key to perform Calibration.
- 7) When Calibration is complete, it returns to the high-level menu.
- 8) You can see the change of the "Comp Calibration" status from Failure to Success.

■ Method of Color Calibration (PC)

- 1) Apply the VESA XGA Lattice (NO. 21) pattern signal to the PC IN port
- 2) Press the Source key to switch to "PC" mode
- 3) Enter Service mode
- 4) Select the "ADC" menu
- 5) Select the "PC Calibration" menu.
- 6) In "PC Calibration Off" status, press the "▶" key to perform Calibration.
- 7) When Calibration is complete, it returns to the high-level menu.
- 8) You can see the change of the "PC Calibration" status from Failure to Success.

■ Method of Color Calibration (HDMI)

- 1) Apply the 720p Lattice (NO. 6) pattern signal to the HDMI1/DVI IN port
 - 2) Press the Source key to switch to "HDMI1" mode
 - 3) Enter Service mode
 - 4) Select the "ADC" menu
 - 5) Select the "HDMI Calibration" menu.
 - 6) In "HDMI Calibration Off" status, press the "▶" key to perform Calibration.
 - 7) When Calibration is complete, it returns to the high-level menu.
 - 8) You can see the change of the "HDMI Calibration" status from Failure to Success.
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4-4-3 White Balance - Adjustment

	(low light)	(high light)
5. W/B	Sub Bright R offset G offset B offset	Sub Contrast R gain G gain B gain

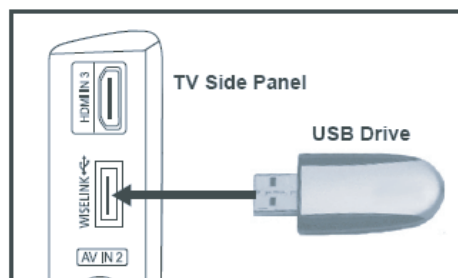
(W/B adjustment Condition refer next page)

4-5. Servicing Information

4-5-1 USB Download Method

Samsung may offer upgrades for TV's firmware in the future. Please contact the Samsung call center at 1-800-SAMSUNG (726-7864) to receive information about downloading upgrades and using a USB drive. Upgrades will be possible by connecting a USB drive to the USB port located on your TV.

1. Insert a USB drive containing the firmware upgrade into the MEDIA PLAY port on the side of the TV.
2. Enter the factory mode.
Go to Control → Sub Option, then change "USB Upgrade" from Off to On.
3. Pull out power cord from the Set and re-insert.
4. Power indicator LED Light on.
And in just a few seconds, The light twinkle faster as time went on.
5. The SET is automatically ON.
You can watch updated software version that you enter the factory mode.



Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied. The TV will turn off and turn on automatically after completing the firmware upgrade. Please check the firmware version after the upgrades are complete. When software is upgraded, video and audio settings you have made will return to their default (factory) settings. We recommend you write down your settings so that you can easily reset them after the upgrade.
