



LED TV

Chassis : UNE50

Model : UN58J5190AF

SERVICE Manual

LED TV



UN58J5190AF

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1. Precautions
2. Product specifications
3. Disassembly and Reassembly
4. Troubleshooting
5. Wiring Diagram

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3. Disassembly and Reassembly

This section of the service manual describes the disassembly and reassembly procedures for the LED TV.



This LED TV contains electrostatically sensitive devices. Use caution when handling these components.

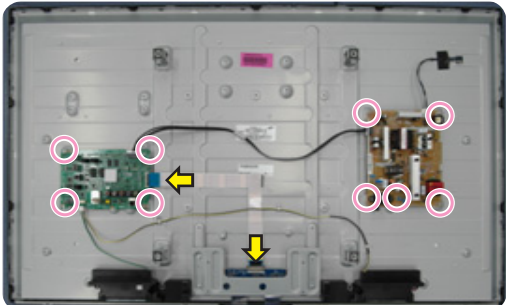
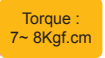

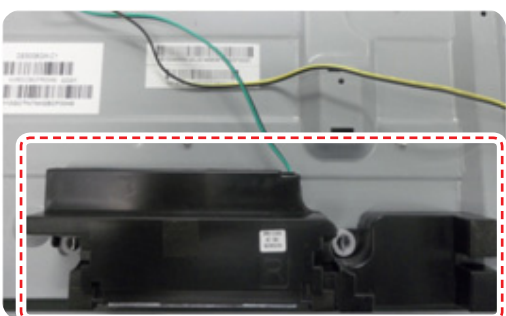
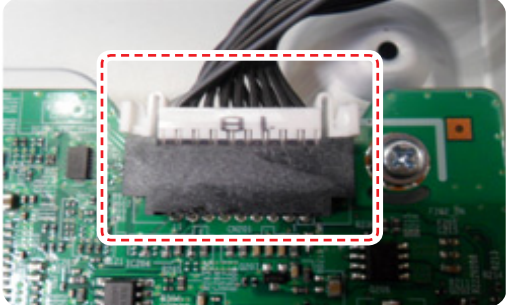
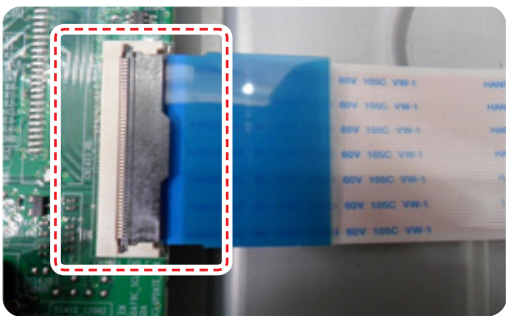
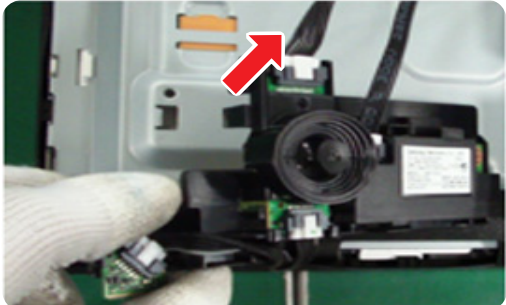
3-1. Disassembly and Reassembly

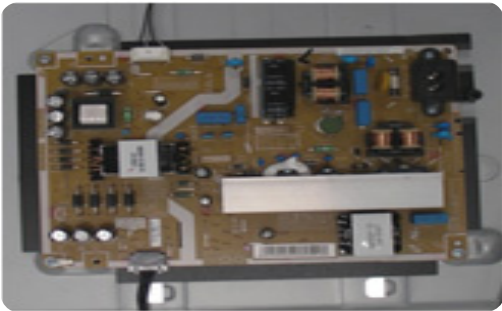



1. Disconnect the LED TV from the power source before disassembly.
2. Follow these directions carefully; never use metal instruments to pry apart the cabinet.
3. If there is no additional coment, it is same for all inches.

Description	Picture Description	Screws
1 Place TV face down on cushioned table.		
2 Remove screws from the Stand and Remove Stand. – 58" : 4ea		<div> Torque : 7~ 8Kgf.cm </div> 6003-001782
3 Remove screws of Rear Cover.		<div> Torque : 7~ 8Kgf.cm </div> 6003-001782 <div> Torque : 4~ 5Kgf.cm </div> 6003-002755

3. Disassembly and Reassemble

Description	Picture Description	Screws
4 Remove screws of Main Board and Power Board.		  6001-002756
5 Remove the speakers and power cables.	 	
6 Remove the cables, function assy and Panel drive cable.	 	

Description	Picture Description	Screws
		
7 Completed disassembly.		











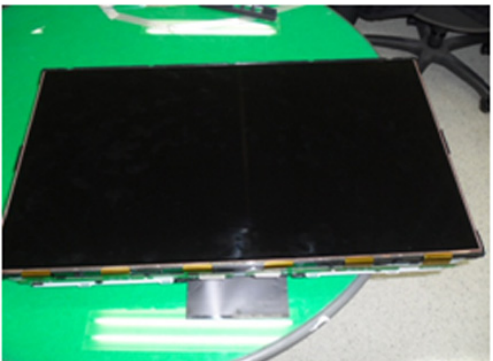
NOTE

Reassembly procedures are in the reverse order of disassembly procedures.




3-2. Disassembly(PTC)

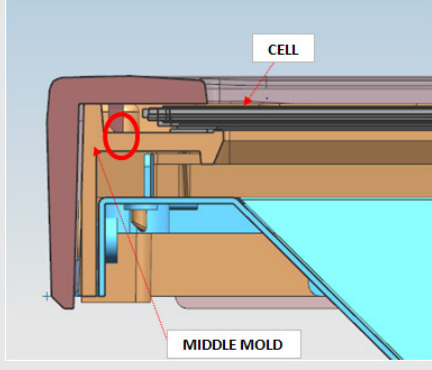

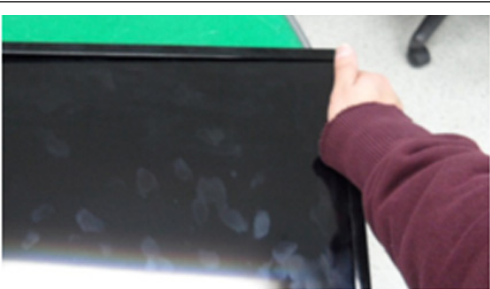
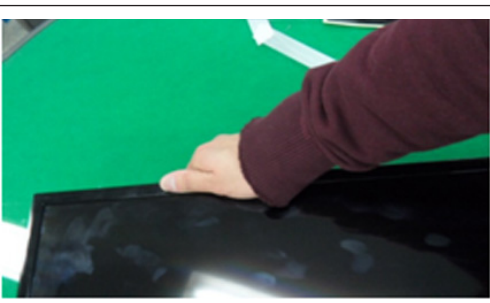


■ How to disassembly

Description	Picture Description	Refer
<div>1</div> <div>Place TV face up on cushioned table.</div>		
<div>2</div> <div>Remove the ASSY Function assy.</div>		
<div>3</div> <div>Spread the both sides of PTC upper (marked "▼") by use the tool.</div> <div><div><div>! CAUTION</div><div>Do not scratch on both side by use tool. Gate Cof will be damaged.</div></div><div></div></div>	<div></div> <div></div>	


Description	Picture Description	Refer
4 Separate the left and right side of the PTC as shown.		
5 Separate the Bottom of the PTC as shown		
6 Raise up the PTC Bottom.		
7 Disassembly is complete.		

■ How to reassembly

Description	Picture Description	Refer
<div>1</div> <div>Attach the PTC Bottom first to the Panel.</div>		
		
<div>2</div> <div>Secure the plastic latch on the left and right side of the PTC as shown.</div>		

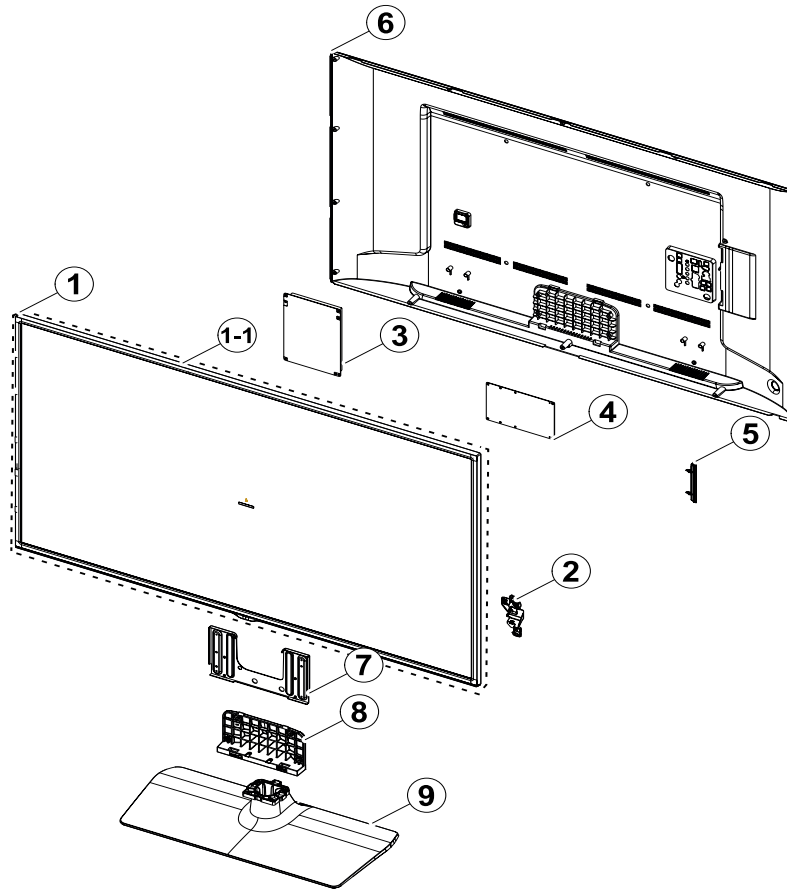
Description	Picture Description	Refer
<div data-bbox="172 277 678 344">3 Visually inspect the spacing between the PTC and the Panel for equal clearance.</div> <div data-bbox="245 367 678 488"><div data-bbox="245 367 309 412"></div><div data-bbox="309 367 421 412">CAUTION</div><div data-bbox="245 434 678 488">Combine to stick the PTC Rib into the middle mold.</div></div> <div data-bbox="245 501 678 869"></div>		
		
		
		
		

3. Disassembly and Reassemble

Description	Picture Description	Refer
<div data-bbox="172 286 209 338">4</div> Assembly is complete.		

ANNEX. Exploded View & Part List [UN58J5190AFXZA IS01]

1-1. Exploded View



1-1-1. Parts List

No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
1	BN95-01724A	PRODUCT LCD-INX; v580HJ1,CY-HH058BGNV1H/V	1	SA	
1-1	BN96-33358A	ASSY CHASSIS TOP P; Y14 F-LED 58,PC+ABS+G	1	SA	
2	BN96-30902X	ASSY BOARD P-FUNCTION; 58H5203,Function A	1	SA	
3	BN44-00787A	DC VSS-LED TV PD BD; L58GFB_ESM,L58GFB_ES	1	SA	
4	BN94-10553A	ASSY PCB MAIN; UN58J5190AFXZA	1	SA	
5	BN61-11153A	HOLDER-SIDE AV; UH5203,HIPS,UO	1	SNA	
6	BN96-39100A	ASSY COVER P-REAR; 58J5202,USA	1	SA	
7	BN61-07962B	BRACKET-STNAD LINK; UE6030 55",SECC,T1.6,	1	SA	
8	BN96-33524A	ASSY GUIDE P-STAND; UH5200 58,PC+G/F20%,B	1	SA	
9	BN96-33225B	ASSY STAND P-BASE; UH5200 58",ABS,HB,BLK	1	SA	

2-1. Electrical Parts List

Service Bom (SA: SERVICE AVAILABLE, SNA: SERVICE NOT AVAILABLE)

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
			UN58J5190AFXZA (IS01)			
1		BN90-05304X	ASSY W/I;UN40F6400AFXZA	1	SNA	
0.2		BN81-08159Z	PART SET-ELEC W/I;UF**,UH**,UG**,ELEC	1	SNA	
0.2		BN81-09500R	PART SET-MECH W/I;UH5H,U58HF*	1	SNA	
1	S001A	BN90-06123A	ASSY STAND;UH5200 58"	1	SNA	
0.2	SB04A	BN96-33225B	ASSY STAND P-BASE;UH5200 58",ABS,HB,BLK	1	SA	
..3	SCREW	6001-003041	SCREW-MACHINE;FH,+,M4,L8,ZPC(BLK),SWRCH1	5	SA	
..3	SCREW	6003-001782	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	4	SA	
..3		6902-000518	BAG PE;HDPE/PE FOAM/HDPE,T0.015/T0.05,W8	1	SNA	
..3		BN60-01083A	SPACER-FOAM;PE FORM,30000mm(1PC),Dark Gr	1	SNA	
..3		BN61-10856A	BRACKET-STAND,BASE;H5200,58,SECC,2.0	1	SNA	
..3		BN61-10895A	GUIDE-STAND,NECK;UH5200 58",PC+GF20%,BK0	1	SNA	
..3	CCM1	BN63-02183E	SHEET-COVER;Rhcm,PE,T0.04,750mm,200M,HB,	1	SNA	
..3		BN63-12618B	COVER-STAND BASE;UH5200 58",ABS,HB,BLK	1	SNA	
..3		BN67-00327D	RUBBER-FOOT;STAND,SILICON,13*13,T2,GRAY(6	SNA	
0.2	SG01A	BN96-33524A	ASSY GUIDE P-STAND;UH5200 58,PC+G/F20%,B	1	SA	
..3		0203-001602	TAPE-OPP MASKING;#232,0.14,15,50000,YEL	0	SNA	
..3		6902-000110	BAG PE;LDPE,T0.05,W250,L400,TRP,2,N	1	SNA	
..3	SG03	BN61-10894A	GUIDE-STAND;UH5200 58",PC+GF20%,BK0007,V	1	SNA	
..3		BN68-05381A	LABEL-BASE;Art Paper 100G,T0.08,20mmX50m	1	SNA	
..3		BN96-29120C	ASSY ACCESSORY-SCREW;6003-001782,8EA,LED	1	SNA	
...4	SCREW	6003-001782	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	8	SA	
...4		BN69-09241C	BAG SCREW;LDPE,0.05,70,90,TRP,Vinyl pack	1	SNA	
1	R001A	BN90-06169S	ASSY COVER REAR;UH5203 58"	1	SNA	
0.2	SCREW	6001-002755	SCREW-MACHINE;BH,+,M3,L6,ZPC(BLK),SWRCH1	4	SA	
0.2	SCREW	6003-001782	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	16	SA	
0.2	R001A	BN96-39100A	ASSY COVER P-REAR;58J5202,USA	1	SA	
..3	R001	BN63-12619N	COVER-REAR;H5203 58",HIPS,V0,BLK,MASTER	1	SNA	
..3	T0071	BN64-02772G	INLAY-TERMINAL;J6200,PC,T0.25,W165.4,L14	1	SNA	
1		BN91-12976A	ASSY LCM-AMLCD;BN95-01724A,CY-HH058BGNV1	1	SNA	
0.2	PANEL	BN95-01724A	PRODUCT LCD-INX;v580HJ1,CY-HH058BGNV1H/V	1	SA	
..3	SCREW	6001-002756	SCREW-MACHINE;BH,+,M3,L6,ZPC(WHT),SWRCH1	4	SA	
..3	SCREW	6001-002757	SCREW-MACHINE;BH,+,M3,L4,ZPC(WHT),SWRCH1	6	SA	
..3	CB20	BN61-07953A	BRACKET-WALL;UE5000 46",EGI-SECC PL,T1.2	4	SA	
..3		BN61-07962B	BRACKET-STNAD LINK;UE6030 55",SECC,T1.6,	1	SA	
..3	M0131	BN63-00520A	GASKET;APPOLO_PAL,Conductive Fabric,0.13	4	SNA	
..3		BN68-05595A	LABEL-STICKER;Art Paper 100G,T0.2,80mmX2	1	SNA	
..3		BN90-05987A	ASSY MISC-BLU;MEGA MODEL,CY-HH058BGNV1V	1	SNA	
...4		BN02-00043C	TAPE ETC-SHEET FIXING;F-LED 32/40/46,3M	3	SNA	
...4		BN02-00102B	TAPE-FILAMENT;#8917,0.15,25,50,WHITE	3	SNA	
...4		BN61-07891A	SUPPORT-PLATE;Y12 FULL LED,PC,V2,CLEAR	9	SNA	
...4		BN61-10791A	LGP-DIFFUSES R PLATE;58inch Mega, Diffuse	1	SNA	
...4		BN62-00635A	INSULATION-SOURCE PCB R;Y14 58",PC,0.25,	1	SNA	
...4		BN62-00635B	INSULATION-SOURCE PCB L;Y14 58",PC,0.25,	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4		BN63-12638A	SHEET-COMPLEX;MEGA 58inch G230-54,PET,0.	1	SNA	
...4		BN63-12640A	SHEET-REFLECTOR;MEGA 58inch UXJP175,PET,	1	SNA	
...4		BN96-32771A	ASSY LED BAR P;58inch Left,Direct LED PK	6	SNA	
...4		BN96-32772A	ASSY LED BAR P;58inch Right,Direct LED P	6	SNA	
...4		BN96-33354A	ASSY CHASSIS BOTTOM P;Y14 F-LED 58,MEGA,	1	SNA	
....5		AK63-00675A	GASKET;BD-C7500,Conductive Fabric,2mm,5m	4	SNA	
....5		BN02-00040C	TAPE DOUBLE FACE-D-PLATE;F-LED ALL,MKT50	2	SNA	
....5		BN02-00074D	TAPE PET;58H5200,PET,T0.05,W40,L40,BLK,3	4	SNA	
....5		BN02-00102B	TAPE-FILAMENT;#8917,0.15,25,50,WHITE	0	SNA	
....5		BN02-00134E	TAPE ETC-SHEET FIXING;SFLED 32/40/46/55/	6	SNA	
....5		BN02-00324A	TAPE-METAL FOIL;Y14 4K,T0.085,W25,NTR,3M	0	SNA	
....5		BN02-00352B	TAPE OPP;PET,T0.05,W30,L50M,BLK,ULNO.E16	0	SNA	
....5		BN02-00352D	TAPE OPP;PET,T0.05,W20,L50M,BLK,ULNO.E16	0	SNA	
....5	EC13	BN39-01910A	LEAD CONNECTOR;58inch Mega,Lead Connecto	1	SNA	
....5		BN61-11027A	HOLDER-SOURCE PCB;H4.2K 58",NYLON66,1.8T	4	SNA	
....5		BN62-00501M	INSULATION-PD BOARD 58;Y14 H4.2K 58,PC,0	1	SNA	
....5	CC02	BN64-02743A	CHASSIS-BOTTOM;Y14 F-LED 58",EGI-SECC AG	1	SNA	
...4		BN96-33355A	ASSY FRAME P-MOLD MIDDLE U;Y14 F-LED 58,	1	SNA	
....5		BN61-10803A	FRAME-MOLD MIDDLE U;Y14 F-LED 58",PC+G/F	1	SNA	
...4		BN96-33356A	ASSY FRAME P-MOLD MIDDLE D;Y14 F-LED 58,	1	SNA	
....5		BN60-00744A	SPACER-RUBBER;Y13 F-LED SLIM,SH-0140U+AT	1	SNA	
....5		BN60-00999E	SPACER-PANEL(UD);14 ENTRY MODEL 58",SI,6	2	SNA	
....5		BN61-10804A	FRAME-MOLD MIDDLE D;Y14 F-LED 58",PC+G/F	1	SNA	
...4		BN96-33357A	ASSY FRAME P-MOLD MIDDLE LR;Y14 F-LED 58	2	SNA	
....5		BN60-00999F	SPACER-PANEL(LR);14 ENTRY MODEL 58" & quot	2	SNA	
....5		BN61-10805A	FRAME-MOLD MIDDLE LR;Y14 F-LED 58",PC+G/	2	SNA	
..3	FL06	BN96-30782D	ASSY CABLE P-FFC;H7000,FFC,NH,68mm□1,60	2	SNA	
..3		BN96-32743A	ASSY OPEN CELL;V580HJ1-PD6,CY-HH058BGNV1	1	SNA	
...4		BN81-10743A	A/S-A/S-IC DRIVER SOURCE;INX 58 FHD 60Hz	1	SNA	
...4		BN81-10744A	A/S-A/S-IC DRIVER GATE;INX 58 FHD 60Hz,6	1	SNA	
...4		BN81-10745A	A/S-A/S-ASSY PCB-SOURCE (XR);INX 58 FHD	1	SNA	
...4		BN81-10746A	A/S-A/S-ASSY PCB-SOURCE (XL);INX 58 FHD	1	SNA	
...4		BN81-10747A	A/S-A/S-POLARIZER-C/F;INX 58 FHD 60Hz,41	1	SNA	
...4		BN81-10748A	A/S-A/S-POLARIZER-TFT;INX 58 FHD 60Hz,41	1	SNA	
..3	TCON	BN96-32745A	ASSY T CON P;V580HJ1-PE6,V580HJ1-PE6,10b	1	SA	
..3	TC01A	BN96-33358A	ASSY CHASSIS TOP P;Y14 F-LED 58,PC+ABS+G	1	SA	
...4		BN60-00667K	SPACER-GASKET;Y13 SF-LED,CONDUCTIVE FABR	3	SNA	
...4		BN60-00715A	SPACER-TOP,CORNER;Y13 Slim F-LED,CONDUCT	4	SNA	
...4		BN60-00746A	SPACER-TOP;GASKET+PET,L1000M,GOLD,T0.2,W	4	SNA	
...4		BN60-01005G	SPACER-TOP (LR);Y14 ENTRY MODEL 58",EVA,	2	SNA	
...4	AS080	BN63-07229K	SHEET-COVER;rose70",SI,T0.052,W36mm,100M	1	SNA	
...4		BN63-10182A	SHEET-COVER;Y12 F-LED,SHEET*,0.052,33mm,	3	SNA	
...4	AC157	BN64-02744A	CHASSIS-TOP;Y14 F-LED 58",PC+ABS+G/F15%,	1	SNA	
...4	T0382	BP61-00509C	HOLDER-CARE;PJT,ACRYL,T0.25,W20.0mm,L33M	0	SNA	
1		BN91-13443P	ASSY SHIELD;UH5200 58"	1	SNA	
0.2	SCREW	6001-003016	SCREW-MACHINE;PWH,+,M3.0,L5.0,ZPC(WHT),S	9	SA	
0.2		BN02-00102K	TAPE FILAMENT;PE,0.15,25,55,WHITE	0	SNA	

ANNEX. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
0.2	EC13	BN39-01889K	LEAD CONNECTOR;UE50H6300,Flat Connector,	1	SA	
0.2	M-F	BN39-01903N	LEAD CONNECTOR-FUNCTION;58H5203,Lead Con	1	SA	
0.2	P001A	BN44-00787A	DC VSS-LED TV PD BD;L58GFB_ESM,L58GFB_ES	1	SA	
0.2	WIFI	BN59-01174A	NETWORK-WIFI MODULE;WIDT-30Q,Internal Wi	1	SA	
0.2	HOLDER-LED SCREW	BN61-09175B	SCREW-MACHINE;BH,+,M3,L10,ZPC(WHT),SWRCH	1	SA	
0.2		BN62-00670A	INSULATION;H5203,PET,0.1,54,54,BLK	1	SNA	
0.2	M0131	BN63-00520A	GASKET;APPOLO_PAL,Conductive Fabric,0.13	1	SNA	
0.2	M0131	BN63-00985A	GASKET;DS15AS,Conductive Fabric,1.5mm,4m	1	SNA	
0.2	AS080	BN63-07229A	SHEET-COVER;rose70",SI,T0.052,W50mm,100M	0	SNA	
0.2	FB01A	BN96-30902X	ASSY BOARD P-FUNCTION;58H5203,Function A	1	SA	
0.2	SPK	BN96-32113E	ASSY SPEAKER P-H5203 58";6ohm,10W,H5203	1	SA	
0.2	FL06	BN96-33236H	ASSY CABLE P-FFC;58H5203,FFC,NH,500mm,51	1	SA	
1	M0017	BN91-16525A	ASSY CHASSIS;UN58J5190AFXZA	1	SNA	
0.2	M0014	BN94-10553A	ASSY PCB MAIN;UN58J5190AFXZA	1	SA	
..3		BN61-11153A	HOLDER-SIDE AV;UH5203,HIPS,UO	1	SNA	
..3	AH020	BN62-00659A	HEAT SINK;UN55H6203AFXZA,A6063,BLACK	1	SNA	
..3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),BLACK,	1	SNA	
..3		BN97-09494A	ASSY DRM-KEY;HU7*,NT14U,US	1	SNA	
...4		BN46-00109H	KEY CODE-CERTIFI;MAC,TV/AV,General	1	SNA	
...4		BN46-00110P	KEY CODE-CERTIFI;MIRACAST(HDCP2.2), TV	1	SNA	
..3		BN97-10423A	ASSY SMD;LED TV	1	SNA	
...4		0202-001976	SOLDER-CREAM;LST-309M-K21,20~38um,96.5Sn	3	SNA	
...4		0403-001783	DIODE-ZENER;BZB84-C6V2,5.8/6.6V,300mW,SO	2	SNA	
...4		0404-001404	DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23,	2	SA	
...4		0406-001200	DIODE-TVS;RCLAMP0504F,6/-/-V,150W,SC-70	2	SA	
...4		0406-001628	DIODE-TVS;AOZ8804ADI,6/-/-V,150W,SLP2510	1	SA	
...4		0406-001635	DIODE-TVS;SMF5.0A,6.4V, 6.7V, 7V,200W,SM	5	SA	
...4		0501-000002	TR-SMALL SIGNAL;KSA812,PNP,150mW,SOT-23,	1	SNA	
...4		0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	2	SC	
...4		0505-002560	FET-SILICON;AO6415,P,-20V,-3.3A,0.15ohm,	1	SA	
...4		0505-002598	FET-SILICON;AP2317GN,P,-20V,-4.2A,0.052o	1	SA	
...4		0505-002893	FET-SILICON;AO4801AS,P,-30V,-5A,2W,SOIC-	1	SA	
...4		0505-003397	FET-SILICON;2N7002K,N,60V,380mA,1.19ohm,	5	SA	
...4		1001-001860	IC-ANALOG SWITCH;NX5L2750CGU,QFN,10P,1.4	1	SNA	
...4		1006-001576	IC-DRIVER/RECEIVER;MAX3221ECPWR,TSSOP,16	1	SA	
...4		1103-001487	IC-EEPROM;AT24C256C-SSHL-T,256Kbit,32Kx8	1	SA	
...4		1105-002529	IC-DDR3 SDRAM;K4B4G1646D-BCK0,DDR3 1600,	2	SA	
...4		1201-003690	IC-AUDIO AMP;TAS5747PHPR,QFP,48P,DUAL,PL	1	SA	
...4		1203-004363	IC-VOL. DETECTOR;SOT-23,3Z30,2.9x1.6mm,P	1	SA	
...4		1203-006017	IC-VOL. DETECTOR;RT9824GJ8,TSOT23,8P,2.9	1	SA	
...4		1203-006130	IC-POSIFIXED REG.;S-1172B25-U5T1G,SOT-8	1	SA	
...4		1203-007238	IC-PWM CONTROLLER;TPS54427,DDA,8P,4.8x3.	1	SNA	
...4		1203-007242	IC-POSIAJUST REG.;G2992BP11U,SOP-8,8P,	1	SA	
...4		1203-007984	IC-DC/DC CONVERTER;AOZ3015PI,SO-8,8P,6.2	1	SA	
...4		1203-008104	IC-POSIFIXED REG.;S-13A1D18-E800,HSOP,8	2	SNA	
...4		1203-008105	IC-POSIFIXED REG.;S-13A1D33-E800,HSOP,8	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4		1203-008118	IC-DC/DC CONVERTER;AOZ3013PI,SO-8,8P,4.9	3	SA	
...4		1204-003558	IC-VIDEO PROCESS;SENK15,HS-TFBGA,626P,26	1	SA	
...4		1205-004447	IC-SWITCH;TPS2051CDBVR,SOT23-5,5P,3x1.65	1	SA	
...4		1205-004983	IC-SWITCH;BD82032FVJ,TSSOP-B8J,8P,3.0x4.	1	SA	
...4		1405-001271	VARISTOR;35V,20Vdc,5A,1.0x0.5mm,TP,100V,	17	SA	
...4		2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	22	SA	
...4		2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	9	SA	
...4		2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	6	SA	
...4		2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	26	SA	
...4		2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	19	SA	
...4		2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	6	SNA	
...4		2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	15	SNA	
...4		2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	1	SA	
...4		2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	9	SA	
...4		2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	2	SNA	
...4		2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	16	SA	
...4		2007-000256	R-CHIP;1.6Kohm,1%,1/10W,TP,1608	3	SA	
...4		2007-000265	R-CHIP;1.8Kohm,1%,1/10W,TP,1608	1	SA	
...4		2007-000583	R-CHIP;22Kohm,1%,1/10W,TP,1608	3	SA	
...4		2007-000691	R-CHIP;3.3Mohm,5%,1/10W,TP,1608	1	SA	
...4		2007-000726	R-CHIP;300ohm,1%,1/10W,TP,1608	2	SA	
...4		2007-000775	R-CHIP;33Kohm,5%,1/16W,TP,1005	1	SNA	
...4		2007-000803	R-CHIP;36Kohm,1%,1/10W,TP,1608	2	SA	
...4		2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	8	SA	
...4		2007-001125	R-CHIP;68Kohm,1%,1/10W,TP,1608	1	SA	
...4		2007-001168	R-CHIP;75ohm,5%,1/4W,TP,3216	1	SA	
...4		2007-001288	R-CHIP;18ohm,5%,1/16W,TP,1005	4	SA	
...4		2007-003022	R-CHIP;62ohm,5%,1/16W,TP,1005	26	SNA	
...4		2007-007001	R-CHIP;3.9Kohm,5%,1/16W,TP,1005	1	SA	
...4		2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	4	SNA	
...4		2007-007108	R-CHIP;43.2Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-007136	R-CHIP;4.7Kohm,1%,1/16W,TP,1005	18	SNA	
...4		2007-007142	R-CHIP;10Kohm,1%,1/16W,TP,1005	16	SA	
...4		2007-007156	R-CHIP;1ohm,5%,1/16W,TP,1005	2	SA	
...4		2007-007306	R-CHIP;100ohm,1%,1/16W,TP,1005	3	SNA	
...4		2007-007309	R-CHIP;12Kohm,1%,1/16W,TP,1005,0.35T	3	SA	
...4		2007-007311	R-CHIP;22Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-007312	R-CHIP;20Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-007318	R-CHIP;1Kohm,1%,1/16W,TP,1005	15	SA	
...4		2007-007470	R-CHIP;7.5Kohm,1%,1/16W,TP,1005	1	SNA	
...4		2007-007517	R-CHIP;240ohm,1%,1/16W,TP,1005	2	SNA	
...4		2007-007538	R-CHIP;56Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-007942	R-CHIP;1Mohm,1%,1/16W,TP,1005	1	SNA	
...4		2007-008015	R-CHIP;75ohm,1%,1/16W,TP,1005	13	SA	
...4		2007-008117	R-CHIP;2.7Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-008275	R-CHIP;30Kohm,1%,1/16W,TP,1005	2	SNA	
...4		2007-008298	R-CHIP;49.9ohm,1%,1/16W,TP,1005	4	SA	

ANNEX. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4		2007-008779	R-CHIP;0ohm,1%,1/16W,TP,1005	3	SA	
...4		2011-001449	R-NETWORK;22ohm,5%,1/16W,L,4Points,TP,10	2	SA	
...4		2011-001506	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,4P,TP,1	1	SA	
...4		2011-001527	R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,4P,TP,	2	SA	
...4		2011-001587	R-NETWORK;100ohm,5%,1/16W,L,CHIP-V,4P,TP	2	SA	
...4	AD480	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005	4	SA	
...4	AD480	2203-000278	C-CER,CHIP;0.01nF,0.5pF,50V,C0G,TP,1005	1	SA	
...4	AD480	2203-000330	C-CER,CHIP;0.012nF,5%,50V,C0G,TP,1005	2	SA	
...4	AD480	2203-000359	C-CER,CHIP;0.15nF,5%,50V,C0G,TP,1005,0.5	1	SA	
...4	AD480	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,TP,1005	15	SA	
...4	AD480	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,TP,1005	4	SA	
...4	AD480	2203-000575	C-CER,CHIP;220nF,10%,25V,X7R,TP,2012	6	SA	
...4	AD480	2203-000585	C-CER,CHIP;0.22nF,10%,50V,X7R,TP,1005	1	SA	
...4	AD480	2203-000627	C-CER,CHIP;0.022nF,5%,50V,C0G,TP,1005	3	SNA	
...4	AD480	2203-000679	C-CER,CHIP;0.027nF,5%,50V,C0G,TP,1005	2	SA	
...4	AD480	2203-000714	C-CER,CHIP;3.3nF,10%,50V,X7R,TP,1005	5	SA	
...4	AD480	2203-000812	C-CER,CHIP;0.033nF,5%,50V,C0G,TP,1005	4	SA	
...4	AD480	2203-000940	C-CER,CHIP;0.47nF,10%,50V,X7R,TP,1005	2	SA	
...4	AD480	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,TP,1005	20	SNA	
...4	AD480	2203-002711	C-CER,CHIP;100nF,10%,25V,X7R,TP,1608	6	SA	
...4	AD480	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,TP,1608	5	SA	
...4	AD480	2203-005344	C-CER,CHIP;22nF,10%,25V,X7R,TP,1005,0.5T	1	SNA	
...4	AD480	2203-005968	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1005,0.5	3	SNA	
...4	AD480	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,TP,1005	93	SA	
...4	AD480	2203-006126	C-CER,CHIP;47nF,10%,16V,X7R,TP,1005	13	SNA	
...4	AD480	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,TP,1005,0.5	17	SA	
...4	AD480	2203-006324	C-CER,CHIP;2200nF,10%,10V,X5R,TP,1608	6	SA	
...4	AD480	2203-006348	C-CER,CHIP;1000nF,10%,25V,X5R,TP,1608,0.	2	SA	
...4	AD480	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012	26	SC	
...4	AD480	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,TP,2012	33	SA	
...4	AD480	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005	13	SNA	
...4	AD480	2203-006824	C-CER,CHIP;4700nF,10%,10V,X5R,TP,1608	5	SNA	
...4	AD480	2203-006838	C-CER,CHIP;2200nF,10%,6.3V,X5R,TP,1005	1	SA	
...4	AD480	2203-006841	C-CER,CHIP;1000nF,10%,16V,X5R,TP,1005	4	SNA	
...4	AD480	2203-006842	C-CER,CHIP;0.47nF,5%,50V,C0G,TP,1005	2	SNA	
...4	AD480	2203-006890	C-CER,CHIP;10000nF,20%,6.3V,X5R,TP,1608	26	SNA	
...4	AD480	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012,1	5	SNA	
...4	AD480	2203-007269	C-CER,CHIP;22000nF,20%,10V,X5R,TP,2012(2	2	SA	
...4	AD480	2203-007513	C-CER,CHIP;10000nF,10%,10V,X5R,TP,1608,0	4	SA	
...4	AD480	2203-007544	C-CER,CHIP;100nF,10%,50V,X7R,TP,1005,0.5	10	SA	
...4		2409-001213	C-ORGANIC,SMD;150uF,20%,6.3V,-,TP,3.5x2.	2	SNA	
...4		2503-001051	C-NETWORK;100nFx4,20%,16V,2012	1	SA	
...4		2703-000158	INDUCTOR-SMD;1uH,10%,2012,.4Ohm,50mA,45,	4	SA	
...4		2703-000213	INDUCTOR-SMD;470nH,10%,1608,1.35Ohm,35mA	1	SA	
...4		2703-001938	INDUCTOR-SMD;56nH,5%,1005,1.5Ohm,200mA,1	2	SA	
...4		2703-003713	INDUCTOR-SMD;1.5uH,20%,7366,0.015ohm,700	2	SA	
...4		2703-003790	INDUCTOR-SMD;4.7uH,20%,8080,0.025ohm,450	1	SA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4		2703-003930	INDUCTOR-SMD;4.7uH,20%,5050,0.072Ohm,245	4	SA	
...4		2703-004145	INDUCTOR-SMD;2.2uH,20%,6.5 x 6.9mm,0.20o	1	SNA	
...4		2703-004462	INDUCTOR-SMD;3.3uH,20%,10x10x8mm,0.0082O	1	SA	
...4		2801-003773	CRYSTAL-SMD;12MHz,30ppm,28-AAN,20pF,50oh	1	SA	
...4		3301-000314	BEAD-SMD;120ohm,1608,TP,120ohm/100MHz	6	SNA	
...4		3301-001364	BEAD-SMD;1000ohm,1608,TP,1085ohm/108MHz,	2	SNA	
...4		3301-002039	BEAD-SMD;26ohm,1608,TP	35	SA	
...4		3601-001374	FUSE-SURFACE MOUNT;32V,5A,FAST-ACTING,PL	2	SA	
...4		3701-001856	CONNECTOR-HDMI;19P,FEMALE,AU,0.5mm,BLK,S	2	SA	
...4		3707-001106	CONNECTOR-OPTICAL;STRAIGHT W/L,SPDIF	1	SA	
...4		3708-003073	CONNECTOR-FPC/FFC/PIC;51P,0.5mm,SMD,AU,N	1	SA	
...4	EH01	3711-008131	HEADER-BOARD TO CABLE;BOX,4P,1R,2.5mm,AN	1	SA	
...4	EH01	3711-008453	HEADER-BOARD TO CABLE;BOX,18P,2R,2mm,ANG	1	SA	
...4	EH01	3711-008558	HEADER-BOARD TO CABLE;BOX,26P,2R,1.25mm,	1	SA	
...4		3722-003226	JACK-PHONE;7P/1C,SN,BLK	1	SA	
...4		3722-003229	JACK-MODULAR;8P/8C W/L,Y,STRAIGHT,N,Au,1	1	SA	
...4		3722-003248	JACK-USB;4P/1C(W/L),NI/PD/AU/SN,BLK,STRA	2	SA	
...4	JACK PIN	3722-003546	JACK-PIN;5P+Screw hole,NI+SN,G,Y/BLU/RED	1	SA	
...4		3722-003667	JACK-PHONE;1P/7C,SN/NI,BLK,STRAIGHT,3.6P	1	SA	
...4	ET01	BN40-00308A	TUNER;GVTH-F16B/FNS,GVTH-F16B/FNS,ATSC H	1	SNA	
...4		BN41-02275A	PCB MAIN;H5203,FR-4,4,A,1.2,192*122,1	1	SNA	
...4		BN68-04746A	LABEL-SMD;all model,POLY*,25.4mm x 9.53m	1	SNA	
...4		BN97-10110B	ASSY MICOM;T-N14M6AUSS,J6200,NORTH AMERI	1	SNA	
....5		1107-002226	IC-NOR FLASH;W25Q40CLSSIP,4Mbit,SOIC,8P,	1	SA	
...4		BN97-10579A	ASSY MICOM;T-N14M6AKUC,BN97-10110A,J6200	1	SNA	
....5		1107-002374	IC-EMMC;KLM4G1FEPD-B031,4Gbyte,BGA,153P,	1	SNA	
1		BN92-15960A	ASSY P/MATERIAL;UH5200 58"	1	SNA	
0.2		6902-001960	BAG ROLL;HDPE/PE FOAM+HDPE,T0.015/T0.5,W	2	SNA	
0.2		6922-000013	BAND;PP,W18,L2300/L2900,TRP	1	SNA	
0.2		BH69-00418A	WRAP;762,1828M,SAMEX FACTORY	2	SNA	
0.2		BN02-00319B	TAPE OPP;OPP,T0.05,W75,L800m,CLEAR	4	SNA	
0.2		BN68-02422B	LABEL-WARNING SHIPPING;ALL MODEL,A/P,T0.	1	SNA	
0.2		BN69-09624A	CUSHION-FRONT;UH6300-60,EPS	1	SNA	
0.2		BN69-10618A	CUSHION-SET;UH5200 58",EPS,Overseas	1	SNA	
0.2		BN69-12806A	PAD-ANGLE;40J6400,PAPER,5 mm,100,1500,YE	1	SNA	
1		BN92-17030A	ASSY LABEL;J5000	1	SNA	
0.2		BN68-07568L	LEAFLET-QSG;J5202,United States,ART*,62.	1	SNA	
0.2		BN68-07705H	LABEL-ENERGY;UN58J5190AFXZA,PET,T0.1,38,	1	SNA	
0.2		BN74-00053G	TAPE-PAPER;PAPER,3M2307,0.14T,W10,60M,WH	0	SNA	
0.2	T0527	BP68-00052B	LABEL-00,RATING;FPTV,PET,T0.05,93,73	1	SNA	
1	ACCE1	BN92-17477P	ASSY ACCESSORY;LED_J6K	1	SNA	
0.2		BN96-38848Z	ASSY ACCESSORY MANUAL/CABLE;LED TV	1	SNA	
..3	T0268	3903-000853	CBF-POWER CORD;DT,UL/CSA,LP-11L,125V,7A,	1	SA	
..3		4301-000103	BATTERY-ALKALINE;1.5V,750mAh,LR03,10.2x4	2	SNA	
..3		6902-001962	BAG PE;LDPE,BIOBASED,T0.05,W400,L300,TRP	1	SNA	
..3		BN59-01199F	REMOCON-REMOCON;TM1240A,44,3.0V,TM1240A_	1	SA	

ANNEX. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
..3	HOLDER- WIRE	BN61-08370A	HOLDER-WIRE STAND;26UE4000 GUIDE STAND,P	1	SA	
..3		BN68-04972A	MANUAL FLYER-12,REGULATORY GUI;ALL,SAMSU	1	SNA	
..3		BN68-05723A	LABEL-ACCESSORY;ALL MODELS,YUPO,0.2,20,7	1	SNA	
..3		BN68-07181P	MANUAL USERS-01;J5202,United States,W/P*	1	SNA	
1		BN92-19443X	ASSY BOX;LED TV	1	SNA	
0.2		BH68-00697A	LABEL BOX-00;ALL MODEL,ART PAPER 90G,60,	1	SNA	
0.2		BN69-11019N	BOX UNIT;58J5190-SS,CB,A-01,DW3,W1555,D1	1	SNA	

1. Precautions

1-1. Safety Precautions

Follow these safety, servicing and ESD precautions to prevent damage and to protect against potential hazards such as electrical shock.

1-1-1. Warnings



For continued safety, do not attempt to modify the circuit board.
Disconnect the AC power and DC power jack before servicing.

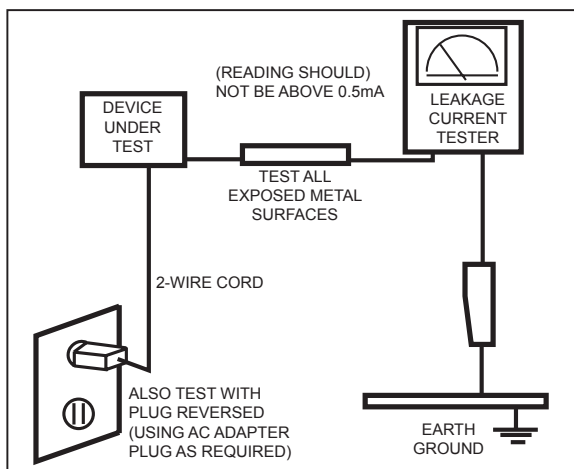
1-1-2. Servicing the LED TV

1. When servicing the LED TV, Disconnect the AC line cord from the AC outlet.
2. It is essential that service technicians have an accurate voltage meter available at all times. Check the calibration of this meter periodically.

1-1-3. Fire and Shock Hazard

Before returning the monitor to the user, perform the following safety checks:

1. Inspect each lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the monitor.
2. Inspect all protective devices such as nonmetallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor/capacitor networks, mechanical insulators, etc.
3. Leakage Current Hot Check:




Do not use an isolation transformer during this test.

Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).

4. With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: metal cabinets, screwheads and control shafts.
The current measured should not exceed 0.5 milliamp.
Reverse the power-plug prongs in the AC outlet and repeat the test.

1-1-4. Product Safety Notices

Some electrical and mechanical parts have special safetyrelated characteristics which are often not evident from visual inspection. The protection they give may not be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by  on schematics and parts lists. A substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire and/or other hazards. Product safety is under review continuously and new instructions are issued whenever appropriate.

1-2. Servicing Precautions



An electrolytic capacitor installed with the wrong polarity might explode.



Before servicing units covered by this service manual, read and follow the Safety Precautions section of this manual.



If unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions, always follow the safety precautions.

1-2-1. General Servicing Precautions

1. Always unplug the unit's AC power cord from the AC power source and disconnect the DC Power Jack before attempting to: (a) remove or reinstall any component or assembly, (b) disconnect PCB plugs or connectors, (c) connect a test component in parallel with an electrolytic capacitor.
2. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
3. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the area around the serviced part has not been damaged.
4. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
5. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500 V) to the blades of the AC plug. The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
6. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3. Static Electricity Precautions

Some semiconductor (solid state) devices can be easily damaged by static electricity. Such components are commonly called Electrostatically Sensitive Devices (ESD). Examples of typical ESD are integrated circuits and some field-effect transistors. The following techniques will reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. To avoid a shock hazard, be sure to remove the wrist strap before applying power to the monitor.
2. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of an electrostatic charge.
3. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESDs.
4. Use only a grounded-tip soldering iron to solder or desolder ESDs.
5. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESDs.
6. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
7. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.



Be sure no power is applied to the chassis or circuit and observe all other safety precautions.

8. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting your foot from a carpeted floor can generate enough static electricity to damage an ESD.

1-4. Installation Precautions




1. For safety reasons, more than a people are required for carrying the product.
2. Keep the power cord away from any heat emitting devices, as a melted covering may cause fire or electric shock.
3. Do not place the product in areas with poor ventilation such as a bookshelf or closet. The increased internal temperature may cause fire.
4. Bend the external antenna cable when connecting it to the product. This is a measure to protect it from being exposed to moisture. Otherwise, it may cause a fire or electric shock.
5. Make sure to turn the power off and unplug the power cord from the outlet before repositioning the product. Also check the antenna cable or the external connectors if they are fully unplugged. Damage to the cord may cause fire or electric shock.
6. Keep the antenna far away from any high-voltage cables and install it firmly. Contact with the highvoltage cable or the antenna falling over may cause fire or electric shock.
7. When installing the product, leave enough space (0.4m) between the product and the wall for ventilation purposes. A rise in temperature within the product may cause fire.
8. If an equipment is provided with a replaceable battery, and if replacement by an incorrect type could result in an explosion (for example, with some lithium batteries), the following applies:

**CAUTION**

- Risk of explosion if battery is replaced by an incorrect type dispose of used batteries according to the instructions.
- Do not dispose of batteries in a fire.
- Do not short circuit, disassemble or overheat the batteries.
- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
- Do not be exposed to excessive heat such as sunshine, fire or the like.

2. Product Specifications

2-1. Product information

Model	UN58J5190AF		
Front View	 <p>* W : Width H : High D : Depth</p>		
Detail View	 		
Color	Front : Black, Stand : Black		
Dimensions (W x H x D)	58"	With Stand	1308 x 843.4 x 295.9 mm / 51.9 x 33.2 x 11.6 inches
		Without Stand	1308 x 770.4 x 91.2 mm / 51.9 x 30.3 x 3.6 inches
Weight	58"	With Stand	21.6 kg / 47.6 lbs
		Without Stand	17.5 kg / 38.6 lbs

2-2. Product specification

2-2-1. Detailed Specifications


NOTE

Design and specifications are subject to change without prior notice.

Item		UN58J5190AFXZA
General Information	Product	LED
	Series	5
	Country	UNITED STATES
Display	Screen Size	58"
	Resolution	1,920 x 1,080
	Ultra Clear Panel	N/A
Video	Motion Rate	60
	Dynamic Contrast Ratio	Mega Contrast
	Micro Dimming	No
	Precision Black (Local Dimming)	N/A
	Nano Crystal Color	N/A
	Wide Color Enhancer (Plus)	Yes
	PurColor	N/A
	Auto Depth Enhancer	N/A
	Contrast Enhancer	N/A
	Auto Motion Plus	N/A
	Film Mode	Yes
	Peak Illuminator	N/A
Audio	Dolby Digital Plus	Yes
	Virtual Surround	DTS Studio Sound
	DTS Codec	DTS Premium Sound 5.1
	3D Sound	N/A
	Sound Customizer	N/A
	Sound Output (RMS)	10W x 2
	Speaker Type	Down Firing + Full Range
	Woofer	N/A
	HD Audio	N/A
	Wallmount Sound Mode	Yes
	Multiroom Link	N/A
Smart TV	Samsung SMART TV	Yes

Item		UN58J5190AFXZA
Smart TV	Apps	Yes
	Games	N/A
	Multi-Link Screen	N/A
	Automated Content Recognition (ACR)	N/A
	Info Widget	N/A
	Vertical Enhancement	N/A
Smart Interaction	Voice Interaction	N/A
	Voice Control	N/A
	Face recognition	N/A
	Motion control	N/A
Convergence	TV to Mobile - Mirroring	N/A
	Mobile to TV - Mirroring, DLNA	Yes
	RVU	N/A
	Samsung SMART View	N/A
	Wireless TV On - Samsung WOL	N/A
	Notification - BLE	N/A
	Briefing On TV	N/A
	WiDi	N/A
	WiFi Direct	Yes
Differentiation	Wireless Copy	N/A
	Sports Mode	Basic
	Analog Clean View	No
Tuner/Broadcasting	Digital Broadcasting	ATSC / Clear QAM
	2 Tuner	N/A
	CI/CI+/2CI+	No
	Analog Tuner	Yes
	MHP / MHEG / HbbTV / ACAP / GINGA / OHTV	No
Connectivity	HDMI	2
	USB	2
	Component In (Y/Pb/Pr)	1
	Composite In (AV)	1 (Common Use for Component Y)
	Ethernet (LAN)	1
	Headphone	N/A
	Audio Out (Mini Jack)	1
	Digital Audio Out (Optical)	1

2. Product specifications

Item		UN58J5190AFXZA
Connectivity	RF In (Terrestrial / Cable input / Satellite input)	1/1(Common Use for Terrestrial)/0
	Ex-Link (RS-232C)	Yes
	IR Out	N/A
	CI Slot	N/A
	Scart	N/A
	MHL	N/A
	Dongle Ready (3G / LTE)	N/A
	HDMI 3D Auto Setting	N/A
	HDMI A / Return Ch. Support	No
	HDMI Quick Switch	N/A
	Wireless LAN Adapter Support	No
	Wireless LAN Built-in	Yes
	Anynet+ (HDMI-CEC)	N/A
Design	Design	Narrow Bezel
	Bezel Type	NNB
	Slim Type	Normal
	Front Color	Black
	Light Effect (Deco)	No
	Stand Type	Square
	Swivel (Left/Right)	No
Additional Feature	Samsung 3D	N/A
	3D Converter	N/A
	Instant On	N/A
	Camera Built-in	N/A
	Processor	N/A
	PX Ready	N/A
	21:9 Immersive Picture Mode	N/A
	SCSA Support	N/A
	Accessibility	Yes(Zoom)
	Digital Clean View	Yes
	One Connect (Jack)	N/A
	Auto Channel Search	Yes
	Auto Power Off	Yes
	BD Wise Plus	No
	Caption (Subtitle)	Yes

Item		UN58J5190AFXZA
Additional Feature	Channel List USB-Clone	N/A
	Connect Share™ (HDD)	N/A
	Connect Share™ Transfer	N/A
	ConnectShare™ (USB 2.0)	Movie
	AC/DC TV	N/A
	Embedded POP	Yes
	EPG	Yes
	Extended PVR	N/A
	Game Mode	Yes
	IP Video Closed Caption	Yes
	OSD Language	English, Spanish, French
	Picture-In-Picture	Yes
	BT HID Built-in	N/A
	USB HID Support	Yes
	Feature Upgrade (Evolution Kit Ready)	N/A
	ATSC 3.0 Ready	N/A
	Teletext (TTX)	N/A
	Time Shift	N/A
	Ultra Clean View	N/A
Eco Feature	Energy Star	Yes
	Eco Sensor	Yes
Accessory	3D Active Glasses (Included)	N/A
	Remote Controller Model	TM1240A
	Batteries (for Remote Control)	Yes
	Samsung Smart Control (Included)	N/A
	PX (Included)	N/A
	Ultra Slim Wall Mount Support	N/A
	Mini Wall Mount Support	Yes
	Vesa Wall Mount Support	Yes
	Floor Stand Support	N/A
	TV Camera (Included)	N/A
	IR Extender Cable (Included)	N/A
	Wireless Keyboard (Included)	N/A
	Wireless PC Mirroring Dongle (Included)	N/A
	Composite to Scart Gender (Included)	N/A

2. Product specifications


Item		UN58J5190AFXZA
Accessory	User Manual	Yes
	E-Manual	Yes
	ANT-Cable	N/A
	Power Cable	Yes
	Slim Gender Cable	N/A

2-2-2. Specifications

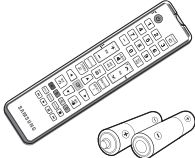



■ Specifications

Model	UN58J5190AF
Item	Description
Screen Size (Diagonal)	58 inches
Display Resolution	1,920 x 1,080
Input Signal	Analog 0.7 Vp-p \pm 5% positive at 75 Ω , internally terminated
Input Sync Signal	H/V Separate, TTL, P. or N.
AC Power Voltage & Frequency	AC110-120V 60Hz
Environmental Considerations	Operating Temperature: 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity: 10% ~ 80%, non-condensing Storage Temperature: -4°F ~ 113°F (-20°C ~ 45°C) Storage Humidity: 5% ~ 95%, non-condensing
Sound (Output)	20W (10W X 2)

2-3. Accessories

 **NOTE**

- The items' colors and shapes may vary depending on the model.
- Cables not included in the package contents can be purchased separately.
- The part code for some accessories may differ depending on your region.

Product	Description	Code. No	Remark
	Remote Control & Batteries (AAA x 2)	BN59-01199F	Samsung Electronics Service center
		4301-000103	
	Power Cord	3903-000853	
	User manual	BN68-07181P	
	Holder-Wire Stand	BN61-08370A	


4. Troubleshooting

4-1. Troubleshooting

4-1-1. Testing the Picture



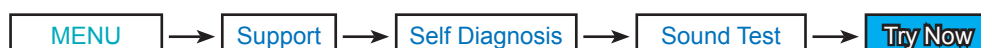
Before you review the list of problems and solutions below, use Picture Test to determine if the problem is caused by the TV. The Picture Test displays a high definition picture you can examine for flaws or faults. If the test picture does not appear or there is noise or distortion, the TV may have a problem. Contact Samsung's Call Center for assistance. If the test picture is displayed properly, there may be a problem with an external device. Please check the connections. If the problem persists, check the signal strength or refer to the external device's user manual.

The Problem	Try this!
Flickering and Dimming.	If your Samsung Television is flickering or dimming sporadically, you may need to disable some of the energy efficiency features. Disable Energy Saving (System > Eco Solution > Energy Saving) or Eco Sensor (System > Eco Solution > Eco Sensor) .
Component Connections/ Screen Color	If the color on your Samsung television screen is not correct or the black and white colors are off, run Picture Test (Support > Self Diagnosis > Picture Test) . If the test results indicate that the problem is not caused by the TV, do the following: <ul style="list-style-type: none"> Confirm that the TV's video input connectors are connected to the correct external device video output connectors. Check the other connections as well. If the TV is connected to an external device via a component cable, confirm that the Pb, Pr, and Y jacks are plugged into their proper connectors.
Screen Brightness	If the colors on your Samsung TV are correct but just a little too dark or bright, try adjusting the following settings first. <ul style="list-style-type: none"> Go to the Picture menu and adjust the Backlight/Cell Light (available on different models) Contrast, Brightness, Sharpness, Color, and Tint (G/R) settings.
Ghosting, Blurring, or Juddering	If you notice ghosting or blurring on the screen, use the Auto Motion Plus option (Picture > Picture Options > Auto Motion Plus) to resolve the issue. <div>  NOTE For the LED 5203, 5303 and 4303 series models, you can resolve this issue by using LED Clear Motion (Picture > Picture Options > LED Clear Motion). </div>
Unwanted Powering Off	If your Samsung TV appears to turn off by itself, try disabling some of the TV's energy efficiency features. See if Sleep Timer (System > Time > Sleep Timer) has been enabled. The Sleep Timer automatically turns the TV off after a specified period of time. If the Sleep Timer has not been enabled, see if No Signal Power Off (System > Eco Solution > No Signal Power Off) or Auto Power Off (System > Eco Solution > Auto Power Off) has been enabled and disable them.
Problems Powering On	When the TV is turned on, the remote control receiver flashes 5 times before the screen turns on. If you are having problems powering on your Samsung television, there are a number of things to check before calling the service department. Confirm that the TV's power cord is connected correctly at both ends and that the remote control is operating normally. Make sure that the antenna cable or cable TV cable is firmly connected. If you have a cable/satellite box confirm that it is plugged in and turned on.
Unable to find a Channel	If your TV is not connected to a cable box or satellite box, run Setup (System > Setup) or Auto Program (Broadcasting > Auto Program) .

4. Troubleshooting

The Problem	Try this!
The TV image does not look as good as it did in the store.	<p>Store displays are all tuned to digital, HD (high definition) channels. If you have an analog cable/set top box, upgrade to a digital set top box. Use HDMI or Component cables to deliver HD (high definition) picture quality. Many HD channels are upscaled from SD (Standard Definition) content. Look for a channel that is broadcasting true HD content.</p> <ul style="list-style-type: none">• Cable/Satellite Subscribers: Try HD channels from the channel lineup.• Air/Cable Antenna Connection: Try HD channels after running the Auto Program function. <p>Adjust the cable/satellite box's video output resolution to 1080i or 720p.</p>
The picture is distorted.	<p>The compression of video content may cause picture distortions, especially in fast moving pictures from sports programs and action movies. A weak or bad quality signal can cause picture distortions. This is not an issue with the TV. Mobile phones used close to the TV (within 3.2 ft) may cause noise in analog and digital channels.</p>
The color is wrong or missing.	<p>If you're using a Component connection, make sure that the Component cables are connected to the correct jacks. Incorrect or loose connections may cause color problems or a blank screen.</p>
The color is poor or the picture is not bright enough.	<p>Go to the Picture menu and then adjust the Picture Mode, Brightness, Sharpness, and Color settings. See if Energy Saving (System > Eco Solution > Energy Saving) has been enabled. Try resetting the picture. (Picture > Picture Reset)</p>
There is a dotted line on the edge of the screen.	<p>If the Picture Size has been set to Screen Fit, change the setting to 16:9. Change the cable/satellite box resolution.</p>
The picture is black and white.	<p>If you are using AV composite input, connect the video cable (yellow) to the TV's green component jack.</p>

4-1-2. Testing the Sound



Before you review the list of problems and solutions below, make sure that the **TV Sound Output** menu item is set to **TV Speaker**, and then listen to the speakers again. If the TV still does not play audio, run the **Sound Test**. The **Sound Test** uses a built-in melody to check for sound problems. If the TV does not play sound during the Sound Test, or the sound is distorted, there may be a problem with the TV. Contact Samsung's Call Center for assistance. If the TV plays the Sound Test melody without distortion, there may be a problem with an external device. Please check the connections. If the problem persists, refer to the external device's user manual.

The Problem	Try this!
There is no sound or the sound is too low at maximum volume.	Check the volume control of the device (cable/satellite box, DVD, Blu-ray, etc.) connected to your TV.
The picture is good but there is no sound.	<p>Set Sound > Speaker Settings > TV Sound Output to TV Speaker.</p> <p>If you are using an external device, check the device's audio output option. (For example, you may need to change your cable box's audio option to HDMI if the box connected to your TV is using an HDMI cable.) To listen to the computer sound, connect the external speaker to the computer's audio output connector.</p> <p>If your TV has a headphone jack, make sure there is nothing plugged into it.</p> <p>Reboot the connected device by disconnecting and then reconnecting the device's power cable.</p>
The speakers are making an odd sound.	<p>Make sure that the audio cable is connected to the correct audio output connector on the external device.</p> <p>For antenna or cable connections, check the signal information. A low signal level may cause sound distortions. Run Sound Test (Support > Self Diagnosis > Sound Test).</p>

4-1-3. There is a problem with the broadcast

The Problem	Try this!
The TV is not receiving all channels.	If your TV is not connected to a cable box or satellite box: <ul style="list-style-type: none">• Confirm that the coaxial cable is securely connected to the TV.• If you are using an antenna, verify it is positioned correctly and the all the connections are secure.• Run Setup (System > Setup) or Auto Program (Broadcasting > Auto Program).
There are no captions with digital channels.	Go to Caption (System > Accessibility > Caption) and change the Caption Mode . Some channels may not have caption data.
The picture is distorted.	The compression of the video content may cause picture distortions. This is especially true with fast moving pictures from sports programs and action movies. A weak signal can cause picture distortions. This is not a problem with the TV.

4-1-4. My computer won't connect

The Problem	Try this!
The "Mode Not Supported" message appears.	Set your PC's output resolution so it matches a resolution supported by the TV.
The video is OK but there is no audio.	If you are using an HDMI connection, check the audio output setting on your PC. If you are using a DVI to HDMI cable, a separate audio cable is required.

4-1-5. I can't connect to the Internet

The Problem	Try this!
The wireless network connection failed.	Confirm your wireless modem/router is on and connected to the Internet. Reset your wireless modem/router by turning it off, waiting for 15 seconds, and then turning it on again. Run Network Setup (MENU > Network > Network Settings).
The software update over the Internet has failed.	Check the network connection status (MENU > Network > Network Status). If the TV is not connected to a network, connect to a network. The upgrade stops if you already have the latest software version.

4-1-6. My file won't play

The Problem	Try this!
Some files can't be played.	This problem may occur with high-bitrate files. Most files can be played back, but you might experience problems with high-bitrate files.

4-1-7. I am having trouble launching/using apps

The Problem	Try this!
I launched an app, but it's in English. How can I change the language?	Languages supported by the app may be different from the user interface language. The ability to change the language depends on the service provider.
My application is not working.	Check with the service provider. Refer to the help section on the application service provider's website.

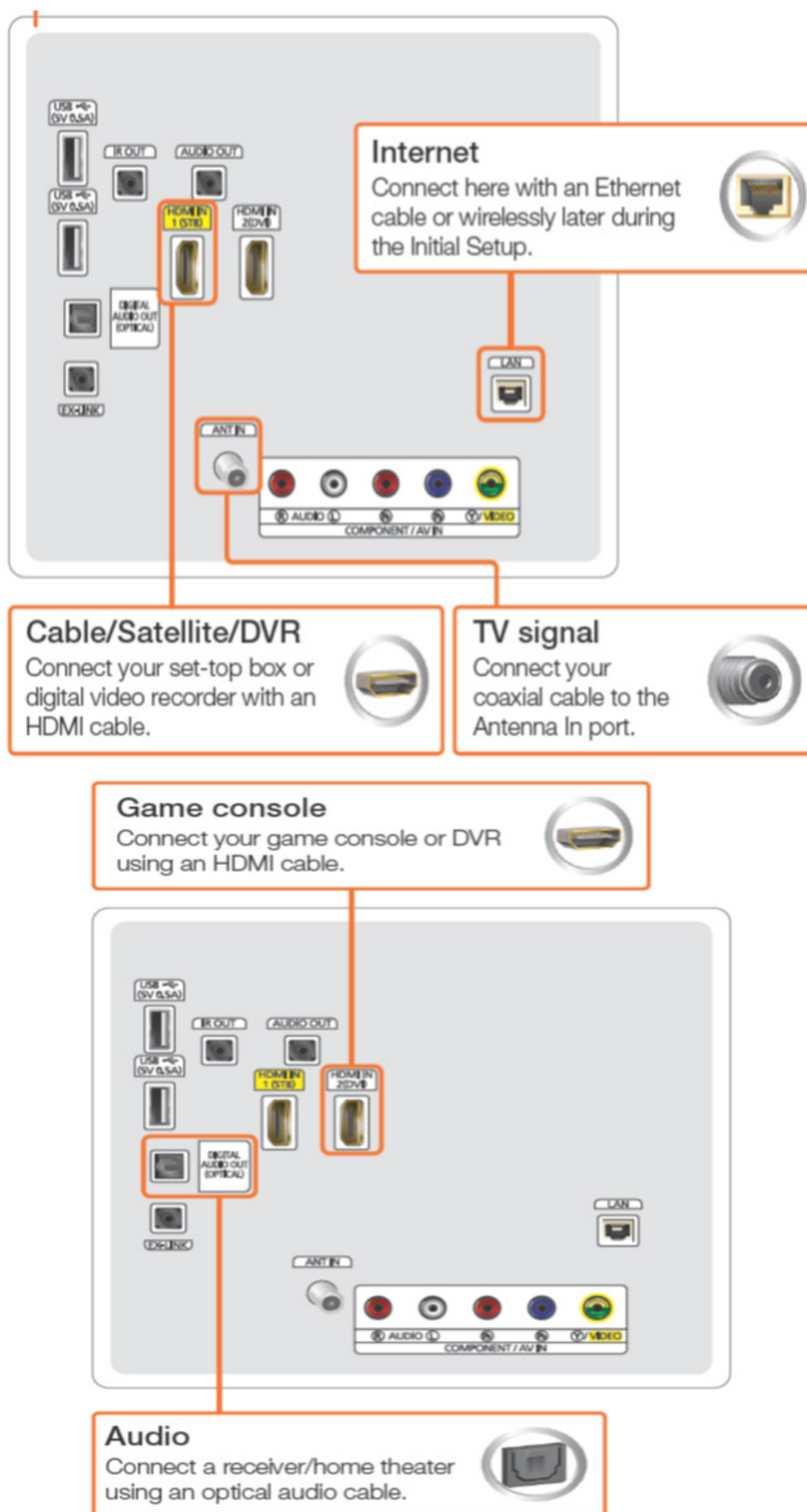
4-1-8. I want to reset the TV

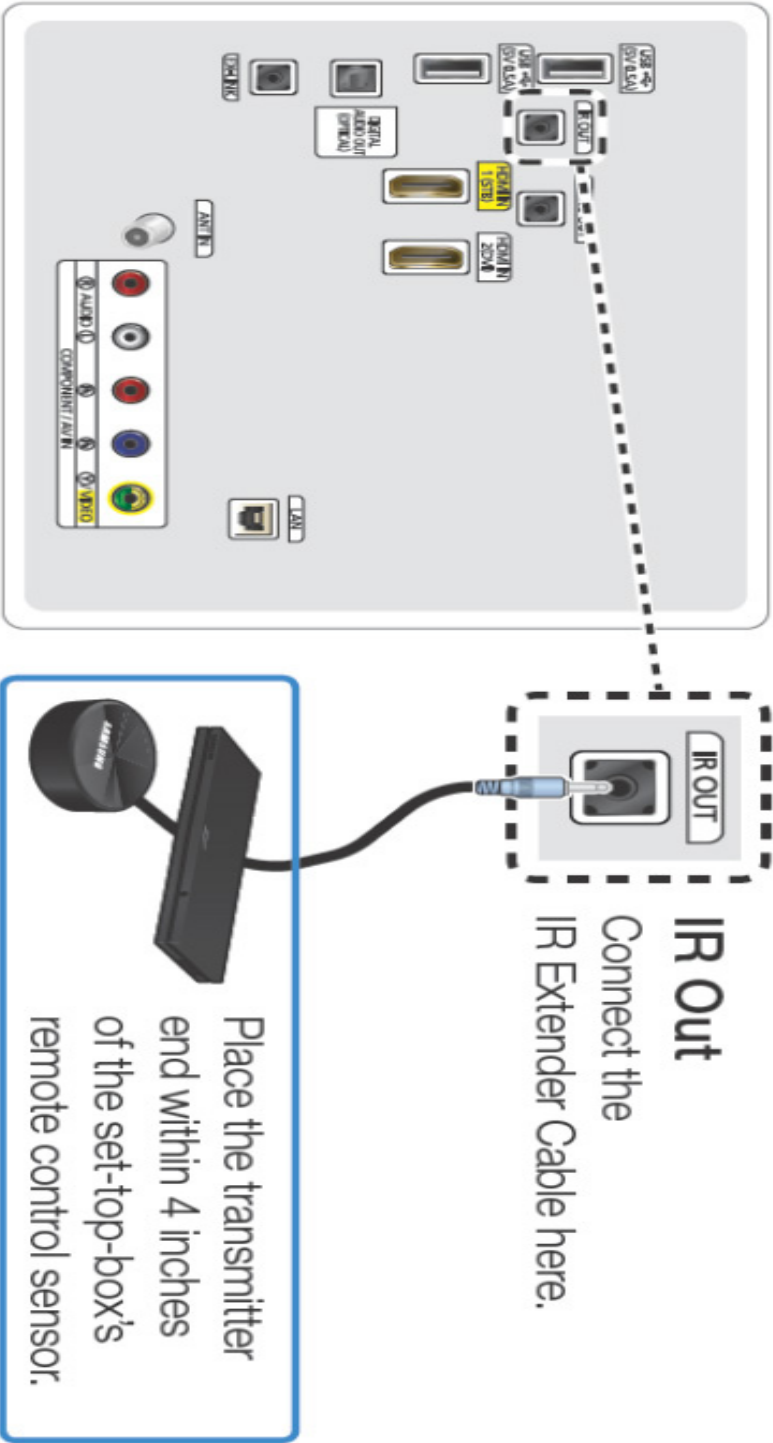
Reset	Path	Description
Reset Settings	MENU > Support > Self Diagnosis > Reset	Reset Picture , Sound , Channel , Smart Hub , and all other settings, except for the network settings, default settings.
Resetting Smart Hub	MENU > Smart Hub > Smart Hub Reset	Resets all Smart Hub settings to their factory defaults and deletes all information related to Samsung accounts, linked service accounts, Smart Hub service agreements, and Smart Hub applications.

4-1-9. Other Issues

The Problem	Try this!
The TV is hot.	Watching TV for an extended period of time causes the panel to generate heat. The heat from the panel is dissipated through internal vents running along the top of the TV. The bottom, however, may feel hot to the touch after extended use. Children watching TV need constant adult supervision to prevent them from touching the TV. This heat, however, is not a defect and does not affect the TV's functionality.
The picture won't display in full screen.	HD channels will have black bars on either side of the screen when displaying upscaled SD (4:3) content. Black bars will appear at the top and bottom of the screen when you watch movies that have aspect ratios different from your TV. Adjust the picture size options on your external device or set the TV to full screen.
The "Mode Not Supported" message appears.	The output resolution of the attached device is not supported by the TV. Check the TV's supported resolutions and adjust the external device's output resolution accordingly.
The Captions item in the TV menu is grayed out.	You cannot select the Caption menu if you have selected a source connected to the TV via HDMI or Component. To view captions, turn on the external device's caption function.
The TV smells of plastic.	This smell is normal and will dissipate over time.
The Signal Information option under Self Diagnosis isn't activated.	Verify that the current channel is a digital channel. The Signal Information is only available for digital channels.
The TV is tilted to the side.	Remove the base stand from the TV and reassemble it.
The Broadcasting option has been deactivated.	Broadcasting is only available when the Source is set to TV . The Broadcasting menu cannot be accessed while you watch TV using a cable box or satellite receiver.
The settings are lost after 5 minutes or every time the TV is turned off.	If the Use Mode is set to Store Demo , the TV's audio and video settings are automatically reset every 5 minutes. Change the Use Mode (Support > Use Mode) to Home Use .
There is an intermittent loss of audio or video.	Check the cable connections and reconnect them. Loss of audio or video can be caused by using overly rigid or thick cables. Make sure the cables are flexible enough for long term use. If you are mounting the TV to a wall, we recommend using cables with 90-degree connectors.
There are small particles on the TV's bezel.	This is part of the product's design and is not a defect.
The PIP menu is not available.	PIP functionality is only available when you are viewing video from an HDMI or Component source on the main screen.
A POP (TV's internal banner ad) appears on the screen.	Change the Use Mode (Support > Use Mode) to Home Use .
The TV is making a popping noise.	The expansion and contraction of the TV's outer casing may cause a popping noise. This does not indicate a product malfunction. The TV is safe to use.
The TV is making a humming noise.	Your TV utilizes high-speed switching circuits and high levels of electrical current. Depending on the TV's brightness level, the TV may seem slightly noisier than a conventional TV. Your TV has undergone strict quality control procedures that meet our demanding performance and reliability requirements. Some noise coming from the TV is considered normal and is not an acceptable cause for an exchange or refund.

4-2. Connect





4-3. Factory Mode Adjustments

4-3-1. Detail Factory Option



NOTE

If you replace the main board with new one, please change the factory option as well.
The options you must change are "**Type**".

■ UN58J5190AFXZA

Inches		58"
PANEL	Vendor	INX
	Code	BN95-01724A
	Spec.	HH058BGNV1H/V
SMPS BOARD	Vendor	SEM
	Code	BN44-00787A
	Spec.	L58GFB_ESM
MAIN BOARD	Chassis Ass'y	BN91-16525A
	PBA Ass'y	BN94-10553A
Byte	Item	
0	Factory Reset	-
1	Type	58D6AF0S
2	Local set	Different according to the country
3	SW Model	UJ5190
4	BOM Model	5190
5	Tuner	ATSC / Clear QAM
6	Ch table	NONE

4-3-2. Entering Factory Mode

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

- If you have Factory remote control



- If you don't have Factory remote control, can't control some menus.

Option
Control
Debug
SVC
ADC/WB
Advanced

```

T-NT14MAKUC-xxxx
T-NT14MAKUSS-xxxx
BT Version :*****
E-Manual : NMISDBH-1.****
Blaster Version : 258401-258403-300001
EDID SUCCESS
CALIB : AV/COMP/PC/HDMI/
Option : **A6AF1D,US,5190,NONE (Vary by
inches)

DTP-SDAL-NT14M-MAIN-****-****
RFS : "NT14M *****" K/2 2014-0*-**
KERNEL : 107.1272,/ Onboot : 00**
DTP-DTVTD-****

Model : UN**J5190
Wired MAC SUCCESS
Wireless MAC SUCCESS
WIFI :ATH6KL (5.0.0.99_****)
C/Nf/W/M/D/HO PO AO /S/ N/
Factory Data Ver : 191 /EERC Ver :77

Smart control : ****
DTP-BP-HAL-4718
DTP-BP-HW- 4718
DTP-BP-APP-4718-02
POP-FLA-14-HD_SMART-**
Date of purchase : mm/dd/yyyy
  
```

4-3-3. Factory Data

■ Option

Factory Menu Name	Data	Range
Factory Reset	-	
Type		58D6AF0S
Local Set	US	
Model	UJ5190	
SVC Model	5190	
TUNER	S_TC	
Ch Table	NONE	
MRT Option		
Front Color	U-S-C-53	
Lvds Format	JEIDA	
Language_Arabic	US	
Region	USA	
PnP Language	Local	
WIFI REGION	S	
OTN Support	ON	
OTA Support	OFF	
MediaPlay DLNA	...	
TTX	OFF	
China HD	OFF	
NT Conversion	OFF	
Num of DTV	1	
Num of AV	1	
Num of COMP	1	
Num of HDMI	2	
Num of SCART	0	
Num of USB Port	2	
Num of USB 3.0	0	
Num of RVU	0	
Num of Display	2	
Num of IPTV	0	
Num of RUI	0	
Num of PVR RECORD	0	
TOOLS Support	40	
LNA Support	OFF	
24Px4 Support	OFF	

4. Troubleshooting

Factory Menu Name	Data	Range
BD Wise Support	OFF(H6203 ON)	
Data Service Support	OFF	
PVR Support	OFF	
CI Support	OFF	
LEDMotionPlus Support	ON	
Natural Mode Support	ON	
Relax Mode Support	OFF	
HDMI/DVI SEL	2	
Select LED/PDP	LCD	
Wall Mount	OFF	
HV Flip	HV Filp	
FRC HV Flip	0	
Light Effect	OFF	
e-Pop Default	ON	
CAMERA Support	OFF	
NETWORK Support	Int-Wifi	
EcoSensor Support	ON	
3D Support	OFF	
BT Support	OFF	
BT ADDRESS	Not support	
HP LINE	LineOut	
Smart Control Support	OFF	
Motion Recog	OFF	
Voice Recog	OFF	
Virtual Remocon color	1	
Local Dimming Panel	OFF	
Wifi Vendor	QCA	
Engineer Option		
Type Of PANEL KEY	None	
5 Way Function Key	R_BACK	
Contents Bar	OFF	
Cable Modulation	QAM	
Standby led on/off	OFF	
Recognition Support	OFF	
IF AGC	0	
D AGC	0	
PH BW	0	
FQ BW	0	

Factory Menu Name	Data	Range
PH RATE	0	
PD EN	0	
PEQ Inx	0	
WF Scale		
WF Type	0	
Num of Network Stream	1	
DP V Size	0	
Backend Device		
BT_AUDIO_ON_OFF	OFF	
Config_AV_PATH		
USING_PSI_UPDATE		
ECO Stanby	OFF	
Fast Logo Delay	0	
Num of PANEL KEY		
Panel Detail	0	
Panel Init Time	250	
Tcon Init Time	460	
WRITE MAC Address		

■ Control

Factory Menu Name	Data	Range
EDID		
EDID ON/OFF	OFF	
EDID WRITE ALL	...	
EDID WRITE PC	...	
EDID WRITE HDMI	...	
EDID WRITE HDMI1	...	
EDID WRITE HDMI2	...	
EDID WRITE HDMI3	...	
EDID WRITE HDMI4	...	
EDID Ver	...	
EDID Port		
EDID WRITE DVI	...	
Sub Option		
RS-232 Jack	UART	Debug/UART
Serial Log On/Off	OFF	ON/OFF
Watchdog	OFF	

4. Troubleshooting

Factory Menu Name	Data	Range
FRC Monitoring	OFF	
Checksum	0x0000	
Fast Boot in Production	ON	
UART ENABLE	OFF	
ECO IC TYPE	MC8121	
Info Link Server Type	development	
Info Link Country	None	
TTX Group	...	
Visual Test	...	
MediaPlay DB	...	
OPTION_SWU		
OPTION_NUM		
RF Remocon Support	OFF	
CCD mode	...	
DONS Support	OFF	
Num of IPTV CIP	0	
Num of CI	0	
Num of HYBRID TV	0	
T-CON Device		
BOARD CONTROL	OFF	
RM		
PSA		
LMK threshold	4	
Low threshold	10	
High threshold	15	
CSB	ON	
CLB	ON	
EEPG Enable	0	
Last Screen	OFF	
App Resume	OFF	
BP PMS Reset	1	
F Anet Thread	2	
ACM_MC	OFF	
Support MiniBrowser	ON	
HotkeyList	Basic_Smart	
PDP Option		
Pixel Shift Test	OFF	
Logic SW		

Factory Menu Name	Data	Range
Panel Temperature		
LOGIC Waveform Day		
Logic Check Sum		
MRT		
SAPC Timer		
APC Speed		
Hotel Option		
Hospitality Mode	OFF	
Power On		
Menu OSD		
Operation		
Music Mode		
External Source		
Eco Solution		
Cloning		
Shop Option		
Shop Mode	OFF	
Exhibition Mode	OFF	
3D Cube	OFF	
Asia Option		
Unbalance		
AF Level adjust		
TX Power Level		
Mono Last Memory		
H Shaking		
SOUND		
Carrier_Mute	ON	
High Devi	OFF	
Speaker Delay Normal	10	
SPDIF PCM Gain	□9 dB	
FM M Prescale	48	
FM Prescale	0x00h	
AM Prescale	0x32h	
NICAM Prescale	0x48h	
BTSC Mono Prescale	15	
BTSC stereo Prescale	29	
BTSC SAP Prescale	29	
A2Ident High Thid	36	

4. Troubleshooting

Factory Menu Name	Data	Range
A2Ident Low Thld	9	
Pilot Level High Thld	0x0Fh	
Pilot Level Low Thld	0x08h	
Carrier2 Amp High Thld	4	
Carrier2 Amp Low Thld	3	
Carrier2 SNR High THR	16	
Carrier2 SNR Low THR	80	
Sig Error On	35	
Sig Error Off	41	
Amp Model	TAS5745	
Amp Volume	0xc9h	
Amp Scale	0x35h	
Amp Check Sum	0x00480W60	
Woofer Type	0	
Woofer Volume	0xcbh	
Woofer Scale	0x8ah	
Woofer Check Sum	NONE	
Woofer Local EQ Checksum	0	
Speaker EQ	ON	
PEQ Test	Ready	
Lacal Speaker EQ	0	
Local EQ Checksum	0	
SRS Tuning Parm	0	
Subwoofer Support	0	
India Sound	OFF	
AudioDock BT delay	50	
Wall Filter Type	0	
Bottom CheckSum	0	
Bottom Local Checksum	0	
Lipsync Inx	2	
Lipsync checkSum	NG	
Lipsync USB Test	Ready	
Lipsync BT Checksum	NG	

■ Debug

Factory Menu Name	Data	Range
Spread Spectrum		

Factory Menu Name	Data	Range
LVDS Spread	ON	
DDR Spread	OFF	
Period	20K	
Amplitude	1.5	
HD SSC ON/Off	OFF	
HD SSC Value	1	
LVDS SSC ON/OFF	OFF	
LVDS Value	0	
DDR SSC ON/OFF	OFF	
DDR SSC Value	1	
FRC Vx1 SSC ON/OFF	OFF	
FRC LVDS SSC ON/OFF	OFF	
FRC LVDS SSC MRR	10	
FRC LVDS SSC MFR	1	
FRC Vx1 SSC Period	0	
FRC Vx1 SSC Modulation	0	
FRC DDR SSC ON/OFF	ON	
FRC DDR SSC MRR	15	
FRC DDR SSC MFR	1	
FRC DDR SSC Period	0	
FRC DDR SSC Modulation	0	
DDR Margin		
A CTRL_OFFSET_0_3	0	
A CTRL_OFFSET_D	0	
B CTRL_OFFSET_0_3	0	
B CTRL_OFFSET_D	0	
MICOM POWER OFF	OFF	
RF Mute Time	6ms	
CI +1.3	OFF	
FRC		
Tuner Margin	10	
MPEG Margin	100	
H.264 Margin	100	
CAM Wait Time		
TS Clock delay	0	
TCON_TEMP_READ	0	
TEMP LAST	60	

4. Troubleshooting

Factory Menu Name	Data	Range
DCC VERSION	0x3447	
DCC CHK SEL	0	
DCC CHECK LOCAL	0	
DCC CHECK TOTAL	0	
MultiACC Checksum	0	
IIC Bus Stop	OFF	
Tuner Status		
Cert Option	SHOW	
RM_BIST_DTV	0	
RM_BIST_ATV	0	
Voice Debug	OFF	

■ SVC

Factory Menu Name	Data	Range
Self Test(for HW)		
Loop Back		
CPU		
DDR		
FLASH		
EEPROM		
Tuner X-TAL		
Tuner1		
HDMI Switch IC		
USB HUB IC		
WIFI		
LVDS		
LVDS2		
T-CON/FRC		
T-CON2/FRC		
PCB Test		
MOIP		
BT		
EcoSensor		
Voltage		
Chip Test		
Module Test		
ATV CH Inspection		

Factory Menu Name	Data	Range
DTV CH Inspection		
Satellite CH Inspection		
Woofer Sound Inspection		
DP Test		
DP CRC Result		
Voltage Result		
BT		
Chip Test		
Module Test		
ATV CH Inspection		
DTV CH Inspection		
Satellite CH Inspection		
UHD OSD TEST		
Aging Line Test		
Tweeter Sound Inspection		
Info		
SVC Info		
LOG(View Log)		
ER Count		
Panel Display Time		
Factory Execution History		
Factory Reset History		
Upgrade		
T-CON Usb Download		
T-CON CheckSum		
Logic Usb D/L		
SUBMICOM UPGRADE		
BT UPGRADE		
BT FREEPAIRING		
Function Upgrade		
FRC3D FW UPGRADE		
FRC3D LD UPGRADE		
Camera Upgrade		
Mic Upgrade		
CPLD USB Download		
JP MICOM UPGRADE		
DP MICOM UPGRADE		
Jump UPGRADE		

4. Troubleshooting

Factory Menu Name	Data	Range
IR Blaster Upgrade		
IR Blaster delay time		
CPLD Download		
LDC PROFILE UPGRADE		
Pic Data USB Update		
Audio Data USB Update		
Eco Data USB Upate		
SC ADK Upgrade		
SC MBR Upgrade		
Reset		
App Reset	0	
EEPROM Rst	0	
SPI Flash Reset	Failure	
OPTION_HDMI		
DVI/HDMI SOUND	Auto	
HDMI HOT PLUG	Disable	
HOTPLUG SWITCHING	boot	
HOTPLUG DURATION	1200ms	
CLK TERM DURATION	1200ms	
HDMI FLT CNT SIG	100ms	
HDMI FLT CNT LOS	100ms	
UNSTABLE BAN CNT	5000ms	
HDMI ROBIN	ON	
HDMI Callback	OFF	
HDMI CTS Thld	8	
HDMI CTS Cnt1	1	
HDMI EQ	Auto	
HDMI Write Type	Combine	
HDMI Switch	NONE	
DVI SET TIME	300ms	
HDMI Sync	DE	
HDMI 3D DET	0	
HOTPLUG OFF HOLD TIME		
HDMI Stable Count	1	
HDCP UPDATE SPI		
SPI VERSION	0	
DVB CI		
TS Clock delay TC	0	

Factory Menu Name	Data	Range
TS Clock delay S	0	
CI Control Buf ON	ON	
TS Clock delay CPU	-1	
Test Pattern		
Pattern Sel	OFF	
Logic Pattern Sel		
Logic Level Sel		
FRC Pre Test Pattern	0	
FRC Post Test Pattern	0	
SOC TCON Test Pattern	0	
SOC TCON Pattern Level	255	
SOC TCON FRC Pattern	0	
HDMI WB Pattern	OFF	
HDMI Pattern Sel	0	
Parma Pre Test Pattern	0	
Parma Port Test Pattern	0	
FRC OSD PRE PATTERN	0	
FRC OSD POST PATTERN	0	
Other Setting		
Delete S/N	0	
IPERF	stopped	
Expert		
CAL Data Backup		
CAL Data Restore		
ATV IF AGC SPEED		
Source Direct ON/OFF	0	
App Update	LAST POWER	
SVC Panel	ORIGINAL	

■ ADC/WB

Factory Menu Name	Data	Range
ADC		
AV Calibaration		
Comp Calibration		
PC Calibration		
HDMI Calibration		
ADC Result		

4. Troubleshooting

Factory Menu Name	Data	Range
1st_Y_GH	0	
1st_Y_GL	0	
1st_Cb_BH	0	
1st_Cb_BL	0	
1st_Cr_RH	0	
1st_Cr_RL	0	
2nd_R_L	134	
2nd_G_L	134	
2nd_B_L	134	
2nd_R_H	49	
2nd_G_H	49	
2nd_B_H	49	
White Balance		
R-Offset	128	
G-Offset	128	
B-Offset	128	
R-Gain	128	
G-Gain	128	
B-Gain	128	
WB-W2_R_Offset		
WB_W2_B_Offset		
WB_W2_R_Gain		
WB_W2_B_Gain		
WB-N_R_Offset		
WB_W2_N_Offset		
WB_W2_N_Gain		
WB_W2_N_Gain		
MGA		
MGA On/Off	OFF	
R1_Gain		
G1_Gain		
B1_Gain		
R2_Gain		
G2_Gain		
B2_Gain		
R3_Gain		
G3_Gain		
B3_Gain		

Factory Menu Name	Data	Range
R4_Gain		
G4_Gain		
B4_Gain		
R5_Gain		
G5_Gain		
B5_Gain		
R6_Gain		
G6_Gain		
B6_Gain		
R7_Gain		
G7_Gain		
B7_Gain		
R8_Gain		
G8_Gain		
B8_Gain		
R9_Gain		
G9_Gain		
B9_Gain		
R10_Gain		
G10_Gain		
B10_Gain		

■ Advanced

4-4. White Balance

4-4-1. Calibration

1. Into the Factory Mode.
2. Select **SVC** Menu.
3. Select **ADC/WB** menu.
4. Select **ADC** menu.

Option
Control
Debug
SVC
ADC/WB
Advanced

ADC

AV Calibration
Comp Calibration
HDMI Calibration

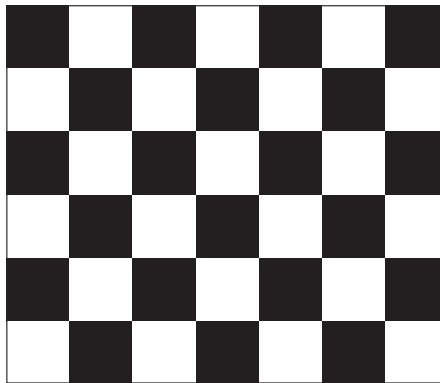
4-4-2. Service Adjustment

You must perform Calibration in the Lattice Pattern before adjusting the White Balance.

■ Color Calibration

- Adjust Specification

Source	Setting Mode	Pattern	Use Equipment
HDMI	1280 x 720@60 Hz	Pattern #24 (Chess Pattern)	CA210 & Master MSPG925 Generator



(Chess Pattern)

- 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
HDMI IN	Perform in 720p B&W Pattern #24	Lattice

■ Method of Color Calibration (AV)

1. Apply the NTSC Lattice (N0. 3) 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)

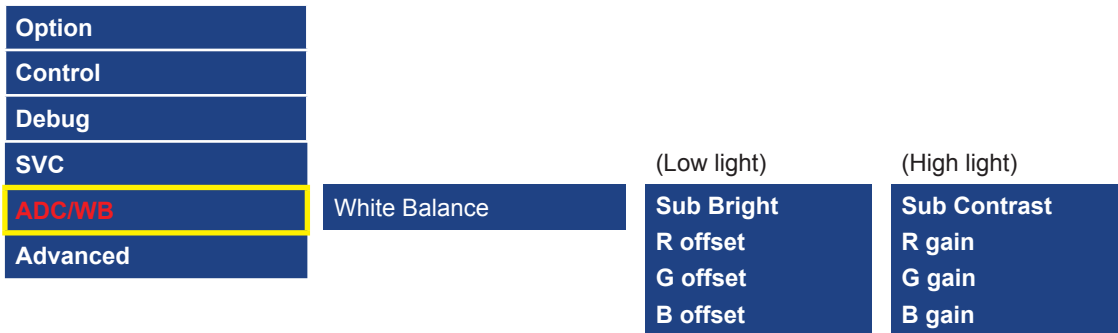
1. Apply the 720p Lattice (N0. 6) pattern signal to the Component IN 1 port.
2. Press the Source key to switch to "Component1" mode.
3. Enter Service mode.
4. Select the "ADC" menu.
5. Select the "Comp Calibration" menu.
6. In "Comp Calibration Off" status, press the "▶" key to perform Calibration.
7. 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 (HDMI)

1. Apply the 720p Lattice (N0. 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.

4-4-3. Adjustment

- 1. Into the Factory Mode.
- 2. Select **SVC** Menu.
- 3. Select **ADC/WB** menu.
- 4. Select **WB** menu.



4-5. Software Upgrade

Samsung may offer upgrades for the TV's firmware in the future. These upgrades can be performed via the TV when it is connected to the Internet, or by downloading the new firmware from samsung.com to a USB memory device.

- Alternative Software (Backup) shows The previous version that will be replaced.
- Software is represented as 'Year/Month/Day_Version'. The more recent the date, the newer the software version. Installing the latest version is recommended.



4-5-1. By USB

Insert a USB drive containing the firmware upgrade downloaded from samsung.com into the TV. Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied.

"MENU-->Support--> Software Update"

The TV will turn off and turn on automatically after completing the firmware upgrade. Please check the firmware version after the upgrades are complete (the new version will have a higher number than the older version). 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.

4-5-2. By Online

Upgrades the software using the Internet.

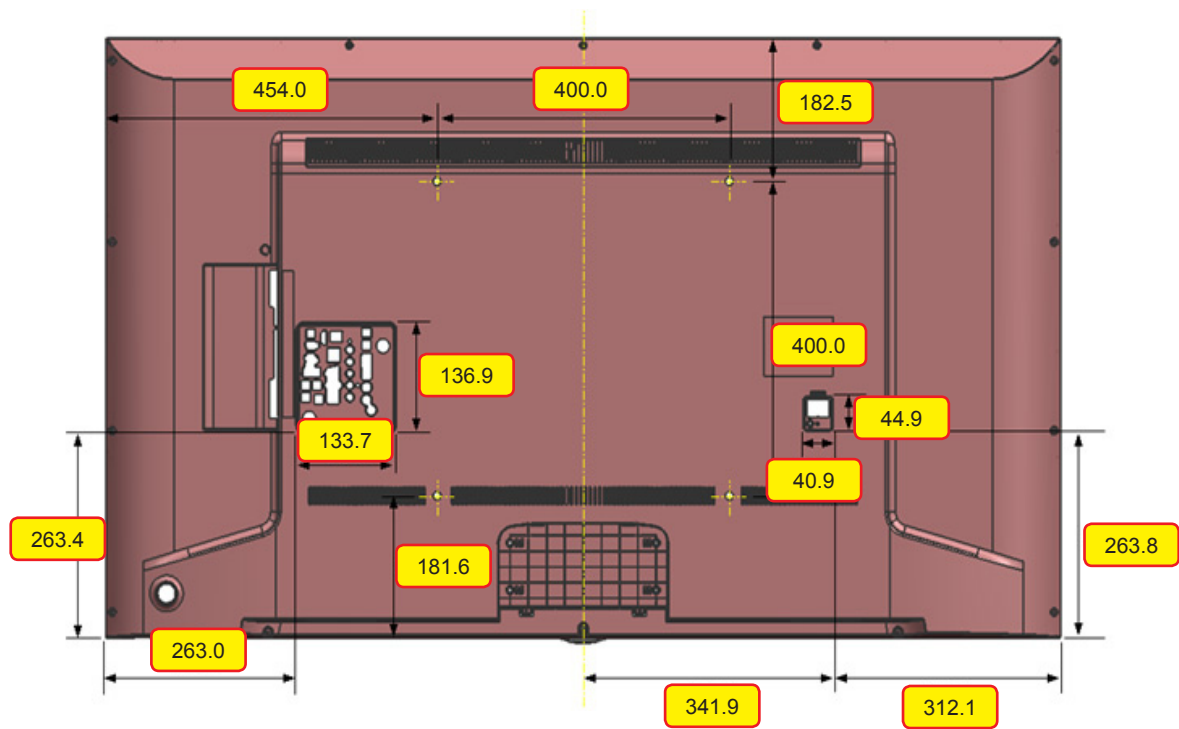
- First, configure your network. For detailed procedures on using the Network Setting, refer to the 'Setting the Network' instructions.
- If The internet connection doesn't operate properly, connection can be broken, please retry downloading. If the problem still happens, download by USB and upgrade.

4-5-3. Alternative Software (Backup)

If there is an issue with the new firmware and it is affecting operation, you can change the software to the previous

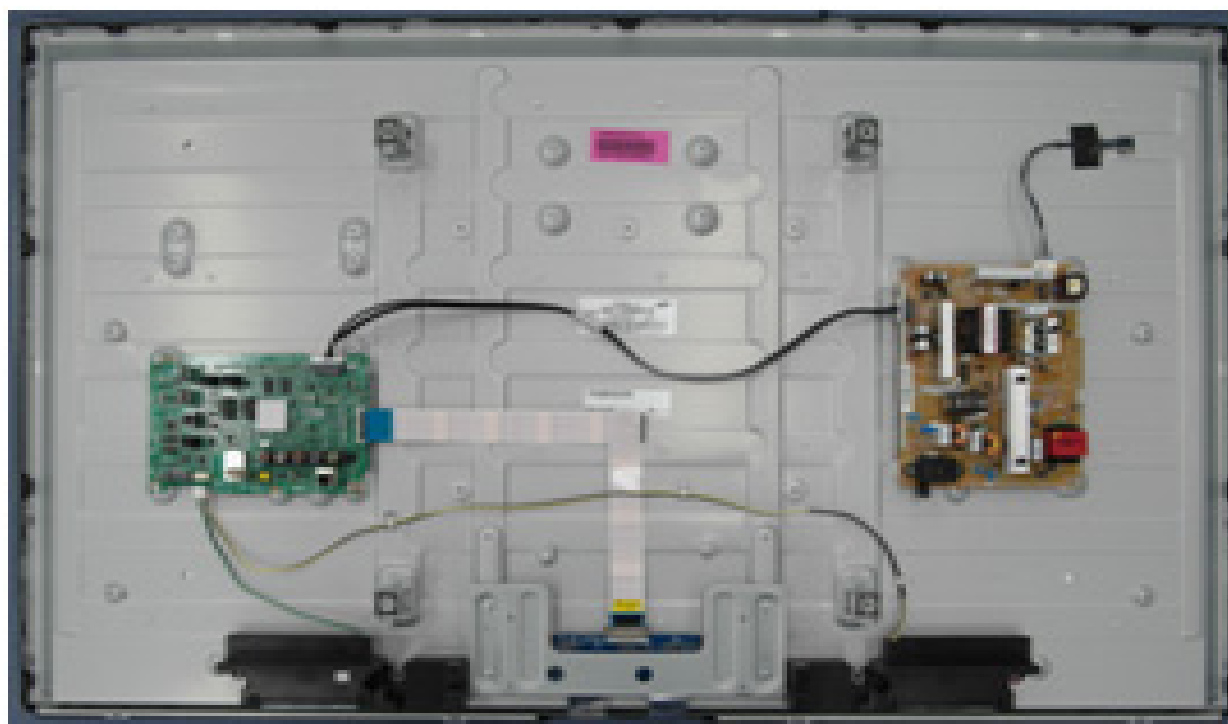
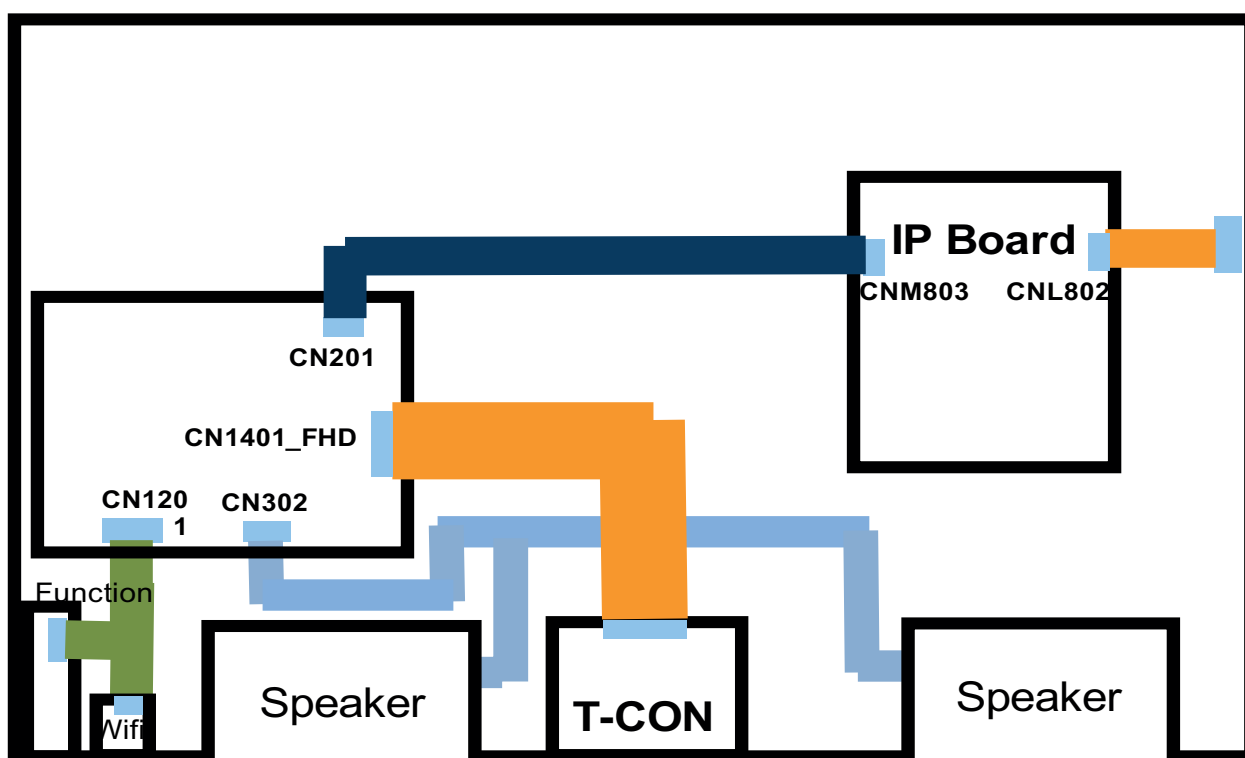
- If Software was changed, existing Software is displayed.
- you can change current Software to Alternative Software by 'Alternative Software'.

4-6. The Dimension of J5190 Models



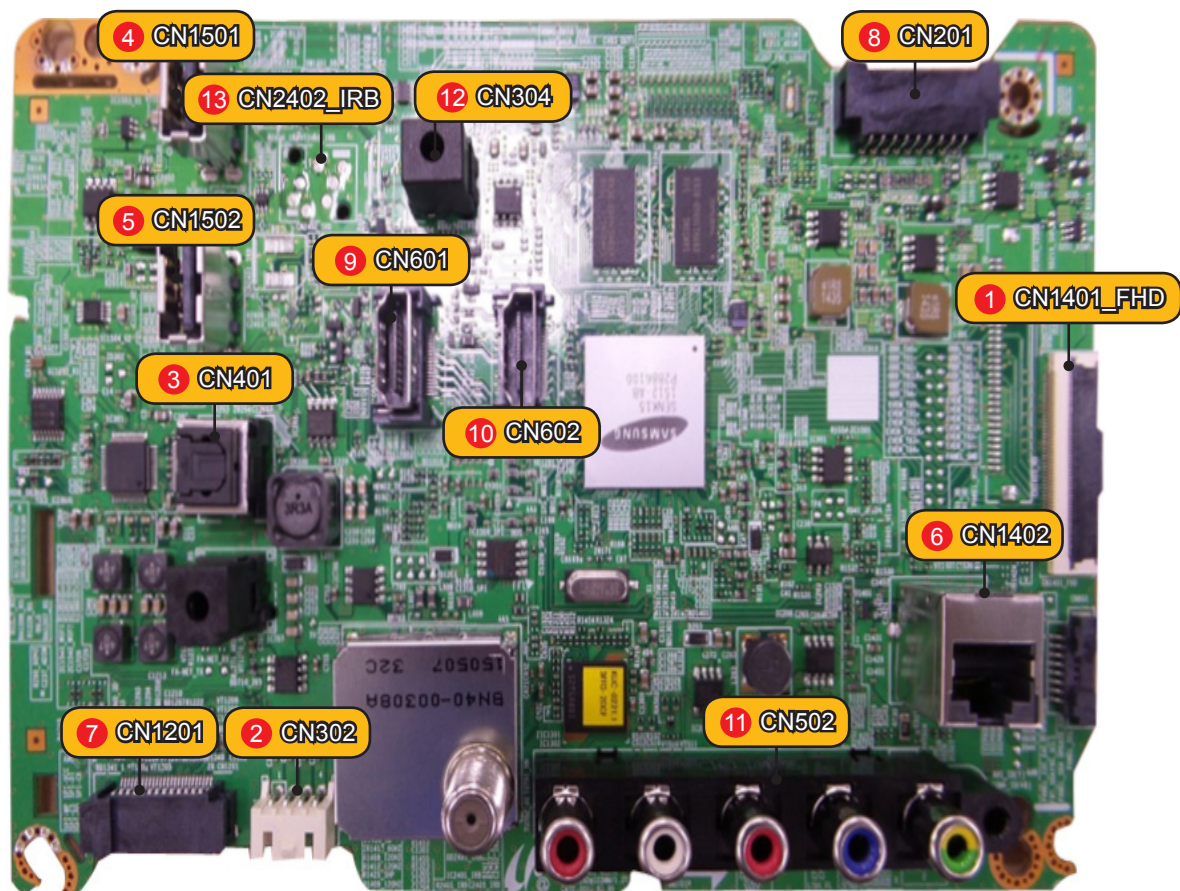
5. Wiring Diagram

5-1. Wiring Diagram



5-2. Connector

■ Main Board



① CN1401_FHD			
1	NC	16	EVEN_TX3+
2	GND	17	EVEN_TX3-
3	FRC_SDA	18	GND
4	FRC_PWM1	19	EVEN_TXCLK-
5	FRC_SCL	20	EVEN_TXCLK+
6	FRC_PWM3	21	GND
7	FRC_PWM2	22	EVEN_TX2+
8	TCON_SDA	23	EVEN_TX2-
9	PANEL_I2C_EN	24	EVEN_TX1+
10	BT_SYNC	25	EVEN_TX1-
11	UPDATE_CHK	26	EVEN_TX0+
12	TCON_SCL	27	EVEN_TX0-
13	GND	28	GND
14	EVEN_TX4+	29	ODD_TX4+
15	EVEN_TX4-	30	ODD_TX4-

① CN1401_FHD			
31	ODD_TX3+	42	ODD_TX0-
32	ODD_TX3-	43	GND
33	GND	44	GND
34	ODD_TXCLK+	45	GND
35	ODD_TXCLK-	46	FRC_PWM4
36	GND	47	PANEL_13V_PW
37	ODD_TX2+	48	PANEL_13V_PW
38	ODD_TX2-	49	PANEL_13V_PW
39	ODD_TX1+	50	PANEL_13V_PW
40	ODD_TX1-	51	PANEL_13V_PW
41	ODD_TX0+		

② CN302 (to Speaker)			
1	R+	3	L+
2	R-	4	L-

③ CN401_OPT (to Optical Jack)			
1	SPDIF_OUT	3	GND
2	B5V_DC_PW		

④ CN1501 (USB1)			
1	B5V_USB1_PW	3	USB1_DP
2	USB1_DM	4	GND

⑤ CN1502 (USB2)			
1	B5V_USB2_PW	3	USB2_DP
2	USB2_DM	4	GND

⑥ CN1402 (to LAN)			
1	LAN_TXD+	5	GND
2	GND	6	LAN_RXD-
3	LAN_TXD-	7	NC
4	LAN_RXD+	8	GND

⑦ CN1201_FUN (to Function/IR)			
1	IR	14	A5V
2	GND	15	LED_STB
3	GND	16	BT_WAKE
4	FRAME_SYNC_IN	17	GND
5	A3.3V	18	POWER_DET
6	BT_SYNC	19	NC
7	MSCL	20	BT_RESET
8	GND	21	GND
9	MSDA	22	WIFI_DP
10	USB_BT_DP	23	WIFI_DM
11	KEY_INPUT1	24	B5V_DC_PW
12	USB_BT_DM	25	WIFI_WOL
13	KEY_INPUT2	26	WIFI_RESET

⑧ CN201 (to Power board)			
1	FRC_PWM4	10	SW_INVERTER
2	NC	11	A13V_PW
3	GND	12	OVD_LEVEL
4	GND	13	A13V_PW
5	A13V_PW	14	OVD_ON_OFF
6	GND	15	GND
7	A13V_PW	16	PWM_DIM
8	SW_POWER_OUT	17	FRC_PWM3
9	A13V_PW	18	FRC_PWM2

⑨ CN601 (to HDMI1)			
1	HDMI1_RX2+	11	GND
2	GND	12	HDMI1_RXCLK-
3	HDMI1_RX2-	13	CEC
4	HDMI1_RX1+	14	NC
5	GND	15	HDMI1_SCL_DDC
6	HDMI1_RX1-	16	HDMI1_SDA_DDC
7	HDMI1_RX0+	17	GND
8	GND	18	HDMI1_5V
9	HDMI1_RX0-	19	HDMI1_HOT_PLUG
10	HDMI1_RXCLK+		

⑩ CN602 (to HDMI2)			
1	HDMI2_RX2+	11	GND
2	GND	12	HDMI2_RXCLK-
3	HDMI2_RX2-	13	CEC
4	HDMI2_RX1+	14	ARC2_SIGLE
5	GND	15	HDMI2_SCL_DDC
6	HDMI2_RX1-	16	HDMI2_SDA_DDC
7	HDMI2_RX0+	17	GND
8	GND	18	HDMI2_5V
9	HDMI2_RX0-	19	HDMI2_HOT_PLUG
10	HDMI2_RXCLK+		

⑪ CN502 (to Component&AV)			
1	GND	9	TEST_PR
2	COMP2_Y_CVBS	10	GND
3	INDENT_VIEDO2	11	COMP2_AV2_SL_IN
4	GND	12	TEST_SL
5	COMP2_PB	13	GND
6	INDENT_COMP2	14	COMP2_AV2_SR_IN
7	GND	15	TEST_SR
8	COMP2_PR		


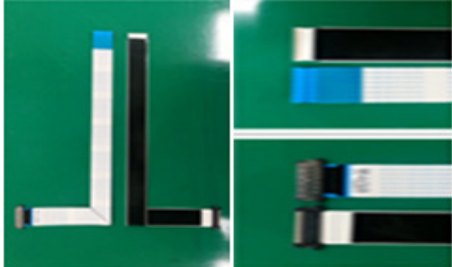
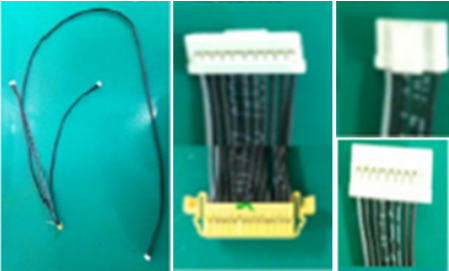
⑫ CN304 (HEADPHONE & LR OUT)			
1	GND	4	TEST_SL
2	HP_LINE_SL_OUT	5	TEST_SR
3	HP_LINE_SR_OUT	6	IDENT_HP

⑬ CN2402_IRB (IRB) : It's depend on Country.			
1	GND	5	NC
2	B3.3V_PW	6	IRB_JACK_ID
3	NC	7	GND
4	NC		

5-3. Connector Functions

Connector	Function
CN201 ↔ CNM803	Supply main power and dimming signal from IP Board to Main Board.
CN1401 ↔ CON3	The LVDS signal transfered from Main Board to Panel.

5-4. Cables

Use	Model	Main-SMPS (18P-10P)	Main-Tcon
Code No.	UN58J5190	BN39-01889K	BN96-33236H
Image	/		
Use	Model	Main-Function/WiFi Module	
Code No.	UN58J5190	BN39-01903N	
Image	/		

5-5. The Types of Module

Use	Wifi module	Function module
Code No.	BN59-01174A	BN96-30902X
Standard	IEEE802.11abgn	-
Image		