



LED TV

Chassis : HED58

Model : HG32ED470SK

SERVICE Manual

Hospitality Displays



HG32ED470SK

Contents

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.




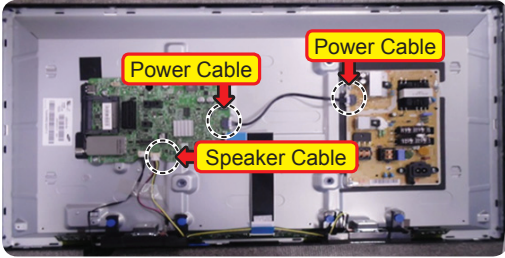
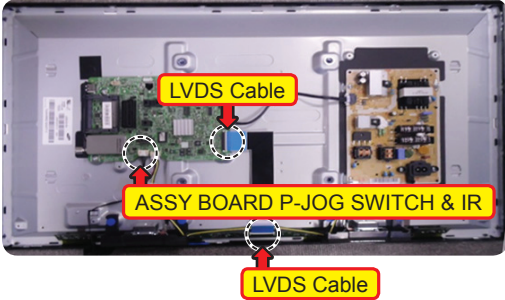
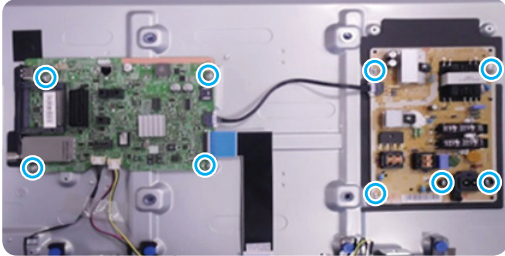

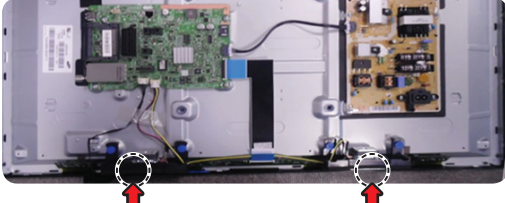
3-1. Disassembly and Reassembly

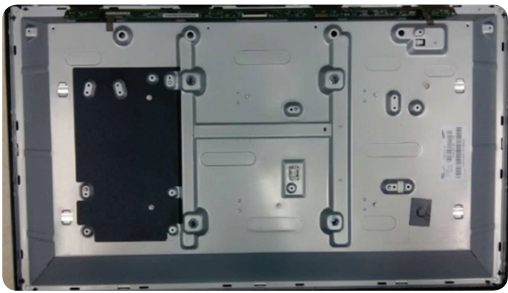



1. Disconnect the LED TV from the power source before disassembly.
2. Follow these directions carefully; never use metal instruments to pry apart the cabinet.
3. If there is no additional coment, it is same for all inches.

Description	Picture Description	Screws
1 Place a soft cloth over the table to protect the TV, and then place the TV on the cloth screen-side down.		
2 Remove the screws from the ASSY STAND P-BASE. <ul style="list-style-type: none">• 32" : 4EA		 6003-001782 SCREW-TAPTYPE M4,L12,ZPC(BLK)
3 Remove the ASSY STAND P-BASE.		

3. Disassembly and Reassemble

Description	Picture Description	Screws
4 Remove the screws from the ASSY COVER P-REAR. • 32" : 7EA		 6001-002755 SCREW-MACHINE M3,L6,ZPC(BLK)
5 Remove the ASSY COVER P-REAR.		
6 Remove the Power Cables and Speaker Cables.		
Remove the LVDS Cable, ASSY BOARD P-JOG SWITCH & IR Cable.		
7 Remove the screws of ASSY PCB MAIN and DC VSS-LED TV PD BD. • ASSY PCB MAIN : 4EA • DC VSS-LED TV PD BD : 5EA		 6001-003016 SCREW-MACHINE M3.0,L5.0,ZPC(WHT)
8 Remove the ASSY SPEAKER (L/R).		

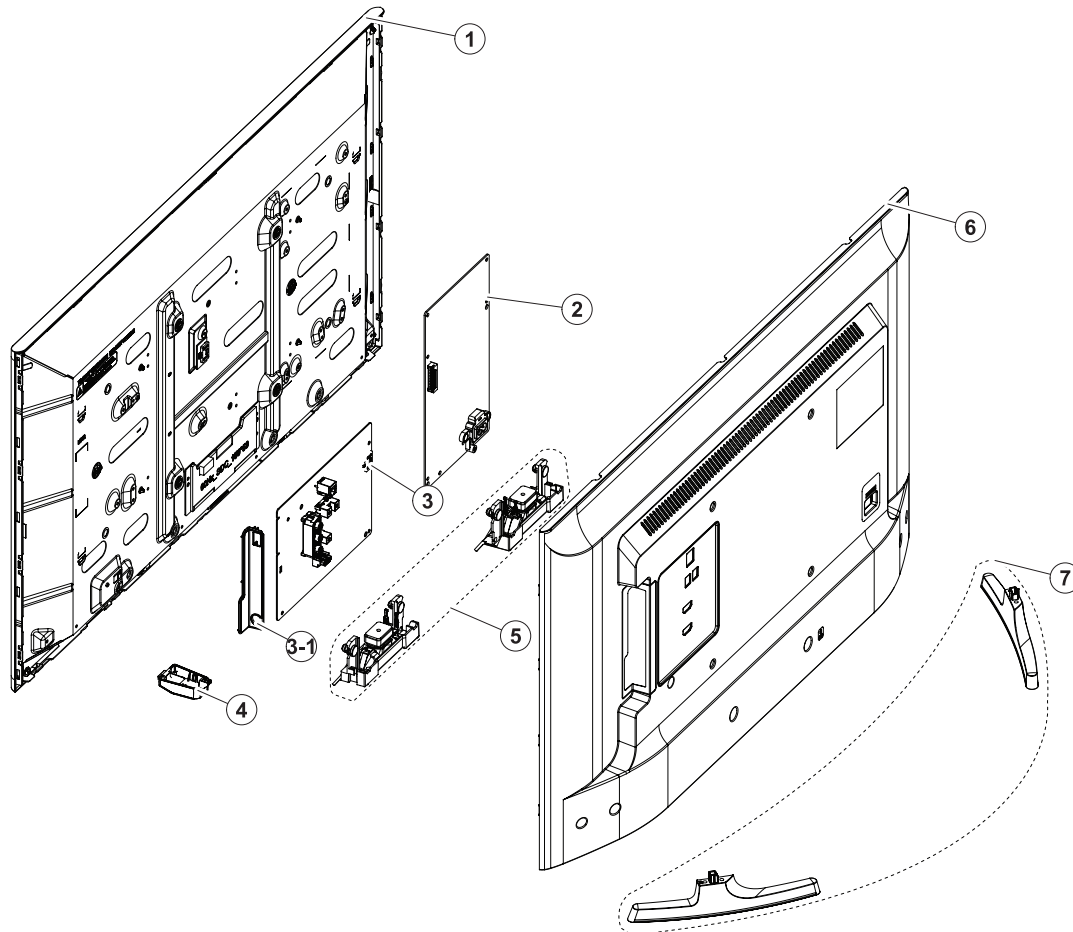
Description	Picture Description	Screws
9 Completed disassembly.		

 **NOTE**

Reassembly procedures are in the reverse order of disassembly procedures.

ANNEX. Exploded View & Part List [HG32ED470SKXEN LP02]

1-1. Exploded View



1-1-1. Part List

No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
1	BN07-01419D	LCD-PANEL CORE; JJ032AGH-R4,RJJ4AH4,8bit*	1	SA	
2	BN44-00844A	DC VSS-LED TV PD BD; P32SF_FPN,P32SF_FPN,	1	SA	
3	BN94-07312Z	ASSY PCB MAIN; HD470S,NEW_CIS,NEW_EUROP	1	SA	
3-1	BN61-12065A	HOLDER-SIDE AV; Y15 J4003 32" (EO, SMART)	1	SNA	
4	BN96-37286B	ASSY BOARD P-JOG SWITCH & IR; HD470S 32",	1	SA	
5	BN96-36052A	ASSY SPEAKER P; 6ohm,4pin,5W,J4003"	1	SA	
6	BN63-14019M	COVER-REAR; J4003 32"Hotel,HD470S_EU,ABS+	1	SA	
7	BN96-37255A	ASSY STAND P-BASE; J4003,Arc-Feet,Matt BL	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
			HG32ED470SKXEN (LP02)			
1	R001A	BN90-07123A	ASSY COVER REAR;HD470	1	SNA	
0.2	SCREW	6001-002755	SCREW-MACHINE;BH,+,M3,L6,ZPC(BLK),SWRCH1	7	SA	
0.2	R001	BN63-14019M	COVER-REAR;J4003 32"Hotel,HD470S_EU,ABS+	1	SA	
..3		0103-010376	RESIN PC ABS;FR3012 / 901510,BLACK,BK000	800	SNA	
1	S001A	BN90-07130K	ASSY STAND;J5000	1	SNA	
0.2	SB04A	BN96-37255A	ASSY STAND P-BASE;J4003,Arc-Feet,Matt BL	1	SA	
..3		BN63-14338A	COVER-STAND-BASE L;J4003 32" etching,ABS	1	SNA	
..3		BN63-14344A	COVER-STAND-BASE R;J4003 32" Etching,ABS	1	SNA	
...4		0103-005041	RESIN PC ABS;FR3200TV,901408,BK0008,1.2m	26	SNA	
..3		BN67-00524A	RUBBER-FOOT;J4003,Sillicon,12.0 X 7.0,2.	4	SNA	
..3		BN69-08751A	WRAP VINYL-SHRINK;STAND,PLASTIC OTHERS,P	0	SNA	
..3		BN96-18013E	ASSY ACCESSORY-SCREW;6003-001782,4EA,ALL	1	SNA	
...4	SCREW	6003-001782	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	4	SA	
...4		6902-000341	BAG PE;LDPE,T0.05,L90,W70,TRP,,,PE MARK	1	SNA	
1	M0017	BN91-12216Z	ASSY CHASSIS;HD470S,NEW_CIS,NEW_EUROPE	1	SNA	
0.2	M0014	BN94-07312Z	ASSY PCB MAIN;HD470S,NEW_CIS,NEW_EUROPE	1	SA	
..3		0202-001608	SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0.	0	SNA	
..3		BN61-12065A	HOLDER-SIDE AV;Y15 J4003 32" (EO, SMART)	1	SNA	
...4		0103-004631	RESIN HIPS;HF-1690H,K21294,BK0007,1.5mm	16	SNA	
..3	FB01A	BN97-07120D	ASSY DRM-KEY;NT14L_DRM-KEY(CI+)	1	SNA	
...4		BN46-00328B	KEY CODE-CERTIFI;CI+,TV,NT14, EU	1	SNA	
..3		BN97-08104Z	ASSY SMD;UH4A,UH4A	1	SNA	
...4		0202-001830	SOLDER-CREAM;LFM-48W TM-HP,D20~38um,96.5	4	SNA	
...4	DS01A	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	2	SA	
...4	DS01A	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3	3	SA	
...4	DS01A	0401-001116	DIODE-SWITCHING;BAV99DW,75V,215mA,SOT-36	1	SA	
...4	DR01A	0402-002006	DIODE-RECTIFIER;SBR6100CTL,100V,6A,TO-25	1	SA	
...4		0403-001552	DIODE-ZENER;DDZ16,15.69/16.51V,500mW,SOD	2	SA	
...4		0403-001783	DIODE-ZENER;BZB84-C6V2,5.8/6.6V,300mW,SO	5	SNA	
...4		0403-001784	DIODE-ZENER;NZH7V5C,7.29/7.67V,500mW,SOD	2	SNA	
...4		0403-001785	DIODE-ZENER;NZH5V1B,4.94/5.2V,500mW,SOD-	1	SA	
...4		0403-001797	DIODE-ZENER;NZH3V0B,2.85/3.15V,500mW,SOD	1	SNA	
...4		0404-001089	DIODE-SCHOTTKY;RB551V-30,20V,500MA,SOD-3	1	SA	
...4		0404-001404	DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23,	1	SA	
...4		0404-001881	DIODE-SCHOTTKY;SS3040-HE,40V,3000mA,SOD-	1	SA	
...4		0406-001628	DIODE-TVS;AOZ8804ADI,6/-/-V,150W,SLP2510	2	SA	
...4		0406-001635	DIODE-TVS;SMF5.0A,6.4V, 6.7V, 7V,200W,SM	9	SA	
...4		0501-000279	TR-SMALL SIGNAL;KSA1182-Y,PNP,150mW,SOT-	1	SA	
...4		0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	8	SC	
...4		0501-002080	TR-SMALL SIGNAL;2SC2412K,NPN,200mW,SC-59	1	SA	
...4		0505-002560	FET-SILICON;AO6415,P,-20V,-3.3A,0.15ohm,	3	SA	
...4		0505-002887	FET-SILICON;AOD478,N,100V,11A,140mohm,45	1	SA	
...4		0505-003224	FET-SILICON;AO6405,P,-30V,-5A,0.052ohm,2	1	SA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4		0505-003397	FET-SILICON;2N7002K,N,60V,380mA,1.19ohm,	8	SA	
...4		0801-002780	IC-CMOS LOGIC;74LVC1G17,SCHMITT-TRIGGER	3	SA	
...4		0801-003330	IC-CMOS LOGIC;Octal buffer,DQFN,20P,4.5x	1	SA	
...4		0909-001032	IC-REAL TIME CLOCK;PCF8563,SOP,8P,4.9x3.	1	SA	
...4		1006-001266	IC-LINE TRANSCEIVER;3232,TSSOP,16P,174MI	1	SA	
...4		1103-001531	IC-EEPROM;S-24C256CI-J8T1U4,256Kbit,32Kx	1	SA	
...4		1103-001561	IC-EEPROM;S-24C02DI-J800,2Kbit,256X8bit,	1	SA	
...4		1105-002527	IC-DDR3 SDRAM;K4B2G1646Q-BCK0,DDR3,2Gbit	1	SA	
...4		1201-003183	IC-AUDIO AMP;DRV612,HTSSOP,14P,5x4.4mm,D	1	SA	
...4		1201-003671	IC-AUDIO AMP;NTP7414,MLF,48P,7x7mm,DUAL,	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-POS.FIXED REG.;S-1172B25-U5T1G,SOT-8	1	SA	
...4		1203-007144	IC-DC/DC CONVERTER;TPS54331D,SOIC8,8P,4.	1	SA	
...4		1203-007151	IC-PWM CONTROLLER;TPS54328DDAR,SO PowerP	1	SNA	
...4		1203-007694	IC-DC/DC CONVERTER;SN1106041DDAR,DDA,8Z3	2	SA	
...4		1203-007984	IC-DC/DC CONVERTER;AOZ3015PI,SO-8,8P,6.2	1	SA	
...4		1203-008102	IC-POS.FIXED REG.;S-13A1D12-E800,HSOP,8	1	SNA	
...4		1203-008103	IC-POS.FIXED REG.;S-13A1D15-E800,HSOP,8	1	SNA	
...4		1203-008104	IC-POS.FIXED REG.;S-13A1D18-E800,HSOP,8	1	SNA	
...4		1203-008105	IC-POS.FIXED REG.;S-13A1D33-E800,HSOP,8	1	SNA	
...4		1203-008496	IC-BACKLIGHT DRIVER;BD9397EFV,HTSSOP-B40	1	SA	
...4		1204-003492	IC-DECODER;SENK14,LFBGA,624P,21x21mm,PLA	1	SA	
...4		1205-004447	IC-SWITCH;TPS2051CDBVR,SOT23-5,5P,3x1.65	2	SA	
...4		1405-001271	VARISTOR;35V,20Vdc,5A,1.0x0.5x0.6mm,TP,1	18	SA	
...4		2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	3	SC	
...4		2007-000039	R-CHIP;0ohm,1%,1/10W,TP,1608	1	SA	
...4		2007-000052	R-CHIP;10Kohm,1%,1/10W,TP,1608	3	SA	
...4		2007-000060	R-CHIP;100Kohm,1%,1/10W,TP,1608	1	SNA	
...4		2007-000063	R-CHIP;150Kohm,1%,1/10W,TP,1608	1	SNA	
...4		2007-000066	R-CHIP;20Kohm,1%,1/10W,TP,1608	1	SNA	
...4		2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	4	SA	
...4		2007-000137	R-CHIP;2Kohm,5%,1/16W,TP,1005	7	SNA	
...4		2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	22	SA	
...4		2007-000142	R-CHIP;2.7Kohm,5%,1/16W,TP,1005	3	SA	
...4		2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	45	SNA	
...4		2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	38	SA	
...4		2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	11	SNA	
...4		2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	5	SNA	
...4		2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	5	SNA	
...4		2007-000168	R-CHIP;470Kohm,5%,1/16W,TP,1005	3	SA	
...4		2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	1	SNA	
...4		2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	7	SNA	
...4		2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	2	SNA	
...4		2007-000242	R-CHIP;1.5Kohm,5%,1/16W,TP,1005	1	SNA	
...4		2007-000256	R-CHIP;1.6Kohm,1%,1/10W,TP,1608	1	SA	
...4		2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	1	SA	

ANNEX. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4		2007-000336	R-CHIP;120Kohm,1%,1/10W,TP,1608	1	SA	
...4		2007-000475	R-CHIP;1Mohm,1%,1/10W,TP,1608	1	SA	
...4		2007-000501	R-CHIP;2.2ohm,1%,1/10W,TP,1608	5	SA	
...4		2007-000539	R-CHIP;200ohm,5%,1/10W,TP,1608	2	SA	
...4		2007-000566	R-CHIP;220Kohm,5%,1/16W,TP,1005	1	SNA	
...4		2007-000695	R-CHIP;3.3ohm,5%,1/10W,TP,1608	4	SNA	
...4		2007-000755	R-CHIP;330Kohm,1%,1/10W,TP,1608	1	SA	
...4		2007-000775	R-CHIP;33Kohm,5%,1/16W,TP,1005	2	SNA	
...4		2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	5	SNA	
...4		2007-001139	R-CHIP;7.5Kohm,1%,1/10W,TP,1608	2	SA	
...4		2007-001196	R-CHIP;820Kohm,5%,1/10W,TP,1608	1	SA	
...4		2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	17	SNA	
...4		2007-001298	R-CHIP;51ohm,5%,1/16W,TP,1005	2	SNA	
...4		2007-001313	R-CHIP;330ohm,5%,1/16W,TP,1005	2	SNA	
...4		2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	1	SNA	
...4		2007-002910	R-CHIP;30.1Kohm,1%,1/10W,TP,1608	1	SNA	
...4		2007-003025	R-CHIP;6.8ohm,5%,1/16W,TP,1005	2	SA	
...4		2007-007001	R-CHIP;3.9Kohm,5%,1/16W,TP,1005	1	SA	
...4		2007-007095	R-CHIP;390ohm,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		2007-007132	R-CHIP;15Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-007134	R-CHIP;39Kohm,1%,1/16W,TP,1005	2	SA	
...4		2007-007136	R-CHIP;4.7Kohm,1%,1/16W,TP,1005	2	SNA	
...4		2007-007138	R-CHIP;27Kohm,1%,1/16W,TP,1005	3	SA	
...4		2007-007139	R-CHIP;47Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-007142	R-CHIP;10Kohm,1%,1/16W,TP,1005	2	SNA	
...4		2007-007156	R-CHIP;1ohm,5%,1/16W,TP,1005	18	SNA	
...4		2007-007231	R-CHIP;110Kohm,1%,1/10W,TP,1608	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	2	SA	
...4		2007-007311	R-CHIP;22Kohm,1%,1/16W,TP,1005	3	SA	
...4		2007-007312	R-CHIP;20Kohm,1%,1/16W,TP,1005	2	SA	
...4		2007-007317	R-CHIP;2.2Kohm,1%,1/16W,TP,1005	2	SA	
...4		2007-007318	R-CHIP;1Kohm,1%,1/16W,TP,1005	24	SNA	
...4		2007-007431	R-CHIP;91Kohm,1%,1/10W,TP,1608	1	SA	
...4		2007-007517	R-CHIP;240ohm,1%,1/16W,TP,1005	1	SNA	
...4		2007-007538	R-CHIP;56Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-007668	R-CHIP;68.1Kohm,1%,1/10W,TP,1608	1	SA	
...4		2007-007720	R-CHIP;300Kohm,1%,1/10W,TP,1608	1	SA	
...4		2007-007723	R-CHIP;75Kohm,1%,1/10W,TP,1608	1	SA	
...4		2007-007767	R-CHIP;200ohm,1%,1/16W,TP,1005	1	SA	
...4		2007-007791	R-CHIP;9.1Kohm,1%,1/16W,TP,1005	2	SNA	
...4		2007-008011	R-CHIP;11.5Kohm,1%,1/10W,TP,1608	1	SA	
...4		2007-008015	R-CHIP;75ohm,1%,1/16W,TP,1005	8	SA	
...4		2007-008167	R-CHIP;120Kohm,1%,1/16W,TP,1005	1	SC	
...4		2007-008213	R-CHIP;4.3Kohm,1%,1/16W,TP,1005	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4		2007-008263	R-CHIP;3Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-008275	R-CHIP;30Kohm,1%,1/16W,TP,1005	3	SNA	
...4		2007-008332	R-CHIP;11.5Kohm,1%,1/16W,TP,1005	2	SA	
...4		2007-008473	R-CHIP;59Kohm,1%,1/10W,TP,1608	3	SA	
...4		2007-009138	R-CHIP;33Kohm,1%,1/16W,TP,1005	2	SNA	
...4		2007-009923	R-CHIP;0.3ohm,1%,1/4W,TP,3216	3	SNA	
...4		2007-010664	R-CHIP;4.7Mohm,1%,1/4W,TP,3216	2	SNA	
...4		2011-000515	R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,8P,TP,	2	SA	
...4		2011-001261	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,2.	2	SA	
...4		2011-001262	R-NETWORK;22ohm,5%,1/16W,L,CHIP,8P,TP,2.	7	SA	
...4		2011-001344	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,2	5	SA	
...4		2011-001345	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,2	4	SA	
...4		2011-001396	R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,8P,TP,	2	SA	
...4		2011-001449	R-NETWORK;22ohm,5%,1/16W,L,4P,TP,1010	5	SA	
...4		2011-001527	R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,4P,TP,	1	SNA	
...4		2011-001587	R-NETWORK;100ohm,5%,1/16W,L,CHIP-V,4P,TP	2	SNA	
...4	AD480	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005	10	SA	
...4	AD480	2203-000278	C-CER,CHIP;0.01nF,0.5pF,50V,C0G,TP,1005	1	SA	
...4	AD480	2203-000359	C-CER,CHIP;0.15nF,5%,50V,C0G,TP,1005,0.5	2	SA	
...4	AD480	2203-000386	C-CER,CHIP;0.015nF,5%,50V,C0G,TP,1005	2	SA	
...4	AD480	2203-000425	C-CER,CHIP;0.018nF,5%,50V,C0G,TP,1005	1	SA	
...4	AD480	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,TP,1005	6	SA	
...4	AD480	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,TP,1005	3	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	2	SNA	
...4	AD480	2203-000714	C-CER,CHIP;3.3nF,10%,50V,X7R,TP,1005	11	SA	
...4	AD480	2203-000812	C-CER,CHIP;0.033nF,5%,50V,C0G,TP,1005	1	SA	
...4	AD480	2203-000854	C-CER,CHIP;0.039nF,5%,50V,C0G,TP,1005	1	SA	
...4	AD480	2203-000940	C-CER,CHIP;0.47nF,10%,50V,X7R,TP,1005	3	SA	
...4	AD480	2203-000995	C-CER,CHIP;0.047nF,5%,50V,C0G,TP,1005	3	SA	
...4	AD480	2203-001412	C-CER,CHIP;0.03nF,5%,50V,NP0,TP,1005	3	SNA	
...4	AD480	2203-001634	C-CER,CHIP;33nF,10%,50V,X7R,TP,1608	1	SA	
...4	AD480	2203-001683	C-CER,CHIP;0.068nF,5%,50V,NP0,TP,1608	1	SNA	
...4	AD480	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,TP,1005	14	SNA	
...4	AD480	2203-002398	C-CER,CHIP;22nF,10%,50V,X7R,TP,1608	3	SNA	
...4	AD480	2203-002443	C-CER,CHIP;0.33nF,10%,50V,X7R,TP,1005	8	SA	
...4	AD480	2203-002711	C-CER,CHIP;100nF,10%,25V,X7R,TP,1608	1	SA	
...4	AD480	2203-005005	C-CER,CHIP;100nF,10%,16V,X7R,TP,1608	4	SC	
...4	AD480	2203-005054	C-CER,CHIP;0.0047nF,0.25pF,50V,NP0,TP,10	2	SA	
...4	AD480	2203-005083	C-CER,CHIP;220nF,10%,50V,X7R,TP,1608,0.8	2	SA	
...4	AD480	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,TP,1608	17	SNA	
...4	AD480	2203-005659	C-CER,CHIP;0.18nF,5%,50V,NP0,TP,1005	1	SNA	
...4	AD480	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,TP,1005	90	SA	
...4	AD480	2203-006126	C-CER,CHIP;47nF,10%,16V,X7R,TP,1005	8	SNA	
...4	AD480	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,TP,1005,0.5	6	SNA	
...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.	7	SA	

ANNEX. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4	AD480	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012	10	SC	
...4	AD480	2203-006377	C-CER,CHIP;4700nF,10%,25V,X5R,TP,2012	1	SNA	
...4	AD480	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,TP,2012	14	SA	
...4	AD480	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005	18	SNA	
...4	AD480	2203-006890	C-CER,CHIP;10000nF,20%,6.3V,X5R,TP,1608	34	SA	
...4	AD480	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012,1	8	SNA	
...4	AD480	2203-007240	C-CER,CHIP;22000nF,20%,6.3V,X5R,TP,1608(2	SA	
...4	AD480	2203-007269	C-CER,CHIP;22000nF,20%,10V,X5R,TP,2012(2	19	SA	
...4	AD480	2203-007270	C-CER,CHIP;10000nF,10%,10V,X5R,TP,1608,0	9	SNA	
...4	AD480	2203-007306	C-CER,CHIP;10000nF,10%,25V,X5R,TP,2012,1	9	SNA	
...4	AD480	2203-007425	C-CER,CHIP;2200nF,10%,25V,X5R,TP,1608,0.	2	SNA	
...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	3	SA	
...4	AD480	2203-008096	C-CER,CHIP;2200nF,10%,50V,X5R,TP,2012,1.	4	SA	
...4		2402-001474	C-AL,SMD;100uF,20%,50V,TP,10.0x8.5mm	3	SA	
...4		2409-001168	C-EDL;200000uF,3.3V,0.01mA,TP,D6.8x11.3m	1	SA	
...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		2703-001209	INDUCTOR-SMD;1.2uH,10%,1608,.8Ohm,25mA,3	3	SA	
...4		2703-002332	INDUCTOR-SMD;330nH,5%,1608,3Ohm,100mA,32	1	SA	
...4		2703-003149	INDUCTOR-SMD;2.2uH,20%,5050,0.055Ohm,300	3	SA	
...4		2703-004145	INDUCTOR-SMD;2.2uH,20%,6.5 x 6.9mm,0.20o	1	SNA	
...4		2703-004457	INDUCTOR-SMD;10uH,20%,8080 (4.5T),0.074O	1	SNA	
...4		2703-004724	INDUCTOR-SMD;8.2uH,20%,5050,4mm,0.072Ohm	4	SA	
...4		2703-005289	INDUCTOR-SMD;33uH,20%,15x16mm,8.5mm,0.05	1	SA	
...4		2801-000258	CRYSTAL-SMD;0.032768MHz,20ppm,SMD,12.5pF	1	SA	
...4		2801-003773	CRYSTAL-SMD;12MHz,30ppm,28-AAN,20pF,50oh	1	SA	
...4		2801-003856	CRYSTAL-SMD;0.032768MHz,20ppm,28-ACP,7pF	1	SA	
...4		3301-000314	BEAD-SMD;120ohm,1608,TP,120ohm/100MHz	3	SNA	
...4		3301-002039	BEAD-SMD;26ohm,1608,TP	44	SA	
...4		3601-001374	FUSE-SURFACE MOUNT;32V,5A,FAST-ACTING,PL	1	SA	
...4		3601-001376	FUSE-SURFACE MOUNT;32V,3A,FAST-ACTING,Hi	1	SNA	
...4		3701-001856	CONNECTOR-HDMI;19P,FEMALE,AU,0.5mm,BLK,S	1	SA	
...4		3708-001150	CONNECTOR-FPC/FFC/PIC;30P,1mm,SMD-A,SN,Z	1	SA	
...4		3709-001782	CONNECTOR-CARD SLOT;68P,1.27mm,ANGLE,AUF	1	SA	
...4	EH01	3711-008131	HEADER-BOARD TO CABLE;BOX,4P,1R,2.5mm,AN	1	SA	
...4	EH01	3711-008168	HEADER-BOARD TO CABLE;BOX,6P,1R,2.0mm,AN	1	SNA	
...4	EH01	3711-008634	HEADER-BOARD TO CABLE;BOX,10P,2R,2mm,ANG	1	SA	
...4		3711-008945	HEADER-BOARD TO BOARD;4P,1R,2.0mm,STRAIG	1	SNA	
...4		3722-003246	JACK-MODULAR;6P/6C(W/L),RJ12,YES,NO,AU/N	1	SA	
...4		3722-003457	JACK-USB;4P/1C,NI,BLK,A	1	SA	
...4		3722-003617	JACK-PHONE;14P/2C,SN,BLK,STRAIGHT,3.6PI,	1	SA	
...4		3722-003655	JACK-SCART;21P,SN,BLK	1	SA	
...4		3722-003667	JACK-PHONE;1P/7C,SN/NI,BLK,STRAIGHT,3.6P	1	SA	
...4	ET01	BN40-00288B	TUNER;GT2CX-33X264S/FW-FWS,GT2CX-33X264S	1	SA	
...4		BN41-02409A	PCB MAIN;HD470S_EU/AA_32inch,FR-4,4,1.2T	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4		BN97-09388D	ASSY MICOM-MAIN;HD670/HD470,EU,1107-0020	1	SNA	
....5		1107-002048	IC-NAND FLASH;MT29F2G08ABAEAWP:E,2Gbit,2	1	SA	
...4		BN97-09389D	ASSY MICOM-SUB;HD670/HD470,EU,0903-00187	1	SNA	
....5		0903-001879	IC-MICROCONTROLLER;WT61P808,LQFP,48P,7x7	1	SA	
...4		BN97-09390B	ASSY MICOM-SPI;HD670/HD470,EU,1107-00222	1	SNA	
....5		1107-002226	IC-NOR FLASH;W25Q40CLSSIP,4Mbit,SOIC,8P,	1	SA	
..3	T0066	BP62-00017A	HEAT SINK-ES;SP-50L2HX,A6063S,T2.0,26.2,	1	SNA	
1		BN91-14470A	ASSY SHIELD;HD470	1	SNA	
0.2	SCREW	6001-003016	SCREW-MACHINE;PWH,+,M3.0,L5.0,ZPC(WHT),S	9	SA	
0.2		BN02-00102B	TAPE-FILAMENT;#8917,0.15,25,50,WHITE	0	SNA	
0.2		BN39-01885X	LEAD CONNECTOR-POWER CABLE;SD850,Lead Co	1	SA	
0.2	P001A	BN44-00844A	DC VSS-LED TV PD BD;P32SF_FPN,P32SF_FPN,	1	SA	
0.2		BN67-00327H	RUBBER-FOOT;RUBBER-FOOT,SILICONE,Square,	2	SNA	
0.2		BN67-00364C	RUBBER-FOOT;X13,RUBBER,10*10,6,Gray,SQUA	1	SNA	
0.2		BN96-35954A	ASSY CABLE P-FFC CABLE;UN32J4003,FFC,NH,	1	SA	
0.2	SP01A	BN96-36052A	ASSY SPEAKER P;6ohm,4pin,5W,J4003"	1	SA	
0.2	FB01A	BN96-37286B	ASSY BOARD P-JOG SWITCH & IR;HD470S 32",	1	SA	
1		BN91-15459B	ASSY LCD-CORETN;BN07-01419D	1	SNA	
0.2		BN07-01419D	LCD-PANEL CORE;JJ032AGH-R4,RJJ4AH4,8bit*	1	SA	
1		BN92-17513A	ASSY BOX;HD470	1	SNA	
0.2		BH68-00662A	LABEL BOX-01;ALL MODEL,ART PAPER,60,110,	1	SNA	
0.2		BN69-11893T	BOX UNIT;32HD450-YS,CB,A-01,SW2,W914,D11	1	SNA	
1		BN92-17537A	ASSY P/MATERIAL;HD470	1	SNA	
0.2		6902-002498	BAG ROLL;HDPE/PE FOAM,T0.5*,W650,L300M,T	2	SNA	
0.2		6922-000013	BAND;PP,W18,L2300/L2900,TRP	1	SNA	
0.2		BN01-00039A	FOIL-STRETCH-HOOD;LLDPE,T0.08,W930,L1400	0	SNA	
0.2	AS080	BN63-10787F	SHEET-COVER;UE22ES5000,PE,T4.0,W1020,L11	1	SNA	
0.2		BN69-08447A	PAD;COMM,CB,SW2,T3,W800,L1000,-,-,-,YE	1	SNA	
0.2		BN69-11850A	CUSHION-SET;J4003,EPS,16.7g/l	1	SNA	
..3		0103-005099	RESIN EPS;BASF303,Natural,Natural	213	SNA	
0.2		BN69-12515A	PALLET-WOODEN;UE32J4000/5000/6200,WOOD,9	1	SNA	
0.2		BN74-00008N	TAPE OPP;Silent,T0.065,W60,L1500M,NTR,Ac	2	SNA	
1	ACCE1	BN92-17799A	ASSY ACCESSORY;HD470	1	SNA	
0.2		BN68-05417A	LABEL-02,ENERGY;ALL,EDC,PP,T0.135,60,125	1	SNA	
0.2	ACCE1	BN96-35795B	ASSY ACCESSORY MANUAL/CABLE;HD470	1	SNA	
..3	T0268	3903-000950	CBF-POWER CORD;DT,CEE,LP-21L,250V,2.5A,B	1	SA	
..3		4301-000121	BATTERY-MN;1.5V,R03,10.5x44.5m,7.5g,AAA	2	SNA	
..3		6902-001962	BAG PE;LDPE,BIOBASED,T0.05,W400,L300,TRP	1	SNA	
..3	REMOCON	AA59-00818A	REMOCON;TM1240,44,3.0V,HB460, HB67X, HB6	1	SC	
..3	T0568	BN39-00864A	CBF IF-MODULAR/MODULAR;Bordeaux Plus HOT	1	SA	
..3		BN68-02989A	LABEL-PQS;ALL,ALL,Paper,30,65,WHITE,SEH	1	SNA	
..3		BN68-03019A	LEAFLET-10,SAFETY GUIDE;ALL,SAMSUNG,28LE	1	SNA	
..3		BN68-04972D	LEAFLET-04,REGULATORY GUIDE;ALL,SAMSUNG,	1	SNA	
..3		BN68-07115A	LEAFLET-02,FICHER CARD;HD470,EUROPE,ENG,	1	SNA	
..3		BN68-07310A	LEAFLET-QSG;HD470S EU,ENG,XC & XU,MOJO,MOJ	1	SNA	
..3	EH03A	BN96-18153A	ASSY HOLDER P-RING;11 LED-TV	1	SNA	
...4		6902-001404	BAG ZIPPER;LDPE,T0.05,W80,L100,TRP	1	SNA	

ANNEX. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4	AH365	BN61-07295A	HOLDER-RING;40UD5500,ABS,BK0007,HB	4	SC	
....5		0103-004609	RESIN ABS;HF-0680U,K21294,BK0007,1.5mm H	16	SNA	
1		BN92-17807A	ASSY LABEL;HD470	1	SNA	
0.2		BN68-06708E	LABEL RATING;ALL,WW,PP,T0.05,93,73,Dark	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.

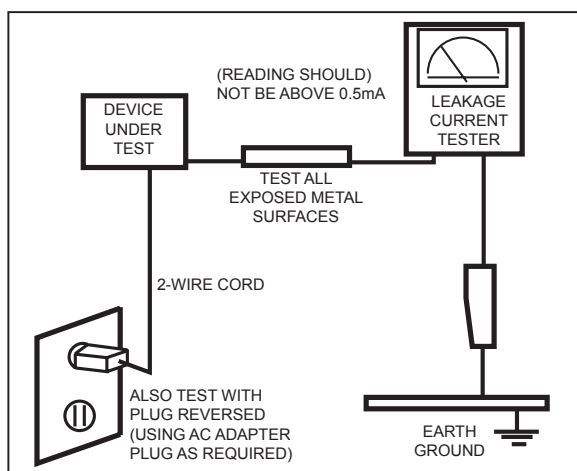
1-1-2. Servicing the LED TV

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	HG32ED470SK		
Front View	 <p>* W : Width H : High D : Depth</p>		
Detail View			
Color	Front Color : BLACK / Stand Color : BLACK		
Dimensions (W x H x D)	32"	Set without Stand	745.4 x 442.2 x 69.0 mm
		Set with Stand	745.4 x 466.6 x 150.5 mm
Weight	32"	Set without Stand	3.97 Kg
		Set with Stand	4.06 Kg
Panel Type	Anti Glare		
Internal Memory	256 Mbtye		
DDR	128 x 2 Mbtye		
Feature	Media Play (Movie)		

2-2. Product specification

2-2-1. Specifications

■ Feature

- Digital-TV, RF, 1-HDMI, 1-USB2.0, 1-Headphone, 1-HPID, 1-DATA, 1-RJP, 1-CI, 1-Scart
- Dynamic Contrast Ratio : Mega Contrast
- Response Time : 6.5 ms

■ Specifications

Model	HG32ED470SK
Item	Description
Screen Size	32 inches
LCD Panel	HD 60 Hz
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)
Display Colors	16.7M color
Display Resolution	1366 x 768
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.
Maximum Pixel Clock Rate	85 MHz
AC Power Voltage & Frequency	AC220-240V 50/60Hz
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)	10W (5W X 2)
Note : Dolby Digital Plus/Pulse, USB2.0, Film mode, Energy Saving	

2-2-2. Detailed Specifications



NOTE

Design and specifications are subject to change without prior notice.

Item		HG32ED470SKXEN
General Information	Product	LED
	Country	NETHERLANDS
Display	Inch	32"
	Resolution	1,366 x 768
	Ultra Clear Panel	N/A
	Screen Curvature	N/A
Video	Picture Engine	HyperReal
	Clear Motion Rate	100 Hz
	Dynamic Contrast Ratio	Mega Contrast
	Micro Dimming	N/A
	Wide Color Enhancer (Plus)	Yes
	Auto Depth Enhancer	N/A
	Contrast Enhancer	N/A
	Auto Motion Plus	N/A
	Film Mode	Yes
	Natural Mode Support	N/A
Audio	Dolby Digital Plus	Yes
	Virtual Surround	DTS Studio Sound
	DTS Codec	DTS Premium Sound
	Sound Output (RMS)	10W
	Speaker Type	2CH(Down Firing + Base Reflex)
	Woofer	N/A
Smart TV	Samsung SMART TV	N/A
	Apps	N/A
Smart Interaction	Voice Control	N/A
Convergence	Mobile to TV - Mirroring, DLNA	N/A
	RVU	N/A
	Samsung SMART View	N/A
	WiDi	N/A
General Feature	Samsung 3D	N/A
	3D Converter	N/A
	Instant On	N/A
	Camera Built-in	N/A
	Digital Clean View	Yes

2. Product specifications

Item		HG32ED470SKXEN
General Feature	Auto Channel Search	Yes
	Auto Power Off	Yes
	BD Wise Plus	N/A
	Caption (Subtitle)	Yes
	Connect Share™ (HDD)	N/A
	ConnectShare™ (USB 2.0)	Yes
	Embedded POP	N/A
	EPG	Yes
	Game Mode	Yes
	OSD Language	27 European Languages
	Picture-In-Picture	Yes
	BT HID Built-in	N/A
	USB HID Support	N/A
	Teletext (TTX)	Yes
	Triple Protector	N/A
Hospitality Feature	Samsung LYNK™ SINC Compatibility	No
	H.Browser Compatibility	No
	Samsung LYNK™ REACH	Yes
	Samsung LYNK™ REACH Server Compatibility	Yes
	Hospitality Home Menu	Yes
	Bluetooth Music Player (Mobile → TV)	No
	Hospitality Plug&Play (Easy Set-up)	Yes
	Power On Mode	Yes
	Hotel Channel List	Yes
	Channel Setup On/Off	Yes
	Mixed Channel List (ATSC, DVB-T/T2/C/S2, Analog)	Yes
	My Channel	Yes
	Energy Saving Mode (BLU Control)	Yes
	Logo Display with Time Out Setting (BMP/ Movie)	Yes
	Welcome Message	Yes
	RJ12/IR Pass Through	Yes
	Auto Source Mode	Yes
	External Clock Compatibility	No
	Clock Back Up Supply	Yes
	External Clock Dimming Control	No
	Software Clock	Yes
	Multi Code Remote Control	Yes

Item		HG32ED470SKXEN
Hospitality Feature	Screwed Remote Battery Cover	Yes
	Soundbar Compatibility	Yes
	Music Mode (Input: PC/AV/Component/HDMI)	No
	Music Mode Backlight on/off	No
	TTX Clock Update (Analogue)	Yes
	USB Cloning	Yes
	Smooovie Compatibility	Yes
	Soft AP	No
	On/Off Timer (Schedule)	No
	Wake-up Timer (Alarm)	Yes
	Samsung LYNK™ DRM	Yes
	Pro:Idiom	No
	bLAN	No
	Security Mode	Yes
	S/W EPG (Solution EPG)	Yes
	IEC 60601-1	No
	Standby LED Color	RED
	Wake on LAN (WOL)	N/A
Input & Output	HDMI (Side/Rear)	0/1
	USB (Side/Rear)	1/0
	Component In (Y/Pb/Pr) (Side/Rear)	No
	Composite In (AV) (Side/Rear)	No
	Ethernet (LAN) (Side/Rear)	No
	Headphone (Side/Rear)	0/1
	Audio Out (Mini Jack / LR) (Side/Rear)	No
	Digital Audio Out (Optical) (Side/Rear)	No
	PC In (D-sub) (Side./Rear)	No
	PC/DVI Audio In (Mini Jack) (Side./Rear)	No
	RF In (Terrestrial / Cable input) (Side/Rear)	1/0
	RS232C	Yes(Common Use for RJ12)
	CI Slot (Side/Rear)	1/0
	Scart (Side/Rear)	0/1
	Pillow Speaker Jack (Side/Rear)	No
	Variable Audio Out (Side/Rear)	No
	Variable Audio Out Volume Control (Side/Rear)	No
	Video Out (Side/Rear)	No
	RJ12 (Side/Rear)	0/1
	RJP (Remote Jackpack) (Side/Rear)	0/1

2. Product specifications

Item		HG32ED470SKXEN
Input & Output	Headphone ID (Side/Rear)	0/1
	Door-Eye Control (Side/Rear)	No
	Door-Eye Video In (Side/Rear)	No
System	DTV Tuner Built-in	DVB-T2/C
	Analog Tuner	Yes
Design	Front Color	Black
	Stand Type	Mini Arc
	Swivel (Left/Right)	N/A
Eco Feature	Eco Label	EU Eco label
	Eco Sensor	N/A
	Energy Efficiency Class	A+
	Mercury Content	0.0 mg
	Lead Presence	Yes



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	Code. No	Product	Code. No
• Remote Control	AA59-00818A	• Quick Setup Guide	BN68-07310A
• Batteries (AAA x 2)	4301-000121	• Safety Guide	BN68-03019A
• Power Cord	3903-000950		

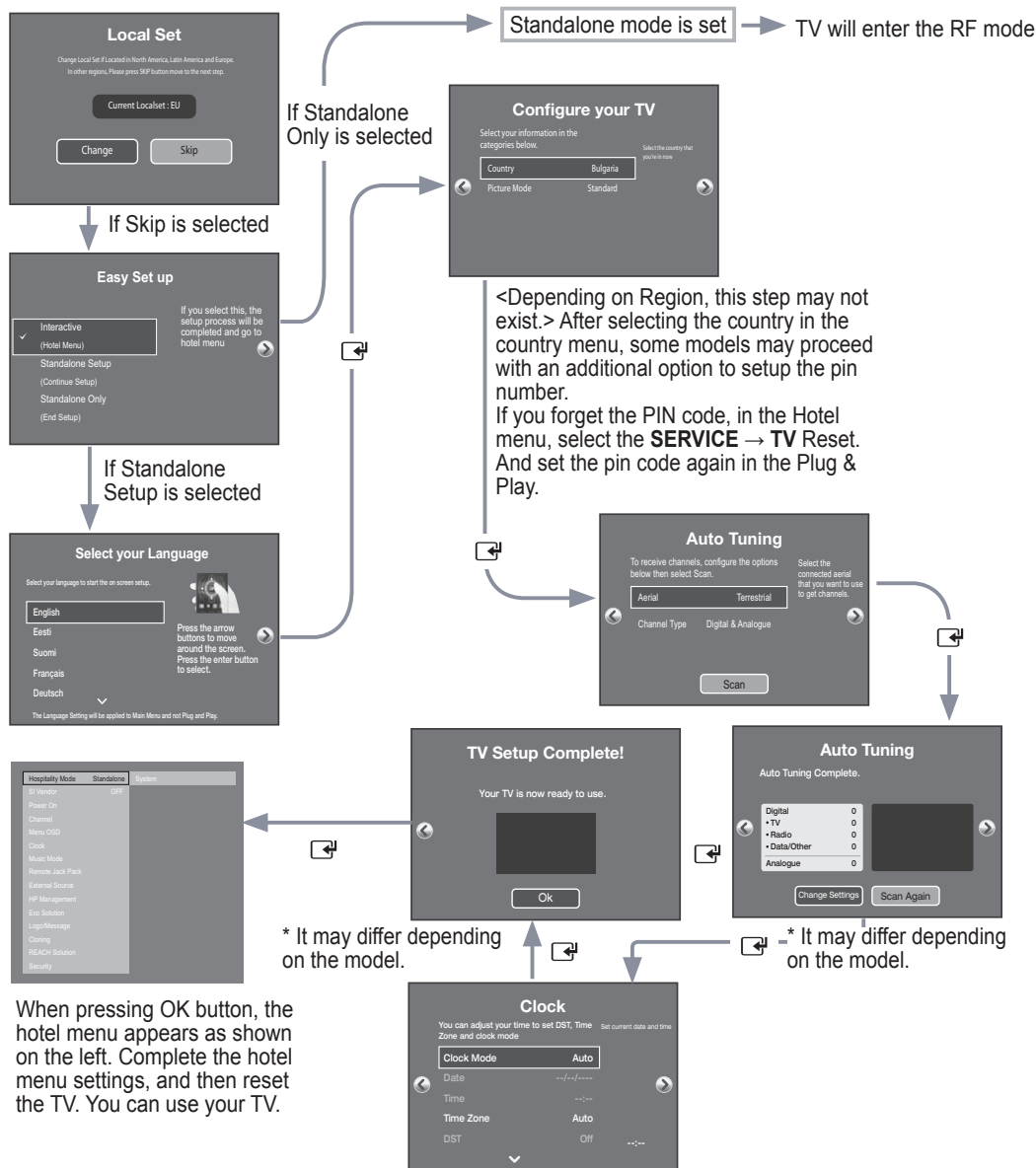
Image	Product	Code. No
	• Data Cable	BN39-00864A
	• Wall mount Adapter	BN61-07295A

2-4. Viewing the Functions

2-4-1. Hotel Plug & Play

Hotel Plug & Play is a function that automatically performs the Hotel mode selection, Country Setup, Clock Setup and Picture mode Setup once.

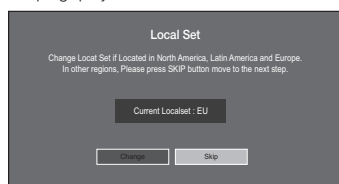
- Hotel Plug & Play is available only one time when power is first turned ON.
- After setting up first TV and Clone TV to USB
- Next TV only needs to exit Hotel Plug & Play, connect USB, then Clone USB to TV.



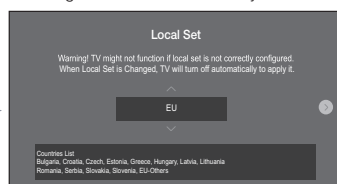
2-4-2. HD Plug & Play – Local Set

- Local Set is very important software setting value such as Languages, Broadcast frequencies, etc.
- TV might not function, if Local Set is not correctly configured.
Select correct Local Set with country list provided.

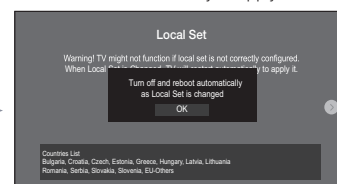
Local Set change option on the first page of HD plug&play



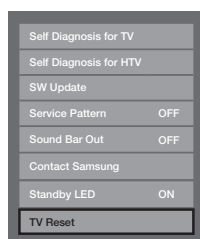
Select right Local Set with country list



TV will reboot automatically to apply new Local Set

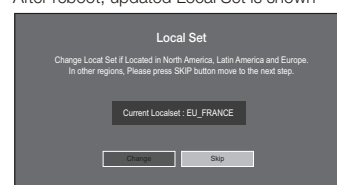


Region	Country	Local Set
Europe	Bulgaria	EU
	Croatia	
	Czech	
	Estonia	
	Greece	
	Hungary	
	Latvia	
	Lithuania	
	Romania	
	Serbia	
	Slovakia	
	Slovenia	
	EU-Others	
	Italy	EU_ITALY
	Austria	EU_GER
	Germany	
	Switzerland	
	France	EU_FRANCE
	Belgium	EU_BENELUX
	Luxembourg	
	Netherlands	
	Portugal	EU_SPAIN
	Spain	
	United Kingdom	EU_UK
	Ireland	
	Denmark	NORDIC
	Finland	
	Norway	
	Sweden	
CIS	Turkey	EU_TURKEY
	Poland	EU_POLAND
	Kazakhstan	CIS_RUSSIA
	Russia	
	Ukraine	

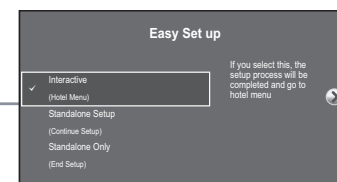
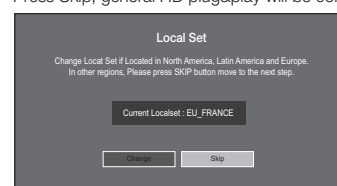


If you need to change Local Set after HD plug&play, click TV Reset function on Factory mode, you can progress HD plug&play including Local Set change.

After reboot, updated Local Set is shown



Press Skip, general HD plug&play will be continued

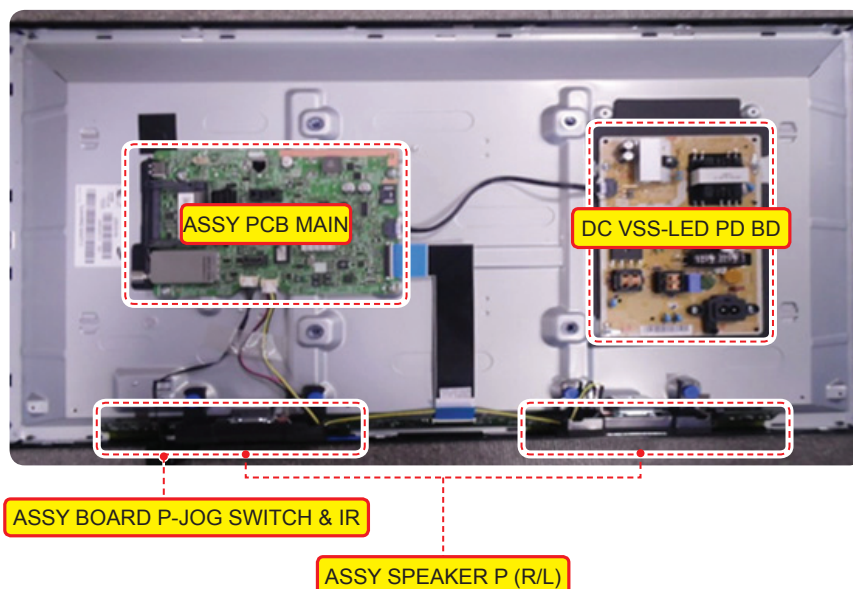


4. Troubleshooting

4-1. Previous Check

■ Check list for initial operation

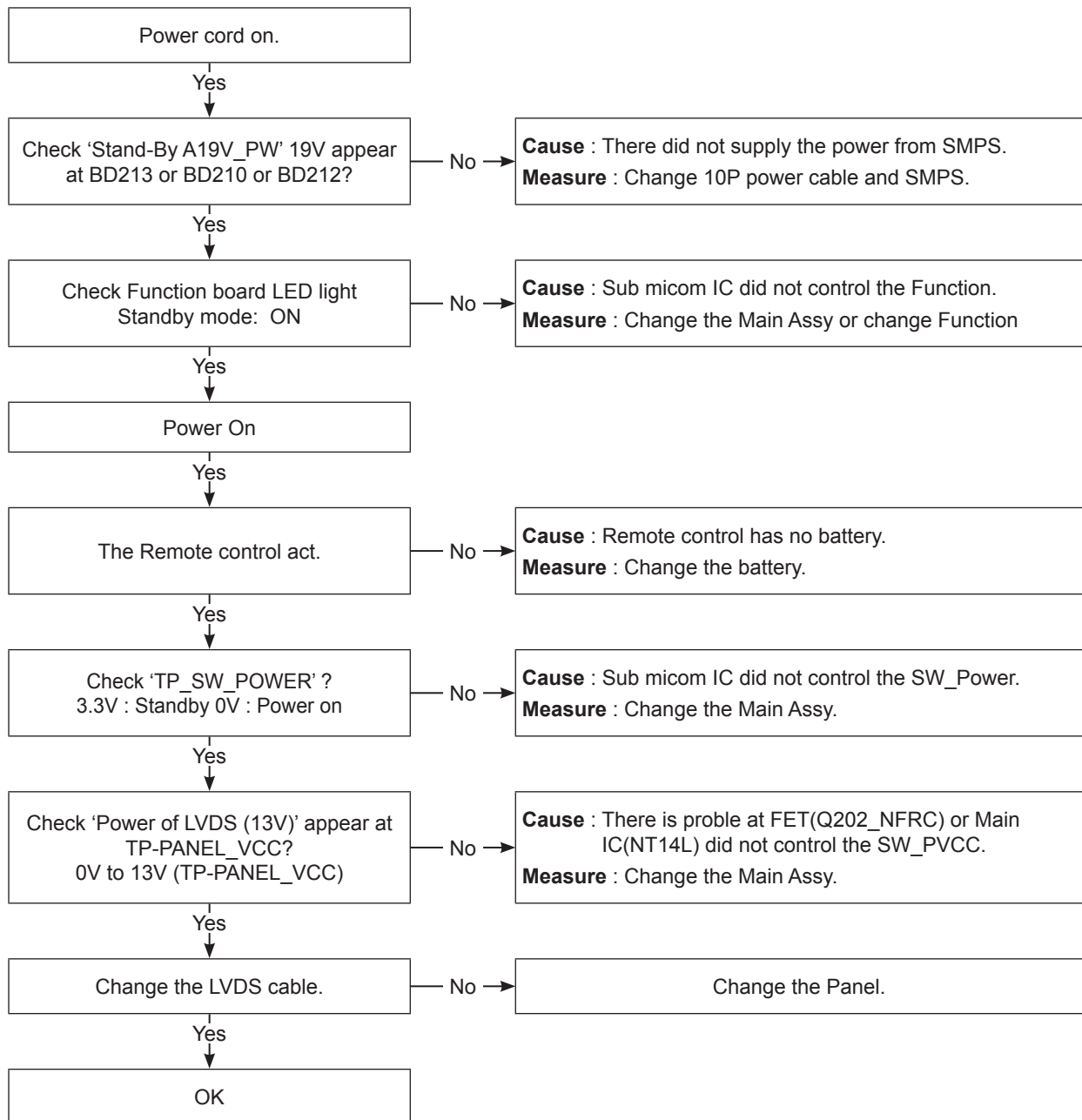
- AC Power Cord connected to the TV and the wall receptacle.
- Standby Power/IR Indicator LED is turned On.
- If Power/IR Indicator is not on check 10p power cable is connected and for correct Standby Voltage from SMPS to Main. Also check Jog Function Cable.
- Power turned On with Jog Function or Remote.
- Power on command from main Board to SMPS.
- Power/IR Indicator Flashes.
- Panel Back Lights are turned On.
- If no Backlights, unplug AC Power Cord, unplug 10 pin connector to SMPS, plug in AC Power Cord, Back light should come on. Check Main Board operation for error.
- Power/IR Indicator goes off.
- Picture or banner is displayed.
 - If nothing is displayed, check the LVDS cable.



CN202(to Power board)			
1	A19V_PW	6	DGND
2	DGND	7	A19V_PW
3	A19V_PW	8	DGND
4	DGND	9	A19V_PW
5	A19V_PW	10	DGND

4-2. How to Check Fault Symptom

■ NO Power and No Video



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**".

■ HG32ED470SKXEN

Inches		32"
PANEL	Vendor	CORETN
	Code	BN07-01419D
	Spec.	JJ032AGH-R4
SMPS	Vendor	POWER
	Code	BN44-00844A
	Spec.	P32SF_FPN
MAIN	ASSY CHASSIS	BN91-12216Z
	ASSY PCB MAIN	BN94-07312Z
Byte	Item	
0	Factory Reset	-
1	Type	32S6AH0JJ
2	Local set	EU
3	SW Model	HD470
4	BOM Model	470
5	Tuner	S_T2C
6	Ch table	NONE

4-3-2. 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



- If you don't have Factory remote control, can't control some menus. (Expert, Advanced menu)

Option

Control

Debug

SVC

ADC/WB

Advanced

T-N14LJDEUCB-xxxx

T-N14LJDEUSB-xxxx

EDID SUCCESS

CALIB : AV / COMP / PC / HMDI /

Option : xxxx xxxx xxx

DTP-SDAL-NT14L-MAIN-xxxx.x

RFS:"NT14L xxxx" K/ xxxx-xx-xx

KERNEL : xxx.xxxx, / Onboot : XXXX

TCON Version: ----

NSP-DTVTD-HOTEL-xxxx

Model : HG**ED470

CIP SUCCESS

DRM CRC:----

Factory Data Ver : xxx

EERC Version:xxx

NSP-BP-HAL-xxxx

NSP-AP-CNC-xxxx

NSP-AP-MM-xxxx

NSP-BP-MW-xxxx

NSP-BP-APP-xxxx

Date of purchase : mm/dd/yyyy

MAIN SW Version

SUB SW Version

4-3-3. Factory Data

■ Option

Factory Menu Name	Data	Range
Factory Reset	-	
Type	32S6AH0JJ	
Local Set	EU	ED_MAL/ED_VIET/AD_SIN2/ED_INDIA/AD_AU_NZ2/ED_THAI/ED_PHI/ED_INA
SW Model	HD470	
BOM Model	470	
TUNER	S_T2C	
Ch Table	NONE	
MRT Option		
Front Color	N/A	
Lvds Format	JEIDA	
Language_Arabic	EU	
Region	PANEURO	
PnP Language	ENG	
WIFI REGION	E	
OTN Support	OFF	
MediaPlay DLNA	...	
TTX	ON	
China HD	OFF	
NT Conversion	OFF	
Num of DTV	1	
Num of AV	0	
Num of COMP	0	
Num of HDMI	1	
Num of SCART	1	
Num of USB Port	1	
Num of RVU	0	
Num of Display	2	
Num of IPTV	0	
Num of RUI	0	
TOOLS Support	1849	
LNA Support	0	
24P*4 Support	OFF	
BD Wise Support	OFF	
Data Service Support	OFF	

4. Troubleshooting

Factory Menu Name	Data	Range
PVR Support	OFF	
CI Support	ON	
OTA Support	OFF	
LEDMotionPlus Support	OFF	
Natural Mode Support	OFF	
Relax Mode Support	OFF	
HDMI/DVI SEL	0	
Select LCD/PDP	LCD	
Wall Mount	0	
HV Flip	HV Flip	
PVR RECOND NUM	0	
Light Effect	OFF	
e-Pop Default	OFF	
CAMERA Support	OFF	
NETWORK Support	Not Support	
EcoSensor Support	OFF	
3D Support	OFF	
BT Support	OFF	
BT ADDRESS	Not Support	
HP LINE	Headphone	
Capture Recording Support	OFF	
JAVA Data Service Support	OFF	
African Cinema Mode support OFF		
Indian Cinema Mode support	OFF	
Cricket Score Game Support	OFF	
Engineer Option		
Type Of Panel Key	Horizontal	
5 Way Function Key	R_BOTTOM	
Contents Bar	0	
Cable Modulation	...	
Standby Led on/off	OFF	
Recognition Support	OFF	
IF AGC	0	
D AGC	0	
PH BW	3	
FQ BW	3	
PH RATE	4	

Factory Menu Name	Data	Range
PD EN	1	
PEQ Inx	183	
WF Scale		
Num of Network Stream	0	
DP V Size	1	
Backend Device	ECHO_FS	
BT_AUDIO_ON_OFF	OFF	
Config_AV_PATH		
V_HDMI IDENT TYPE	2134	
V_HDMI PATH TYPE	BACD	
V_EDID TYPE	LCD_FHD	
V_ATV	CVBS_PORT 2	
V_AV1	None	
V_AV2	None	
V_COMP1	None	
V_COMP2	None	
V_PC	None	
V_SCART1_CVBS	CVBS_PORT_3	
V_SCART1_RGB	ADC-PORT-2	
V_SCART2_CVBS	None	
V_SCART2_RGB	None	
A_ATV	SIF	
A_DTV	DECODER	
A_AV1	AUIN0	
A_AV2	None	
A_COMP1	None	
A_COMP2	None	
A_PC	None	
A_SCART1	AUIN0	
A_SCART2	None	
A_DVI	None	
A_HDMI	None	
A_Media	DECODER	
USING_PSI_UPDATE		
FAST LOGO DELAY	0	
NUM OF PANEL KEY	6	

■ Control

Factory Menu Name	Data	Range
EDID		
EDID ON/OFF	Off	
EDID WRITE ALL	...	
EDID WRITE PC	...	
EDID WRITE HDMI	...	
EDID Ver	...	
EDID Port	...	
EDID WRITE DVI	...	
Sub Option		
RS-232 Jack	UART	
Serial Log On/Off	ON	
Watchdog	ON	
Checksum	0x0000	
Fast Boot in Production	OFF	
USB Serial	OFF	
Eeprom Reset		
EER Reset	0	
NVR ALL Clear	OFF	
ECO IC TYPE	None	
Info Link Server Type	operating	
Info Link Country	None	
TTX Group	UserOSD	
Visual Test	...	
MediaPlay DB	...	
OPTION_SUM		
OTN Server Type	operating	
OTN Test Server	OFF	
SWU Reset		
SWU Duration	OFF	
SWU Fail Test	OFF	
SWU_Diag_Code		
OPTION_NUM		
Num of ATV	1	
Num of SVIDEO	-	
Num of PC	-	
Num of DVI	-	

Factory Menu Name	Data	Range
Num of OPTICAL Link	-	
Num of MEDIA	1	
Num of Tuner	1	
Num of PVR RECORD	-	
RF Remocon Support	OFF	
CDD mode		
DPMS Support	OFF	
Num of IPTV CIP	0	
Num of CI	1	
Num of DECODER	0	
T-CON Device		
BOARD CONTROL	OFF	
RM		
Server Type	Operationg	
RTS mode	0	
PSA		
FKP Download1		
FKP Download2		
LMK threshold	0	
Low threshold	0	
High threshold	0	
CSB	ON	
CLB	ON	
EEPG Enable	OFF	
FAnet Thread	5	
UNIQUE TRIPLET	ON	
Hotel Option		
Hospitality Mode		
SI Vendor		
Power On		
Power On Channel	Last Saved	
Power On Channel Num	
Power On Channel Type		
Power on Volume	Last Saved	
Power on Volume Num	
Min Volume	0	
Max Volume	100	

4. Troubleshooting

Factory Menu Name	Data	Range
Power on Source	TV	
Power on Option	Last Option	
Channel		
Channel Setup		
Channel Editor		
Mixed Channel Map	ON	
Dynamic SI	OFF	
Channel Rescan Message	ON	
Pan Euro MHEG	OFF	
My channel	OFF	
Genre Editor		
Subtitle Auto On	OFF	
TTX WIDESCREEN MODE	OFF	
MENU OSD		
Picture Menu Lock	Off	
Menu Display	On	
TOOLS DISPLAY	ON	
CHANNEL MENU DISPLAY	OFF	
Panel Button lock	Unlock / Lock /OnlyPower / Menu/ Source	
Home Menu Display	ON	
Home Menu Editor		
Home Menu Auto Start	ON	
Clock		
Clock Typ	OFF	
Local Time	Standalone : Manual / TTX Interactive : Manual / TTX / Auto	
Time Channel Type		
Time Channel Num		
MUSIC Mode		
Remote Jack Pack		
Priority HDMI	1	
HDMI Option	HDMI	
External Source		
USB Pop-up Screen	Default	
External Source Banner	ON	
Auto source	OFF	
Anynet+Return Source	Power On Src	

Factory Menu Name	Data	Range
HP Managment		
HP Mode	OFF	
Default HP Volume		
Main Speaker	ON	
Eco Solution		
Energy Saving	Off	
Logo/Message		
Welcome Message	OFF	
Edit Welcome Message	-	
Hospitality Logo	OFF	
Hospitality Logo DL	...	
Logo Display Time	...	
Cloning		
Clone TV to USB	-	
Clone USB to TV	-	
Setting Auto Intialize	OFF	
REACH Solution		
REACH 3.0	OFF	
Ticker	OFF	
Reach server Version	0	
Security		
Password Input		
Password Setting		
Password Reset		
Security Mode		
USB		
HDMI		
TTX Security		
System		
Self Diagnosis for TV		
Self Diagnosis for HTV		
SW Upgrade		
Service Pattern	OFF	
Sound Bar Out	OFF	
Contact Samsung		
Standby LED	ON	
TV Reset		

4. Troubleshooting

Factory Menu Name	Data	Range
Shop Option		
Shop Mode	...	
Exhibition Mode	OFF	
3D CUBE	OFF	
Asia Option		
Sepco 120Hz	OFF	
Unbalance	OFF	
FMTransmitter Support	OFF	
FMTransmitter Carrier	OFF	
AF level adjust	3	
TX Power Level	0	
Mono Last Memory	OFF	
H Shaking	OFF	
Sound		
High Devi	OFF	
Carrier Mute	OFF	
Speaker Delay Normal	0	
Wiselink Delay Menu	0	
Pilot Level High Thld	0x13h	
Pilot Level Low Thld	0x09h	
Pilot_Phase_diff_on_THR	OFF	
FM Prescale	0X2Eh	
AM Prescale	0x1Ah	
NICAM Prescale	0x1Dh	
AMP Model	NTP7414	
Amp Volume	0xc5h	
Amp Scale	0x6bh	
Amp Check Sum	0x1E23D3A9	
SubWoofer Support	0	
Woofer Type	0	
Woofer Volume	0xcbh	
Woofer Scale	0x8ah	
Woofer Check Sum	NONE	
Woofer Local Check Sum	NONE	
Amp Local Check Sum	NONE	
Speaker EQ	ON	
PEQ Test	Ready	

Factory Menu Name	Data	Range
Speaker cut-off Freq	5	
SPDIF PCM Gain	-9db	
FM M Prescale	0	
BTSC Mono Prescale	0	
BTSC stereo Prescale	0	
SAP Prescale	0	
A2 Ident High Thld	15	
A2 Ident low Thld	4	
Carrier2 Amp High Thld	16	
Carrier2 Amp Low Thld	14	
Carrier2 SNR High Thld	32	
Carrier2 SNR Low Thld	17	
Audio-IP Test	Ready	
SRS Tuning Param	0	
TruBass-Checksum	0	
Mic Scale	0	
India Sound	OFF	
Wall Filter Type	0	
SAP High Thld	9	
SAP Low Thld	7	
Bottom CheckSum	0	
Bottom Local CheckSum	0	
MFM Option		
PDD	1670	
A_Dimming_Support	OFF	
UnderDriver_Switch	OFF	

■ Debug

Factory Menu Name	Data	Range
Spread Spectrum		
DDR Margin		
ND ADJ Support	0	
MICOM POWER OFF	0	
RF Mute Time	6ms	
CI+1.3	0	
FRC		
Tuner Margin	0	

4. Troubleshooting

Factory Menu Name	Data	Range
MPEG Margin	1	
H.264 Margin	8	
CAM Wait Time	0	
TS Clock delay	0	
TCON_TEMP READ	0	
TEMPLAST	60	
DCC VERSION	0x0	
DDC CHK SEL	0	
DDC CHECK LOCAK	0x0	
DDC CHECK TOTAL	0x0	
MultiACC Checksum	0	
IIC Bus Stop	OFF	
Tuner Status		

■ SVC

Factory Menu Name	Data	Range
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 Test Pattern	0	
SOC TCON Patten Level	0	
SOC TCON FRC Patten	0	
HDMI WB Pattern	0	
HDMI Pattern Sel	0	
PANEL DISPLAY TIME	6Hr	
SVC Info	0	
Delete S/N	Failure	
Upgrade		
Smart Hub Reset	0	
ER Count		
LOG		
Self Diagnosis		
IPERF	Stopped	

Factory Menu Name	Data	Range
OPTION_HDMI		
DVB CI		
CAL Data Backup_Copy	...	
CAL Data Restore_Copy	...	
Expert		
ATV IF AGC SPEED	0	
Reset		
Auto Power	MEMORY	

■ ADC/WB

Factory Menu Name	Data	Range
ADC		
AV Calibration	Success	
Comp Calibraion	Success	
PC Calibration	Success	
HDMI Calibration	Success	
ADC Result		
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	124	
G-Gain	128	
B-Gain	149	
WB_W2_R_Offset	128	

4. Troubleshooting

Factory Menu Name	Data	Range
WB_W2_B_Offset	128	
WB_W2_R_Gain	162	
WB_W2_B_Gain	74	
WB_N_R_Offset	128	
WB_N_B_Offset	128	
WB_N_R_Gain	148	
WB_N_B_Gain	111	
MGA		
MGA On/Off	OFF	
R1_Gain	512	
B1_Gain	512	
G1_Gain	512	
R2_Gain	512	
B2_Gain	512	
G2_Gain	512	
R3_Gain	512	
B3_Gain	512	
G3_Gain	512	
R4_Gain	512	
B4_Gain	512	
G4_Gain	512	
R5_Gain	512	
B5_Gain	512	
G5_Gain	512	
R6_Gain	512	
B6_Gain	512	
G6_Gain	512	
R7_Gain	512	
B7_Gain	512	
G7_Gain	512	
R8_Gain	512	
B8_Gain	512	
G8_Gain	512	
R9_Gain	512	
B9_Gain	512	
G9_Gain	512	
R10_Gain	512	

Factory Menu Name	Data	Range
B10_Gain	512	
G10_Gain	512	

■ Advanced

4-4. White Balance

4-4-1. Calibration

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

Option
Control
Debug
SVC
ADC/WB
Advanced

ADC
ADC Result
White Balance
MGA

AV Calibration
Comp Calibration
PC Calibration
HDMI Calibration

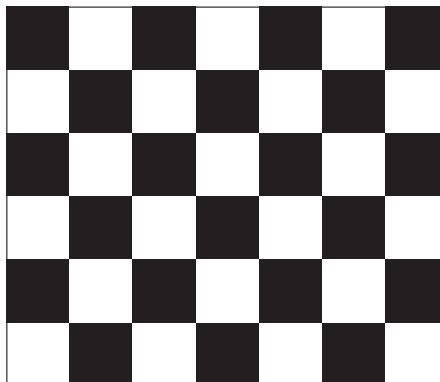
4-4-2. Service Adjustment

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. elect 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 (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 **ADC/WB** menu.
- 3. Select **White Balance** menu.

Option	ADC	(Low Light)	(Hight Light)
Control	ADC Result	Sub Brightness	Sub Contrast
Debug	White Balance	R offset	R gain
SVC	MGA	G offset	G gain
ADC/WB		B offset	B gain
Advanced			

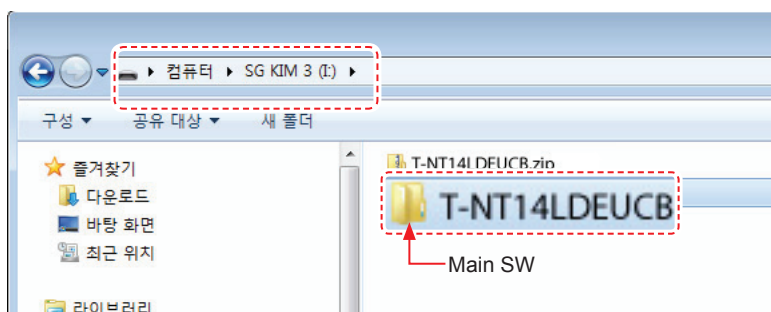
4-5. Software Upgrade

■ How to Upgrade SW and Micom

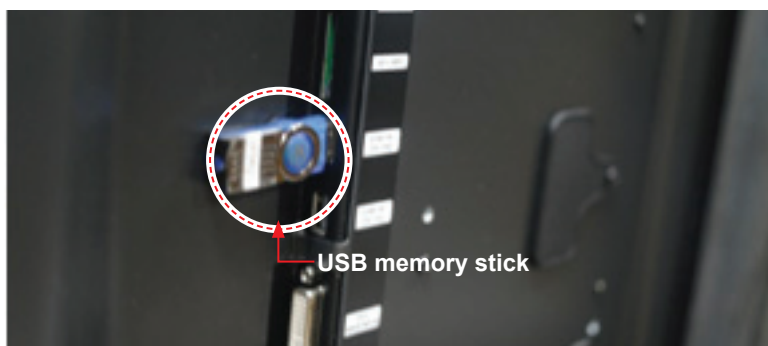
- Insert a USB drive containing the firmware upgrade downloaded from samsung.com into the Set. Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied.
- The set will turn off and turn on automatically after completing the firmware upgrade. Please check the firmware version after the upgrades are complete (the new version will have a higher number than the old 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.

4-5-1. Main SW Upgrade

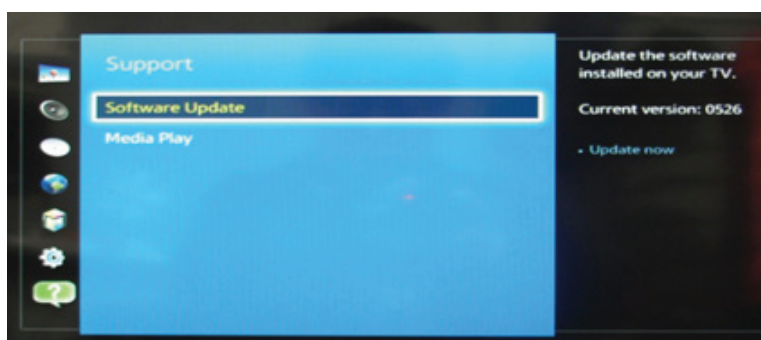
1. You need USB, including update file.
 - <http://displaysolutions.samsung.com/resources/downloadCenter?method=list> save "T-NT14LDEUCB" file in USB.
2. Store the SW program named "T-NT14LDEUCB" in a USB memory stick.



3. Connect the USB memory stick.

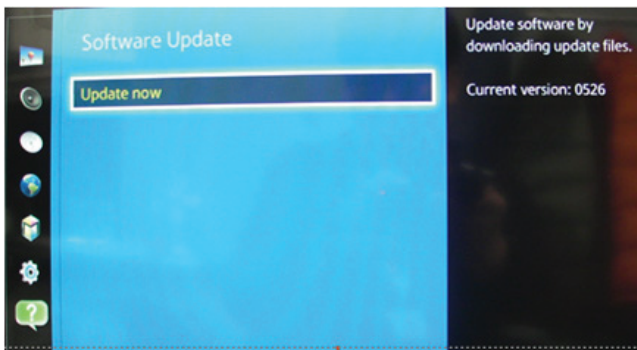


4. Click the **MENU** button on the remote control.
 - You can use OSD menu.
5. Select **Support** menu.
 - Locate the menu cursor **Software Upgrade** menu.

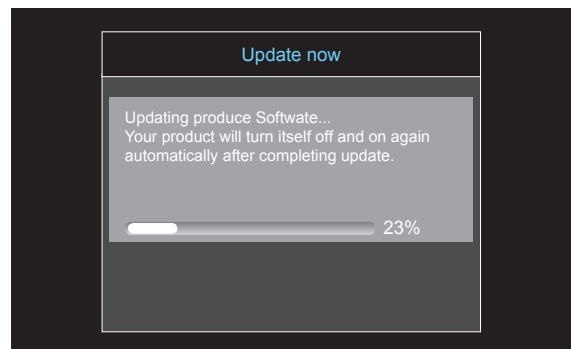
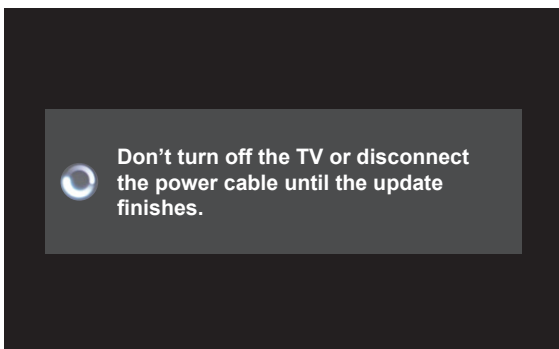
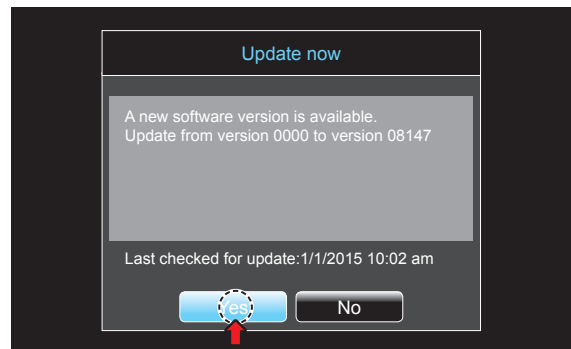
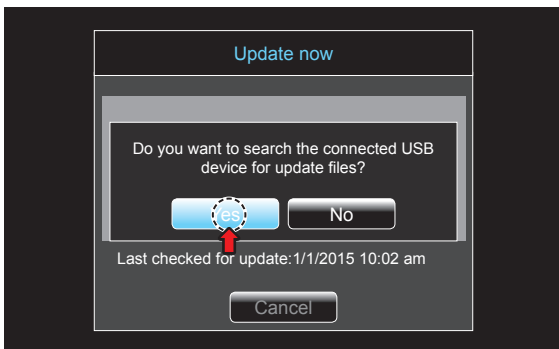


4. Troubleshooting

6. Locate the menu cursor **Update now** menu.



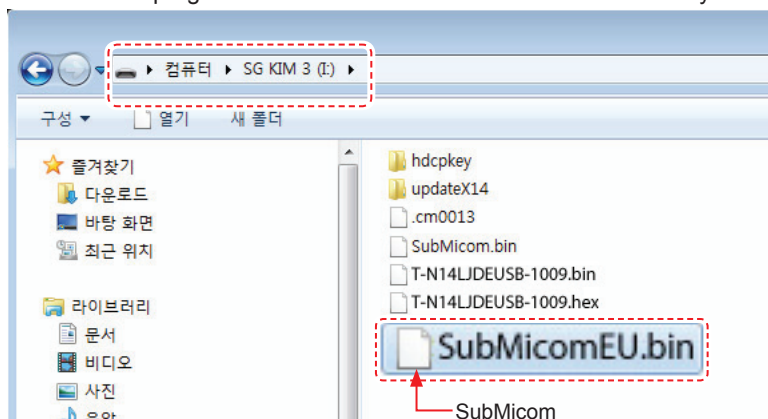
7. Click the **YES** button.



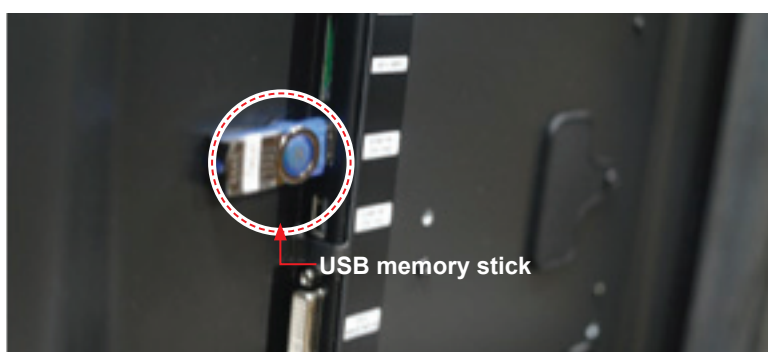
4-5-2. SUBMICOM Upgrade

You can upgrade SUBMICOM in factory mode without DDC program. But it take long time about 5 minutes.

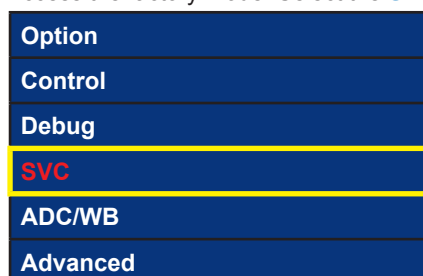
1. Store the SW program named **SubMicomEU.bin** in a USB memory stick.



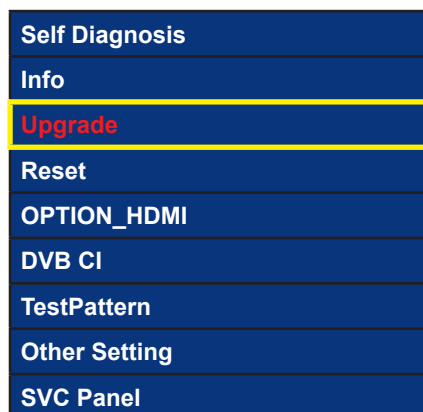
2. Connect the USB memory stick.



3. Access the factory mode. Select the **SVC** menu.



4. Select the **UPGRADE** menu.



4. Troubleshooting

5. Locate the cursor **SUBMICOM** upgrade menu.

T-CON Usb Download	Failure	IR Blaster Upgrade	Failure
T-CON CheckSum	N/A	IR Blaster delay time	50
Logic Usb D/L	-	CPLD Download	
SUBMICOM UPGRADE	off	LDC Profile Upgrade	0
BT UPGRADE		Pic Data USB Upgrade	0
BT FREEPAIRING	ON	Audio Data USB Upgrade	0
Fuction Upgrade	Failure	Eco Data USB Upgrade	0
FRC3D FW Upgrade		SC ADK Upgrade	Failure
FRC3D LD Upgrade	0000	SC MBR Upgrade	Failure
Camera Upgrade			
Mic Upgrade	ON		
CPLD USB Download			
JP MICOM UPGRADE	Failure		
DP MICOM UPGRADE	Failure		
Jump Upgrade	Failure		

6. Click the **Enter** button.
7. Click the **Right (►)** button on the remote control.
- Wait for upgrade complete about 5 minutes.

SUBMICOM UPGRADE	Ready
SUBMICOM UPGRADE	Upgrading...

8. Check the Micom version.

4-6. How to write EDID

1. Select **Control** - **EDID**.

Option	EDID
Control	Sub Option
Debug	PDP Option
SVC	Hotel Option
ADC/WB	Shop Option
Advanced	Asia Option
	LFD Option
	Config Option

2. Select **EDID ON/OFF** and push ► button of remote control.
then you can see the change of state **OFF** to **ON**.

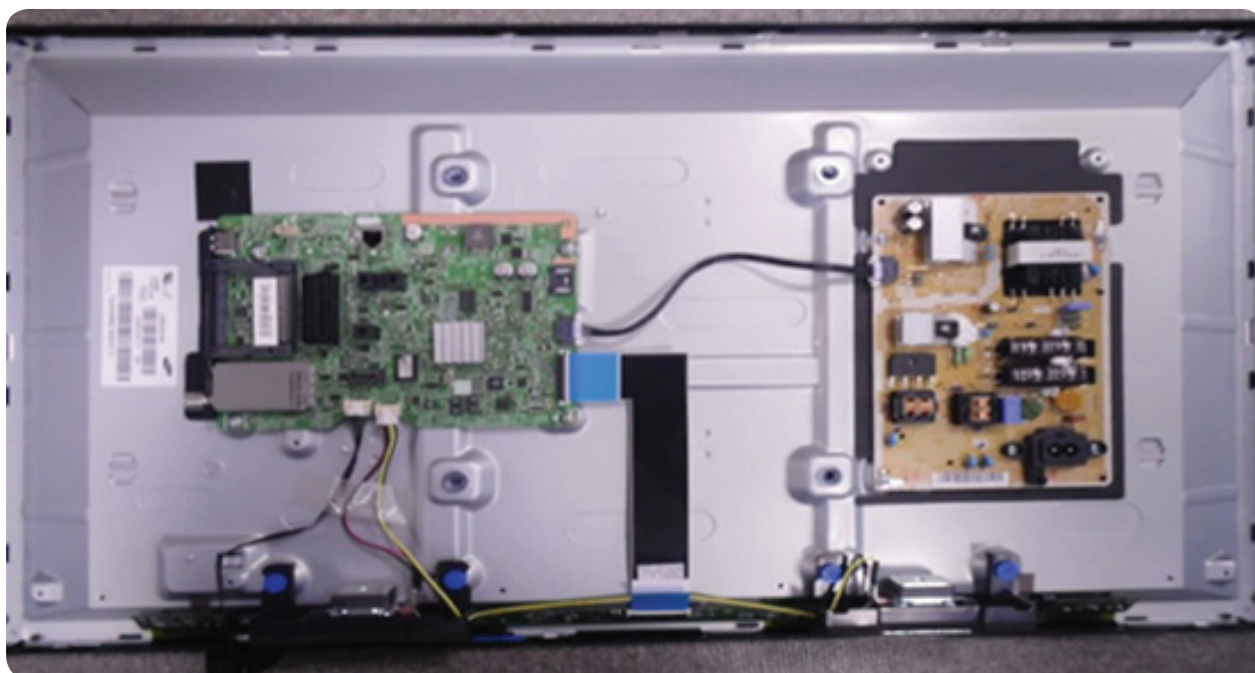
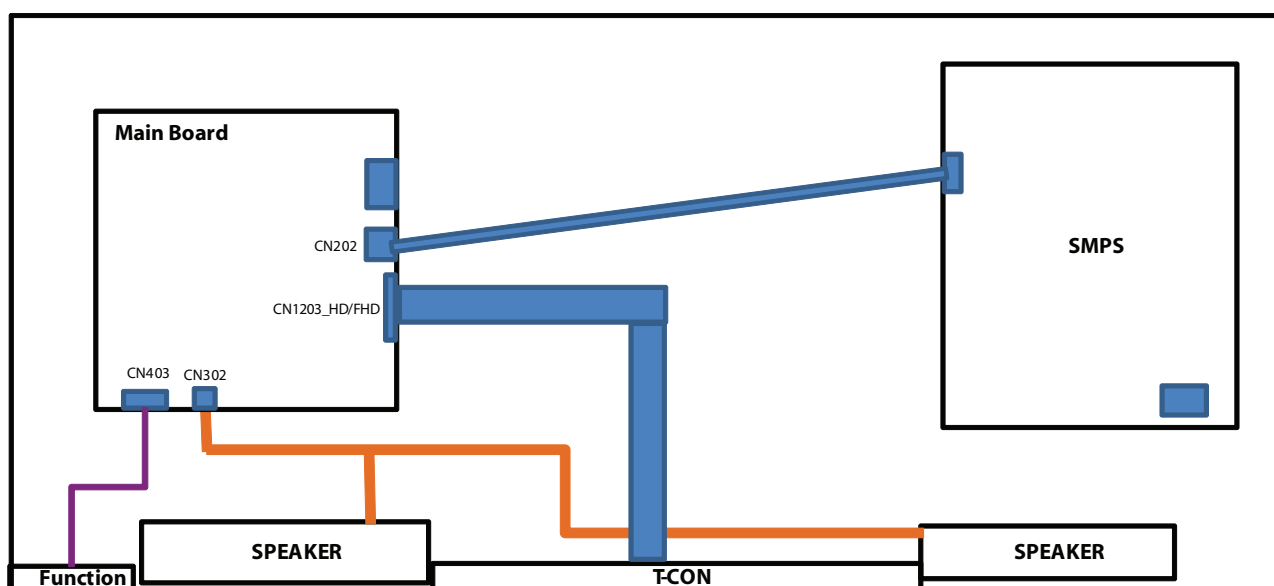
EDID ON/OFF	ON
--------------------	-----------

3. Select **EDID WRITE ALL** and push ► button of remote control.

EDID WRITE ALL	Success
-----------------------	----------------

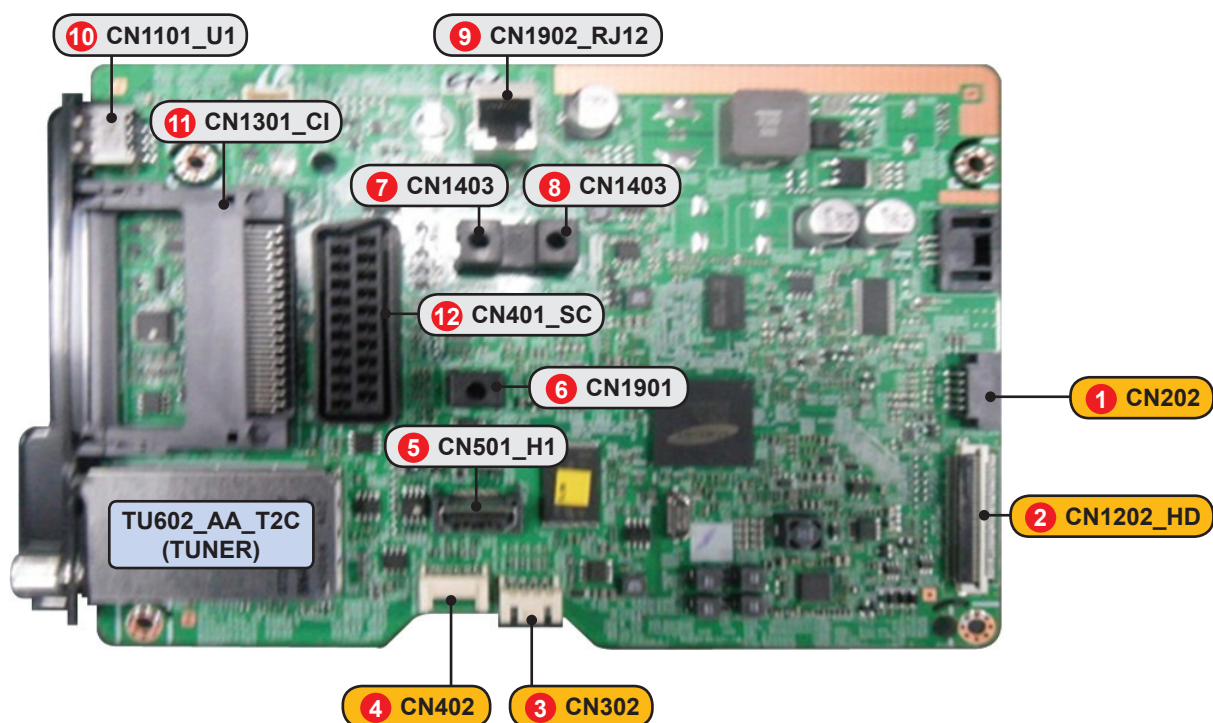
5. Wiring Diagram

5-1. Wiring Diagram



5-2. Connector

■ Main Board



■ Main Board Pin Map

1 CN202(to Power Board)				2 CN1202_HD(to Panel)			
1	A19V_PW	6	DGND	1	PANEL 13V_PW	16	EVEN_TXCLK+_LVDS
2	DGND	7	A19V_PW	2	PANEL 13V_PW	17	EVEN_TXCLK-_LVDS
3	A19V_PW	8	DGND	3	PANEL 13V_PW	18	DGND
4	DGND	9	A19V_PW	4	PANEL 13V_PW	19	EVEN_TX2+_LVDS
5	A19V_PW	10	DGND	5	PANEL 13V_PW	20	EVEN_TX2-_LVDS
				6	DGND	21	GND
				7	DGND	22	EVEN_TX1+_LVDS
				8	DGND	23	EVEN_TX1-_LVDS
				9	TCON_WP	24	DGND
				10	LVDS_FORMAT	25	EVEN_TX0+_LVDS
				11	NC	26	EVEN_TX0-_LVDS
				12	DGND	27	DGND
				13	EVEN_TX3+_LVDS	28	TCON_SDA
				14	EVEN_TX3-_LVDS	29	TCON_SCL
				15	DGND	30	DGND

3 CN302(To Speaker)

1	R+	3	L+
2	R-	4	L-

4 CN402(to Function/IR)

1	IR	4	KEY_INPUT1
2	GND	5	
3	A3.3V	6	LED_STB

5 CN501_H1(to HDMI)

1	HDMI1_RX2+	11	GND
2	GND	12	HDMI1_RXCLK-
3	HDMI1_RX2-	13	CEC
4	HDMI1_RX1+	14	HDMI1_ARC
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+		

6 CN1901

1	GND	5	NC
2	FANET_TX	6	NC
3	FANET_RX	7	NC
4	NC		

7 CN1403(Headphone_IDENT)

1	GND	5	NC
2	IDENT_HP_MO	6	NC
3	IDENT_HP_MO	7	GND
4	NC		

8 CN1403(Headphone)

1	GND	5	TEST_SR
2	MO_HP_SL_OUT	6	IDENT_HP_MO
3	MO_HP_SR_OUT	7	GND
4	TEST_SL		

9 CN1902_RJ12

1	TP_RJ12_IR	4	TP_RJ12_GND
2	NC	5	NC
3	TP_RJ12_RX	6	TP_RJ12_TX

10 CN1101_U1(USB)

1	B5V_USB1_PW	3	USB1_DP+_USB
2	USB1_DM-_USB	4	GND

11 CN1301_CI(PCMCIA)

1	GND	35	GND
2	EXT_DATA[3]	36	PCM_CD1
3	EXT_DATA[4]	37	TSO_DATA[3]
4	EXT_DATA[5]	38	TSO_DATA[4]
5	EXT_DATA[6]	39	TSO_DATA[5]
6	EXT_DATA[7]	40	TSO_DATA[6]
7	PCM_CE1	41	TSO_DATA[7]
8	EXT_ADDR[10]	42	PCM_CE2
9	PCM_OE	43	NC
10	EXT_ADDR[11]	44	PCM_IORD
11	EXT_ADDR[9]	45	PCM_IOWR
12	EXT_ADDR[8]	46	CH_START
13	EXT_ADDR[13]	47	CH_DATA[0]
14	EXT_ADDR[14]	48	CH_DATA[1]
15	PCM_WE	49	CH_DATA[2]
16	PCM_IRQA	50	CH_DATA[3]
17	CI_VCC	51	CI_VCC
18	CI_VCC	52	CI_VCC
19	CH_VALID	53	CH_DATA[4]
20	CH_CLK	54	CH_DATA[5]
21	EXT_ADDR[12]	55	CH_DATA[6]
22	EXT_ADDR[7]	56	CH_DATA[7]
23	EXT_ADDR[6]	57	TSO_CLK
24	EXT_ADDR[5]	58	PCM_RESET
25	EXT_ADDR[4]	59	PCM_WAIT
26	EXT_ADDR[3]	60	NC
27	EXT_ADDR[2]	61	PCM_REG
28	EXT_ADDR[1]	62	TSO_VALID
29	EXT_ADDR[0]	63	TSO_START
30	EXT_DATA[0]	64	TSO_DATA[0]
31	EXT_DATA[1]	65	TSO_DATA[1]
32	EXT_DATA[2]	66	TSO_DATA[2]
33	CI_VCC	67	GND
34	GND	68	GND


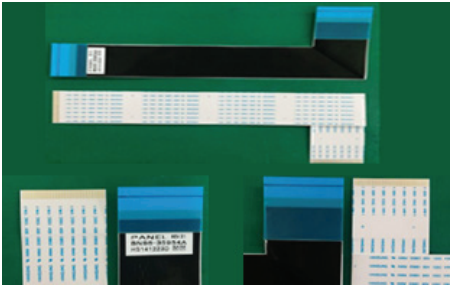
5. Wiring Diagram

12 CN401_SC			
1	SC_SR_OUT	12	NA
2	SC_SR_IN	13	DGND
3	SC_SL_OUT	14	DGND
4	DGND	15	SC_R
5	DGND	16	SC_FB
6	SC_SL_IN	17	DGND
7	SC_B	18	DGND
8	IDENT_SC	19	SC_CVBS_OUT
9	DGND	20	SC_CVBS_IN
10	NA	21	DGND
11	SC_G		

5-3. Connector Functions

Connector	Function
CN202 ↔ CNM803	Supply main power and dimming signal from IP Board to Main Board.
CN1202_HD ↔ T-CON	The LVDS signal transfered from Main Board to Panel.

5-4. Cables

USE	Main-SMPS	Main-T CON
	LEAD CONNECTOR	ASSY CABLE P-FFC
Code	BN39-01885X	BN96-35954A
Photo		



NOTE

The code number of cable (Lead-connector) can be changed, see "Exploded Views and Parts List".