



LED TV

Chassis : UES60

Model : UE32K4100AW

SERVICE Manual

LED TV



UE32K4100AW

Contents

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2. Product specifications
3. Disassembly and Reassembly
4. Troubleshooting
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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.

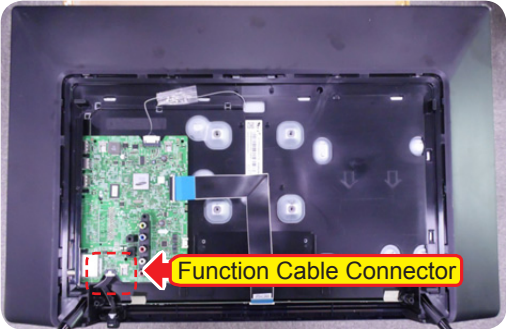
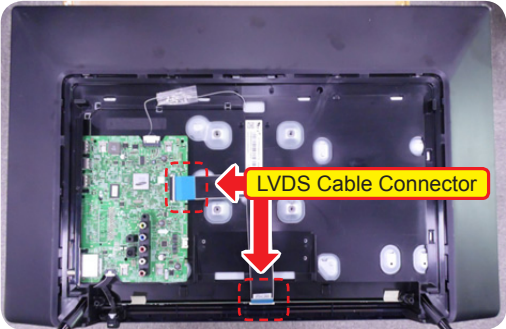
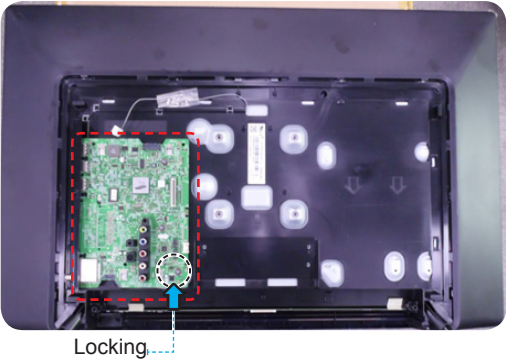
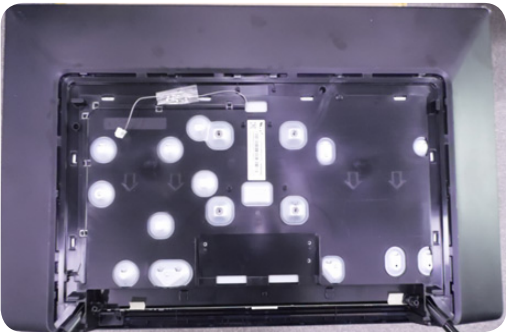
3-1. Disassembly and Reassembly



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	Note
1 Place TV face down on cushioned table.		
2 Remove the ASSY COVER P-REAR. Remove the Screw of ASSY COVER P-REAR.		 6003-001782
NOTE <p>Locking Part</p> <ul style="list-style-type: none"> • Top : Each 6 point • L/R : Each 3 point • Bottom : Each 4 point 		
3 Remove the the ASSY SPEAKER P-FRONT (R/L).		

3. Disassembly and Reassemble

Description	Picture Description	Note
4 Remove the Function Cable, LVDS Cable, LED Cable.		
		
5 Remove the SMPS Board and Main Board. <ul style="list-style-type: none">• Gently lift up to release the lock.• Use both hands to hold the board and slide UP to release the board.		
6 Completed disassembly.		

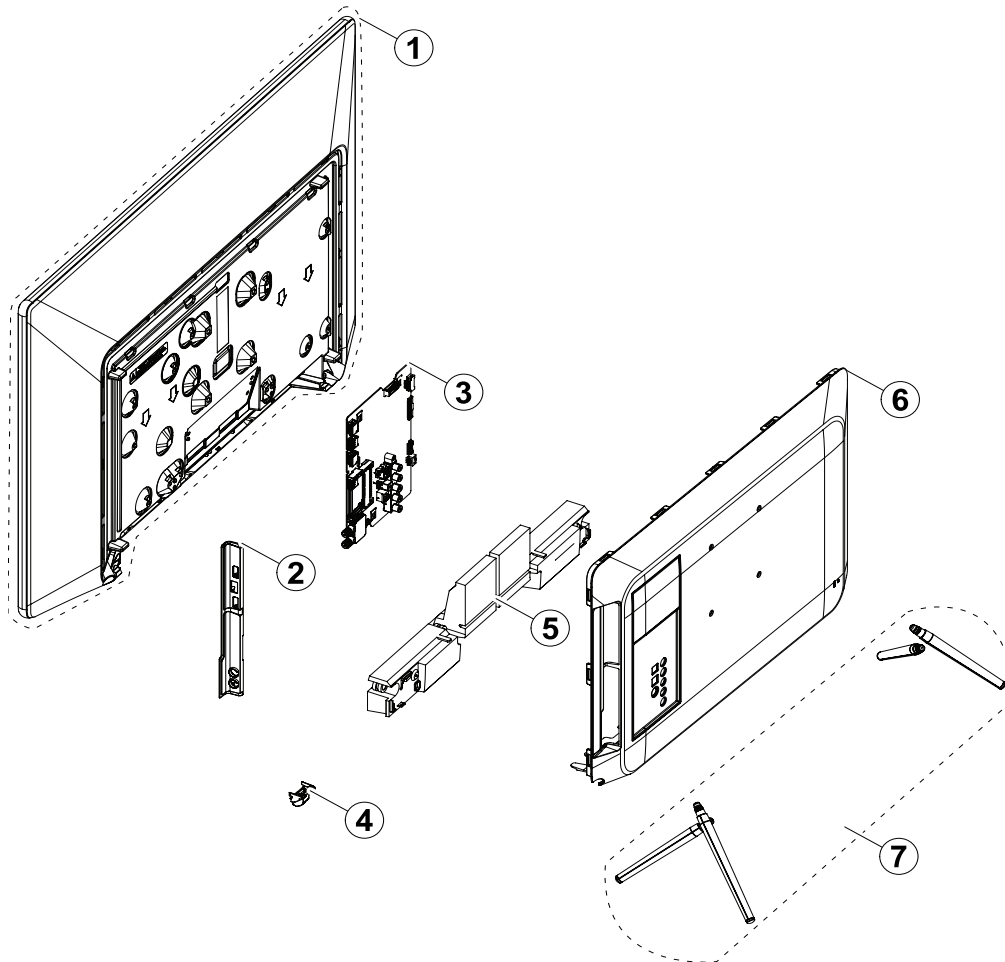


NOTE

Reassembly procedures are in the reverse order of disassembly procedures.

ANNEX. Exploded View & Part List [UE32K4100AWXXH CA01]

1-1. Exploded View



1-1-1. Parts List

No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
1	BN95-02691A	PRODUCT LCD-CSOT; CY-FK032ANHV1V,K4100,Y1	1	SA	
2	BN63-15595A	COVER-TERMINAL SIDE; 32K5100,ABS,MOLD,HB,	1	SA	
3	BN94-10869M	ASSY PCB MAIN; 4series	1	SA	
4	BN96-39802B	ASSY BOARD P-FUNCTION TACT; K6200/K5500/K	1	SA	
5	BN96-39966A	ASSY SPEAKER P-FRONT; TV-SPK,K5100,6ohm,1	1	SA	
6	BN96-39939L	ASSY COVER P-REAR; 32K4100,PC+ABS,V-0,BK0	1	SA	
7	BN95-02829A	ASSY COVER STAND SMT-FRONT; K5300,32,SILV	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
			UE32K4100AWXXH (CA01)			
1	S001A	BN90-08323C	ASSY STAND;UK5500N 32	1	SNA	
0.2		BN95-02829A	ASSY COVER STAND SMT-FRONT;K5300,32,SILV	1	SA	
..3		0204-007390	COATING;UVICHEM CVM92000(VOC) Matt(3),Ye	3	SNA	
..3		BN02-00518A	TAPE DOUBLE FACE;32K5300,ACRYL,T0.1,W8.5	4	SNA	
..3	RF01	BN61-13237A	FOOT-RUBBER;55K5100,Si,GRAY,T3.5,OD10, I	4	SNA	
..3		BN63-15182B	COVER-STAND TOP;32K5100,PC+ABS+GF20%,MOL	2	SNA	
..3		BN63-15503B	COVER-STAND TOP;32K5100,PC+ABS+GF20%,MOL	2	SNA	
..3		BN68-05603A	LABEL-E PASS;ART PAPER 90G,W/W	1	SNA	
..3		BN69-14176A	BAG ACCESSORY;32K5100,HDPE,T0.03,L250,W1	1	SNA	
1		BN90-08342A	ASSY W/I;UK4100,32"	1	SNA	
0.2		BN81-08159Z	A/S PART SET-ELEC W/I;LED TV ELEC spec-C	1	SNA	
0.2		BN81-11259C	A/S PART SET-MECH W/I;UK4100A,U32KA*	1	SNA	
1	R001A	BN90-08343H	ASSY COVER REAR;UK4100,32"	1	SNA	
0.2	SCREW	6003-001782	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	1	SA	
0.2	R001A	BN96-39939L	ASSY COVER P-REAR;32K4100,PC+ABS,V-0,BK0	1	SA	
..3	R001	BN63-15059G	COVER-REAR;32K4100,PC+ABS,T2,V-0,BK0120,	1	SNA	
...4		0103-010904	RESIN PC ABS;NH-1017SG/72317,Deep Blue B	900	SNA	
..3		BN64-03565C	INLAY-TERMINAL SIDE;40K5100,PET,T0.125,W	1	SNA	
1	M0017	BN91-17439M	ASSY CHASSIS;4series	1	SNA	
0.2	M0014	BN94-10869M	ASSY PCB MAIN;4series	1	SA	
..3		0202-001608	SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0.	0	SNA	
..3	T0066	BN62-00071A	HEAT SINK-CERAMIC;UN46C7000WFXZA,A6063,W	1	SNA	
..3		BN63-15595A	COVER-TERMINAL SIDE;32K5100,ABS,MOLD,HB,	1	SA	
...4		0103-010894	RESIN ABS;HF-0680U/72317,Indigo Black,BK	30	SNA	
..3		BN97-10727M	ASSY SMD-MAIN;4series	1	SNA	
...4		0202-001830	SOLDER-CREAM;LFM-48W TM-HP,D20~38um,96.5	4	SNA	
...4	DS01A	0401-001099	DIODE-SWITCHING;1N4148WS,75V,150mA,SOD-3	2	SA	
...4	DS01A	0401-001166	DIODE-SWITCHING;BAV20WS-V,150V,250mA,SOD	2	SA	
...4	DR01A	0402-002006	DIODE-RECTIFIER;SBR6100CTL,100V,6A,TO-25	1	SA	
...4		0403-001411	DIODE-ZENER;BZT52-B5V6S,5.49~5.73V,200mW	1	SA	
...4		0404-001307	DIODE-SCHOTTKY;SSC54,40V,5000mA,DO-214AB	1	SA	
...4		0404-001404	DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23,	2	SA	
...4		0406-001200	DIODE-TVS;RClamp0504F,6V,1MAV,TP	1	SA	
...4		0406-001635	DIODE-TVS;SMF5.0A,6.4V,6.7V,7V,200MAV,20	5	SA	
...4		0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	7	SC	
...4		0505-002560	FET-SILICON;AO6415,P,20V,-3.3A,0.15ohm,1	3	SA	
...4		0505-003224	FET-SILICON;AO6405,P,30V,-5A,0.052ohm,2W	1	SA	
...4		0505-003397	FET-SILICON;2N7002K,N,60V,0.38A,1.19ohm,	6	SA	
...4		0505-003620	FET-SILICON;AOD4286,N,100V,14A,55.5mohm,	1	SA	
...4		0801-003603	IC-CMOS LOGIC;MC74LCX244MN2TWG,Octal buf	1	SA	
...4		0801-003604	IC-CMOS LOGIC;NL17SZ17DFT2G,SC-70,5P,TP,	2	SA	
...4		1001-001998	IC-ANALOG MULTIPLEX;NX3DV221GM,USB switc	1	SA	
...4		1103-001487	IC-EEPROM;AT24C256C-SSHL-T,256Kbit,32Kx8	1	SA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...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		1203-008030	IC-DC/DC CONVERTER;TPS54531DDA,SO PowerP	1	SA	
...4		1203-008103	IC-POSI.FIXED REG.;S-13A1D15-E800,HSOP,8	1	SNA	
...4		1203-008104	IC-POSI.FIXED REG.;S-13A1D18-E800,HSOP,8	1	SNA	
...4		1203-008105	IC-POSI.FIXED REG.;S-13A1D33-E800,HSOP,8	1	SNA	
...4		1203-008728	IC-BACKLIGHT DRIVER;BD9413F,SOP,18P,11.2	1	SA	
...4		1203-008734	IC-DC/DC CONVERTER;RT6214,TSOT-23,6,3x1.	3	SA	
...4		1204-003665	IC-VIDEO PROCESS;SENK17,LFBGA,562P,21x21	1	SA	
...4		1204-003698	IC-TUNER;SI2190-B30-ZM8,QFN,28P,4X4mm,PL	1	SA	
...4		1205-004447	IC-SWITCH;TPS2051CDBVR,SOT23-5,5P,3x1.65	1	SA	
...4		1205-005551	IC-SWITCH;ET20161,SOT23-5,5P,2.926x2.8mm	1	SA	
...4		1405-001271	VARISTOR;35V,20VDC,5A,1.0x0.5mm,TP,100V,	11	SA	
...4		2007-000060	R-CHIP;100Kohm,1%,1/10W,TP,1608	1	SNA	
...4		2007-000067	R-CHIP;15Kohm,1%,1/10W,TP,1608	1	SNA	
...4		2007-000137	R-CHIP;2Kohm,5%,1/16W,TP,1005	9	SNA	
...4		2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	31	SA	
...4		2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	49	SNA	
...4		2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	43	SA	
...4		2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	10	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	1	SA	
...4		2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	1	SNA	
...4		2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	2	SNA	
...4		2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	12	SNA	
...4		2007-000231	R-CHIP;1.3Kohm,1%,1/10W,TP,1608	1	SA	
...4		2007-000309	R-CHIP;10ohm,5%,1/10W,TP,1608	1	SA	
...4		2007-000343	R-CHIP;120ohm,1%,1/10W,TP,1608	1	SA	
...4		2007-000475	R-CHIP;1Mohm,1%,1/10W,TP,1608	1	SA	
...4		2007-000592	R-CHIP;22ohm,1%,1/4W,TP,3216	1	SA	
...4		2007-000691	R-CHIP;3.3Mohm,5%,1/10W,TP,1608	1	SA	
...4		2007-000775	R-CHIP;33Kohm,5%,1/16W,TP,1005	1	SNA	
...4		2007-000879	R-CHIP;4.7ohm,1%,1/10W,TP,1608	1	SA	
...4		2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	4	SNA	
...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		2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	11	SNA	
...4		2007-001323	R-CHIP;3Kohm,5%,1/16W,TP,1005	1	SA	
...4		2007-002749	R-CHIP;3.3ohm,5%,1/4W,TP,3216	2	SNA	
...4		2007-002906	R-CHIP;200Kohm,1%,1/10W,TP,1608	2	SA	
...4		2007-007107	R-CHIP;100Kohm,1%,1/16W,TP,1005	12	SNA	
...4		2007-007135	R-CHIP;18Kohm,1%,1/16W,TP,1005	2	SNA	
...4		2007-007136	R-CHIP;4.7Kohm,1%,1/16W,TP,1005	1	SNA	
...4		2007-007139	R-CHIP;47Kohm,1%,1/16W,TP,1005,T0.35	1	SA	
...4		2007-007142	R-CHIP;10Kohm,1%,1/16W,TP,1005	5	SNA	

ANNEX. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4		2007-007156	R-CHIP;1ohm,5%,1/16W,TP,1005	12	SNA	
...4		2007-007306	R-CHIP;100ohm,1%,1/16W,TP,1005	2	SNA	
...4		2007-007308	R-CHIP;33Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-007309	R-CHIP;12Kohm,1%,1/16W,TP,1005,T0.35	6	SA	
...4		2007-007311	R-CHIP;22Kohm,1%,1/16W,TP,1005	2	SA	
...4		2007-007316	R-CHIP;3.3Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-007318	R-CHIP;1Kohm,1%,1/16W,TP,1005	13	SNA	
...4		2007-007334	R-CHIP;200Kohm,1%,1/16W,TP,1005	7	SNA	
...4		2007-007382	R-CHIP;20Mohm,5%,1/10W,TP,1608	1	SNA	
...4		2007-007405	R-CHIP;560ohm,1%,1/16W,TP,1005	2	SA	
...4		2007-007517	R-CHIP;240ohm,1%,1/16W,TP,1005	1	SNA	
...4		2007-008015	R-CHIP;75ohm,1%,1/16W,TP,1005	2	SA	
...4		2007-008035	R-CHIP;160Kohm,1%,1/10W,TP,1608	1	SA	
...4		2007-008136	R-CHIP;36Kohm,1%,1/16W,TP,1005	2	SA	
...4		2007-008167	R-CHIP;120Kohm,1%,1/16W,TP,1005	2	SC	
...4		2007-008263	R-CHIP;3Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-008269	R-CHIP;51Kohm,1%,1/16W,TP,1005	2	SNA	
...4		2007-008485	R-CHIP;22ohm,1%,1/16W,TP,1005	2	SC	
...4		2007-008517	R-CHIP;240Kohm,1%,1/16W,TP,1005	1	SA	
...4		2007-008720	R-CHIP;4.7ohm,1%,1/4W,TP,3216	3	SNA	
...4		2007-008779	R-CHIP;0ohm,1%,1/16W,TP,1005	1	SA	
...4		2007-009234	R-CHIP;0.47ohm,1%,1/4W,TP,3216	4	SNA	
...4		2007-009753	R-CHIP;52.3Kohm,1%,1/16W,TP,1005	1	SA	
...4		2011-000686	R-NETWORK;56ohm,5%,1/16W,L,CHIP,8P,TP,3.	2	SA	
...4		2011-001261	R-NETWORK;33ohm,5%,1/16W,L,CHIP,8P,TP,2.	2	SA	
...4		2011-001264	R-NETWORK;10ohm,5%,1/16W,L,CHIP,8P,TP,2.	4	SNA	
...4		2011-001344	R-NETWORK;100ohm,5%,1/16W,L,CHIP,8P,TP,2	2	SA	
...4		2011-001345	R-NETWORK;10Kohm,5%,1/16W,L,CHIP,8P,TP,2	2	SA	
...4		2011-001396	R-NETWORK;4.7Kohm,5%,1/16W,L,CHIP,8P,TP,	1	SA	
...4		2011-001449	R-NETWORK;22ohm,5%,1/16W,L,4P,TP,1.0x1.0	1	SA	
...4	AD480	2203-000138	C-CER,CHIP;1.5nF,10%,50V,X7R,TP,1005	1	SNA	
...4	AD480	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005	4	SA	
...4	AD480	2203-000311	C-CER,CHIP;0.12nF,5%,50V,C0G,TP,1005	1	SA	
...4	AD480	2203-000359	C-CER,CHIP;0.15nF,5%,50V,C0G,TP,1005,0.5	4	SA	
...4	AD480	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,TP,1005	8	SA	
...4	AD480	2203-000466	C-CER,CHIP;0.001nF,0.25pF,50V,C0G,TP,100	2	SA	
...4	AD480	2203-000489	C-CER,CHIP;2.2nF,10%,50V,X7R,TP,1005	2	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	1	SNA	
...4	AD480	2203-000714	C-CER,CHIP;3.3nF,10%,50V,X7R,TP,1005	2	SA	
...4	AD480	2203-000726	C-CER,CHIP;3.9nF,10%,50V,X7R,TP,1608	3	SA	
...4	AD480	2203-000812	C-CER,CHIP;0.033nF,5%,50V,C0G,TP,1005	3	SA	
...4	AD480	2203-000854	C-CER,CHIP;0.039nF,5%,50V,C0G,TP,1005	2	SA	
...4	AD480	2203-000940	C-CER,CHIP;0.47nF,10%,50V,X7R,TP,1005	4	SA	
...4	AD480	2203-000995	C-CER,CHIP;0.047nF,5%,50V,C0G,TP,1005	1	SA	
...4	AD480	2203-001124	C-CER,CHIP;0.68nF,10%,50V,X7R,TP,1005	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4	AD480	2203-001412	C-CER,CHIP;0.03nF,5%,50V,NP0,TP,1005	5	SNA	
...4	AD480	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,TP,1005	13	SNA	
...4	AD480	2203-002687	C-CER,CHIP;1.2nF,10%,50V,X7R,TP,1005	4	SA	
...4	AD480	2203-003019	C-CER,CHIP;8.2nF,10%,50V,X7R,TP,1005	1	SNA	
...4	AD480	2203-005083	C-CER,CHIP;220nF,10%,50V,X7R,TP,1608,0.8	6	SA	
...4	AD480	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,TP,1608	13	SNA	
...4	AD480	2203-005659	C-CER,CHIP;0.18nF,5%,50V,NP0,TP,1005	1	SNA	
...4	AD480	2203-005968	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1005,0.5	2	SNA	
...4	AD480	2203-006048	C-CER,CHIP;100nF,10%,10V,X7R,TP,1005	75	SA	
...4	AD480	2203-006126	C-CER,CHIP;47nF,10%,16V,X7R,TP,1005	12	SNA	
...4	AD480	2203-006324	C-CER,CHIP;2200nF,10%,10V,X5R,TP,1608	2	SA	
...4	AD480	2203-006348	C-CER,CHIP;1000nF,10%,25V,X5R,TP,1608,0.	5	SA	
...4	AD480	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,TP,2012	3	SA	
...4	AD480	2203-006562	C-CER,CHIP;1000nF,10%,10V,X5R,TP,1005	11	SNA	
...4	AD480	2203-006824	C-CER,CHIP;4700nF,10%,10V,X5R,TP,1608	2	SNA	
...4	AD480	2203-006890	C-CER,CHIP;10000nF,20%,6.3V,X5R,TP,1608	24	SA	
...4	AD480	2203-007176	C-CER,CHIP;10000nF,10%,16V,X5R,TP,2012,1	9	SNA	
...4	AD480	2203-007240	C-CER,CHIP;22000nF,20%,6.3V,X5R,TP,1608(8	SA	
...4	AD480	2203-007269	C-CER,CHIP;22000nF,20%,10V,X5R,TP,2012(2	7	SA	
...4	AD480	2203-007270	C-CER,CHIP;10000nF,10%,10V,X5R,TP,1608,0	7	SNA	
...4	AD480	2203-007486	C-CER,CHIP;1000nF,10%,50V,X5R,TP,1608	1	SNA	
...4	AD480	2203-008096	C-CER,CHIP;2200nF,10%,50V,X5R,TP,2012,1.	3	SA	
...4	AD480	2203-008315	C-CER,CHIP;22000nF,20%,25V,X5R,TP,2012,T	9	SA	
...4	AD480	2203-009740	C-CER,CHIP;1000nF,10%,100V,X7R,TP,3216,2	2	SA	
...4		2402-001268	C-AL,SMD;100uF,20%,25V,WT,TP,8x6.3mm	1	SA	
...4		2402-001276	C-AL,SMD;47uF,20%,35V,TP,6.6x6.6x5.8mm	1	SNA	
...4		2703-000175	INDUCTOR-SMD;270nH,10%,1608,0.8Ohm,50mA,	4	SA	
...4		2703-000213	INDUCTOR-SMD;470nH,10%,1.35Ohm,35mA,15,M	1	SA	
...4		2703-001880	INDUCTOR-SMD;180nH,5%,1608,0.8T,2.7Ohm,2	1	SA	
...4		2703-001938	INDUCTOR-SMD;56nH,5%,1005,1.5Ohm,200mA,1	3	SA	
...4		2703-003149	INDUCTOR-SMD;2.2uH,20%,0.055Ohm,3000mA,W	1	SA	
...4		2703-003790	INDUCTOR-SMD;4.7uH,20%,8080,0.025Ohm,450	3	SA	
...4		2703-003930	INDUCTOR-SMD;4.7uH,20%,0.072Ohm,2450mA,W	4	SA	
...4		2703-004575	INDUCTOR-SMD;22uH,20%,8.5T,0.058Ohm,5500	1	SNA	
...4		2801-003773	CRYSTAL-SMD;12MHz,30ppm,28-AAN,20pF,50Oh	1	SA	
...4		2801-004813	CRYSTAL-SMD;24MHz,50ppm,8pF,100ohm,TP	1	SA	
...4		3301-000314	BEAD-SMD;120ohm,1608,TP,120ohm/100MHz	1	SNA	
...4		3301-001364	BEAD-SMD;1000ohm,1608,TP,1085ohm/108MHz,	5	SNA	
...4		3301-002039	BEAD-SMD;26ohm,1608,TP	22	SA	
...4		3301-002315	BEAD-SMD;120ohm,3216,TP	1	SNA	
...4		3601-001374	FUSE-SURFACE MOUNT;32V,5A,FAST-ACTING,PL	2	SA	
...4		3701-001967	CONNECTOR-HDMI;19P,A,FEMALE,AU,0.5mm,BLK	2	SA	
...4		3707-001106	CONNECTOR-OPTICAL;STRAIGHT,SPDIF,2.5PI	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,AU,	1	SA	
...4		3711-007776	CONNECTOR-HEADER;BOX,8P,1R,1.25mm,SMD-A,	1	SA	
...4	EH01	3711-008131	HEADER-BOARD TO CABLE;BOX,4P,1R,2.5mm,AN	1	SA	

ANNEX. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...4	EH01	3711-008690	HEADER-BOARD TO CABLE;BOX,8P,1R,2.5mm,AN	1	SA	
...4		3722-003322	JACK-DC POWER;4P,4PI,SN/PB,BLK,12.4x10.8	1	SA	
...4		3722-003457	JACK-USB;4P/1C,NI,BLK,ANGLE,A,2.0,13.1x1	1	SA	
...4	JACK PIN	3722-003546	JACK-PIN;5P,NI/SN,BLU/GRN/RED/WHT/YEL,SM	1	SA	
...4		BN27-00094A	COIL;CMI-SC0703-271K,270nH,10%,-,13ts□1	1	SA	
...4		BN37-00013A	CONNECTOR-TUNER SHIELD;CPJ-AS-907A,1A,15	1	SA	
...4		BN41-02527A	PCB-MAIN;NT16L,FR-4,4L,1.2T,141x192mm,1,	1	SNA	
...4	CB07	BN61-13312B	BRACKET-PCB;55KS8000,SK5,T0.3,13.7,11.4,	4	SNA	
...4		BN97-11149A	ASSY MICOM-MAIN;T-NT16LDEUC,NT16L,1107-0	1	SNA	
....5		1107-002459	IC-NAND FLASH;F59L1G81MA-25TIG2Y,1Gbit,1	1	SA	
....5		BN46-00541B	S/W MANUAL;T-NT16LDEUC,NLDVBEU2K,E-MANUA	1	SNA	
....5		BN46-00546A	S/W MICOM;T-NT16LDEUC,K4100/K4170/K5100/	1	SNA	
...4		BN97-11163A	ASSY MICOM-SUB;T-NT16LDEUS,EU/AA,NT16L,1	1	SNA	
....5		1107-002226	IC-NOR FLASH;W25Q40CLSSIP,4Mbit,SOIC,8P,	1	SA	
..3		BN97-11280A	ASSY DRM;NT16L/NT16M,BN46-00555A,UES60 & U	1	SNA	
...4		BN46-00555A	KEY CODE-CERTIFICATION;CI PLUS,NT16L,NT1	1	SNA	
1		BN91-17889G	ASSY SHIELD;UK4100,32"	1	SNA	
0.2		BN02-00102B	TAPE-FILAMENT;FILAMENT,#8917,T0.15,W25,L	0	SNA	
0.2		BN39-02223E	LEAD CONNECTOR-SUB ASSY;32K5100,UL21016,	1	SA	
0.2	RF01	BN67-00364C	FOOT-RUBBER;X13,RUBBER,GRAY,W10,L10,T6	1	SNA	
0.2	LVDS	BN96-26659Q	FFC CABLE;UN32F4030AF,Fold,L325,30P	1	SA	
0.2		BN96-39802B	ASSY BOARD P-FUNCTION TACT;K6200/K5500/K	1	SA	
0.2		BN96-39966A	ASSY SPEAKER P-FRONT;TV-SPK,K5100,6ohm,1	1	SA	
1	ACCE1	BN92-19466D	ASSY ACCESSORY;4series	1	SNA	
0.2	P001A	BN44-00886D	DC VSS(A);A4819_KSML,19V,2.53A,100~240V,	1	SA	
0.2	ACCE4	BN96-38835D	ASSY ACCESSORY-MANUAL;UJ4F	1	SNA	
..3		6902-001964	BAG PE;LDPE,BIOBASED,T0.03,W200,L300,TRP	1	SNA	
..3		BN68-03548J	LEAFLET-WARRANTY;comm,Samsung,17Lang,Mid	1	SNA	
..3		BN68-04972E	LEAFLET-REGULATORY GUIDE;ALL,SAMSUNG,W/W	1	SNA	
..3		BN68-07346X	MANUAL USERS;UK5100B,XH,ENG/POL/SLV/HUN/	1	SNA	
..3		BN68-07598A	LEAFLET-FICHE;ALL,W/P,0	1	SNA	
0.2	ACCE2	BN96-38839A	ASSY ACCESSORY-CABLE;UJ4F	1	SNA	
..3		3721-001283	PLUG-CONVERSION;2P,Ni,15,BLACK,17.5mm,EU	1	SA	
..3		4301-000121	BATTERY-MN;1.5V,R03,10.5x44.5m,7.5g,AAA	2	SNA	
..3		6902-001965	BAG PE;LDPE,BIOBASED,T0.05,W200,L300,TRP	1	SNA	
..3	REMO2	AA59-00741A	REMOCON-TV;2012 TV,Samsung,44KEY,3V,F502	1	SA	
..3		BN68-02989A	LABEL ETC;ALL,ALL,PAPER,W30,L65,WHITE,SE	2	SNA	
1		BN92-20130C	ASSY LABEL;4series	1	SNA	
0.2		BN68-06708G	LABEL-RATING;Monitor,WW,PP,T0.161,W93,L7	1	SNA	
0.2		BN68-07350D	LEAFLET-QUICK SETUP GUIDE;32" UK5100B/UK	1	SNA	
0.2		BN68-07519A	LABEL-ENERGY;ALL JORDAN,WW,PP,T0.135,W60	1	SNA	
1		BN92-20131B	ASSY LABEL POP;4series	1	SNA	
0.2		BN68-07971H	LABEL POP-HIGHLIGHT;32K4100,PET,T0.1,W90	1	SNA	
1		BN92-20455V	ASSY BOX;UK4100,32"	1	SNA	
0.2		BH68-00662A	LABEL BOX;ALL,ART PAPER,W60,L110,WHT,NO	1	SNA	
0.2		BN68-05640A	LABEL BOX;ALL,ART PAPER,W110,L130,EUROPE	1	SNA	
0.2		BN69-13647E	BOX UNIT;32K4100,CB,SW4,F1,L781,W122,H50	1	SNA	

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
1		BN92-20456A	ASSY P/MATERIAL;UK4100,32"	1	SNA	
0.2		0203-006958	TAPE-OPP;OPP,T0.065,W75,L1500M,CLEAR,#31	2	SNA	
0.2		6902-002501	BAG ROLL;HDPE/PE FOAM,T0.5*,W750,L300M,T	2	SNA	
0.2		6922-000013	BAND;PP,W18,L2300/L2900,TRP	1	SNA	
0.2		BN01-00039A	SHEET-PROTECTION COVER;LB4C,PE,T0.08,W93	0	SNA	
0.2	AS080	BN63-10787F	SHEET-PROTECTION COVER;UE22ES5000,PE,T4,	1	SNA	
0.2		BN69-13429A	CUSHION-SET;32K4100,EPS,16.7g/l,WHT	1	SNA	
..3		0103-005099	RESIN EPS;BASF303,Natural,Natural	181	SNA	
0.2		BN69-14440A	PALLET-WOODEN;32",WOOD,800,1200,H130,2-W	1	SNA	
1		BN95-03212A	PRODUCT LCD DP;DP,BN95-02691A,SEH ONLY	1	SA	
0.2		BN92-20675A	ASSY P/MATERIAL;CY-FK032ANEV1H,inhouse L	1	SNA	
..3		BN69-13430B	CUSHION-PANEL;32K4000,EPS,ESD,-,-,-,22.2	1	SNA	
...4		0103-005099	RESIN EPS;BASF303,Natural,Natural	2387	SNA	
0.2		BN95-02691A	PRODUCT LCD-CSOT;CY-FK032ANHV1V,K4100,Y1	1	SA	
..3	AS080	BN63-07229A	SHEET-PROTECTION COVER;rose70",PET,T0.05	1	SNA	
..3		BN68-05722A	LABEL-E PASS;POLYPROPYLENE,NON-COATING	1	SNA	
..3		BN74-00053E	TAPE-PAPER;PAPER,3M2307,T0.14,W20,L50M,W	0	SNA	
..3		BN90-08215A	ASSY MISC-BLU;Y16,LCM	1	SNA	
...4		BN39-02225A	LEAD CONNECTOR-BLU;32K4000,UL21016,3P,10	1	SNA	
...4	HDP01	BN61-08161A	HOLDER-PCB;Direct-LED,PC,MOLD,white,V-2	2	SNA	
....5		0103-009493	RESIN PC;LH-1070W,W92853,WT0107,V-0	2	SNA	
...4		BN61-13643A	OPTICAL SHEET-REFLECTOR;16Y_K5100_32 inc	1	SNA	
...4		BN61-13680A	FRAME-MIDDLE TOP;32K4100,TPV,HB,BK0008,M	1	SNA	
...4		BN61-13681A	FRAME-MIDDLE BOTTOM;32K4100,TPV,HB,BK000	1	SNA	
...4		BN61-13682A	FRAME-MIDDLE LEFT;32K4100,TPV,HB,BK0008,	1	SNA	
...4		BN61-13761A	FRAME-MIDDLE RIGHT;32K4100,TPV,HB,BK0008	1	SNA	
....5		0103-010669	RESIN TPE;5402PV/5409H,Black,BK0008,HB,T	110	SNA	
...4		BN61-13958A	OPTICAL SHEET-COMPLEX;16Y_K4100_32INCH_O	1	SNA	
...4		BN96-39779A	ASSY LED BAR P;K4100 32inch HD CSOT,ALUM	1	SNA	
...4		BN96-40505G	ASSY CHASSIS REAR P;32K4100,PC+ABS+ED20%	1	SNA	
....5	SCREW	6003-000115	SCREW-TAPTYPE;BH,+,B,M3,L6,ZPC(BLK),SWRC	3	SA	
....5		BN96-40505F	ASSY CHASSIS REAR P;32K4100,PC+ABS+ED20%	1	SNA	
....6	SCREW	6003-000115	SCREW-TAPTYPE;BH,+,B,M3,L6,ZPC(BLK),SWRC	8	SA	
....6	T0073	AA63-01617A	GASKET-EMI;50Q71,Conductive Fabric,T1.0,	2	SNA	
....6		BN02-00102B	TAPE-FILAMENT;FILAMENT,#8917,T0.15,W25,L	0	SNA	
....6		BN02-00435B	TAPE PET;K5300,PET,T1.3,W12,L40,WHITE	2	SNA	
....6		BN39-02183A	LEAD CONNECTOR-BLU;32K5000,UL21016,8P,80	1	SNA	
....6		BN61-04692A	ADHESIVE-AA;SHEET,CLEAR,C043	0	SNA	
....6		BN61-05915A	TAPE DOUBLE FACE;65LB650,ACRYL FOAM,T1.1	0	SNA	
....6	CB07	BN61-13726A	BRACKET-PCB;32K5100,EGI-SECC,T0.6,NATURA	1	SNA	
.....7		BN01-00394A	STEEL;32K5100,EGI-SECC,L275,0.6,510,AG	1	SNA	
.....7	CB20	BN61-13521A	BRACKET-WALL;32K5500,CR-SPCC,T1.2,L10.5,	4	SNA	
....6	AB285	BN61-14143A	BRACKET-REAR;32K5300,EGI-SECC,T1,NATURAL	1	SNA	
....6		BN61-14255A	HOLDER-SHEET;32K5300,ABS,MOLD,WT0034,HB,	1	SNA	
....6		BN61-14263A	FRAME-CHASSIS REAR BOTTOM LEFT;32K4100,P	1	SNA	
....6		BN61-14264A	FRAME-CHASSIS REAR BOTTOM RIGHT;32K4100,	1	SNA	
.....7		0103-009493	RESIN PC;LH-1070W,W92853,WT0107,V-0	8	SNA	

ANNEX. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
.....6		BN61-14335A	BRACKET-STAND LEFT;32K5300,SK5,T0.5,NATU	1	SNA	
.....6		BN61-14336A	BRACKET-STAND RIGHT;32K5300,SK5,T0.5,NAT	1	SNA	
.....6		BN63-16049A	GASKET-EMI;GASKET,FABRIC,T3.3,W45,L10,Gr	2	SNA	
.....6		BN63-16106A	SHEET-PS;32K5300,PS,T1,W6,L170,GRAY,RIGH	1	SNA	
.....6		BN63-16107A	SHEET-PS;32K5300,PS,T1,W6,L170,GRAY,LEFT	1	SNA	
.....6	CC04	BN64-03508A	CHASSIS-REAR;32K4100,PC+ABS+ED20%,V-1,MO	1	SNA	
.....7		0103-010844	RESIN PC ABS;CM20G/BK90070,Deep Blue Bla	2050	SNA	
.....7	CCM1	BN63-02183D	SHEET-PROTECTION COVER;Rhcm,PE,T0.04,W68	2	SNA	
.....6		BN74-00053E	TAPE-PAPER;PAPER,3M2307,T0.14,W20,L50M,W	0	SNA	
....5		BN96-40920A	ASSY BRACKET P-LED PCB;32K5300,EGI-SECC,	1	SNA	
.....6		BN61-13250A	BRACKET-LED PCB;32K5100,EGI-SECC,T0.6,NA	1	SNA	
.....6		BN61-14256A	HOLDER-SHEET;32K5300,ABS,MOLD,WT0034,HB,	1	SNA	
..3		BN96-30110B	ASSY OPEN CELL;ST3151A04-8,16:9,32inch 6	1	SNA	
...4		BN81-11242A	A/S-IC DRIVER SOURCE;ST3151A04-8,3302100	1	SNA	
...4		BN81-11243A	A/S-IC DRIVER GATE;ST3151A04-8,330110000	1	SNA	
...4		BN81-11244A	A/S-POLARIZER CF;ST3151A04-7,31305061000	1	SNA	
...4		BN81-11245A	A/S-POLARIZER TFT;ST3151A04-7,3130506000	1	SNA	
...4		BN81-12726A	A/S-ASSY PCB SOURCE;A/S-ASSY PCB-SOURCE,	1	SNA	
..3		BN96-40415A	ASSY CHASSIS FRONT P;32K4100,PC+ABS,BLK,	1	SA	
...4		BN60-00715D	SPACER-CONDUCTIVE;LCM MNT 28,CONDUCTIVE	4	SNA	
...4		BN60-00930C	SPACER-CONDUCTIVE;Y14 NNB/VNB 32",CONDUCT	1	SNA	
...4		BN60-00930D	SPACER-CONDUCTIVE;Y14 NNB/VNB 32",CONDUCT	2	SNA	
...4		BN60-01060Z	SPACER-CONDUCTIVE;32J4004, CSOT,CONDUCTI	1	SNA	
...4		BN63-07556G	SHEET-PROTECTION COVER;TOC,PO,T0.7,W70,L	1	SNA	
...4	AS080	BN63-07556Y	SHEET-PROTECTION COVER;Y13 SF-LED,PO,T0.	2	SNA	
...4		BN63-16054A	GASKET-EMI;GASKET,FABRIC,T8,W23,L10,Gray	2	SNA	
...4		BN63-16066A	SHEET-THERMAL;32K5300,AI,T0.5,W10,L570,B	1	SNA	
...4	AC155	BN64-03507A	CHASSIS-FRONT;32K4100,PC+ABS,V-0,MOLD,BK	1	SNA	
....5		0103-010904	RESIN PC ABS;NH-1017SG/72317,Deep Blue B	200	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.

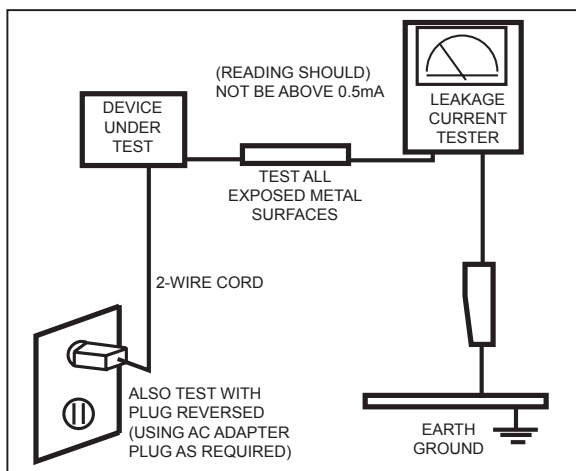
1-1-2. Servicing the LED TV

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

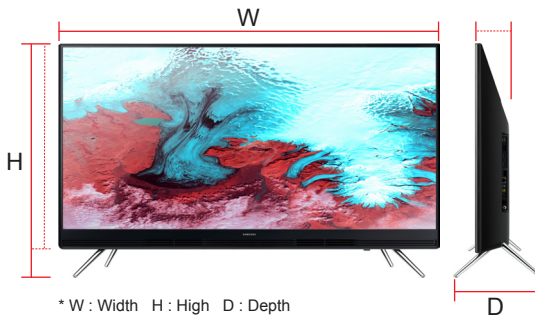

1. For safety reasons, more than a people are required for carrying the product.
2. Keep the power cord away from any heat emitting devices, as a melted covering may cause fire or electric shock.
3. Do not place the product in areas with poor ventilation such as a bookshelf or closet. The increased internal 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	UE32K4100AW		
Front View	 <p>* W : Width H : High D : Depth</p>		
Detail View			
Color	Front : INDIGO BLACK, Stand : SILVER, Middle : INDIGO BLACK		
Dimensions (W x H x D)	32"	With Stand	728.7 x 521.7 x 185.3 mm
		Without Stand	728.7 x 468.8 x 78.0 mm
Weight	32"	With Stand	4.8 kg
		Without Stand	4.7 kg
Panel Type	All		Slim LED

2-2. Product specification

2-2-1. Detailed Specifications


NOTE

Design and specifications are subject to change without prior notice.

Item		UE32K4100AWXXH
General Information	Product	LED
	Series	4
	Country	HUNGARY
Display	Screen Size	32"
	Resolution	1366 x 768
	Ultra Black	N/A
	Quantum Dot Display	N/A
	Screen Curvature	N/A
	10 bit Support	N/A
Video	Picture Engine	HyperReal
	Motion Rate	50
	PQI (Picture Quality Index)	100
	HDR (High Dynamic Range)	N/A
	Dynamic Contrast Ratio	Mega Contrast
	Micro Dimming	N/A
	Precision Black (Local Dimming)	N/A
	Quantum Dot Color	N/A
	Active 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
	DTS Codec	Yes
	Sound Output (RMS)	10W+10W
	Speaker Type	2CH(Full Range SPK)
	Woofer	N/A
	Wallmount Sound Mode	Yes

Item		UE32K4100AWXXH
Audio	Multiroom Link	N/A
	TV SoundConnect	N/A
	BT Headset Support	N/A
Smart TV	Samsung SMART TV	N/A
	Apps	N/A
	Games	N/A
	Cloud Game	N/A
	Billing	N/A
	Automated Content Recognition (ACR)	N/A
	Web Browser	N/A
Smart Interaction	Voice Recognition	N/A
Convergence	TV to Mobile - Mirroring	N/A
	Mobile to TV - Mirroring, DLNA	N/A
	Samsung SMART View	N/A
	Bluetooth Low Energy	N/A
	RVU	N/A
	WiFi Direct	N/A
IoT Service	TV as Hub Support	N/A
	TV as Things Support	N/A
	IoT Client Application	N/A
Tuner/Broadcasting	Digital Broadcasting	DVB-TC
	Analog Tuner	Yes
	2 Tuner	N/A
	CI (Common Interface)	CI+(1.3)
	Data Broadcasting	N/A
Connectivity	HDMI	2
	USB	1
	Component In (Y/Pb/Pr)	1
	Composite In (AV)	1 (Common Use for Component Y)
	Ethernet (LAN)	N/A
	Headphone	N/A
	Audio Out (Mini Jack)	N/A
	Digital Audio Out (Optical)	1
	RF In (Terrestrial / Cable input / Satellite input)	1/1(Common Use for Terrestrial)/0
	Ex-Link (RS-232C)	N/A

2. Product specifications

Item		UE32K4100AWXXH
Connectivity	CI Slot	1
	Scart	N/A
	HDMI A / Return Ch. Support	N/A
	HDMI Quick Switch	N/A
	Wireless LAN Adapter Support	N/A
	Wireless LAN Built-in	N/A
	Anynet+ (HDMI-CEC)	N/A
Design	Design	Louvre
	Bezel Type	NNB
	Slim Type	Semi-Edge Slim
	Front Color	Indigo Black
	Light Effect (Deco)	N/A
	Stand Type	Node
	Swivel (Left/Right)	N/A
Additional Feature	Instant On	N/A
	Processor	Single Core
	Accessibility	N/A
	Digital Clean View	Yes
	One Connect (Jack)	N/A
	Auto Channel Search	Yes
	Auto Power Off	Yes
	BD Wise Plus	N/A
	Caption (Subtitle)	Yes
	Channel List USB-Clone	Yes
	Connect Share™ (HDD)	N/A
	ConnectShare™ (USB 2.0)	Yes
	Embedded POP	Yes
	EPG	Yes
	Extended PVR	N/A
	Game Mode	Yes
	OSD Language	27 European Languages
	Picture-In-Picture	Yes
	BT HID Built-in	N/A
	USB HID Support	N/A
	Time Shift	N/A
	MBR Support	N/A

Item		UE32K4100AWXXH
Additional Feature	Ultra Clean View	N/A
Eco Feature	Eco Sensor	Yes
	Energy Efficiency Class	A

2-2-2. Feature & Specifications

■ Feature

- Digital-TV, RF, 2-HDMI, 1-USB , 1-Component, 1-A/V, Digital Audio Out(Optical), CI Slot
- Dynamic Contrast Ratio : Mega Contrast
- CMR : 50
- PQI (Picture Quality Index) : 200

■ Specifications

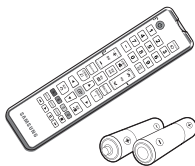
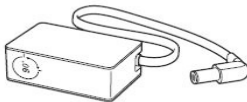

Model	UE32K4100AW
Item	Description
Screen Size (Diagonal)	32 inches
LCD Panel	HD 60Hz
Display Colors	16.7M color
Display Resolution	1366 x 768
Input Signal	Analog 0.7 Vp-p \pm 5% positive at 75 Ω , internally terminated
Input Sync Signal	H/V Separate, TTL, P. or N.
Environmental Considerations	Operating 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
AC Power Voltage & Frequency	AC220-240V 50/60Hz
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.

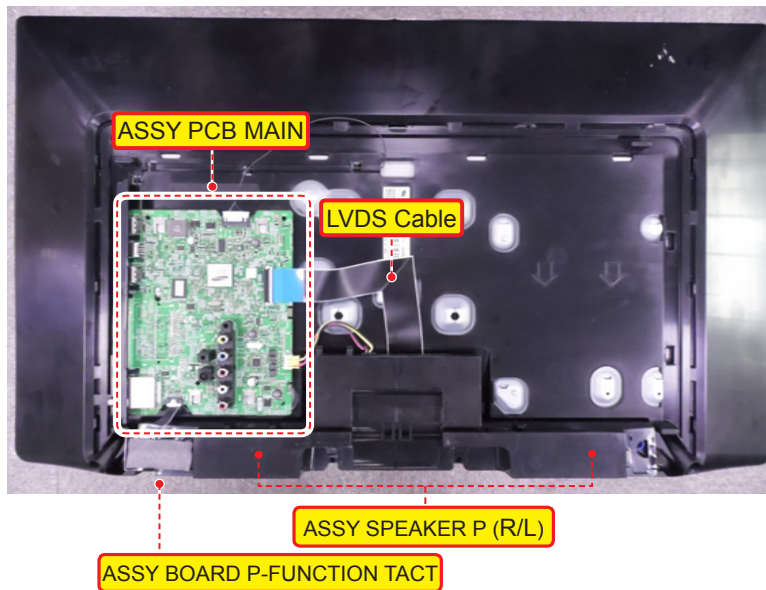
Product	Description	Code. No	Remark
	Remote Control & Batteries (AAA x 2)	AA59-00741A	
		4301-000121	
	Adaptor	BN44-00886D	
	Manual Users	BN68-07346X	

4. Troubleshooting

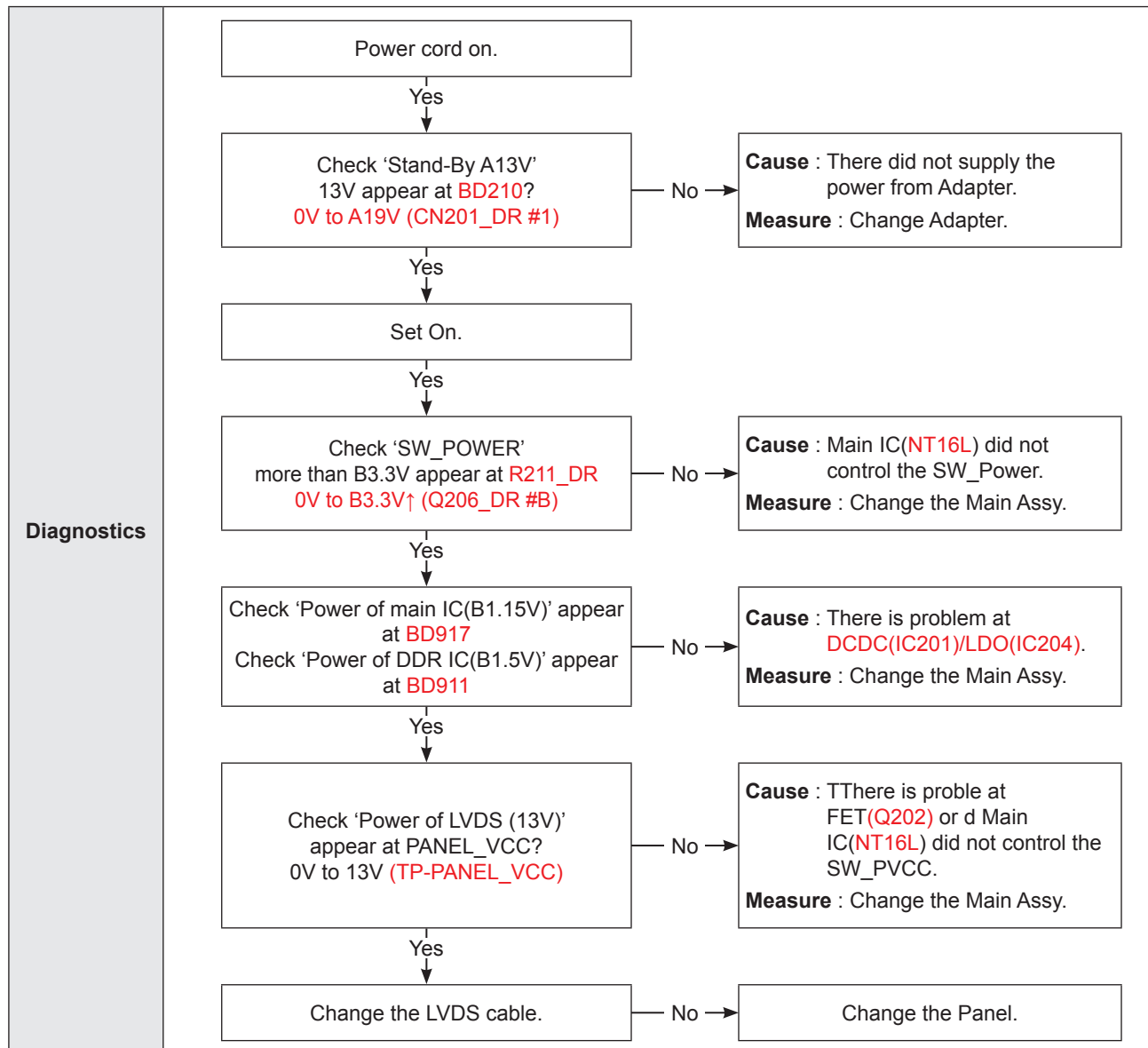
4-1. Troubleshooting

■ Previous Check

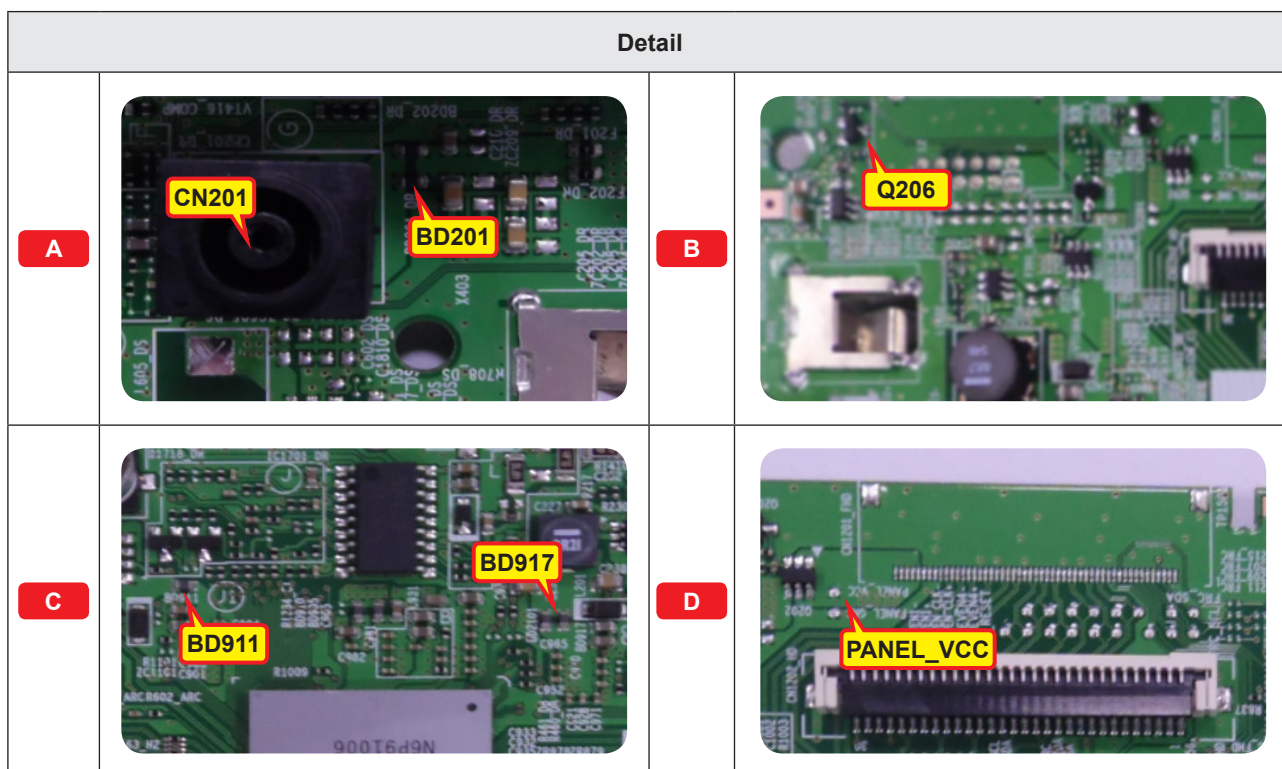
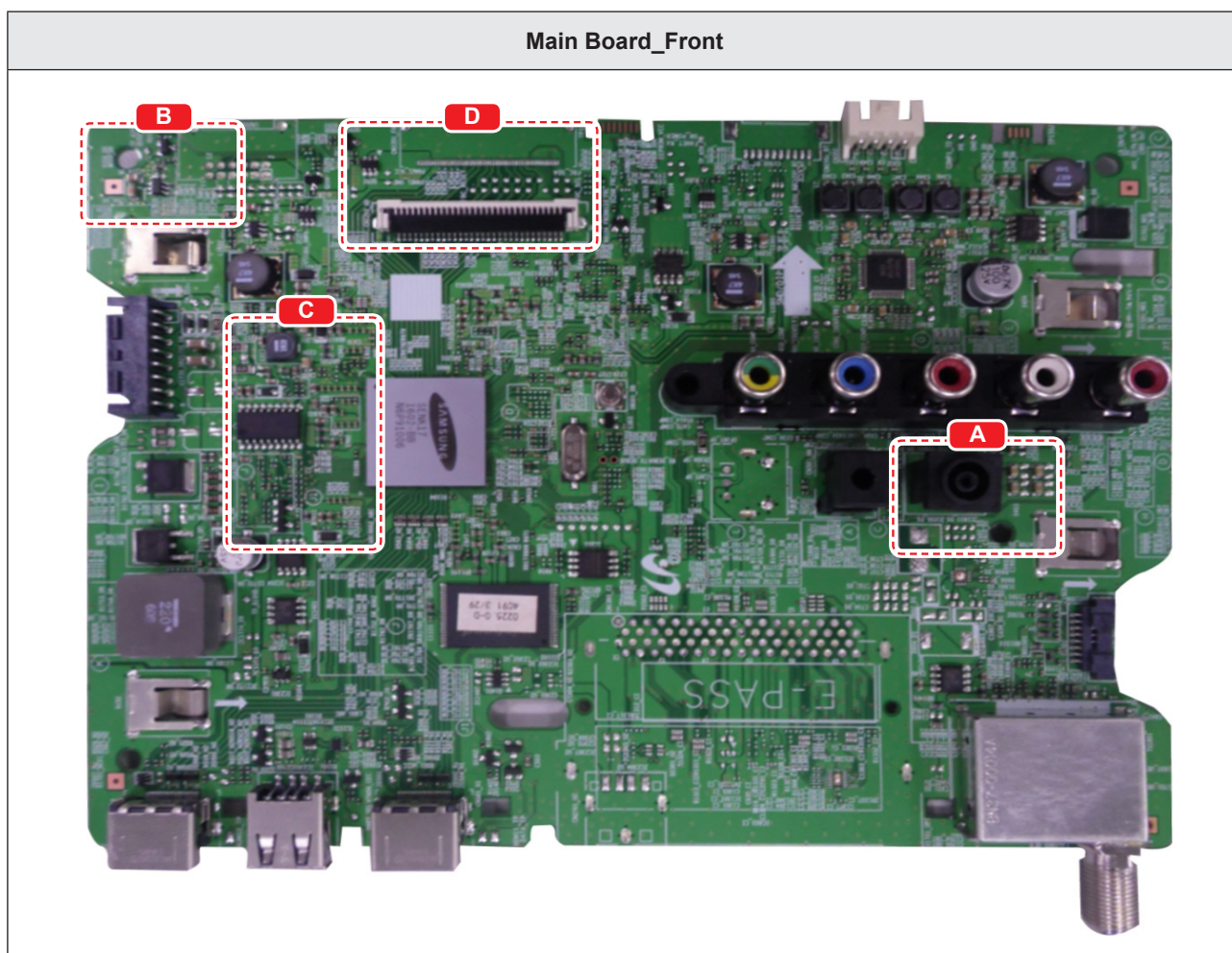
1. Check the various cable connections first.
 - Check to see if there is a burnt or damaged cable.
 - Check to see if there is a disconnected or loose cable connection.
 - Check to see if the cables are connected according to the connection diagram.
2. Check the power input to the ASSY PCB MAIN.



4-2. How to Check Fault Symptom



■ Location of Parts



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".

■ **UE32K4100AWXXH**

Inches		32"
		CA01
Panel	Vendor	CSOT
	Code	BN95-02691A
	Spec.	CY-FK032ANHV1V
SMPS (Adaptor)	Vendor	SOLUM
	Code	BN44-00886D
	Spec.	A4819_KSML
MAIN ASSY	Chassis Ass'y	BN91-17439M
	PBA Ass'y code	BN94-10869M
Byte	Item	
0	Factory Reset	-
1	Type	32S6AH0FK
2	SW Model	UK4100
3	BOM Model	4100
4	Local Set	EU
5	Tuner	Auto (DVB-TC)

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.

Option	T-N16LDEUC-xxxx.x
Control	T-N16LDEUS-xxxx
Debug	E-Manual :NLDVBEU1H-xxxx
SVC	E-POP:SUCCESS
ADC/WB	EDID SUCCESS
Advanced	HDCP SUCCESS
	CALIB : AV/COMP/PC/HDMI/
	Option : 32S6AH0FK,xx_xx,xxxx,NONE
	Factory Reset In Production:0
	NSP-SDAL-NT16L-xxxx-xxxx
	RFS:"NT16L xxxx" K/ 20xx-xx-xx
	KERNEL:xxx.xxxx,/Onboot: xxxx
	TCON Version:----
	NSP-DTVTD-xxxx
	Model: UE32K****
	CIP SUCCESS
	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
	NSP-PNG-xx-xxxx
	Date of purchase:-/-----

4-3-3. Factory Data

■ Option

Factory Menu Name	Data	Range
Factory Reset	-	
Type	32S6AH0FK	
Local Set	EU	
SW Model	UK4100	
BOM Model	4100	
TUNER	Auto (DVB-TC)	
Ch Table	-	
MRT Option		
Front Color	N/A	
Lvds Format	JEIDA	
Language_Arabic	EU	EU/AUSTRALIA
Region	PANEURO	
PnP Language	ENG	
WIFI REGION	E	A~Z/AA/AB
OTN Support	OFF	ON/OFF
MediaPlay DLNA	...	
TTX	ON	ON/OFF
China HD	OFF	ON/OFF
NT Conversion	OFF	ON/OFF
Num of DTV	1	0~2
Num of AV	1	0~2
Num of COMP	1	0~2
Num of RUI	0	0~1
Num of HDMI	2	0~4
Num of SCART	0	0~2
Num of USB Port	1	0~4
Num of RVU	0	0~1
Num Of Display	2	1~2
Num of IPTV	0	0~1
TOOLS Support	1849	
LNA Support	0	0~1
24Px4 Support	OFF	ON/OFF
BD Wise Support	OFF	ON/OFF
Data Service Support	OFF	ON/OFF
PVR Support	OFF	ON/OFF

Factory Menu Name	Data	Range
CI Support	ON	ON/OFF
OTA Support	General	General/OFF
LEDMotionPlus Support	ON	ON/OFF
Natural Mode Support	ON	ON/OFF
Relax Mode Support	OFF	ON/OFF
HDMI/DVI SEL	2	0~4
Select LCD/PDP	LCD	LCD/PDP
Wall Mount	0	ON/OFF
HV Flip	OFF	OFF/HV Flip/V Flip/H Flip
PVR RECORD NUM	0	0~1
Light Effect	OFF	ON/OFF
e-POP Default	ON	ON/OFF
CAMERA Support	OFF	ON/OFF
NETWORK Support	Not Support	Not Support/Cable/Ext-Wifi/Int-Wifi/ExtOnly-Wifi
EcoSensor Support	ON	ON/OFF
3D Support	OFF	ON/OFF
BT Support	OFF	ON/OFF
BT ADDRESS	Not Support	Not Support
HP LINE	NONE	Headphone/LineOut/NONE
CaptureRecordingSupport	OFF	ON/OFF
JAVADateServiceSupport	OFF	ON/OFF
AfricanCinemaModeSupport	OFF	ON/OFF
IndianCinemaModeSupport	OFF	ON/OFF
Cricke Score Game Support	OFF	ON/OFF
PersianCinemaModeSupport	OFF	ON/OFF
Engineer option		
Type Of PANEL KEY	ONE KEY	Horizontal/Vertical/PDPVertical/PDPHorizon/ONE KEY/None
5 Way Function Key	R_BOTTOM	L_BOTTOM/R_BOTTOM/L_BACK/R_BACK
Contents Bar	0	0~1
Cable Modulation	...	
Standby led on/off	OFF	ON/OFF
Recognition Support	OFF	ON/OFF
IF AGC	0	0~10
D AGC	0	0~10
PH BW	3	0~10
FQ BW	3	0~10
PH RATE	4	0~10

4. Troubleshooting

Factory Menu Name	Data	Range
PD EN	1	0~10
PEQ Inx	303	
WF Scale		
Num of Network Stream	0	0~1
DP V Size	1	0~1
Backend Device	ECHO_FS	ECHO_FS/PARMA
BT_AUDIO_ON_OFF	OFF	ON/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	AV_COMP_G1	
V_AV2	CVBS_PORT_3	
V_COMP1	ADC_PORT_1	
V_COMP2	None	
V_PC	ADC_PORT_0	
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	AUIN1	
A_AV2	AUIN0	
A_COMP1	AUIN1	
A_COMP2	None	
A_PC	AUIN0	
A_SCART1	AUIN0	
A_SCART2	None	
A_DVI	None	
A_HDMI	None	
A_Media	DECODER	
USING_PSI_UPDATE	...	
Fast Logo Delay	0	0~20
Num Of PANEL KEY	6	0~20

■ Control

Factory Menu Name	Data	Range
EDID		
EDID ON/OFF	ON	ON/OFF
EDID WRITE ALL	Success	
EDID WRITE PC	...	
EDID WRITE HDMI	Success	
EDID WRITE HDMI1	...	
EDID WRITE HDMI2	...	
EDID WRITE HDMI3	...	
EDID WRITE HDMI4	...	
EDID Ver	HDMI 1.3	
EDID Port	NONE	
EDID WRITE DVI	...	
Sub Option		
RS-232 Jack	UART	Debug/UART
Serial Log On/Off	OFF	ON/OFF
Watchdog	ON	ON/OFF
Checksum	0x0000	
Fast Boot in Production	OFF	ON/OFF
UART ENABLE	OFF	ON/OFF
Eeprom Reset		
EER Reset	0	
NVR All Clear	OFF	ON/OFF
ECO IC TYPE	MC8121	NONE/CT802FN/NLS1106/MC8121/MC8121_REV
Info Link Server Type	operating	operating/development/developing
Info Link Country	None	
TTX Group	UserOSD	WestEurope/EastEurope/Russian/Greek/Turkey/Arabic/Farsian/Arab/Hbrw/UserOSD
Visual Test	...	
MediaPlay DB	...	
OPTION_SWU		
OTN Server Type	operating	operating/development
OTN Test Server	OFF	ON/OFF
SWU Reset		
SWU Duration	OFF	ON/OFF
SWU Fail Test	OFF	ON/OFF
SWU_Diag_Code		

4. Troubleshooting

Factory Menu Name	Data	Range
OPTION_NUM		
Num of ATV	1	
Num of SVIDEO	0	
Num of PC	0	
Num of DVI	0	
Num of OPTICAL Link	1	
Num of MEDIA	1	
Num of Tuner	1	
Num of PVR RECORD	0	
RF Remocon Support	OFF	ON/OFF
CDD mode	...	
DPMS Support	OFF	ON/OFF
Num of IPTV CIP	0	0~1
Num of CI	1	0~1
Num of HYBRID TV	0	0~1
T-CON Device		
BOARD CONTROL	OFF	ON/OFF
RM		
Server Type	Operating	operating/development
RTS Mode	0	0~1
PSA		
FKP Download1		
FKP Download2		
LMK threshold	0	
Low threshold	0	
High threshold	0	
CSB	ON	ON/OFF
CLB	ON	ON/OFF
EEPG Enable	OFF	ON/OFF
FAnet Thread	5	0~5
UNIQUE TRIPLET	ON	ON/OFF
PDP Option		
HOTEL Option		
Hospitality Mode	OFF	ON/OFF
Power On		
Menu OSD		
Music Mode		
External Source		

Factory Menu Name	Data	Range
Eco Solution		
Cloning		
Shop Option		
Exhibition Mode	OFF	ON/OFF
3D Cube	OFF	ON/OFF
Asia Option		
Sepco 120Hz	OFF	ON/OFF
Unbalance	OFF	ON/OFF
FMTransmitter Support	OFF	ON/OFF
FMTransmitter Carrier	OFF	ON/OFF
AF Level adjust	3	0~7
TX Power Level	0	0~3
Mono Last Memory	OFF	ON/OFF
H Shaking	OFF	ON/OFF
SOUND		
High Devi	OFF	ON/OFF
Carrier_Mute	OFF	ON/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	ON/OFF
FM Prescale	0x2Eh	
AM Prescale	0x1Ah	
NICAM Prescale	0x1Dh	
Amp Model	TASS5747	
Amp Volume	0xc9h	
Amp Scale	0x35H	
Amp Check Sum	0x001B010F	
SubWoofer Support	0	0~7
Woofer Type	0	0~7
Woofer Volume	0xcbh	
Woofer Scale	0x8ah	
Woofer Check Sum	NONE	
Woofer Local Check Sum	NONE	
Amp local Check Sum	0x003FCA62	
Speaker EQ	ON	ON/OFF

4. Troubleshooting

Factory Menu Name	Data	Range
PEQ Test	Ready	Ready/Set1~Set5
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 THR	32	
Carrier2 SNR Low THR	17	
Audio-IP Test	Ready	Ready/Set1~Set9
SRS Tuning Parm	6	
TruBass-Checksum	0	
Mic Scale	0	
India Sound	OFF	ON/OFF
Wall Filter Type	0	
SAP High Thld	9	
SAP Low Thld	7	
Bottom Checksum	0	
Bottom Local CChecksum	0	
MFM Option		
PDD		
A_Dimming_Support		ON/OFF
UnderDriver_Switch		ON/OFF
HDMI FreeSync Support		ON/OFF
HDMI FreeSync Support Cer		ON/OFF

■ Debug

Factory Menu Name	Data	Range
Spread Spectrum		
LVDS Spread	ON	ON/OFF
LVDS Period	40K	20K/30K/40K
LVDS Amplitude	2.0	0.0/0.5/1.0/1.5/2.0/2.5/3.0
DDR Spread	ON	ON/OFF

Factory Menu Name	Data	Range
DDR Period	20K	20K/30K/40K
DDR Amplitude	1.5	0.0/0.5/1.0/1.5/2.0
FRC LVDS SSC ON/OFF	ON	ON/OFF
FRC LVDS SSC MFR	1	
FRC LVDS SSC MRR	10	
FRC LVDS SSC Period	0	
FRC LVDS SSC Modulation	1	
FRC DDR SSC ON/OFF	ON	ON/OFF
FRC DDR SSC MFR	1	
FRC DDR SSC MRR	10	
FRC DDR SSC Period	1	
FRC DDR SSC Modulation	1	
DDR Margin		
A CTRL_OFFSET_0_3	0	
A CTRL_OFFSET_D	0	
B CTRL_OFFSET_0_3	0	
B CTRL_OFFSET_D	0	
ND ADJ Support	0	0~1
MICOM POWER OFF	0	0~1
RF Mute Time	6ms	0ms~10ms
CI+1.3	0	0~1
FRC		
FRC FDISPLAY ON/OFF	OFF	ON/OFF
PC Mode ON/OFF	OFF	ON/OFF
Home Panel FRC	OFF	ON/OFF
Tuner Margin	0	0~1
MPEG Margin	1000	
H.264 Margin	8	
CAM Wait Time	0	
TS Clock delay	0	
TCON_TEMP READ	0.00	
TEMP LAST	60.00	
DCC VERSION	0x0	
DCC CHK SEL	0	
DCC CHECK LOCAL	0x0	
DCC CHECK TOTAL	0x0	
MultiACC Checksum	0	
IIC Bus Stop	OFF	ON/OFF

4. Troubleshooting

Factory Menu Name	Data	Range
Tuner Status		
DVB		
SNR	0	0
BER	0	0
Signal Strength	0	0
Bandwidth	0	0
Frequency	0	0
LNA Status	0	0
FFT	0	0
Modulation	0	0
Code Rate	0	0
GI	0	0
Hier Modulation	0	0
Frequency Offset	0	0
Timing Offset	0	0
AGC	0	0
UCB	0	0
PLL Type	0	0
DEMOD Type	0	0
TPS Lock	0	0
RS Lock	0	0
SSI	0	0
SQI	0	0
Firmware Version	0	0
ISDB-T		
FFT Size_1	0	0
Guard Interval_1	0	0
Freq.Offset_1	0	0
SNR_1	0	0
IF AGC_1	0	0
TMCC Lock_1	0	0
TS Packet_1	0	0
Master Lock_1	0	0
A_Modulation_1	0	0
A_Code Rate_1	0	0
A_Timer InterLeave_1	0	0
A_Segments Num_1	0	0
A_BER_1	0	0

Factory Menu Name	Data	Range
B_Modulation_1	0	0
B_Code Rate_1	0	0
B_Timer InterLeave_1	0	0
B_Segments Num_1	0	0
B_BER_1	0	0
C_Modulation_1	0	0
C_Code Rate_1	0	0
C_Timer InterLeave_1	0	0
C_Segments Num_1	0	0
C_BER_1	0	0

■ 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	0~1
SOC TCON Pattern Level	0	0~1
SOC TCON FRC Pattern	0	0~1
HDMI WB Pattern	0	0~1
HDMI Pattern Sel	0	0~1
Panel Display Time	0Hr	
SVC Info	0	
Delete S/N	Failure	Failure/Success
Upgrade		
T-CON Usb Download	Failure	Failure/Success
T-CON CheckSum	N/A	
Logic Usb D/L	...	
SUBMICOM UPGRADE	Ready	
BT UPGRADE		
BT FREEPAIRING	ON	ON/OFF
Function Upgrade	Failure	Failure/Success
FRC3D FW Upgrade		
Camera Upgrade	0	0~1

4. Troubleshooting

Factory Menu Name	Data	Range
Mic Upgrade	0	0~1
CPLD USB Download	0	0~1
JP MICOM UPGRADE	Failure	Failure/Success
DP MICOM UPGRADE	Failure	Failure/Success
Jump Upgrade	Failure	Failure/Success
MIC PROGRAM UPGRADE	Failure	Failure/Success
Smart Hub Reset	0	
ER Count		
WD Count	0	
AR Count	0	
WIFI ER Count	0	
BT ER Count	0	
HDMI Stable Cnt	1	
Camera ER Count	0	
Power Fail Error Count	0	
LOG		
Select Log Type	MICOM	
Log View	0	
Delete Log		
Debug Log Down		
Self Diagnosis		
Loop Back		
LAN Test		
AV Audio Test	Failure	Failure/Success
AV2 Audio Test	Failure	Failure/Success
DVIN Audio Test	Failure	Failure/Success
CVBS Test	Failure	Failure/Success
CVBS2 Test	Failure	Failure/Success
COMP Test	Failure	Failure/Success
USB HUB Test		
HDMI Test	NG/NG/NG/NG	
SCART Audio Test	Failure	Failure/Success
SCART CVBS Test	Failure	Failure/Success
SCART RGB Test	Failure	Failure/Success
PC Audio Test	Failure	
PC Self Test	Failure	
CPU	Failure	Failure/Success

Factory Menu Name	Data	Range
DDR		
FLASH		
EEPROM		
X-TAL	Failure	Failure/Success
Tuner1		
Sound AMP	Failure	Failure/Success
HDMI Switch IC	Failure	Failure/Success
USB HUB IC	Failure	Failure/Success
WIFI	Failure	
LVDS		
T-CON/FRC		
PCB Test	Failure	Failure/Success
MOIP	0	
BT		
EcoSensor		
Voltage	0	
Device Self Test	0	
App Self Test		
EXT Sound Inspection		
Woofer Sound Inspection	NONE	
ATV CH Inspection	Failure	Failure/Success
DTV CH Inspection		
Satellite CH Inspection		
PDP Discharge Voltage		
DDR Self Test		
IREPF	Stopped	Stopped/running
OPTION_HDMI		
DVI/HDMI SOUND	Auto	Auto/DVI
HDMI HOT PLUG	Disable	Disable/Enable
HOT PLUG SWITCHING	Boot	Boot/Source
HOT PLUG DURATION	200ms	
CLK TERM DURATION	200ms	
HDMI FLT CNT SIG	100ms	
HDMI FLT CNT LOS	100ms	
UNSTABLE BAN CNT	3500ms	
HDMI ROBIN	1	0~1
HDMI Callback	0	0~1
HDMI CTS Thld	8	0~15

4. Troubleshooting

Factory Menu Name	Data	Range
HDMI CTS Cnt1	1	0~15
HDMI EQ	AUTO	AUTO/Low/Middle/High/Strong
HDMI Write Type	Combine	Combine/Separate
HDMI Switch	NONE	NONE/SIL9287/TMDS461
DVI SET TIME	300ms	
HDMI Sync	DE	DE/HV
HDMI 3D DET	0	0~1
HOT PLUG OFF HOLD TIME	0	0~1
DVB CI		
TS Clock delay TC	0	
TS Clock delay S	0	
CI Control Buf ON	ON	
TS Clock delay CPU	-1	
CAL Data Backup_Copy	...	
CAL Data Restore_Copy	...	
Expert		
N/D ADJ	...	
Source	...	
ATV IF AGC SPEED	0	0~16
Reset		
EEPROM_Reset		
Factory_Reset		
Auto Power	MEMORY	MEMORY/ALWAYS ON/ALWAYS OFF

■ ADC/WB

Factory Menu Name	Data	Range
ADC		
AV Calibration	/	
Comp Calibration	Failure	
PC Calibration	/	
HDMI Calibration	/	
ADC Result		
1st_Y_GH	0	
1st_Y_GL	0	
1st_Cb_BH	0	
1st_Cb_BL	0	
1st_Cr_RH	0	

Factory Menu Name	Data	Range
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	133	
G-Gain	128	
B-Gain	144	
WB-W2_R_Offset	128	
WB_W2_B_Offset	128	
WB_W2_R_Gain	147	
WB_W2_B_Gain	95	
WB-N_R_Offset	128	
WB_W2_N_Offset	128	
WB_W2_N_Gain	138	
WB_W2_N_Gain	134	
MGA		
MGA On/Off	OFF	
R1_Gain	496	
G1_Gain	492	
B1_Gain	476	
R2_Gain	502	
G2_Gain	498	
B2_Gain	482	
R3_Gain	506	
G3_Gain	502	
B3_Gain	492	
R4_Gain	512	
G4_Gain	506	
B4_Gain	504	
R5_Gain	514	
G5_Gain	510	

4. Troubleshooting

Factory Menu Name	Data	Range
B5_Gain	506	
R6_Gain	516	
G6_Gain	514	
B6_Gain	508	
R7_Gain	516	
G7_Gain	516	
B7_Gain	510	
R8_Gain	516	
G8_Gain	514	
B8_Gain	512	
R9_Gain	514	
G9_Gain	514	
B9_Gain	512	
R10_Gain	512	
G10_Gain	512	
B10_Gain	512	

■ Advanced

4-4. White Balance

4-4-1. MGA(Multipoint Grayscale Adjustment)

MGA(Multipoint Grayscale Adjustment)

DEVICES	Type
CA-210	-

RGB Measurement		
Levels	Code	Check
10 IRE	0x01	O
20 IRE	0x02	O
30 IRE	0x03	X
40 IRE	0x04	O
50 IRE	0x05	X
60 IRE	0x06	X
70 IRE	0x07	O
80 IRE	0x08	X
90 IRE	0x09	X
100 IRE	0x0A	O

Panel Inspection Spec.				
Levels	Check	x(±)	y(±)	Gamma(±)
10 IRE	O	0.020	0.020	0.40
20 IRE	O	0.020	0.020	0.40
30 IRE	O	0.020	0.020	0.40
40 IRE	O	0.020	0.020	0.40
50 IRE	O	0.020	0.020	0.40
60 IRE	O	0.020	0.020	NA
70 IRE	O	0.020	0.020	NA
80 IRE	O	0.020	0.020	NA
90 IRE	O	0.020	0.020	NA
100 IRE	O	NA	NA	NA

Gray Check			Adjust Spec(xyL)			Adjust Target offset(xyL)		
Levels	Code	Check	x(±)	y(±)	L(±)	x(±)	y(±)	L(±)
10 IRE	0x01	X	0.005	0.005	0.07	0.000	0.000	0.000
20 IRE	0x02	O	0.005	0.005	0.05	0.000	0.000	0.000
30 IRE	0x03	X	0.005	0.005	0.04	0.000	0.000	0.000
40 IRE	0x04	O	0.004	0.004	0.03	0.000	0.000	0.000
50 IRE	0x05	X	0.004	0.004	0.02	0.000	0.000	0.000
60 IRE	0x06	X	0.004	0.004	0.02	0.000	0.000	0.000
70 IRE	0x07	O	0.004	0.004	0.02	0.000	0.000	0.000
80 IRE	0x08	X	0.004	0.004	0.01	0.000	0.000	0.000
90 IRE	0x09	X	0.004	0.004	0.01	0.000	0.000	0.000
100 IRE	0x0A	X	NA	NA	NA	NA	NA	NA

4. Troubleshooting

Target Gamma		2.30	
Black	x	y	Contrast
	0.231	0.208	300000
Target xy	Option	x	y
	Auto	0.282	0.299

Color Tone Target			Spec.	
Agingless	x	y	x(±)	y(±)
COOL	0.274	0.286	0.004	0.004
NORMAL	0.281	0.295		
WARM2	0.313	0.340		
Aging	x	y	x(±)	y(±)
COOL	0.274	0.286	0.004	0.004
NORMAL	0.281	0.295		
WARM2	0.313	0.340		

Panel Spec.		±	
Gamma	2.20	0.35	20~128
x	0.281	0.030	255
y	0.288	0.030	
ACC x	255 white	0.015	26~255
ACC y	x,y value	0.015	

10IRE Gamma target		2.2
RetryCount		6

LFDContrast		0
-------------	--	---

	offset(x)	offset(y)	offset(g)
COOL	0.000	0.000	0.000
NORMAL	0.000	0.000	
WARM2	0.000	0.000	

DEVICES	Type
CA-310	-

RGB Measurement		
Levels	Code	Check
10 IRE	0x01	O
20 IRE	0x02	O
30 IRE	0x03	X
40 IRE	0x04	O
50 IRE	0x05	X
60 IRE	0x06	X
70 IRE	0x07	O
80 IRE	0x08	X
90 IRE	0x09	X
100 IRE	0x0A	O

Panel Inspection Spec.				
Levels	Check	x(±)	y(±)	Gamma(±)
10 IRE	O	0.020	0.020	0.40
20 IRE	O	0.020	0.020	0.40
30 IRE	O	0.020	0.020	0.40
40 IRE	O	0.020	0.020	0.40
50 IRE	O	0.020	0.020	0.40
60 IRE	O	0.020	0.020	NA
70 IRE	O	0.020	0.020	NA
80 IRE	O	0.020	0.020	NA
90 IRE	O	0.020	0.020	NA
100 IRE	O	NA	NA	NA

Gray Check			Adjust Spec(xyL)			Adjust Target offset(xyL)		
Levels	Code	Check	x(±)	y(±)	L(±)	x(±)	y(±)	L(±)
10 IRE	0x01	X	0.005	0.005	0.07	0.000	0.000	0.000
20 IRE	0x02	O	0.005	0.005	0.05	0.000	0.000	0.000
30 IRE	0x03	X	0.005	0.005	0.04	0.000	0.000	0.000
40 IRE	0x04	O	0.004	0.004	0.03	0.000	0.000	0.000
50 IRE	0x05	X	0.004	0.004	0.02	0.000	0.000	0.000
60 IRE	0x06	X	0.004	0.004	0.02	0.000	0.000	0.000
70 IRE	0x07	O	0.004	0.004	0.02	0.000	0.000	0.000
80 IRE	0x08	X	0.004	0.004	0.01	0.000	0.000	0.000
90 IRE	0x09	X	0.004	0.004	0.01	0.000	0.000	0.000
100 IRE	0x0A	X	NA	NA	NA	NA	NA	NA

Target Gamma		2.20	
Black	x	y	Contrast
	0.231	0.208	300000
Target xy	Option	x	y
	Auto	0.282	0.299

Color Tone Target			Spec.	
Agingless	x	y	x(±)	y(±)
COOL	0.274	0.275	0.004	0.004
NORMAL	0.281	0.284		
WARM2	0.313	0.329		
Aging	x	y	x(±)	y(±)
COOL	0.274	0.275	0.004	0.004
NORMAL	0.281	0.284		
WARM2	0.313	0.329		

Panel Spec.		±	
Gamma	2.20	0.35	20~128
x	0.281	0.030	255
y	0.288	0.030	
ACC x	255 white	0.015	26~255
ACC y	x,y value	0.015	

10IRE Gamma target			2.2
RetryCount			6
LFDContrast			0
	offset(x)	offset(y)	offset(g)
COOL	0.000	0.000	0.000
NORMAL	0.000	0.000	
WARM2	0.000	0.000	

4-5. Software Upgrade

Software Upgrade can be performed by downloading the latest firmware from samsung.com to a USB memory device.

- Current Version - The software already installed in the TV.

Software is represented as 'Year/Month/Day_Version'.

4-5-1. How to Check the Software Version

■ Use the Main Menu

1. Click the "MENU" key in remote controller.
2. Select "Support" menu.
3. Locate the menu cursor "Software Upgrade" menu.
4. Click the "INFO" key.
 - Check the Main SW and Micom version.



■ Use the Factory Mode

Access the factory mode

Option	T-N16LDEUC-xxxx.x T-N16LDEUS-xxxx E-Manual :NLDVBEU1H-xxxx E-POP:SUCCESS EDID SUCCESS HDCP SUCCESS CALIB : AV/COMP/PC/HDMI/ Option : 32S6AH0FK,xx_xx,xxxx,NONE Factory Reset In Production:0 NSP-SDAL-NT16L-xxxx-xxxx RFS:"NT16L xxxx" K/ 20xx-xx-xx KERNEL:xxx.xxxx,/Onboot: xxxx TCON Version:---- NSP-DTVTD-xxxx
Control	Model: UE32K**** CIP SUCCESS Factory Data Ver:xxx EERC Version: xxx NSP-BP-HAL-xxxx NSP-AP-CNC-xxxx NSP-AP-MM-xxxx
Debug	NSP-BP-MW-xxxx NSP-BP-APP-xxxx NSP-PNG-xx-xxxx Date of purchase:-/-----
SVC	
ADC/WB	
Advanced	

4-5-2. How to Upgrade Software and Micom

Insert a USB drive containing the firmware upgrade downloaded from samsung.com into the TV. Please be careful not to disconnect the power or remove the USB drive while upgrades are being applied. The TV will turn off and turn on automatically after completing the firmware upgrade. Please check the firmware version after the upgrades are complete (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 before beginning firmware update. After update is completed, restore your previous settings.

■ Main Software Upgrade

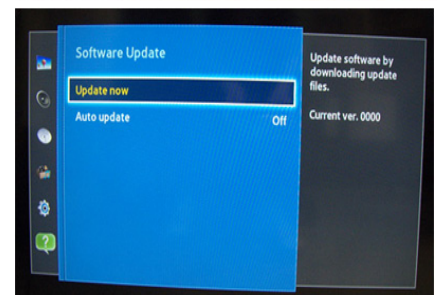
1. Store the sw program named "T-NT16LDEUC" in USB memory stick.
 - Connect the USB.



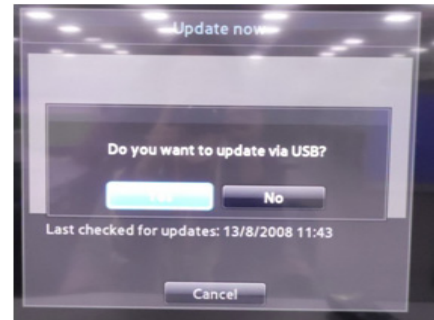
2. Click the "MENU" key in Remote Controller.
3. Select "Support" menu.
 - Locate the menu cursor "Software Update" menu.



4. Locate the menu cursor "Update now" menu.



5. Click the "ENTER" key.



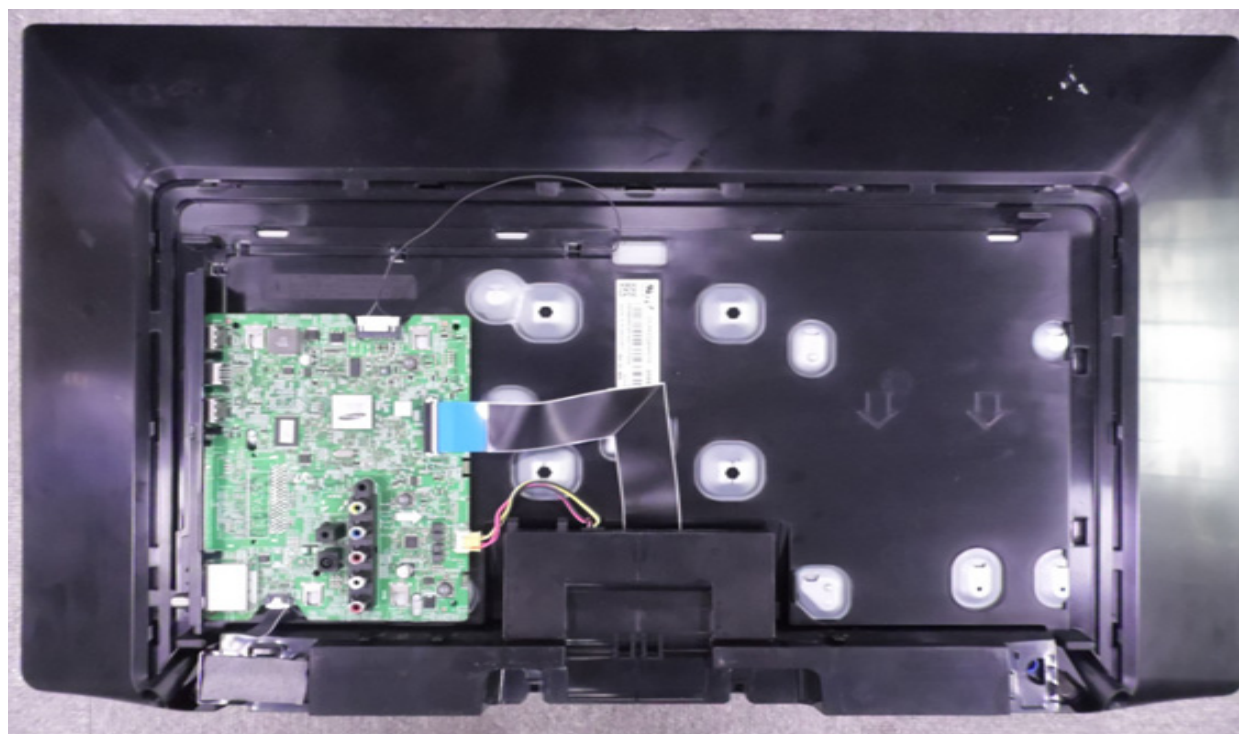
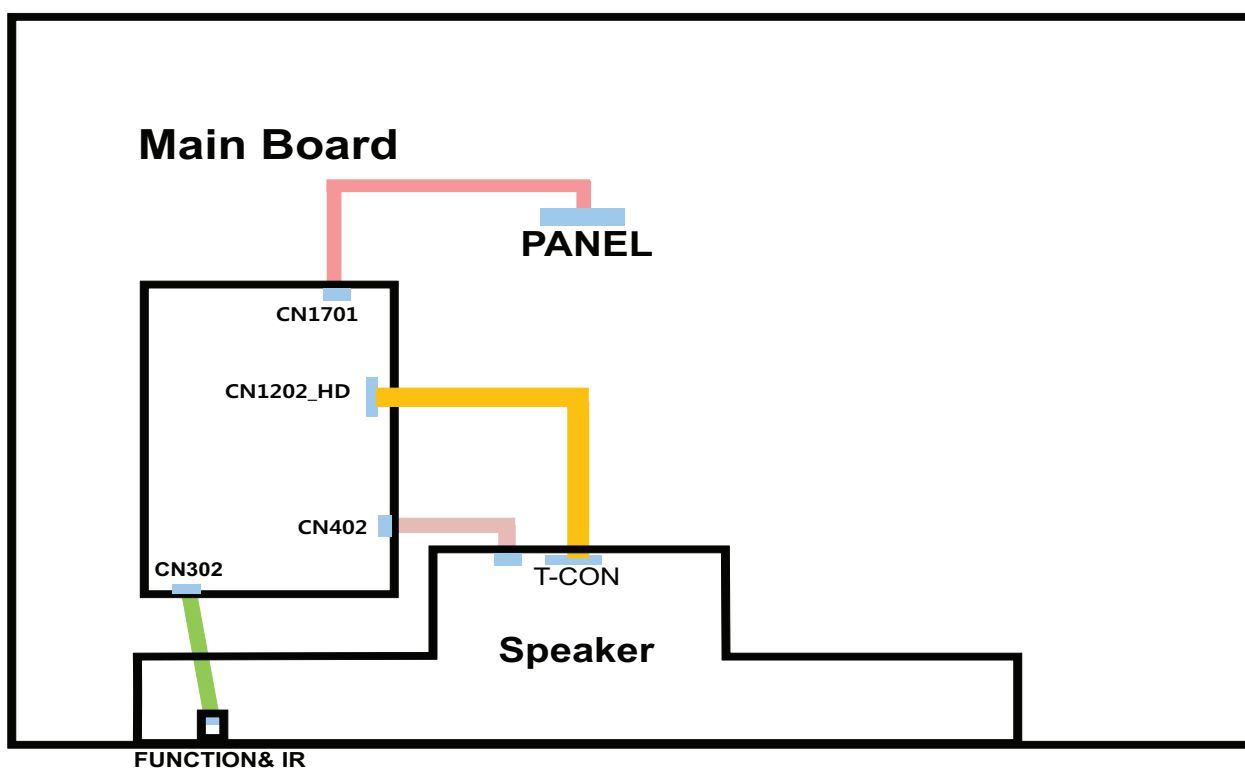
6. Click the "ENTER" key.

- Wait for upgrade complete.
- Check the Software Version.



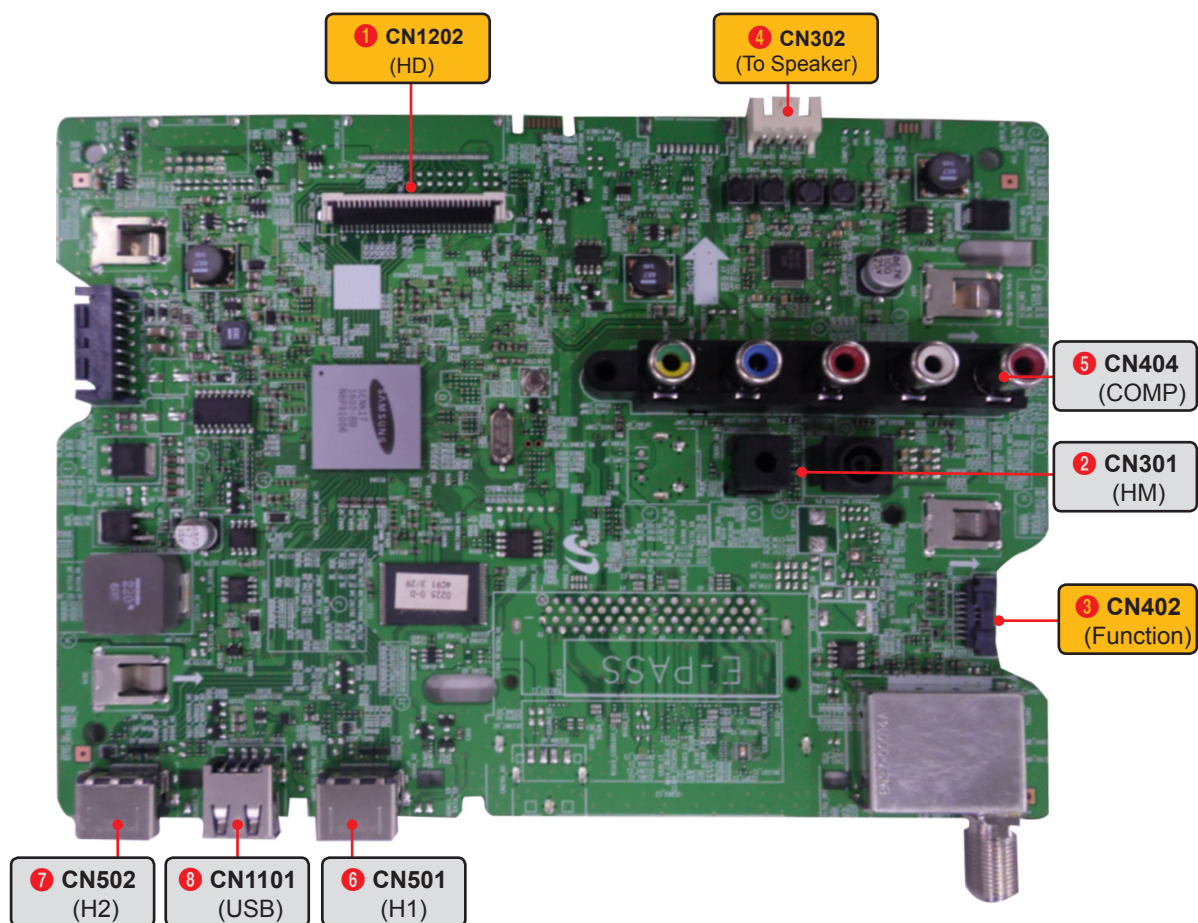
5. Wiring Diagram

5-1. Wiring Diagram



5-2. Connector

■ Main Board



■ Main Board Pin Map

1 CN1202_HD (to Panel)			
1	PANEL_13V_PW	16	EVEN_TXCLK+_LVDS
2	PANEL_13V_PW	17	EVEN_TXCLK-_LVDS
3	PANEL_13V_PW	18	DGND
4	PANEL_13V_PW	19	EVEN_TX2+_LVDS
5	PANEL_13V_PW	20	EVEN_TX2-_LVDS
6	DGND	21	DGND
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_SLA
15	DGND	30	DGND

2 CN301_HM			
1	GND	5	TEST_SR
2	HP_AUD_SL_OUT	6	IDENT_HP_MO
3	HP_AUD_SR_OUT	7	GND
4	TEST_SL		

3 CN402 (FUNCTIONI)			
1	IR	5	MSDA
2	GND	6	KEY_INPUT1
3	A3.3V	7	KEY_INPUT2
4	MSCL	8	LED_STB

4 CN302 (SPEAKER)			
1	R+	3	L+
2	R-	4	L-

5 CN404_COMP (COMPONENT)

1	GND	9	TEST_PR
2	COMP1_Y_CVBS	10	GND
3	IDENT_VIDEO1	11	COMP1_AV1_SL_IN
4	GND	12	TEST_SL
5	COMP1_PB	13	GND
6	IDENT_COMP1	14	COMP1_AV1_SR_IN
7	GND	15	TEST_SR
8	COMP1_PR		

6 CN501_H1 (HDMI1)

1	HDMI1_RX2+	11	GND
2	GND	12	HDMI1_RX_CLK-
3	HDMI1_RX2-	13	CEC
4	HDMI1_RX1+	14	NC
5	GND	15	HDMI1_SCL
6	HDMI1_RX1-	16	HDMI1_SDA
7	HDMI1_RX0+	17	GND
8	GND	18	HDMI1_5V
9	HDMI1_RX0-	19	STB_CHECK
10	HDMI1_RX_CLK+		

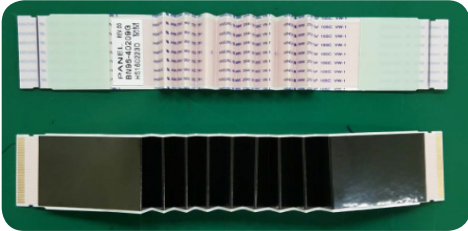

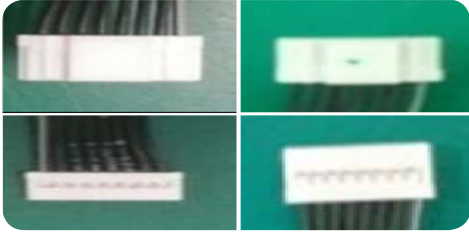

7 CN502_H2 (HDMI INPUT2)


1	HDMI2_RX2+	11	GND
2	GND	12	HDMI2_RX_CLK-
3	HDMI2_RX2-	13	CEC
4	HDMI2_RX1+	14	NC
5	GND	15	HDMI_SCL
6	HDMI2_RX1-	16	HDMI_SDA
7	HDMI2_RX0+	17	GND
8	GND	18	HDMI2_5V
9	HDMI2_RX0-	19	STB_CHECK
10	HDMI2_RX_CLK+		

8 CN1101 (USB)

1	B5V_USB1	3	USB_DP
2	USB_DM	4	GND

5-3. Cables

USE		LVDS CABLE (Main - panel)	Function Cable
		FFC CABLE	LEAD CONNECTOR
Inch	32"	BN96-26659Q	BN39-02223E
Photo			
	Connector-1	Connector-2	
			

 **NOTE**

The code number of cable can be changed, see "Exploded Views and Parts List".