

SAMSUNG

液晶显示电视

底板: N82E

型号: LA22C450E1T

LA26C450E1T

LA32C450E1T

LA37C530F1T

LA40C530F1T

LA46C530F1T

维修手册

手 册

薄膜液晶电视

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LA22C450E1T / LA26C450E1T / LA32C450E1T
LA37C530F1T / LA40C530F1T / LA46C530F1T

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参阅 GSPN 维修手册 (翻阅封底) 获取更多信息。

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GSPN (全球维修合作网络)

国家	网站
北美	service.samsungportal.com
拉丁美洲	latin.samsungportal.com
CIS	cis.samsungportal.com
欧洲	europe.samsungportal.com
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3.拆卸和重新组装

维修手册的这一章叙述液晶显示电视的拆卸和重新组装步骤。

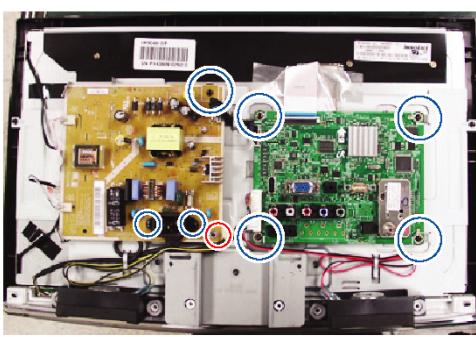
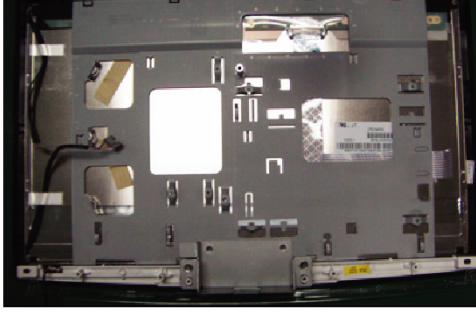
△ 警告：本液晶显示电视包含静电敏感器件。处理这些部件时应小心。

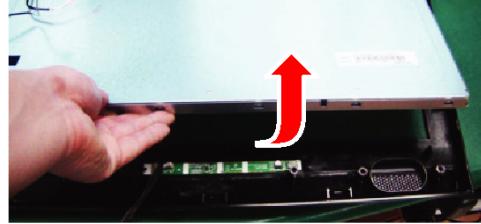
3-1.拆卸和重新组装 (LA22C450)

△ 小心：1.拆卸前，断开液晶显示电视的电源。

2.小心遵守以下步骤，不得使用任何金属器具拆卸本产品。

说明	图片说明	螺钉
1. 拆除底座上的 3 个螺钉。 拆卸底座。		
		 6002-001294 (M4 x L16, 自攻螺钉)
2. 拆除后盖上的 5 个螺钉。		 6002-001294 (M4 x L16, 自攻螺钉)

说明	图片说明	螺钉
3. 提起后盖。.		
4. 拆卸左右两侧的扬声器。		
5. 拆卸主板上的4个螺钉和IP板上的4个螺钉。		 6003-001439 (M4 x L8, 自攻螺钉)
6. 拆卸架座链接。		

说明	图片说明	螺钉
7. 提起底座链接。		
8. 提起屏板。		

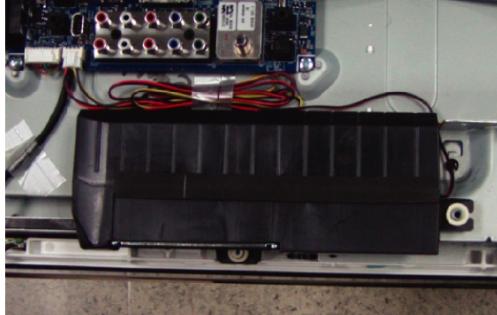
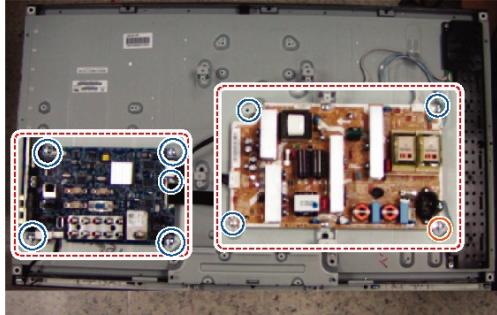
※ 重新组装步骤与拆卸步骤相反。

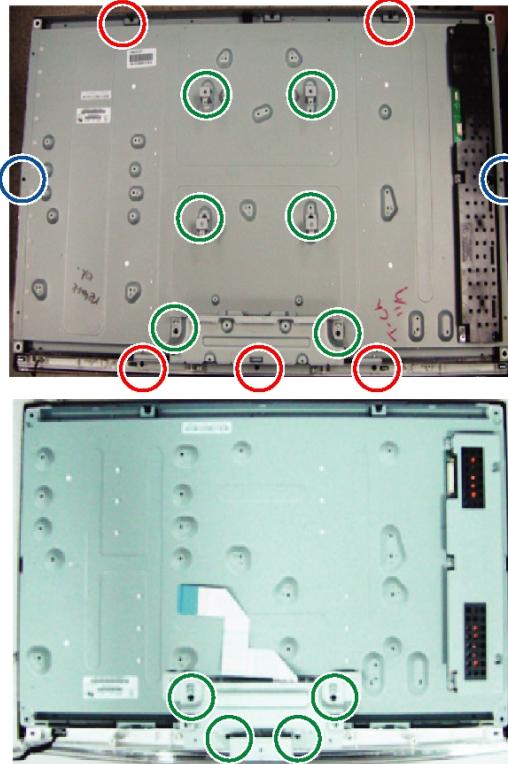
3-2. 拆卸和重新组装 (LA32C450)

△ 小心：1.拆卸前，断开液晶显示电视的电源。

2.小心遵守以下步骤，不得使用任何金属器具拆卸本产品。

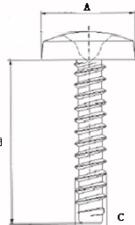
说明	图片说明	螺钉
1. 将电视面朝下放置在垫有软垫的桌面上。 拆除底座上的 3 个螺钉。 拆卸底座。		
		 6003-001003
2. 拆除后盖上的 9 个螺钉。		 6003-001003
3. 提起后盖。.		

说明	图片说明	螺钉
4. 拆卸左右两侧的扬声器。		
5. 拆卸主板上的5个螺钉和IP板上的4个螺钉。	 The image shows the internal components of a device. Two areas are highlighted with dashed red boxes: one around the main printed circuit board (PCB) and another around the smaller IP board. Numerous circular callouts point to specific screws in both areas, indicating they are to be removed.	 6001-002284  6003-001439

说明	图片说明	螺钉
6. 拆卸屏板和前部的2个螺钉。 拆卸架座链接上的4个螺钉。		 6003-000337
7. 提起底座链接。		
8. 提起屏板。		

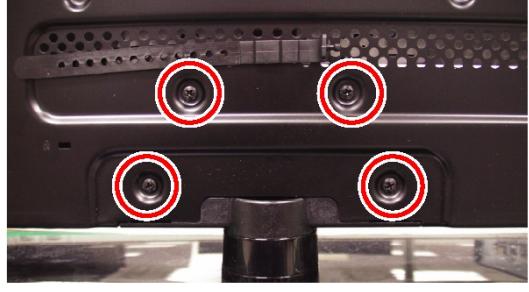
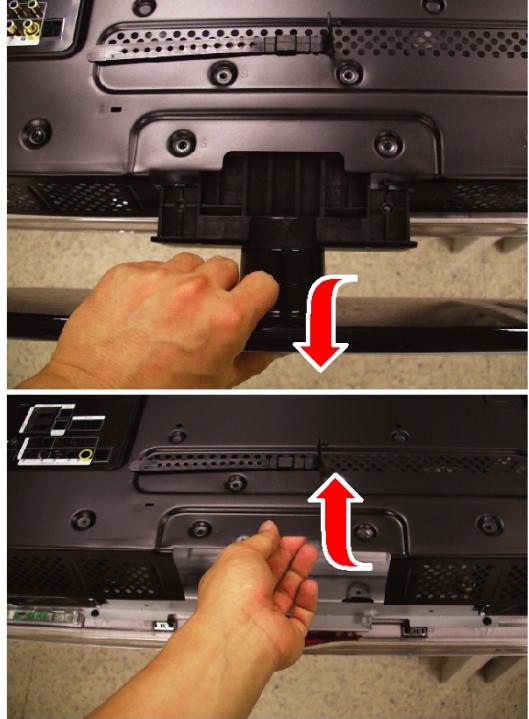
※ 重新组装步骤与拆卸步骤相反。

螺钉尺寸

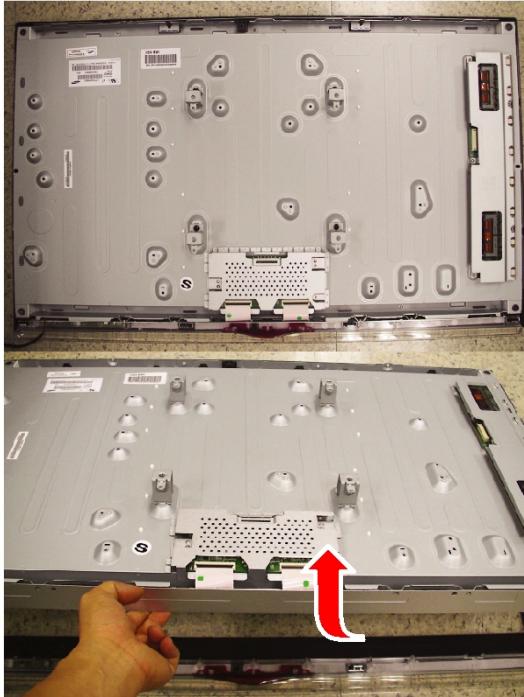
代码编号	A (mm)	B (mm)	C (mm)	Q'ty	B 
6001-002284	8.3±0.5	8.0±0.6	3.83~3.98	8(26"/32"/37"), 10(40"/46")	
6003-000337	7.3~8.3	9.2~10.0	3.73~3.83	4(26"), 8(32"), 6(37"/40"46")	
6003-001439	8.3±0.4	8.0±0.4	3.85~3.93	1(ALL)	
6003-001003	7.80~8.30	11.20~12.00	3.81~3.91	10(26") 12(32"450) 13(32"5XX). 17(37"), 15(40"), 18(46")	

3-3.拆卸和重新组装 (LA37C530)

- ⚠ 小心：1.拆卸前，断开液晶显示电视的电源。
2.小心遵守以下步骤，不得使用任何金属器具拆卸本产品。

说明	图片说明	螺钉
1. 将电视面朝下放置在垫有软垫的桌面上。 拆除底座上的螺钉。 拆卸底座。		 O x 7
		 O x 4
2. 提起后盖并拆卸底座。		

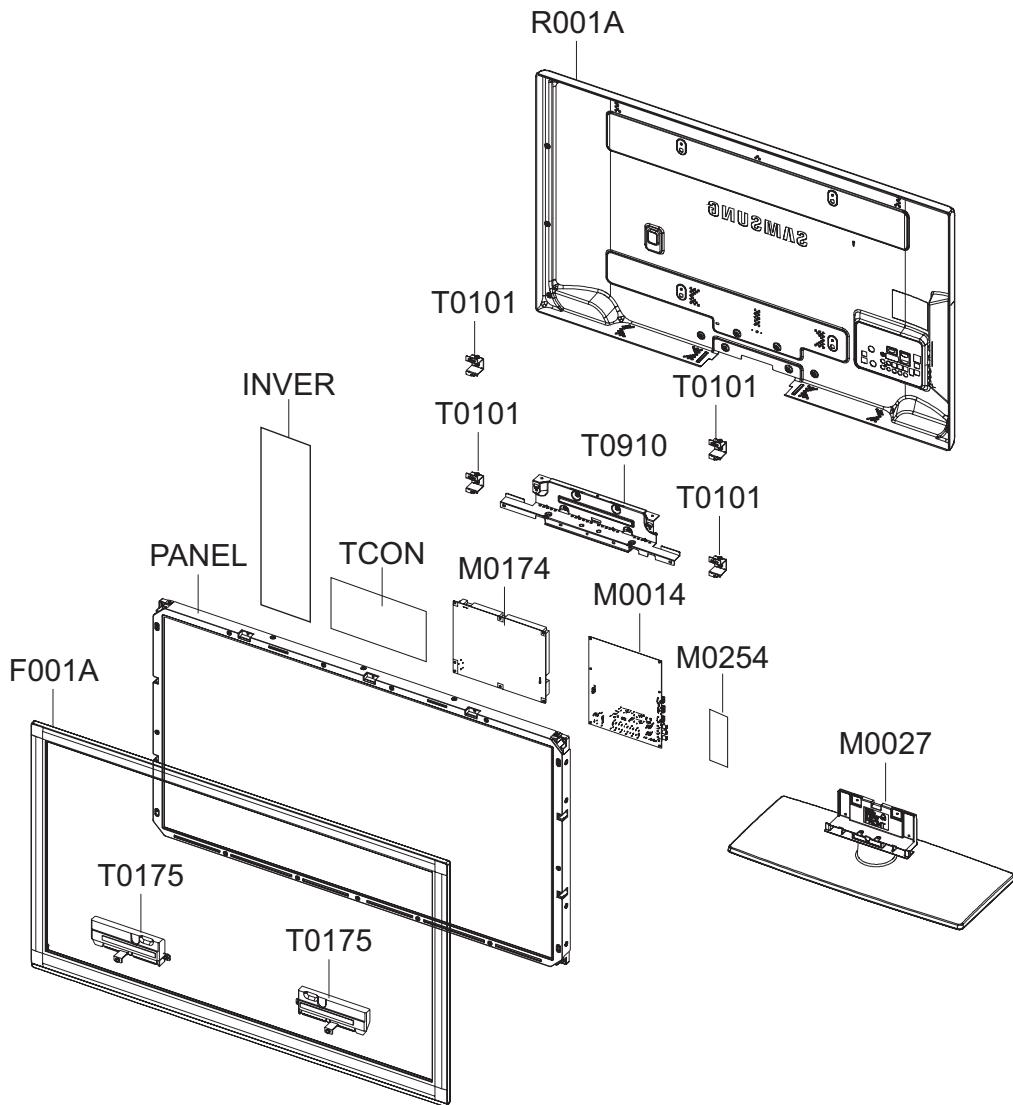
说明	图片说明	螺钉
3. 拆卸左右两侧的扬声器。		
4. 拆卸座架上的螺钉并提起座架。		 O x 3 O x 2
5. 拆卸屏板上的3个螺钉。		 O x 3
6. 断开板面上的接线。		 O x 8 O x 1

说明	图片说明	螺钉
7. 拆卸螺钉并提起液晶显示屏板。		
8. 拆卸屏板上的螺钉。		

※ 重新组装步骤与拆卸步骤相反。

5. Exploded View & Part List

5-1. LA40C530F1T Exploded View



5-1-1. LA40C530F1T Parts List

Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
F001A	BN96-12785N	ASSY COVER P-FRONT;40,LC530,CHINA(HOTEL)	1	SA	
T0175	BN96-12837A	ASSY SPEAKER P;6ohm,4pin,10W,L:570 R:250	1	SA	
PANEL	BN07-00830A	LCD-PANEL;T400HW03 V2,AU40H32,8bit,40,16	1	SA	
TCON	BN81-04411A	A/S-T CON T400HW03_V2;T400HW03 V2	1	SA	
INVER	BN81-04440A	A/S-BB-L T400HW03 V2;T400HW03 V2	1	SA	
M0174	BN44-00340A	AC VSS(I)-TV;PSIV231510A,I40F1_ASM,14mA,	1	SA	
M0254	BN61-06066A	HOLDER-SIDE AV;LC550,PC+ABS,V0,BK0008	1	SNA	
M0014	BN94-03878A	ASSY PCB MAIN;CHINA,LA40C530F1T	1	SA	
T0910	BN96-13342A	ASSY BRACKET P-STAND LINK;LC530 37/40/46	1	SA	
T0101	BN61-05996A	BRACKET-WALL;LC650 40,SECC,T1.2	4	SNA	
R001A	BN96-13963D	ASSY COVER P-REAR;40,LC530,CHINA(HOTEL),	1	SA	
M0027	BN96-12799A	ASSY STAND P-BASE;37,40,LC530,ABS+PMMA,H	1	SA	

5. Exploded View & Part List

5-2. LA40C530F1T Parts List

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

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
			LA40C530F1TXXZ			
0.1		BN90-02461N	ASSY COVER FRONT;40,LC530,CHINA(HOTEL)	1	SNA	
.2	F001A	BN96-12785N	ASSY COVER P-FRONT;40,LC530,CHINA(HOTEL)	1	SA	
...3	AB326	BN61-04661A	BRACKET-STOPPER;L650,SK-5,T0.4,Plating,H	5	SNA	
...3	CCM1	BN63-02183G	COVER-SHEET;Rhcm,PE Vinyl,T0.05,1100mm,2	0.61	SNA	
...3	F001	BN63-06396M	COVER-FRONT;40,LC530,CHINA(HOTEL),PC,V1,	1	SNA	
...3		BN64-01245A	DECORATION-IN;46,LC530,PC,V2,RD0045(RED)	1	SNA	
...3		BN96-12791A	ASSY DECORATION P-BOTTOM;40,LC530,PC,CLE	1	SNA	
....4		BN61-04731B	BOSS-TAPE;AMBER,ACRYL,T1.1,W12.0mm,WHITE	0.64	SNA	
....4	AD070	BN64-01242A	DECORATION-BOTTOM;40,LC530,PC,CLEAR,V2,T	1	SNA	
....4		BN61-06617A	BOSS-TAPE;LC530,ACRYL,T1.1,W4.0mm,L135.0	1	SNA	
...3	M0125	BN96-13424B	ASSY BOARD P-TOUCH FUNCTION&IR;LN40C539F	1	SA	
...3	CCM1	BN63-05940D	COVER-SHEET;PE,T0.08,650mm,200M,CLEAR,40	2	SNA	
...3		BN74-00052A	TAPE-PAPER;LB530,Crepe Paper,0.17mm, 10m	0.05	SNA	
...3		BN60-00162V	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.5T,	2.77	SNA	
.2	T0175	BN96-12837A	ASSY SPEAKER P;6ohm,4pin,10W,L:570 R:250	1	SA	
0.1	S001A	BN90-02466C	ASSY STAND;40,LC530,W/W,BLACK	1	SNA	
.2	SG03A	BN96-12795B	ASSY STAND P-GUIDE;37,40,46,LC530,W/W,PC	1	SA	
...3	T0920	BN61-06003A	GUIDE-STAND;37,40,46,LC650,PC+G/F,20%,V2	1	SNA	
...3		BN96-12031E	ASSY ACCESSORY-SCREW;10 LCD-TV,6003-0010	1	SNA	
....4	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	8	SA	
....4	T0524	6902-000341	BAG PE;LDPE,T0.05,L90,W70,TRP,,,PE MARK	1	SNA	
...3	T0524	6902-001063	BAG PE;LDPE,T0.05,W180,L350,TRP,RECYCLE	1	SNA	
...3		BN68-02721H	MANUAL FLYER-STAND GUIDE;All,SAMSUNG,W/W	1	SNA	
.2	M0027	BN96-12799A	ASSY STAND P-BASE;37,40,LC530,ABS+PMMA,H	1	SA	
...3	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	4	SA	
...3	M0081	6003-001239	SCREW-TAPTYPE;FH,+,B,M4,L10,ZPC(WHT),SWR	6	SNA	
...3	T0010	BN61-02248A	HOLDER-SWIVEL RING;40R71,ACETAL NATUAL,T	1	SNA	
...3	T0010	BN61-02885A	HOLDER-SWIVEL RING;MURANO40,ACETAL NATUR	1	SNA	
...3		BN61-02886A	BRACKET-HINGE SWIVEL;BORDEAUX PLUS,40,SE	1	SNA	
...3		BN61-03715A	BRACKET-STAND BOTTOM;BRACKET-STAND-BOTTO	1	SNA	
...3	GSN01	BN61-06027A	GUIDE-STAND NECK;40,LC530,PC+G/F,20%,V2,	1	SNA	
...3	CCM1	BN63-02183E	COVER-SHEET;Rhcm,PE Vinyl,T0.04,750mm,20	0.5	SNA	
...3	M0019	BN73-00052C	RUBBER-FOOT;LCD TV,CR RUBBER,T2.0 DIA19,	6	SNA	
...3		BN74-00031A	GREASE;kanto-kasei FL-955,grease,wht	0.4	SNA	
...3		BN63-05522A	COVER-STAND BASE;37,40,LB530,ABS+PMMA,HB	1	SNA	
0.1	R001A	BN90-02759D	ASSY COVER REAR;40,LC530,CHINA(HOTEL)	1	SNA	
.2	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	11	SA	
.2	R001A	BN96-13963D	ASSY COVER P-REAR;40,LC530,CHINA(HOTEL),	1	SA	
...3	R001	BN63-06393D	COVER-REAR;40,LC550,SO,PCM,T0.5,BLK	1	SNA	
...3		BN64-01270W	INLAY-AV;LC530,CHINA(HOTEL),PS SHEET,T0.	1	SNA	
...3	T0071	BN64-01314C	INLAY-TERMINAL;LC530,CHINA(HOTEL),PS SHE	1	SNA	
...3	T0139	BN65-00003A	CLAMPER BAG;42C7,LDPE,HB,BLK	1	SNA	
...3	AH358	BN61-06545A	HOLDER-REAR;LC650 37/40/46,PP,BLK	1	SNA	
...3		BN60-00162C	SPACER-FOAM;FOAM,50000mm,Dark Gray,0.5T,	0.96	SNA	
0.1		BN91-05226A	ASSY LCD;BN07-00830A	1	SNA	
.2	PANEL	BN07-00830A	LCD-PANEL;T400HW03 V2,AU40H32,8bit,40,16	1	SA	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3	TCON	BN81-04411A	A/S-T CON T400HW03_V2;T400HW03 V2	1	SA	
...3	INVER	BN81-04440A	A/S-BB-L T400HW03 V2;T400HW03 V2	1	SA	
0.1	ACCE1	BN92-05979E	ASSY ACCESSORY;LA37C530F1TXXZ	1	SNA	
..2	ACCE1	BN96-15836A	ASSY ACCESSORY;HOTEL TV	1	SNA	
...3	T0268	3903-000434	CBF-POWER CORD;DT,CN,IP3/YES,IEC320 C13-	1	SA	
...3	T0524	6902-000110	BAG PE;LDPE,T0.05,W250,L400,TRP,28,2,9.2	1	SNA	
...3	M0254	AA59-00416B	ANT SHIELD BOX;UGC-AS-003A,PAL-BG,DK,I,M	1	SA	
...3	T0527	AA68-00764A	LABEL-PASSING;SAMSUNG ALL,ART PAPER,CLR,	1	SNA	
...3	T0527	AA68-02517A	LABEL;PJTV(TTSEC),COPPERPLATE,50,75,YELL	1	SNA	
...3	T0059	AA68-03184A	MANUAL FLYER-CARD-08;ALL MODEL,CHINESE,2	1	SNA	
...3		AA68-03184C	MANUAL FLYER-SERVICE CARD;comm,Samsung,S	1	SNA	
...3		BN43-00004A	BATTERY;BM1L,BATTERY,MN,600mAh,7.9g	2	SNA	
...3	REMO2	BN59-01069A	REMOCON;TM1050,SAMSUNG,20PIN SINGLE,49KE	1	SA	
...3	M9889	BN63-01798B	CLOTH-CLEAN;cloth,180,200,sea blue,ToC	1	SNA	
...3	T0531	BN63-06339B	COVER-BOTTOM;37,40,46,LC650,HIPS,V0,BK00	1	SA	
...3	T0527	BN68-00513A	LABEL-E,PASS;ALL MODEL,YUPO(110G),50X15,	1	SNA	
...3		BN68-02862A	MANUAL FLYER-QSG;Comm,Samsung,SC,China_H	1	SNA	
0.1		BN92-06029A	ASSY LABEL;LN37C539F1HXZA	1	SNA	
..2	T0527	BP68-00052B	LABEL-00,RATING;CCTV,TETRON PAPER,T0.05,	1	SNA	
0.1		BN91-05182L	ASSY SHIELD;LA40C530F1TXXT	1	SNA	
..2	T0081	6001-002284	SCREW-MACHINE;BH,+,M4,L8,ZPC(WHT),SWRCH1	10	SA	
..2	T0081	6001-002604	SCREW-MACHINE;BH,+,M4,L10,ZPC(WHT),SWRCH	2	SA	
..2	M0081	6003-000337	SCREW-TAPTYPE;BH,+,S,M4,L10,ZPC(BLK),SWR	6	SA	
..2	M0081	6003-001003	SCREW-TAPTYPE;BH,+,B,M4,L12,ZPC(BLK),SWR	6	SA	
..2	M2893	BN39-01024E	LEAD CONNECTOR;LC5F,UL3239#24,2P,175mm,1	1	SA	
..2	M0174	BN44-00340A	AC VSS(I)-TV;PSIV231510A,I40F1_ASM,14mA,	1	SA	
...3		BN81-04735A	A/S-FUSE;3.15A 250V,FM801S	1	SA	
...3		BN81-04738A	A/S-FUSE;6.3A 250V,FS801S	1	SA	
...3		BN81-04758A	A/S-MOSFET;FDPF12N50UT,MI801S, MI802S,QI	2	SA	
...3		BN81-04766A	A/S-MOSFET;SD10N60,QP802, QP803, QP801S,	2	SA	
...3		BN81-04786A	A/S-PWM CONTROL IC;STR-W6052S,UM801S	1	SA	
..2		BN61-06441A	HOLDER-INLET;LC530,ABS,V0	1	SNA	
..2	M0523	BN96-12973A	ASSY BRACKET P-WALL;32,37,40,LC650,SECC,	4	SA	
...3	T0101	BN61-05996A	BRACKET-WALL;LC650 40,SECC,T1.2	4	SNA	
...3		BN60-00188B	SPACER-FOAM;LCD,FELT,20,3.0,20,Center :	4	SNA	
..2	M0230	BN96-13171C	ASSY CABLE P-FFC;LN40C530F1FXZA,FFC,0.5m	1	SA	
..2	T0910	BN96-13342A	ASSY BRACKET P-STAND LINK;LC530 37/40/46	1	SA	
...3		BN61-02429K	STUD-PEM;PNB,M3.8,D7,L14.9,ZPC(SIL),SUM2	2	SNA	
...3	M0115	BN61-05998A	BRACKET-STAND LINK;LC650 46,SECC,T1.6	1	SNA	
...3		BN61-05281A	HOLDER-CLAMP;LCD,NYLON 66,WHT	3	SNA	
..2	M2893	BN39-01279E	LEAD CONNECTOR;LB6T,Flat Connector Ass'y	1	SA	
..2		BN98-02806M	ASSY K/D-LABEL PCB;40c530,XZ	1	SNA	
...3	M2893	BN39-01267N	LEAD CONNECTOR;UN40C6400,UL2651,#26,18P,	1	SA	
...3	M0254	BN61-06066A	HOLDER-SIDE AV;LC550,PC+ABS,V0,BK0008	1	SNA	
...3		BN68-03035A	LABEL-PCB;10MM,30MM,WHITE,label pcb	1	SNA	
...3		BN73-00273B	SILICON/RUBBER-GAPPAD;UE32C6500,SILICON+	1	SNA	
0.1	M0017	BN91-05212L	ASSY CHASSIS;LA40C530F1TXXZ	1	SNA	
..2	M0014	BN94-03878A	ASSY PCB MAIN;CHINA,LA40C530F1T	1	SA	
...3		0202-001608	SOLDER-WIRE FLUX;LFC7-107,D0.8,99.3Sn/0.	0.25	SNA	
...3		3701-001480	CONNECTOR-DSUB;15P,3R,FEMAIL,STAMPED PIN	1	SA	
...3		3711-007302	HEADER-BOARD TO BOARD;BOX,18P,2R,2mm,ANG	1	SA	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
...3		3722-003037	JACK-USB;4P/1C W/L,AU/NI,BLK,ANGLE,A	1	SA	
...3	JA330	3722-003038	JACK-PHONE;7P/1C W/L,SN,BLK	6	SA	
...3	JA333	3722-003040	JACK-PIN;3P W/L,SN,BLK/YEL/WHT/RED,ANGLE	1	SA	
...3		3722-003041	JACK-PIN;5P RCA(SCART) W/L,NI,RED/WHT/RE	1	SA	
...3		3722-003046	JACK-PIN;4P W/L,NI,RED/WHT/YEL/YEL,STRAI	1	SNA	
...3		3722-003047	JACK-MODULAR;6P/6C,YES,NO,AU/NI,1PORT	1	SA	
...3	JA333	3722-003048	JACK-PIN;1P W/L,NI/SN,BLK,STRAIGHT	1	SA	
...3	CIS3	BN40-00173A	TUNER;DTOS40CVL081A,DVB-T/C,164CH,38.9MH	1	SA	
...3	T0066	BN62-00040A	HEAT SINK-ES;SAPPHIRE,T2.0,36*36*6.6,BLK	1	SNA	
...3	M0412	BN96-11826C	ASSY BRACKET P-PCB;LB450 40,SPTE T0.5 +	1	SNA	
....4		BN61-04928C	BRACKET-SUPPORT PCB;SPTE,T 0.5,SCREW-M4	1	SNA	
....4		BN61-05262B	HOLDER-BOSS PCB;52,LB550(EO),PBT+G/F(30%	1	SNA	
...3		BN97-04720A	ASSY SMD;N82E,PCB , 1352C,301	1	SNA	
....4	DS01A	0401-001056	DIODE-SWITCHING;MMBD4148SE,100V,200mA,SO	15	SA	
....4		0403-001783	DIODE-ZENER;BZB84-C6V2,5.8/6.6V,300mW,SO	13	SNA	
....4	D0254	0404-001271	DIODE-SCHOTTKY;SSA34,40V,3000mA,SMA,TP	1	SA	
....4	D0254	0404-001404	DIODE-SCHOTTKY;BAT721C,40V,200mA,SOT-23,	1	SA	
....4	T0139	0406-001200	DIODE-TVS;RCLAMP0504F,6/-/V,150W,SC-70	1	SA	
....4	T0139	0406-001271	DIODE-TVS;RCLAMP0524P,6/-/V,150W,SLP251	6	SNA	
....4	SD3	0407-000114	DIODE-SWITCHING;KDS184,80V,100mA,SOT-23,	3	SNA	
....4	Q101	0501-000445	TR-SMALL SIGNAL;KTC3875S-Y,NPN,150mW,SOT	11	SA	
....4		0501-000669	TR-SMALL SIGNAL;KTA1505Y,PNP,150mW,SOT-2	1	SA	
....4	CEQ2	0505-000110	FET-SILICON;2N7002,N,60V,115mA,7.5ohm,0.	4	SA	
....4	Q409	0505-000274	FET-SILICON;AO4435L,P,-30V,-11A,0.014ohm	1	SNA	
....4	ND51C2	0801-002780	IC-CMOS LOGIC;74LVC1G17,SCHMITT-TRIGGER	2	SA	
....4	T0596	0904-002554	IC-USC;AU6256-JBF,QFN,28P,5x5mm,12MHz,TP	1	SA	
....4	IC106	1001-001573	IC-VIDEO SWITCH;SII9287BCNUTR,QFN,72P,10	1	SNA	
....4		1006-001266	IC-LINE TRANSCEIVER;3232,TSSOP,16P,174MI	1	SA	
....4		1006-001474	IC-LINE DRIVER;DRV604PWP,HPSSOP,28P,9.8x	1	SA	
....4	IC112	1103-000129	IC-EEPROM;24C02,2Kbit,256x8,SOP,8P,5x4mm	2	SA	
....4	IC112	1103-001385	IC-EEPROM;AT24C256,256Kbit,32Kx8,SOP,8P,	1	SA	
....4		1105-002058	IC-DDR2 SDRAM;K4T1G164QE-HCF8,DDR2,1Gbit	2	SA	
....4	T0124	1201-002992	IC-POWER AMP;STA369BWS,PSSO,36P,10.3x7.5	2	SA	
....4	T0087	1203-001815	IC-POSI.FIXED REG.;78M09,TO-252,3P,PLAST	1	SA	
....4	T0087	1203-002835	IC-POSI.FIXED REG.;KIA7805AF,DPAK,3P,6.6	1	SA	
....4	T0087	1203-002898	IC-POSI.FIXED REG.;G950T45R,T0-252,3P,6.	1	SA	
....4		1203-004363	IC-VOL. DETECTOR;RT9818C-29PV,SOT-23,3P,	1	SA	
....4	T0087	1203-005134	IC-POSI.FIXED REG.;RT9167A-33PB,SOT-23-5	1	SNA	
....4		1203-005538	IC-DC/DC CONVERTER;AOZ1021HAIL,SOP,8P,4.	1	SA	
....4		1203-006013	IC-DC/DC CONVERTER;AOZ1031AI,SO-8,8P,4.9	1	SA	
....4		1203-006017	IC-VOL. DETECTOR;RT9824GJ8,TSOT23,8P,2.9	1	SA	
....4	T0087	1203-006135	IC-POSI.FIXED REG.;AP1117D-33-GZ-13-89,T	1	SA	
....4	T0087	1203-006136	IC-POSI.FIXED REG.;AP1117D-18-GZ-13-89,T	1	SA	
....4	IC012	1203-006138	IC-POSI.ADJUST REG.;AP1117DGZ-13-89,TO-2	1	SA	
....4		1203-006142	IC-DC/DC CONVERTER;BD8924G,5P,2.9x1.6x1.	1	SA	
....4		1204-003088	IC-DEMODULATOR;DRX39XYK,PQFN,64P,9x9x0.8	1	SA	
....4		1204-003096	IC-VIDEO DECODER;HIDTVPRO-SX,PBGA,580P,P	1	SA	
....4		1205-003201	IC-BUS SWITCH;TC7WB125FK,SSOP,8P,2x2.3mm	4	SA	
....4		1205-003733	IC-SWITCH;AP2191MPG-13,MSOP-8L-EP,8P,2.9	1	SA	
....4		1405-001185	VARISTOR;24Vdc,1.6x0.8x0.36mm,TP	1	SA	
....4		1405-001271	VARISTOR;20Vdc,5A,1.0x0.5x0.6mm,TP	31	SA	

5. Exploded View & Part List

Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	J914	2007-000029	R-CHIP;0ohm,5%,1/8W,TP,2012	1	SC	
....4	KAR21	2007-000070	R-CHIP;0ohm,5%,1/10W,TP,1608	1	SA	
....4	PR6	2007-000072	R-CHIP;47ohm,5%,1/10W,TP,1608	4	SNA	
....4	R105	2007-000138	R-CHIP;100ohm,5%,1/16W,TP,1005	30	SA	
....4	HDR7	2007-000139	R-CHIP;220ohm,5%,1/16W,TP,1005	3	SNA	
....4	AR49	2007-000140	R-CHIP;1Kohm,5%,1/16W,TP,1005	8	SNA	
....4	MR306	2007-000141	R-CHIP;2.2Kohm,5%,1/16W,TP,1005	14	SNA	
....4	R319	2007-000143	R-CHIP;4.7Kohm,5%,1/16W,TP,1005	50	SNA	
....4		2007-000146	R-CHIP;6.8Kohm,5%,1/16W,TP,1005	2	SNA	
....4	R104	2007-000148	R-CHIP;10Kohm,5%,1/16W,TP,1005	45	SA	
....4	R102	2007-000149	R-CHIP;12Kohm,5%,1/16W,TP,1005	8	SA	
....4	HDR2	2007-000151	R-CHIP;15Kohm,5%,1/16W,TP,1005	1	SNA	
....4	MR36	2007-000153	R-CHIP;22Kohm,5%,1/16W,TP,1005	8	SNA	
....4	AR43	2007-000155	R-CHIP;27Kohm,5%,1/16W,TP,1005	3	SNA	
....4	MR13	2007-000157	R-CHIP;47Kohm,5%,1/16W,TP,1005	6	SNA	
....4	R123	2007-000159	R-CHIP;56Kohm,5%,1/16W,TP,1005	2	SNA	
....4	DR39	2007-000162	R-CHIP;100Kohm,5%,1/16W,TP,1005	2	SNA	
....4	MR16	2007-000168	R-CHIP;470Kohm,5%,1/16W,TP,1005	1	SA	
....4	R509	2007-000170	R-CHIP;1Mohm,5%,1/16W,TP,1005	1	SNA	
....4	R111	2007-000171	R-CHIP;0ohm,5%,1/16W,TP,1005	6	SNA	
....4	HDR17	2007-000172	R-CHIP;10ohm,5%,1/16W,TP,1005	11	SNA	
....4	R338	2007-000173	R-CHIP;22ohm,5%,1/16W,TP,1005	11	SNA	
....4	UR23	2007-000174	R-CHIP;47ohm,5%,1/16W,TP,1005	4	SNA	
....4	R726	2007-000695	R-CHIP;3.3ohm,5%,1/10W,TP,1608	3	SNA	
....4	R124	2007-000775	R-CHIP;33Kohm,5%,1/16W,TP,1005	1	SNA	
....4	HR3	2007-000903	R-CHIP;430ohm,1%,1/10W,TP,1608	1	SNA	
....4	DR37	2007-000932	R-CHIP;470ohm,5%,1/16W,TP,1005	2	SNA	
....4		2007-001285	R-CHIP;5.6ohm,5%,1/16W,TP,1005	2	SA	
....4	OTR1	2007-001292	R-CHIP;33ohm,5%,1/16W,TP,1005	3	SNA	
....4	DR43	2007-001298	R-CHIP;51ohm,5%,1/16W,TP,1005	1	SNA	
....4		2007-001317	R-CHIP;910ohm,5%,1/16W,TP,1005	1	SNA	
....4	R326	2007-001325	R-CHIP;3.3Kohm,5%,1/16W,TP,1005	12	SNA	
....4		2007-002768	R-CHIP;6.2Kohm,1%,1/10W,TP,1608	1	SA	
....4	MR316	2007-002796	R-CHIP;510ohm,5%,1/16W,TP,1005	1	SA	
....4	PR24	2007-002970	R-CHIP;56ohm,5%,1/16W,TP,1005	1	SA	
....4		2007-007134	R-CHIP;39Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-007135	R-CHIP;18Kohm,1%,1/16W,TP,1005	1	SNA	
....4	DR4	2007-007142	R-CHIP;10Kohm,1%,1/16W,TP,1005	3	SNA	
....4		2007-007156	R-CHIP;1ohm,5%,1/16W,TP,1005	13	SNA	
....4		2007-007312	R-CHIP;20Kohm,1%,1/16W,TP,1005	2	SA	
....4		2007-007316	R-CHIP;3.3Kohm,1%,1/16W,TP,1005	1	SNA	
....4		2007-007317	R-CHIP;2.2Kohm,1%,1/16W,TP,1005	1	SA	
....4		2007-007318	R-CHIP;1Kohm,1%,1/16W,TP,1005	8	SNA	
....4		2007-007334	R-CHIP;200Kohm,1%,1/16W,TP,1005	3	SNA	
....4	MR11	2007-008015	R-CHIP;75ohm,1%,1/16W,TP,1005	20	SNA	
....4		2007-008134	R-CHIP;12.4Kohm,1%,1/16W,TP,1005	1	SC	
....4		2007-008275	R-CHIP;30Kohm,1%,1/16W,TP,1005	1	SNA	
....4		2007-008563	R-CHIP;270ohm,1%,1/16W,TP,1005	1	SA	
....4		2007-008593	R-CHIP;750ohm,1%,1/16W,TP,1005	1	SA	
....4	DAR09	2011-001262	R-NETWORK;22ohm,5%,1/16W,L,CHIP,8P,TP,2.	10	SA	
....4		2011-001449	R-NETWORK;22ohm,5%,1/16W,L,4P,TP,1010	5	SA	

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Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	DRP9	2011-001474	R-NETWORK;47ohm,5%,1/16W,L,CHIP,8P,TP,2.	1	SA	
....4		2011-001519	R-NETWORK;33OHM,5%,1/16W,L,CHIP,4P,TP,1.	4	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		2011-001589	R-NETWORK;0ohm,5%,1/16W,L,CHIP-V,4P,TP,1	12	SNA	
....4	AC1	2203-000125	C-CER,CHIP;1.2nF,10%,50V,X7R,TP,1608,-	1	SA	
....4	DC30	2203-000138	C-CER,CHIP;1.5nF,10%,50V,X7R,TP,1005,-	2	SA	
....4	PC43	2203-000233	C-CER,CHIP;0.1nF,5%,50V,C0G,TP,1005	3	SA	
....4	MC302	2203-000425	C-CER,CHIP;.018nF,5%,50V,C0G,TP,1005	4	SA	
....4	C254	2203-000438	C-CER,CHIP;1nF,10%,50V,X7R,TP,1005	13	SA	
....4	AC139	2203-000491	C-CER,CHIP;2.2nF,10%,50V,X7R,1608	2	SA	
....4	V1233	2203-000575	C-CER,CHIP;220nF,10%,25V,X7R,TP,2012	7	SNA	
....4	MC9	2203-000627	C-CER,CHIP;.022nF,5%,50V,C0G,TP,1005	2	SNA	
....4	DC374	2203-000659	C-CER,CHIP;0.27nF,5%,50V,C0G,1608	1	SA	
....4	AD480	2203-000679	C-CER,CHIP;0.027nF,5%,50V,C0G,1005	1	SNA	
....4	ZC35	2203-000681	C-CER,CHIP;.027nF,5%,50V,C0G,1608	2	SA	
....4	DC25	2203-000812	C-CER,CHIP;.033nF,5%,50V,C0G,TP,1005	10	SA	
....4	CK40B	2203-000838	C-CER,CHIP;0.39nF,5%,50V,C0G,TP,1608	3	SNA	
....4	KFC6	2203-000872	C-CER,CHIP;0.0030nF,0.25pF,50V,C0G,1608	2	SNA	
....4	HDC5	2203-001072	C-CER,CHIP;0.056nF,5%,50V,NP0,1005	4	SA	
....4	C101	2203-001124	C-CER,CHIP;0.68nF,10%,50V,X7R,TP,1005	2	SA	
....4	AD480	2203-001428	C-CER,CHIP;470nF,10%,50V,X7R,TP,2012	2	SNA	
....4	AD480	2203-002285	C-CER,CHIP;10nF,10%,50V,X7R,1005	20	SNA	
....4	AD480	2203-002525	C-CER,CHIP;0.56nF,10%,50V,X7R,TP,1005	8	SNA	
....4	C711	2203-002982	C-CER,CHIP;6.8nF,10%,50V,X7R,1005	1	SA	
....4	AD480	2203-002994	C-CER,CHIP;0.068nF,5%,50V,CH,BK,1005	2	SNA	
....4	AAC1	2203-005249	C-CER,CHIP;100nF,10%,50V,X7R,TP,1608	9	SNA	
....4	DC9	2203-005481	C-CER,CHIP;47nF,10%,10V,X7R,TP,1005	3	SA	
....4	AD480	2203-005511	C-CER,CHIP;27nF,10%,10V,X7R,TP,1005	1	SA	
....4	AD480	2203-005968	C-CER,CHIP;4.7nF,10%,50V,X7R,TP,1005	2	SNA	
....4	C102	2203-006158	C-CER,CHIP;100nF,10%,16V,X7R,1005	124	SNA	
....4	JC10	2203-006324	C-CER,CHIP;2200nF,10%,10V,X5R,1608	2	SA	
....4	AD480	2203-006336	C-CER,CHIP;10000nF,10%,25V,X5R,3216	23	SA	
....4	C125	2203-006361	C-CER,CHIP;10000nF,10%,10V,X5R,TP,2012	51	SC	
....4	HE4	2203-006474	C-CER,CHIP;22000nF,20%,6.3V,X5R,2012	3	SA	
....4	AD480	2203-006824	C-CER,CHIP;4700nF,10%,10V,X5R,1608	1	SNA	
....4	AD480	2203-006841	C-CER,CHIP;1000nF,10%,16V,X5R,TP,1005	24	SNA	
....4	AD480	2203-006992	C-CER,CHIP;0.33nF,5%,50V,C0G,TP,1005	2	SNA	
....4	C	2402-001326	C-AL,SMD;220uF,20%,16V,LZ,8.3x8.3x6.2mm	1	SA	
....4	T0052	2703-000158	INDUCTOR-SMD;1uH,10%,2012	3	SA	
....4	T0052	2703-000296	INDUCTOR-SMD;680nH,10%,1608	1	SA	
....4	VL6	2703-000398	INDUCTOR-SMD;10uH,10%,3225	6	SA	
....4	T0052	2703-001239	INDUCTOR-SMD;3.3uH,10%,1608	3	SA	
....4	L607	2703-001254	INDUCTOR-SMD;1.8uH,10%,2012	1	SA	
....4	T0052	2703-002268	INDUCTOR-SMD;8.2nH,5%,1005	2	SNA	
....4	T0052	2703-003149	INDUCTOR-SMD;2.2uH,20%,5050	2	SA	
....4	T0052	2703-003150	INDUCTOR-SMD;4.7uH,20%,5050	4	SNA	
....4	T0052	2703-003637	INDUCTOR-SMD;22uH,20%,7070	1	SA	
....4		2703-003890	INDUCTOR-SMD;47uH,10%,3225	1	SA	
....4	X202	2801-003326	CRYSTAL-SMD;24MHz,30ppm,28-ABX,20pF,50oh	1	SA	
....4	X202	2801-003773	CRYSTAL-SMD;12MHz,30ppm,28-AAN,20pF,50oh	1	SA	

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Level	Location No.	Code No.	Description & Specification	Q'ty	SA/SNA	Remark
....4	X202	2801-004004	CRYSTAL-SMD;20.25MHz,20ppm,28-AAN,13pF,2	1	SA	
....4	X202	2801-004775	CRYSTAL-SMD;12MHz,30ppm,16pF,30ohm,TP	1	SNA	
....4	F103	2901-001506	FILTER-EMI SMD;5V,0.13A,0pF,2x1x0.5mm,TP	2	SA	
....4	T0568	3301-001236	BEAD-SMD;60ohm,1608	7	SNA	
....4	T0568	3301-002039	BEAD-SMD;26ohm,1608,TP	38	SA	
....4		3601-001374	FUSE-SURFACE MOUNT;32V,5A,FAST-ACTING,Hi	1	SNA	
....4		3701-001591	CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-S,AU	2	SNA	
....4		3701-001693	CONNECTOR-HDMI;19P,2ROW,FEMALE,SMD-A	1	SA	
....4	AC510	3708-002797	CONNECTOR-FPC/FFC/PIC;51P,0.50mm,SMD,AU,	1	SA	
....4	CON_US	3711-005616	HEADER-BOARD TO CABLE;BOX,10P,1R,2mm,SMD	1	SNA	
....4	HB01A	3711-007336	HEADER-BOARD TO CABLE;B0X,4P,1R,2.5mm,SM	1	SA	
....4		BN41-01352C	PCB MAIN;Hotel EU,Asia Large LC450/457/5	1	SNA	
....4		BN97-04208A	ASSY MICOM-MAIN;N82E,ASIA/CHINA,1107-001	1	SNA	
....5		1107-001818	IC-NAND FLASH;KFG1G16U2C-DIB6,1024Mbit,6	1	SNA	
....4		BN97-04209A	ASSY MICOM-SUB;N82E,ASIA/CHINA,0903-0015	1	SNA	
....5	IC520	0903-001590	IC-MICROCONTROLLER;61P8E-RG480WT,LQFP,48	1	SNA	
....4		0202-001477	SOLDER-CREAM;LST309-M,D20~45um,96.5Sn/3A	4.089	SNA	
...3		0202-001463	SOLDER-WIRE;LFC2-W3.0,-,D3,99.79Sn/0.2Cu	1.14	SNA	
...3		0204-002420	SOLVENT;1M-1000,C3H7OH,96	5.38	SNA	
...3		0204-002607	FLUX;DF-234U,13%,14KG,Gravity 0.82	3.503	SNA	
0.1		BN92-06371D	ASSY BOX;40,LC530,CHINA(HOTEL)	1	SNA	
.2		BH68-00662A	LABEL BOX-00;ALL MODEL,MOJO 90G,60,110,W	1	SNA	
.2		BN69-04631Q	BOX-SET;40LC530,CB,A-01,DW3,YEL,W1195,D1	1	SNA	
0.1		BN92-06524A	ASSY P/MATERIAL;LC530 40	1	SNA	
.2		6902-000061	BAG AIR;LDPE,T0.2,W500,L1000,TRP,370.000	1	SNA	
.2		6902-000379	BAG AIR;LDPE,T0.2,W1000,L1800,TRP,1260.0	1	SNA	
.2		6902-000604	BAG WRAPPING;LDPE,T0.02,W500,L10000,TRP,	8.8	SNA	
.2		6902-000609	BAG ROLL;LDPE,T0.05,W2400,L1000,TRP,30.0	0.03	SNA	
.2		6902-001178	BAG SHEET;HDPE/NITRON,T0.015/T01.0,W400,	1	SNA	
.2	M040	6922-000013	BAND PP;PP,W18,L2300m,TRP,21000g	1.3	SNA	
.2		BH69-00376D	PACKING PALLET-00;COMM,WOOD,1232,1032,12	1	SNA	
.2		BN68-02422B	LABEL-WARNING SHIPPING;ALL MODEL,A/P 100	1	SNA	
.2		BN69-00391P	PAD-ANGLE;OTHER,T4,50,2200,YEL	1	SNA	
.2	T0246	BN69-04353A	CUSHION-01,SET;40LC530-PS,EPS,16.7g/l	1	SNA	
.2		6902-001250	BAG PE;HDPE/NITRON,T0.015/T0.5,W1200,L60	1	SNA	
.2		BN74-00008D	TAPE-OPP MASKING;OPP,T0.05,W75,L800M,CLR	2.7	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

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

1-1-2. Servicing the LCD TV

1. When servicing the LCD 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 LCD TV 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 LCD TV.
2. Inspect all protective devices such as nonmetallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistorcapacitor networks, mechanical insulators, etc.
3. Leakage Current Hot Check (Figure 1-1):

WARNING : 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).

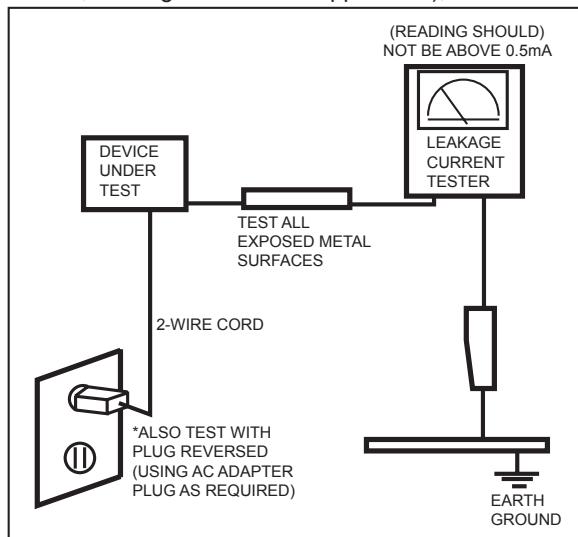


Figure 1-1. Leakage Current Test Circuit

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

WARNING: An electrolytic capacitor installed with the wrong polarity might explode.

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

Note: 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. Electrostatically Sensitive Devices (ESD) 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 LCD TV.
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.
Caution: 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.

Memo

2. Product specifications

2-1. Feature & Specifications

Model	LA22C450E1T	
	Feature	
<ul style="list-style-type: none"> ▶ RF, 1-HDMI, 1-Component, 1-AV, 1-USB2.0, D-SUB, Video Out, Audio Out, Headphone ▶ Brightness : 500 cd/m² ▶ Response Time : 6.5ms 		
	Specifications	
Item	Description	
LCD Panel	22inch HD 50/60Hz	
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)	
Display Colors	16.7M color	
Maximum resolution	Horizontal : 1366 Pixels Vertical : 768 pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Maximum Pixel Clock rate	76MHz	
Active Display Horizontal/Vertical	18.96 x 10.73 inches (481.5(H) x 272.5(V) mm)	
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz	
Power Consumption	Under 55W (Under 0.3W, Stand by)	
Dimensions Set (W x D x H)	21.0 x 6.8 x 15.8 inches (533.2 x 171.9 x 402.5 mm)_with stand 21.0 x 2.4 x 13.9 inches (533.2 x 60.8 x 354.1 mm)_without stand	
Weight	11.46 lbs (5.20kg)_with stand 10.38 lbs (4.71kg)_without stand	
TV System	Tunning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	PAL, SECAM, NT4.43,NT3.58
	Sound	BG, DK, M, I
Environmental Considerations	Operating Temperature : 32°F ~ 122°F (0°C ~ 50°C) Operating Humidity : 10% ~ 90% Storage temperature : -4°F ~ 140°F (-20°C ~ 60°C) Storage Humidity: 10% ~ 90%	
Audio Spec.	<ul style="list-style-type: none"> - MAX Internal Audio Output Power : Each 3W(Left/Right) - Equalizer : 5band - Output Frequency : RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz 	

2. Product specifications

Model	LA26C450E1T			
Feature				
<ul style="list-style-type: none"> ▶ RF, 3-HDMI, 1-Component, 2-AV, 1-USB2.0, D-SUB, Video Out, Audio Out, Headphone ▶ Brightness : 500 cd/m² ▶ Response Time : 6.5ms 				
Specifications				
Item	Description			
LCD Panel	26inch HD 50/60Hz			
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)			
Display Colors	16.7M color			
Maximum resolution	Horizontal : 1366 Pixels Vertical : 768 pixels			
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated			
Input Sync Signal	H/V Separate, TTL, P. or N.			
Maximum Pixel Clock rate	76MHz			
Active Display Horizontal/Vertical	22.67 x 12.74 inches (575.769 (H) x 323.712 (V) mm)			
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz			
Power Consumption	Under 90W (Under 0.3W, Stand by)			
Dimensions Set (W x D x H)	25.5 x 8.8 x 18.7 nchs (646.5 x 222.2 x 475.8 mm)_with stand 25.5 x 3.0 x 17.0 inchs (646.5 x 77.0 x 432.3 mm)_without stand			
Weight	14.66 lbs (6.65kg)_with stand 13.76 lbs (6.24kg)_without stand			
TV System	Tunning	Frequency Synthesize (Refer to detailed Frequency Table)		
	System	PAL, SECAM, NT4.43,NT3.58		
	Sound	BG, DK, M, I		
Environmental Considerations	Operating Temperature : 32°F ~ 122°F (0°C ~ 50°C) Operating Humidity : 10% ~ 90% Storage temperature : -4°F ~ 140°F (-20°C ~ 60°C) Storage Humidity: 10% ~ 90%			
Audio Spec.	<ul style="list-style-type: none"> - MAX Internal Audio Output Power : Each 5W(Left/Right) - Equalizer : 5band - Output Frequency : RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz 			

Model	LA32C450E1T			
Feature				
<ul style="list-style-type: none"> ▶ RF, 3-HDMI, 1-Component, 2-AV, 1-USB2.0, D-SUB, Video Out, Audio Out, Headphone ▶ Brightness : 500cd//m² ▶ Response Time : 6.5 ms 				
Specifications				
Item	Description			
LCD Panel	32inch HD 50/60Hz			
Scanning Frequency	Horizontal : 60 kHz ~ 73 kHz (Automatic) Vertical : 47 Hz ~ 63 Hz (Automatic)			
Display Colors	16.7M color			
Maximum resolution	Horizontal : 1366 Pixels Vertical : 768 pixels			
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated			
Input Sync Signal	H/V Separate, TTL, P. or N.			
Maximum Pixel Clock rate	76MHz			
Active Display Horizontal/Vertical	27.50 x 15.47 inches (698.4 (H) x 392.85 (V) mm)			
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz			
Power Consumption	Under 120W (Under 0.3W, Stand by)			
Dimensions Set (W x D x H)	30.9 x 9.7 x 22.8 inchs (784.4 x 247.2 x 580.0 mm)_with stand 30.9 x 3.0 x 20.2 inchs (784.4 x 76.1 x 514.2 mm)_without stand			
Weight	20.30 lbs (9.21kg)_with stand 18.96 lbs (8.6kg)_without stand			
TV System	Tunning	Frequency Synthesize (Refer to detailed Frequency Table)		
	System	PAL, SECAM, NT4.43,NT3.58		
	Sound	BG, DK, M, I		
Environmental Considerations	Operating Temperature : 32°F ~ 122°F (0°C ~ 50°C) Operating Humidity : 10% ~ 90% Storage temperature : -4°F ~ 140°F (-20°C ~ 60°C) Storage Humidity: 10% ~ 90%			
Audio Spec.	<ul style="list-style-type: none"> - MAX Internal Audio Output Power : Each 10W(Left/Right) - Equalizer : 5band - Output Frequency : RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz 			

2. Product specifications

Model	LA37C530F1T			
Feature				
<ul style="list-style-type: none"> ▶ RF, 3-HDMI, 1-COMPONENT, 2-AV, USB2.0, D-SUB, Video Out, Audio Out ▶ Brightness : 500cd/m² ▶ High Contrast Ratio : 60,000:1 ▶ Response Time : 6.5ms 				
Specifications				
Item	Description			
LCD Panel	T370HW03 VG, AU37H3G, 8bit, 37.0inch, 16.7M, 16:9, 0 to +50, 12V, AMVA3, CCFL, 60Hz			
Scanning Frequency	Horizontal : 30 kHz ~ 80 kHz (Automatic) Vertical : 56 Hz ~ 75 Hz (Automatic)			
Display Colors	16.7 million colors			
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 pixels			
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated			
Input Sync Signal	H/V Separate, TTL, P. or N.			
Maximum Pixel Clock rate	310MHz			
Active Display Horizontal/Vertical	697.685 (H) x 392.256 (V) mm			
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz			
Power Consumption	<110 W (< 1W, stand by)			
Dimensions Set (W x D x H)	901.8 x 240.0 x 613.6 _with stand 901.8 x 76.9 x 561.8 _without stand			
Weight (Set)	14.24kg_with stand 11.34kg_without stand			
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)		
	System	PAL, SECAM, NT4.43,NT3.58		
	Sound	BG, DK, M, I		
Environmental Considerations	Operating Temperature : 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13°F ~ 113°F (-25°C ~ 45°C) Storage Humidity : 5% ~ 95%, non-condensing			
Audio spec.	<ul style="list-style-type: none"> - MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -8 dB ~ + 8dB - TREBLE Control Range : -8 dB ~ +8 dB - Headphone Out : 10 mW MAX - Output Frequency : RF : 80 Hz ~ 15 kHz A/V : 80 Hz ~ 20 kHz 			

Model	LA40C530F1T			
Feature				
<ul style="list-style-type: none"> ▶ RF, 3-HDMI, 1-COMPONENT, 2-AV, USB2.0, D-SUB, Video Out, Audio Out ▶ Brightness : 500cd/m² ▶ High Contrast Ratio : 60,000:1 ▶ Response Time : 6.5ms 				
Specifications				
Item	Description			
LCD Panel	T400HW03 V2, AU40H32, 8bit, 40.0inch, 16.7M, 16:9, 0 to +50, 12V, AMVA3, CCFL, 60Hz			
Scanning Frequency	Horizontal : 30 kHz ~ 80 kHz (Automatic) Vertical : 56 Hz ~ 75 Hz (Automatic)			
Display Colors	16.7 million colors			
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 pixels			
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated			
Input Sync Signal	H/V Separate, TTL, P. or N.			
Maximum Pixel Clock rate	310MHz			
Active Display Horizontal/Vertical	819.6 (H) x 460.8 (V) mm			
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz			
Power Consumption	< 110 W (< 1W, stand by)			
Dimensions Set (W x D x H)	970.0 x 240.0 x 651.7 _with stand 970.0 x 78.6 x 600.1 _without stand			
Weight (Set)	7.3kg _with stand 14.4kg _without stand			
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)		
	System	PAL, SECAM, NT4.43,NT3.58		
	Sound	BG, DK, M, I		
Environmental Considerations	Operating Temperature : 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13°F ~ 113°F (-25°C ~ 45°C) Storage Humidity : 5% ~ 95%, non-condensing			
Audio spec.	<ul style="list-style-type: none"> - MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -8 dB ~ + 8dB - TREBLE Control Range : -8 dB ~ +8 dB - Headphone Out : 10 mW MAX - Output Frequency : RF : 80 Hz ~ 15 kHz A/V : 80 Hz ~ 20 kHz 			

2. Product specifications

Model	LA40C530F1T			
Feature				
<ul style="list-style-type: none"> ▶ RF, 3-HDMI, 1-COMPONENT, 2-AV, USB2.0, D-SUB, Video Out, Audio Out ▶ Brightness : 500cd/m² ▶ High Contrast Ratio : 60,000:1 ▶ Response Time : 6.5ms 				
Specifications				
Item	Description			
LCD Panel	TFT-LCD panel, T400XW01 V7, AU40X17, RGB vertical stripe, 1366 x 768 pixels, 40-Inch viewable, Normally Black, pixel pitch 0.648 x 0.648 mm			
Scanning Frequency	Horizontal : 30 kHz ~ 80 kHz (Automatic) Vertical : 56 Hz ~ 75 Hz (Automatic)			
Display Colors	16.7 million colors			
Maximum resolution	Horizontal : 1920 Pixels Vertical : 1080 pixels			
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω , internally terminated			
Input Sync Signal	H/V Separate, TTL, P. or N.			
Maximum Pixel Clock rate	307MHz			
Active Display Horizontal/Vertical	885.168 (H) x 497.66 (V) mm			
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz			
Power Consumption	< 140 W (< 1W, stand by)			
Dimensions Set (W x D x H)	1102.4 x 260.1 x 733.2 _with stand 1102.4 x 78.7 x 676.3 _without stand			
Weight (Set)	20.64kg_with stand 16.74kg_without stand			
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)		
	System	PAL, SECAM, NT4.43,NT3.58		
	Sound	BG, DK, M, I		
Environmental Considerations	Operating Temperature : 50°F ~ 104°F (10°C ~ 40°C) Operating Humidity : 10% ~ 80%, non-condensing Storage temperature : -13°F ~ 113°F (-25°C ~ 45°C) Storage Humidity : 5% ~ 95%, non-condensing			
Audio spec.	<ul style="list-style-type: none"> - MAX Internal speaker Out : Right => 10W, Left => 10W - BASS Control Range : -8 dB ~ +8dB - TREBLE Control Range : -8 dB ~ +8 dB - Headphone Out : 10 mW MAX - Output Frequency : RF : 80 Hz ~ 15 kHz <p style="text-align: center;">A/V : 80 Hz ~ 20 kHz</p>			

2-2. Specification Comparison to Old Models

※ O : application, X : non-application

● LC450

Model	LC4H(LA**C450E1T)	LB4B(LA**B450B1)
Design		
Display Type	LCD TV	LCD TV
Built-in Tuner	O	O
Resolution	1366 x 768	1366 x 768
LCD Panel	TFT LCD Panel 50/60Hz	TFT LCD Panel 50/60Hz
Screen Size	22"/26"/32"	26"/32"
Picture ratio	16 : 9	16 : 9
Dimensions (W x H x D)	22" 21.0 x 6.8 x 15.8 inches _with stand 26" 25.5 x 8.8 x 17.0 inches _with stand 32" 26.0 x 9.7 x 22.8 inches _with stand	26" 26.0 x 8.5 x 19.4 inches _with stand 32" 31.4 x 9.4 x 22.8 inches _with stand
Weight	22" 5.2 kg _with stand 26" 6.8 kg _with stand 32" 9.6 kg _with stand	26" 6.5kg _with stand 32" 11.4kg _with stand
Brightness	500 cd/m ²	500 cd/m ²
Picture Enhacer	DNIe (SX1)	DNIe (Lola3)
Equalizer	5 Band	5 Band
Auto Volume Control	O	O
Surround Sound	Dolby Digital Plus	SRS TruSurround HD & Dolby Digital
Speaker Output	22" 3W+3W 26" 5W+5W 32" 10W+10W	10W + 10W
PIP	O	O
Entertainment Mode	X	X
Game Mode	O	O
Energy Saving	O	O
Anynet*	O	O
Antenna	1	1

● LC530

Model	LC5F(LA**C530F1)	B530(37/40/46B530)
Design		
Display Type	LCD TV	LCD TV
Built-in Tuner	O	O
Resolution	1920 X 1080	1920 X 1080
LCD Panel	TFT LCD Panel 60Hz	TFT LCD Panel 60Hz
Screen Size	37"/40"/46"	37"/40"/46"
Picture ratio	16 : 9	16 : 9
Dimensions (W x H x D)	37 901.8 x 240.0 x 613.6 mm_with stand	37 916.9 x 299.7 x 650.2 mm_with stand
	40 970.0 x 240.0 x 651.7 mm_with stand	40 998.2 x 259.0 x 685.8 mm_with stand
	46 1102.4 x 260.1 x 733.2 mm_with stand	46 1127.7 x 259.0 x 767.0 mm_with stand
Weight	37 14.24 kg_with stand	37 15.29 kg_with stand
	40 17.30 kg_with stand	40 17.99 kg_with stand
	46 20.64 kg_with stand	46 52.25 lbs_with stand
Brightness	500 cd/m ²	500 cd/m ²
Contrast Ratio	60,000:1	60,000:1
Equalizer	O	O
Speaker Output	10W + 10W	10W + 10W
Antenna	1	1

■ CHANNEL FREQUENCY TABLE

1. OUTPUT FREQUENCY : ANALOG fv:45.75MHz, fs:41.25MHz DIGITAL Fc:44MHz

2. TUNING STEP SIZE : FIRST PLL 250KHz SECOND PLL 62.5KHz

(Unit : MHz)

CH Number	AREA									
	ASIA W/EUROPE	BAND	CIS E/EUROPE	BAND	HONG KONG U/K	BAND	NZ/ INDONESIA	BAND	SOUTH AFRICA	BAND
C00	-	-	-	-	-	-	-	-	-	-
C01	46.25	VHF	49.75	VHF	49.75	VHF	44.25	VHF	-	-
C02	48.25	VHF	59.25	V-L	59.25	V-L	55.25	V-L	-	-
C03	55.25	V-L	77.25	V-L	77.25	V-L	62.25	V-L	-	-
C04	62.25	V-L	85.25	V-L	85.25	V-L	175.25	V-H	175.25	V-H
C05	175.25	V-H	93.25	VHF	93.25	VHF	182.25	V-H	183.25	V-H
C06	182.25	V-H	175.25	V-H	175.25	V-H	189.25	V-H	191.25	V-H
C07	189.25	V-H	183.25	V-H	183.25	V-H	196.25	V-H	199.25	V-H
C08	196.25	V-H	191.25	V-H	191.25	V-H	203.25	V-H	207.25	V-H
C09	203.25	V-H	199.25	V-H	199.25	V-H	210.25	V-H	215.25	V-H
C10	210.25	V-H	207.25	V-H	207.25	V-H	217.25	VHF	223.25	VHF
C11	217.25	VHF	215.25	V-H	215.25	V-H	224.25	VHF	231.25	VHF
C12	224.25	VHF	223.25	VHF	223.25	VHF	45.25	VHF	239.25	VHF
C13	53.75	VHF	53.75	VHF	45.75	VHF	-	-	247.25	VHF
C14	-	-	62.25	V-L	53.75	VHF	-	-	-	-
C15	82.25	V-L	82.25	V-L	61.75	V-L	-	-	-	-
C16	-	-	-	-	-	-	69.75	V-L	-	-
C17	183.75	V-H	183.75	V-H	95.75	VHF	-	-	-	-
C18	192.25	V-H	192.25	V-H	-	-	-	-	-	-
C19	201.25	V-H	-	-	201.25	V-H	-	-	-	-
C20	-	-	210.25	V-H	-	-	-	-	-	-
C21	471.25	UHF	471.25	UHF	471.25	UHF	471.25	UHF	471.25	UHF
C22	479.25	UHF	479.25	UHF	479.25	UHF	479.25	UHF	479.25	UHF
C23	487.25	UHF	487.25	UHF	487.25	UHF	487.25	UHF	487.25	UHF
C24	495.25	UHF	495.25	UHF	495.25	UHF	495.25	UHF	495.25	UHF
C25	503.25	UHF	503.25	UHF	503.25	UHF	503.25	UHF	503.25	UHF
C26	511.25	UHF	511.25	UHF	511.25	UHF	511.25	UHF	511.25	UHF
C27	519.25	UHF	519.25	UHF	519.25	UHF	519.25	UHF	519.25	UHF
C28	527.25	UHF	527.25	UHF	527.25	UHF	527.25	UHF	527.25	UHF
C29	535.25	UHF	535.25	UHF	535.25	UHF	535.25	UHF	535.25	UHF
C30	543.25	UHF	543.25	UHF	543.25	UHF	543.25	UHF	543.25	UHF
C31	551.25	UHF	551.25	UHF	551.25	UHF	551.25	UHF	551.25	UHF
C32	559.25	UHF	559.25	UHF	559.25	UHF	559.25	UHF	559.25	UHF
C33	567.25	UHF	567.25	UHF	567.25	UHF	567.25	UHF	567.25	UHF
C34	575.25	UHF	575.25	UHF	575.25	UHF	575.25	UHF	575.25	UHF
C35	583.25	UHF	583.25	UHF	583.25	UHF	583.25	UHF	583.25	UHF
C36	591.25	UHF	591.25	UHF	591.25	UHF	591.25	UHF	591.25	UHF
C37	599.25	UHF	599.25	UHF	599.25	UHF	599.25	UHF	599.25	UHF
C38	607.25	UHF	607.25	UHF	607.25	UHF	607.25	UHF	607.25	UHF
C39	615.25	UHF	615.25	UHF	615.25	UHF	615.25	UHF	615.25	UHF
C40	623.25	UHF	623.25	UHF	623.25	UHF	623.25	UHF	623.25	UHF
C41	631.25	UHF	631.25	UHF	631.25	UHF	631.25	UHF	631.25	UHF
C42	639.25	UHF	639.25	UHF	639.25	UHF	639.25	UHF	639.25	UHF
C43	647.25	UHF	647.25	UHF	647.25	UHF	647.25	UHF	647.25	UHF
C44	655.25	UHF	655.25	UHF	655.25	UHF	655.25	UHF	655.25	UHF
C45	663.25	UHF	663.25	UHF	663.25	UHF	663.25	UHF	663.25	UHF
C46	671.25	UHF	671.25	UHF	671.25	UHF	671.25	UHF	671.25	UHF
C47	679.25	UHF	679.25	UHF	679.25	UHF	679.25	UHF	679.25	UHF
C48	687.25	UHF	687.25	UHF	687.25	UHF	687.25	UHF	687.25	UHF
C49	695.25	UHF	695.25	UHF	695.25	UHF	695.25	UHF	695.25	UHF
C50	703.25	UHF	703.25	UHF	703.25	UHF	703.25	UHF	703.25	UHF
C51	711.25	UHF	711.25	UHF	711.25	UHF	711.25	UHF	711.25	UHF
C52	719.25	UHF	719.25	UHF	719.25	UHF	719.25	UHF	719.25	UHF
C53	727.25	UHF	727.25	UHF	727.25	UHF	727.25	UHF	727.25	UHF
C54	735.25	UHF	735.25	UHF	735.25	UHF	735.25	UHF	735.25	UHF
C55	743.25	UHF	743.25	UHF	743.25	UHF	743.25	UHF	743.25	UHF
C56	751.25	UHF	751.25	UHF	751.25	UHF	751.25	UHF	751.25	UHF
C57	759.25	UHF	759.25	UHF	759.25	UHF	759.25	UHF	759.25	UHF
C58	767.25	UHF	767.25	UHF	767.25	UHF	767.25	UHF	767.25	UHF
C59	775.25	UHF	775.25	UHF	775.25	UHF	775.25	UHF	775.25	UHF
C60	783.25	UHF	783.25	UHF	783.25	UHF	783.25	UHF	783.25	UHF

2. Product specifications

(Unit : MHz)

CH Number	AREA									
	ASIA W/EUROPE	BAND	CIS E/EUROPE	BAND	HONG KONG U/K	BAND	NZ/ INDONESIA	BAND	SOUTH AFRICA	BAND
C61	791.25	UHF	791.25	UHF	791.25	UHF	791.25	UHF	791.25	UHF
C62	799.25	UHF	799.25	UHF	799.25	UHF	799.25	UHF	799.25	UHF
C63	807.25	UHF	807.25	UHF	807.25	UHF	807.25	UHF	807.25	UHF
C64	815.25	UHF	815.25	UHF	815.25	UHF	815.25	UHF	815.25	UHF
C65	823.25	UHF	823.25	UHF	823.25	UHF	823.25	UHF	823.25	UHF
C66	831.25	UHF	831.25	UHF	831.25	UHF	831.25	UHF	831.25	UHF
C67	839.25	UHF	839.25	UHF	839.25	UHF	839.25	UHF	839.25	UHF
C68	847.25	UHF	847.25	UHF	847.25	UHF	847.25	UHF	847.25	UHF
C69	855.25	UHF	855.25	UHF	855.25	UHF	855.25	UHF	855.25	UHF
C70	-	-	-	-	-	-	53.75	-	53.75	-
C71	-	-	-	-	62.25	VHF	-	-	62.25	VHF
C72	-	-	-	-	82.25	V-L	82.25	V-L	82.25	V-L
C73	-	-	-	-	-	-	-	-	-	-
C74	69.75	V-L	-	-	-	-	183.25	V-H	-	-
C75	76.25	V-L	-	-	192.25	V-H	192.25	V-H	192.25	V-H
C76	83.25	V-L	-	-	201.25	V-H	201.25	V-H	201.25	V-H
C77	90.25	VHF	-	-	210.25	V-H	-	-	210.25	V-H
C78	97.25	VHF	217.25	VHF	217.25	VHF	-	-	217.25	VHF
C79	59.25	V-L	224.25	VHF	224.25	VHF	-	-	224.25	VHF
C80	-	-	93.25	VHF	-	-	-	-	-	-
C81	49.75	VHF	-	-	-	-	49.75	VHF	49.75	VHF
C82	-	-	-	-	-	-	59.25	V-L	59.25	V-L
C83	77.25	V-L	-	-	77.25	V-L	77.25	V-L	77.25	V-L
C84	85.25	V-L	-	-	85.25	V-L	85.25	V-L	85.25	V-L
C85	-	-	-	-	93.25	VHF	93.25	VHF	93.25	VHF
C86	-	-	-	-	-	-	-	-	-	-
C86	183.25	V-H	-	-	-	-	-	-	-	-
C86	191.25	V-H	-	-	-	-	191.25	V-H	-	-
C86	199.25	V-H	-	-	199.25	V-H	199.25	V-H	-	-
C86	207.25	V-H	-	-	207.25	V-H	207.25	V-H	-	-
C86	215.25	VHF	-	-	-	-	215.25	VHF	215.25	VHF
C86	223.25	VHF	-	-	-	-	223.25	VHF	223.25	VHF

(Unit : MHz)

CH Number	AREA					
	AUSTRALIA	BAND	CHINA	BAND	AMERICA	BAND
C00	46.25	VHF	-	-	-	-
C01	57.25	V-L	49.75	VHF	-	-
C02	64.25	V-L	57.75	V-L	55.25	V-L
C03	86.25	V-L	65.75	V-L	61.25	V-L
C04	95.25	VHF	77.25	V-L	67.25	V-L
C05	102.25	VHF	85.25	V-L	77.25	V-L
C06	175.25	V-H	168.25	VHF	83.25	V-L
C07	182.25	V-H	176.25	V-H	175.25	V-H
C08	189.25	V-H	184.25	V-H	181.25	V-H
C09	196.25	V-H	192.25	V-H	187.25	V-H
C10	209.25	V-H	200.25	V-H	193.25	V-H
C11	216.25	VHF	208.25	VHF	199.25	VHF
C12	224.25	VHF	216.25	VHF	205.25	VHF
C13	138.25	V-H	471.25	UHF	211.25	VHF
C14	203.25	V-H	479.25	UHF	471.25	UHF
C15	-	-	487.25	UHF	477.25	UHF
C16	-	-	495.25	UHF	483.25	UHF
C17	-	-	503.25	UHF	489.25	UHF
C18	-	-	511.25	UHF	495.25	UHF
C19	-	-	519.25	UHF	501.25	UHF
C20	-	-	527.25	UHF	507.25	UHF
C21	x	-	535.25	UHF	513.25	UHF
C22	x	-	543.25	UHF	519.25	UHF
C23	x	-	551.25	UHF	525.25	UHF
C24	x	-	559.25	UHF	531.25	UHF
C25	x	-	607.25	UHF	537.25	UHF
C26	x	-	615.25	UHF	543.25	UHF
C27	x	-	623.25	UHF	549.25	UHF
C28	527.25	UHF	631.25	UHF	555.25	UHF
C29	534.25	UHF	639.25	UHF	561.25	UHF
C30	541.25	UHF	647.25	UHF	567.25	UHF
C31	548.25	UHF	655.25	UHF	573.25	UHF
C32	555.25	UHF	663.25	UHF	579.25	UHF
C33	562.25	UHF	671.25	UHF	585.25	UHF
C34	569.25	UHF	679.25	UHF	591.25	UHF
C35	576.25	UHF	687.25	UHF	597.25	UHF
C36	583.25	UHF	695.25	UHF	603.25	UHF
C37	590.25	UHF	703.25	UHF	609.25	UHF
C38	597.25	UHF	711.25	UHF	615.25	UHF
C39	604.25	UHF	719.25	UHF	621.25	UHF
C40	611.25	UHF	727.25	UHF	627.25	UHF
C41	618.25	UHF	735.25	UHF	633.25	UHF
C42	625.25	UHF	743.25	UHF	639.25	UHF
C43	632.25	UHF	751.25	UHF	645.25	UHF
C44	639.25	UHF	759.25	UHF	651.25	UHF
C45	646.25	UHF	767.25	UHF	657.25	UHF
C46	653.25	UHF	775.25	UHF	663.25	UHF
C47	660.25	UHF	783.25	UHF	669.25	UHF
C48	667.25	UHF	791.25	UHF	675.25	UHF
C49	674.25	UHF	799.25	UHF	681.25	UHF
C50	681.25	UHF	807.25	UHF	687.25	UHF
C51	688.25	UHF	815.25	UHF	693.25	UHF

2. Product specifications

(Unit : MHz)

CH Number	AREA					
	AUSTRALIA	BAND	CHINA	BAND	AMERICA	BAND
C52	695.25	UHF	823.25	UHF	699.25	UHF
C53	702.25	UHF	831.25	UHF	705.25	UHF
C54	709.25	UHF	839.25	UHF	711.25	UHF
C55	716.25	UHF	847.25	UHF	717.25	UHF
C56	723.25	UHF	855.25	UHF	723.25	UHF
C57	730.25	UHF	863.25	UHF	729.25	UHF
C58	737.25	UHF	-	-	735.25	UHF
C59	744.25	UHF	-	-	741.25	UHF
C60	751.25	UHF	-	-	747.25	UHF
C61	758.25	UHF	-	-	753.25	UHF
C62	765.25	UHF	-	-	759.25	UHF
C63	772.25	UHF	-	-	765.25	UHF
C64	779.25	UHF	-	-	771.25	UHF
C65	786.25	UHF	567.25	UHF	777.25	UHF
C66	793.25	UHF	575.25	UHF	783.25	UHF
C67	800.25	UHF	583.25	UHF	789.25	UHF
C68	807.25	UHF	591.25	UHF	795.25	UHF
C69	814.25	UHF	599.25	UHF	801.25	UHF
C70	53.75	-	-	-	807.25	UHF
C71	62.25	VHF	-	-	813.25	UHF
C72	82.25	V-L	-	-	819.25	UHF
C73	-	-	-	-	825.25	UHF
C74	183.25	-	-	-	831.25	UHF
C75	192.25	V-H	-	-	837.25	UHF
C76	201.25	V-H	-	-	843.25	UHF
C77	-	V-H	-	-	849.25	UHF
C78	-	VHF	-	-	855.25	UHF
C79	-	VHF	-	-	861.25	UHF
C80	-	-	-	-	867.25	UHF
C81	49.75	VHF	-	-	873.25	UHF
C82	59.25	V-L	-	-	879.25	UHF
C83	77.25	V-L	-	-	885.25	UHF
C84	85.25	V-L	-	-	-	-
C85	93.25	VHF	-	-	-	-
C86	-	-	-	-	-	-
C86	-	-	-	-	-	-
C86	191.25	-	-	-	-	-
C86	199.25	-	-	-	-	-
C86	207.25	-	-	-	-	-
C86	215.25	VHF	-	-	-	-
C86	223.25	VHF	-	-	-	-

Cable CHANNEL

(Unit : MHz)

CH Number	AREA									
	ASIA W/EUROPE	BAND	CIS E/EUROPE	BAND	HONG KONG U/K	BAND	NZ/ INDONESIA	BAND	SOUTH AFRICA	BAND
S01	105.25	VHF	103.25	VHF	103.25	VHF	105.25	VHF	105.25	VHF
S02	112.25	VHF	111.25	VHF	111.25	VHF	112.25	VHF	112.25	VHF
S03	119.25	VHF	119.25	VHF	119.25	VHF	119.25	VHF	119.25	VHF
S04	126.25	VHF	127.25	VHF	127.25	VHF	126.25	VHF	126.25	VHF
S05	133.25	VHF	135.25	VHF	135.25	VHF	133.25	VHF	133.25	VHF
S06	140.25	VHF	143.25	VHF	143.25	VHF	140.25	VHF	140.25	VHF
S07	147.25	VHF	151.25	VHF	151.25	VHF	147.25	VHF	147.25	VHF
S08	154.25	VHF	159.25	VHF	159.25	VHF	154.25	VHF	154.25	VHF
S09	161.25	VHF	167.25	VHF	167.25	VHF	161.25	VHF	161.25	VHF
S10	168.25	VHF	231.25	VHF	231.25	VHF	168.25	VHF	168.25	VHF
S11	231.25	VHF	239.25	VHF	239.25	VHF	231.25	VHF	231.25	VHF
S12	238.25	VHF	247.25	VHF	247.25	VHF	238.25	VHF	238.25	VHF
S13	245.25	VHF	253.25	VHF	253.25	VHF	245.25	VHF	245.25	VHF
S14	252.25	VHF	263.25	VHF	263.25	VHF	252.25	VHF	252.25	VHF
S15	259.25	VHF	271.25	VHF	271.25	VHF	259.25	VHF	259.25	VHF
S16	266.25	VHF	279.25	VHF	279.25	VHF	266.25	VHF	266.25	VHF
S17	273.25	VHF	287.25	VHF	287.25	VHF	273.25	VHF	273.25	VHF
S18	280.25	VHF	295.25	VHF	295.25	VHF	280.25	VHF	280.25	VHF
S19	287.25	VHF	303.25	UHF	303.25	UHF	287.25	VHF	287.25	VHF
S20	294.25	VHF	-	-	-	-	294.25	VHF	294.25	VHF
S21	303.25	UHF	-	-	-	-	303.25	UHF	303.25	UHF
S22	311.25	UHF	311.25	UHF	311.25	UHF	311.25	UHF	311.25	UHF
S23	319.25	UHF	319.25	UHF	319.25	UHF	319.25	UHF	319.25	UHF
S24	327.25	UHF	327.25	UHF	327.25	UHF	327.25	UHF	327.25	UHF
S25	335.25	UHF	335.25	UHF	335.25	UHF	335.25	UHF	335.25	UHF
S26	343.25	UHF	343.25	UHF	343.25	UHF	343.25	UHF	343.25	UHF
S27	351.25	UHF	351.25	UHF	351.25	UHF	351.25	UHF	351.25	UHF
S28	359.25	UHF	359.25	UHF	359.25	UHF	359.25	UHF	359.25	UHF
S29	367.25	UHF	367.25	UHF	367.25	UHF	367.25	UHF	367.25	UHF
S30	375.25	UHF	375.25	UHF	375.25	UHF	375.25	UHF	375.25	UHF
S31	383.25	UHF	383.25	UHF	383.25	UHF	383.25	UHF	383.25	UHF
S32	391.25	UHF	391.25	UHF	391.25	UHF	391.25	UHF	391.25	UHF
S33	399.25	UHF	399.25	UHF	399.25	UHF	399.25	UHF	399.25	UHF
S34	407.25	UHF	407.25	UHF	407.25	UHF	407.25	UHF	407.25	UHF
S35	415.25	UHF	415.25	UHF	415.25	UHF	415.25	UHF	415.25	UHF
S36	423.25	UHF	423.25	UHF	423.25	UHF	423.25	UHF	423.25	UHF
S37	431.25	UHF	431.25	UHF	431.25	UHF	431.25	UHF	431.25	UHF
S38	439.25	UHF	439.25	UHF	439.25	UHF	439.25	UHF	439.25	UHF
S39	447.25	UHF	447.25	UHF	447.25	UHF	447.25	UHF	447.25	UHF
S40	455.25	UHF	455.25	UHF	455.25	UHF	455.25	UHF	455.25	UHF
S41	463.25	UHF	463.25	UHF	463.25	UHF	463.25	UHF	463.25	UHF

(Unit : MHz)

CH Number	AREA					
	AUSTRALIA	BAND	CHINA	BAND	AMERICA	BAND
S01	105.25	VHF	112.25	VHF	73.25	VHF
S02	112.25	VHF	120.25	VHF	55.25	VHF
S03	119.25	VHF	128.25	VHF	61.25	VHF
S04	126.25	VHF	136.25	VHF	67.25	VHF
S05	133.25	VHF	144.25	VHF	77.25	VHF
S06	140.25	VHF	152.25	VHF	83.25	VHF
S07	147.25	VHF	160.25	VHF	175.25	VHF
S08	154.25	VHF	224.25	VHF	181.25	VHF
S09	161.25	VHF	232.25	VHF	187.25	VHF
S10	168.25	VHF	240.25	VHF	193.25	VHF
S11	231.25	VHF	248.25	VHF	199.25	VHF
S12	238.25	VHF	256.25	VHF	205.25	VHF
S13	245.25	VHF	264.25	VHF	211.25	VHF
S14	252.25	VHF	272.25	VHF	121.25	VHF
S15	259.25	VHF	280.25	VHF	127.25	VHF
S16	266.25	VHF	288.25	VHF	133.25	VHF
S17	273.25	VHF	296.25	VHF	139.25	VHF
S18	280.25	VHF	304.25	UHF	145.25	VHF
S19	287.25	VHF	312.25	UHF	151.25	VHF
S20	294.25	VHF	320.25	UHF	157.25	VHF
S21	303.25	UHF	328.25	UHF	163.25	VHF
S22	311.25	UHF	336.25	UHF	169.25	VHF
S23	319.25	UHF	344.25	UHF	217.25	VHF
S24	327.25	UHF	352.25	UHF	223.25	VHF
S25	335.25	UHF	360.25	UHF	229.25	VHF
S26	343.25	UHF	368.25	UHF	235.25	VHF
S27	351.25	UHF	376.25	UHF	241.25	VHF
S28	359.25	UHF	384.25	UHF	247.25	VHF
S29	367.25	UHF	392.25	UHF	253.25	VHF
S30	375.25	UHF	400.25	UHF	259.25	VHF
S31	383.25	UHF	408.25	UHF	265.25	VHF
S32	391.25	UHF	416.25	UHF	271.25	VHF
S33	399.25	UHF	424.25	UHF	277.25	VHF
S34	407.25	UHF	432.25	UHF	283.25	VHF
S35	415.25	UHF	440.25	UHF	289.25	VHF
S36	423.25	UHF	448.25	UHF	295.25	VHF
S37	431.25	UHF	456.25	UHF	301.25	UHF
S38	439.25	UHF	x	x	307.25	UHF
S39	447.25	UHF	x	x	313.25	UHF
S40	455.25	UHF	x	x	319.25	UHF
S41	463.25	UHF	x	x	325.25	UHF
S42					331.25	UHF
S43					337.25	UHF
S44					343.25	UHF
S45					349.25	UHF
S46					355.25	UHF
S47					361.25	UHF
S48					367.25	UHF
S49					373.25	UHF
S50					379.25	UHF
S51					385.25	UHF
S52					391.25	UHF
S53					397.25	UHF
S54					403.25	UHF
S55					409.25	UHF
S56					415.25	UHF
S57					421.25	UHF
S58					427.25	UHF
S59					433.25	UHF
S60					439.25	UHF
S61					445.25	UHF
S62					451.25	UHF
S63					457.25	UHF
S64					463.25	UHF
S65					469.25	UHF

(Unit : MHz)

CH Number	AREA					
	AUSTRALIA	BAND	CHINA	BAND	AMERICA	BAND
S66					475.25	UHF
S67					481.25	UHF
S68					487.25	UHF
S69					493.25	UHF
S70					499.25	UHF
S71					505.25	UHF
S72					511.25	UHF
S73					517.25	UHF
S74					523.25	UHF
S75					529.25	UHF
S76					535.25	UHF
S77					541.25	UHF
S78					547.25	UHF
S79					553.25	UHF
S80					559.25	UHF
S81					565.25	UHF
S82					571.25	UHF
S83					577.25	UHF
S84					583.25	UHF
S85					589.25	UHF
S86					595.25	UHF
S87					601.25	UHF
S88					607.25	UHF
S99					613.25	UHF
S90					619.25	UHF
S91					625.25	UHF
S92					631.25	UHF
S93					637.25	UHF
S94					643.25	UHF
S95					91.25	VHF
S96					97.25	VHF
S97					103.25	VHF
S98					109.25	VHF
S99					115.25	VHF

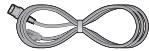
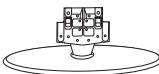
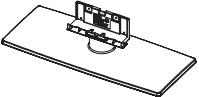
CATV CH mark (A row) : China area : attach 'Z'

besides area : attach 'S'

For example) China : Z10

besides area : S10

2-3. Accessories

Product	Description	Code. No	Remark
	Remote Control & Batteries (AAA x 2)	BN59-01069A	
	Power Cord	3903-000461	
	Stand	LC450 22" BN96-12739A 26" BN96-12869A 32" BN96-12870A	Samsung Electronics Service center
		LC530 37" BN90-02466C 40" BN90-02466C 46" BN90-02467C	
	Screw (for the stand - M4, L6)	6002-001294	
	Owner's Instructions		
	Warranty Card / Registration Card / Safety Guide Manual (Not available in all locations)		

4.故障排除

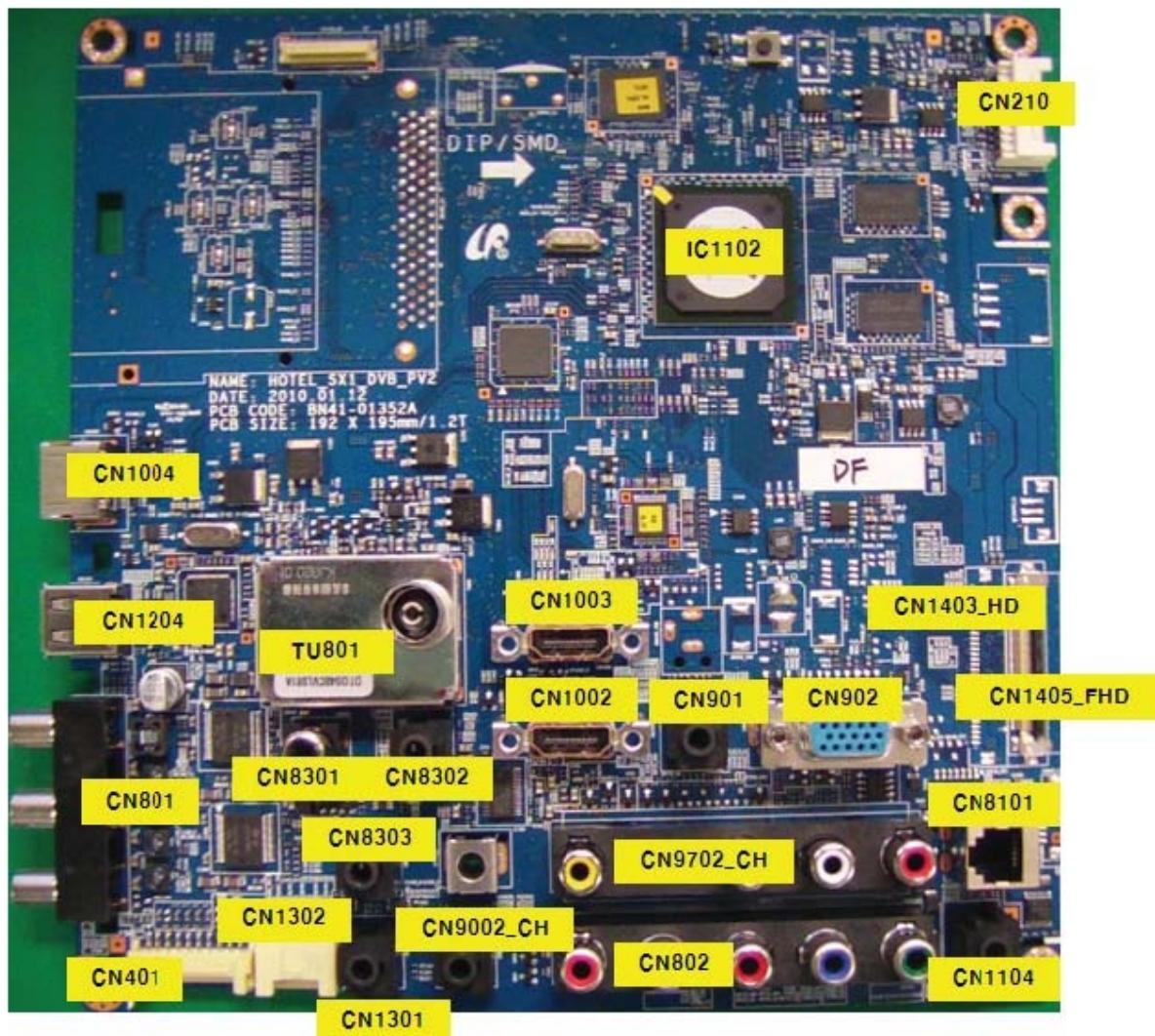
4-1.故障排除

4-1-1.预前检查

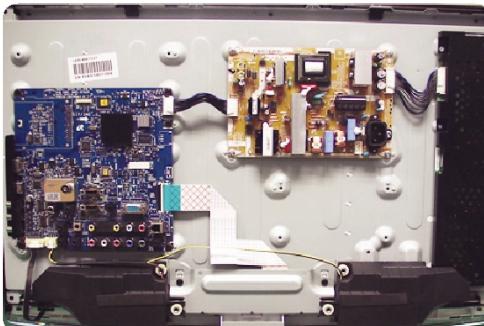
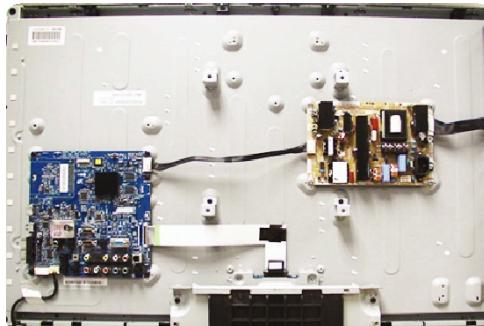
1.首先检查各电缆连接情况。

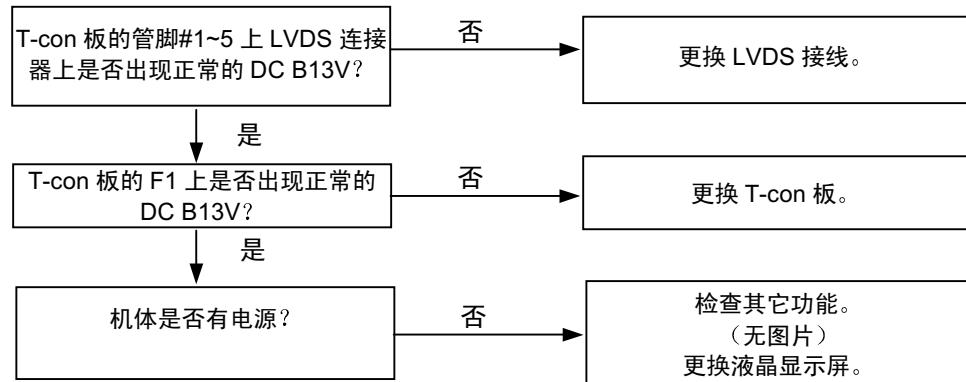
- 检查是否有烧坏或损坏的接线。
- 检查接线是否断开，或连接处太松。
- 检查是否依据连接图连接接线。

2.检查主板的电源输入。



4-1-2.未通电

征兆	<ul style="list-style-type: none"> -当连接电源线时，前面板上的 LED 指示灯未工作。 -当连接电源线时，SMPS 继电器未工作。 -本机似乎损坏。
主要检查点	<p>如果接线连接不当或主板或 SMPS 有故障，当连接电源线时，前面板上的 IP 继电器或 LED 指示灯不工作。在这种情况下，检查下列各项：</p> <ul style="list-style-type: none"> -检查本机内部接线连接状态。 -检查各零件的保险丝。 -检查 SMPS 的输出电压。 -更换主板。
诊断	<div style="display: flex; justify-content: space-around; align-items: center;">  LC450  LC530 </div> <div style="margin-top: 10px;"> <pre> graph TD A[灯（背景灯）关闭，电源指示灯 LED 是否关闭？] -- 否 --> B[更换 18p 电源线。] A -- 是 --> C[灯（背景灯）关闭，电源指示灯 LED 是否开启？] C -- 否 --> D[更换转换器（平衡板）。] C -- 是 --> E[TP-A5V 上是否出现正常的 DC A5V？] E -- 否 --> F[TP-B13V, B5V 上是否出现正常的 DC B13V, B5V？] F -- 否 --> G[更换主板组件] F -- 是 --> H[在 TP-A3.3V 上是否出现正常的 DC A3.3V？] H -- 否 --> I[BD216 (B3.3V) BD233 (DDR B1.8V) 上是否出现 正常的 B3.3V,B1.8V？] I -- 否 --> J[] I -- 是 --> K[] </pre> </div>

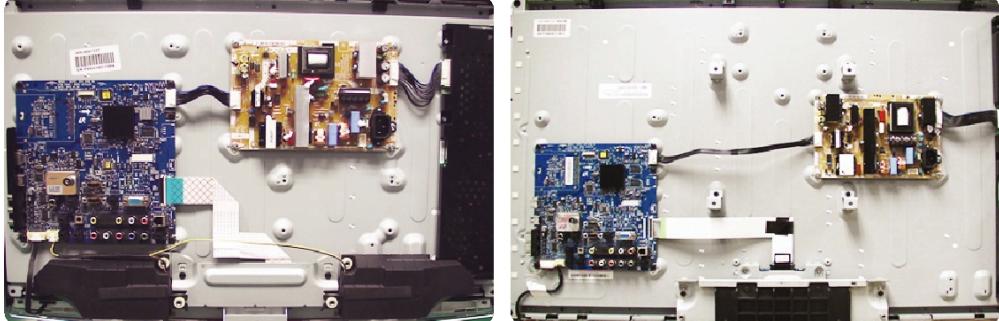


诊断

小心

在 IP 板上工作之前，必须断电。

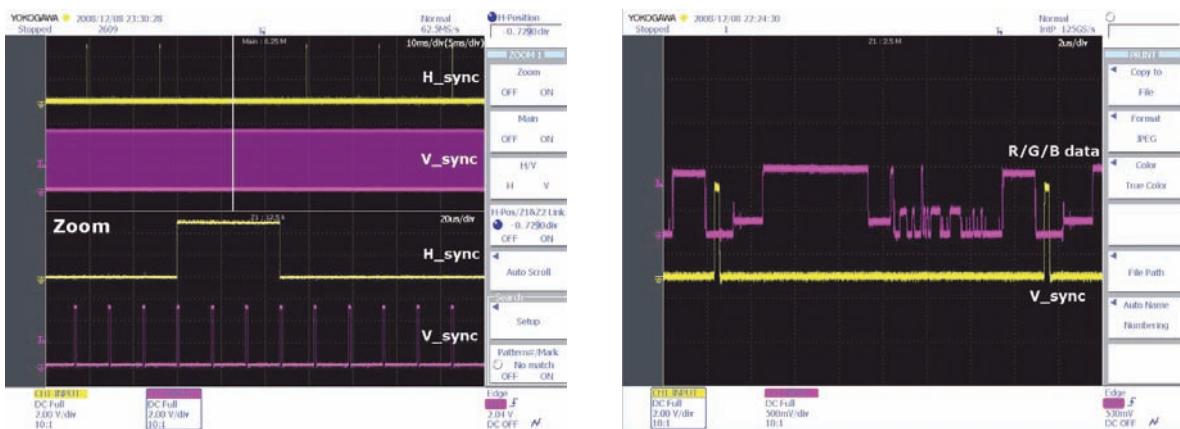
4-1-3.无图像（模拟PC信号）

征兆	-声音正常，但屏幕上未显示画面。
主要检查点	<ul style="list-style-type: none"> -检查 PC 来源 -检查Arsenal, 检查Chelsea -当断开连接主板和面板的 LVDS 接线时，可能出现这种情况。
	 <p style="text-align: center;">LC450 LC530</p>
诊断	<pre> graph TD A["电源指示灯关闭。 灯（背景灯）打开，是否有图像？"] -- 是 --> B["检查 PC 来源，并检查 D-SUB 的连 接情况？"] A -- 否 --> C["在“待机模式”或“DPMS 模式”中 检查机体。"] B -- 是 --> D["TP - PC_R, PC_G, PC_B, PC_HS, PC_VS (R, G, B, H, V) 上是否出现信号？"] B -- 否 --> E["输入模拟 PC 信号正常。"] D -- 是 --> F["① TP - PC_R, PC_G, PC_B, PC_HS, PC_VS (R, G, B, H, V) 上是否出现信号？"] D -- 否 --> G["检查 CN902、PC 接线。 更换主板组件。"] F -- 是 --> H["② TP-E_TXCLK+, E_TXCLK-、 O_TXCLK+, O_TXCLK- 是否出现数字数据？"] F -- 否 --> G H -- 是 --> I["检查LVDS接线？ 检查T-con板？ 更换液晶显示屏？"] H -- 否 --> J["检查IC1102 (SX1) 更换主板组件。"] I -- 否 --> K["请与技术支持部联系。"] </pre>
小心	在 IP 板上工作之前，必须断电。

■ 波形

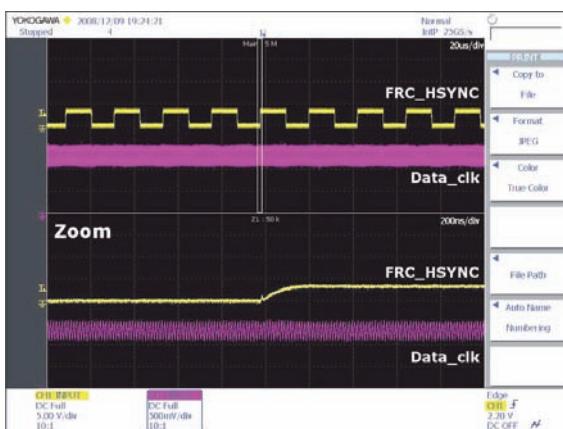
①

PC输入信号(V-sink , H-sink , R/G/B)



②

LVDS 输出信号



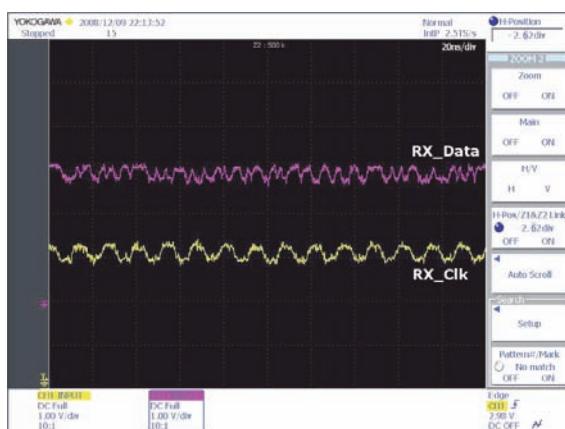
4-1-4. 没有图像 (HDMI1,2,3-数字信号)

征兆	-声音正常，但屏幕上未显示画面。
主要检查点	<ul style="list-style-type: none"> -检查 HDMI 来源 -检查HDMI 切换器，检查Chelsea -当断开连接主板和面板的 LVDS 接线时，可能出现这种情况。
诊断	 <p>LC450 LC530</p> <pre> graph TD A["电源指示灯关闭。 灯（背景灯）打开，是否有图像？"] -- 否 --> B["在“待机模式”下检查机体。"] A -- 是 --> C["检查 HDMI 来源，并检查 HDMI 接线 的连接情况？"] C -- 否 --> D["输入 HDMI 信号正常。"] C -- 是 --> E["③ CN1002 (管脚#12, #7) (HDMI1) CN1003(管脚#12, #7) (HDMI2) CN1004 (管脚#12, #7) (HDMI3) (HDMI RX_Clk , RX_Data)上 是否出现信号？"] E -- 否 --> F["检查 CN1002、CN1003、CN1004。 检查 HDMI 接线。更换主板组件。"] E -- 是 --> G["② TP-E_TXCLK+、E_TXCLK-、 O_TXCLK+、O_TXCLK- 是否出现数字数据？"] G -- 否 --> H["检查IC1102 (SX1) 更换主板组件。"] G -- 是 --> I["① 检查LVDS接线？ 检查T-con板？ 更换液晶显示屏？"] I -- 否 --> J["请与技术支持部联系。"] I -- 是 --> K["小心 在 IP 板上工作之前，必须断电。"] </pre>
小心	在 IP 板上工作之前，必须断电。

■ 波形

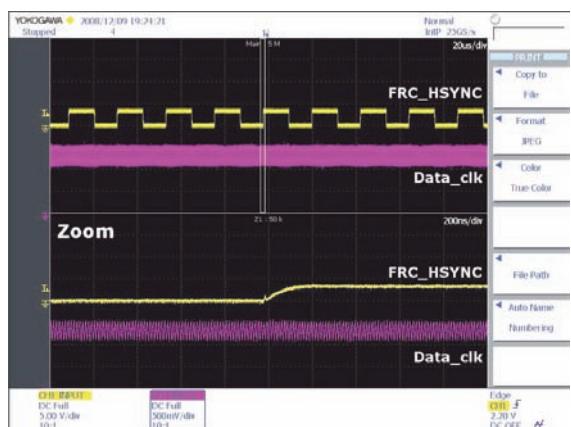
③

HDMI输入信号(RX_Data, RX_Clk)



②

LVDS 输出信号



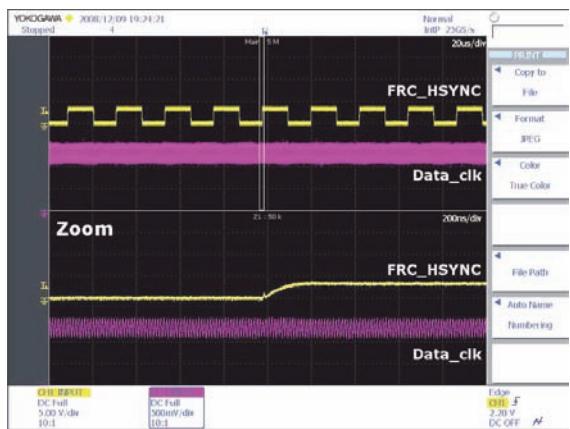
4-1-5. 没有画面 (Tuner_CVBS)

征兆	-声音正常，但屏幕上未显示画面。
主要检查点	<ul style="list-style-type: none"> -检查 Tuner CVBS 来源 -检查Tuner, 检查Chelsea -当断开连接主板和面板的 LVDS 接线时, 可能出现这种情况。
诊断	 <p>LC450 LC530</p> <pre> graph TD A["电源指示灯关闭。 灯（背景灯）打开，是否有图像？"] -- 否 --> B["在“待机模式”下检查机体。"] A -- 是 --> C["检查 RF 来源，并检查 RF 接线的连接情况？"] C -- 否 --> D["输入 RF 信号正常。"] C -- 是 --> E["Tuner 的管脚#3、#5 上是否出现 DC B5V_TU_PW, TU33V_PW？"] E -- 否 --> F["更换主板组件。"] E -- 是 --> G["TP-E_TXCLK+、E_TXCLK-、 O_TXCLK+、O_TXCLK- 是否出现数字数据？"] G -- 否 --> H["检查IC1102 (SX1) 更换主板组件。"] G -- 是 --> I["检查LVDS接线？ 检查T-con板？ 更换液晶显示屏？"] I -- 否 --> J["请与技术支持部联系。"] </pre> <p>②</p>
小心	在 IP 板上工作之前, 必须断电。

■ 波形

②

LVDS 输出信号



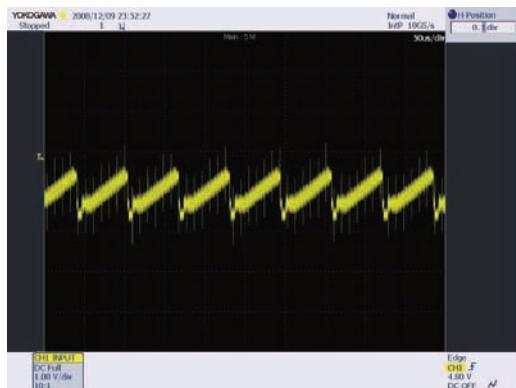
4-1-6.没有画面 (Video CVBS)

征兆	-声音正常，但屏幕上未显示画面。
主要检查点	<ul style="list-style-type: none"> -检查图像来源 -检查Chelsea -当断开连接主板和面板的 LVDS 接线时，可能出现这种情况。
诊断	 <p>LC450 LC530</p> <pre> graph TD A["电源指示灯关闭。 灯（背景灯）打开，是否有图像？"] -- 否 --> B["在“待机模式”下检查机体。"] A -- 是 --> C["检查图像来源，并检查图像接线的连接情况？"] C -- 否 --> D["输入图像来源的信号正常。"] C -- 是 --> E["④ TP-SC_CVBS_IN AV_CVBS 上是否出现CVBS数据？"] E -- 否 --> F["检查CN9702_CH, CN802 更换主板组件。"] E -- 是 --> G["② TP-E_TXCLK+、E_TXCLK-、 O_TXCLK+、O_TXCLK- 是否出现数字数据？"] G -- 否 --> H["检查IC1102 (SX1) 更换主板组件。"] G -- 是 --> I["检查LVDS接线？ 检查T-con板？ 更换液晶显示屏？"] I -- 否 --> J["请与技术支持部联系。"] I -- 是 --> J </pre>
小心	在 IP 板上工作之前，必须断电。

■ 波形

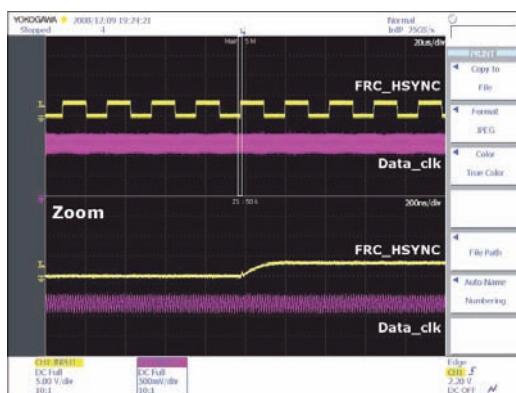
④

CVBS输出信号(Grey Bar)



②

LVDS输出信号



4-1-7.没有画面（分量）

征兆	-声音正常，但屏幕上未显示画面。
主要检查点	<ul style="list-style-type: none"> -检查分量来源 -检查Chelsea -当断开连接主板和面板的 LVDS 接线时，可能出现这种情况。
	 <p style="text-align: center;">LC450 LC530</p>
诊断	<pre> 电源指示灯关闭。 灯（背景灯）打开，是否有图像？ → 否 → 在“待机模式”下检查机体。 ↓ 是 检查分量来源，并检查分量接线 (Y,Pb,Pr)的连接情况？ → 否 → 输入图像来源的信号正常。 ↓ 是 ④ TP - COMP1_Y, COMP1_PB, COMP1_PR(Comp / Y, Pb, Pr) 上是否出现分量数据？ → 否 → 检查CN802 更换主板组件。 ↓ 是 ② TP-E_TXCLK+、E_TXCLK-、 O_TXCLK+、O_TXCLK- 是否出现数字数据？ → 否 → 检查IC1102 (SX1) 更换主板组件。 ↓ 是 检查LVDS接线？ 检查T-con板？ 更换液晶显示屏？ → 否 → 请与技术支持部联系。 </pre>
小心	在 IP 板上工作之前，必须断电。

■ 波形

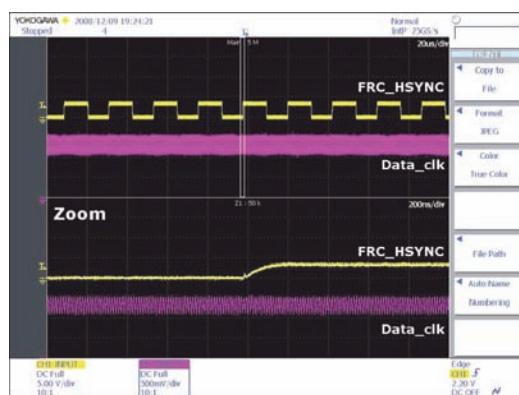
⑤

Compnet_Y (灰度色标) / Pb / Pr (色彩条)

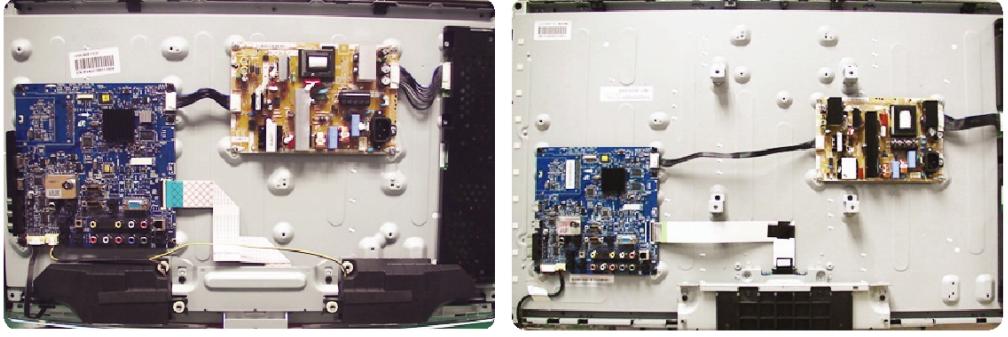


②

LVDS 输出信号



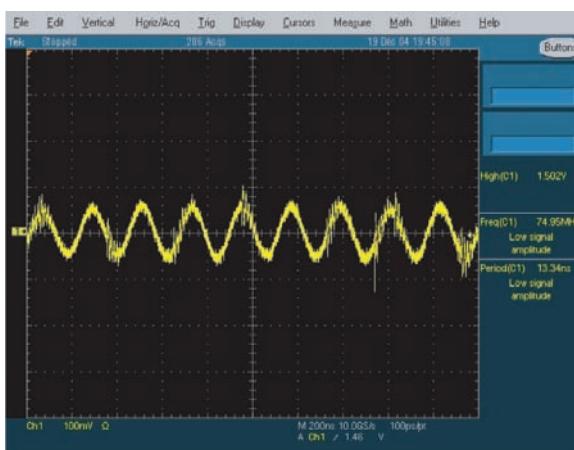
4-1-9.没有声音

征兆	-声音正常，但屏幕上未显示画面。
主要检查点	<ul style="list-style-type: none"> -当扬声器连接器被断开或损坏。 -当主板的声音处理部分不能运作。 -扬声器故障。
	 <p>LC450 LC530</p>
诊断	<pre> graph TD A["检查来源并检查声音接线的连接器 情况是否正常(Comp/PC/DVI 到 HDMI)?"] -- 否 --> B["在“待机模式”下检查机体。"] A -- 是 --> C["检查分量来源并检查分量接线的 连接 (Y,Pb,Pr)?"] C -- 否 --> D["输入图像来源正常。"] C -- 是 --> E["TP - COMP1_SL, COMP1_SR (COMP1) TP - COMP2_SL, COMP2_SR (Comp2) TP - PC_SL_IN, PC_SR_IN(PC/DVI) 中是否出现声音数据?"] E -- 否 --> F["检查CN802、CN9702_CH、 CN801、CN901。 更换主板组件。"] E -- 是 --> G["TP - B3.3V、B12V上是否出现 DC B3.3V、B12V?"] G -- 否 --> H["更换主板组件。"] G -- 是 --> I["- L-, L+, R-, R+上是否出现声音 数据?"] I -- 否 --> J["检查 IC1102(SX1), 检查 IC1301 (声音放大器)。更换主板组件。"] I -- 是 --> K["更换扬声器组件?"] K -- 否 --> L["请与技术支持部联系。"] </pre> <p>⑦</p>
小心	在 IP 板上工作之前，必须断电。

■ 波形

⑦

扬声器输出信号



4-2. 调整和调节

4-2-1一般维修说明

1. 通常，彩色液晶电视只需在安装时稍加调节。检查基本特性，如高度、水平和竖直同步。
2. 使用规定的测试设备或等效品。
3. 需要正确的匹配阻抗。
4. 避免过载。扫描振荡器发出的过多信号可能使电视的前端过载。当插入标志信号时，不可使标志信号发生器干扰测试结果。
5. 只可把电视连接到具有后盖铭牌上标定的电压和频率的交流电源上。
6. 当电视机处于开机状态时，不可试图连接或断开接线。必须保证在更换任何零件时拔下电源线。
7. 为了防止电击危险，应使用隔离变压器。

4-3.工厂模式调节

4-3-1进入工厂模式

如欲进入“Service Mode”，可按下列顺序按下遥控键：

-如果没有工厂遥控器



4-3-2 如何进入维修模式

使用客户遥控

1. 关机并设置为待机模式。
2. 按此顺序按下遥控按钮开机。
3. 开机并进入到维修模式，这可能需要耗费大约20秒的时间。
4. 按下电源按钮退出并存储数据到存储器中。
 - 如果进入维修模式失败，重复上述步骤1和步骤2。
5. 初始化“维修模式显示”状态

Option
Control
SVC
Expert
ADC/WB
Advanced
T-TDT5HAAC-XXX T-TDT5HAAC-XXX EDID SUCCESS CALIB : AV X COM X PC X HDMI X Option : XXXX XXXX XXXX X SDAL-XXX RFS : 0130 T-TDT5HAAC 20XX-XX-XX TYPE : XX MODEL : XXXXX MAC FAIL FACTORY DATA VER : XXX EERC VERSION : XXX DTP-AP-COMP- XXX DTP-HIIG-XXX DTP-BP-XXX DATE OF PURCHASE : XX/XX/XX

* 如何进入到隐性工厂模式。

- a. 进入到工厂模式
- b. 移动箭头选择“高级”
- c. 按键输入：0 + 0 + 0 + 0

** 隐藏菜单：图片

6. 在维修模式中的按钮操作

菜单	全部菜单显示/移动到主体菜单
方向键▲/▼	通过移动鼠标选择项目
方向键◀/▶	所选项目增加/减少
来源	通过激活输入源，连接到本机，进行循环。

4-3-3 工厂数据

■ 选项

OPTION	Factory Name	Data	Range
	Factory Reset		
	Type		NONE/19O6TH0C/19A6TH0C/22I6TH0C/22A6TH0C/22D6TH0C/2 2P6TH0C/26A6AH0C/26D6AH0C/26L6AH0C/26P6AH0C/32A6AH 0C32D6AH0C/32L6AH0C32P6AH0C/32A6AF0C/32L6AF0C/32A1 AF0C/32L1AF0C/37L6AF0C/37L1AF0C/40A6AF0C/40D6AF0C/40 L6AF0C/40A1AF0C/40L1AF0C/40A1UF0C/40D1UF0C/40L1UF0C/ 46A6AF0C/46D6AF0C/46L6AF0C/46A1AF0C/46L1AF0C/46A1UF0 C/46D1UF0C/46L1UF0C/55A1UF0C/55L1UF0C/65L1UF0C/19R6T H0E/22D6TH0E/26D6AH0E/32D6AH0E32D6UF0E/32A1UF0E/32D 1UF0E/37L6UF0E/37D1UF0E/37L1UF0E/40D6UF0E/40A1UF0E/4 0D1UF0E/46D6UF0E/46L6UF0E/46A1UF0E/46D1UF0E/46L1UF0 E/55A1UF0E/55D1UF0E/55L1UF0E/65L1UF0E/42HHcD3/50HHcD 450FArN4/50FArV458FArN1/58FArV163FArN1/
	Local Set	...	
	Model	LC450H LC530H	LC350/LC450/LC450H/LC451LC452/LC457HLC459H/LC480/ LC530/LC530H/LC539H/LC540/LC550/LC560/LC580/LC570/ LC610/LC620/LC630/LC631/LC632/LC633/LC640/LC650/LC652/ LC653/LC654/LC670/ UC400/UC400H/UC4010/UC5000/UC5100/UC6000/UC6200/ UC6300/UC6400/UC6400H/UC6500/UC6510/UC6530/UC6540/ UC6550/UC6600/UC6620/UC6630/UC6700/UC6720/UC6730/ UC6740/UC6800/UC6830/UC6900/UC6900H/UC8000/ PC420/PC430/PC431/PC432/PC450/PC451/PC480/PC520/ PC530/PC531/PC540/PC541/PC550/PC551/PC560/PC580/ PC590/PC670/PC6100/PC6400/PC6500/PC7000/PC7700/PC8000
	TUNER	DRXKSEMCO	
	DDR	0	
	Country	...	
	Front Color		NONE/W-MILKY/T-M-Brn/T-W-Brn/T-W-Gray/W-D-Gray/W-M-Whit/ W-Violet/T-C-Gray/T-R-BLK/S-BLK/S-RBLK/S-C-Gray/

■ 控制

Control	Factory Name		
	EDID		
	Sub Option		
	PDP Option		
	Hotel Option		
	Shop Option		
	Asia Option		
	Sound		
	Config Option		
	SCC		
EDID	Factory Name	Data	Range
	EDID ON/OFF	Off	
	EDID WRITE ALL	...	
	EDID WRITE PC	...	
	EDID WRITE HDMI	...	
	EDID WRITE HDMI1	...	
	EDID WRITE HDMI2	...	
	EDID WRITE HDMI3	...	
	EDID WRITE HDMI4	...	
	EDID 1.2 PORT	...	
	EDID WRITE DVI	...	

Sub Option	Factory Name	Data	Range
	RF Mute Time	600ms	0ms~1000ms
	RS-232 Jack	UART	Debug/Login/UART
	Watchdog	OFF	ON/OFF
	WD Count	0	255
	Dimm Type	EXT	fixed
	Lvds Format	JEIDA	JEIDA/VESA/19INCH
	MediaPlay DB	On whth 5MB	fixed
	MediaPlay Movie	chapterinMedia	fixed
	MediaPlay DLNA	OFF	fixed
	MediaPlay PlayList	OFF	fixed
	OTN Server Type	operationg	operation/development
	OTN Test Server	OFF	OFF/ A/B/C/D/E Zone
	OTN Support	ON	ON/OFF
	OTN Reset		not modified
	OTN Duration	OFF	ON/OFF
	OTN Fail Test	OFF	ON/OFF
	T-CON USB Download	Failure	fixed
	View Log		not modified
	SST		not modified
	2nd mips	ON	ON/OFF
	2nd mips count	0	0~255
	Region	USA	fixed
	PC Auto Ident	Enable	Auto/Enable
Hotel Option	Factory Name	Data	Range
	Hotel Mode	OFF	
	SI Vender	...	
	Power On Channel	...	
	Channel Type	...	
	Power On Volume	...	
	Min Volume	...	
	Max Volume	...	
	Panel Button Lock	...	
	Power On Source	...	
Shop Option	Factory Name	Data	Range
	Shop Mode	OFF	ON/OFF
	Exhibition Mode	OFF	ON/OFF

Sound	Factory Name	Data	Range
	High Devi	OFF	ON/OFF
	Carrier_Mute	ON	ON/OFF
	Speaker Delay Normal	10	0~255
	Pilot Level High Thld	0x70h	0x00~0xff
	Pilot Level Low Thld	0x20h	0x00~0xff
	Speaker EQ	ON	ON/OFF
	SPDIF PCM Gain	-9dB	-10dB~0dB

■ SVC

SVC	Factory Name	Data	Range
	Test Pattern		fixed
	Panel Display Time	0Hr	
	Tuner Status		

Test Pattern	Factory Name	Data	Range
	Pattern Sel	OFF	OFF/ White/Grey/Black/Red/Green/Blue
	RFC PC Mode	OFF	ON/OFF
	Logic Pattern Sel	...	Not modified
	Logic Level Sel	...	Not modified

TUNER STATUS	Factory Name	Data	Range
	DVB		
	ISDB-T		

DVB	Factory Name	Data	Range
	SNR		Not modified
	BER		Not modified
	Singal Strength		Not modified
	Bandwidth		Not modified
	Frequency		Not modified
	LNA Status		Not modified
	FFT		Not modified
	Modulation		Not modified
	Code Rate		Not modified
	GI		Not modified
	Hier Modulation		Not modified
	Frequency Offset		Not modified
	Timing Offset		Not modified
	AGC		Not modified
	UCB		Not modified
	PLL Type		Not modified
	DEMOD Type		Not modified
	TPS LOCK		Not modified
	RS Lock		Not modified
	SSI		Not modified
	SQI		Not modified

ISDB-T	Factory Name	Data	Range
	FFT Size_1		Not modified
	Guard Interval_1		Not modified
	Freq. Offset_1		Not modified
	SNR_1		Not modified
	IF AGC_1		Not modified
	TMCC Lock_1		Not modified
	TS Packet_1		Not modified
	Master Lock_1		Not modified
	A_Modulation_1		Not modified
	A_Code Rate_1		Not modified
	A_Timer InterLeave_1		Not modified
	A_Segments Num_1		Not modified
	A_Ber_1		Not modified
	B_Modulation_1		Not modified
	B_Code Rate_1		Not modified
	B_Timer InterLeave_1		Not modified
	B_Segments Num_1		Not modified
	B_BER_1		Not modified
	C_Modulation_1		Not modified
	C_Code Rate_1		Not modified
	C_Timer InterLeave_1		Not modified
	C_Segments Num_1		Not modified
	C_BER_1		Not modified

■ Expert

Expert	Factory Name	Data	Range
	N / D ADJ	Off	Off / On / FIX
	SOURCE	...	Not modified

■ ADC/白平衡

ADC/WB	Factory Name
	ADC
	ADC Target
	ADC RESULT
	WB

ADC	Factory Name	Data	Range
	AV Calibration	Success	Success / Failure
	Comp Calibration	Success	Success / Failure
	PC Calibration	Success	Success / Failure
	HDMI Calibration	Success	Success / Failure

ADC Target	Factory Name	Data	Range
	1st_AV_Low	18	0 ~ 255
	1st_AV_High	220	0 ~ 255
	1st_AV_Delta	1	0 ~ 255
	1st_COMP_Low	16	0 ~ 255
	1st_COMP_High	235	0 ~ 255
	1st_COMP_Delta	1	0 ~ 255
	1st_PC_Low	2	0 ~ 255
	1st_PC_High	235	0 ~ 255
	1st_PC_Delta	1	0 ~ 255
	2nd_Low	1	0 ~ 255
	2nd_High	235	0 ~ 255
	2nd_Delta	1	0 ~ 255

ADC RESULT	Factory Name	Data	Range
	1st_AV_Gain	127	0 ~ 255
	1st_AV_Offset	139	0 ~ 255
	1st_Comp_Gain	68	0 ~ 255
	1st_Comp_Gain_Cb	68	0 ~ 255
	1st_Comp_Gain_Cr	68	0 ~ 255
	1st_Comp_Offset	127	0 ~ 255
	1st_Comp_Offset_Cb	127	0 ~ 255
	1st_Comp_Offset_Cr	127	0 ~ 255
	1st_PC_R_Gain	96	0 ~ 255
	1st_PC_G_Gain	95	0 ~ 255
	1st_PC_B_Gain	94	0 ~ 255
	1st_PC_R_Offset	127	0 ~ 255
	1st_PC_G_Offset	127	0 ~ 255
	1st_PC_B_Offset	127	0 ~ 255
	2nd_R_Offset	110	0 ~ 255
	2nd_G_Offset	110	0 ~ 255
	2nd_B_Offset	110	0 ~ 255
	2nd_R_Gain	165	0 ~ 255
	2nd_G_Gain	165	0 ~ 255
	2nd_B_Gain	165	0 ~ 255

WB	Factory Name	Data	Range
	Sub Brightness	128	0 ~ 255
	R_Offset	128	0 ~ 255
	G_Offset	128	0 ~ 255
	B_Offset	128	0 ~ 255
	Sub Contrast	128	0 ~ 255
	R_Gain	128	0 ~ 255
	G_Gain	128	0 ~ 255
	B_Gain	128	0 ~ 255
	Movie R Offset	122	0 ~ 255
	Movie B Offset	145	0 ~ 255
	Movie R Gain	156	0 ~ 255
	Movie B Gain	39	0 ~ 255

4-4. 设置旅馆选项数据

4-4-1. 独立待机模式

如欲进入：照顺序按下 MUTE→1→1→9→ENTER

如欲退出此菜单：关机并再次开启。

编号	项目	初始值	说明
1	Hotel Mode	On	旅馆模式（独立待机）开/关
2	Power On Channel	1	电视将会切换到此特殊的信道
3	Power On Volume	10	电视将会被切换到此音量级
4	Min Volume	0	用户可设置为最小音量级
5	Max Volume	100	用户可设置为最大音量级
6	Panel Button Lock	Off	前部显示屏（本地键）运行开/关 ·关：解锁所有显示屏键 ·开：锁定所有显示屏键 ·电源：除电源键外锁定所有显示屏键。
7	Power on source	TV	电视在初始开启时选择输入源
8	Picture Menu Lock	Off	启用或取消图片菜单
9	Channel Editor		编辑信道编号和名称。
10	Music Mode AV	Off	如要在 AV 输入源的 MP3/音频播放器中获取音乐。 在此模式中，音频被取消，视频被取消。
11	Music Mode PC	Off	如要在 PC 输入源的 MP3/音频播放器中获取音乐。 在此模式中，音频被取消，视频被取消。
12	Music Mode Comp	Off	如要在分量输入源的 MP3/音频播放器中获取音乐。 在此模式中，音频被取消，视频被取消。
13	Music Mode Backlight	Off	在音乐模式下背景灯开/关选项可节能
14	RJP Priority AV	1	如果优先设置插孔，当插孔被插入时会依照插孔的优先设置，相应的源会自动被设置
15	RJP Priority PC	2	如果优先设置插孔，当插孔被插入时会依照插孔的优先设置，相应的源会自动被设置
16	RJP Priority HDMI	3	如果优先设置插孔，当插孔被插入时会依照插孔的优先设置，相应的源会自动被设置
17	RJP AV Option	AV1	选择 RJP AV 来源。（AV1/AV2）
18	RJP HDMI Option	HDMI1/DVI	选择 RJP HDMI 来源。（HDMI1/HDMI2/HDMI3）
19	Sub AMP volume	6	在初始状态下的子功放音量级
20	Sub AMP mode	2	确定次功放运作模式。 ·0：关闭次功放功能（PWM 关闭） ·1：主音的控制决定次音的大小。 次音是由开机音量、最小音量及最大音量决定。 ·2：由浴室控制板的设置决定音量的大小。

编号	项目	初始值	说明
21	Local time	Manual	升级时钟数据的方法选项 ·手动：当电视处于独立待机模式时，通过信道或手动时钟设置使用时钟数据。 ·TTX：手动时钟设置（带有 TTX 数据更新）
22	Audio Loop In	Off	音频循环识别或 H.P 识别选项
23	Menu display	On	(仅独立待机模式) ·开：显示主菜单 ·关：不显示主菜单
24	Customer Logo	Off	选择客户徽标
25	Customer Logo Download		下载客户徽标
26	Logo Display Time		客户徽标显示时间
27	Power On Option	Last Option	开机（交流电源开启）选项 ·STN-BY；待机模式 ·Power on：开机 ·LAST OPT：最后的电源状态
28	Auto Source	OFF	
29	Energy Saving	Off	此功能用来调节电视亮度，以便减少电源消耗。 ·关：关闭节能功能。 ·低：设置电视到低节能模式。 ·中：设置电视到中等节能模式。 ·高：设置电视到高节能模式。 ·自动：设置电视到自动节能模式。
30	Clone TV to USB		USB 克隆：TV→USB
31	Clone USB to TV		USB 克隆：USB→TV
32	Cloning Data Reset	Off	复位克隆数据。
33	Welcome Message	Off	显示欢迎信息。
34	Edit Welcome Message		编辑欢迎信息。
35	Channel Auto Store		自动存储信道 当旅馆模式开启，在此模式中可进行信道搜索。

4-4-2. 交互模式

如欲进入：在正常运作状态下，照顺序按下 INFO→MENU→0→1→EXIT按钮。

如欲退出此菜单：关机并再次开启。（按下通用三星遥控器的电源按钮）

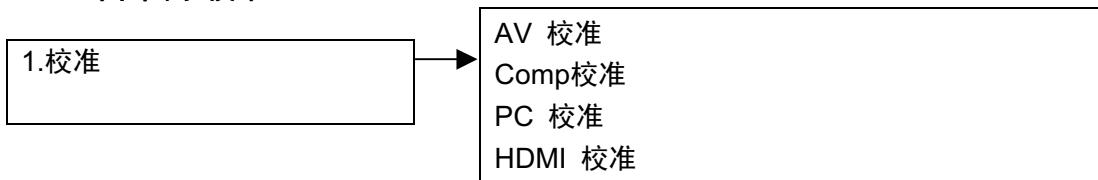
编号	项目	初始值	说明
1	Hotel Mode	On	旅馆模式（独立待机）开/关
2	SI Vendor	Samsung	选择 SI Vendor
3	Power On Channel	1	电视将会切换到此特殊的信道
4	Power On Volume	10	电视将会被切换到此音量级
5	Min Volume	0	用户可设置为最小音量级
6	Max Volume	100	用户可设置为最大音量级
7	Panel Button Lock	Unlock	前部显示屏（本地键）运行开/关 ·关：解锁所有显示屏键 ·开：锁定所有显示屏键 ·电源：除电源键外锁定所有显示屏键。
8	Power on source	TV	电视在初始开启时选择输入源
9	Picture Menu Lock	Off	启用或取消图片菜单
10	Channel Editor		编辑信道编号和名称。
11	Music Mode AV	Off	如要在 AV 输入源的 MP3/音频播放器中获取音乐。 在此模式中，音频被取消，视频被取消。
12	Music Mode PC	Off	如要在 PC 输入源的 MP3/音频播放器中获取音乐。 在此模式中，音频被取消，视频被取消。
13	Music Mode Comp	Off	如要在分量输入源的 MP3/音频播放器中获取音乐。 在此模式中，音频被取消，视频被取消。
14	Music Mode Backlight	Off	在音乐模式下背景灯开/关选项可节能
15	RJP Priority AV	1	如果优先设置插孔，当插孔被插入时会依照插孔的优先设置，相应的源会自动被设置
16	RJP Priority PC	2	如果优先设置插孔，当插孔被插入时会依照插孔的优先设置，相应的源会自动被设置
17	RJP Priority HDMI	3	如果优先设置插孔，当插孔被插入时会依照插孔的优先设置，相应的源会自动被设置
18	RJP AV Option	AV1	选择 RJP AV 来源。 (AV1/AV2)
19	RJP HDMI Option	HDMI1/DVI	选择 RJP HDMI 来源。 (HDMI1/HDMI2/HDMI3)
20	Sub AMP volume	6	在初始状态下的子功放音量级
21	Sub AMP mode	2	确定次功放运作模式。 ·0：关闭次功放功能（PWM 关闭） ·1：主音的控制决定次音的大小。 次音是由开机音量、最小音量及最大音量决定。 ·2：由浴室控制板的设置决定音量的大小。
22	Local time	Manual	升级时钟数据的方法选项 ·手动：手动时钟设置。 ·TTX：手动时钟设置（带有 TTX 数据更新） ·自动：通过服务器使用时钟数据。
23	Audio Loop In	Off	音频循环识别或 H.P 识别选项
24	Menu display	On	·开：显示主菜单 ·关：不显示主菜单
25	Customer Logo	Off	选择客户徽标

编号	项目	初始值	说明
26	Customer Logo Download		下载客户徽标
27	Logo Display Time		客户徽标显示时间
28	Power On Option	Last Option	开机（交流电源开启）选项 •STN-BY: 待机模式 •Power on: 开机 •LAST OPT: 最后的电源状态
29	Auto Source	OFF	
30	Energy Saving	Off	此功能用来调节电视亮度，以便减少电源消耗。 •关: 关闭节能功能 •低: 设置电视到低节能模式。 •中: 设置电视到中等节能模式。 •高: 设置电视到高节能模式。 •自动: 设置电视到自动节能模式。
31	Clone TV to USB		USB 克隆: TV→USB
32	Clone USB to TV		USB 克隆: USB→TV
33	Cloning Data Reset	Off	复位克隆数据。
34	Welcome Message	Off	显示欢迎信息。
35	Edit Welcome Message		编辑欢迎信息。
36	Channel Auto Store		自动存储信道

 当交互模式开启时，不能通过按下**MUTE**→**1**→**1**→**9**→**ENTER**按钮到旅馆选项。如要退出旅馆选项，关闭电源。

4-5. 白平衡-校准

4-5-1 白平衡-校准



4-5-2 白平衡-调节

	(弱光)	(强光)
3. 白平衡	次亮度 红色偏移 绿色偏移 蓝色偏移	次对比度 红色增益 绿色增益 蓝色增益
(白平衡调节状况, 请参照下页)		

4-6. 白色比（平衡）调节

1. 可以在工厂模式下调节白色比（1: 校准, 3: 白平衡）。
2. 因为调节值和数据值随输入源而异，所以必须在 CVBS、分量 1 和 HDMI1 模式下调节。
3. 在默认设置下配置各模式的最佳值。（参照表 1、2）
该项随显示屏尺寸和规格而异。

-设备: CS-210

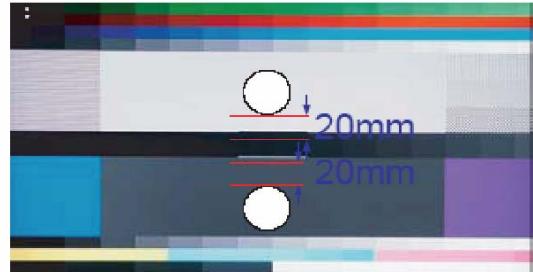
-图案: MIK K-7256 #92 “平白平衡图”，作为标准

-只有当与主设备的结果比较结果后，才可使用其他设备

-设置老化时间: 60 分钟



-白平衡调节的校准和手动设置



HDMI: #24 方格图校准→用#92 图手动调节 (720p)

COMP: #24 方格图校准→用#92 图手动调节 (720p)

CVBS: #24 方格图校准→用#92 图手动调节 (NTSC)

-如果在 HDMI 模式下完成，调节座标几乎与 AV/COMP 模式下相同。

-白平衡手动调节

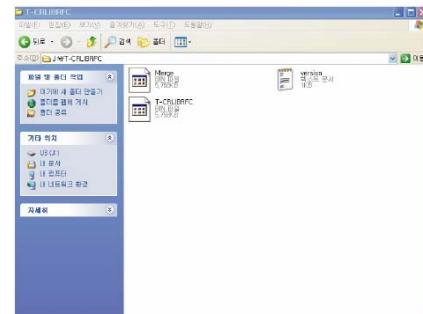
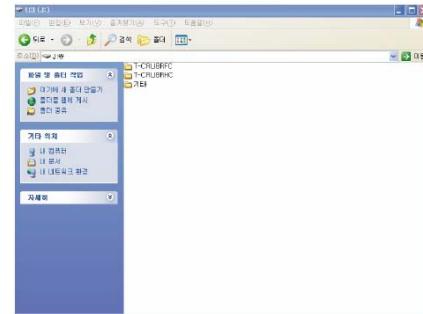
4-7.维修信息

4-7-1USB下载方法

三星公司在将来可能会提供电视固件的升级。

升级将会通过连接USB驱动器到安置在电视背后的USB端口上。

1. 插入包含固件升级的USB驱动器到电视后部的USB端口上（USB驱动文件夹“T-TDT5HAAC”，“T-TDT5HAAC”及此文件夹下载micom程序）。



2.插入USB驱动。

菜单-> 设置 -> 软件升级然后按下确认键。

出现信息“USB扫描，大约需要30秒”请小心不要将电源断开或在升级过程中将USB驱动取下。出现信息“升级版本XXXX到版本XXXX？”系统将会在升级后复位，按下左右键选择“确认”。

电视将会在固件完成升级后关闭。

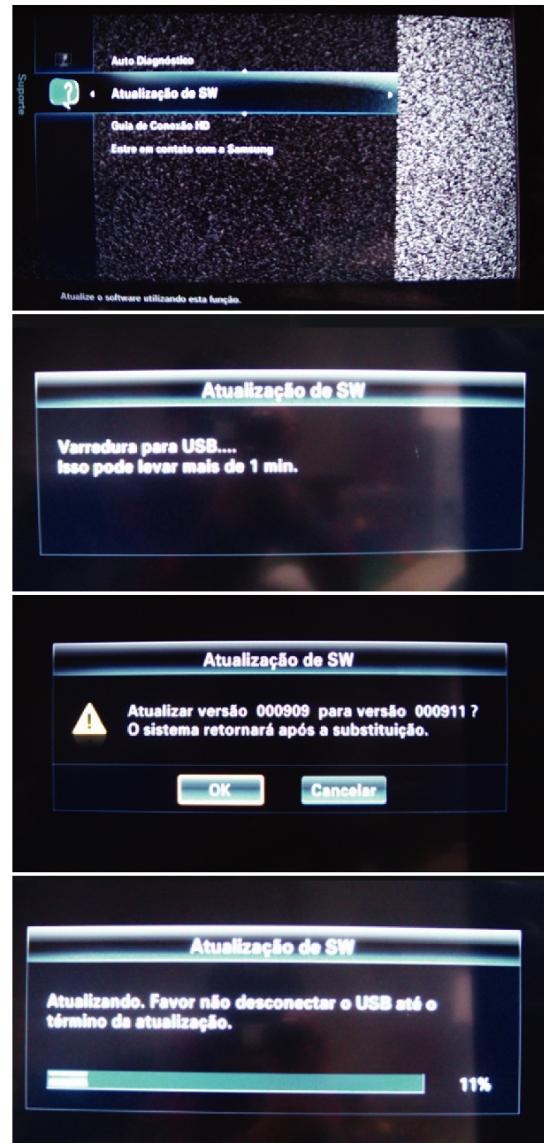
升级完成后请检查固件版本。

- 升级仅使用USB
- 下载完成后执行P&P

* 如何检查程序版本

- 1.进入工厂模式
- 2.检查micom 版本

T-TDT5HAAC



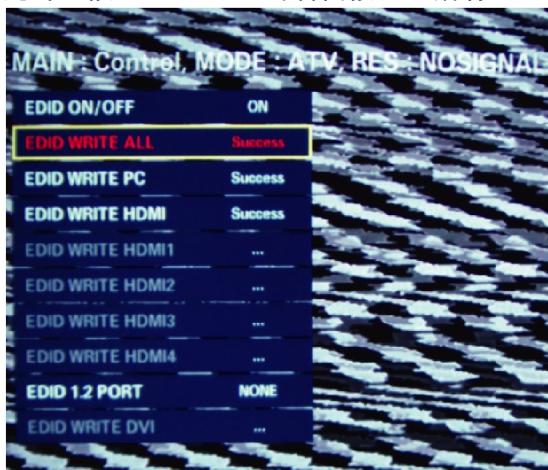
4-7-2. EDID 自写方法

1.进入到工厂模式后进行在屏显示调节：显示并检查自写运行是否正常。



2.如何进行 EDID 自写功能

进入工厂模式→ EDID →按下Remocon的右侧按钮后， EDID写入开/关→选择开启
此时，按下Remocon的右侧按钮，所有EDID进行写入。



4-8. 旅馆即插即用

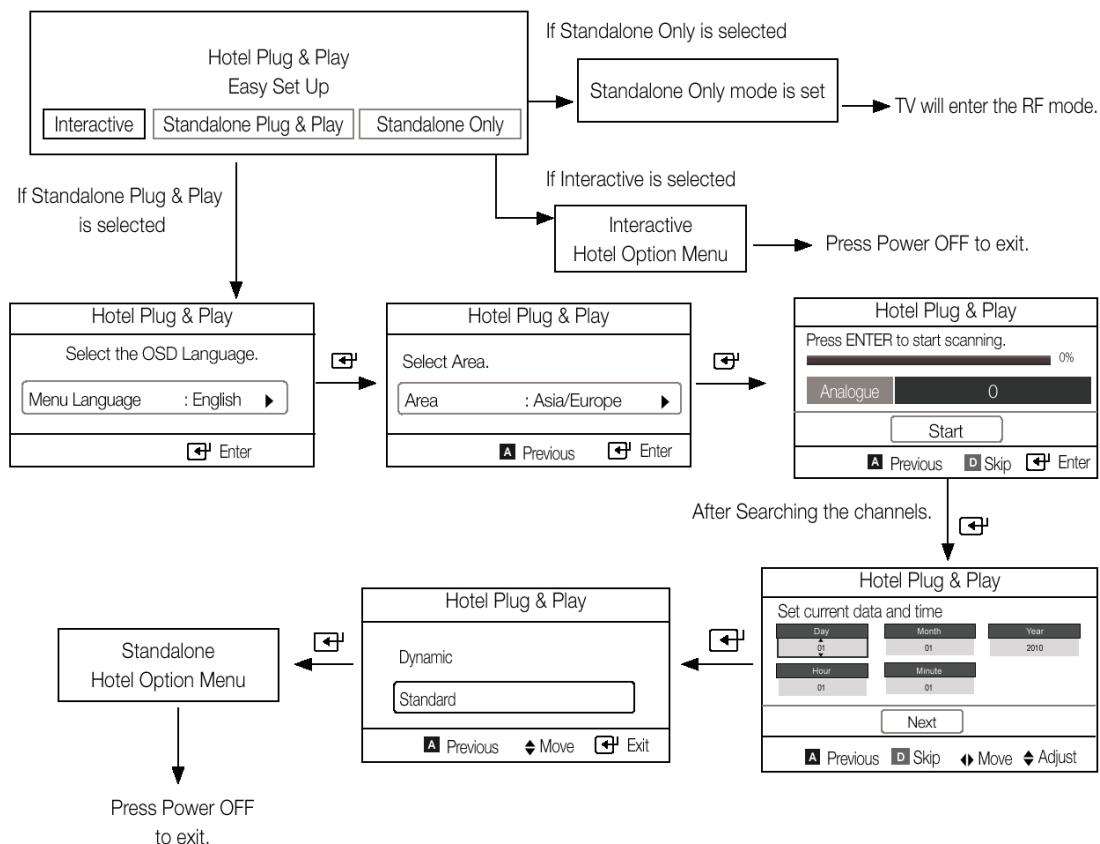
旅馆即插即用是指可马上自动执行旅馆模式选项、国家设置、时钟设置和图片模式设置的一种功能。

*旅馆即插即用仅可在开机后用一次。

*设置第一台TV和克隆TV到USB后。

*下一台TV仅需要退出旅馆即插即用，连接USB，然后克隆USB到TV上即可。

•UI 情形



旅馆即插即用OSD

- 初始提示：交互
- 如果选择独立待机按钮，独立待机旅馆模式会被设置为默认值并且“独立待机模式被设置” OSD显示3秒。
- TV在显示“独立待机模式被设置” OSD显示3秒后会自动进入到射频模式。
- 当交互模式被选择后，将会显示交互设置菜单，按下关机键从交互菜单中退出。
- 当独立待机即插即用被选择后，显示“选择菜单语言” OSD信息。

选择旅馆TV模式OSD

- 当独立待机从“选择旅馆TV模式” OSD中被选择时，显示“选择菜单语言” OSD信息。
- 初始提示：英语
- 显示时间：OSD 超时及运行将会和销售机型一致。
- 如果按下ENTER键，将会显示“选择国家” OSD信息。

自动信道搜索模式OSD

- 如果选择skip选项，将会进入到时钟模式OSD。
- 如果按下ENTER键，信道的自动搜索功能将会执行。
- OSD的显示时间是指从自动开始到自动搜索完成为止为30秒。

时钟模式OSD

- 初始提示：自动。
- 显示时间：30秒。
- 当手动被选择时，显示时钟设置项目。
- 如果设置时钟自动后按下ENTER键，显示图片模式OSD。

图片模式OSD

- 初始提示：动态
- 图片模式OSD被显示后，我们可以选择动态或标准图片模式。
- 在选择图片模式后进入到独立待机设置菜单OSD，按下关机键退出。

■ 旅馆选项

说明

本电视带有交互式功能，通过计算机控制系统与其它电视相连接，后部机箱(SBB/STB) 连接到电视，用于旅店及其它商业场所。

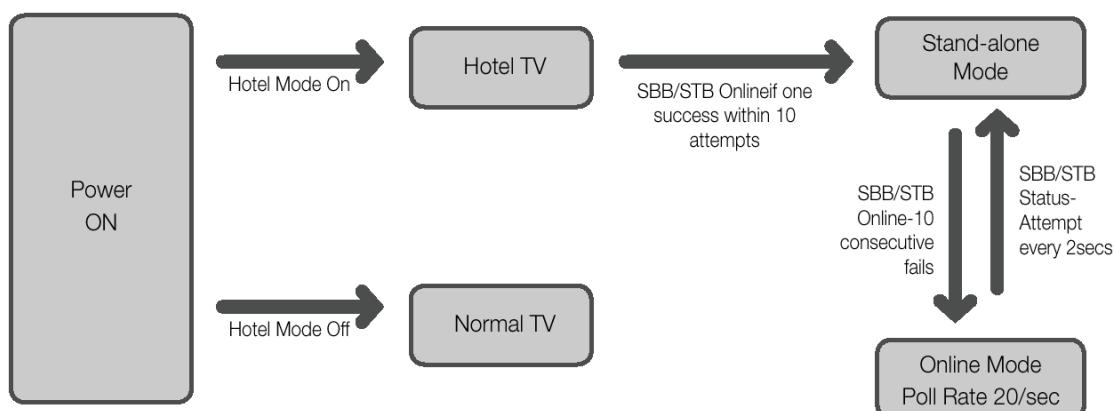
交互式：当电视在初始在开启时，会发送命令到可识别的SBB/STB，如果可识别的电视切换到在线模式，通过SBB/STB 完全控制，在线电视停止接收IR(三星遥控) 命令并根据端口协议执行。

独立待机：如果SBB/STB不能被识别，电视在受限运转中切换至独立待机模式。

运转模式

当本电视 (在旅馆模式) 在SBB/STB时运行，会进入到在线或独立待机两种状态。在独立待机状态时，电视可作为旅馆电视，但是不能启用通信功能。

这样可预防客人通过断开SBB/STB蒙蔽本系统。



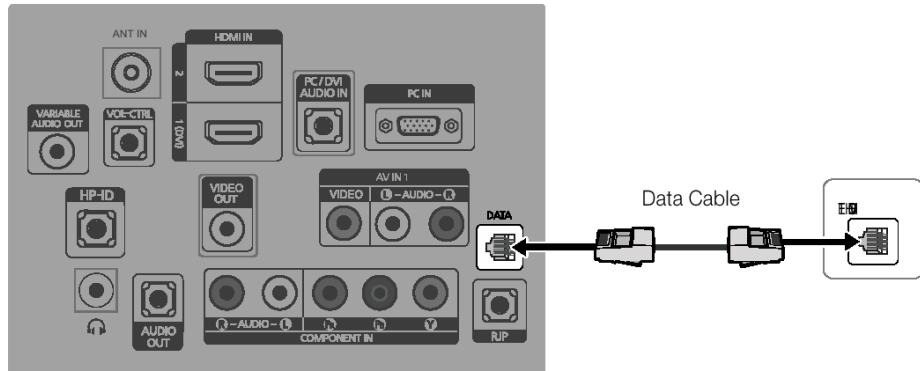
如要详细设置独立待机或交互模式，参看第15页（设置旅馆选项数据：独立待机模式和交互模式）

- 一些操作可能会受限，以防客人“蒙蔽”本电视系统。
- 无主菜单(交互模式) 或频道菜单，在主菜单中插入并播放(独立待机模式)
- 音量受限及屏板键锁定或解锁。

通过 SBB 连接到电视

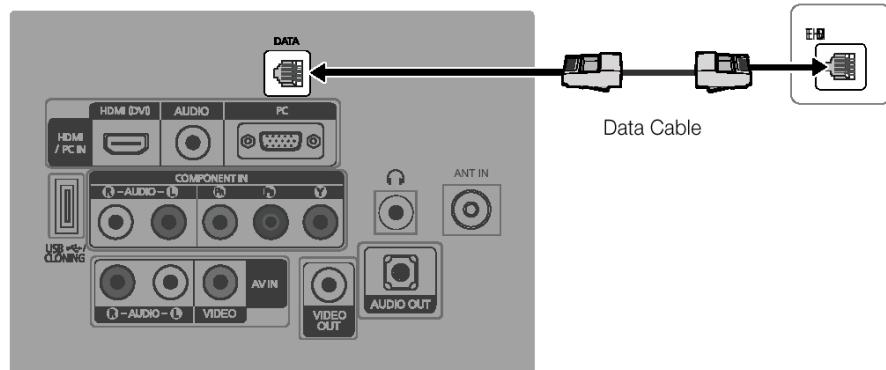
- LA26C450 / LA32C450
LA37C530/ LA40C530 / LA46C530

TV Rear Panel



- LA22C450

TV Rear Panel



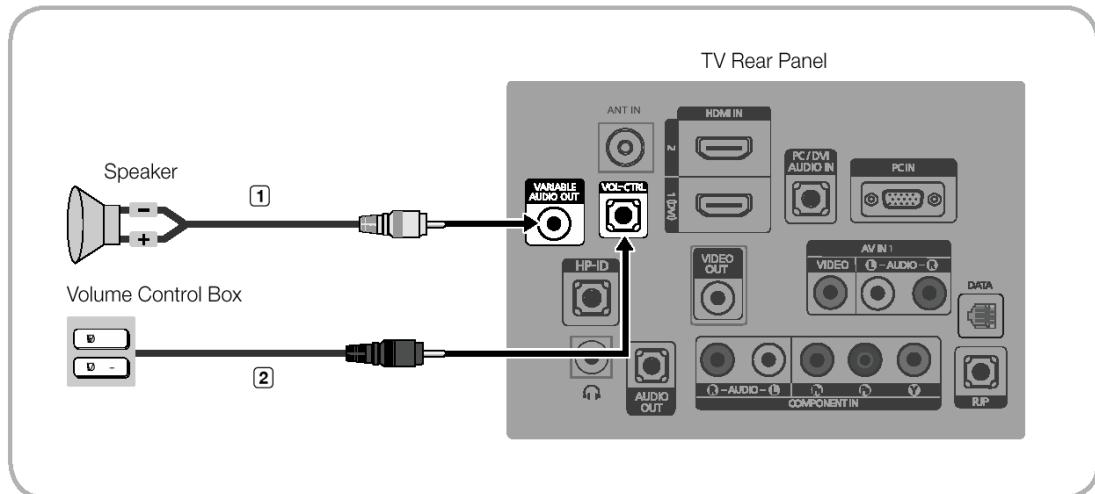
1. 使用数据线连接电视的 DATA 插口到 STB (SBB) 的 ETH MODEM 插口。

使用数据通信。

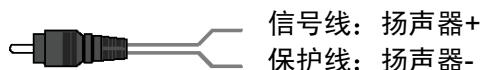
连接浴室扬声器

你可以按照如下的 2 种方法连接浴室扬声器。

- 通过变量输出连接（无外部功放设备可用）



- 连接电视的可变音频[R-AUDIO-L]端口到旅馆的浴室墙壁的扬声器。
- 连接电视的VOL-CTRL 插孔到旅馆浴室墙壁的音量控制盒的开关端口上。



- 最大的扬声器输出为 4W, 8 欧姆。
- 当按下遥控器上的“静音”键或耳机或话筒连接到电视上时, 主扬声器及浴室扬声器被静音。

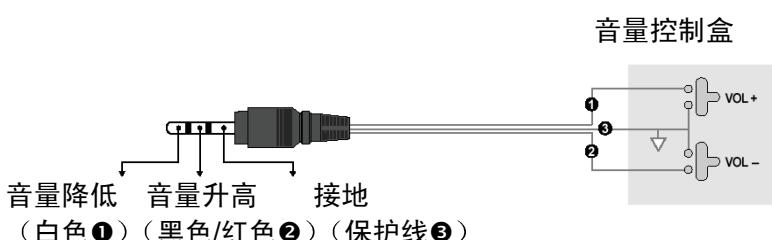
- 安装音量控制

- 如图所示, 如果配置音量控制盒, 你可以控制浴室扬声器的音量。
- 连接音量控制盒到电视的插孔为普通手机插孔。
- 音量控制盒的开关由智能开关构成。
 - 设置副功放模式
 - 0: 关闭副功放功能 (关闭电源)。
 - 1: 依照主音量控制决定子音量。也就是, 子音量由电源音量决定, 旅馆模式的最大音量和最小音量。
 - 2: 依照浴室控制板的设置决定音量大小。

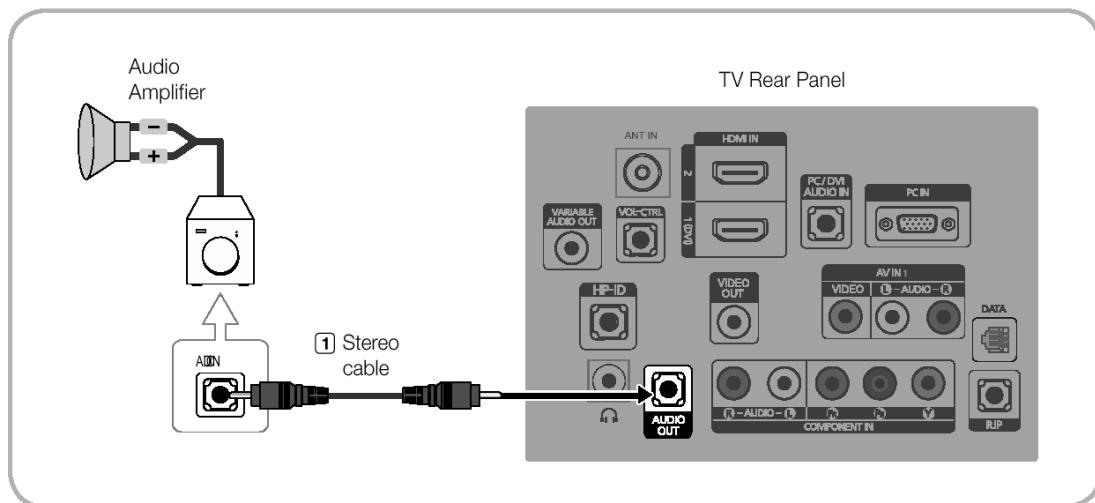
变量输出端口规格

-8 欧姆, 2 瓦特

-扬声器接线: 使用的扬声器接线长度不超过 82 英尺 (25 米)。



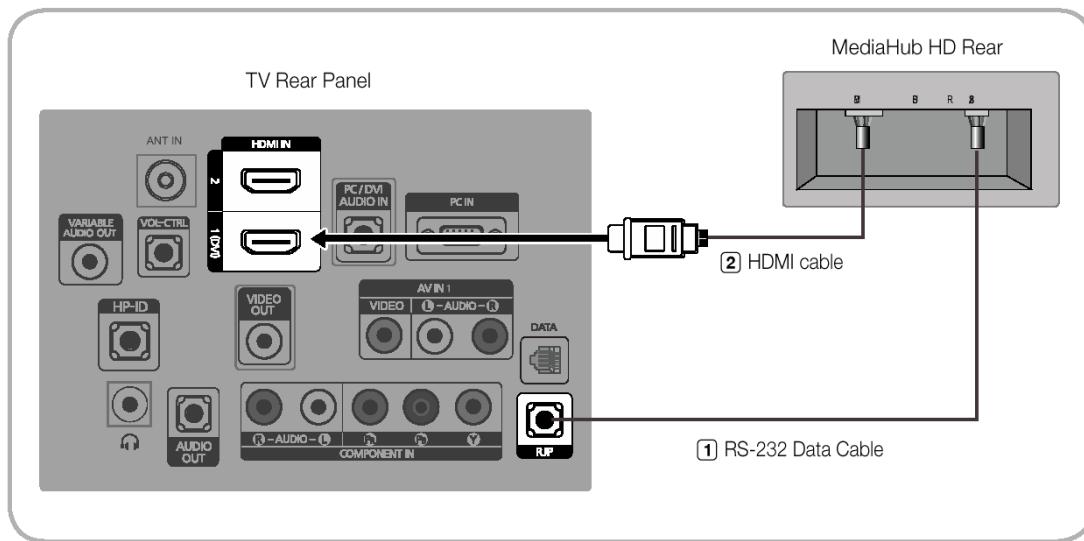
通过固定的输出端连接（无外部功放可用）



1. 连接电视的音频输出端口和带有立体接线的音频放大器的端口。

连接 MediaHub HD

外接源的输出端连接到旅馆模式的MediaHub HD上。



1. 连接电视的RJP端口和MediaHub HD的RS/232端口。
2. 连接电视的HDMI端口和MediaHub HD的HDMI端口。

• MediaHub HD

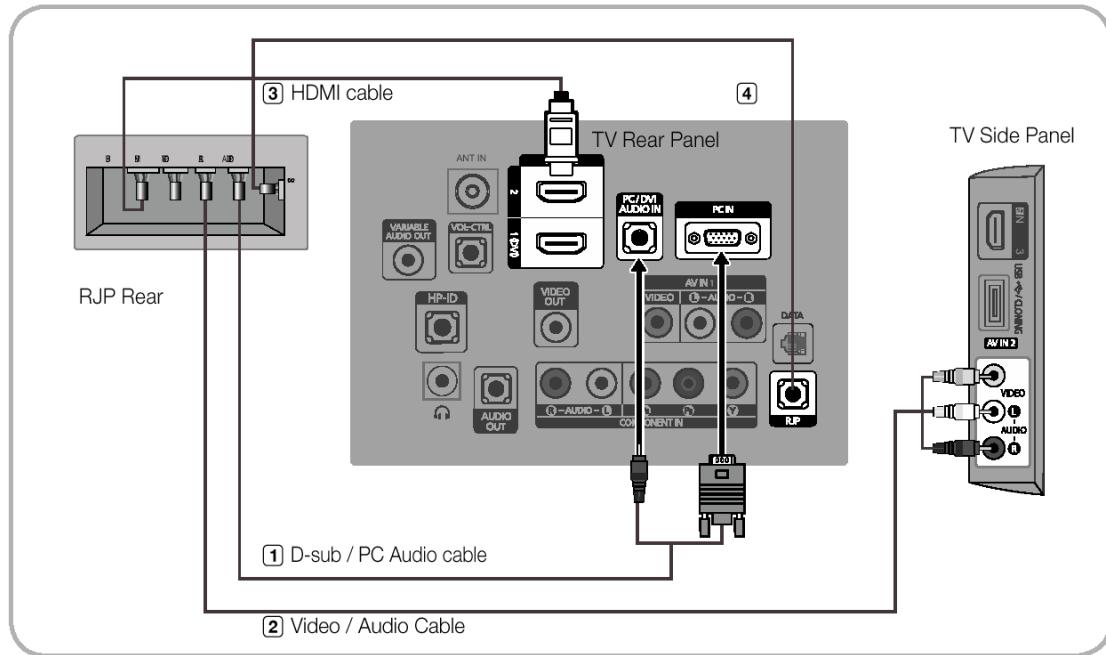
- MediaHub HD是拥有不同音频视频输入端(A/V、Audio、PC、HDMI和USB)及相应输出端的硬件模块。
相应的输出源通过MediaHub连接到电视。
MediaHub通过RS232与电视通讯，热插拔及播放功能可使得旅馆客人连接外接源到MediaHub。
MediaHub通过发送相关的来源信息与电视进行通讯。电视将会切换到外接来源端。
- 当电视被开启后，在10秒内连接电视与RJP。

• 特殊功能

- 画中画
- 蓝牙
- 自动检测

连接 RJP(远程 Jack Pack 系统)

任意外接源的输出端链接到用户桌面的 RJP 系统上。



1. 连接电视上的 PC IN/PC/DVI AUDIO IN 端口到 RJP 系统的 RCA 端口上。
2. 连接电视上的 AV IN[VIDEO]/[L-AUDIO-R]端口到 RJP 系统 RCA 端口上。
3. 连接电视上的 [HDMI]端口到 RJP 系统 HDMI 端口上。
4. 连接电视上的 RJP 系统端口和 RJP 系统的 RS/232 端口。

◎ -RJP(远程 Jack Pack 系统)与此三星电视兼容的型号为 TeleAdapt TA-7610,TA-7650 (HD) 及 TA-7660(HD Plus)。

- RJP(远程Jack Pack系统): RJP 代表远程Jack Pack系统。RJP 是有着不同音频视频输出端口硬件模块(A/V, Audio, PC和 HDMI) 及相应的输出。相应的输出源从RJP系统连接到电视。
RJP通过RS232与电视相连接，即插即用功能可方便客人连接外接源到RJP系统。RJP通过启用/取消外接源与电视相连接。电视将会依照用户的优先设置切换到外界源。
 - ☞ 你可选择连接RJP系统的HDMI1,2,3和AV1, 2。
 - ☞ 当电视开启时，在10秒钟内连接电视和RJP系统。
- 同时按下A/V和HDMI按钮10秒钟，RJP系统可以返回到工厂默认设置。所有的LED指示灯闪烁5次提示将会进入休息状态。
- RJP系统在5分钟后将会自动关闭所有指示灯，以免旅馆中不必要的灯源照射。如果客人触摸任何按钮，LED指示灯将由关闭状态再次启动，并且5分钟计时器而将会重启。如果客人触摸其它源按钮，电视将会切换到被选源且相应的LED将会点亮。
- RJP 系统复位后或电视电源关/开，大约需要10秒钟的时间在电视和RJP系统间建立连接。

- 如下表所示为从电视到输入源的大概时间，用秒表示，基于优先设置。

情况1：当无输入源接入时，

Source	To Connect
AV	2 Sec
PC	0.7 Sec
HDMI	3.9 Sec

情况2：当2个或更多个输入被接入时，且输入源被断开并重新连接。

Source	Disconnect	To Connect	Total
AV	4.5 Sec	2 Sec	6.5 Sec
PC	0.7 Sec	0.7 Sec	1.4 Sec
HDMI	3.9 Sec	3.9 Sec	7.8 Sec

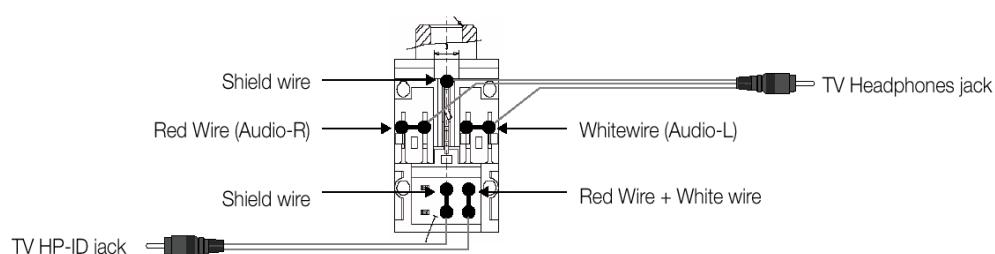
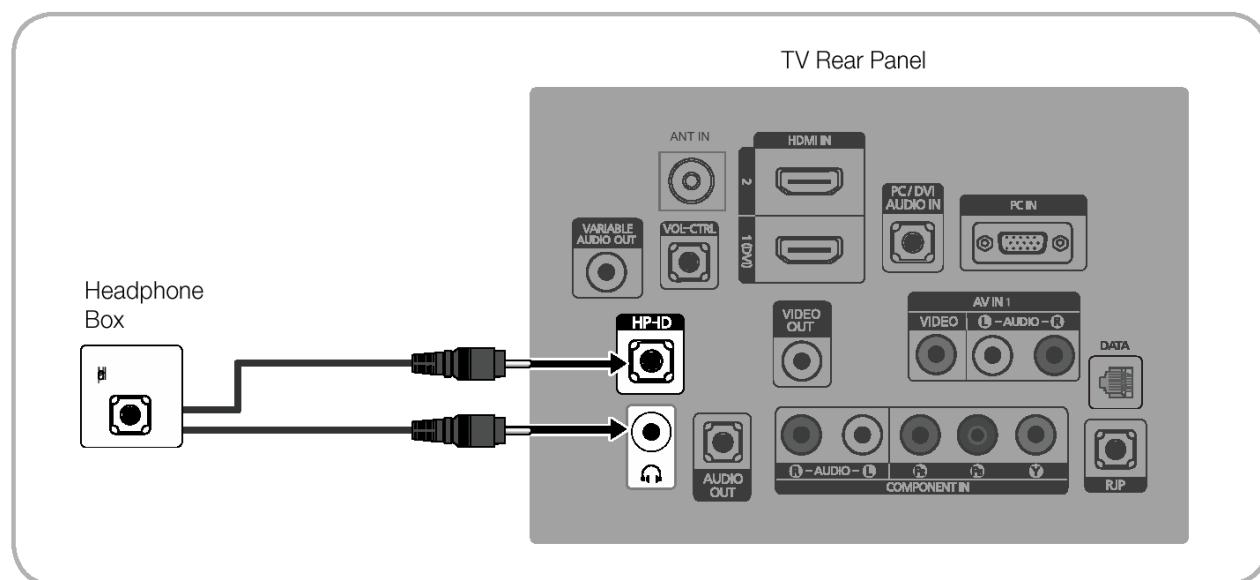
例如：如果RJP系统拥有所有的在线源AV, PC和HDMI被连接，AV被视为最大优先。如果RJP系统处于HDMI 模式，且客人搬离并重新连接AV，切换到AV的最小时时间为6.5秒。

- 如要连接音频 (Ipod 或 Mp3)，应该开启音乐模式且插孔识别检测应当关闭。
- 支持A/V, PC和HDMI输入源。

音频循环

由电话产生的附加功能可被安装在床头或商务桌上，以便方便用户使用。安装过程如下。(不适用于 22 英寸型号)

- 话机的详细接线图



欢迎信息

欢迎信息是在电视上显示自定义信息的一种功能，客人每次在旅馆房间里开启时显示：

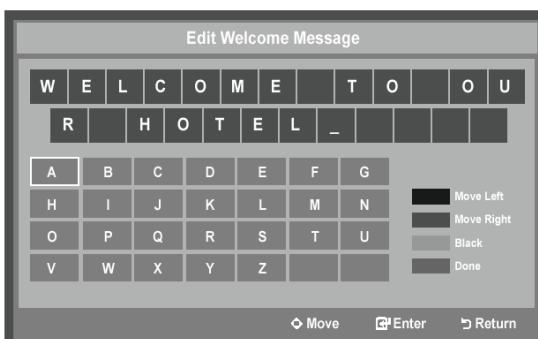
- 欢迎信息设置在旅馆的选项菜单中。
- 如要在开机时显示信息，欢迎信息应当处于开启状态。

Hotel Mode	ON	RJP Priority HDMI	3	Clone USB to TV
Power On Channel	1	RJP AV Option	AV1	Cloning Data Reset
Power On Volume	10	RJP HDMI Option	HDMI1/DVI	Welcome Message
Min Volume	0	Sub Amp Volume	6	Edit Welcome Message
Max Volume	100	Sub Amp Mode	2	Mixed Channel Map
Panel Button Lock	Unlock	Local time	Manual	Channel Auto Store
Power On Source	TV	Audio Loop In	OFF	Dynamic SI
Picture Menu Lock	OFF	Menu Display	ON	
Channel Editor		Customer Logo	OFF	
Music Mode AV	OFF	Customer Logo Download	...	
Music Mode PC	OFF	Logo Display Time	...	
Music Mode Comp	OFF	Power On Option	Last Option	
Music Mode Backlight	OFF	Auto Source	OFF	
RJP Priority AV	1	Energy Saving	OFF	
RJP Priority PC	2	Clone TV to USB		

- 欢迎信息一般只有25个字符组成，其内容可在旅馆服务菜单中更改。
- 如下为欢迎信息所支持的字符列表。

字母表从A到Z，仅允许使用大写。

- 欢迎信息可通过OSD中“编辑欢迎信息”，使用方向，色彩及输入键进行编辑。



-欢迎信息和hotel logo不能同时被启用。

Hotel Logo

Hotel Logo是在开机过程中显示图片图像的一种功能。

- Hotel Logo在独立待机和交互模式的旅馆选项菜单里。
- Hotel Logo的选项被开启时，将会启用如下菜单。
- 如果logo图像已被存储到存储器中及在开机过程中hotel logo选项被开启，Hotel Logo将被开启。
- Hotel Logo选项被关闭时，即使logo图像依然存在，Hotel Logo也将不会再显示。

Hotel Mode	ON	RJP Priority HDMI	3	Clone USB to TV
Power On Channel	1	RJP AV Option	AV1	Cloning Data Reset OFF
Power On Volume	10	RJP HDMI Option	HDMI1/DVI	Welcome Message OFF
Min Volume	0	Sub Amp Volume	6	Edit Welcome Message
Max Volume	100	Sub Amp Mode	2	Mixed Channel Map OFF
Panel Button Lock	Unlock	Local time	Manual	Channel Auto Store
Power On Source	TV	Audio Loop In	OFF	Dynamic SI OFF
Picture Menu Lock	OFF	Menu Display	ON	
Channel Editor		Customer Logo	OFF	
Music Mode AV	OFF	Customer Logo Download	...	
Music Mode PC	OFF	Logo Display Time	...	
Music Mode Comp	OFF	Power On Option	Last Option	
Music Mode Backlight	OFF	Auto Source	OFF	
RJP Priority AV	1	Energy Saving	OFF	
RJP Priority PC	2	Clone TV to USB		

• Hotel Logo

- 此选项决定hotel logo图像是否被显示。

• Hotel Logo下载

- 此选项可从USB设备中下载logo图像到电视存储器。
- 当图像被复制到电视时，请等待其被显示。
- 当复制操作成功完成时，将会显示成功完成的信息。
- 当复制操作没有成功完成时，将会显示没有成功完成的信息。
- 当USB设备没有被连接时，USB将被显示。
- 没有文件通过USB复制时，将会显示无文件信息。

• Logo文件格式

- 仅支持BMP格式文件名称必须为samsung.bmp
- 最大分辨率为960 x 540
- 在开机过程中图像不发生变更变大或变小。

• Logo显示时间

- 此选项决定Logo的显示时间。
- 3秒/ 5秒/ 7秒

USB克隆

USB克隆是一种用于从一台电视机上下载用户配置设置(图片、声音、输入、信道、设置及旅馆菜单)并同时上载到其它电视机的功能。

所有的用户自定义设置都会从电视机(主机)复制到USB设备上。

- 从TV到USB的克隆

这种操作是将存储数据从TV的EEPROM特定区域上复制到USB设备中。.

- 插入USB的驱动到TV后部的USB端口上。

- 按顺序按下此按钮，进入到旅馆菜单。

- 交互模式： INFO → MENU → 0 → 1 → EXIT

- 独立待机模式： MUTE → 1 → 1 → 9 → ENTER

- 按下▲或▼按钮可选择“克隆： TV到USB”，然后按下ENTER键按钮。

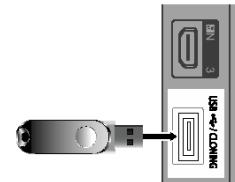
- 你可以确定USB克隆操作：

- 进程中：在复制数据到USB时。

- 完成：复制操作成功完成。

- 失败：复制操作没有成功完成。

- 无USB：没有接入任何USB设备。



Ch Remap On/Off	Off
Program Ch	3
Original Ch/Src	3
Auto PC	Off
Energy Saving	Off
Clone:TV to USB	
Clone:USB to TV	
Welcome Message	On
Edit Welcome Message	

- 从USB到TV的克隆：这种操作是下载USB设备中的存储数据到TV中。.

- 插入USB的驱动到TV后部的USB端口上。

- 按顺序按下此按钮，进入到旅馆菜单。

- 交互模式： INFO → MENU → 0 → 1 → EXIT

- 独立待机模式： MUTE → 1 → 1 → 9 → EN

- 按下▲或▼按钮可选择“克隆： TV到USB”，然后按下ENTER键按钮。

- 显示信息“克隆： TV 到USB”，然后按下ENTER键按钮。

- 你可以确定USB克隆操作：

- 进程中：在复制数据到USB时。

- 完成：复制操作成功完成。

- 失败：复制操作没有成功完成。

- 无USB：没有接入任何USB设备。

Ch Remap On/Off	Off
Program Ch	3
Original Ch/Src	3
Auto PC	Off
Energy Saving	Off
Clone:USB to TV	
Welcome Message	On
Edit Welcome Message	

在按下ENTER键5秒后，可进行USB到TV的复制操作。

For fast instant cloning during installation!

Insert USB key with master settings from first TV and press Enter key for 5 seconds.

Multi Code Remocon

Multi Code Remocon 是一种特殊的发射器，可通过一个遥控来控制每个电视。

此功能对于大量使用TV的地方很有用处，如医院。所设置的ID识别号码将会出现在OSD上，它可以支持10种不同的遥控键传输Multi code，且每个TV的初始ID代码设置为“0”。

- ID代码可以在TV模式或PC模式中被设置和复位。(在DTV信道时不可用)
- ID代码可为0到9的数字。
- 按下蓝色按键3秒以上，用户设置数字键。
- 设置的ID OSD 将会显示在中心区域。
- 将会显示如下信息“遥控代码被设置为x, 如果想要更改遥控代码，输入要变更的数字即可。”(x为数字) 此OSD将会持续显示，至到输入退出键为止。

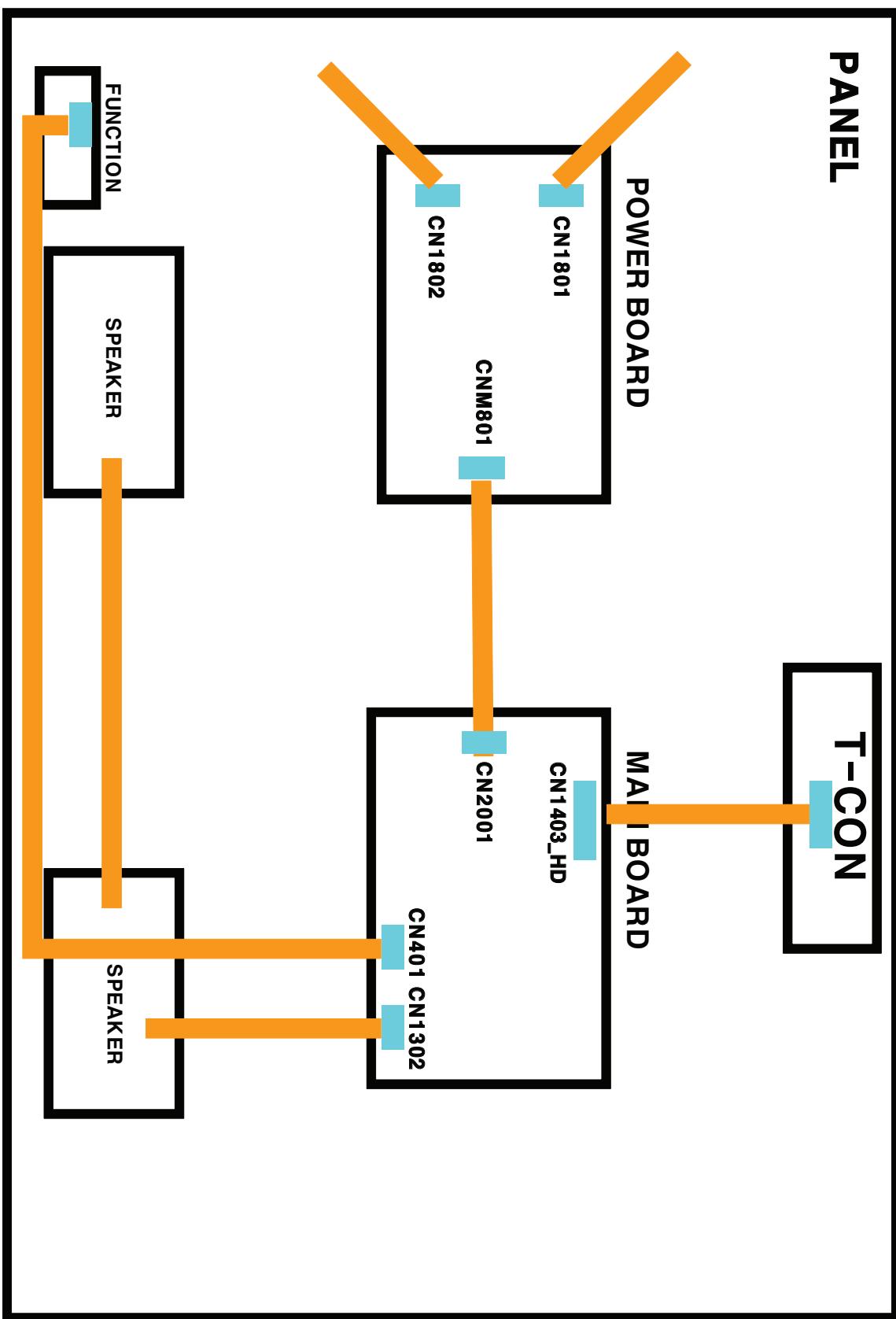


- 例如，如果用户按下#1，TV 和遥控将会提示设置ID代码。
- 将会显示如下信息“遥控代码被更改为1”。拥有同样ID代码的电视可以通过一个遥控来进行控制。
- 如果ID代码与遥控和TV不匹配，将会显示如下信息：“TV ID x”(x 是指TV ID)
- 如要对ID进行复位操作，按下黄色键3秒以上，电视和遥控的ID代码将会被复位为“0”。这时将会显示“遥控代码被设置为0”

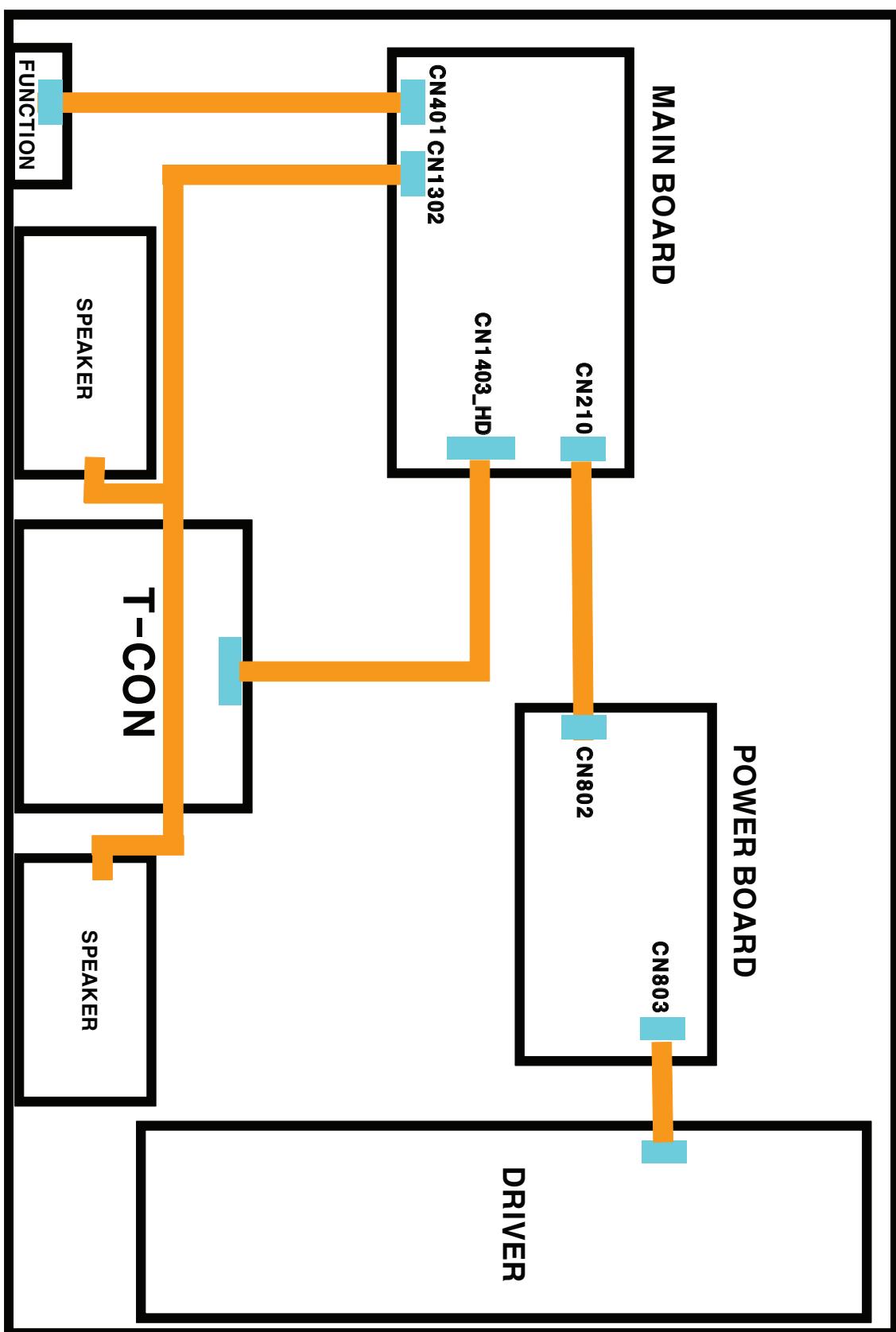
6. Wiring Diagram

6-1. Wiring Diagram

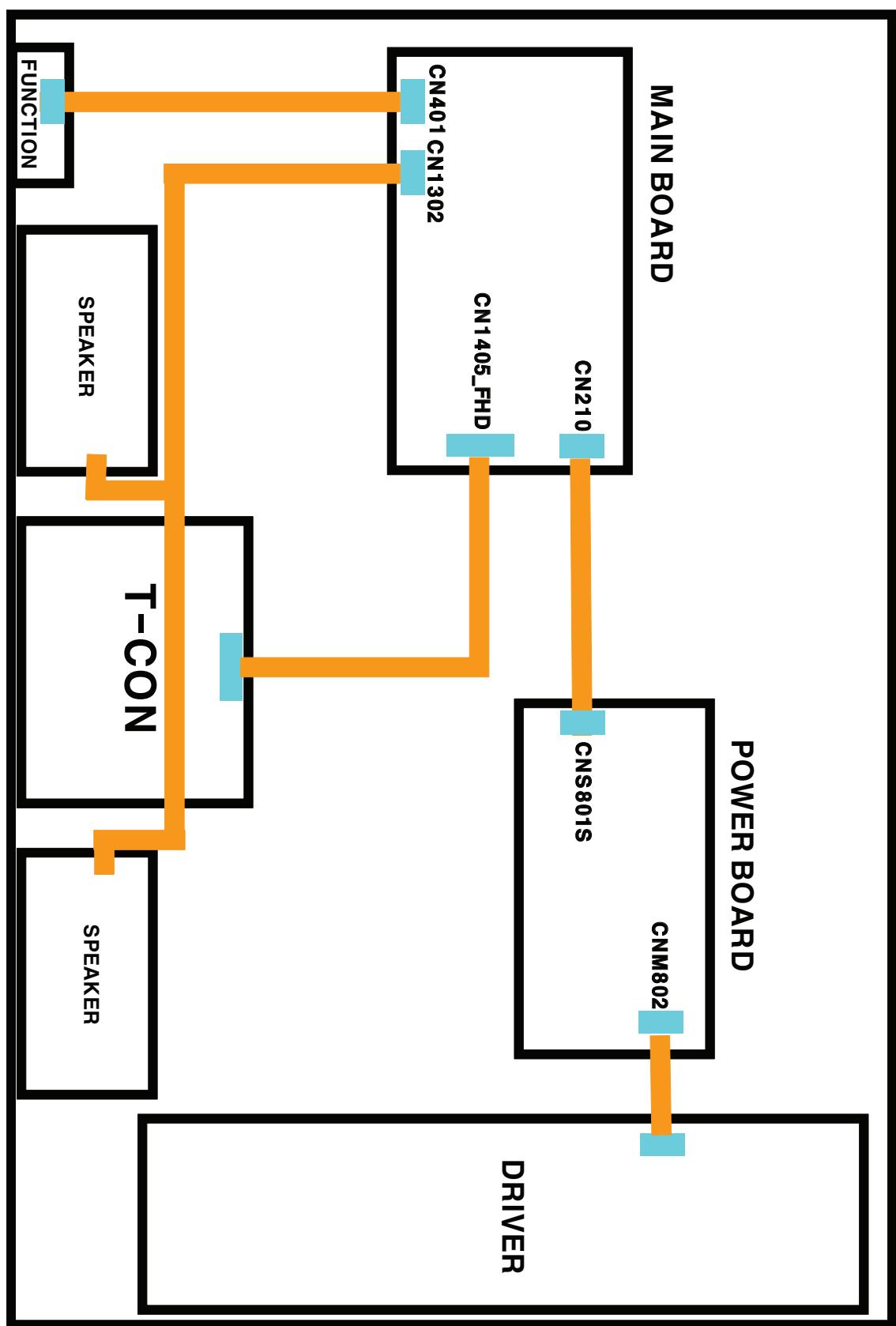
■ LA22C450E1T



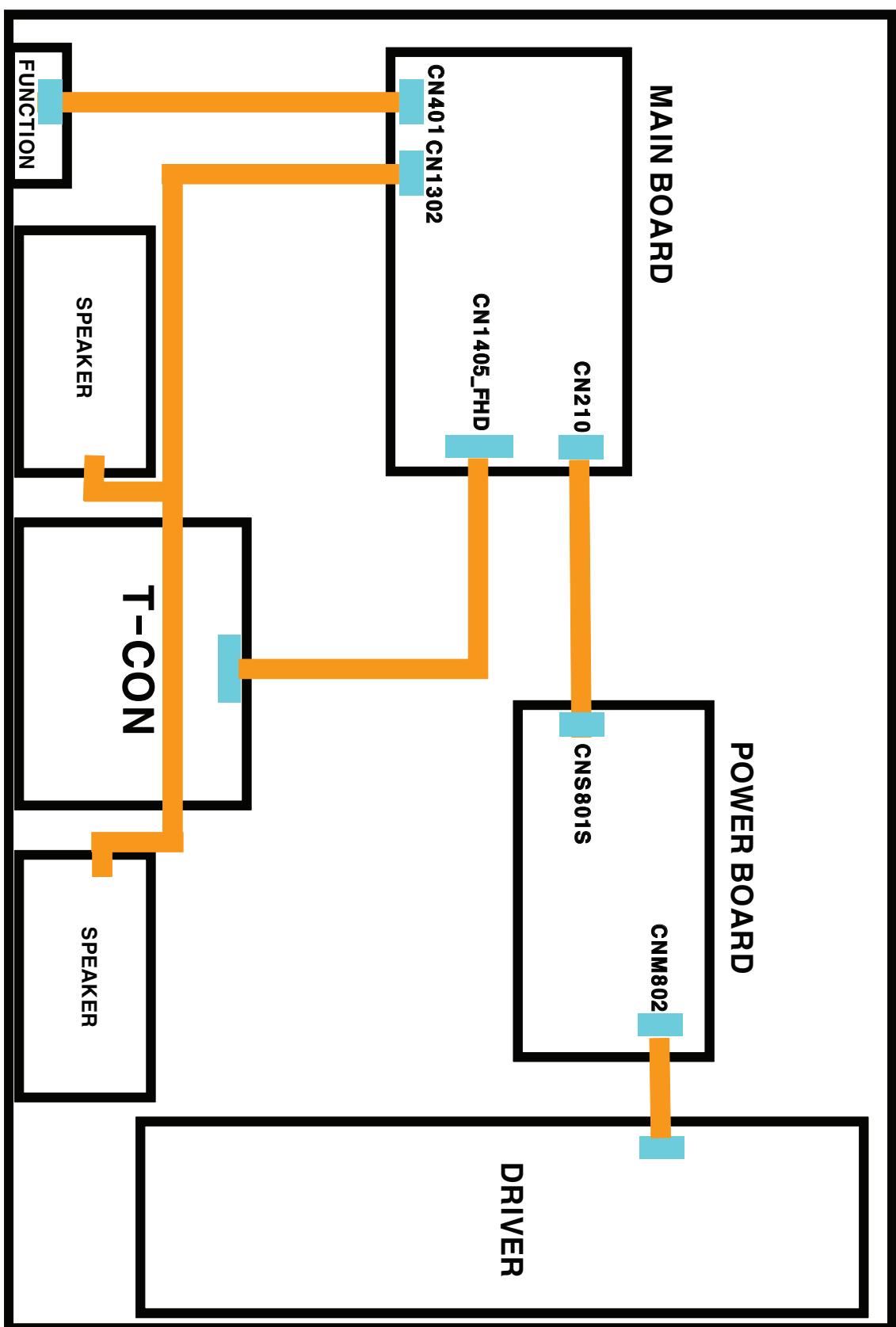
■ LA26_32C450E1T



■ LA37C530E1T



■ LA40_46C530E1T



6-2. Connector

CN201(to Power board)			
1	B13VS	10	GND
2	SW_POWER	11	GND
3	B13VS	12	H_OUT
4	A5V	13	B13V
5	B5V	14	(PWM)DIMMING_OUT
6	B5V	15	B13V
7	B5V	16	SW_INVERTER
8	GND	17	B13V
9	GND	18	IP_DET

CN401(FUNCTION)			
1	IR	6	KEY_INPUT1
2	GND	7	KEY_INPUT2
3	A5V	8	LED_STB
4	MSCL	9	N.C
5	MSDA	10	N.C

CN1002(REAIR : HDMI1 /DVI)			
1	HDMI1_RX2+	11	GND
2	GND	12	HDMI1_RXCLK-
3	HDMI1_RX2-	13	HDMI1_CEC
4	HDMI1_RX1+	14	GND
5	GND	15	HDMI1_DDC_SCL
6	HDMI1_RX1-	16	HDMI1_DDC_SDA
7	HDMI1_RX0+	17	GND
8	GND	18	HDMI1_5V
9	HDMI1_RX0-	19	HDMI1_HPD
10	HDMI1_RXCLK+		

CN1302(SPEAKER)			
1	R+	3	L+
2	R-	4	L-

CN1204(SIDE USB)			
1	USB_5V	3	USB_DP
2	USB_DM	4	GND

CN1403_HD(to HD PANEL)			
1	Panel_VCC	16	ODD[CLK]+
2	Panel_VCC	17	ODD[CLK]-
3	Panel_VCC	18	GND
4	Panel_VCC	19	ODD[2]+
5	Panel_VCC	20	ODD[2]-
6	GND	21	GND
7	GND	22	ODD[1]+
8	GND	23	ODD[1]-
9	TCON_WP	24	GND
10	FORMAT	25	ODD[0]+
11	NC	26	ODD[0]-
12	GND	27	GND
13	ODD[3]+	28	SDA_TCON
14	ODD[3]-	29	SCL_TCON
15	GND	30	NC

CN9702_CH(REAR : AV IN / VIDEO OUT)			
1	GND	5	IDENT_COMP2
2	SC_SR_IN	6	SC_CVBS_IN
3	SC_SL_IN	7	GND
4	GND	8	SC_AV_CVBS_OUT

CN802 (COMPONENT)			
1	COMP1_Y	6	COMP1_SR_IN
2	IDENT_COMP1	7	GND
3	COMP1_PB	8	GND
4	COMP1_PR	9	GND
5	COMP1_SL_IN		

CN801(SIDE AV IN)			
1	GND	6	AV1_SL_IN
2	IDENT_AV1	7	GND
3	AV1_CVBS_IN	8	AV1_SL_IN
4	GND	9	AV1_SR_IN
5	AV1_SR_IN		

CN1003(REAR : HDMI2)			
1	HDMI2_RX2+	11	GND
2	GND	12	HDMI2_RXCLK-
3	HDMI2_RX2-	13	HDMI_CEC
4	HDMI2_RX1+	14	GND
5	GND	15	HDMI2_DDC_SCL
6	HDMI2_RX1-	16	HDMI2_DDC_SDA
7	HDMI2_RX0+	17	GND
8	GND	18	HDMI2_5V
9	HDMI2_RX0-	19	HDMI2_HPD
10	HDMI2_RXCLK+		

CN1301(HEADPHONE)			
1	GND	4	HP_OUT_SL
2	HP_OUT_SR	5	HP_OUT_SL
3	HP_OUT_SL	6	GND

CN1405_FHD(to FHD PANEL)			
1	NC	27	EVEN[0]-
2	NC	28	GND
3	NC	29	ODD[4]+
4	NC	30	ODD[4]-
5	NC	31	ODD[3]+
6	NC	32	ODD[3]-
7	FORMAT	33	GND
8	SDA_Panel	34	ODDCLK+
9	TCON_WP	35	ODDCLK-
10	NC	36	GND
11	SDA_Panel	37	ODD[2]+
12	SCL_Panel	38	ODD[2]-
13	GND	39	ODD[1]+
14	EVEN[4]+	40	ODD[1]-
15	EVEN[4]-	41	ODD[0]+
16	EVEN[3]+	42	ODD[0]-
17	EVEN[3]-	43	GND
18	GND	44	GND
19	EVENCLK+	45	GND
20	EVENCLK-	46	NC
21	GND	47	Panel_VCC
22	EVEN[2]+	48	Panel_VCC
23	EVEN[2]-	49	Panel_VCC
24	EVEN[1]+	50	Panel_VCC
25	EVEN[1]-	51	Panel_VCC
26	EVEN[0]+		

CN901 (PC/DVI AUDIO IN)			
1	GND	5	N.C
2	PC_DVI_SR_IN	6	N.C
3	PC_DVI_SL_IN	7	N.C
4	N.C		

CN902(PC - DSUB)			
1	PC_R	9	PC_5V
2	PC_G	10	IDENT_PC
3	PC_B	11	RDB_FANET
4	TDB_FANET	12	SDA_DOWN
5	GND	13	PC_HS
6	GND	14	PC_VS
7	GND	15	SCL_DOWN
8	GND		

CN1004(SIDE : HDMI3)			
1	HDMI3_RX2+	11	GND
2	GND	12	HDMI3_RXCLK-
3	HDMI3_RX2-	13	HDMI_CEC
4	HDMI3_RX1+	14	GND
5	GND	15	HDMI3_DDC_SCL
6	HDMI3_RX1-	16	HDMI3_DDC_SDA
7	HDMI3_RX0+	17	GND
8	GND	18	HDMI3_5V
9	HDMI3_RX0-	19	HDMI3_HPD
10	HDMI3_RXCLK+		

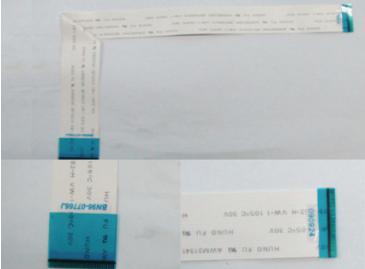
CN9002_CH (AUDIO OUT)			
1	GND	4	N.C
2	SC_SR_OUT	5	N.C
3	SC_SL_OUT	6	N.C

6-3. Connector Functions

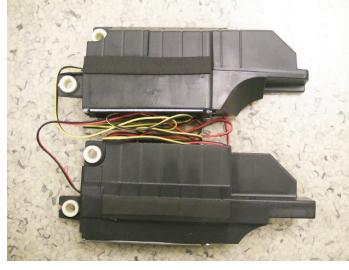
Connector	Functions
Main CN210 ↔ IP CN802	Supply main power and dimming signal from IP board to Main Board.
Main CN1403_HD / CN1405_FHD ↔ T-CON CNF1	The LVDS signal transferred from Main Board to Panel .
IP CN803 ↔ Panel CN1 (14 Pin)	Supply power from IP board to Driver Board.
IP CNI802 ↔ Panel CN1 (2 Pin)	Supply power from IP board to Driver Board.
IP CNI801 ↔ Panel CN3 (7 Pin)	Supply power from IP board to Driver Board.

6-4. Cables

- LC450E1T

Use	LEAD (Main-IP 18P)	LVDS (Main - TCON)	
Code	26" : BN39-01267P (70mm) 32" : BN39-01267A (200mm)	22" : BN96-12453B 26" : BN96-12469D 32" : BN96-13227A	26" : BN39-01274A (80mm - 14P) 32" : BN39-01274A (80mm - 14P)
Photo			

- LC530F1T

Use	(1) LVDS CONNECTOR	(2) CONNECTOR POWER 18P	(3) ASSY-SPEAKER
Code	BN96-13171B (37") BN96-13171C (40") BN96-13171D (46")	BN39-01267E (37") BN39-01267N (40") BN39-01267F (46")	BN96-12871B (37") BN96-12837A (40") BN96-12837B (46")
Photo			
Use	(4) CONNECTOR POWER 14P	(5) CONNECTOR INVERTOR	(6) CONNECTOR_High Voltage
Code	BN39-01272A(37" 14P)	BN39-01279E(40",46" 7P)	BN39-01024D(40",46" 2P)
Photo			