

Model	LE40F86BD	
<b>Feature</b>		
<ul style="list-style-type: none"> <li>▶ Digital-TV, RF, 3-HDMI, 1-Component, 1-AV, 1-S-Video, USB2.0(WISELINK), D-SUB</li> <li>▶ Brightness : 500cd/m<sup>2</sup></li> <li>▶ Contrast Ratio : 8000:1</li> <li>▶ Response time : 6ms</li> <li>▶ Dynamic contrast, Super-PVA</li> <li>▶ PIP(in HDMI 1, 2, 3, Component 1, PC Mode and Sub picture is available only in TV analog mode)</li> </ul>		
<b>Specifications</b>		
Item	Description	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normaly black, 40-Inch viewable, 0.46125(H) x 0.46125(W) x 3 mm pixel pitch	
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	34.84 x 19.59 inches (885.168 (H) x 497.664 (V) mm)	
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz	
Power Consumption	<245 W ( < 1W, stand by )	
Dimensions Set (W x D x H)	43.08 x 11.41 x 26.59 inches (1094.3 x 289.9 x 675.4mm) with stand 43.08 x 4.04 x 23.9 inches (1094.3 x 102.8 x 607.3 mm) without stand	
Weight (Set)	52.24 lbs (23.7kg)	
TV System	Tuning	Frequency Synthesizer (Refer to detailed Frequency Table)
	System	DVB-T, PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
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	
Environmental Considerations	- 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	
<b>Note:</b> Anynet+, WISELINK		

## 2. Product specifications

<b>Model</b>	<b>LE46F86BD</b>	
<b>Feature</b>		
<ul style="list-style-type: none"> <li>▶ Digital-TV, RF, 3-HDMI, 1-Component, 1-AV, 1-S-Video, USB2.0(WISELINK), D-SUB</li> <li>▶ Brightness : 500cd/m<sup>2</sup></li> <li>▶ Contrast Ratio : 8000:1</li> <li>▶ Response time : 6ms</li> <li>▶ Dynamic contrast, Super-PVA</li> <li>▶ PIP(in HDMI 1, 2, 3, Component 1, PC Mode and Sub picture is available only in TV analog mode)</li> </ul>		
<b>Specifications</b>		
<b>Item</b>	<b>Description</b>	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normally black, 46-Inch viewable, 0.53025(H) x 0.17675(W) x 3 mm pixel pitch	
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	40.1 x 22.54 inches (1018.08 (H) x 572.67 (V) mm)	
AC power voltage & Frequency	AC 110V ~ 240V, 50/60 Hz	
Power Consumption	<265 W ( < 1W, stand by )	
Dimensions Set (W x D x H)	48.12 x 4.37 x 27.03 inches (1222.3 x 111.0 x 686.8 mm) without stand 48.12 x 12.59 x 29.62 inches (1222.3 x 319.9 x 752.4 mm) with stand	
Weight (Set)	72.31 lbs (32.8kg)	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB-T, PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
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	
Environmental Considerations	- 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	
<b>Note:</b> Anynet+, WISELINK		

2-3

## 2. Product specifications

<b>Model</b>	<b>LE70F96BD</b>	
<b>Feature</b>		
<ul style="list-style-type: none"> <li>▶ Digital-TV, RF, 3-HDMI, 1-Component, 1-AV, 1-S-Video, USB2.0(WISELINK), D-SUB</li> <li>▶ Brightness : 500cd/m<sup>2</sup></li> <li>▶ Contrast Ratio : 8000:1</li> <li>▶ Response time : 6ms</li> <li>▶ Dynamic contrast, Super-PVA</li> <li>▶ PIP(in HDMI 1, 2, 3, Component 1, PC Mode and Sub picture is available only in TV analog mode)</li> </ul>		
<b>Specifications</b>		
<b>Item</b>	<b>Description</b>	
LCD Panel	TFT-LCD panel, RGB vertical stripe, SPVA mode, normally black, 70-Inch viewable, 0.511(H) x 0.511(V) x 3 mm pixel pitch	
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	61.18 x 34.29 inches(1554 x 871 mm)	
AC power voltage & Frequency	AC 110V ~ 240V, 50/60Hz	
Power Consumption	<570 W ( < 1W, stand by )	
Dimensions Set (W x D x H)	69.72 x 16.54 x 42.48 inches (1771 x 420 x 1079 mm)_ Without stand 69.72 x 5.91 x 40.28 inches(1771 x 150 x 1023 mm)_ With stand	
Weight (Set)	211.62 lbs (96kg)	
TV System	Tuning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	DVB-T, PAL, SECAM, NT4.43
	Sound	BG, DK, NICAM, MPEG1
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	
Environmental Considerations	- MAX Internal speaker Out : Right => 15W, Left => 15W - 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	
<b>Note:</b> Anynet+, WISELINK		

## CHANNEL FREQUENCY TABLE

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

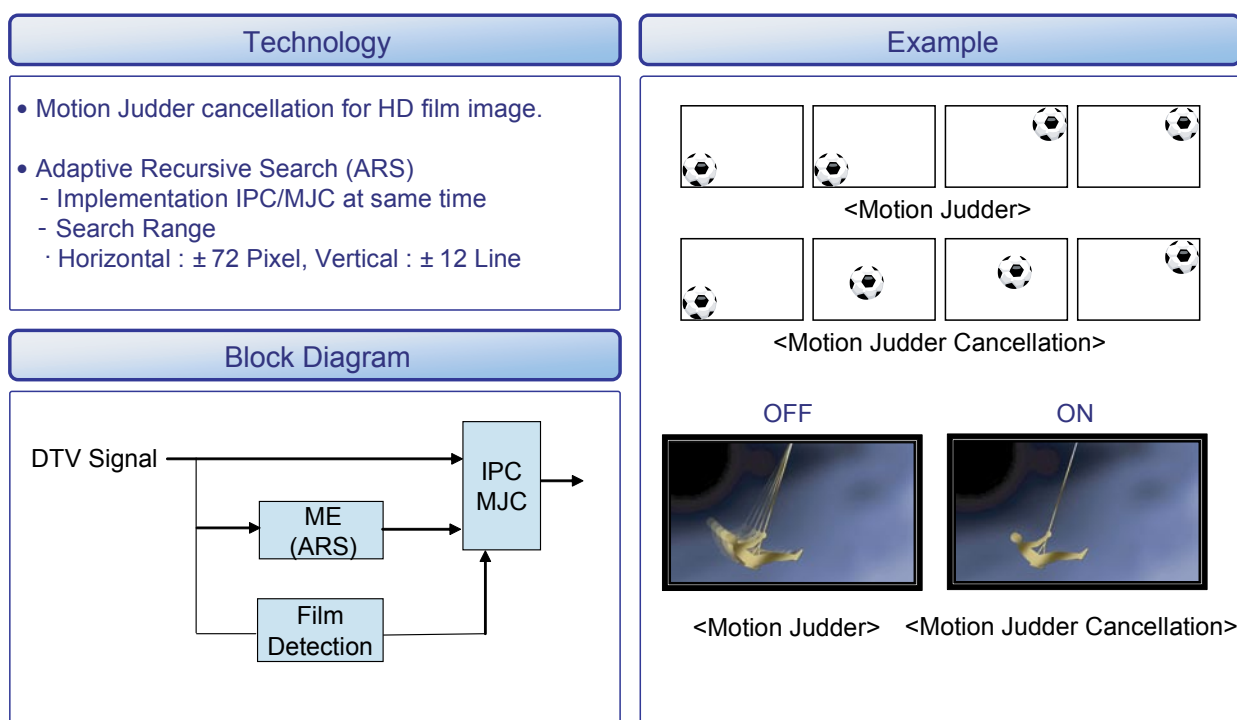
2. TUNING STEP SIZE : FIRST PLL 250KHz    SECOND PLL 62.5KHz

OSD	CH NO	AIR		BAND	CH NO	Cable STD		BAND	CH NO	Cable HRC		CH NO	Cable IRC	
		Air-DTV	Air-NTSC											
1	1								A-8	72.00		A-8	73.25	
2	2	57	55.25	V-L	2	55.25		V-L	2	54.00		2	55.25	
3	3	63	61.25	V-L	3	61.25		V-L	3	60.00		3	61.25	
4	4	69	67.25	V-L	4	67.25		V-L	4	66.00		4	67.25	
5	5	79	77.25	V-L	5	77.25		V-L	A-7	78.00		A-7	79.25	
6	6	85	83.25	V-L	6	83.25		V-L	A-6	84.00		A-6	85.25	
7	7	177	175.25	V-H	7	175.25		V-H	7	174.00		7	175.25	
8	8	183	181.25	V-H	8	181.25		V-H	8	180.00		8	181.25	
9	9	189	187.25	V-H	9	187.25		V-H	9	186.00		9	187.25	
10	10	195	193.25	V-H	10	193.25		V-H	10	192.00		10	193.25	
11	11	201	199.25	V-H	11	199.25		V-H	11	198.00		11	199.25	
12	12	207	205.25	V-H	12	205.25		V-H	12	204.00		12	205.25	
13	13	213	211.25	V-H	13	211.25		V-H	13	210.00		13	211.25	
14	14	473	471.25	UHF	A	121.25		MID	A	120.00		A	121.25	
15	15	479	477.25	UHF	B	127.25		MID	B	126.00		B	127.25	
16	16	485	483.25	UHF	C	133.25		MID	C	132.00		C	133.25	
17	17	491	489.25	UHF	D	139.25		MID	D	138.00		D	139.25	
18	18	497	495.25	UHF	E	145.25		MID	E	144.00		E	145.25	
19	19	503	501.25	UHF	F	151.25		MID	F	150.00		F	151.25	
20	20	509	507.25	UHF	G	157.25		MID	G	156.00		G	157.25	
21	21	515	513.25	UHF	H	163.25		MID	H	162.00		H	163.25	
22	22	521	519.25	UHF	I	169.25		MID	I	168.00		I	169.25	
23	23	527	525.25	UHF	J	175.25		SUPER	J	174.00		J	175.25	
24	24	533	531.25	UHF	K	181.25		SUPER	K	180.00		K	181.25	
25	25	539	537.25	UHF	L	187.25		SUPER	L	186.00		L	187.25	
26	26	545	543.25	UHF	M	193.25		SUPER	M	192.00		M	193.25	
27	27	551	549.25	UHF	N	199.25		SUPER	N	198.00		N	199.25	
28	28	557	555.25	UHF	O	205.25		SUPER	O	204.00		O	205.25	
29	29	563	561.25	UHF	P	211.25		SUPER	P	210.00		P	211.25	
30	30	569	567.25	UHF	Q	217.25		SUPER	Q	216.00		Q	217.25	
31	31	575	573.25	UHF	R	223.25		SUPER	R	222.00		R	223.25	
32	32	581	579.25	UHF	S	229.25		SUPER	S	228.00		S	229.25	
33	33	587	585.25	UHF	T	235.25		SUPER	T	234.00		T	235.25	
34	34	593	591.25	UHF	U	241.25		SUPER	U	240.00		U	241.25	
35	35	599	597.25	UHF	V	247.25		SUPER	V	246.00		V	247.25	
36	36	605	603.25	UHF	W	253.25		SUPER	W	252.00		W	253.25	
37	37	611	609.25	UHF	AA	259.25		HYPER	AA	258.00		AA	259.25	
38	38	617	615.25	UHF	BB	265.25		HYPER	BB	264.00		BB	265.25	
39	39	623	621.25	UHF	CC	271.25		HYPER	CC	270.00		CC	271.25	
40	40	629	627.25	UHF	DD	277.25		HYPER	DD	276.00		DD	277.25	
41	41	635	633.25	UHF	EE	283.25		HYPER	EE	282.00		EE	283.25	
42	42	641	639.25	UHF	FF	289.25		HYPER	FF	288.00		FF	289.25	
43	43	647	645.25	UHF	GG	295.25		HYPER	GG	294.00		GG	295.25	
44	44	653	651.25	UHF	HH	301.25		HYPER	HH	300.00		HH	301.25	
45	45	659	657.25	UHF	II	307.25		HYPER	II	306.00		II	307.25	
46	46	665	663.25	UHF	JJ	313.25		HYPER	JJ	312.00		JJ	313.25	
47	47	671	669.25	UHF	KK	319.25		HYPER	KK	318.00		KK	319.25	
48	48	677	675.25	UHF	LL	325.25		HYPER	LL	324.00		LL	325.25	
49	49	683	681.25	UHF	MM	331.25		HYPER	MM	330.00		MM	331.25	
50	50	689	687.25	UHF	NN	337.25		HYPER	NN	336.00		NN	337.25	
51	51	695	693.25	UHF	OO	343.25		HYPER	OO	342.00		OO	343.25	
52	52	701	699.25	UHF	PP	349.25		HYPER	PP	348.00		PP	349.25	
53	53	707	705.25	UHF	QQ	355.25		HYPER	QQ	354.00		QQ	355.25	
54	54	713	711.25	UHF	RR	361.25		HYPER	RR	360.00		RR	361.25	
55	55	719	717.25	UHF	SS	367.25		HYPER	SS	366.00		SS	367.25	
56	56	725	723.25	UHF	TT	373.25		HYPER	TT	372.00		TT	723.25	
57	57	731	729.25	UHF	UU	379.25		HYPER	UU	378.00		UU	729.25	
58	58	737	735.25	UHF	VV	385.25		HYPER	VV	384.00		VV	735.25	
59	59	743	741.25	UHF	WW	391.25		HYPER	WW	390.00		WW	741.25	
60	60	749	747.25	UHF	XX	397.25		HYPER	XX	396.00		XX	747.25	
61	61	755	753.25	UHF	YY	403.25		HYPER	YY	402.00		YY	753.25	
62	62	761	759.25	UHF	ZZ	409.25		HYPER	ZZ	408.00		ZZ	759.25	
63	63	767	765.25	UHF	AAA	415.25		HYPER	AAA	414.00		AAA	765.25	
64	64	773	771.25	UHF	BBB	421.25		HYPER	BBB	420.00		BBB	771.25	
65	65	779	777.25	UHF	CCC	427.25		ULTRA	CCC	426.00		CCC	777.25	
66	66	785	783.25	UHF	DDD	433.25		ULTRA	DDD	432.00		DDD	783.25	
67	67	791	789.25	UHF	EEE	439.25		ULTRA	EEE	438.00		EEE	789.25	
68	68	797	795.25	UHF	FFF	445.25		ULTRA	FFF	444.00		FFF	795.25	
69	69	803	801.25	UHF	GGG	451.25		ULTRA	GGG	450.00		GGG	801.25	

## 2. Product specifications

OSD	CH NO	AIR		BAND	CH NO	Cable STD	BAND	CH NO	Cable HRC	CH NO	Cable IRC
		Air-DTV	Air-NTSC								
70	70				HHH	499.25	ULTRA	HHH	498.00	HHH	499.25
71	71				III	505.25	ULTRA	III	504.00	III	505.25
72	72				JJJ	511.25	ULTRA	JJJ	510.00	JJJ	511.25
73	73				KKK	517.25	ULTRA	KKK	516.00	KKK	517.25
74	74				LLL	523.25	ULTRA	LLL	522.00	LLL	523.25
75	75				MMM	529.25	ULTRA	MMM	528.00	MMM	529.25
76	76				NNN	535.25	ULTRA	NNN	534.00	NNN	535.25
77	77				000	541.25	ULTRA	000	540.00	000	541.25
78	78				PPP	547.25	ULTRA	PPP	546.00	PPP	547.25
79	79				79	553.25	ULTRA	79	552.00	79	553.25
80	80				80	559.25	ULTRA	80	558.00	80	559.25
81	81				81	565.25	ULTRA	81	564.00	81	565.25
82	82				82	571.25	ULTRA	82	570.00	82	571.25
83	83				83	577.25	ULTRA	83	576.00	83	577.25
84	84				84	583.25	ULTRA	84	582.00	84	583.25
85	85				85	589.25	ULTRA	85	588.00	85	589.25
86	86				86	595.25	ULTRA	86	594.00	86	595.25
87	87				87	601.25	ULTRA	87	600.00	87	601.25
88	88				88	607.25	ULTRA	88	606.00	88	607.25
89	89				89	613.25	ULTRA	89	612.00	89	613.25
90	90				90	619.25	ULTRA	90	618.00	90	619.25
91	91				91	625.25	ULTRA	91	624.00	91	625.25
92	92				92	631.25	ULTRA	92	630.00	92	631.25
93	93				93	637.25	ULTRA	93	636.00	93	637.25
94	94				94	643.25	ULTRA	94	642.00	94	643.25
95	95				A-5	91.25	FM	A-5	90.00	A-5	91.25
96	96				A-4	97.25	FM	A-4	96.00	A-4	97.25
97	97				A-3	103.25	FM	A-3	102.00	A-3	103.25
98	98				A-2	109.25	MID	A-2	108.00	A-2	109.25
99	99				A-1	115.25	MID	A-1	114.00	A-1	115.25
100	100				100	649.25	ULTRA	100	648.00	100	649.25
101	101				101	655.25	ULTRA	101	654.00	101	655.25
102	102				102	661.25	ULTRA	102	660.00	102	661.25
103	103				103	667.25	ULTRA	103	666.00	103	667.25
104	104				104	673.25	ULTRA	104	672.00	104	673.25
105	105				105	679.25	ULTRA	105	678.00	105	679.25
106	106				106	685.25	ULTRA	106	684.00	106	685.25
107	107				107	691.25	ULTRA	107	690.00	107	691.25
108	108				108	697.25	ULTRA	108	696.00	108	697.25
109	109				109	703.25	ULTRA	109	702.00	109	703.25
110	110				110	709.25	ULTRA	110	708.00	110	709.25
111	111				111	715.25	ULTRA	111	714.00	111	715.25
112	112				112	721.25	ULTRA	112	720.00	112	721.25
113	113				113	727.25	ULTRA	113	726.00	113	727.25
114	114				114	733.25	ULTRA	114	732.00	114	733.25
115	115				115	739.25	ULTRA	115	738.00	115	739.25
116	116				116	745.25	ULTRA	116	744.00	116	745.25
.	.				.	.	.	.	.	.	.
.	.				.	.	.	.	.	.	.
125	125				125	799.25	ULTRA	125	798.00	125	799.25
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.	.				.	.	.	.	.	.	.

## 2-2. MJC : Motion Judder Cancellation (FRC)





### Difference of FRC Board

FRC-S (SAMSUNG FRC IC : SDP73), FRC-M (MICRONAS FRC IC : FRC9459M)

If you want substitute each other, must change all lower three items.

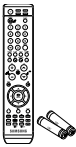
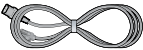

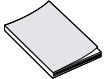


	FRC-S	FRC-M
1. Main MICOM S/W Program	T-PONPEUMD-xxxx	T-PONFMPEUMD-xxxx
2. PCB	BN41-00918A	BN41-00944A
3. LVDS Cable	BN39-00977B BN39-00956B BN39-00957A	BN39-00986A BN39-00987A BN39-00985A

## 2-3. Spec Comparison to the Old Models

Model	ROSE & PEONY (LE40F86BD, LE46F86BD, LE52F96BD LE70F96BD)	Tulip(LE40M86BD)
Design		
Display Type	LCD TV	LCD TV
Built-in Tuner	O	O
Resolution	1920 x 1080	1920 x 1080
LCD Panel	TFT LCD Panel 100Hz	TFT LCD Panel 50Hz
Screen Size	40" / 46" / 52" / 70"	40" / 46" / 52"
Picture ratio	16 : 9	16 : 9
Dimensions (W x H x D)	40 43.08 x 11.41 x 26.59 inches_with stand 43.08 x 4.04 x 23.9 inches_without stand 46 48.12x12.59x29.62 inches_with stand 48.12x4.37x27.03 inches_without stand 52 53.79 x 12.59 x 332.8 inches_with stand 53.79 x 4.72 x 30.7 inches_without stand 70 69.72 x 16.54 x 42.48 inches_with stand 69.72 x 5.91 x 40.28 inches_without stand	44.4 x 12.8 x 31.0 inches_With Stand 44.4 x 4.2 x 28.8 inches_Without Stand
Weight	40 52.2 lbs (set) 46 72.31lbs (set) 52 81.56 lbs (set) 70 211.62 lbs (set)	78.2 lbs (set)
Brightness	500 nit	500 nit
Contrast Ratio	8000:1	8000:1
Picture Enhacer	DNle (FBE2)	DNle (FBE2)
Equalizer	5 Band	O
Auto Motion Plus 100Hz	O	X
Surround Sound	3 Way SRS TruSurround Dolby Digital	2 Way SRS TruSurround Dolby Digital
Speaker Output	10W + 10W	10W + 10W
Antenna	1	1



## 2-4. Accessories

Product	Description	Ccde. No	Remark
	Remote Control & Batteries (AAA x 2)	BN59-00634A BN59-00643A (70" only)	Samsung Electronics Service center
	Power Cord	3903-000042	
	Cover-Bottom	BN63-03665B	
	Owner's Instructions	BN68-01310A	
	Cleaning Cloth	BN63-01798A	
	Warranty Card / Registration Card / Safety Guide Manual (Not available in all locations)	6801-001011	

**Memo**