

2. Product Specifications

2-1. Product Specifications

Item		UN**F6100AG
General Information	Product	LED
	Cabinet Basic Code	FP
	Series	6
	Series Name	LED F6100
	Country	BRAZIL
	Tools Support	No
	Platform(TV)	Novatek NT13
Display	Inch	40" / 46" / 55"
	Resolution	1,920 x 1,080
	Ultra Clear Panel	No
	Lvds Format	JEIDA
	HV Flip	ON
Video	Picture Engine	3D HyperReal Engine
	Clear Motion Rate	240
	Dynamic Contrast Ratio	Mega Contrast
	Micro Dimming	No
	Precision Black (Local Dimming)	No
	Wide Color Enhancer (Plus)	Yes
	Auto Motion Plus 120/240Hz	120Hz
	Film Mode	Yes
	Brightness	300nits
	Contrast Ratio	5000:1
	Picture	3D-Effect,Film Mode
	Detail Resolution	50/60Hz
	Response Time	8ms
	Viewing Angle (H/V)	178/178
	Natural Mode Support	Yes
Audio	Dolby	Dolby Digital Plus / Dolby Pulse
	SRS / DNSe+	DTS Studio Sound
	dtb 2.0+Digital Out / DTS Premium Audio	DTS Premium Audio 5.1
	3D Sound	Yes
	Sound Customizer	No
	Speaker Type	Down Firing + Full Range
	Sound Output (RMS)	10Wx2
	Woofer	No

2. Product specifications

Item		UN**F6100AG
Audio	Sound	SRS TheaterSound HD
	Sound Amp IC	NeoFidelity NTP7412
	Speaker	10W + 10W
	Analog	2Ch
	Digital	Optical
VESA Standard	Screw Size	M8
Feature	Samsung 3D	Yes
	3D Converter	Yes
	History	No
	MultiTasking	No
	Smart Phone Remote support	No
	Smart Evolution Support	No
	Extended PVR	No
	Time Shift	No
	Allshare Play	No
	ConnectShare™ (USB2.0)	Movie
	AllShare Cast	No
	WiFi Direct	No
	Wireless LAN Built-in	No
	Wireless LAN Adaptor Support	No
	ISP Bound Service	No
	BT HID Built-in	Yes (Glasses Only)
	USB HID Support	No
	OSD Language	Local Languages
	User Interface	Golden Bridge Lite
	Digital Noise Filter	Yes
	Network Speaker Support	No
	MHL	No
	Sound Share	No
	WiDi	No
	InstaPort S (HDMI quick switch)	No
	HDMI 1.4 3D Auto Setting	Yes
	HDMI 1.4 A/Return Ch. Support	No
	EPG	Yes
	Analog Clean View	Yes
	Teletext (TTX)	No
	Miracast	No
	Anynet+ (HDMI-CEC)	No

Item		UN**F6100AG
Feature	BD Wise Plus	No
	Auto Channel Search	Yes
	Auto Power Off	Yes
	Auto Volume Leveler	Yes
	Caption (Subtitle)	Yes
	2 Tuner	No
	Clock&On/Off Timer	Yes
	Game Mode	Yes
	Picture-In-Picture	Yes
	Sleep Timer	Yes
	Embedded POP	Yes
	Channel	Auto Store,Fine Tune
	Plug&Play	Yes
	Child Lock	Yes
	Sports Mode	Basic
	Paratal Lock	No
	Media Play(USB & DLNA)	Yes
	Bluetooth	Yes
	Home Network Centre	No
Additional Feature	Self Diagnosis	Yes
	Software Upgrade	Yes
	HD Connection Guide	Yes
	Contact Samsung	Yes
S/W	MCU name	NT13
	OS	Linux
System	DTV Tuner	ISDB-T
	Analog Tuner	Yes (Trinorma)
	MHP / MHEG (version) / ACAP	GINGA
	NTSC 3.58	Yes
	Trinorma (PAL M,N)	Yes
	Broadcast System	ISDB-T
	ATV Sound System	M,N
	DTV Video System	ISDBT
	DTV Sound System	Dolby
	Tuner Vendor & Model	SEM DTIS22EIH055A
Core Component	DDR SDRAM	Samsung
	Nand Flash Memory	Samsung
	Display Device Vender	SDC
Input & Output	HDMI	2

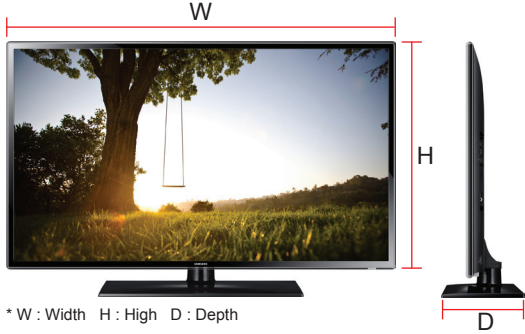
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Item		UN**F6100AG
Input & Output	Resolution	1920 x 1080
	DVI Supported Port	Port1 Type
	PC Maximum Resolution	1920 x 1080 60 Hz
	USB	1
	Port 1 Type	Host
	OS	Linux
	Component In (Y/Pb/Pr)	1
	Composite In (AV)	1 (Common Use for Component Y)
	Ethernet (LAN)	No
	Headphone	No
	Digital Audio Out (Optical)	1
	Audio Out (Mini Jack / LR)	1
	PC In (D-sub)	No
	PC Audio In (Mini Jack)	No
	DVI Audio In (Mini Jack)	No
	RF In (Terrestrial/Cable Input)	2
	RF In (Satellite Input)	No
	RS232C (AV CONTROL)	No
	EX-Link	Yes
	Monitor Output	No
Design	Design	ToC
	Bezel Type	NNB
	Slim Type	Slim 1
	Front Color	Clear
	Light Effect (Deco)	No
	Stand Type	Square
	Swivel (Left/Right)	No
	Molding Method	ToC
	Front Resin	PC+G/F
	Stand Packing Type	Bundle
Eco	Eco Mark	Planet First
	Eco Sensor	Yes
Security	Kensington Lock	Yes
Accessory	3D Active Glasses (Included)	4 EA - SSG-5100GB
	IR Blaster (Included)	No
	Wireless LAN Adaptor (Included)	No
	Network Speaker (Included)	No
	MOIP Camera (Included)	No
	Wireless Keyboard (Included)	No

Item		UN**F6100AG
Accessory	Remote Controller Model	TM1240
	Battery (for Remote Control)	Yes
	Mini Wall Mount Support	Yes
	Ultra Slim Wall Mount Support	No
	VESA Wall Mount Support	Yes
	Slim Gender Cable	No
	ANT-Cable	No
	Power Cable	Yes
	User Manual	Yes
	E-Manual	Yes
	Floor Stand Support	No

2-2. Detailed Specifications

2-2-1. Model Comparison

Model	UN**F6100AG		
Front View	 * W : Width H : High D : Depth		
Detail View	 		
Front Color	Clear / Black		
Dimensions (W x H x D)	40"	Set with Stand	934.0 x 617.4 x 235.0 mm / 36.77 x 24.31 x 9.25 inches
		Set without Stand	934.0 x 548.6 x 49.6 mm / 36.77 x 21.6 x 1.95 inches
	46"	Set with Stand	1065.4 x 697.3 x 235.0 mm / 41.94 x 27.45 x 9.25 inches
		Set without Stand	1065.4 x 622.5 x 49.6 mm / 41.94 x 24.51 x 1.95 inches
	55"	Set with Stand	1256.0 x 798.6 x 235.0 mm / 49.45 x 31.44 x 9.25 inches
		Set without Stand	1256.0 x 729.3 x 49.2 mm / 49.45 x 28.71 x 1.94 inches
Weight	40"	Set with Stand	9 kg / 19.84 lbs
		Set without Stand	7.5 kg / 16.53 lbs
	46"	Set with Stand	13.1 kg / 28.88 lbs
		Set without Stand	11.5 kg / 25.35 lbs
	55"	Set with Stand	18.3 kg / 40.34 lbs
		Set without Stand	16.9 kg / 37.26 lbs
Panel Type	Black		
Internal Memory	128 MByte		
DDR	256 MByte		
Feature	AllShare, 3D, USB 2.0, Energy Saving, ECO Sensor		

2-2-2. Feature & Specifications

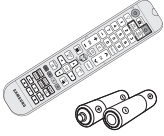
Model	UN40F6100AG	
Feature		
- Digital-TV, RF, 1-Component, 1-A/V(Common Use for Component Y), 2-HDMI, 1-USB2.0(Media Play) - PIP(in HDMI 1, 2 Component and Sub picture is available only in TV mode(DTV/ATV)) - CMR Clear Motion Rate : 240 - Dolby Digital Plus Pulse, DTS Premium Sound 5.1, DTS Studio Sonud		
Specifications		
Item	Description	
LCD Panel	40 inch FHD 120 Hz	
Input Signal Frequency	Horizontal : 31~80 kHz Vertical : 56 ~ 75 Hz	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Display Colors	1.07 B	
Maximum Resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated	
Maximum Pixel Clock Rate	138 MHz	
Active Display (H x V)* * Horizontal x Vertical	885.6 (H) x 498.15 (V) mm	
AC Power Voltage & Frequency	AC 100 V ~ 240 V, 50/60 Hz	
Power Consumption	138 W (Under 0.1 W, Stand by)	
TV System	Tunning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	ISDB-T, PAL-M, PAL-N, NTSC
	Sound	NTSC-M, Dolby Digital +
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 Specifications	MAX Internal Audio Output Power : Each 10 W (Left/Right) Equalizer : 5 Band Output Frequency : RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz	
Note : AllShare, 3D, USB 2.0, Energy Saving, ECO Sensor		

2. Product specifications

Model	UN46F6100AG	
Feature		
- Digital-TV, RF, 1-Component, 1-A/V(Common Use for Component Y), 2-HDMI, 1-USB2.0(Media Play) - PIP(in HDMI 1, 2 Component and Sub picture is available only in TV mode(DTV/ATV)) - CMR Clear Motion Rate : 240 - Dolby Digital Plus Pulse, DTS Premium Sound 5.1, DTS Studio Sonud		
Specifications		
Item	Description	
LCD Panel	46 inch FHD 120 Hz	
Input Signal Frequency	Horizontal : 31~80 kHz Vertical : 56 ~ 75 Hz	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Display Colors	1.07 B	
Maximum Resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated	
Maximum Pixel Clock Rate	138 MHz	
Active Display (H x V)* * Horizontal x Vertical	1018.08 (H) x 572.67 (V) mm	
AC Power Voltage & Frequency	AC 100 V ~ 240 V, 50/60 Hz	
Power Consumption	140 W (Under 0.1 W, Stand by)	
TV System	Tunning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	ISDB-T, PAL-M, PAL-N, NTSC
	Sound	NTSC-M, Dolby Digital +
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 Specifications	MAX Internal Audio Output Power : Each 10 W (Left/Right) Equalizer : 5 Band Output Frequency : RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz	
Note : AllShare, 3D, USB 2.0, Energy Saving, ECO Sensor		

Model	UN55F6100AG	
Feature		
- Digital-TV, RF, 1-Component, 1-A/V(Common Use for Component Y), 2-HDMI, 1-USB2.0(Media Play) - PIP(in HDMI 1, 2 Component and Sub picture is available only in TV mode(DTV/ATV)) - CMR Clear Motion Rate : 240 - Dolby Digital Plus Pulse, DTS Premium Sound 5.1, DTS Studio Sonud		
Specifications		
Item	Description	
LCD Panel	55 inch FHD 120 Hz	
Input Signal Frequency	Horizontal : 31~80 kHz Vertical : 56 ~ 75 Hz	
Input Sync Signal	H/V Separate, TTL, P. or N.	
Display Colors	1.07 B	
Maximum Resolution	Horizontal : 1920 Pixels Vertical : 1080 Pixels	
Input Signal	Analog 0.7 Vp-p ± 5% positive at 75Ω, internally terminated	
Maximum Pixel Clock Rate	138 MHz	
Active Display (H x V)* * Horizontal x Vertical	1209.6 (H) X 680.4 (V) mm	
AC Power Voltage & Frequency	AC 100 V ~ 240 V, 50/60 Hz	
Power Consumption	166 W (Under 0.1 W, Stand by)	
TV System	Tunning	Frequency Synthesize (Refer to detailed Frequency Table)
	System	ISDB-T, PAL-M, PAL-N, NTSC
	Sound	NTSC-M, Dolby Digital +
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 Specifications	MAX Internal Audio Output Power : Each 10 W (Left/Right) Equalizer : 5 Band Output Frequency : RF : 20 Hz ~ 15.4 kHz AV/Componet/HDMI : 20 Hz ~ 20 kHz	
Note : AllShare, 3D, USB 2.0, Energy Saving, ECO Sensor		

2-3. Accessories

Product	Description	Code. No	Remark
	Remote Control Batteries (AAA x 2)	BN98-04411A (4301-000121)	Supplied Accessories
	Power Cord	3903-000851	
	User Manual	BN68-04920B	
	3D Active Glasses	BN96-25614A	
	Holder-Ring (4ea)	BN61-07295A	
	Holder-Wire Stand	BN61-08370A	
	Cloth-clean	BN63-01798B	



NOTE

The part code for some Accessories may differ depending on your region.

2-4. Viewing the Functions

2-4-1. Auto Motion Plus 120 Hz

■ Function Naming

- 120 Hz FRC + MJC : Auto Motion Plus 120 Hz

■ Detail Specifications

Function (OSD)	120 Hz FRC	Judder reduction (only 24p source)	Blur reduction
Off	Off (repeat)	Off	Off
Clear	ON (interpolation)	Off	High
Standard	ON (interpolation)	Medium	Medium
Smooth	ON (interpolation)	High	High
Custom	Level variable (0~10)		
Demo	Demo (Standard / Off)		

■ 120Hz Motion Enhancement



Off



Low / Medium / High



Demo

2-4-2. Supported Formats

■ Supported Subtitle Formats

Exterminal

Name	File Extension
MPEG-4 Timed text	.ttx
SAMI	.smi
SubRip	.srt
SubViewer	.sub
Micro DVD	.sub or .txt
SubStation Alpha	.ssa
Advanced SubStation Alpha	.ass
Powerdivx	.psb

Internal

Name	Container	Format
Xsub	AVI	Picture Format
SubStation Alpha	MKV	Text Format
Advanced SubStation Alpha	MKV	Text Format
SubRip	MKV	Text Format
MPEG-4 Timed text	MP4	Text Format

■ Supported Photos Formats

File Extension	Type	Resolution
*.jpg *.jpeg	JPEG	15360 x 8640
*.bmp	BMP	4096 x 4096
*.mpo	MPO	15360 x 8640

* The MPO type file does not support Zoom, Rotate and Slide Show Effect functions.

■ Supported Music Formats

File Extension	Type	Codec	Comments
*.mp3	MPEG	MPEG1 Audio Layer 3	
*.m4a	MPEG4	AAC	
*.mpa			
*.aac			
*.flac	FLAC	FLAC	Supports up to 2 channel
*.ogg	OGG	Vorbis	Supports up to 2 channel
*.wma	WMA	WMA	WMA 10 Pro supports up to 5.1 channel. WMA lossless audio is not supported. Supports up to M2 profile (except LBR mode)
*.wav	wav	wav	
*.mid *.midi	midi	midi	type 0, type 1 are supported.

■ Supported Video Formats

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec				
*.avi	AVI MKV ASF MP4 3GP MOV FLV VRO VOB PS TS SVAF	Divx 3.11 / 4 / 5 / 6	1920 x 1080	6~30	30	AC3 LPCM ADPCM(IMA, MS) AAC HE-AAC WMA DD+ MPEG(MP3) G.711(A-Law, μ-Law)				
*.mkv		MPEG4 SP/ASP								
*.asf		H.264 BP/MP/HP								
*.wmv		Motion JPEG	640 x 480		8					
*.mp4										
*.3gp		Microsoft MPEG-4 v3	1280 x 720		30					
*.vro										
*.mpg		Window Media Video v7,v8	1920x1080		4					
*.mpeg										
*.ts		Window Media Video v9	1920x1080							
*.tp										
*.trp		MPEG2								
*.mov										
*.flv		MPEG1								
*.vob										
*.svi		MVC	640 x 480		60					
*.m2ts										
*.mts		VP6			4					
*.divx										
*.webm		WebM	VP8	1920 x1080		20	Vorbis			

■ Other Restrictions

- Video content will not play, or not play correctly, if there is an

■ Video Decoders

- Supports up to H.264, Level 4.1 (does not support FMO/ASO/RS)
- VC1 AP L4 is not supported.
- All video codecs excluding WMV v7, v8, MSMPEG4 v3, MVC, and VP6:
 - Below 1280 x 720: 60 frame max
 - Above 1280 x 720: 30 frame max
- GMC is not supported.
- Supports SVAF top/bottom and left/right only.
- Supports Blu-ray/DVD MVC specs only.

■ Audio Decoders

- WMA 10 Pro supports up to 5.1 channels. Supports up to M2 profile. (Excluding M0 LBR mode)

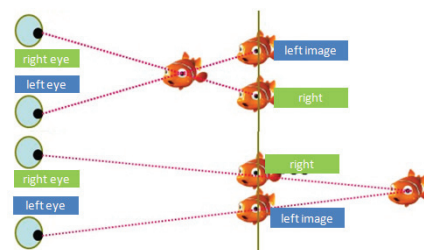
2. Product specifications

- WMA lossless audio is not supported.
- Vorbis is supported for up to 2 channels.
- DD+ is supported for up to 5.1 channels.

2-4-3. 3D Display

■ What is 3D Display?

This mode is to enable users to view images on the TV/Monitor in 3D by receiving the video signal in 3D format from sources such as 3D games and titles. The human brain constructs a 3 dimensional image from the two images entering both eyes. The depth of a 3 dimensional images is determined by the horizontal difference between the images from both the left and right eyes. 3D is displayed two images alternately on screen equivalent to left and right at TV, and embodied by doing to see each relevant image in left eye and right eye through shutter glasses.



■ 3D Function of Model Series

LCD / LED / PDP TV			LED
Items	Sub Items		120 Hz
	Platform (Main)		X12
	Platform (FRC / Formatter)		Fox-FT1 (SDC) Fox-FT2 (AUO / CMI) Echo-Fs (Sharp 3D) NT7231 2 (Sharp 2D)
3D Feature	2D → 3D Conversion		O
	3D → 2D		O
	3D Perspective		O
	3D Depth		O
	Auto View (Auto Format Detection)		X
	3D Optimize		O
FRC Feature	Auto Motion Plus		O
3D Input Format	ATV / AV, PC	2D → 3D	O
		2D → 3D	O
	Component	SS, TB	O
		2D → 3D	O
	HDMI	SS, TB	O
		FP 1080P 24 / 25 / 30 FP 720P 50 / 60 FP 1080i 50 / 60	O
	HDMI (PC / DVI)	LL, VS, Check ker BD, FS	X
	HDMI (PC / DVI)	2D → 3D	O
		SS, TB	O
		MPO	O
		SVAF IES (SS, BT)	O
		MVC 1080P 24 / 25 / 30 MVC 720P 50 / 60 MVC 1080i 50 / 60 MVC 720P 24 / 25 / 30	O
	DTV	2D → 3D	O
		SS, TB	O
		DVB_Phase1 (SS, BT)	O
		ATSC_KR30	O

■ Supported 3D Resolutions

Supported resolutions (16:9 Only)

- HDMI

Source	Resolution	Frequency (Hz)
	1280 x 720p	59.94 / 60 Hz
	1920 x 1080i	59.94 / 60 Hz
	1920 x 1080p	23.98 / 24 / 29.97 / 30 / 59.94 / 60 Hz
Frame Packing	1280 x 720p	59.94 / 60 Hz
	1920 x 1080i	59.94 / 60 Hz
	1920 x 1080p	23.98 / 24 / 29.97 / 30 Hz

- Components & DTV

Source	Resolution	Frequency (Hz)
Components	1280 x 720p	59.94 / 60 Hz
	1920 x 1080i	59.94 / 60 Hz
	1920 x 1080p	23.98 / 24 / 29.97 / 30 / 59.94 / 60 Hz
DTV	1280 x 720p	59.94 / 60 Hz
	1920 x 1080i	59.94 / 60 Hz

■ 3D Format Test

3D Format : There are several 3D formats existing on how to merge Left and Right images.

Format	Input images	Test Method
Frame Packin (HDMI 1.4)		Able to test only by HDMI 1.4 BD Player or MSPG-4600MT(Master Device)
Top & Bottom		Using Format_test.bmp - Check in the PC(HDMI) source. PC resolution and format resolution must be same - Wearing 3D glass, left eye sees only 'L' letter, right eye sees only 'R' letter (close your eyes one by one)
Side by Side		Using Format_test.bmp - Check in the PC(HDMI) source. PC resolution and format resolution must be same - Wearing 3D glass, left eye sees only 'L' letter, right eye sees only 'R' letter (close your eyes one by one)
2D → 3D		Check in the normal 2D source. Check not in the test pattern but in the actual video. Left/Right black region will grow more and more as the depth goes higher.