

# HL-T5689S

56" New Slim Depth LED Engine Widescreen DLP®

with 1080p HDTV Resolution



Thanks to a new, long-lasting LED light engine, the Full HD (1920 x 1080p) picture of the HL-T5689S DLP® HDTV will last as long as the set. An ultra-thin, piano-black bezel around the 56" screen lets you enjoy more screen and less frame. Its slim depth, light weight and hidden speaker system allow the set to fit where others won't™. Samsung's Cinema Smooth™ light engine delivers the widest range of brilliant colors, while a 10,000:1 dynamic contrast ratio renders every picture in perfect detail, from the darkest darks to brightest whites, and every tone in between. SRS TruSurround XT™ delivers sound that is clear and full. Enjoy watching two shows at the same time using the one-tuner Picture-in-Picture (PIP) feature. Three HDMI inputs in version 1.3 render your digital movies, photos and more with greater color depth, while a USB 2.0 port and other inputs allow full connectivity. CEC capability lets you control other Samsung CEC equipped peripherals using one remote; the set can also interface with other devices via Bluetooth™ technology. Game Mode optimizes performance, so avid gamers will marvel at the lifelike action. And even with all these advanced features, the HL-T5689S is remarkably energy efficient.

SLIM DLP™

## TV/Video

- DLP® HDTV by Samsung
- Ultra slim bezel (0.6"), "piano black" cabinet
- Slim depth – fits where others won't™
- Long lasting LED light engine provides stable light output and ultra wide color gamut (spectrum)
- Built-in light sensor with beam current feedback insures stable light output over the life of the TV
- Samsung Cinema Smooth™ 1080p light engine:
  - Full HD 1920 x 1080p digital format converter for all inputs
  - Up to 10,000:1 contrast ratio with outstanding colors and deep black levels
  - Single-panel design—crystal-clear picture without any possibility of convergence errors
  - Smooth, film-like image and ultra-quiet operation
- Analog and full digital NTSC/ATSC Tuners with Clear QAM (digital cable)\*
- Energy Star® Compliant (0.8 Watt standby)
- Hidden speaker system (DACST™)
- Picture in Picture
- Bluetooth™ capability for wireless headphones
- Game Mode enhances game console performance
- 3D HD ready—Future-proof your HD experience
- RS232 port for system control

## Audio

- 10w x 2
- SRS TruSurround XT™

## Connections

- 3 HDMI inputs (High Definition Multimedia Interface) version 1.3 with CEC with 480i/480p/720i/1080p/1080i input support
- 2-component video inputs (480i/480p/720p/1080i/1080p)
- 2 S-video inputs
- 2 A/V composite inputs
- USB 2.0
- PC (RGB) input with 1080p Input Support

## Options

- Floor stand: TR500X3B



OFFICIAL HDTV OF THE NFL



\* limited reception varies by cable operator.

All on screen images are simulated pictures. DLP® is a trademark of Texas Instruments.

# DLP tv

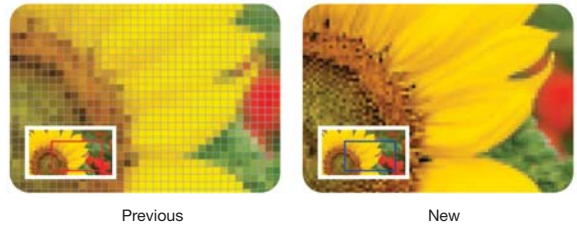
## HL-T5689S 56" New Slim Depth LED Engine Widescreen DLP® with 1080p HDTV Resolution

### Integrated HDTV Tuner

with the addition of a suitable UHF/VHF antenna delivers the world of free off-air DTV and HDTV local broadcast channels. An additional QAM tuner decodes unscrambled digital cable signals.

### Cinema Smooth™ Light Engine

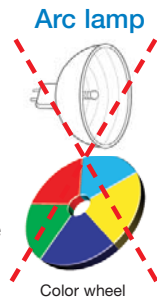
Samsung is the worldwide leader in creating light engines that harness DLP HDTV technology from Texas Instruments. Samsung's Cinema Smooth light engine brings together the right optics, electronic circuitry and replaceable light source to create a brilliant picture that's more lifelike and much closer to film. Now in its sixth year of evolution, Samsung's Cinema Smooth light engine delivers crisp, 1080p High Definition resolution with high contrast and brightness, defined edges and sharp detail.



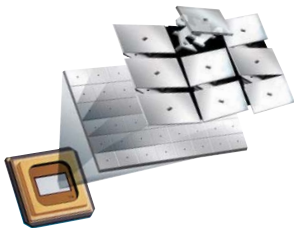
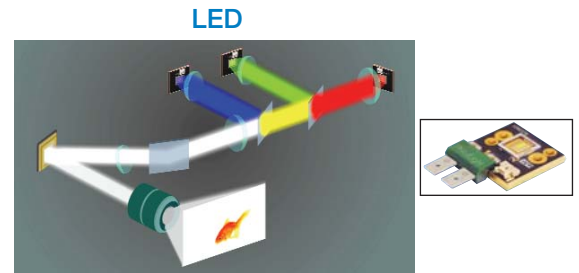
### LED (Light Emitting Diode) for modern color realization

LED replaces arc lamp & color wheel and realizes beautiful color

- LED will last the life of the TV (No lamp to change)
- Samsung LED DLP TVs eliminate the need to replace the consumable lamps every few years, and thus have less impact on the environment and on one's wallet.
- Ultra-Wide Color Gamut exceeds NTSC defined color space
- More energy efficient than similar sized flat panel displays
- Ultra quiet (no color wheel noise)



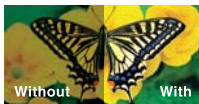
True advanced solid-state design—high output, lower power consumption, energy-saving high performance design



### Next Generation DLP Chips from Texas Instruments

Samsung employs a Texas Instruments DLP chip that is comprised of millions of microscopic mirrors. The DLP chip is faster than any other HDTV technology, with the mirrors switching on & off 15,000 times a second to deliver a razor-sharp picture for fast moving images. When combined with Samsung's new Cinema Smooth light engine, the result is a crisp, bright picture with deep, rich colors that's closer to film.

### DNiE™



### Samsung's DNiE™ – Digital Natural Image Engine

Samsung's exclusive Digital Natural Image engine makes the sharpest and clearest images possible, regardless of the profile of input signals. Five image processors and a six-times density enhancer ensure the best picture from any source. Now in its sixth generation (since 2002), DNiE guarantees the truest colors and highest contrast, while virtually eliminating digital artifacts.



### My Color Control

You can get the pink tones, the green of the grass and the blue of the sky just the way you like, without affecting the other colors on the screen. The three major colors can be adjusted to perfectly fit your taste. Self expression meets display perfection.

# HL-T5689S

## Cinema Mode

Samsung's Cinema Mode lets you see colors the way the director intended, by matching them more closely to production standards. This creates more accurate colors and natural skin tones when viewing Hollywood movies on your TV—the perfect setting when enjoying movies with the lights off.



Interlaced



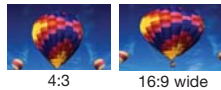
Progressive Cinema



Progressive

## Cinema Smooth™ Film Mode 3:2 Pull Down

Powered by Samsung's Cinema Smooth technology, 3:2 Pull Down corrects for the artificial frames created when films are converted to DVDs. The result is a clearer image without the subtle motion artifacts caused by 24-to-30 frames per second video conversion.



4:3

16:9 wide



Zoom 1

Zoom 2

## Picture Format Size Adjustment

Enjoy all your 4:3 aspect-ratio programming in smooth, wide-screen without black bars. Four pre-set aspect ratio modes—Normal, Wide, Zoom 1 and Zoom 2—stretch your image to fill the screen naturally.

## Energy Efficient

Samsung DLP TVs are more energy efficient than many flat panel TVs, resulting in significant utility savings over the life of the TV.

## Color Temperature Adjustments

Cool1, Cool2, Normal, Warm1, Warm2 selectable with on-screen display.

## 3D Comb Filter

dramatically reduces edge image artifacts while improving transition detail.

## Previous Channel

returns to the previously viewed channel at the push of a button.

## Game Mode

enhances dark areas, sharpens the picture, speeds up the image processing response and enhances the sounds of your games. Picture and sound quality optimized for the special needs of gaming systems at the touch of a button.

## Closed Caption

displays dialog that can be read along with encoded broadcast TV programs and pre-recorded videos.

## Non Volatile Memory

preserves audio, video and menu settings during power outages.

## Auto Volume Leveler

keeps audio volume consistent during channel changing to minimize static sound bursts.

## Discrete IR Codes

This set is equipped with discrete IR codes for use with an optional macro/programmable remote (see owners manual for details).

## Universal Remote Control

permits control of the TV, DVD, VCR and a Tuner/Receiver.



## HDMI (High-Definition Multimedia Interface)

addresses both pure digital audio and video performance and simplifies connections from the new generation set-top boxes, HD game consoles, HD Blu-ray™ and DVD players by reducing cable connections to one cable and plug.



## DTV and DVD Compatible Connect

your DVD and DTV sources with two smart component video (Y/Pb/Pr) inputs that accept 480p/720p/1080i/1080p signals.



## PC

A Samsung HDTV using DLP technology can also function as a high-quality WUXGA PC monitor with 1080p compatibility.

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## Features

**3D HD ready.** The HLT generation of Samsung DLP® HDTVs are capable of displaying future 3D games, movies, and other programming via 3D compatible glasses and hardware.

**Picture-in-Picture (PIP)** enables convenient simultaneous viewing of TV programs and video or PC sources.

**Bluetooth™** Privately listen to TV with wireless Bluetooth enabled headset.

**SRS TruSurround XT™.** TruSurround is a patented SRS technology that solves the problem of playing 5.1 multichannel content over two speakers. TruSurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal television speakers and headphones. It is fully compatible with all multichannel formats up to 6.1 channels.

**V-Chip<sup>1</sup>** enables parental control for channel and program blocking of TV programs that incorporate the rating code signal.

## Specifications

### DISPLAY PERFORMANCE

**Video display rate:** 120 Hz

**Response time:** 16 micro seconds

### VIDEO

**Display device:** Single digital micro mirror device

### Pixel count:

1920 horizontal x 1080 vertical

**Resolution:** 1080p

**Contrast ratio:** 10,000:1

**Channel coverage:** VHF 2-13, UHF 14-69, CATV 1-125 (up to 181 pre-selected channels), ATSC 1-69

### AUDIO

**Output power:** 10Wx2

**Speakers:** 2

**Sound effect system:** TruSurround XT™

MTS stereo

**Hidden speaker system (DACS™)**

1080p input support

RS232 system control

## POWER

**Voltage, Line frequency:** 100-120V  
60Hz

**Power consumption:** 230 Watts

**Standby power consumption:** 0.8 Watt

## Connections

**HDMI (High-Definition Multimedia Interface):** 3

**DVI Audio In:** 1 (For HDMI port 3)

**Component video input (Y,Pb,Pr):** 2

**S-Video input:** 2

**Composite input:** 2 (RCA)

**RF input:** 2

**Video Output:** 1 (RCA)

**Audio out:** 2 (RCA L/R + Optical)

**USB:** 1

**PC Input:** 1 (Mini Jack)

**Bluetooth™ (Wireless)**

## Quality

**Warranty:** 1 year parts and labor warranty, including lamp, with in-home service backed by Samsung toll-free support. 1-800-SAMSUNG

**Energy Star® Compliant** reduces energy consumption by up to 25% compared with standard TVs.<sup>2</sup>

## Accessories

**Universal Remote Control, User Manual, Power Cord**

## Net dimensions and weight (WxHxD)

**TV (w/o foot):** 50.4" x 34.9" x 13.4"

**TV weight:** 69.0 lbs.

**TV (w/ foot):** 50.4" x 34.9" x 14.0"

## Shipping dimensions and weight (WxHxD)

**Carton:** 55.1" x 39.9" x 18.5"

**Carton weight:** 88.8 lbs.

## Order code

HLT5689SX/XAA

## UPC

036725256910

## Optional stand: (WXHXD) TR500X3B

### Net dimensions:

45.5"/50.75"/55.125" x 19.69" x 17.94"

**Net weight:** 76.3 lbs.

### Shipping dimensions:

50.5" x 20.8" x 8.0"

**Shipping weight:** 84.7 lbs.

**UPC:** 036725296190

**Order code:** TR500X3B/XAA

<sup>1</sup>Feature dependent upon broadcasting of information by local off-air TV and cable channels.

<sup>2</sup>As an Energy Star® partner, Samsung has determined that this product meets the Energy Star® guidelines for energy efficiency. Energy Star® is a registered trademark of the U.S. Environmental Protection Agency.

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For more information on digital TV technology please visit [www.samsung.com/dtvguide](http://www.samsung.com/dtvguide)