

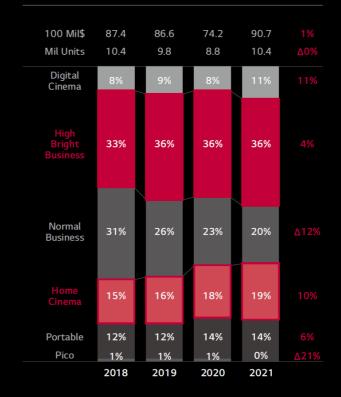


Expanding High Bright Business Rising Market Demand for Home Cinema LG's Growing Market Share:

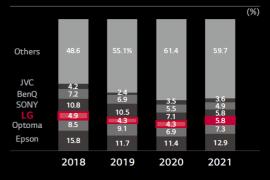
Going to the theater has become difficult; people want to enjoy a proper viewing experience.

As market demand for home cinemas increase, LG's market share is also growing.

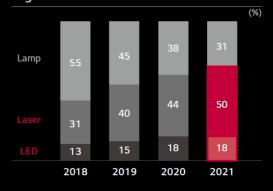
#### Market Demand (Amt)



Market Share (Amt) (Home Cinema + Portable)



**Light Source Trend** (Amt)





#### Top 10 home cinema & portable projector brands:

LG's home cinema projector with CineBeam, you can enjoy diverse content at the highest quality from the comfort of your home.

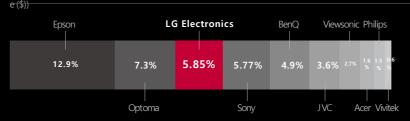
#### Y19) All SSI<sup>1)</sup> Projector (B2B/B2C) Top 10 Brands (M/S by sales



NO.1
SSI (Laser / LED) Projector since 201

\* Source : PMA Research, Commercial & Consumerprojector all includedexcept undefined 'others' brands and Chinese local brands

#### Y20 Q1) HomeCinema & PortableTop 10 Brands (M/S by Market Valu



NO.3

B2C (HomeCinema&Portable) Projector in Y20Q1

\* Source: PMA Research, 100-1499ANSI + 1500ANSI-3999ANSI 4K/FHDexcept undefined 'others' brands and Chinese loc al brands

\* 2018 -2020 Q1 (HU80K / HU85L / HU70L / BU50N)

Epson















1) SSI (Solid State Lightsource): Laser, LED and Laser/LED Hybrid light sources which lasts 20,000~30,000 hours.

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Home Entertainment hall with different class

# LG Cine Beam Laser 4K HU/AU810P

- Resolution: Real 4K, 8.3 megapixel 4K UHD
- Illuminating System: D.alLaser
- Brightness Optimizer
- Smart Projector





## PRODUCT BRIEF



#### **HU810P**

Light Source	Dual Laser (up to 20,000 hrs)		
Resolution	4K UHD (3840 x 2160) <sup>1)</sup>		
Brightness	2,700 ANSI <sup>2)</sup>		
Contrast Ratio	2,000,000 : 1		
Color Reproduction	DCI-P3 97% <sup>3)</sup>		
Screen Size	40"~300"		
Installation	Lens shift H ±24%, V ±60%, Zoom x1.6		
Feature	Brightness Optimizer Iris Mode / Adaptive Contrast		
	HDR 10 / HLG / HGiG / HDR Dynamic Tone Mapping		
	Film Maker Mode / TruMotion / Real Cinema		
	webOS		
	Wireless Connectivity AirPlay2 / Miracast		
	5W+5W Speaker eARC Bluetooth		
Size / Weight	337 x 410 x 145 mm / 11kg		

- 1) 4K UHD resolution with 8.3 million discrete pixels projected by XPR (Expanded Pixel Resolution) video processing.
- 2) The brightness (ANSI Lumen) is based on the perceived brightness of projected image
- 3) The rate may vary by picture modes

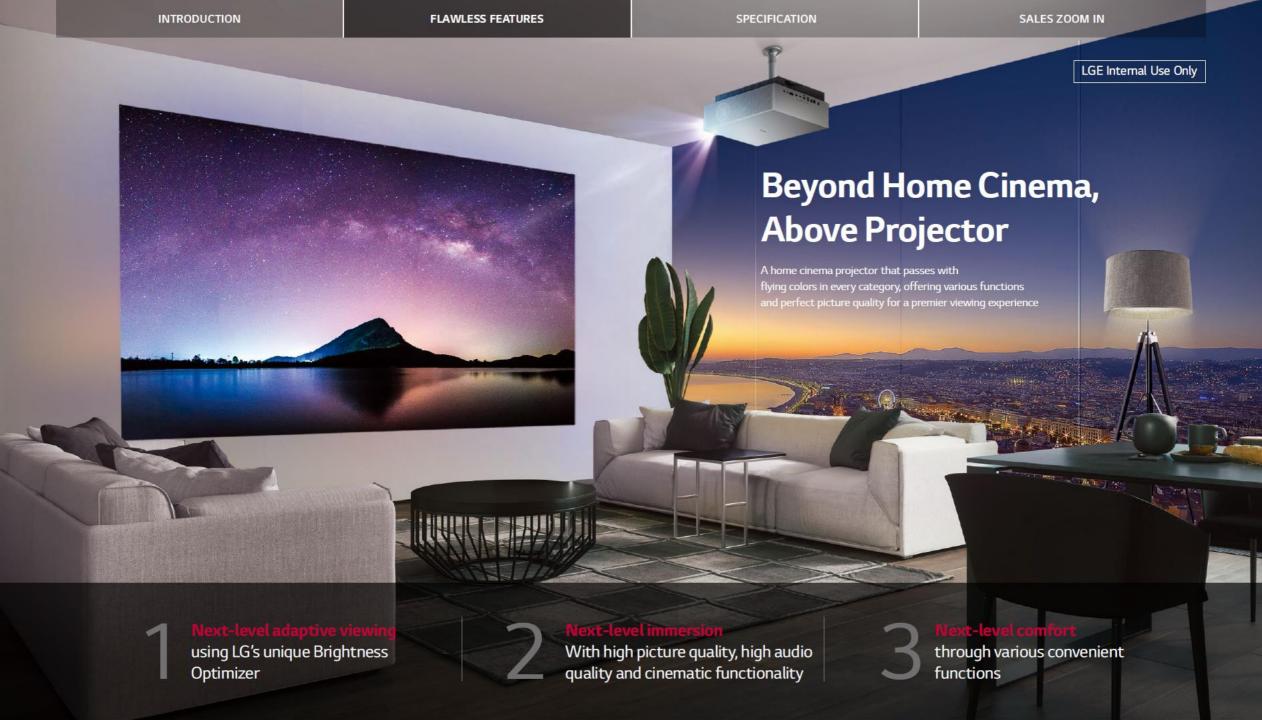
## PRODUCT BRIEF



#### **AU810P**

Light Source	Dual Laser (up to 20,000 hrs)		
Resolution	4K UHD (3840 x 2160) <sup>1)</sup>		
Brightness	2,700 ANSI <sup>2)</sup>		
Contrast Ratio	2,000,000 : 1		
Color Reproduction	DCI-P3 97% <sup>3)</sup>		
Screen Size	40"~300"		
Installation	Lens shift H ±24%, V ±60%, Zoom x1.6		
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	HDR 10 / HLG / HGiG / HDR Dynamic Tone Mapping		
	Film Maker Mode / TruMotion / Real Cinema		
reacure	webOS		
	Wireless Connectivity AirPlay2 / Miracast		
	5W+5W Speaker eARC Bluetooth		
Pro-AV Features	Wisa / Auto Calibration / 12V Trigger		
Size / Weight	337 x 410 x 145 mm / 11kg		

- 1) 4K UHD resolution with 8.3 million discrete pixels projected by XPR (Expanded Pixel Resolution) video processing.
- 2) The brightness (ANSI Lumen) is based on the perceived brightness of projected image
- 3) The rate may vary by picture modes



AU810P / HU810P

## **ENJOY NEXT-LEVEL ADAPTIVE VIEWING**

Provides optimal viewing by adjusting to brightness and darkness



#### Brightness and black level optimized to the surrounding illumination Brightness and black level optimized to the image brightness

- In bright rooms, since lighting prevents deep blacks, the iris widens to increase the range of brightness
- In dark rooms, since excessive brightness can hurt the eyes, the iris narrows to decrease the range of brightness without ruining the screen brightness

- Gives deeper blacks in addition to brightness range for each iris mode, thus increasing range
- With Brightness Optimizer (Iris Mode, Adaptive Contrast), it physically adapts to the display's brightness and darkness range, while Dynamic Tone Mapping optimizes the image for that range



#### **IRIS MODE**

Depending on lighting condition of viewing environment, a user can change iris mode. Dark Room (Standard) mode is recommended for optimized images with balanced brightness and black level, while Bright Room mode is recommended for bright environment viewing with the projector's iris fully open





#### **SALES SPOTLIGHT**

## Perfect picture quality in any space!

Optimizes brightness and black level to the room's lighting. Only available in LG's

#### **Bright Room mode**

- **¥** 2700 ANSI high brightness
- **✓** DCI-P3 97%
- **∀** High contrast ratio
- $\rightarrow$  Watch Sports/Drama with family, in brightly lit room

#### **Dark Room mode**

- **Y** Optimized brightness for dark room
- Same DCI-P3 97%
- High contrast ratio & black level
- → Watch movies, in dedicated dark room



#### **ADAPTIVE CONTRAST**

This feature gives more depth to your image by adaptively adjusting the Laser output to image, in order to create a high contrast ratio. Bright scenes appear brighter, while dark scenes remain detailed with deep blacks and shade detail.



# SALES SPOTLIGHT **Perfect picture quality** with any image! Optimizes brightness and black level to the image's brightness Movie Sport

AU810P / HU810P **BRIGHTNESS OPTIMIZER** 

## **EXPERIENCE NEXT-LEVEL EMOTIONS**

Unrivaled immersion through your home entertainment











- Real 4K UHD
- 6 Step Upscaling
- Expert picture control
- Dynamic Tone Mapping
- HGiG
- Auto Calibration

- eARC (HDMI2.1)
- Dolby Atmos Compatible

- Film Maker Mode,
- Real Cinema Mode
- TruMotion



#### **REAL 4K**

LG 4K UHD projector has a 3840 x 2160 (2160p) resolution with 8.3 million discrete pixels projected. It provides a 4 times more dense and detailed picture, which is obvious with a large screen.



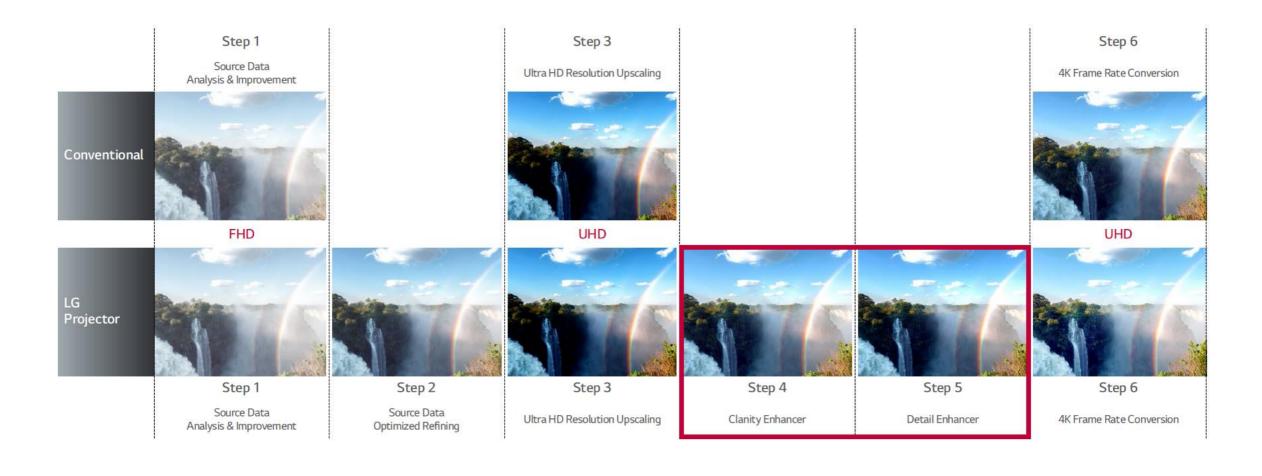


<sup>\*</sup> Real 4K with 8.3million pixels projected onto scre



#### 6 STEP 4K UPSCALER (4K UPSCALER+SUPER RESOLUTION)

To provide consumers a superior Ultra HD picture quality from an HD source, A 4K conversion algorithm and Super Resolution are used to express detailed and clear 4K picture quality.





#### **EXPERT PICTURE CONTROL**

Expert picture settings for the projector experts who want to adjust pictures for their preference

Dynamic Contrast	Corrects the difference between the bright and dark areas of the screen for optimal results depending on the brightness of the picture. (SDR/HDR content)
Gamma	Adjusts the medium brightness of the picture. (1.9/2.2/2.4/BT.1886)
Smooth Gradation	It reduces jaggies in the picture for a smooth picture.
Color Management System	This is used when experts control it by using a test pattern. You can control it by selecting areas of six colors ([Red]/[Green]/[Blue]/[Cyan]/[Magenta]/[Yellow]). For normal images, adjustments may not result in noticeable color changes.
Color Gamut	Selects the range of colors to display for much colorful and vivid expression (extended/Auto)
Dynamic Color	Adjusts the color and saturation of the picture to make the image more colorful and lively.
White Balance	Adjusts the overall color temperature of the screen as desired. (2point/10point/22point)

# **SALES SPOTLIGHT** Adjust settings to yo ur tastes with Expert Mode!" (How to Use) Menu) **Expert Mode**



#### HDR DYNAMIC TONE MAPPING (AUTO)

Auto Dynamic tone mapping technology delivers higher contrast and vivid colors for HDR content



#### Makes HDR images better by adjusting tone mapping curve.

- but manually : usually users should control HDR Tone mapping for every different HDR contents.
- and static : This use only simple minimum or maximum signal range which come from an entire movie, not from scene by scene, or frame by frame.



#### **Higher contrast and more vivid colors**

With improved signal range detection algorithm

- Auto: Automatically detecting the signals and adjust tone mapping.
- Dynamic : Using meaningful signal range (frame by frame) instead of using simple minimum or maximum signal range



#### HDR DYNAMIC TONE MAPPING (AUTO)

#### Conventional

#### **Static Tone Mapping**

: This uses only simple minimum or maximum signal range which come form an entire movie.

#### Same tone mapping for an entire movie



#### **HU810P**

#### **Dynamic Tone Mapping**

: Using meaningful signal range (frame by frame) instead of using simple minimum or maximum signal range

#### Dynamically controlling tone mapping frame by frame





#### **HGiG** (HDR GAMING INTEREST GROUP)

New HDR game mode created by HGiG for X-box and Playstation's HDR games.





**Cannot** see exact road

Can see exact road and right turn

- X HGiG (HDR Gaming Interest Group): Consortium group for HDR game (LG, Vizio, Sony, MS)
- **X** Below game developers have expressed interest in developing titles with HGIG functionality
- : Activision Publishing Inc., CAPCOM Co. Ltd., Electronic Arts, Epic Games, Microsoft Corporation, Sony Interactive Entertainment, SQUARE ENIX CO. LTD., Ubisoft Unity Technologies, Vicarious Visions, WB Games



#### **eARC**

eARC(Enhanced Audio Return Channel) is the next generation of ARC, which is most preferred speaker connection as o f today. With eARC, the original, full-resolution audio signal can be sent via the HDMI cable.

Function	TOSLINK	HDMI-ARC	HDMI-eARC
Cable used	Optical S/PDIF	HDMI	HDMI with Ethernet
Stereo support	YES	YES	YES
Compressed 5.1	YES	YES	YES
Uncompressed 5.1	No	No	✓ YES
Uncompressed 7.1	No	No	✓ YES
High Bitrate/Object based Up to 192kHz, 24-bit (e.g. Dolby Atmos)	No	No	✓ YES (Pass-through)
Maximum Audio Bandwidth	~384 Kbits/second	~1 Mbits/second	9.22Mbps (Uncompressed 48khz/7.1/24bit support)
TV Mutes & controls volume	No	YES (CEC)	YES (CEC)
Powering TV powers audio device	No	YES (CEC)	YES (CEC)
ARC Fallback <sup>2)</sup>	No	N/A	YES (CEC)

#### **SALES SPOTLIGHT**

#### ARC:

dumbs down and compress audio signals before passing them through an HDMI or optical cable



#### eARC:

the original, full-resolution audio signal can be sent via the HDMI cable -producing the very best sound with no compromises. (up to Uncompressed 7.1)

<sup>\*</sup> All the competitors support only ARC as of today ('20. Nov)



#### **DOLBY ATMOS COMPATIBLE**

Through the use of audio objects, overhead sound, and all the richness, clarity, and power of Dolby sound, Dolby Atmos turns your room into an amazing place for entertainment. You'll feel like you're inside the action, in ways you've never before experienced.

#### **Setting examples**









#### FILMMAKER MODE

The picture mode for content appreciation proposed by the film content creators.



FILMMAKER MODE™ logo is a trademark of the UHD Alliance,

FILMMAKER MODE: Inc. in the United States and other countries.

Voice of Content Creators Motion smoothing removes the filmic essence from films, giving them a hyperreal quality. (aka soap opera effect)

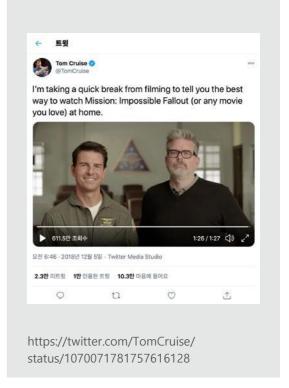
Objective of Film -maker

- Filmmaker Mode turns off motion smoothing and other video processing settings with an eye toward approximating what creator sees in the final grading suite.
- This mode can faithfully and accurately deliver the creators' intent.

Same as the original contents

- Maintain source frame rate and aspect ratio
- Motion processing off (no smoothing)
- Sharpening and noise reduction off
- Other "image enhancements" off
- Color: White point at D65/6500K (prevents colors from looking too warm or cool)

#### **SALES SPOTLIGHT**





#### **REAL CINEMA UP TO 4K**

Movies are usually shot at 24 frames per second (fps), whereas standard projectors are 60fps. Real Cinema displays images optimized for the original 24fps without sacrificing image quality, the way the film was meant to be seen. This technology provides a cinematic experience at home, optimizing images for the original 24fps without altering image quality.





Video Source	Film Source

60Hz(ATSC) / 50Hz(DVB)

24Hz

Casual TV / Broadcasting content (RF / HDMI / RGB / AV / Component)

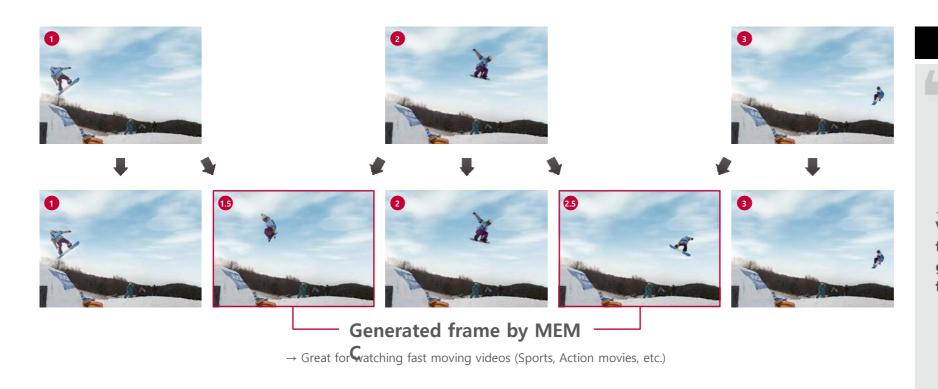
Cinema / film related sources (Theater / DVD / Blue-ray)

<sup>\*</sup> Creative community shows necessity of something like "Filmmaker Mode" very much. (96% of 373 respondents showed somewhat / most important)



#### TRUMOTION UP TO 4K

With motion estimation/motion compensation (MEMC) technology, fast-moving content like sports and action movies appear smooth and fluid.



#### **SALES SPOTLIGHT**

MEMC (Motion Estimation/ Motion Compensatio n) Technology?

Video processing where animation frames generated between existin g frames, making animation more fluid (i.e Motion Interpolation).

AU810P / HU810P

# COMFORTABLE VIEWING WITH NEXT-LEVEL CONVENIENCE

Unrivaled immersion through your home entertainment

## Your own private theater COMFORTABLE VIEWING ENVIRONMENT



**Long Lasting Light Source** 

Lens Shift / Zoom

12v Trigger (Trigger Out)

**AirPlay** 

**Screen Share** 

Bluetooth

**4K Streaming Services** 



#### AIRPLAY2 (CERTIFIED)



Stream or share video, photos, music from your iOS device to your compatible LG Projectors. LG CineBeam provide AirPlay2 capability without the need to buy a \$199\* Apple TV.

\* US RRP based

#### **Video casting**

# AIRPLAY This video is playing on the living room

- Supports 4K HDR / Dolby Atmos
- Works with Magic Remote (play/pause/caption)
- \* Netflix not supported

#### Mirrorin



- Supports up to 1080p picture quality
- Unsupported HDR / Dolby Vision
- \* Netflix not supported

#### **Audio Streamin**



- Play music from mobile devices
- Works with Magic Remote (play/pause)

#### **SALES SPOTLIGHT**



Some projector brands claim they support Airplay,but their projector only support ' mirroring,' not casting, without any quality test done by Apple. LG CineBeam is the only projectors with Airplay (Casting & Mirroring) which is certified by Apple



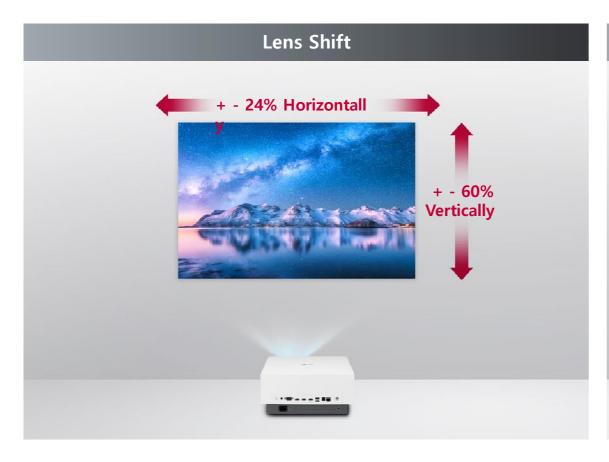
#### \*What is Casting?

Casting allows you to watch your favorite movie content on the large screen with your iOS phone running other apps After you cast content, you are free to use the phone for calls or games without disturbing the cast.



## **LENSSHIFT / ZOOM**

Flexibly and conveniently to be put or installed on the place where you want it to be.





**AU810P** 

# LG CineBeam Laser 4K AU810P AV Specialist

#### WiSA

Enjoy premium sound with ease through a wireless audio solution!



#### 12V Trigge

Connect to external devices with ease, like motorized screens that support trigger signals!



#### **Auto Calibratio**

Calibrate in just 30 minutes with ease using Calman, a professional calibration software!



**AU810P** 

#### HIGH-END WIRELESS SPEAKER & AUDIO (WISA)

LG Wireless audio solution with short latency performance and multi-channel function completes perfect synchronized watching experiences.



• Play one BT speaker only

X 2.0 channels (Sound sync from TV speakers is not matched with bluetooth speaker)



• 5.1 channels many speakers connection

5.1 channels : USA, Europe, Korea 2.0 channels : Other countries

• Uncompressed, up to 24-bit/96kHz hi-res audio supported

<sup>\*</sup>Compatible with WiSA certified speakers, WiSA Tx dongles are provided by speaker manufacturers.

<sup>\*</sup>WiSA certified speakers include high-end speakers such as B&O, Klipsch, Platin and Enclave

<sup>\*</sup>Applied series: All models except HU810PW-EU, HU810PW-NA

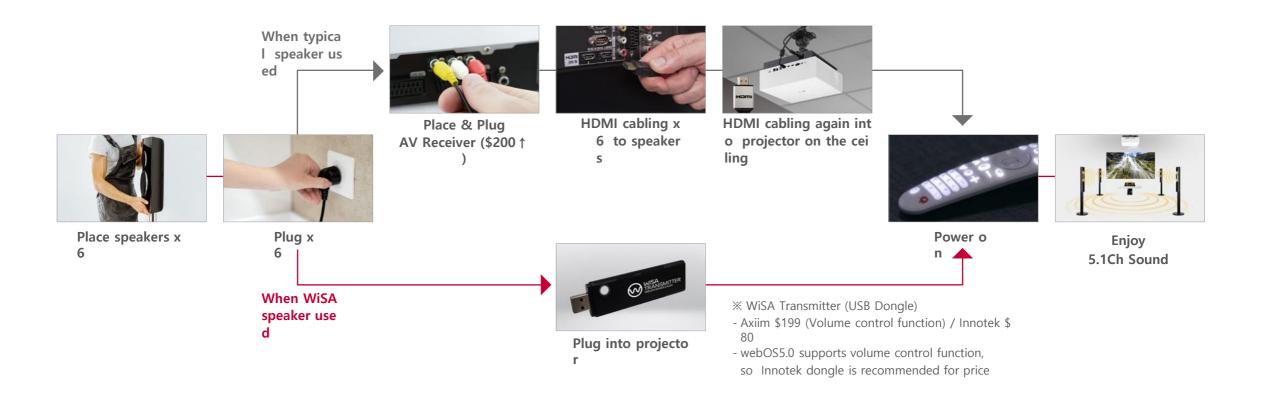
**AU810P** 

#### HIGH-END WIRELESS SPEAKER & AUDIO (WISA) \_5.1CH SOUND SYSTEM SETTING CASE

#### Why WiSA?

With WiSA, 5.1Ch premium sound can be achieved without an AV receiver and complicated HMDI cabling.

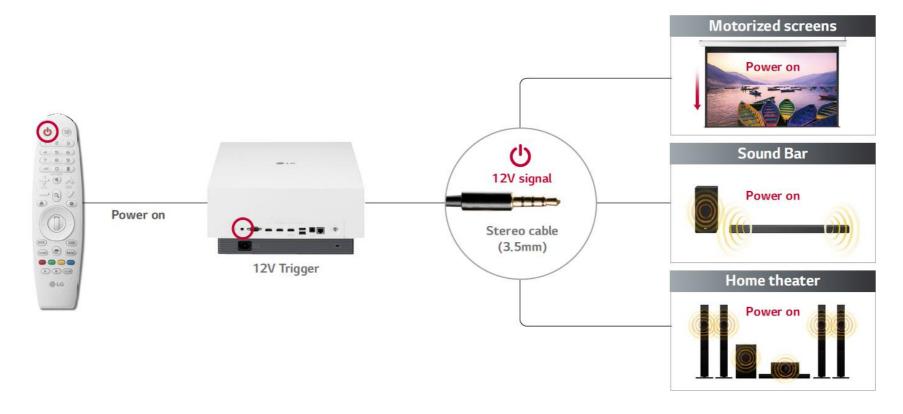
- No cables here and there. No hassles with HDMI cabling to speakers and projector on the ceiling.
- No worry about purchasing compatible AV receiver for multi-channel sound system



**AU810P** 

#### 12V TRIGGER (TRIGGER OUT)

Using mini jack stereo cable (3.5mm), you can connect your projector to external devices such as motorized screens that support a trigger sig nal. When on, a 12V signal is sent to the connected device while the projector is powered on, so screen powered on, and then screen come down.



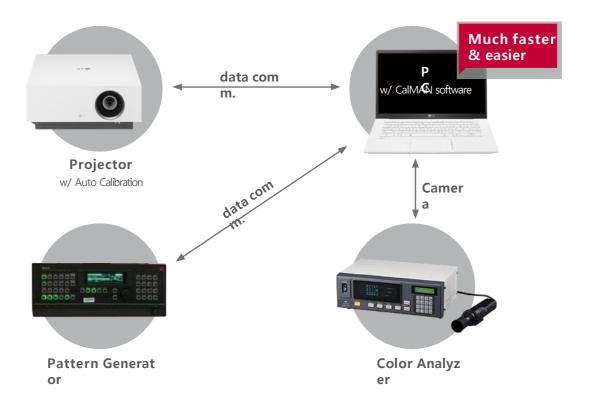
<sup>\*</sup> Applied series : All models except HU810PW-EU, HU810PW-NA

**AU810P** 

#### **AUTO CALIBRATION (W/CALMAN)**

A vital step in projector configuration is calibrating the optimal image contrast, grayscale, and color balance. Due to small picture deviations, differences in screen color and room lightin gs, and decreased brightness, calibration is crucial for professional projectors. Professional manual calibration requires 3-4 hours, but auto calibration via laptop and software takes only 30 minutes to 1 hour.

#### Professional Calibration setting example with CalMan SW

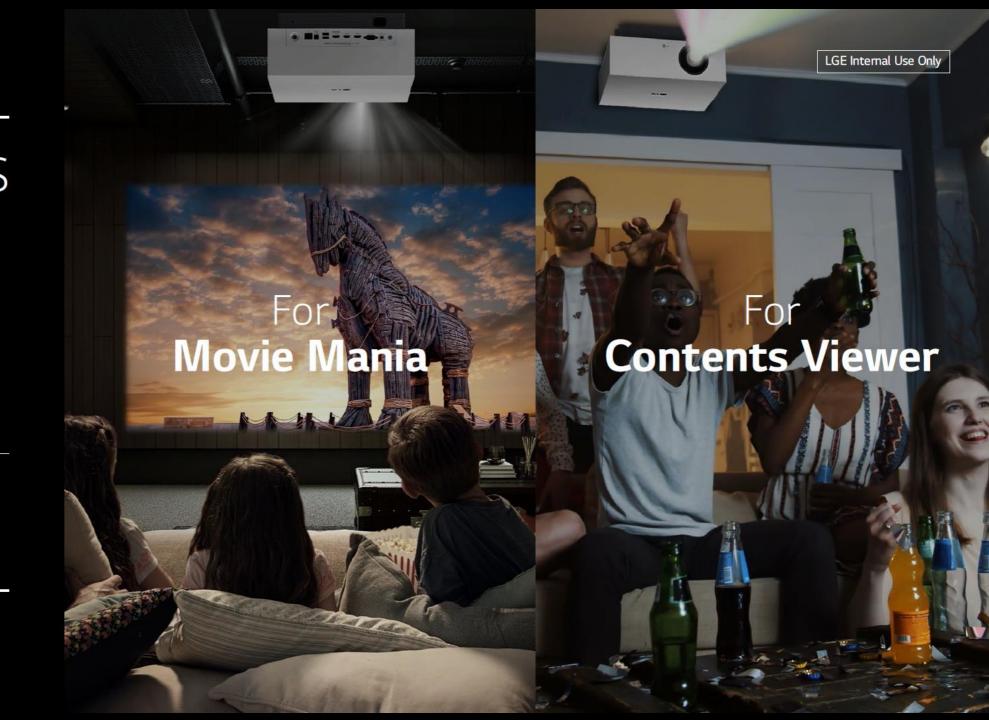


## **SALES SPOTLIGHT** Why Auto Calibration II by CalMan & LG? Normally manual calibration requires 3~4 hours of setting by professional calibrators -but Auto Calibration with laptop and program connected calibrati on can be done in 30min ~one hour **Before** After 0.3-

<sup>\*</sup> Applied series : All models except HU810PW-EU, HU810PW-NA

# KEY SALES POINT BY TARGET TYPE

- Target Definition
- Key Sales Point 3
- Sales Talk



# For MOVIE MANIA

Satisfy the Movie Mania in you with a high-quality viewing environment, professional audio and picture quality, and functionality specialized for cinema.



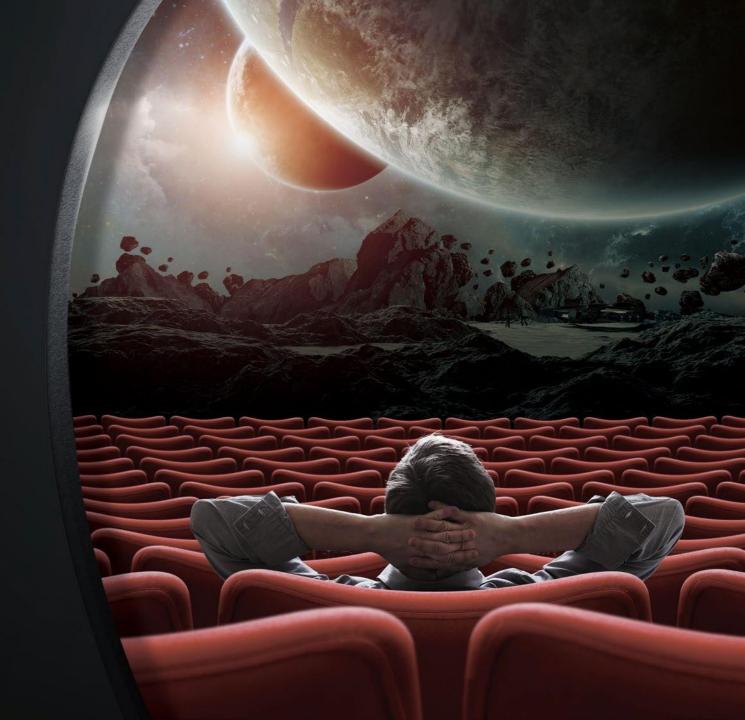
Specialized
Cinematic Functionality



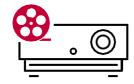
Deep Immersion with High Picture and Audio Quality



Convenient Features for Tailored Viewing Experience



# LG CineBeam Laser 4K HU810PW Key Sales Point 3



Next-level experience with specialized cinematic contact functionality

Brightness Optimizer / Dynamic Tone Mapping /
Film Maker Mode / Real Cinema Mode

The Brightness Optimizer creates an optimal viewing environment, while Film Maker Mode, Cinema Mode preserve the film's detail



Deep immersion with perfect picture qualit y and lifelike sound

Real 4K UHD / 6 Step Upscaling /
Expert picture control / HGiG / eARC /
Dolby Atmos Compatible

Feel vivid movements with detailed control, Dynamic tone mapping, and the 6 step upscaler that converts FHD to 4K, while Dolby Atmos Compatible and eARC provide deep immersion.



Your own movie theater optimized with convenie nt functions

Lens Shift / Zoom / 12v Trigger / AirPlay / Screen Share / WiSA / 4K Streaming Services

LensShift & Zoom and 12v Trigger enable flexible installation, and wireless connectivity (WISA, Screen Share) and Auto Calibration complete your very own home cinema.

## Sales Talk For Movie Mania

Watch movies in their original form!

Experience immersive home cinema!

Recreate the theater experience in today's COVID era!

LG HU810PW lets you enjoy movies the way they were meant to be viewed with FilmMaker mode, Real Cinema mode, and Trumotion. LG HU810PW provides vivid realism through unrivaled picture quality with Real 4K and HDR, on top of immersive sound with eARC and Dolby Atoms Compatible.

Transport yourself to the movie theater with LG HU810PW. Eliminate complicated connections with Airplay, Screen Share, WiSA, and 4K streaming services! Erase spatial restrictions with Lens Shift & Zoom and 12V Trigger! Create your own personal VIP zone.



# For CONTENTS VIEWER

Freely install your very own home entertainment system wit hout spatial restrictions, and enjoy various contents 24 hou rs a day in a comfortable viewing environment



Premium home entertainmen t day and night

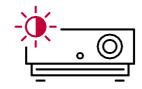


Diverse content at your fingertip s



Efficient installation without spatial restrictions

# LG Cine Beam Laser 4K HU810PW Key Sales Point 3



# Enjoy your premium hom e entertainment day and night

Brightness Optimizer / Real 4K UHD /
Long Lasting Light Source

Enjoy content 24 hours a day with the Brightnes s Optimizer that adapts to the environment an

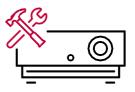
Long-Lasting Light Source that provides 20,000 hours of life.



#### Enjoy diverse content wi th smart features

AirPlay / Screen Share / WiSA / 4K Streaming Services /
Auto Calibration

With 4K Streaming and Screen Share, movies, sp orts, games, and other content are at your fingertips and wireless connectivity WiSA, Auto Calibration convenient and pleasant viewing.



# Flexible installation witho ut spatial restrictions

LensShift & Zoom / 12v Trigger

LensShift & Zoom and 12v Trigger enable flexibl e installation without spatial restrictions.

### **Sales Talk For Contents Viewer**

I'm worried about cost due to different viewing times!

Connecting wires and installing devices is so complicated!

I'm unsure about installation because of my furniture!

With LG HU810P's Best Optimizer feature that recognizes day and night to provide optimal brightness, as well as a light source with 20,000 hours of continuous use, you can always enjoy superior quality without cost worries.

With Airplay, Screen Share, WiSA, and 4K Streaming Services, LG HU810P lets you enjoy everything from movies and sports to games without complicated connections.

LG HU810PW eliminates spatial and structural restrictions with Lens Shift & Zoomand 12V Trigger, creating a home cinema environment optimized just for you.