

# BeoVision Avant 85"

## Design, dimensions and materials

**Designer:** Torsten Valeur, David Lewis Designers

**Materials:** Aluminium, glass, fabric and plastic

**Dimensions:** Dimension of TV with speakers in **off-mode**:  
(W x H x D 199.2 x 111.7 x 7.3 cm)  
Dimension of TV with speakers in **on-mode**:  
(W x H x D 199.2 x 120.1 x 7.3 cm)  
TV on motorised **floor stand** :  
(W x H x D 199.2 x 160.6 x 69 cm(footprint))  
TV on motorised **wall bracket**:  
(W x H x D 199.2 x 120.1 x 14.2 cm)

**Weight:** 110 kg

**Front:** Anti-reflection coated front glass, completely flush with black anodized aluminium profile. The hide-away sound panel containing integrated speakers is covered by aluminium and an extendable fabric front. The grill pattern is designed to ensure optimal acoustic transparency for the treble and midrange units.

**Back:** Also designed with exceptional attention to detail, the aluminium back of the TV has no visible screws, vents or connectors. Apple TV and an external hard disk drive (HDD) can be integrated easily and invisibly. The connection panel collects all wires and cables in one central location simply and seamlessly.

## Placement and stand options

- **Motorised floor stand** Turn on the TV and it rotates into the optimal viewing angle, up to 90 degrees from the wall, to allow for many different viewing positions when in use, but to hug the wall when not in use. The sound panel descends simultaneously in one coordinated movement. The motorised floor stand integrates two movements: the plate moves the tube and TV out from the wall, while the tube rotates the TV around its own axis, so even this relatively large screen can be turned as much as 90 degrees from the wall and back again. The top of the stand is completely concealed inside the TV.
- **Motorised wall bracket:** Available in left-hinged or right-hinged versions, the motorised wall bracket simultaneously moves the TV out from the wall and turns it to the optimal viewing angle – while the sound panel glides into place – all in one coordinated movement. The motorized bracket is completely concealed inside the TV and turns 19 degrees from the wall.
- **Fixed wall bracket:** Places the TV flush against the wall, in one fixed position.

## Sound: components, features and specs

## Overview, speakers and amplifiers:

The integrated three-channel speaker solution provides exceptional stereo performance with optimized speech reproduction and enough cultivated bass to satisfy even the most discerning listener. Each of the eight integrated drivers are driven by its own dedicated class D amplifier giving a fully active speaker solution all managed by the latest Digital Sound Processing technology.

All but the largest woofer are built into the hide-away sound panel that glides beneath the television when it is turned on to provide unobstructed high-fidelity performance. Both woofers use Coscone™ drivers, originally developed for high-end automotive sound systems, to provide superior bass performance from a very compact and lightweight design.

- Right channel: 1 x 2" midrange powered by a 60 watt class D amplifier; 1 x ¾" tweeter; powered by a 60 watt class D amplifier
- Left channel: 1 x 2" midrange powered by a 60 watt class D amplifier; 1 x ¾" tweeter; powered by a 60 watt class D amplifier
- Centre channel: 1 x 2" midrange powered by a 60 watt class D amplifier; 1 x ¾" tweeter; powered by a 60 watt class D amplifier
- Bass: 1 x 4" Coscone™ woofer, pointing forward, powered by an 60 watt class D amplifier; 1 x 6.5" Coscone™ woofer, pointing behind the television, powered by an 60 watt class D amplifier

**Magical mechanics:** When the TV is switched on, the sound panel elegantly emerges below the screen, and slides to the sides, to deliver superior stereo separation. It automatically retreats inside the television screen when not in use.

**Immaculate Wireless Sound:** An integrated wireless transmitter lets you connect even more speakers, up to a full 7.1 surround sound solution, without adding cable clutter to the interior. Sophisticated digital processing detects wireless speakers during the setup process, and adapts sound performance to deliver a completely optimized acoustic experience without the wires.

**Bass adaptation and management:** As proximity to walls directly affects bass performance, BeoVision Avant features a new automatic sound equalizer for bass adaptation. When the motorized wall bracket is in use, the bass is automatically adjusted depending on whether the TV is playing against the wall or after having been turned to a free-hanging position.

A unique Bass Management algorithm directs low frequencies to the most suitable speaker(s) or subwoofer in the system setup.

**Thermal protection:** Driver temperatures are constantly monitored, and all drivers have thermal protection with heat sinks to eliminate the risk of damage due to overheating at high volumes – and still deliver high-performance sound.

## Flexible sound staging:

BeoVision Avant offers a full digital surround decoder module that delivers up to 16 audio channels using Bang & Olufsen's TrueImage™ processor. TrueImage™ technology dynamically handles up- and down-mixing of audio signals to match the number of audio channels in the incoming signal with the available loudspeakers, yielding audio performance unparalleled by any other television.

BeoVision Avant makes it easier than ever before to set up a surround system. With the introduction of a microphone that quickly plugs into an easy access panel, the Automatic Speaker Calibration adapts gain and delay on all connected speakers including the subwoofers. A specially developed all-pass filter ensures perfectly balanced system performance that coherently integrates a subwoofer. BeoVision Avant offers a Sound Staging System that gives you exceptional flexibility:

- **Stand-alone:** The television's integrated speaker system plays centre, left and right channels – and delivers superb bass performance.
- **Simple surround:** The integrated speaker system plays centre, left and right channels; simply connect a pair of external rear speakers and a subwoofer, wired or wirelessly, for an engaging surround sound experience.
- **Full surround:** Connect subwoofer, front and rear speakers – wired or wirelessly – to achieve true 7.1 surround and the ultimate listening experience.

**Sound modes:** Nine pre-programmed modes for films, drama, sports, music, gaming, etc. The mode pre-sets can be customized in the advanced settings menu. Automatic detection and switching to dedicated sound sources (e.g., gaming console or Blu-ray player).

**Speaker groups:** Define up to nine different speaker groups, or use all connected speakers simultaneously in one speaker group.

## Video: components, features and specs

**Overview and screen type:**

LED-based LCD Ultra High Definition (UHD) with a resolution of 3840 x 2160 pixels.

- 85": direct type LED panel with 2D local backlight dimming 12 rows and 20 columns - = 240 individually controlled segments.

5 x HDMI inputs are UHD compatible.

**Anti-reflection coating:** The grey-toned front glass is treated with a high-grade anti-reflection coating, on both sides, to dampen disturbing reflections more than 98%.

**Improved 10-point factory calibration:** Each BeoVision Avant screen is calibrated to accurately tune white point, gamma curve and red, green and blue primary colours, ensuring impeccable tracking of whites across the grey scale, the best possible colour reproduction, and avoiding oversaturated colours. This is achieved by subjecting each screen individually to an automatic 10-point factory measurement procedure. After this, the resulting measurement data is stored in a 3D look-up table for that particular screen, so that the TV screen will have exactly the specified white point, gamma and primary colours, identical to all the other TV sets manufactured at Bang & Olufsen, regardless of any screen manufacturing tolerances.

**Chromatic Room Adaptation:** Bang & Olufsen takes its standard-setting adaptation to ambient light feature to the next level with Chromatic Room Adaptation. Integrated into the top, right-hand edge of the screen is a dual light

sensor unit consisting of two 180-degree light sensors. Rather than calculating a 360-degree average, the split sensor significantly improves light measurement precision and adjustment of the appropriate screen light output by analysing light coming from both behind and in front of the screen. The rear sensor also measures the ambient light's colour tone to automatically adjust the white point in bright room conditions.

**Motion compensation:** By doubling the rate at which video frames are displayed, and then using advanced interpolation techniques to calculate the additional intermediate frames, BeoVision Avant effectively cancels "judder" to provide a naturally fluid viewing experience of sports and other motion-centric content.

**Adaptive contrast:** An algorithm that provides exceptional performance and enhanced contrast in very dark scenes when viewed in a bright room or when sunlight hits the screen

**Digital noise reduction:** An advanced adaptive noise filter has been implemented taking care of the suppression of MPEG block noise and MPEG ringing caused by compression in modern digital MPEG based TV signals and suppression of Gaussian noise originating from analogue legacy material.

#### Picture modes:

- **Adaptive mode (default):** Picture settings are continuously optimized depending on source material and viewing conditions
- **Movie mode:** For film fans, who prefer to watch film material with the colour temperature (white point) as it was intended by the film director (6500K). This often results in the picture becoming warmer (more reddish). Film mode can be set up for one or several specific sources, e.g. a Blu-ray player, from which most film material will originate.
- **Game mode:** For gamers who want to connect BeoVision Avant to a game console, this mode reduces video input-to-output delay to a minimum and provides fast, direct response from game controls. While this affects some video motion features, it adds essential advantages for optimal gaming experience. In game mode, other picture enhancement features are still active.
- **Monitor mode:** Adjusts the picture to use the screen as a monitor for PC applications. It minimizes the video delay and neutralises all signal processing for an unaltered picture.

**Electronic curtains:** Open up for the TV experience when the scene is set.

**Hard disk recording:** Connect a USB-based external Hard Disk Drive to record content. The integrated DVB T2/C/S2 dual-tuner design allows you to make a recording while you are watching another programme. Repeat recording, for example of a series, is also possible.

**Digital Media Renderer:** BeoVision Avant is a Digital Media Renderer (DMR), which uses a DLNA app to 'throw' content from a mobile phone or tablet directly onto the TV screen.

#### User interface

BeoVision Avant introduces Bang & Olufsen's latest user interface improvements that make operation more uniform, easy-to-recognize and convenient than ever before.

Conceptualized with the BeoRemote One remote control, BeoVision Avant builds on classic Bang & Olufsen User Interface and navigation elements. It also adds more intuitive visual icons and introduces a new feature, MyButtons, which takes a "snapshot" of scenarios that include multiple settings – for example watching a film on your Blu-ray player or listening to one of your favourite internet radio stations – and lets you enjoy the same combination of settings again with one-touch simplicity.

Setup wizards have also been improved. New on-screen illustrations make it even simpler to connect an external set-top box, Blu-ray player, Apple TV box or IR blaster.

## Internet features

**Integrated internet radio and music services:** With its outstanding acoustic performance, BeoSound Avant provides the ideal platform for enjoying streamed music services such as Spotify and Deezer, as well as thousands of internet radio stations.

**Bang & Olufsen Smart TV:** BeoVision Avant incorporates Bang & Olufsen Smart TV, which offers viewers a wealth of flexible options for accessing internet content.

Bang & Olufsen Smart TV can be shown simultaneously on screen along with whatever else you are watching on TV by activating the Picture and Picture function (PAP). This lets you follow your TV content and view internet content, for example Facebook, at the same time.

### Hybrid broadband TV (HbbTV)

HbbTV is a major new pan-European initiative that is intended to harmonize the broadcast and broadband delivery of entertainment content. HbbTV will provide a wealth of new consumer services from content providers and brands, including catch-up TV, interactive advertising, personalisation, voting, gaming and social networking. It will also provide programme-related services such as digital text, EPGs and supplemental information during broadcast.

BeoVision Avant supports HbbTV. Content is defined by broadcasters, and not all broadcasters will offer the service.

## Connectivity

**One remote:** Choose between BeoRemote One, Beo4, or BeoRemote App for iPad or Android tablets.

**Integrated DVB:** An optional hard disk for recording digital broadcasts can be integrated inside the TV, and controlled from the remote. Not available in all markets.

**Multi-room audio:** BeoVision Avant uses DLNA but also connects to Bang & Olufsen's analogue Master Link system via a BeoLink Converter. This allows users to use BeoVision Avant as a master in an A/V setup to play music in other rooms connected to the Master Link setup

**HDMI:** 6 connections

**USB:** 2 connections

**Power Link:** 5 sockets, with 2 channels in each for connection of external speakers

and subwoofer

**PUC:** 3 connections (for control of up to six external devices)

**WLAN/LAN**

**Pincode protection**

**DLNA compatibility:** BeoVision Avant works as a DMR (Digital Media Renderer), which means that it can play content from other DLNA compatible devices, including a BeoSound 5.

**Connection to third-party devices:** Connect to set-top boxes, gaming consoles, Blu-ray players, HDD and Apple TV (which can be placed inside the cabinet), NAS servers and hard disks; the integrated media browser lets you view photo collections or listen to music that you have on a USB drive or NAS server.