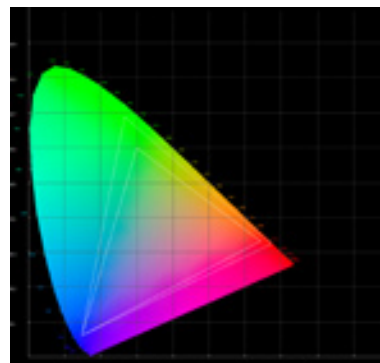
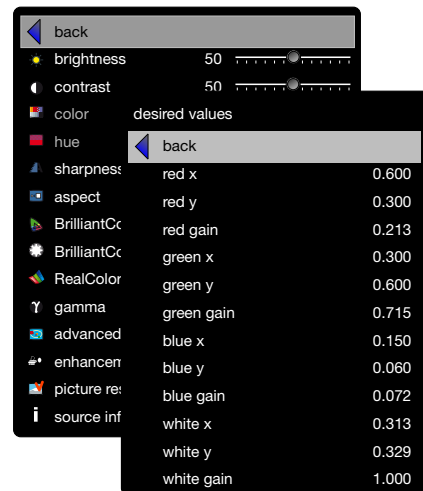




avielo[®]
by projectiondesign

essentials



Calibration menu and RealColor™

Colour accuracy, fidelity and natural reproduction of images are essential to enjoying a movie as the director intended. projectiondesign's extensive experience in the post production segment of the feature film and movie making process has led to the development of our proprietary calibration software designed for delivering perfect colours to our partners in the home theater market.

RealColor™ enables the correct calibration and set up of a projector to the desired professional colour standard, such as Rec709, white point and grey scale tracking.

RealColor™ uses a process called coordinate mode 3D calibration to achieve perfect colour accuracy. By accessing the x, y, and z coordinates in the colour gamut the installer utilizes a system uniquely made to calibrate home theater projectors in the same way as professional theater installers.

With some knowledge of colour coordinates and measurements, this method, provides the most accurate and influential settings possible. At projectiondesign we have worked closely with several post production houses in the creation of this advanced calibration system resulting in the ability to calibrate 100% perfect colours in any recognised video standard.

Colour standards – DCI & REC 709

The REC 709 and DCI are universally recognised industry colour standards that enable audiences to enjoy films with the same consistency of colour, detail, and resolution.

These standards are optimised for high definition video presentations, by combining red, green, and blue light to reproduce a broad array of accurate colours. All professional film studios use these colour standards in the making of movies. avielo by projectiondesign have taken this more serious than any other projector model or manufacturer in the luxury home theater market and can guarantee that our products can be calibrated in 3 dimensions to support these formats.



Our top-level helios features the revolutionary projectiondesign optical colour processing technology (ACOP). ACOP is vastly superior in all aspects of accurate colour rendition.

By combining fixed and motorised optical filters for each colour channel, the projector can be optically calibrated with near infinite accuracy. It also means that by the flick of a switch, you can change the projected colour gamut from a standard REC709 to a DCI-compliant colour gamut that complies with strict DCI colour specifications.

This accuracy is achieved without loss of bit depth, as the compensation uses finely tuned optical elements, and not electronic adjustments. In some competing home theater projectors, colour calibration is based upon a simple single yellow notch filter to change the green point of the picture, or more commonly by simply changing electronic values, which has negative effects on picture quality.

Dynamic black - How it works

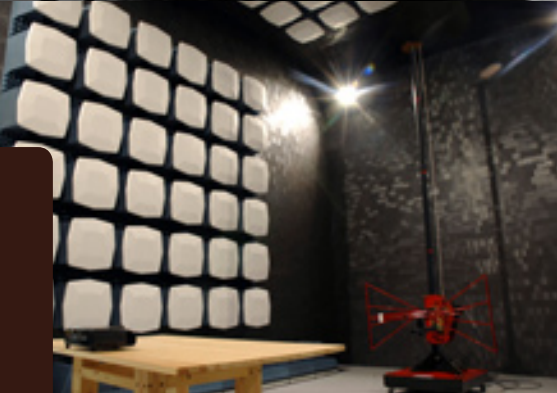
The aviello helios features unmatched dynamics amongst large venue projectors.

The unique DynamicBlack™ functionality can automatically adapt to the input histogram of the video signal, and adjust the image output so contrast is maximized at any one point in time. This creates much broader dynamic range for the image, and a more involving viewing experience.

If DynamicBlack™ functionality is not desired, the user can manually adjust IRIS and lamp settings to match a constant, desired output level, with contrast up to 12,000:1, and tune brightness levels to match the desired screen size requirement.

This feature is recommended for applications where extreme contrast is required such as bright family rooms or similar venues. For most home theater installations where ambient lighting can be controlled we recommend disabling DynamicBlack.





Quality of parts statement – All projectors hand built of the highest quality parts, measured and tested -

Every single part in all our projectors is developed, rigorously tested, and verified in-house at projectiondesign in Fredrikstad, Norway. With more than 800 models and variations of projectors in regular manufacture, our test, research and verification facilities include everything from acoustical analysis labs, to a full featured FCC certified EMC lab, environmental labs for lifetime and operational testing, such as temperature variations and testing of vibration resistance, as well as our own optics lab and various test and demo.

We pride ourselves in making the best projectors. They are enjoying the careful management of dedicated people at all stages of manufacture and are not passed down an automated production line as is the case with other brand products. That also means we are personally responsible for all of them. In addition, every single projector is made to specific order. The configuration which is ordered is the configuration that is built, and may only exist for that particular installation.

Optical Engine - Helios is not your "standard" 3-chip projector

All competing 3-chip projectors on the market use the same standard optical engine across the board. In order to achieve maximum performance from the technology, projectiondesign has created a completely unique 3-chip design that is unlike anything else in the market. We also use a robot to automatically align the DMD's (Digital Micromirror Device)

The revolutionary design of the helios optical engine provides advanced benefits for the high end home theater customer:

- High light output in a very compact design
- Better native contrast than standard 3-chip solutions
- Less "prism" effect reduced colour scattering from refraction in the glass material for different wavelengths

And wait there's more...

The helios engine features new and revolutionary optical colour processing technology. By combining fixed and motorised optical filters for each colour channel, the projector can be



optically calibrated with near infinite accuracy.

All this without any loss of bit depth, as the compensation is purely optical, and not electronic.

Unlike competing projectors, where colour calibration is based upon a simple yellow notch filter to change the green point of the picture, or simply by changing electronic values, ACOP is vastly superior in all aspects.

Signature Series Lenses

The aviello series features a wide range of ultra high quality projection lenses, handpicked for their superior performance.

Most importantly, every single lens uses Low Dispersion (LD) aspherical glass and aspherical lens elements for high quality focusing and sharpness, as well as high optical interfield contrast, resulting in very high image quality. The lenses are designed and made with high resolution in mind, not taking standard off the shelf lenses for use in higher performance applications.

We measure each lens and record the lens's MTF (Modulation Transfer Function) value - just the top 5% will pass the test. This rigorous benchmark guarantees the best possible image quality, colour display, and contrast, as well as sharpness and focus. All signature lenses are engraved with the inscription "signature series", all approved by world class Bård Eker Industrial Design who also designs Koenigsegg supercars and Hydrolift speed boats.



SIGNATURE SERIES



Lens memory

The aviolo helios series features a wide range of custom designed, precision projection lenses for the best quality imaging, and the most secure and reliable setup.

Key features include infinitely adjustable IRIS and aperture settings, motorised zoom, focus and lens shift with memory for use in multiple settings and installations with programmed calibration and screen setups. The memorised IRIS function also works in concert with an optional motorised anamorphic lens system which increases the screen size by 33% and thus requires a more brightness to fill the screen. With the lens memory it is possible to pre-program up to 10 different screen settings

DuArch lamp system

projectiondesign's unique, patented DuArch™ optical block realises the potential of using two lamps in an optical system to dramatically increase brightness and efficiencies from a projector. DuArch is approximately 70% more efficient than other, similar systems, and therefore creates more brightness on screen, or simply put - higher brightness for the money.

DuArch is a very powerful optical design and offers many important features and benefits including:

- the ability to run on either one or two lamps
- Better control of brightness output
- very low brightness output (one lamp)
- very high output (two lamps),
- any level between
- Increased mean time between maintenance when running one lamp at the time



Single board technology

At projectiondesign we understand the desire to achieve the purest possible signal processing. All our products include our unique Uniboard single electronics board architecture. Shortening electronic signal paths reduces noise and increases image fidelity. Low level information is kept intact, and our projectors resolve more detail than any other projector on the market, with better contrast, better brightness, and better colour rendition. It is a projectiondesign core philosophy to be on the forefront of technology at all times. Uniboard™ technology affords the following factors:

- The purest possible signal processing
- All vital signal processing on a single board
- Short signal paths
- Noise free video signal
- Gold plated signal paths
- Separate ground layers
- Separate power supplies



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