



What is Orbiter?

Orbiter is an ultra-bright, tunable, and directional LED fixture from ARRI. All systems in Orbiter are completely new and designed with versatility in mind. Orbiter's new six-color light engine delivers a wide-color gamut and outstanding color rendition across all color temperatures along with industry-leading, smooth dimming from 100 to 0%. With its changeable optics, Orbiter can transform into many different types of lampheads including open face, soft light, domes, and other future possibilities. Orbiter's state-of-the-art technology and versatile design makes it an optimal lamphead for today and for the future with endless possibilities for updates, configurations, and enhancements.



A Wide Variety of Changeable Optics



Open Face



Softbox



Dome



Projection



Fresnel

Changeable optics is the core innovation in Orbiter. With a wide variety of optics to choose now and in the future Orbiter transforms into the perfect light for your application without sacrificing beam, output, or color quality. The Quick Lighting Mount (QLM) in Orbiter allows for optics with vastly different properties to be connected to the fixture.

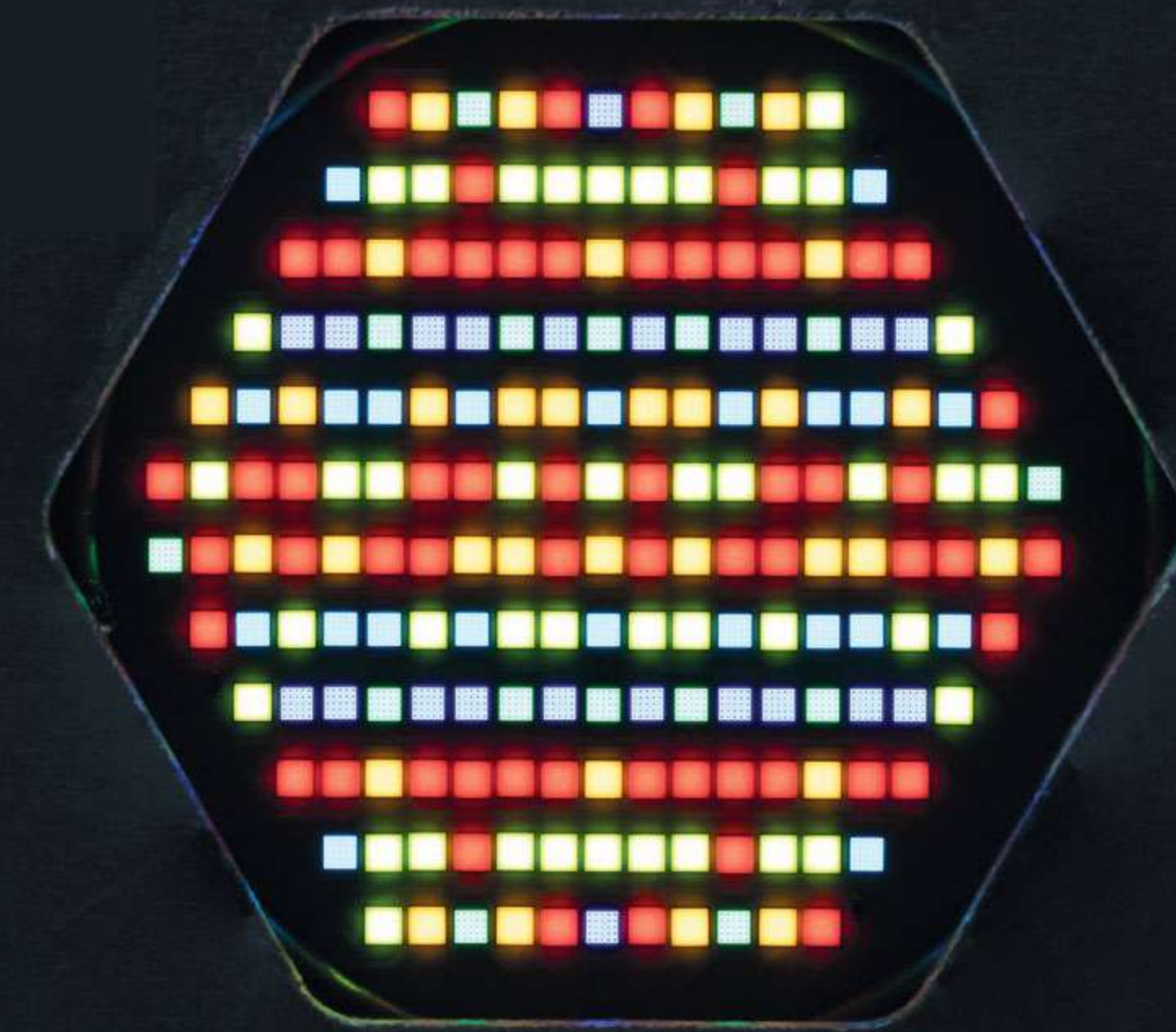
QLM
Quick Lighting Mount



Say Hello to ARRI Spectra State-of-the-art, six-color LED light engine

ARRI is known for creating high-quality lighting products. With the new ARRI Spectra light engine in Orbiter, this commitment is being taken to the next level. Including a red, green, blue, amber, cyan, and lime LED, the ARRI Spectra six-color light engine translates into a wider color gamut, more accurate colors, and most importantly, higher color rendition across the entire CCT range.

Skin tones look amazing and natural. Hues are precisely reproduced and the increased gamut allows for 15% more colors to be created than previous ARRI light engines. Orbiter has a larger CCT range of 2,000 to 20,000 K with ultra-high color rendition across all color temperatures. This next generation in color control will open up new possibilities and produce better colors than ever before.





Sheer Output

Immense brightness with full color tunability

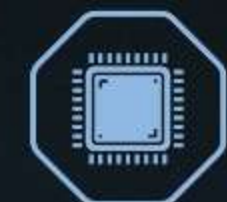
Orbiter is an extremely bright and powerful, directional LED fixture with an output similar to that of the corresponding HMI systems. Orbiter's high, yet tunable, ARRI Spectra light engine output can create hard shadows with defined edges. This revolutionary light engine is 76 times smaller than the L10's light engine but produces the same power draw and greater output. A dense arrangement of over 200 LEDs Orbiter a point source-like aperture while maintaining full-color tunability with a new six-color LED mixture. These cutting-edge LEDs have never been used before in a luminaire and the arrangement creates a homogeneous color-beam field with amazing brightness.



Technology Unleashed

Fast, powerful, and full of possibilities

A new era of digital lighting is truly upon us. Orbiter is the most technologically advanced luminaire ever to be created for image capture while maintaining superior color fidelity.



Electronics

With state-of-the-art electronics, Orbiter is able to perform more tasks than previous luminaires. Orbiter's processor is four times faster than the SkyPanel with 125 times more memory, setting the stage for extensive software features and updates in the future.



Weatherproof

Orbiter's housing is weatherproof. To ensure no defects, Orbiter's ports (such as power, or XLR (for DMX)) require additional protection. The rain cover is mandatory when the Orbiter is tilted at a horizontal angle or facing downward, and recommended from 0° to 75° upwards.



Battery

Orbiter includes a lightweight internal power supply and a 3-pin XLR battery input for 48 V batteries.



Dimming

Using a combination of three dimming techniques, Orbiter's cutting-edge electronics provide smooth dimming down to zero without color changes or jumps.



Connectivity

Ready for today, prepared for tomorrow

Communication to and from a luminaire is crucial to create robust networks and dynamic control. Orbiter includes a full suite of input and output connectors which enable communication to the fixture in whatever way is required. With all these connectivity interfaces, Orbiter is not only ready for today's state-of-the-art communication but is also prepared for whatever the future might bring.



Powerful Software Packed with amazing features

Orbiter's new software called LiOS (Lighting Operating System) includes all the innovative and groundbreaking features from SkyPanel plus others, making Orbiter one of the most fully-featured luminaires on the market. LiOS' eight-color modes are available including CCT, HSI, individual color, x/y coordinates, gel, source matching, lighting effects, and the new color sensor mode which measures ambient light and recreates it through Orbiter's output. Other new features in LiOS include simplified DMX modes, operational modes to optimize the fixture's performance, over 240 slots for favorites to be stored, optics recognition, multi-language support, custom boot screen, and many more still to come.

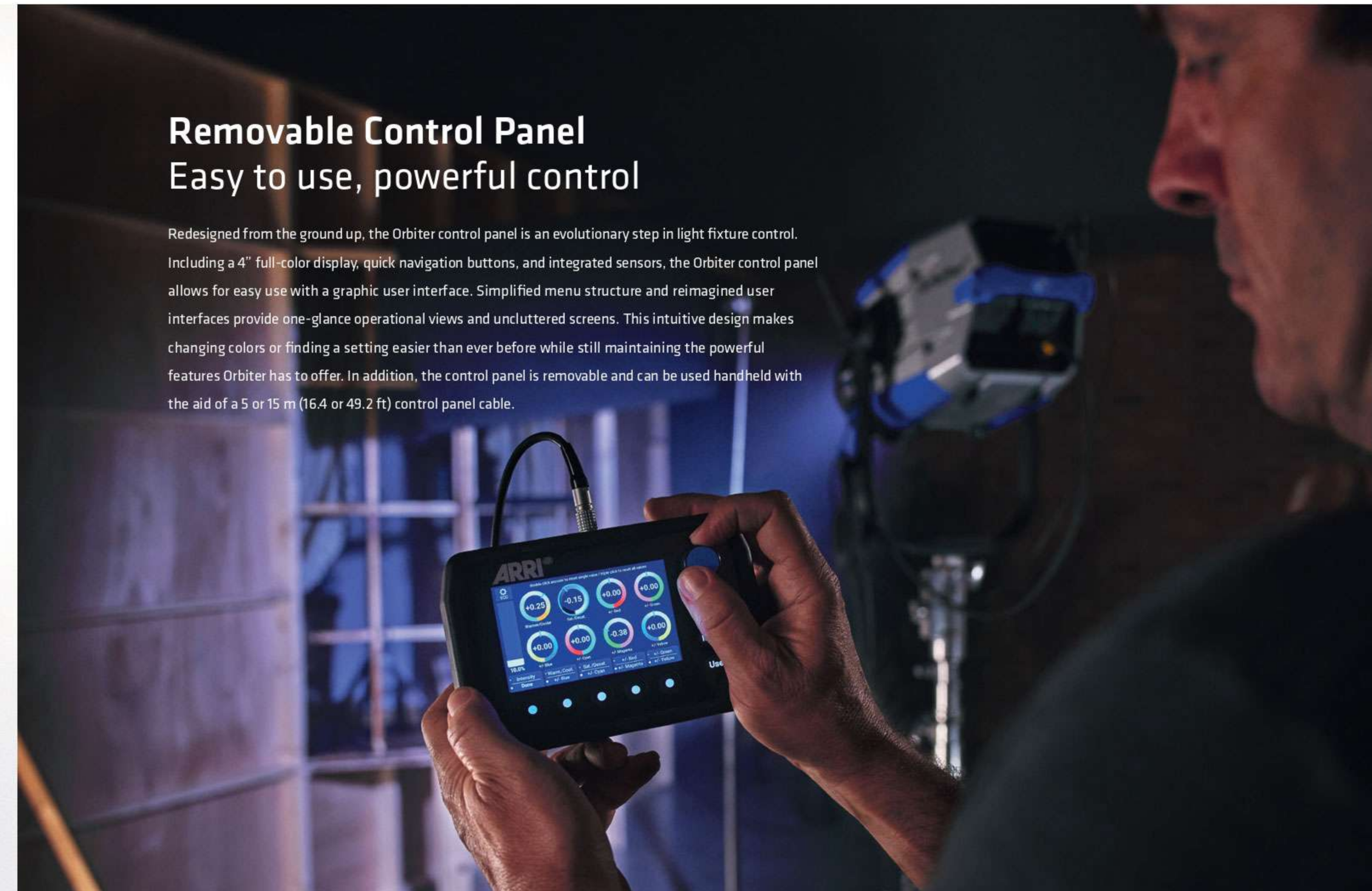


LIOS
Lighting Operating System



Removable Control Panel Easy to use, powerful control

Redesigned from the ground up, the Orbiter control panel is an evolutionary step in light fixture control. Including a 4" full-color display, quick navigation buttons, and integrated sensors, the Orbiter control panel allows for easy use with a graphic user interface. Simplified menu structure and reimagined user interfaces provide one-glance operational views and uncluttered screens. This intuitive design makes changing colors or finding a setting easier than ever before while still maintaining the powerful features Orbiter has to offer. In addition, the control panel is removable and can be used handheld with the aid of a 5 or 15 m (16.4 or 49.2 ft) control panel cable.



Integrated Color Sensor Measure ambient light directly on fixture

The new Color Sensor Mode in Orbiter will read the ambient color surrounding the fixture and reproduce the color with great accuracy. There are two measurement types: continuous and momentary. Continuous will constantly measure the ambient color and update the light output accordingly. Momentary will only take one measurement of the ambient color with the press of a button. This new color mode is perfect in situations where the light is changing. Orbiter can automatically adjust for color changes without any interaction.

Full Suite of Sensors Generating more information for more control

A digital light of the future requires data. Orbiter is aware of the world around it with a variety of sensors that allow for advanced operations, smart automations, and a stream of metadata. Included in Orbiter is a color sensor for measuring the ambient light, a 3-axis accelerometer and magnetometer for sensing the pan, tilt, roll, and heading of the fixture as well as heat sensors for keeping the LEDs and electronics at exactly the right temperature, and an ambient light sensor for automatically dimming the control panel display. All these sensors make for a better user experience and increased control over the fixture. Available data improve workflow also in post production and service.





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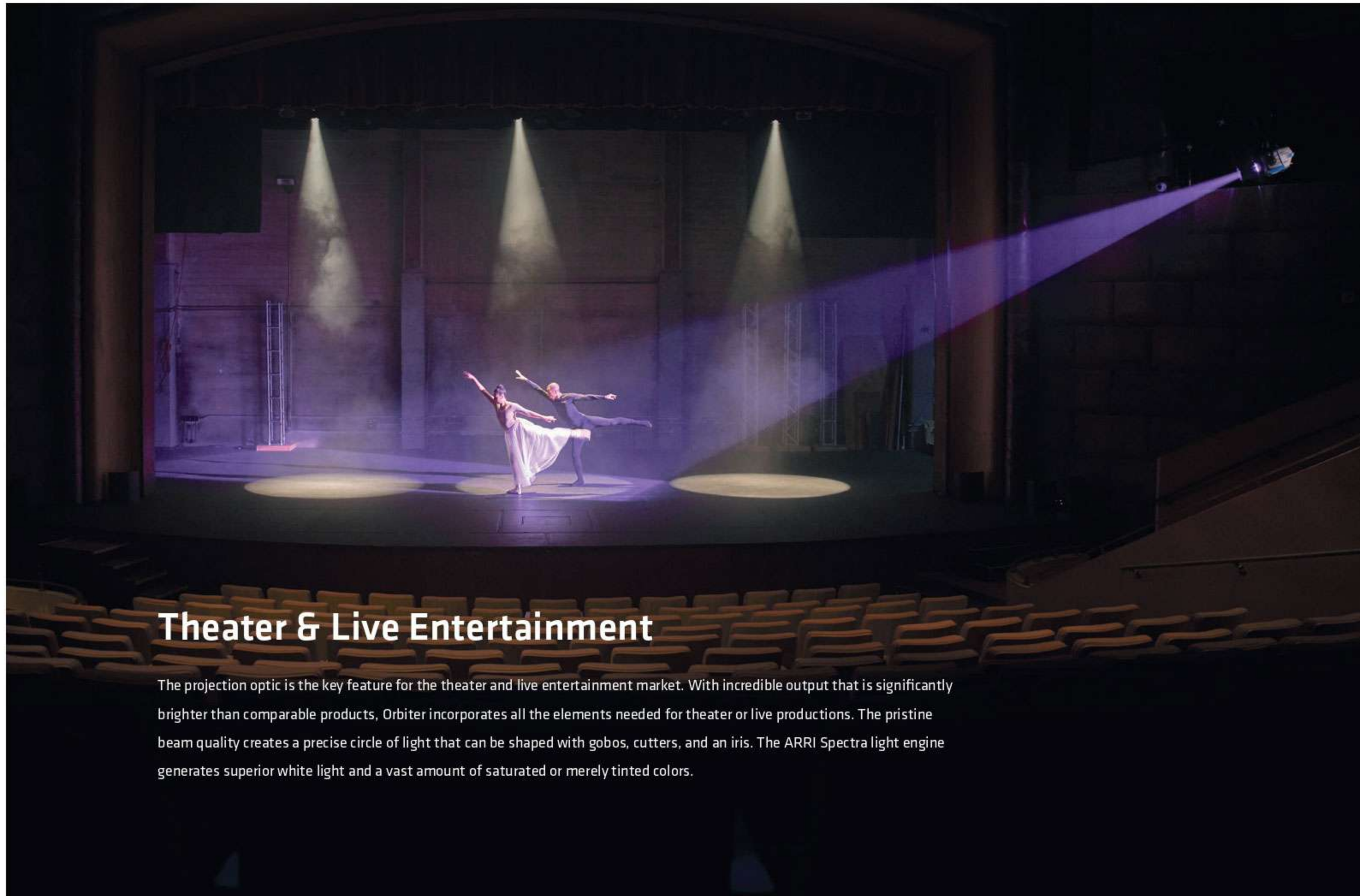
Motion Picture

Orbiter's amazing output and versatility makes it the perfect directional light fixture for motion picture use. The ability to throw light long distances with open face or projection optics while at the same time being able to serve as a soft light brings the flexibility needed on today's fast paced film sets. Given its sleek ergonomics and intuitive user interface, the new control panel enables easy handling and control of the luminaire on the fly. The software features and connectivity make Orbiter the ultimate companion for dynamic lighting setups.



Broadcast & Media

Broadcasters now have a new tool to illuminate their studios and on-location setups. Orbiter's projection optic will enable broadcasters to have controlled, high-quality light in the studio. In combination with the SkyPanel, Orbiter is the perfect companion to studio lighting. The open face optic or softbox option provides either tremendous directional output or a soft wrapping field of light. With its battery power, Orbiter can easily be used on the move.



Theater & Live Entertainment

The projection optic is the key feature for the theater and live entertainment market. With incredible output that is significantly brighter than comparable products, Orbiter incorporates all the elements needed for theater or live productions. The pristine beam quality creates a precise circle of light that can be shaped with gobos, cutters, and an iris. The ARRI Spectra light engine generates superior white light and a vast amount of saturated or merely tinted colors.



Still Photography

The need for continuous lighting in still photography has never been greater and Orbiter fills a critical function in this workflow transition. Using the powerful features of the SkyPanel in Orbiter's directional source, hard shadows are now attainable with countless color possibilities. Whether bouncing off a surface or pointed directly at the subject, Orbiter will give the output needed with beautiful color rendition. Octagonally shaped softboxes convert the point light source into a great soft light perfect for beauty shots, changing the light characteristics in just seconds.

Your Choice of Optics



The open face optics produce a high-output, directional beam of light in several different beam angles including 15°, 30°, and 60°. Perfect for throwing light long distances or providing a broad swath of light.



Two kinds of projection optics provide the desired output and quality. The projection optics contain high-end lenses to provide even illumination and color across the entire beam field for superior results. Fixed beam angles available are 15°, 25°, 35°. Wider angles might be added in future. The zoom projection optics allow for flexibility in all kinds of application.



The dome optics are fabric spheres available in three different diameters - small, medium and large, ranging from 30 cm (12") up to 100 cm (39") diameter. The dome emits omnidirectional light, great for illuminating a large area with a beautiful, soft quality of light.



The softbox adapter creates a direct mounting point for Chimera and DoPchoice products. With easy attachment and no additional optical elements needed, the softboxes allow for a controlled soft light with amazing output.

Built to Last

Constructed with great care from durable materials

Made in Germany to the high standards for which all ARRI products are known, Orbiter is built to last – constructed from resilient materials and assembled by hand with great care. The combination of an aluminum core with fiberglass-reinforced thermoplastics results in a solid fixture that can withstand heavy daily use.

The electronics have been designed to last beyond a minimum of 50.000 hours, and to be easily serviceable. The LED light engine even allows for recalibration, further enhancing Orbiter's credentials as a long-lasting, high-quality fixture. As with all ARRI products, a high return on investment is ensured by uncompromising engineering standards.





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Technical Data

Orbiter	
Optical System	Changeable optics
Light Aperture	42 mm / 1,66"; without optics
Beam Angle	80° Half Peak Angle, without optics
Weight	Fixture only: 11,7 kg / 25.8 lbs Manual Version: 14,2 kg / 31.3 lbs Pole Op Version: 14,9 kg / 32.9 lbs
Handling	Aluminum yoke with quick release, high strength tilt lock, pole operation option (pan and tilt)
Mounting	28 mm Spigot (Junior Pin)
Tilt Angle	+/- 90° in dry location, +75° / -90° in wet location with rain cover
Power Consumption	400 W Nominal, 500 W Maximum
Voltage Input Range	100 - 240 V~, 50 - 60 Hz
Mains Power Connection	powerCON TRUE1 TOP (Bare Ends / Schuko / Edison, Japanese, Chinese cables available)
DC Voltage Range	48 - 52 V=
Battery Connector	3-Pin XLR Connector (Pin 1: negative, Pin 2: positive)
White Light	calibrated 2,000 K to 20,000 K continuously variable correlated color temperature
Color Modes	CCT, HSI, RGBACL, gel selection, x/y coordinates, source matching, lighting effects, and color sensor mode
Color Temperature Tolerance	3.200 to 5.600 K: +/- 100 K (nominal), +/- 1/8 Green-Magenta (nominal)
High Color Rendition Mode	3.200 to 5.600 K: CRI Average > 98 TLCI Average > 95 TM-30 Average > 94
Green-Magenta Adjustment	Continuously adjustable between Full Minusgreen to Full Plusgreen
Dimming	Smooth, 100 to 0 %, continuously, linear / exponential / logarithmic / „S“ curve
Connectivity	Removable Control Panel via PoE, 5-Pin XLR in and through, EtherCON in and through, 2 x USB-A, USB-C, SD Card, Sync Input
Control Options	Wireless control via LumenRadio CRMX® (DMX & RDM), Full E1.20 RDM standard implementation with custom & standard RDM commands
Housing Color	Blue/Silver, Black
Ambient Temperature Operation	-20 to +45° C (-4 to +113° F)
Protection Class	I
IP Rating	IP 20 without Rain Cover, IP 24 with Rain Cover L2.0037805
Estimated LED Lifetime (L70)	50,000 hours
Estimated Color Shift Over Lifetime (CCT)	+/- 5 %
Certifications & Declarations of conformity	CE, CB, ENEC, cNRTLus, FCC, ICES pending: PSE, KC, SRRC and more

All specifications are preliminary typical values. Subject to change without notice.
*Brand: LumenRadio AB, Equipment: CRMX TiMo, Model: 200-1502, Product: Orbiter 2.4G Wireless Control Module, Frequency Range: 2402 - 2480 MHz, Frequency of Operation: 2402 - 2480 MHz, Power Output: 17.51 dBm, Number of Channels: 79, Channel Spacing: 1 MHz, Modulation Type: GFSK

