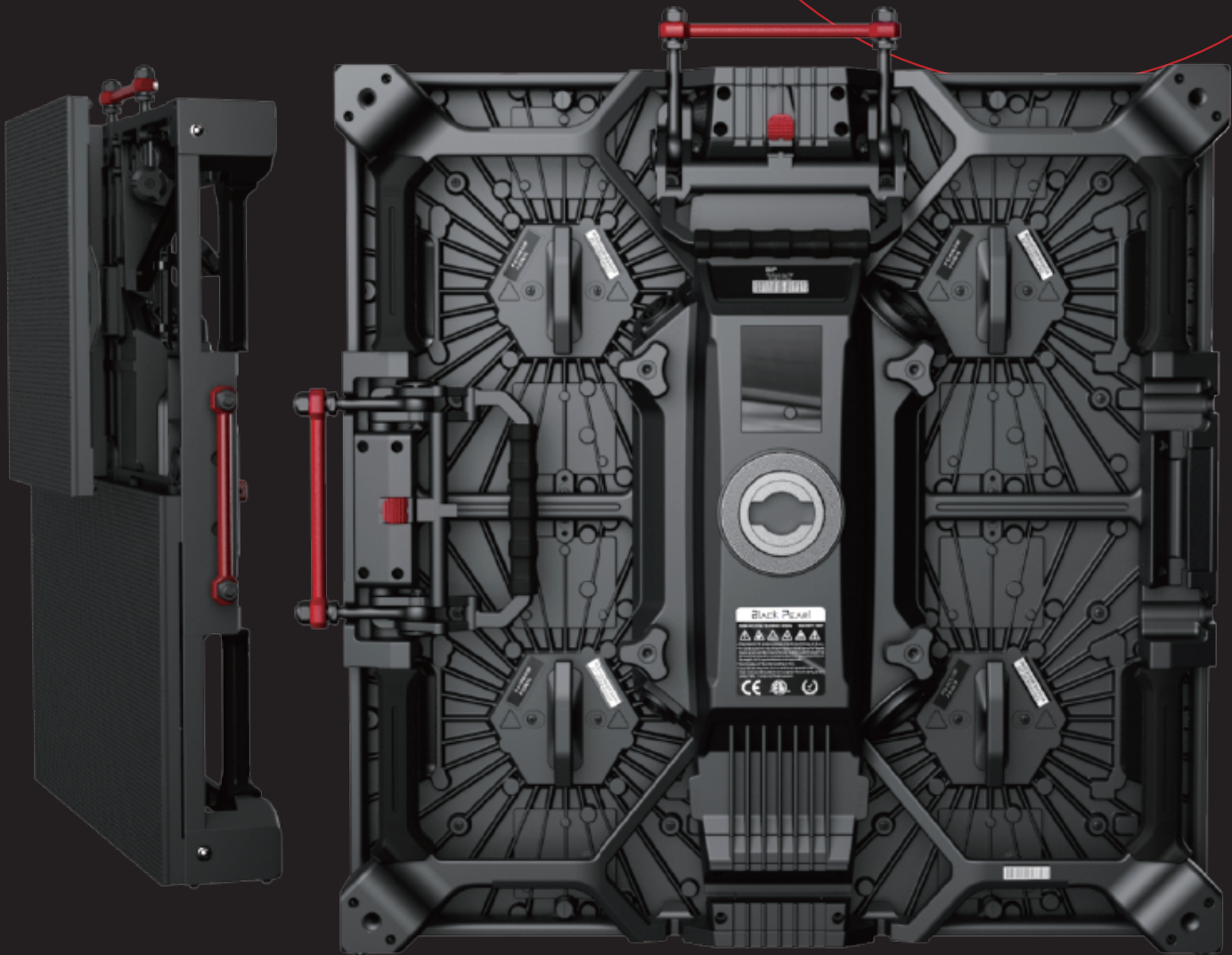


## Black Onyx

AWARDED, CUTTING-EDGE LED  
DESIGN AND TECHNOLOGY



The Black Onyx family by ROE Visual offers Awarded, cutting-edge LED design and technology in a LED panel that has become industry standard.



## Introduction

Black Onyx is a high-performance, broadcast grade, HD-LED display for indoor applications. Winner of the prestigious IDEA Gold Award and the Red Dot Award, Black Onyx offers user-friendly and innovative design that supports fast and easy hanging and stacking options set-up options. The lightweight magnesium-based panels are durable and of proven high-quality. Panel features an integrated LCD screen for easy read-out of the panel status. Featuring HD pixel pitch and outstanding color processing, Black Onyx is perfectly suited for the professional AV market.

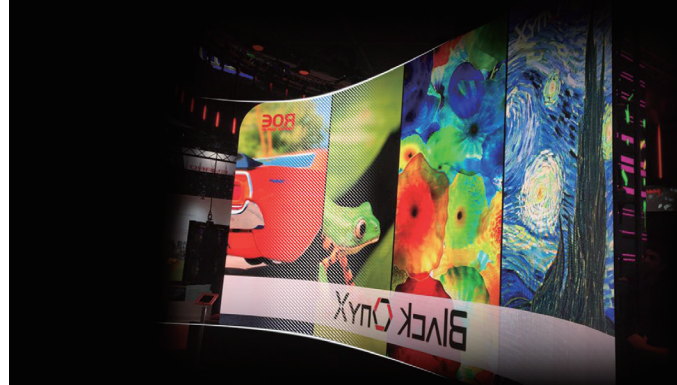


### Fast and Easy Set-up

The integrated magnet-assisted assembly and smart-lock system allows for easy positioning and efficient installation. The edge-conscious tile design guarantees optimum panel protection.

## Superb Visuals

True-to-content effects are created with high refresh rates, outstanding color processing and great contrast ratios.



## Intelligent Module and Easy Maintenance

Each individual module stores its calibration and operating parameters. Equipped with identical push-out modules, maintenance is a breeze.



## High Power Supply Efficiency

Built-in heat dissipation and a power supply efficiency of 90% guarantee minimum waste heat.



## Flexible Installation Options

Due to its stacking, hanging and curved installation options, the Black Onyx LED panels offer flexible solutions for both rental and fixed installation applications. Through concave or convex curving a larger field of view and a more immersive experience can be created.



## Specifications

Tile	BO2	BO3
Pixel Pitch	2.84 mm	3.47 mm
Pixel Density	123,904 px / m <sup>2</sup>	82,944 px / m <sup>2</sup>
Pixels (H x V)	176 x 176 px / tile	144 x 144 px / tile
LED Configuration	Black SMD 3-in-1	Black SMD 3-in-1
Max. Brightness (Calibrated)	1,800 nits (MultiColor 1515)	1,500 nits (NationStar 2020)
Gray Scale (Input to Output)	16 bit	16 bit
Contrast Ratio	6000:1	5000:1
Refresh Rate	1920 Hz	1920 Hz
Scan	1/11	1/12
3D Ready	Yes	Yes
Hoz. Viewing Angle	140°	140°
Vert. Viewing Angle	140°	140°
Transparency	Solid	Solid
Tile Size(W x H x D)	500 x 500 x 90 mm / 19.7" x 19.7" x 3.5"	500 x 500 x 90 mm / 19.7" x 19.7" x 3.5"
Frame Material	Magnesium Alloy	Magnesium Alloy
Serviceability	Front / Rear	Front / Rear
Weight / Tile	9.35 kg; 20.61 lbs	9.35 kg; 20.61 lbs
Max. Hanging	20 tiles	20 tiles
Max. Stacking	12 tiles	12 tiles
Curve(Concave & Convex)	Max. Concave 10° Max. Convex 10°	Max. Concave 10° Max. Convex 10°
Max. Power / Tile	160 W	160 W
BTU Max/Average	546 / 251	580 / 267
Processor	Brompton	Brompton
Operational Temp / Humidity	-20°~ 45°C, 10~90% RH / -4°~113°F, 10~90% RH	-20°~ 45°C, 10~90% RH / -4°~113°F, 10~90% RH
Storage Temp / Humidity	-40°~ 60°C, 10~90% RH / -40°~140°F, 10~90% RH	-40°~ 60°C, 10~90% RH / -40°~140°F, 10~90% RH
IP Rating (Front / Rear)	Indoor Only	Indoor Only
Certifications	CE,ETL,FCC	CE,ETL,FCC
Lifetime	≥50,000 hrs	≥50,000 hrs

\* Notes:  
The max. hanging supports up to 20 tiles when the safety factor is 5.  
Convex ability only applies to custom tile, not the standard one.

## Dimensions

