Black Pearl BP2 is specially developed for use in the film industry and xR applications. Featuring in large-scale film projects, such as The Mandalorian and Westworld, its features have been adapted based on extensive testing and industry partners’ feedback.

Creating the right canvas for virtual production is not just building any LED screen. It’s where the LED panel, processing, and camera work together, complement and strengthen each other that real stunning results are achieved. ROE Visual Black Pearl has proven to be the right product for the job.

The BP2.2 offers the trusted performance of the BP2 in an updated version with high-speed components. It results in an identical perfect in-camera performance as the BP2, adding quicker and easier camera set up and handling.

Specifications

**Black Pearl**

- **Pixel Spacing**: 2.84 mm
- **Max Brightness**: Calibrated 1,500 nits
- **Panel Dimension**: 500 x 500 x 90mm (19.69” x 19.69” x 3.54”)
- **Panel Resolution**: (H x V) 176 x 176
- **Weight Per Panel**: 9.35kg; 20.61lbs
- **Power Consumption**: Max/Average 185W / 92W
- **BTU**: Max/Average 631 / 290
- **Transparency**: Solid
- **Serviceability**: Front
- **Max. Hanging (panels)**: *1 20
- **Max. Stacking (panels)**: *2 12
- **Curving (Concave & Convex)**: Concave 10°

**LED Configuration**

- **LED Configuration**: SMD 1515 Black
- **Viewing Angle**: Vertical 140°, Horizontal 140°
- **Scan Ratio**: 1/8
- **Refresh Rate**: 7680Hz
- **Gray Scale**: 16bit
- **Frame Material**: Magnesium Alloy

**Operational Temp / Humidity**: -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

**IP Rating**: Indoor

**Certifications**: CE, ETL, FCC

*Note: The specifications are non-exhaustive, actual values may vary.*

1. The max. hanging amount is only valid when the ROE Visual hanging bar and complementary accessories are used and is at an indoor environment, a safety factor is 8. No climbing is allowed.

2. The max. stacking amount is only valid when the ROE Visual stacking system and complementary accessories are used, sufficient ballast is applied, and in an indoor environment, safety factor is 8. No climbing is allowed.

3. Curving curveability only applies to custom tiles.

Dimensions

![Dimensions Diagram](image-url)
Premier choice LED for virtual production.

ROE Visual LED panels prove to be the ideal solution and canvas to portray to sets and backgrounds created in virtual reality.

Easy installation

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

Superb visuals and perfect in-camera behaviour

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

ROE Visual LED screens work with high-end components and state of the art driver IC’s, making all the difference for the in-camera performance.

BP2 V2 offers low refresh cycles due to a low scan rate.

High refresh rates help to avoid visible scan-lines.

BP2 V2 has a refresh rate of 7680 Hz.

With a bit-depth of 16-bit, color banding and inaccurate color representation are a problem of the past.

Fast and Easy Set-up

The integrated magnet-assisted assembly, LED protection and smart lock system allow for automatic positioning and efficient installation. These features guarantee optimum panel protection during build and break.