ROE
CREATIVE DISPLAY

Carbon Series

Versatile LED Platform

IN- & OUTDOOR LED PANELS

Lightweight

Measuring 600x1200mm, 23.6" x 47.2"
the sleek Carbon family panels have a weight of
only 13,9kg/30.6lbs per panel.
With the slim panel design and great frame and
dolly options, you can save costs on shipping
and labor.
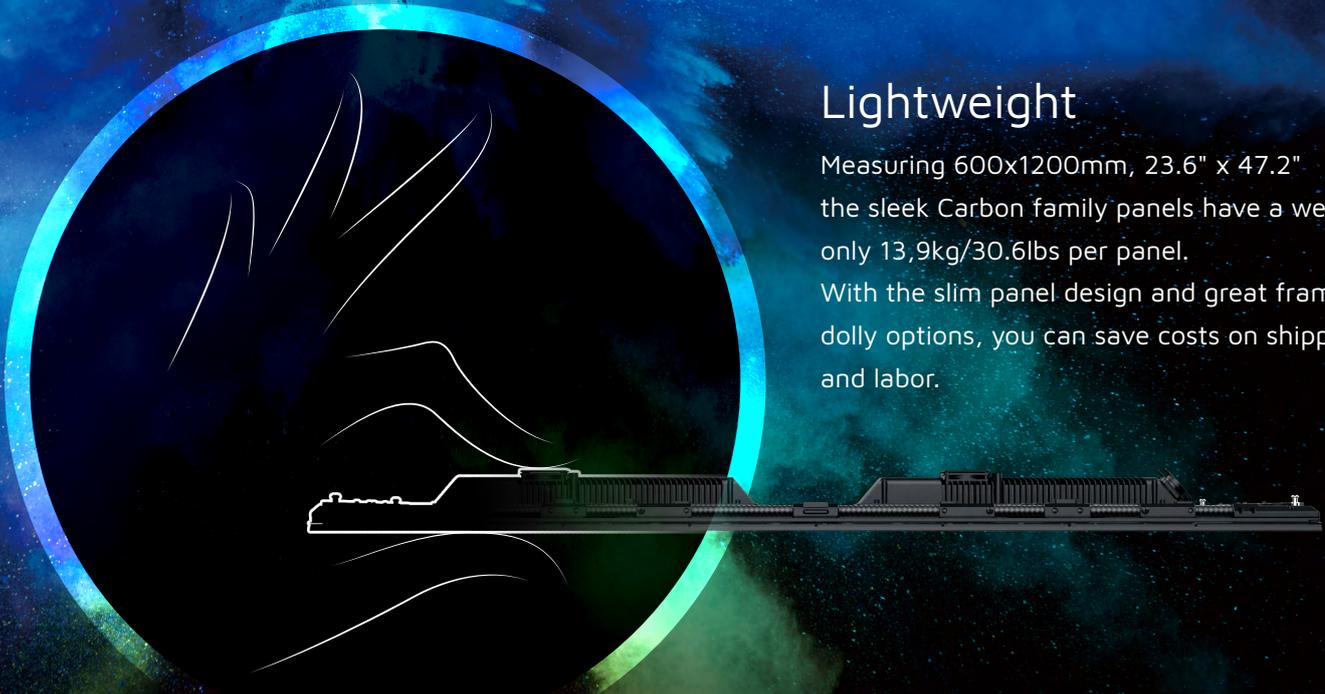
In and Outdoor

Comprised of bright, high-contrast LEDs, the CB5 and CB8
panels offer a perfect in and outdoor large format solution.

UVA (Uniform Viewing Angle) Technology

UVA technology applies to special-designed modules
when used as LED ceilings. UVA technology help LEDs get
much better color performance, reduce the color deviation
phenomenon, and improve uniformity as the lighting
resource.

Normal

VS

UVA Ceiling Technology
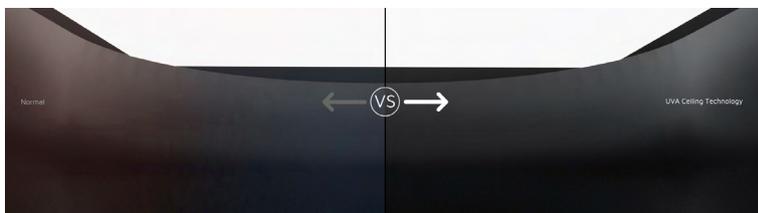
Air Frame

Air Frame is a lightweight touring system that is compatible with the Carbon family of product (CB5, CB8) panels.
It provides a convenient all-in-one solution for hanging, stacking and transportation.

T Dolly

ROE's innovative technology and use of carbon fiber frame design reduces pre-tour engineering time.
Our lightweight Air Frame uses minimal trailer space, contributing to cost savings in shipping, truck load weight and air freight costs when compared to conventional touring frames.

THE CARBON Series BY ROE VISUAL OFFERS THE IDEAL LIGHTWEIGHT LED SOLUTION FOR TOURING APPLICATIONS.

Curving Capability

Concave and convex curving capabilities provide expanded flexibility to bring to life uniquely creative stage designs.

Half-panel Option

While the standard panel is 600mmx1200mm (w x h), we also manufacture half-panels at 600mmx600mm for the ability to customize corners and edges.

Easy-to-Build

Equipped with the integrated magnet-assisted assembly, easy setup in both hanging or stacking configurations and great options for touring frames, the Carbon Family panels guarantee effortless and swift building of your LED screen.
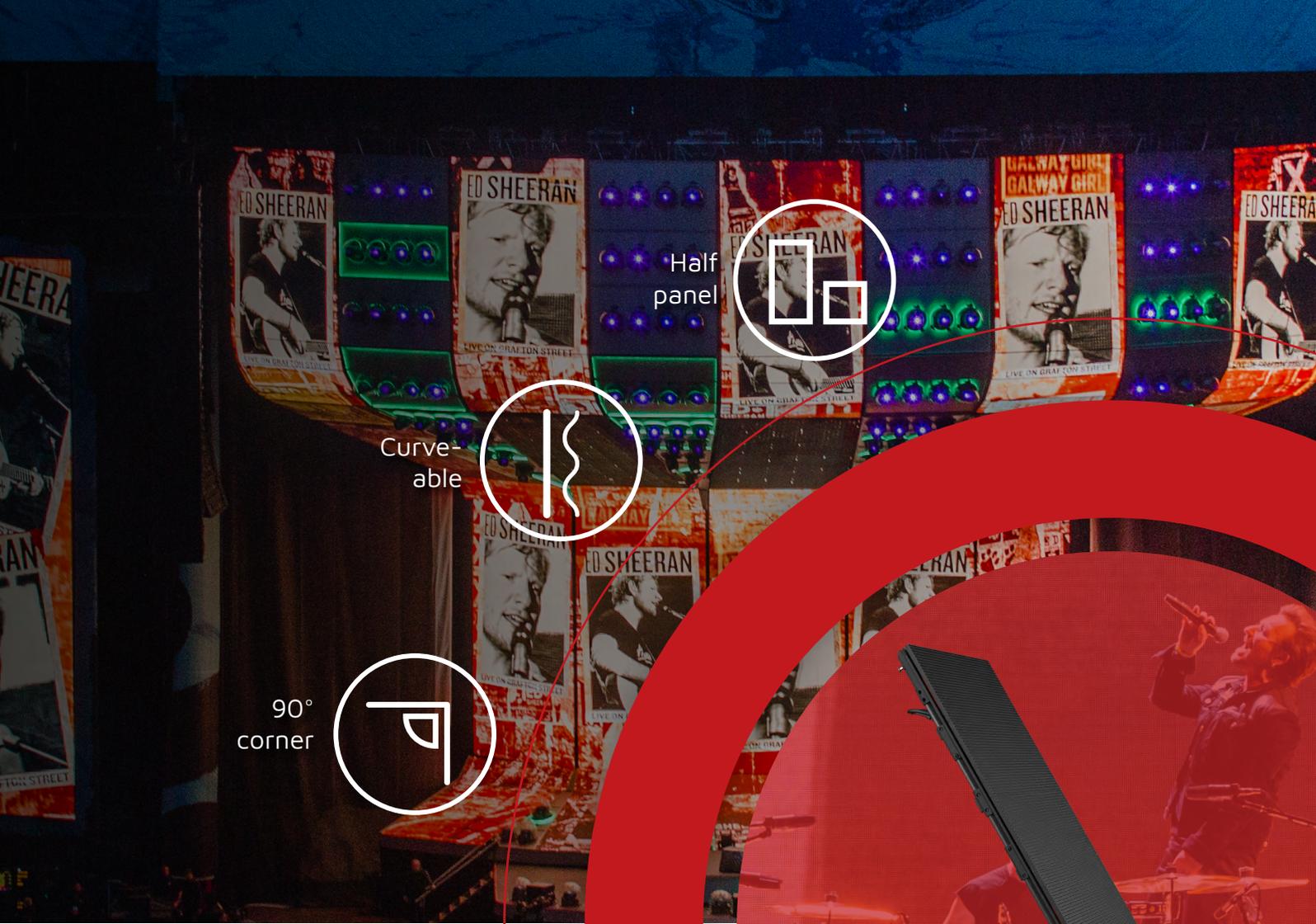
Half panel

Curve-able

90° corner
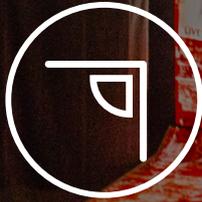
For hanging or stacking configuration

LED ceiling

Pixel pitch
CB3 - 3.75mm
CB5 - 5.77mm
CB8 - 8.33mm
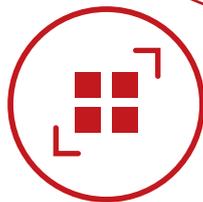
Dummy panel

Specifications

Carbon	CB3	CB5	CB5	CB8
Pixel Pitch	3.75mm	5.77mm	5.77mm	8.33mm
Max Brightness Calibrated	1500nits	6000nits	4500nits	5000nits
Panel Dimensions	600mm x 1200mm x 77mm 23.6" x 47.2" x 3.0"	600mm x 1200mm x 77mm 23.6" x 47.2" x 3.0"	600mm x 1200mm x 77mm 23.6" x 47.2" x 3.0"	600mm x 1200mm x 72mm 23.6" x 47.2" x 2.8"
Panel Resolution (H x V)	160 x 320	104 x 208	104 x 208	72 x 144
Panel Weight	13.2kg; 29.10lbs	13.85kg; 30.53lbs	13.85kg; 30.53lbs	12.68kg; 27.96lbs
Power Consumption Max / Average	540W / 270W	500W / 250W	650W / 330W	430W / 220W
BTU Max / Average	1840 / 850	1710 / 785	2220 / 1020	1470 / 675
Transparency	Solid	Solid	Solid	Solid
Serviceability	Rear	Front	Front	Front
Curving (Concave & Convex)*1	Concave 15°~Convex 10°	Concave 15°~Convex 10°	Concave 15°~Convex 10°	Concave 15°~Convex 10°
Max. Hanging (panels) *2	12	12	12	12
Max. Stacking (panels) *3	5	5	5	5
LED Configuration	SMD 2020 Black	SMD 1921 White	SMD 1921 Black HB	SMD 2727 White
Viewing Angle Horizontal	140°	140°	140°	140°
Viewing Angle Vertical	140°	110°	110°	110°
Scan Ratio	1/16	1/4	1/4	1/6
Refresh Rate	3840	7680Hz	7680Hz	3840Hz
Gray Scale	14bit	16bit	16bit	16bit
Frame Material	Carbon Fiber and Magnesium Alloy	Carbon Fiber and Magnesium Alloy	Carbon Fiber and Magnesium Alloy	Carbon Fiber and Magnesium Alloy
Processing Platform	Brompton / Megapixel / Evision	Brompton / Megapixel / Evision	Brompton / Megapixel / Evision	Brompton / Evision
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	-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	-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	Indoor	IP65	IP65	IP65
Certifications	CE, ETL, FCC, RoHS	CE, ETL, FCC	CE, ETL, FCC	CE, ETL, FCC, RoHS

*Notes: The Specifications are for reference, actual values may vary.
 1. Convex curving ability only applies to custom tiles.
 2. The max. hanging amount is only valid when the ROE Visual hanging bar and complementary accessories are used and in an indoor situation, safety factor is 8. No climbing is allowed.
 3. 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 situation. No climbing is allowed.

Dimensions

77mm · 600mm · 1200mm