Unforgettable images on any scale
Crystal LED

SONY

Crystal clear colour and contrast

Sony's latest generation of Crystal LED premium displays continues to challenge what's possible with super-sized screens and video walls. See the bigger picture in a whole new way with brilliant brights, deep, contrasting blacks and even easier installation.

Contents

BH-Series

The BH-series is a striking solution for entrance lobbies, flagship retail stores and premium showrooms, promising eye-catching brightness no matter how light the space. With more than double the brightness of some other high-end LED displays, and a unique, anti-reflection surface technology, the BH-series delivers phenomenal performance that amazes audiences and captivates customers.
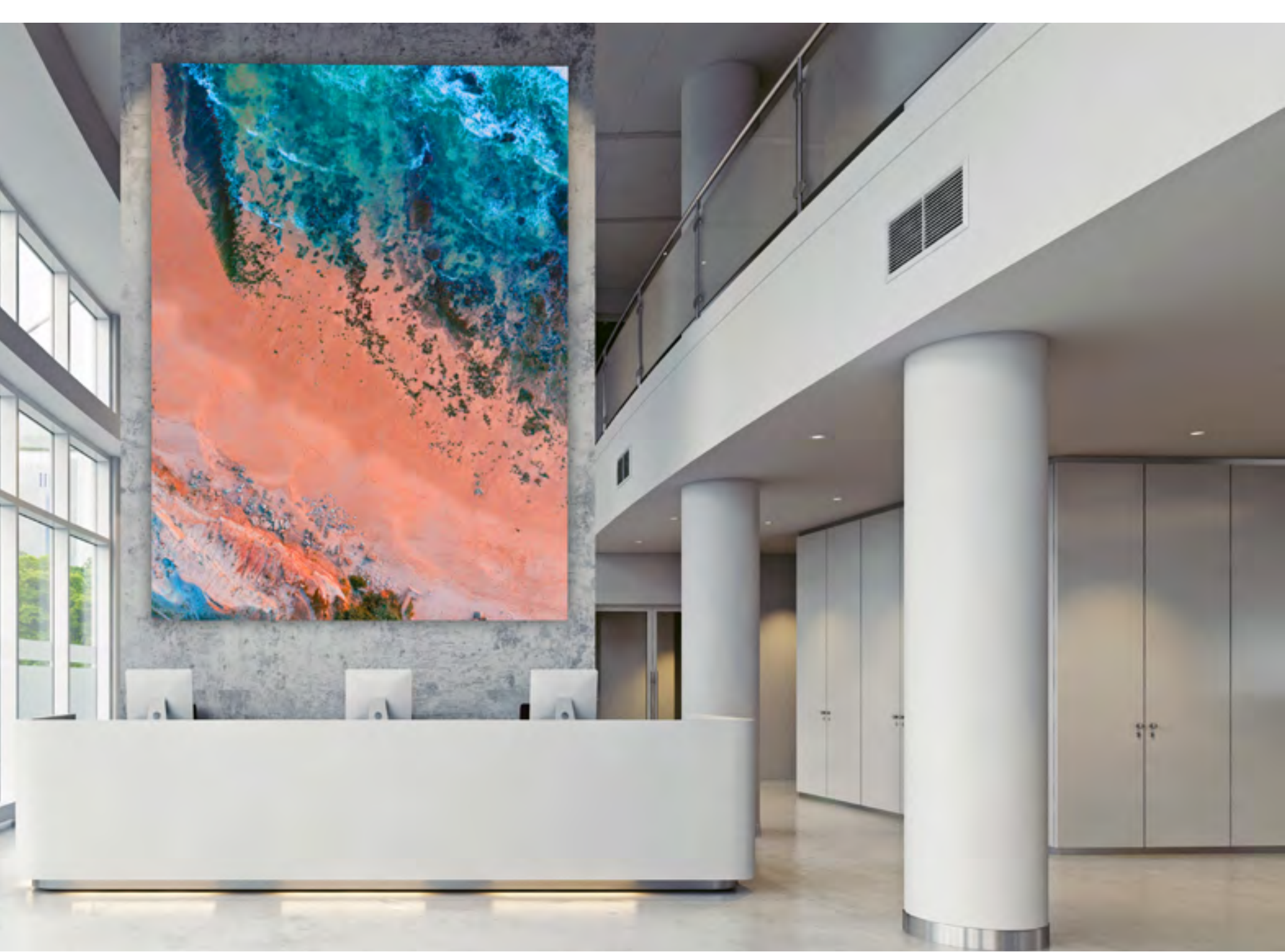
CH-Series

The CH-series creates a truly immersive experience with colour, texture and depth enabled by highly-efficient super fine LED technology – an ideal display for exhibitions, corporate meeting rooms and screening rooms. Experience contrast like never before with Sony's Deep Black surface technology, achieving outstanding black levels even in brilliant sunlight. The CH-series' extra-wide, eye-catching colour gamut unlocks vibrancy that simply isn't visible on other premium video walls.

Extraordinary brightness

BH-series' extraordinary 1,700 nits makes this Crystal LED display the ideal solution for large open spaces where harsh lighting conditions would typically present a challenge. Our high-efficiency LED drivers combined with an anti-reflection surface technology offer a phenomenal viewing experience free of reflections from lights or sun.
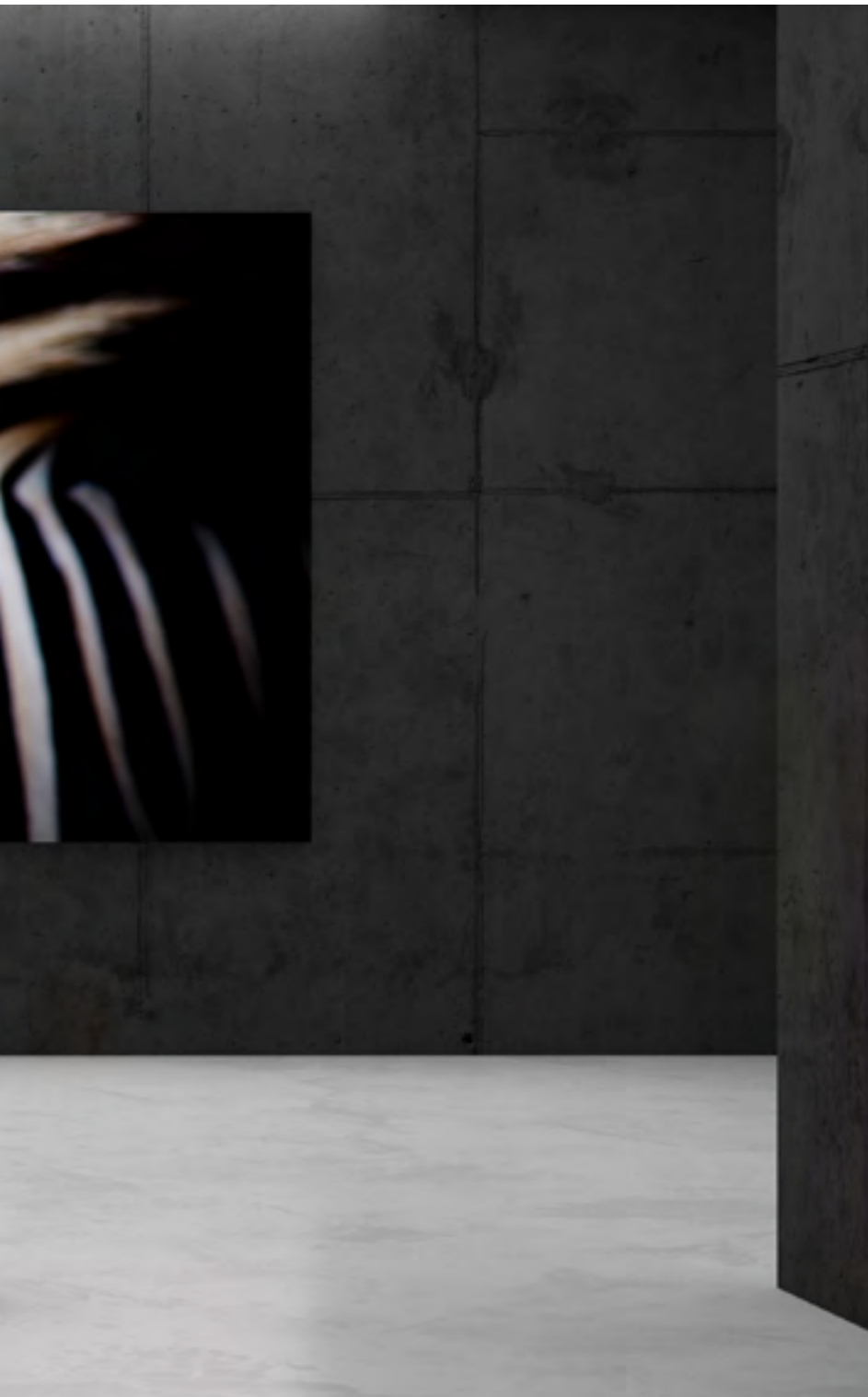
Dramatic contrast

Large displays and video walls often struggle with depth and texture. The CH-series' deep blacks bring an immersive sense of realism to Crystal LED displays thanks to Sony's unique Deep Black surface technology. Colours, contrast and detail will appear richer and more realistic than ever before.

Conventional LED

Precise picture processing power

The X1™ for Crystal LED picture processor brings immensely accurate image processing, using 22-bit Super Bit Mapping technology. Experience smooth gradients and natural transitions – ideal for subtle tones in dark scenes, often found in engaging, high-production automotive, retail and product content.
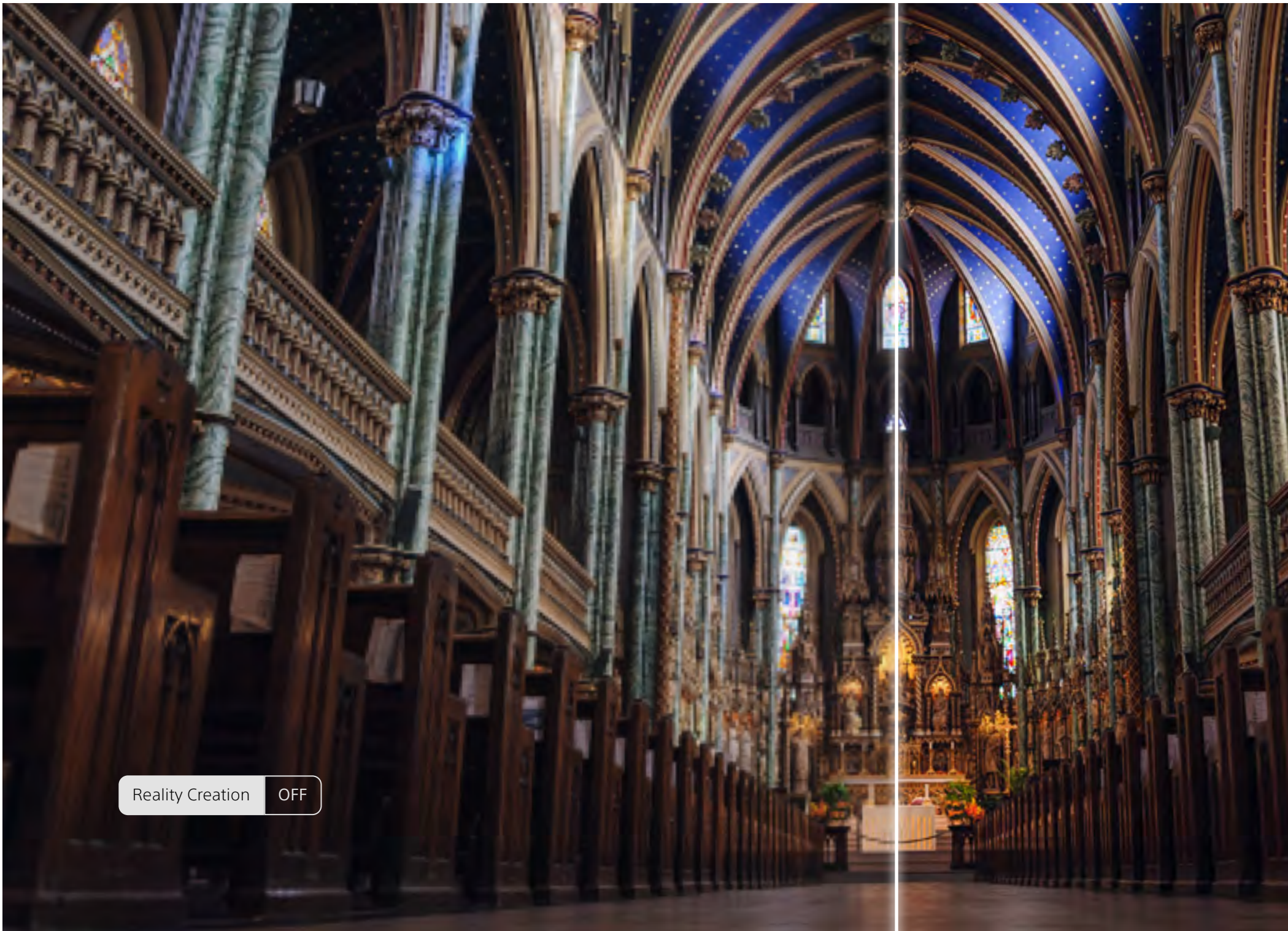
22-bit Super Bit Mapping Technology

Reality Creation | OFF

Enhance and upscale existing content

Low-resolution footage is often compromised even further when shown on large-scale displays. Sony's X1™ for Crystal LED processor delivers real-time image enhancement, vastly improving the quality of legacy footage. Reality Creation analyses video frame-by-frame, remapping pixels from Sony's unique picture patterning database.

Reality Creation features may not operate when total Crystal LED display resolution is over 4K and multiple display controllers are used.

Reality Creation   **ON**

Motionflow™, Sony's smooth operator

Sony's Motionflow™ technology allows you to utilise the BH- and CH-series' impressive 120Hz refresh rate even if your footage was created at a lower frame rate. The X1™ processor analyses video, adding detail and enhancing movement, whilst smoothing out juddering and blur. Motionflow™ is ideal for scenarios where rapidly moving images are crucial, such as fast-moving cars or a high-pace sports match.

Conventional LED

Motionflow™

Motionflow™ features may not operate when total Crystal LED display resolution is over 4K and multiple display controllers are used.
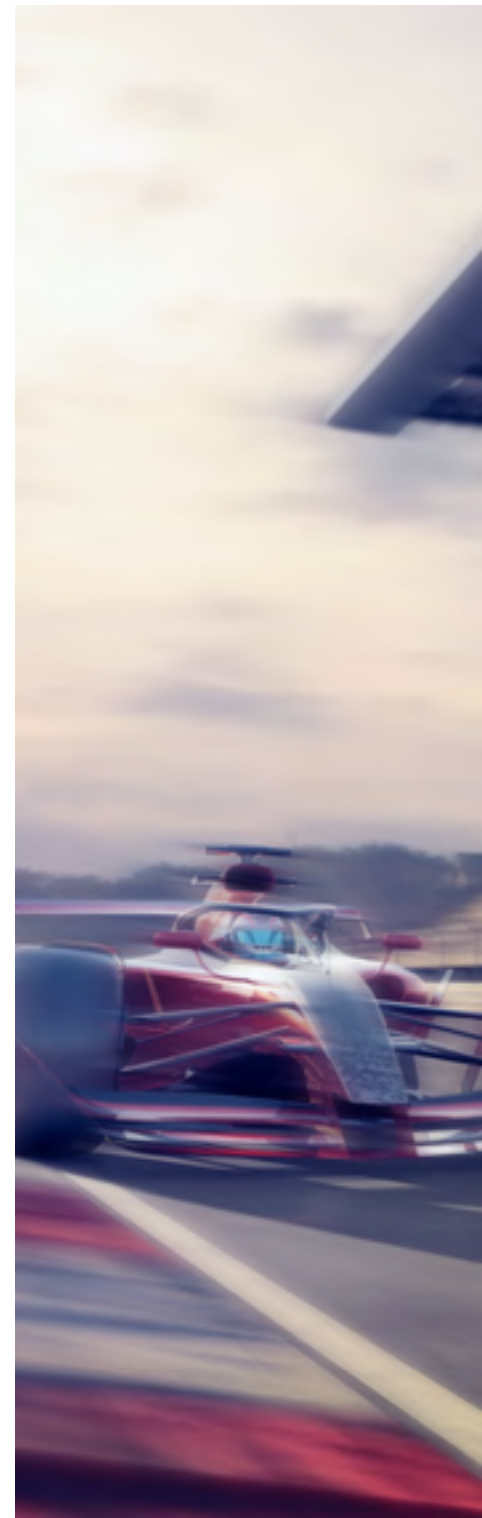
Conventional LED

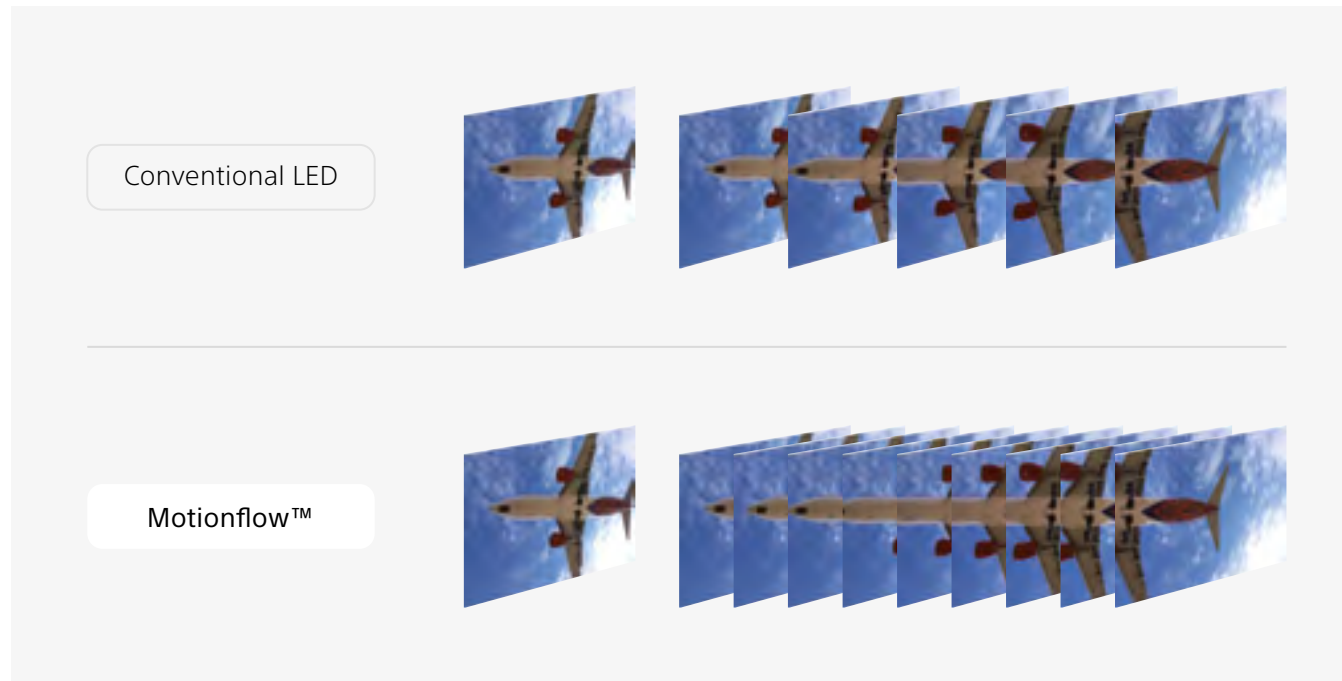Motionflow™

Colour as far as the eye can see

Both the BH- and CH-series displays offer a wide sRGB colour gamut of 148%, the same technology found in our Professional Master Monitors. Promising faithful, true-to-life and vibrant colours, this is a prerequisite for many design studios, museums and showrooms where accuracy is key.

Minimal artifacts, maximum colour

Sony's unique colour mapping process ensures you'll never see compressed colours in dark scenes or blown-out whites in bright scenes. 22-bit Super Bit Mapping means that gradients appear smooth and similar colours are easily distinguishable from one another.
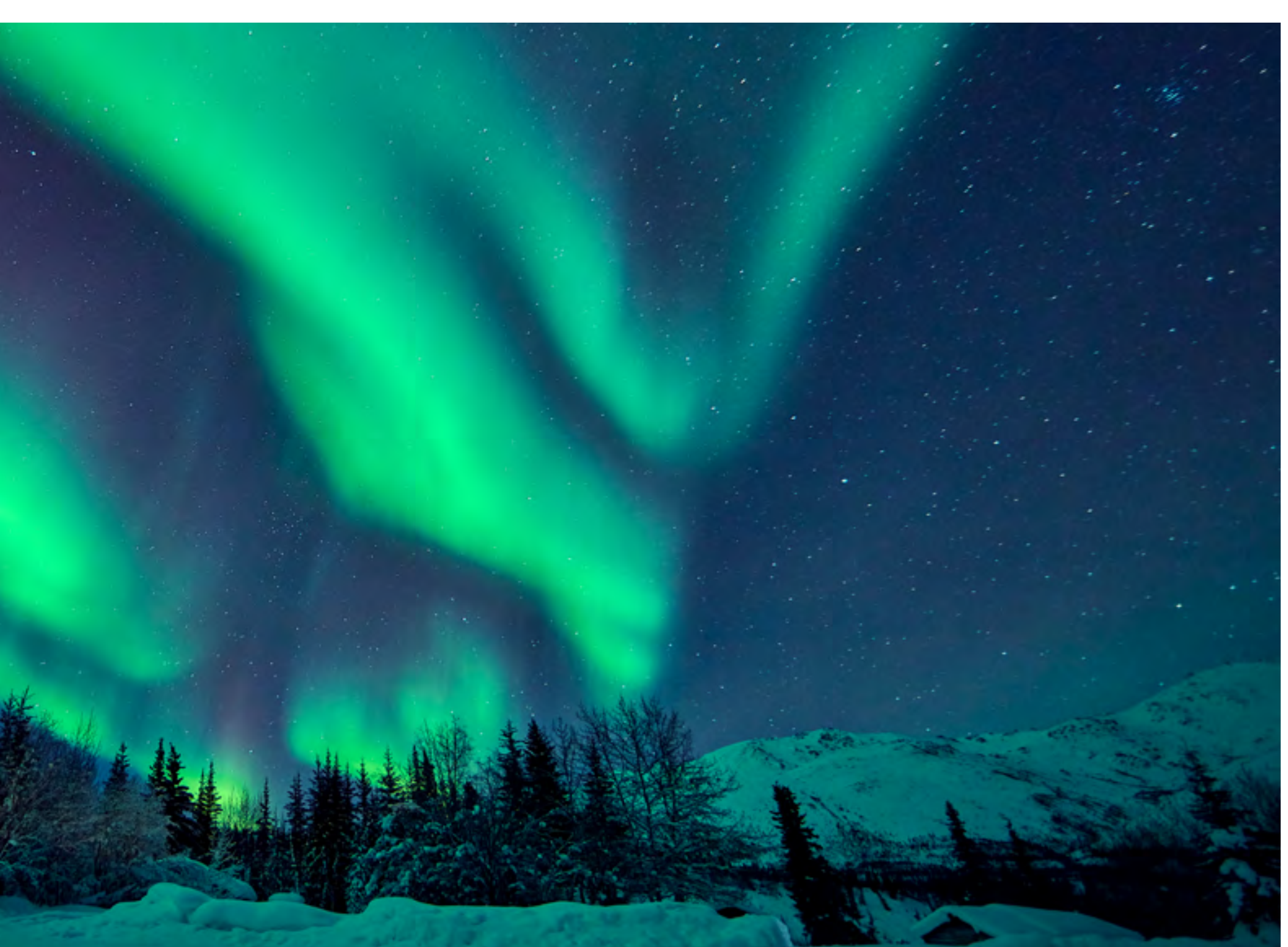
Versatile viewing from any angle

Super-sized displays are often hampered by their reflective surface and low brightness, resulting in washed-out contrasts and inaccurate colour. Sony's BH-series displays offer exceptionally uniform images, with an impressively high 1,700 nits of brightness and an uncompromised viewing angle of 170 degrees. Super fine LED technology combined with Sony's unique surface technology promises precise colour, seamless images and minimal reflection.

Conventional LED Display

Crystal LED

Using large LED

Using super fine LED and
Sony's unique surface technology
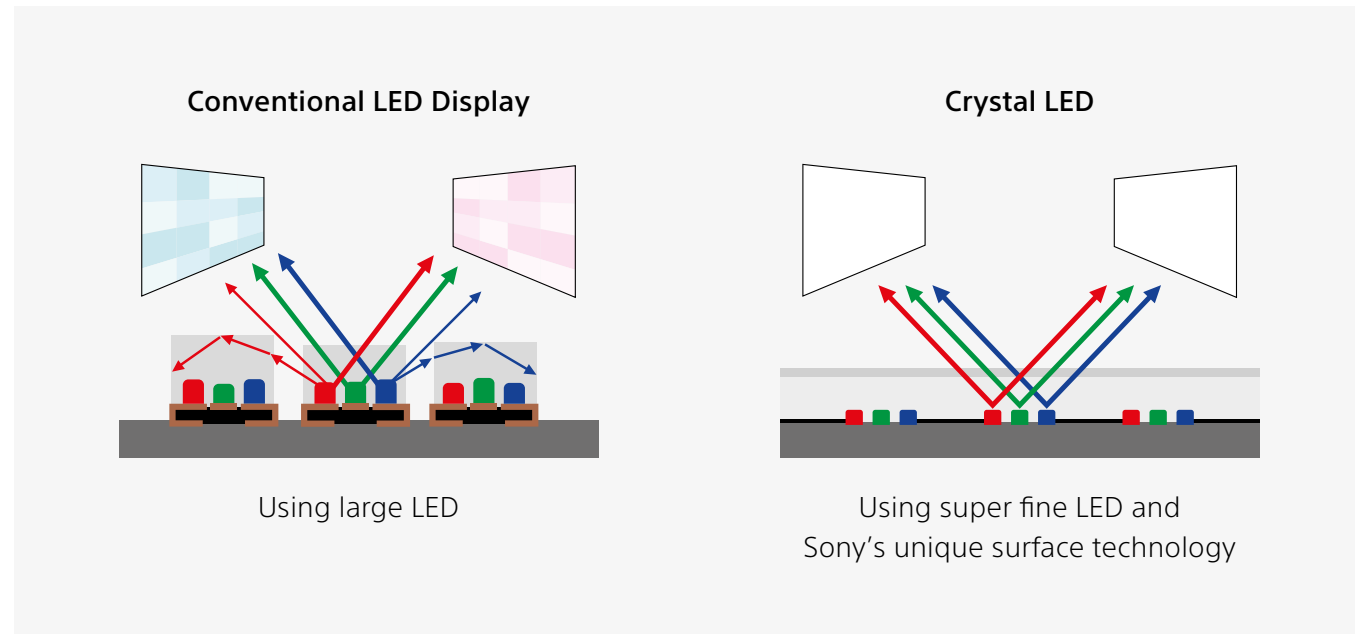
Sustainability at scale

Our BH and CH-series displays support Sony's 'Road to Zero' environmental plan. By using highly efficient LED chips, our displays reduce power consumption and remain cool even without ventilation, ultimately lowering running costs. Combined with minimal maintenance and quick and easy installation, we can reduce the cost of ownership and improve our overall product lifecycle.

Road to
ZERO

Easy installation,
minimal maintenance

The new BH and CH-series are simple to install in a wide range of environments, from big boardrooms and bustling retail stores to shiny showrooms and lively lobbies. Rapid, on-site installation and integration means that your impressive video wall will be up and running in no time.

We also understand that maintenance can be disruptive, so we've designed our displays to be accessible from the front and the ability for individual modules to be repaired, unlike other manufacturers who are required to repair entire cabinets and may struggle to remove individual modules.

Low-profile

Despite the impressive specs of the BH and CH-series, the newly-designed cabinet is thin and light, giving you more options for installation in spaces with size limitations. And with less concern about weight restrictions, our super-size displays are truly versatile devices.

Intelligent design

Our redesigned cabinets are thinner and lighter than ever before, improving installation and reducing the displays' footprint – perfect for spaces where depth and weight are limited.

Thin and
lightweight

All parts including cables
accessible from the front

Reduced power
consumption
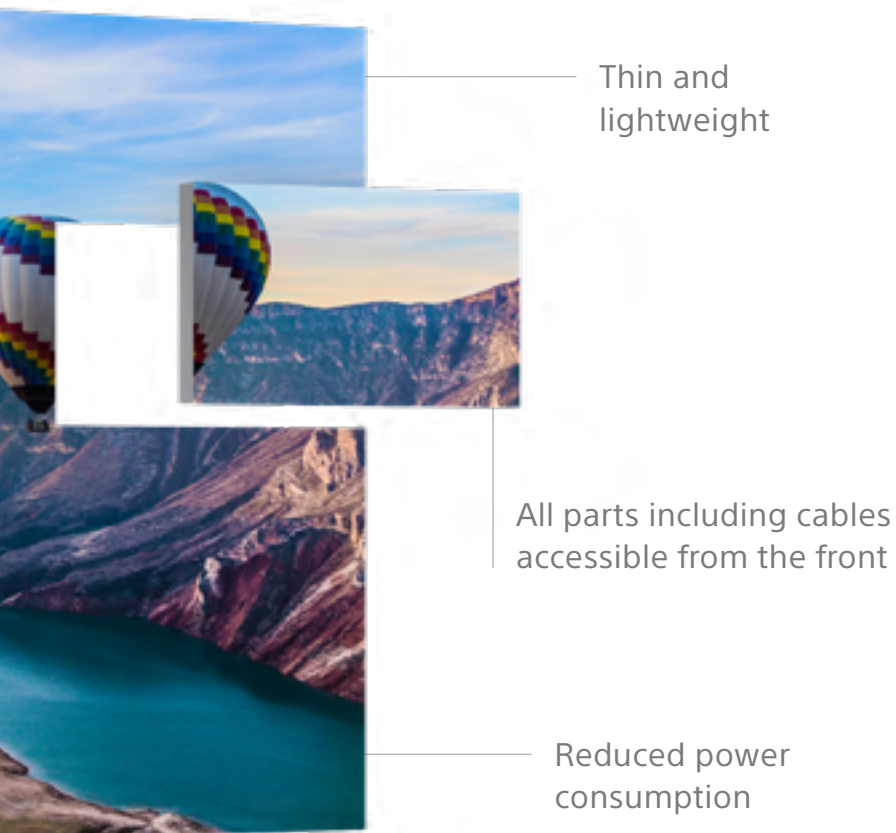
Flexible installation

With a simplified product comes fewer parts and reduced installation time. Not only does this make installation more convenient, but more cost-effective too. Have an unusual space? We can accommodate curved walls, tilted installations and even ceiling-mount solutions.

Easy access

Other large-format displays house system components at the back of the device, meaning rear access or de-installation is required. BH and CH-series are accessible from the front, with minimal wall depth required.

Consistent colour

The colour adjustment process can be simplified by using our Auto Adjustment Tool with a Sony Alpha camera. This feature is available via a firmware update.

Peace of mind with PrimeSupport

Sony's PrimeSupport for Crystal LED offers an enhanced service for customers with European Sony Professional products. We offer rapid turnaround repairs and on-site visits via our approved third-party installers. You will also have access to our technical hotline, advanced parts exchange and an impressive three-year guarantee that can be extended if required.

Prime
Support

Display Cabinet

Display Controller

Display Cabinet Specification

Specification		ZRD-BH12D	ZRD-BH15D	ZRD-CH12D	ZRD-CH15D
Surface		Anti-reflection surface technology		Deep black surface technology	
Pixel Pitch		1.27 mm	1.59 mm	1.27 mm	1.59 mm
Resolution (W x H)		480 x 270	384 x 216	480 x 270	384 x 216
Brightness (Max.)		1,700 cd/m^2		1,300 cd/m^2	
Contrast Ratio (0 lx)		More than 1,000,000 : 1			
Viewing Angle (H/V)		170° / 170°		160° / 160°	
Color Gamut (BT2020, Δu'v' coverage)		Approx. 86%			
Color Gamut (DCI-P3, Δu'v' coverage)		Approx. 97% (ZRD-BH12D/CH12D : DCI acceptable)			
Color Gamut (sRGB, Δu'v' area)		Approx. 148%			
Bit Depth		22 bit Internal Processing			
Frame Rate		Up to 120 fps			
Signal Interface		1 in 1 out (2 x RJ45)			
Operating Temperature / Humidity		0 °C to 45 °C / 20 to 80 % (no condensation)			
Storage Temperature / Humidity		-20 °C to 60 °C / 20 % to 80 % (no condensation)			
Power Requirements		AC 100 - 240 V, 50 / 60 Hz			
Power Consumption (Max.)	Max brightness	120 W (Per-sqm: 574 W)			
	800 cd/m^2	70 W (Per-sqm: 334 W)		84 W (Per-sqm: 408 W)	
Power Consumption (Ave.)		55 W (Per-sqm: 263 W)			
Dimensions (W x H x D)		610 x 343 x 69 mm (24 × 13.5 × 2.7 in)			
Mass		Approx. 8.6 kg (18 lb 15.36 oz) (Per-sqm: Approx. 41.1 kg)			
Application		Indoor			

*Please refer to the installation manual for installation.

Display Controller Specification

Display Controller Specification	ZRCT-300
Maximum Control Number of Display Cabinet	ZRD-BH12D/CH12D : 64 ZRD-BH15D/CH15D : 100
Maximum Input Resolution (W x H)	3,840 x 2,160
Maximum Input Frame Rate	120 fps
Multiple Controller Link	Yes
Maximum Linkage Number of Controller	20
Video Input	HDMI x 2, DisplayPort (DP1.2) x 2
Cabinet Output	RJ45 x 12
Control	RJ45 (ethernet) x 1, USB x 1
Fan Noise	27 dBA - 32 dBA (27 dBA@25 °C ,32 dBA@ 35 °C)
Operating Temperature / Humidity	0 °C to 40 °C / 20 % to 80 % (no condensation)
Storage Temperature / Humidity	-20 °C to 60 °C / 20 % to 80 % (no condensation)
Power Requirements	AC 100 - 240 V, 50 / 60 Hz
Power Consumption (Max.)	100 W
Dimensions (W x H x D) (Without protrusion)	440 x 65 x 349 mm (17 3/8 x 2 5/8 x 13 3/4 in) *1.5 U 19-inch rack
Mass	Approx. 6.4 kg (14 lb 1.75 oz)
Connector panels	

*This equipment is compliant with class A. Operation of this equipment in a residential area could cause harmful interference in which case the user may be required to take adequate measures.

Input Signal

HDMI

Resolution	Input frame rate*1	Input bit depth	Input color sampling
3840 x 2160	60P/50P	8 bit	RGB 4:4:4*2/YCbCr 4:4:4*2/YCbCr 4:2:0
		10 bit	YCbCr 4:2:2*2
		12 bit	
	30P/25P/24P	12/10 bit	RGB 4:4:4*2/YCbCr 4:4:4*2
		8 bit	RGB 4:4:4/YCbCr 4:4:4
		12 bit	YCbCr 4:2:2
1920 x 1080	60P/50P/30P/25P/24P	12/10/8 bit	RGB 4:4:4/YCbCr 4:4:4/YCbCr 4:2:2*3
1280 x 720	60P/50P		
1024 x 768	60P		
800 x 600			
720 x 480			
720 x 576	50P		
640 x 480	60P		

DisplayPort : Single Input

3840 x 2160*2	60P/50P/30P/25P/24P	8/10 bit	RGB 4:4:4
1920 x 2160	120P*2/100P*2/60P/30P/25P/24P		
1920 x 1080	120P/100P/60P/50P/30P		

DisplayPort : Dual Input

3840 x 2160*3	120P/100P	8/10 bit	RGB 4:4:4

*1: 1,000/1,001 frame rate is also supported.
*2: Only multi-stream is supported.
*3: Supported by two input signals of 1920 x 2160, 120P.

SONY