

## ZRD-CH12D

Crystal LED video wall  
modular display cabinet with  
immersive image depth



### Overview

**Premium super-size images delivering an immersive sense of depth**

The latest generation of Crystal LED premium displays from Sony makes the appeal of super-size LED video walls even more accessible.

The ZRD-CH12D delivers spectacularly bright, richly coloured images in a wide range of environments – including corporate lobbies, entrances, boardrooms and retail showrooms – even in brightly-lit spaces.

Sony's unique surface treatment technology, Deep Black Coating and the huge black area in display by using super fine LED achieve outstanding black levels for truly immersive environments. This enables the ZRD-CH12D to achieve outstanding black levels that are superior to other high-end LED video walls. Coupled with the display's extra-wide colour gamut, it ensures immersive images with a vivid sense of depth.

Advanced 4K 120Hz driver technology is augmented by real-time image enhancement features powered by Sony's X1 for Crystal LED picture processor. Every video frame is individually analysed and optimised, ensuring

content looks crisp and super-smooth, even if it wasn't originally shot for large-scale display.

The borderless design of each energy-efficient Crystal LED panel allows multiple ZRD-CH12D cabinets to be tiled seamlessly, creating super-size high resolution displays with virtually any dimensions or aspect ratio – and no bezels or visible gaps. Crystal LED also offers simplified integration compared with previous-generation systems, with slim, light panels that are easy to install and maintain without requiring special skills or complex equipment.

## Features

### **Glare-free, immersive viewing with deepest black levels**

Sony's unique surface treatment technology, Deep Black Coating and the huge black area in display by using super fine led achieve outstanding black levels for truly immersive environments. The advanced anti-reflection coating reduces glare from ambient lighting, ensuring truly immersive images with bright, vibrant colours and deep black levels that bring more contrast, depth and texture to faces and other on-screen objects.

### **Extraordinary colours**

True-to-life, smoothly graduated colours are a must-have for critical viewing applications. Advanced Sony LED driver technology enables an extra-wide colour gamut. You'll see the difference with rich, vibrant colours, even in bright viewing conditions. The ZRD-CH12D reproduces colour gradations with immense accuracy, using 22-bit Super Bit Mapping process that's enabled by the X1 for Crystal LED picture processor. Audiences can see the difference with smooth, natural colour transitions and faithful reproduction of subtle tones in dark scenes.

## **Uniform colour at all viewing angles**

Super fine LED and Sony's unique coating technology reduce colour shifting when the display is viewed from any angle – ensuring an immersive viewing experience for everyone in the room.

## **Spectacular results with lower resolution content**

Lower-resolution content doesn't often look its best when it's displayed on a large LED screen, with images appearing grainy and pixilated. The ZRD-CH12D uses Reality Creation to upscale and optimise lower-quality content to near 4K resolution for crisp, natural big-screen viewing.

## **Smooth, fluid movement**

Fast-moving action can be blurry and uncomfortable to watch on a big display. Motionflow inserts additional video frames to ensure smoother, sharper detail and a more natural viewing experience in fast-moving sequences.

## **Wide viewing angle and natural colour**

The ZRD-CH12D delivers a spectacularly immersive, totally seamless visual experience with an extra-wide viewing angle and no unnatural colour shifts. Super fine LED and Sony's unique coating technology reduce colour shifting when the display is viewed from any angle.

## **Seamless images with consistently accurate colour**

Display modules are factory preassembled and calibrated to ensure quick, precise installation. Colour adjustment\* is simplified with our easy-to-use auto adjustment tool using a Sony Alpha camera.

\*Colour adjustment available via future firmware update

## **Easy installation, minimal maintenance**

The ZRD-CH12D offers simplified installation and

maintenance compared with previous-generation LED wall systems. Newly designed cabinets are thin and light, broadening options for integration in spaces with limited depth or weight restrictions. With fewer parts to assemble, on-site installation time and costs are reduced. All system components and cabling are accessible from the front, simplifying maintenance where there's no rear access.

## Specifications

General	
Pixel Pitch	1.27 mm
Surface	Deep black coating
Resolution (W x H)	480 x 270
Brightness (Max.)	1,300 cd/m <sup>2</sup>
Contrast Ratio (0 lx)	More than 1,000,000:1
Viewing Angle (H/V)	160° / 160°
Color Gamut	Approx. 86 % (BT2020, Δu'v' coverage) Approx. 97 % (DCI-P3, Δu'v' coverage) (DCI acceptable) Approx. 148 % (sRGB, Δu'v' area)
Bit Depth	22 bit Internal Processing
Frame Rate	Up to 120 fps
Signal Interface	1 in 1 out (2 x RJ45)

Operating Temperature / Operating Humidity	0 °C to 45 °C / 20% to 80% (no condensation)
Storage Temperature / Storage Humidity	-20 °C to 60 °C / 20% to 80% (no condensation)
Power Requirements	AC 100 - 240 V, 50 / 60 Hz
Power Consumption (Max.)*	At Max brightness: 120W (Per-sqm: 574W) At 800 cd/m <sup>2</sup> : 84W (Per-sqm: 408W)
Power Consumption (Ave.)	55 W (Per-sqm: 263 W)
Dimensions (W x H x D)	610 x 343 x 69 mm (24 1/8 x 13 5/8 x 2 3/4 in)
Mass	Approx. 8.6 kg (18 lb 15.36 oz) (Per-sqm: Approx. 41.1 kg)
Application	Indoor
Notes	Please refer to the installation manual for installation.

## Related products



## **ZRCT-300**

Display Controller  
for LED wall display  
cabinets

## **ZRD- CH15D**

Crystal LED video  
wall modular  
display cabinet with  
immersive image  
depth

## **ZRD- BH15D**

Crystal LED video  
wall modular  
display cabinet with  
high brightness and  
rich colour

## **ZRD- BH12D**

Crystal LED video  
wall modular  
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## Gallery

