

# Bifrost

TruePix LED Series



The Northern Lights were not an unusual sight for the People living in the north and were a popular theme in folktales. In old Norse mythology, the northern lights were said to be Bifrost, the bridge between Asgard and Midgard.

Bifrost is currently Barco Residential's smallest bezel-less pixel pitch product from the new TruePix product range. But it's not all about pixel pitch, Direct view LED is as much about the source and how it is delivered from the content player through our new processor before it hit's the panel. This is where Barco Residential stand out from the other brands and why we compare ourselves with the beauty of the northern lights.

We have developed a completely new processor which together with the Bifrost modules reproduces a revolutionary viewing experience with an highly dynamic, yet very realistic image.



# Bifrost

## Key features

### Steadyview™

Steadyview is Barco's own algorithm to avoid the scanline effect that can be perceived as visual flicker in the image. With Barco's new Infinipix® gen2 image processing platform, we have created Steadyview™ to ensure an unmatched viewing experience to avoid any type of flicker.

-Because of Steadyview we can watch these walls for hours, same as the northernlight. These were developed for control rooms where you have to watch the walls for hours without getting eye fatigue.

### Risk Free Installation

Barco's revolutionary LED wall mounting structure neutralizes imperfections of the underlying wall surface, making sure you can install your seamless, smooth-looking wall in no time. The camera-guided module placement of TruePix ensures a seamless and dependable installation. To avoid damage during installation, Barco TruePix' guided module insertion ensures a fully contactless and risk-free installation. Moreover, TruePix has motorized module extraction, which allows you to stay in control of the extraction process. Barco TruePix is completely serviceable from the front and the back. Maintenance made easy

### Perfect Flatness

TruePix has no alignment issues and no bulging of the PCB's. Why is this important? Because in most rooms where a LED is used you might have ambient light that will reveal the seams of the modules. We get a perfect result without spending hours on tweaking the alignment. This is possible because of Barco's revolutionary automated manufacturing process, where this alignment is automated by Barco developed alignment machine with super tight tolerances.

### Smart Calibration

The Processing will automatically apply the correct color gamut and EOTF Curve to make sure the colors are represented correctly. It will do this for SDR and HDR content as TruePix supports a color gamut of DCI/P3

## Technical specifications

<b>Resolution</b>	3,840 x 2,160
<b>Pixel Pitch</b>	0.953
<b>Pixel per tile</b>	640 x 360 (HxV)
<b>Number of tiles</b>	36
<b>Brightness</b>	>600 Nits
<b>Internal processing</b>	23 bit
<b>Color depth</b>	16 bit (281 trillion colors)
<b>Contrast</b>	TBC
<b>Dimming</b>	0 - 100%
<b>Shaders</b>	No
<b>Refresh rate</b>	3,840 Hz
<b>Frame rate support</b>	24 / 25 / 29.97 / 30 / 47.95 / 48 / 50 / 59.94 / 60 / 100 / 119.88 / 120 / 144 Hz
<b>Brightness Uniformity</b>	>98%
<b>Hor. viewing angle</b>	160° +/-5°
<b>Vert. viewing angle</b>	160° +/-5°
<b>Control</b>	Infinipix® Gen2
<b>Control drivers</b>	TBC
<b>3D</b>	3D supported
<b>Dimensions (WxLxH)</b>	386.64 x 161.76 cm (152 x 64 inches)
<b>Weight per module</b>	8.2kg/tile (single PSU) 8.6 kg/tile (dual PSU)
<b>Total weight</b>	295.2kg (single PSU), 309.6 kg (dual PSU)
<b>Power requirements</b>	110-130V/200-240V, 50-60 Hz
<b>Power consumption</b>	775 W/m <sup>2</sup> (max) = total 4.85kW 273 W/m <sup>2</sup> (typ) = total 1.71kW less than 10 W/m <sup>2</sup> (standby) = less than 62W total
<b>BTU per hour</b>	2,643 BTU/h/m <sup>2</sup> (max) = 16,529 BTU/h 1,306 BTU/h/m <sup>2</sup> (typ) = 8,168 BTU/h
<b>Operating temperature</b>	-10°C to +40°C / 14°F to 104°F
<b>Operating humidity</b>	10% - 80%
<b>IP rating</b>	IP30
<b>HDR</b>	HLG / HDR10 supported
<b>Installation</b>	Self-leveling with surface tolerance compensation
<b>Serviceability</b>	Full front & full back service
<b>Module replacement</b>	Automated parallel motorized extraction
<b>Module placement</b>	Guided module placement
<b>Seam quality</b>	Guaranteed seamless
<b>Flatness - lay flat quality</b>	Guaranteed flatness
<b>Ergonomics</b>	SteadyView driver algorithm to reduce eye fatigu
<b>Certifications</b>	E, UL, FCC class A, RoHS, WEEE, REACH, CCC, RCM
<b>Warranty</b>	3 years Can be extended up to 8 years