

# MiSPHERE



## Are you ready for the 360° experience?

MiSPHERE opens up the door to new, bold and innovative LED display solutions. Indoor or outdoor, touring shows or permanent installation, MiSPHERE is ready - are you?

- Full 360° viewing angle
- Full video & data capable
- Self supporting, semi-transparent, no additional structure required
- Low weight, string of 64 MiSPHERES < 10kg
- Rugged design
- Weatherproof, IP65 rated
- 4 full color LEDs inside 1 MiSPHERE capsule
- Proven, high performance LED technology

**BARCO**

Visibly yours

## U2 Vertigo Tour 2005

a feast for the eyes with revolutionary  
Barco MiSPHERE technology



With 360-degree viewing angles, opaque, light-defusing casing and ability to play both full video & data, the MiSPHERE bridges the gap between existing video and lighting products, enabling it to be used for both application purposes. Individual MiSPHERES are daisy-chained into a string, with several strings in turn forming a 3-D visualization curtain. Each MiSPHERE acts as a pixel within the curtain, making it possible to display images and simulate lighting effects across the entire curtain, while also achieving a "Look-Through" effect and "Multiple Angle" viewing-effect for the audience all around the scene.





## Objectives and Overall Strategy of the Project

Originally the designers on the U2 tour wanted to fill the space above the stage with a three dimensional grid of LED pixels, with panels arranged next to each other. It was to resemble a “video cloud”. The second part of the brief was to have the content viewed from both sides as, unusually for a concert, the band were playing to a 360° audience due to the seating behind the stage so equipment that restricted the viewing angles of the band was not suitable. This was a huge factor in the design.

## The Solution

Demonstrations and tests took place in Belgium and finally the MiSPHERE was born and seemed to fit the original brief exactly.

The overall effect was far more dimensional than the original “cloud” concept and crucially addressed the vital issue of 360-degree viewing angles due to the positioning of the MiSPHERE’s on long strings - the audience could actually see through them.

In total there were 189 strings divided across seven roll drops that retracted and lowered at various points throughout the show. Four of the MiSPHERE screens flew in across the diagonals of the 360° show and the other three formed a line across centre stage.

Each string contained 64 spheres and measured nine meters long. The total MiSPHERE count was over 12,000.



## Implementation of the project

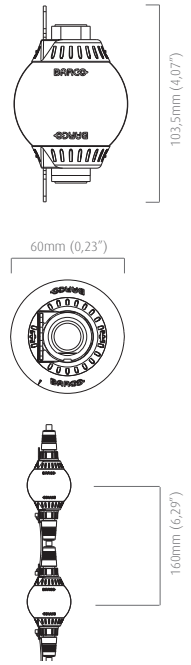
Barco, working closely with Innovative Designs and XL Video, worked tirelessly to ensure that the products were ready in time for the tour. The whole project was turned around in a very short time. It took just six months from design concept to delivery making the achievement all that more impressive. Installation is easy, stored on large rolls suspended above the stage, the MiSPHERE are simply lowered and raised as and when they are needed like a huge video curtain that comes out of no-where. The reliability is equally impressive with only one or two spheres failing out of a total of 12,000 to date.

## The Future of the MiSPHERE

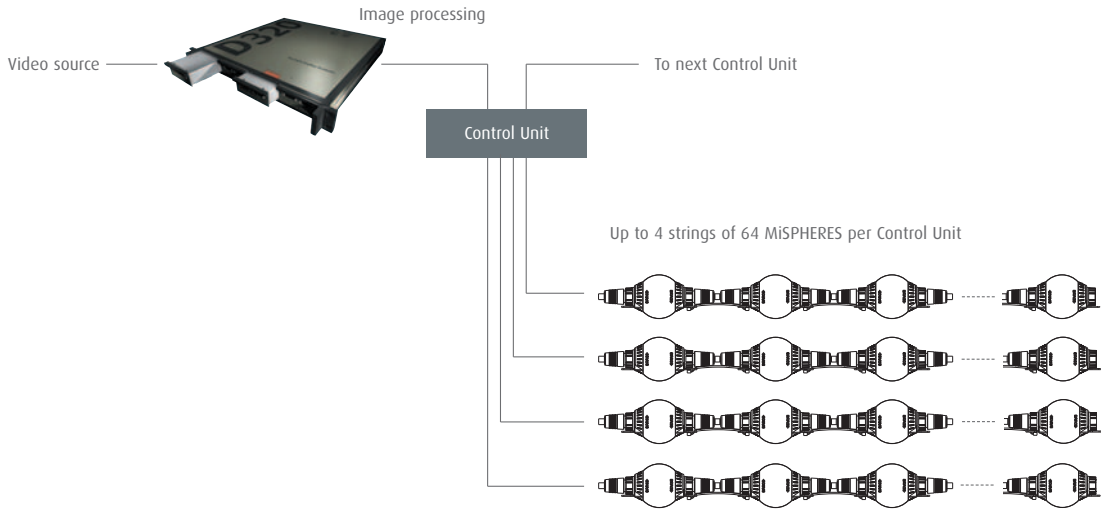
With such a credible endorsement and huge beginning the MiSPHERE will now go on to be a leading light in the Barco portfolio. Its all round reliability, flexibility, creativity and versatility are as yet unmatched and mark a new era in creative lighting.

# MiSPHERE specifications

Pixel pitch	160 mm (6.3") *
Brightness	300 Nit
LED configuration	4 SMD LEDs (2x2 configuration)
Viewing angle horizontal (min 50% brightness)	360°
Viewing angle vertical (min 50% brightness)	180°
Lifetime (Full white)	45 000 hours (50% brightness)
Power consumption	3 W/block (max)
Dimensions	60 x 103,5 x 60 mm (W x H x D)
Weight	142g *
Processing	14 bit
Operating temperature	-20 to 40 °C (-4 to 104 °F)
Storage temperature	-20 to 60 °C (-4 to 140 °F)
Operating humidity	0 - 85%
Storage humidity	0 - 90%
Source compatibility	S-Video, Composite, YUV, RGB, SDI, HDSDI, Data DVI up to SXGA
Structure	MiSPHERES are daisy chained in a string that is self supporting



\* With 90mm (3.5") cable.



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The information and data given are typical for the equipment described. However any individual item is subject to change without any notice. The latest version of this product sheet can be found on [www.barco.com](http://www.barco.com).

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