

ILite



Indoor LED display solutions

Barco's indoor LED display product range - the ILite - delivers images with unequalled brightness and contrast levels as well as superb color uniformity. With its slim, sleek design, the ILite allows the build up of almost any shape and size display.

Purpose built for life on the road, Barco's indoor LED modules form part of a total rental solution that includes rugged rental structures, sturdy flight cases as well as a powerful, user-friendly processor, which allows you to have your display installed and calibrated in no time.

Renowned for its ultimate picture quality, the ILite display products have been awarded numerous industry awards over the past few years. The ILite range comes in the following resolutions: 3mm, 6mm, 8mm and 10mm.

The ILite LED display range is ideally suited for countless applications - from indoor events that deserve a touch of glamour such as product launches, major trade shows or fashion shows, to entertainment events such as music tours, broadcast and film.

BARCO

Visibly yours

Achieving perfection in image quality and system reliability

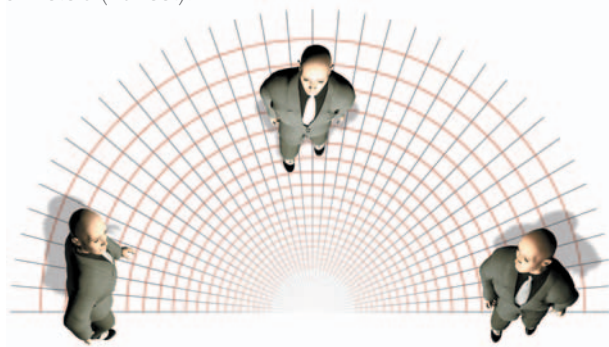


Fully engineered and manufactured by Barco, the ILite offers the most advanced in LED display technology and design quality. An extremely stringent selection of the LED components together with Barco's extensive experience in image processing guarantees ultimate picture quality, colour uniformity and total system reliability.

The ILite indoor LED display range, available in 3mm, 6mm, 8mm and 10mm resolutions, offers the perfect solution for generating the ultimate picture in all bright indoor environments. The ILite display range offers many benefits not found in other display technologies.

Unequalled brightness & extreme viewing angles

Using state-of-the-art SMD LED technology, the Barco ILite range offers a high resolution display delivering high brightness, even at extreme viewing angles. Half of the full brightness is still perceived at viewing angles of 145 degrees from the surface of the display. The ILite products also offer an extreme fill factor, which delivers perfect images at viewing distances as short as 3 meters (10 feet)!



high brightness, even at extreme viewing angles

True color reproduction & authentic video quality

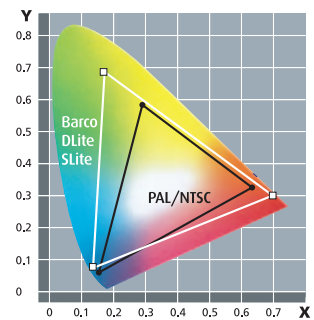
The ILite display products incorporate Barco's proprietary LED System Color Signature, True Color Reproduction™ and True Motion Reproduction technology, which ensure accurate color uniformity and smoother, flicker-free video. Whether it is used for image magnification or for data content, the ILite display products offer the perfect picture over the lifetime of the display.



Barco's True Color Reproduction Technology ensures color accuracy and consistency across the entire screen and over time

- **System Color Signature**
Monitors individual LED color signature, overall runtime and temperature thresholds

- **True Color Reproduction**
Barco's expertise in color processing ensures that an extensive range of colors can be shown and adjusted to PAL/NTSC standards or beyond.



- **Advanced 14-Bit Processing**
Both the ILite 6 XP and ILite 3 feature advanced 14-bit processing, which results in even greater color depth and uniformity, allowing the displays to show vibrant images with even deeper and more uniform colors across the entire surface of the display.

The extra processing power also provides more grey-scales, a critical requirement when displays are used at low brightness levels such as found in broadcast applications.

- **Pixel Based Motion Compensation**
For fast moving items without motion blur.



STS Communication | Exte Fashion Show

Durable and reliable

- Endurance tested LED modules

All Barco's LED modules conform to the highest engineering standards and are endurance tested to ensure maximum system integrity.

- Advanced heat management system

Each LED module is purpose built to minimize internal heat build-up by inclusion of an advanced heat management system.

The system encompasses heat sinks, heat sensors and internal fans, ensuring that the tile's components always operate even at high temperatures.

- Ultimate system reliability

Barco's integrated quality control approach in both component sourcing & manufacturing as well as product design ensures a quality product that delivers a secure long-term investment.

Flexibility through modularity

- Flexibility and seamless images

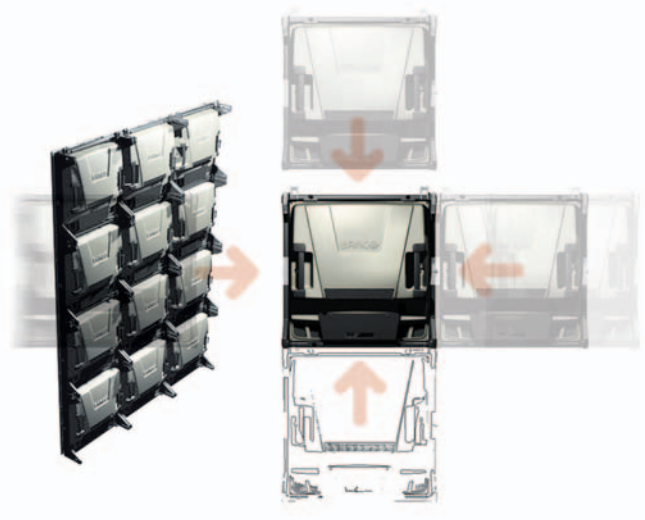
The ILite's slim, light-weight modular design delivers optimal flexibility and truly seamless images each and every time you erect your display.

- Ease of configuration

Barco's built-in intelligence allows the system to configure itself regardless of the shape, size or aspect ratio. Video or data content can come from a variety of sources without having to undergo unnecessary scaling.

- Ease of service

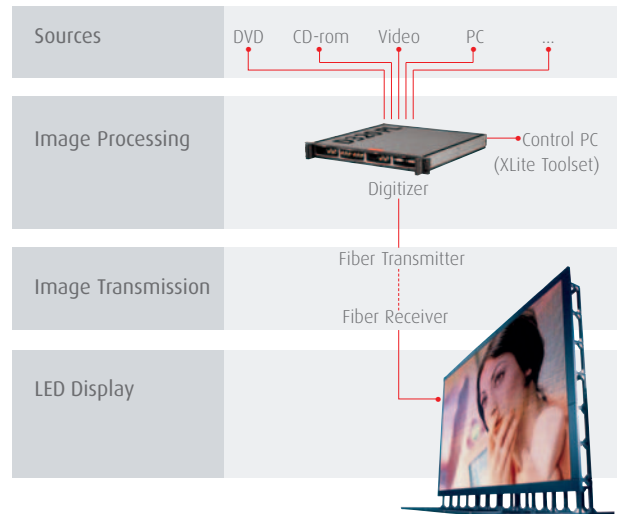
State of the art mechanical design allows ease of servicing of modules while the same built-in "intelligence" enables auto-configuration and hot-swap of tiles without interrupting the performance of the display, guaranteeing minimum down-time to repair the display.



Powerful processing & user-friendly control

Barco's ILite displays are controlled by an advanced image control system which includes Barco's range of D320 digitizers and its proprietary XLite toolset software, allowing you to display and control your display content at the simple touch of a button.

Transport of the data stream from digitizer to display is via a standard data cable. If the display is some distance away from the source /digitizer, the data is transmitted by means of a high-speed fiber-link, which transmits up to 1.2 Gigabits per second.



Powerful D320 processor platform

Barco's D320 digitizer delivers advanced image processing that allows the display to accept a multitude of data and video sources.

- Four interchangeable input modules per D320
- Stackable an infinite number of times, allowing up to 4 sources to be displayed on as many screens as there are digitizers in the stack.
- Capable of being daisy-chained to a maximum of 64 units, allowing 256 sources to be displayed on a single screen.
- Combinations of stacking and daisy-chaining possible.
- Input formats mixed as required, while each source can also be individually scaled.

Scaling/compressing capability of the Barco D320 digitizer and the 'distributed processing' concept assure compatibility with all resolutions and aspect ratios. Due to the Lock-mode functionality, no external frame rate conversion is required, thereby eliminating the risk of artifacts.

Barco's D320 digitizer also allows for various on-screen image manipulations, including chroma-keying, alpha-blending, zooming and more.



Advanced installation and control software

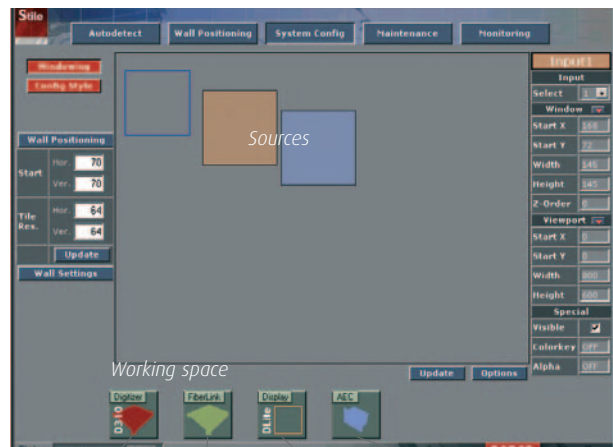
Barco's XLite Toolset is an integrated software package, which provides you with a user-friendly, intuitive, graphical interface for fast installation, system calibration as well as layout configuration and control of your display.

• Installation & calibration

The XLite software makes installation and calibration of your display system as easy as can be.

In a number of easy steps your LED display will be automatically configured and calibrated for optimal installation and superior image quality.

Each display generates and maintains its own database, which includes specific information on each of the individual tiles, such as its unique "System Color Signature", including serial number and operating hours. With this information the tiles can easily be calibrated for color uniformity across the entire display.



Processor type Fiber Link LED Wall type
XLite Ambient Environmental
Controller

• Layout configuration & control

The XLite toolset also provides user-friendly system configuration as well as layout configuration and control.

An extensive range of image controls and adjustments are also available to the end user for various types of input signals. These include:

- Full control over equalization
- Filters
- Tint
- Saturation
- Luma Tracking
- Luminance Delay
- Dynamic Stabilizer
- Clip to Sub-black (removing black wash-out)
- Full control of Gamma Curves.

• Maintenance & monitoring

The status of the display is constantly monitored by the XLite toolset.

This diagnostic capability tracks any potential errors that may occur inside a tile and typical environmental changes such as temperature, power drops, etc.

Sources can be arranged ('Z' order) in any order, up to 64 layers.

Each source can be made invisible, have color values adjusted, and transparency adjusted.

The total rental solution

The ILite LED modules form part of Barco's total rental solution, which includes sturdy flightcases, rugged rental structures and various mounting or set-up devices.

- **Rugged rental structures**

ILite modules come with rugged rental structures, which allow the tiles to be clicked together simply and quickly to form a seamless display in no time.

- **Easy set-up and tear-down**

With its specially engineered truss beams and foot systems, Barco's LED displays are purpose built for fast, easy set-up and repeated relocations.

- **TUV safety certified rental structures and accessories**

All Barco's rental mechanics comply with the highest TUV standards, providing you with complete peace of mind that your installations meet the highest safety standards.

Fully cross-rentable

As part of Barco's total rental solution, the ILite LED modules are fully cross-rentable, allowing you to maximise the return on your investment.

- Each tile features Barco's proprietary True Color Reproduction System and System Color Signature™ technology, which ensure true color rendering of the display from delivery through the entire lifetime of the display.
- This technology also allows you to mix and match tiles of different batches and various run-time ages to obtain a seamless display with a perfect image every single time.
- Each individual LED within each cluster has its color characteristics and brightness robotically measured at Barco's factory before being installed on an EEPROM on each tile.
- Every time a wall is erected, the information stored in the EEPROM is read by the D320 digitizer as it processes and distributes the signal to the display.
- Each individual LED then undergoes individual color and brightness corrections to ensure a uniform image across the entire display.



Countless applications



IAA | Creative Technology



STS Communication | Valentino Fashion Show



Kylie Minogue | XL Video



ETF | Geneva Car Show




Deutsche Telecom | Gahrens + Battermann



Abalos Audiovisuales | Exhibition Spain

Geneva Car Show | Creative Technology (cover)

ILite specifications

| | ILite 6 XP | ILite 8 | ILite 10 |
|--|---|--|---|
| Pixel pitch | 6 mm | 8 mm | 10 mm |
| Brightness (Display calibrated at 6500°K) | 2500 NIT 2000 NIT | 2500 NIT 2000 NIT | 2500 NIT 2000 NIT |
| LED configuration | 3-in-1 SMD | 3-in-1 SMD | 3-in-1 SMD |
| Pixel density | 25.920/m ² (2410/ft ²) 5.184/tile (72x72) | 15.680/m ² (1458/ft ²) 3.136/tile (56x56) | 9.680/m ² (900/ft ²) 1.936/tile (44x44) |
| Viewing angle (min. 50% brightness) | | | |
| • Horizontal | 145° + | 145° + | 145° + |
| • Vertical | 145° + | 145° + | 145° + |
| Contrast ratio | 950:1 | 950:1 | 950:1 |
| Lifetime (full white - half brightness) | 45 000 h | 45 000 h | 45 000 h |
| Power consumption / tile | | | |
| • maximum | 400 W | 400 W | 400 W |
| • average | 100 W | 100 W | 100 W |
| Weight / tile (including structure) | 13 Kg (28,7 lbs) | 13 Kg (28,7 lbs) | 13 Kg (28,7 lbs) |
| Processing (Color) | 14 bit/color | 12 bit/color | 12 bit/color |
| Colors | 4,4 trillion | 68,7 billion | 68,7 billion |
| Refresh rate (PAL/NTSC) minimum | 400 Hz | 400 Hz | 400 Hz |
| Temperature | | | |
| • operating | 0 - 40°C (32 - 104°F) | 0 - 40°C (32 - 104°F) | 0 - 40°C (32 - 104°F) |
| • storage | -20 - 60°C (-4 - 140°F) | -20 - 60°C (-4 - 140°F) | -20 - 60°C (-4 - 140°F) |
| Humidity | | | |
| • operating | 35 - 85% | 35 - 85% | 35 - 85% |
| • storage | 10 - 90% | 10 - 90% | 10 - 90% |
| D320 input compatibility (modules) | S-Video - Composite - YUV - RGB - SDI - HDSDI - Data DVI up to UXGA | | |
| Certification | UL - CE - TUV - FCC Class A | | |
| Dimensions | | | |
| Ordering information | | | |
| • ILite 6 XP | R9010250 |  | |
| • ILite 8 | R9004060 | | |
| • ILite 10 | R9004050 | | |

For full details on Barco's ILite 3,
please refer to the ILite 3 brochure
[ref R599717]

Ref.no. R599560 - May 2004

Barco Projection Systems is an ISO 9001 registered company.
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.events.barco.com.

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