

# LDX series

## High-resolution LED backlit LCD displays



Barco's LDX series of high-resolution LCD displays with LED backlighting has been designed for use in a wide variety of professional applications. The LDX family produces crisp, bright and color-accurate images on 46" and 55" screen sizes.

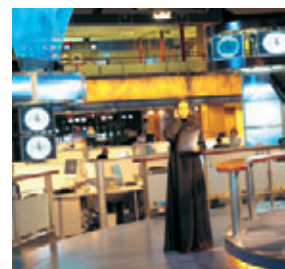
### Your benefits:

- High brightness
- High contrast
- High resolution and pixel density
- Frame lock
- Low power consumption
- Long lifetime
- Easy installation
- Eco-friendly

Featuring LED backlit LCD technology, the LDX series boasts a high brightness and wide color gamut and provides an exceptionally thin and space-saving design. Available in widescreen 46" and 55" displays in native full high definition (1920 x 1080 pixels), the LDX series offers high-quality displays for long-term usage.

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# The allround display

Barco's high-definition LCD technology can be found in many various types of control rooms and studios worldwide. From process control centers to broadcast environments, control room operators will benefit from Barco's LDX series for a host of reasons.

## Broadcasting

The LDX series' large size and outstanding video quality make it an ideal display solution for studio backdrop applications and broadcast control rooms, where multiple video inputs need to be monitored. A dedicated calibration sensor and software allow to configure any display to a target color temperature, gamma and brightness, and match multiple displays to these targets. The LDX displays' fanless design keeps the background noise below the audible noise level. Last but not least, Barco's LDX displays are configured for the lowest possible impact on system latency.

## Utilities and process control centers

Barco's high-resolution LCD displays offer an ideal personal wall solution for process control centers. Operators benefit from a large display surface without having to compromise on image quality or accuracy of the SCADA or GIS application. The high pixel density of the LDX displays boosts the quality of the images.

## Traffic and surveillance

Barco's LDX series provides the perfect overview display solution for traffic and surveillance centers, helping viewers to reduce response times and create better conditions for collaborative decision-making. With its high pixel density and large screen sizes, the LDX series displays video signals with high image quality. Last but not least, the size of the 55" display allows for multiple applications shown simultaneously for ergonomically friendly individual or group viewing.

## Command and Control environments

High-quality displays can significantly improve the speed and quality of decisions. Barco's high-definition LCD displays are widely used in Command & Control applications, where a Common Operational Picture is needed. The LDX series' wide viewing angle perfectly allows video conferencing and collaboration with multiple viewers. High-density information can be viewed in perfect detail.



Broadcasting



Command and Control environments



Utilities and process control centers



Traffic & surveillance



## Intelligent design, durable performance

### LED in the picture

Barco's LDX displays combine the typical benefits of liquid crystal technology (such as low maintenance costs) with energy-efficient LED backlights. Because LED backlights produce less heat than traditional CCFL lamps, the LDX displays reduce image burn-in and have a longer panel life.

Moreover, LED backlights do not emit Infrared radiation which induces coloration in the LCD filters and polarizers. This makes the LDX series perfectly suited for long-term usage.



### Wide viewing angle

The wide viewing angle (178°) and large surface are very beneficial in collaborative environments where detailed information is viewed by multiple participants.

### Space-saving design

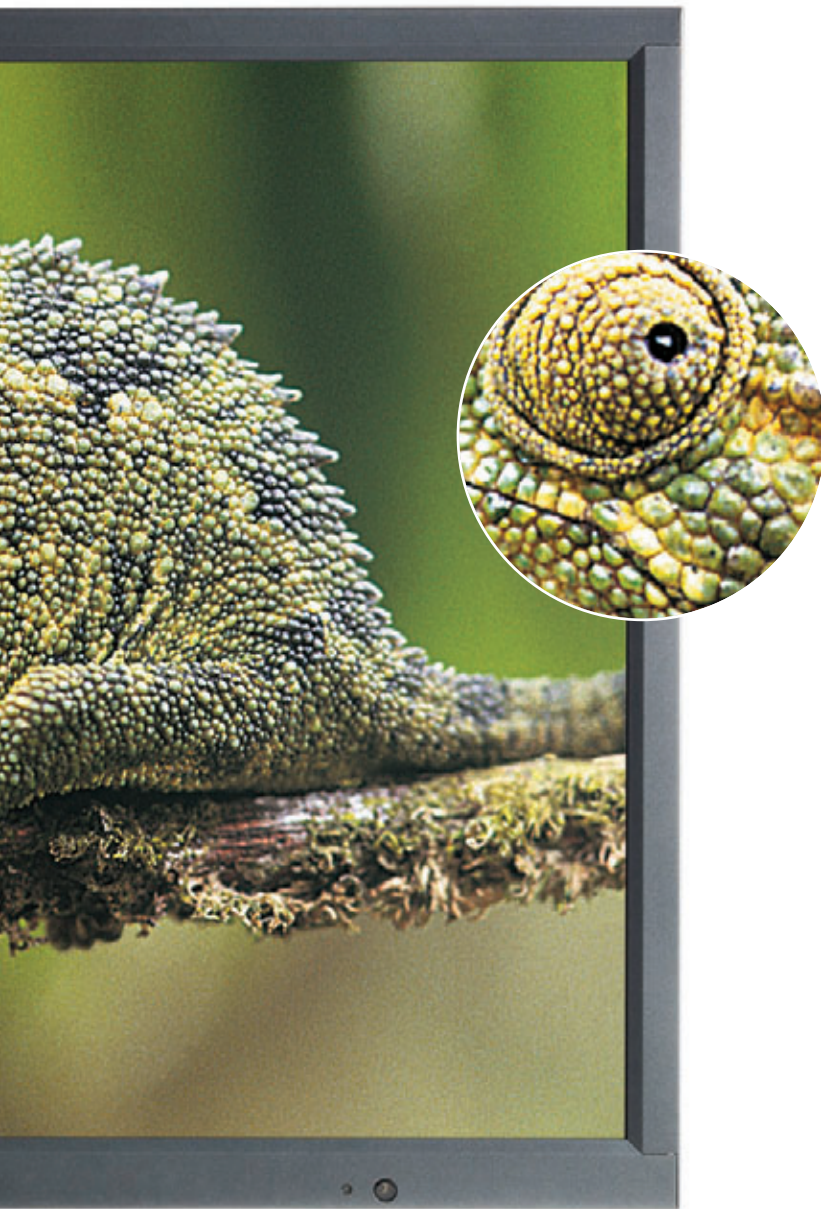
The LDX series is based on Edge LED technology, meaning that the LEDs are positioned around the outer rim of the screen. The light is reflected equally behind the screen by means of a diffusion panel. This technology provides the LDX displays with an exceptionally thin and space-saving design.

The displays have been designed for easy installation of high-quality stand-alone applications as a complementary visualization solution in modern control rooms.

### High resolution

Barco's LDX series of high-resolution LCD displays shows large amounts of data in accurate and high-quality images. Any input source can be shown pixel-on-pixel, which avoids unnecessary scaling artifacts often found on lower-resolution displays.

Combined with the displays' non-glossy professional LCD panel and Anti-Image Retention functionality, the 46" and 55" in native full high definition (1920 x 1080) deliver bright and crisp images that do full justice to high-resolution graphics and video.





## Smooth images, quiet operation

### Color calibration

Using Barco's dedicated calibration software and sensor, the color temperature, brightness and gamma can be adjusted to an absolute target with small error. Correct color targets are important for good color judging, display wall uniformity as well as for backdrop applications.



Wrong color balance results in a bluish image in backdrop applications (left picture). 3200K color adjustment results in a perfect color balance (right picture).

### FrameLock and Genlock functionality

Barco's LDX displays automatically lock to the input frequency of the connected source in order to play in phase-sync and frame-sync with the input signal (50-60 Hz). Since no frame rate conversion is done, the motion is smooth, without judder. In case of backdrop applications, the camera will also run in sync with the display when the signal source is genlocked with the studio camera. No phase shift will be visible in the recording.

### Low latency

Barco's LDX displays are configured for the lowest possible impact on system latency.

### Low noise, fanless system

The fanless design of the LDX displays keeps the noise level exceptionally low, which is perfect to meet the needs of small rooms, such as TV news rooms or board rooms.

Mechanical	LDX-46	LDX-55
Backlight	Edge LED	Edge LED
Cooling	Fanless cooling – low noise	Fanless cooling – low noise
Hanging	VESA 200x200 and 600x200, M8	VESA 200x200 and 600x200, M8
Active screen diagonal	46" (1,168 mm)	55" (1396 mm)
Active screen area	1,019 x 573 mm 40.12" x 22.56"	1,210 x 680 mm 47.64" x 26.77"
Dimensions (WxHxD)	1075 x 639 x 85 mm 42.32" x 25.16" x 3.35"	1,267 x 749 x 81 mm 49.88" x 29.49" x 3.19"
Weight	28 kg (61.8 lb)	35 kg   77.3 lbs (net)

## Worry-free operation and installation

### VESA mounting structure for easy installation

Integrated mounting interfaces according to VESA standards allow for easy wall or ceiling installation. Table stands and mounting devices are optional.

### Wide variety of inputs

Adhering to the most stringent professional standards, the LDX displays offer a wide variety of inputs for the majority of video and data sources: analog and digital RGB, S-video, composite and component video, CVBS, DVI single link, Display Port, HDSOI and HDMI.

### Control & diagnostics

With extensive control and diagnostic functions through RS-232, the LCD displays can be easily controlled, both on or off site or in real-time with a simple touch of a button.



# Technical specifications LDX series

	LDX-46	LDX-55
<b>Display capabilities</b>		
LCD technology	S-PVA, normally black	S-PVA, normally black
	DID technology for extensive usage	DID technology for extensive usage
	AIR Anti Image Retention Circuitry	AIR Anti Image Retention Circuitry
Resolution	Full HD (1920x1080)	Full HD (1920x1080)
Backlight	Edge LED	Edge LED
Aspect Ratio	16:9	16:9
Pixel density	48 dpi	40 dpi
Refresh rate	120 Hz	120 Hz
Luminance	600 cd/m <sup>2</sup> (max)	600 cd/m <sup>2</sup> (max)
Contrast ratio	3000:1 (typ.)	4000:1 (typ.)
Viewing angle	H 178°   V 178°	H 178°   V 178°
Native white point	10,000 K	10,000 K
Color depth	10 bits – 1.07 B colors	10 bits – 1.07 B colors
<b>Calibration</b>		
Color calibration	Barco DCMS software and color probe	Barco DCMS software and color probe
Precision	Internal 10bit processing for precise color calibration	Internal 10bit processing for precise color calibration
<b>Operating performance</b>		
Backlight operating life time	50,000 h	50,000 h
MTBF	>30,000 h	>30,000 h
<b>Mechanical</b>		
Active screen diagonal	46" (1168 mm)	55" (1396 mm)
Dimensions	1075 x 639 x 85 mm   42.32" x 25.16" x 3.35"	1267 x 749 x 81 mm   49.88" x 29.49" x 3.19"
Active screen area	1019 x 573 mm   40.12" x 22.56"	1210 x 680 mm   47.64" x 26.77"
Weight	28 kg   61.8 lbs (net)	35 kg   77.3 lbs (net)
Cooling	Fanless cooling – low noise	Fanless cooling – low noise
AC input voltage	100-240 VAC, 60-50Hz	100-240 VAC, 60-50Hz
<b>Power</b>		
Power consumption (W) (MAX TYP SLEEP STDBY)	220   120   20   2.5	240   130   20   2.5
Max heat dissipation (BTU/h)	750	818
VGA	Separate sync DSUB-15P in/out	Separate sync DSUB-15P in/out
<b>Signal connectors</b>		
DVI	Single link DVI-D in/out with HDCP	Single link DVI-D in/out with HDCP
Display Port	Display port input (Out via DVI)	Display port input (Out via DVI)
HDMI	HDMI Type A with HDCP (Out via DVI)	HDMI Type A with HDCP (Out via DVI)
HD-SDI	2x BNC in, 2x out, SD   HD   3Gb/s	2x BNC in, 2x out, SD   HD   3Gb/s
CVBS	BNC in/out	BNC in/out
S-Video	Mini-DIN S-terminal in/out	Mini-DIN S-terminal in/out
Component video	3xBNC in/out	3xBNC in/out
<b>Wall control</b>		
Barco NSL control manager	Server connected via RS232 chain	Server connected via RS232 chain
	Remote client application:	Remote client application:
	on/off, wall setup, source selection, status, brightness, contrast and color adjustments	on/off, wall setup, source selection, status, brightness, contrast and color adjustments
Control signal	RS-232 DSUB9 PIN in/out	RS-232 DSUB9 PIN in/out
<b>Wall control</b>		
Operational	Temperature: 0-40°C	Temperature: 0-40°C
	Humidity: 20-80% non-condensing	Humidity: 20-80% non-condensing
Storage	Temperature: -20-60°C	Temperature: -20-60°C
	Humidity: 10-90% non-condensing	Humidity: 10-90% non-condensing
Regulation compliance	CE, TUV, cTUVus, CCC, ROHS, WEEE	CE, TUV, cTUVus, CCC, ROHS, WEEE

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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).  
The product is subject to warranty of 2 years.  
Warranty for image retention is subject to certain conditions of use.

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