

# BarcoReality/BarcoGraphics 908



## Ultra-high resolution digital projector

Barco's top-of-the-line digital CRT family has been expanded to include two new 8" offerings: the powerful BARCOREALITY 908 and the affordable BARCOGRAPHICS 908. Unique digital image adjustments provide outstanding performance in multi-channel setups on curved and on flat screens. The advanced digital design features make the BARCOREALITY/BARCOGRAPHICS 908 the standard in high-resolution projection. The BARCOREALITY/BARCOGRAPHICS 908 is specially designed for demanding applications, such as simulation, Virtual and Augmented Reality, Edutainment, 3D and stereoscopic projection, industrial design as well as military command and control centers (C3I).

### Unequaled flexibility

- Mosaic geometry correction: Flat, curved, off axis
- Digital image correction optimized for curved screens and multi-channel setups
- A variety of lenses are available, optimized for a wide range of screen sizes from 1.4 m (4.6 ft.) to 6 m (20 ft.) wide, including curved screens
- Digital AutoALIGN™ automatically aligns all geometry and convergence parameters
- Built-in Scheimpflug optical correction, with stepless adjustment, for optimal optical focus for off-axis projection
- 3D and Stereoscopic optimized phosphors available (upon request)

### Very high resolution images

The BARCOREALITY/BARCOGRAPHICS 908 renders high-resolution, large screen images with unprecedented visual fidelity.

- Compatibility with workstations up to 3,200 by 2,560 pixels.
- Horizontal autolock scan frequency range up to 180 kHz
- 180 MHz RGB amplifier (120 MHz for BARCOGRAPHICS 908)
- New, ultrahigh-definition, LC gun 8" electromagnetic focus CRTs with digitally controlled dynamic astigmatism guarantee razor sharp images
- Optional high-quality Line Multiplier (LIMOPro) for improved video image quality
- TSN™ 6-pole focus astigmatism correction

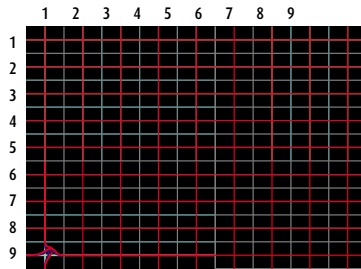
**BARCO**

Visibly yours

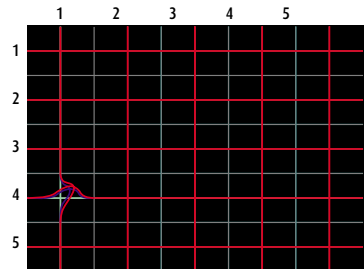
# High precision digital projection system

## Proprietary Digital Waveform Generation geometry & convergence correction

This unique feature offers digital control over all geometry, convergence, focus and astigmatism adjustments. The (patented) morph-interpolation algorithm enhances the digital waveform by suppressing all artifacts and generating smooth transitions. Convergence is adjustable in up to 81 independent zones.



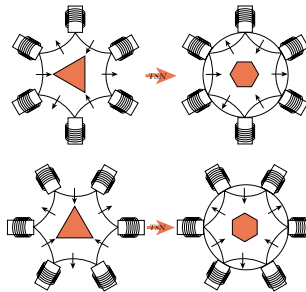
*Fine convergence adjustment in 81 independent zones*



*Coarse convergence adjustment in 25 independent zones*

## Triangular Spot Nullifying™ (TSN™)

Digitally controlled 6-poles offer advanced digital beam correction. Barco's TSN™ beam spot uniformity enhancement guarantees superb focus quality across the entire projected image.



*TSN™ Digital 6 poles beam correction*

## Digital Dynamic Astigmatism (DDA)

Digital enhancement of the overall focus quality of the projected image.

## New high-resolution CRT's

The BARCOREALITY/BARCOGRAPHICS 908 is equipped with new, ultra-high definition, liquid\$-cooled 8" CRTs with an advanced electromagnetic focus system and digitally controlled dynamic astigmatism, which guarantees razor sharp projected images, even at maximum contrast levels.

## New high-resolution Lenses

Super-high definition, fully color corrected, liquid coupled F1.1 lenses provide outstanding image contrast. Several types of lenses are available, optimized for a wide range of screen sizes flat and curved.

## Flexible installation possibilities

Barco offers a series of special options for other applications (multi-screen applications, non-standard projection angles, etc....).

- Mosaic geometry correction: flat, curved, off-axis
- Field extension compatibility
- Optional convergence on green
- SEMU II Soft Edge Modulation Unit with multi-facet capabilities
- Digital Contrast Modulation

And many other application specific optimizations. Please contact us for more details.

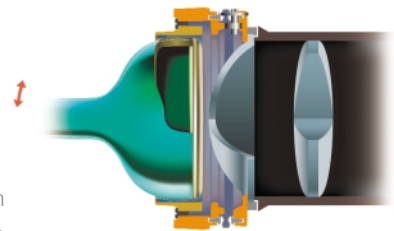


## Optional AutoALIGN™ digital auto-convergence and auto-geometry

Advanced Digital Alignment System effortlessly aligns the geometry and convergence of the projected image with exceptional accuracy. This makes CRT technology transparent for the every-day user and reduces cost of ownership of CRT-based systems.

## Optical Scheimpflug Correction

The BARCOREALITY/BARCOGRAPHICS 908 features a precision Scheimpflug optical correction system with stepless adjustments for both horizontal and vertical axes. This built-in optical correction guarantees optimal optical focus from left to right and top to bottom for projection under non-standard angles.



*Barco's built-in Scheimpflug optical correction offers ultimate flexibility for projection under non-standard angles. Stepless adjustments are easily made by two convenient screws, accessible from the top.*

## Secure design

The BARCOREALITY/BARCOGRAPHICS 908 has been designed for extremely low RFI/EMI emissions for demanding military and industrial applications where unwanted interference could compromise critical communications lines.

## Self-diagnostics

Auto-detection and history log of all essential functions. These functions are accessible through the on-screen menu or over a network.

## Advanced ABL Control

The BARCOREALITY/BARCOGRAPHICS 908 makes use of an advanced ABL (Automatic Black Level) circuit to automatically ensure optimum contrast. The measurement cycle is fully user-controlled through RS232 and a programmable timer.

# Features and specifications

## Light output

### with standard air coupled HD8 lens:

10 % full white:	1,250 lumens
Boost mode:	250 ANSI <sup>(1)</sup> lumens
Normal mode:	210 ANSI <sup>(1)</sup> lumens
Economy mode:	180 ANSI <sup>(1)</sup> lumens

### with optional liquid coupled HD117 lens:

10 % full white::	1,100 lumens
Boost mode:	180 ANSI <sup>(1)</sup> lumens
Normal mode:	150 ANSI <sup>(1)</sup> lumens
Economy mode:	120 ANSI <sup>(1)</sup> lumens

<sup>(1)</sup> Measurement method conforms to ANSI I17.215 standard.

## CRTs

New high brightness, high definition liquid cooled 8" electromagnetic CRTs with a newly designed LC gun

## Lenses

New super high definition, air coupled, and fully color corrected F1.1 lenses, optimized for particular screen sizes

Standard lens	Screen width
HD8	From 4.6 ft./1.4 m up to 19.6 ft./6 m

Optical resolution	10 line pairs/mm 1600 x 1250 ANSI pixels
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Optional lenses	Screen width
HD117-12	from 2.0 ft./0.6 m up to 5.0 ft./1.53 m

HD117-24	from 5.0 ft./1.53 m up to 22.3 ft./6.8 m
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HRQ 804	from 4.6 ft./1.4 m up to 19.6 ft./6 m radius: 9.8-16.4 ft./3-5m
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## Horizontal linearity

< ±0.25% distortion @ 1280 x 1024 with convergence on green option  
< ±1.5% distortion throughout the full horizontal frequency range

## Inputs

- RGB or (Y, R-Y, B-Y) input on 5 BNC-connectors, with automatic sync detection and sync polarity, with sync on green or separate sync
- RGB analog input on D15-connector, with automatic sync detection and polarity

## Remote control

A backlit, user-friendly infrared remote capability to control:

- Source switching
- User settings per source (brightness, contrast, color, hue, sharpness)
- Geometry per source (password protectable)
- Convergence per source (password protectable)

An optional executive remote control unit is available for control of source switching and user settings per source.

## Special features

- Proprietary Digital Waveform Generation Geometry & Convergence Correction
- Triangular Spot Nullifying™ (TSN)
- Self-diagnostics
- Optional AutoAlign™ including blend zones Digital Auto-convergence and Auto-Geometry
- On-screen menus
- 48 frequency-related memory banks
- Modular construction: allows easy access to all controls and facilitates quick servicing (Typical MTTR of less than 10 minutes)
- Advanced ABL Control

## Power

Power factor corrected ranging between 100 and 240 VAC  
+6%/-10%

## AC power consumption

800 W max.

## Safety regulations

The BARCOREALITY/BARCOGRAPHICS 908 complies with UL1950 and EN60950.

## Electromagnetic interference

The BARCOREALITY/BARCOGRAPHICS 908 complies with the principal protection requirements of Council Directive 89/336/EEC (EMC Directive). The BARCOREALITY/BARCOGRAPHICS 908 also complies with FCC Rules & Regulations 47 CFR Ch1 Part 15 Class A.

## Radiation regulations

The BARCOREALITY/BARCOGRAPHICS 908 complies with DHHS radiation emission standards 21 CFR Subchapter J.

## Optional

- Convergence on green
- Geometry Lite
- Geometry advanced
- SEMU Advanced/Multifacet
- Digital Contrast Modulation

	BARCOGRAPHICS 908	BARCOREALITY 908
<b>Scan frequencies</b>	Horizontal: 30-110 kHz autolock Vertical: 37-240 Hz autolock	Horizontal: 30-180 kHz autolock Vertical: 37-240 Hz autolock
<b>Minimal retrace time</b>	<b>Horizontal:</b> < 1.8 µs <b>Vertical:</b> < 200 µs	Horizontal: < 1.8 µs in range 30-130 kHz < 1.1 µs in range 90-180 kHz (switching point adjustable between 90 and 130 kHz) Vertical: < 200 µs
<b>Max. addressable display resolution</b>	2,000 x 1,750 pixels	3,200 x 2,560 pixels
<b>RGB bandwidth</b>	120 MHz	180 MHz
<b>Accommodates digital clock rates over</b>	240 MHz	360 MHz

# Features and specifications

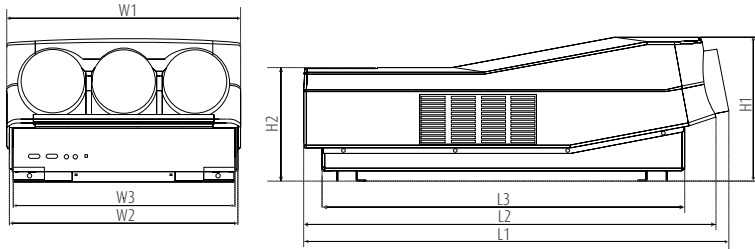
Dimensions	inch	mm
L1	42.4	1078
L2	41.0	1041
L3	32.5	825
W1	23.2	590
W2	22.7	576
W3	22.0	559
H1	14.0	363
H2	11.0	286

Weight	lbs.	Kg
net weight	148	67
Shipping weight	183	83

## Order information

BARCOGRAPHICS 908	R9040004
BARCOREALITY 908	R9040006
Projector Explorer Software advanced version	R9898340
Executive remote control	R9829960

For additional applications, Barco can provide unique projector configurations, custom tailored to meet your specific application requirements.



Ref.no. R599703 September 2003



Barco Simulation 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.simulation.barco.com](http://www.simulation.barco.com).

## Barco Simulation

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