



BARCOREALITY 909

Ultra-High Resolution Digital Projector

The BARCOREALITY 909 is the latest and most innovative digital projector offered. Unique digital image adjustments provide superlative performance in multi-channel setups, on curved screens as well as on flat screens. The advanced digital design features make the BARCOREALITY 909 the reference in high resolution projection. The BARCOREALITY 909 is especially designed for demanding applications such as simulation, Virtual and Augmented Reality, 3D and stereoscopic projection, industrial design as well as military command & control centers (C3I).

Unequaled Flexibility

- Mosaic geometry correction: Flat, Curved, Off axis
- Digital Image correction optimized for curved screens and multi-channel setups
- Different lenses are available, optimized for a wide range of screen sizes from 2 m (6.6 ft.) to 8.8 m (29 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 & Stereoscopic optimized phosphors available (upon request)

Very High Resolution Images

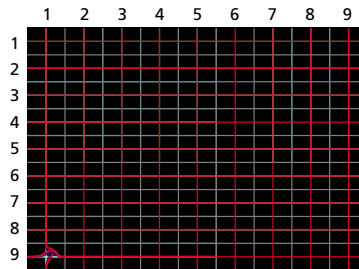
The BARCOREALITY 909 renders high resolution large screen images with unprecedented visual fidelity.

- Compatibility with workstations up to 3,200 by 2,560 pixels.
- Horizontal autolock scan frequency range of 30-180 kHz
- 180 MHz RGB amplifier
- New, ultra-high definition, LC gun 9 inch electromagnetic focus CRTs with digitally controlled dynamic astigmatism guarantee razor sharp images
- Optional high quality Line Multiplier (LIMO Pro) for improved video image quality
- TSN™ 6-pole focus astigmatism correction

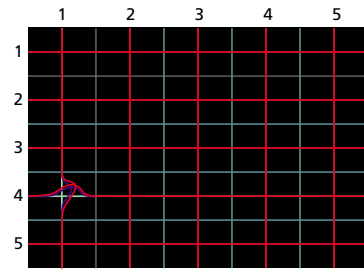
High Precision Digital Projection System

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 81 independent zones as well as 25.



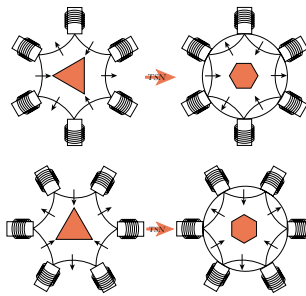
Convergence adjustment in 81 independent zones



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 909 is equipped with new, ultra-high definition, liquid cooled 9" 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 F1.15 lenses provide outstanding image contrast. Several types of lenses are available, optimized for a wide range of screen sizes for flat and curved screens.

Flexible Installation Possibilities

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

- Mosaic geometry correction: Flat, Curved, Off-axis
- Field extensions
- Optional convergence on green
- SEMU II SOFT EDGE MODULATION UNIT
- Digital Contrast Modulation

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

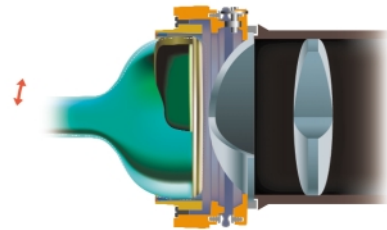


Optional AutoALIGN™ Digital Auto-convergence and Auto-Geometry

Advanced Digital Alignment System effortlessly aligns the geometry and convergence of the projected image with exceptional accuracy, which makes CRT technology transparent for the every-day user.

Optical Scheimpflug Correction

The BARCOREALITY 909 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 909 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.

Features and Specifications

Light output

At 10 % peak white: 1,250 lumens

Boost mode: 300 ANSI⁽¹⁾ lumens

Normal mode: 250 ANSI⁽¹⁾ lumens

Economy mode: 195 ANSI⁽¹⁾ lumens

(1) Measurement method conforms to ANSI IT7.215 standard. Measured with HFQ 900 Lens

CRTs

New high brightness, high definition liquid cooled 9" electromagnetic CRTs with a newly designed LC gun

Lenses

New Super high definition, liquid coupled, and fully color corrected F1.15 lenses, optimized for particular screen sizes

Standard Lens	Screen width
---------------	--------------

HFQ 900	From 7 ft. / 2 m up to 72 ft. / 22 m
---------	---

Optical resolution	12 lp / mm
--------------------	------------

A range of lenses optimized for curved screen setups

Optional lenses	Screen width
-----------------	--------------

HRQ 904	up to 13 ft. / 4 m
HRQ 910	up to 32 ft. / 10 m

Optional Lenses	Screen radius
-----------------	---------------

HRQ 904	8-16 ft. / 2.5-5m
HRQ 910	16-49 ft. / 5-15m

Scan frequencies

Horizontal: 30-180 kHz autolock

Vertical: 37-240 Hz autolock

Minimal retrace time

Horizontal:

< 1.1 μ s in range 90-180 kHz

< 1.8 μ s in range 30-130 kHz

(switching point adjustable between 90 and 130 kHz)

Vertical: < 200 μ s

Max. addressable display resolution

3,200 x 2,560 Pixels

RGB bandwidth

180 MHz

Horizontal linearity

< \pm 0.25% distortion @ 1280 x 1024 with convergence on green option
< \pm 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 control for control of:

- 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™ 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)

Power

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

AC power consumption

800 W max

Safety regulations

The BARCOREALITY 909 complies with UL1950 and EN60950.

Electromagnetic interference

The BARCOREALITY 909 complies with the principal protection requirements of Council Directive 89/336/EEC (The EMC Directive). The BARCOREALITY 909 also complies with FCC Rules & Regulations 47 CFR Ch1 Part 15 Class B.

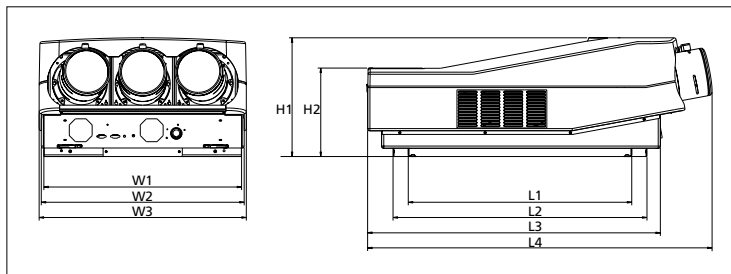
Radiation regulations

The BARCOREALITY 909 complies with DHHS radiation emission standards 21 CFR Subchapter J.

Dimensions	inch	mm
L1	29.0	737
L2	32.8	833
L3	37.8	961
L4	44.5	1,131
H1	15.0	390
H2	11.4	290
W1	25.6	649
W2	26.2	666
W3	26.8	680

Shipping Dimensions	inch	mm
L	53.1	1,350
H	23.6	600
W	35.4	950

Weight	lbs.	Kg
Net	187	85
Shipping	260	118



Order Information

BARCOREALITY 909	R9040014
Projector Explorer Software Advanced Version	R9898340
LIMOPRO kit	R9828631
Executive Remote Control	R9829960

For additional applications, BARCO can provide unique projector configurations, which are custom tailored to specific application requirements.

Barco Simulation Products
a business unit of BarcoProjection

US Headquarters

600 Bellbrook Ave.
Xenia, OH 45385
Phone +1 (937) 372 7579 • Fax +1 (937) 372 8645
E-mail: eis@barco.com

European Headquarters

Noordlaan 5, 8520 Kuurne, Belgium
Phone +32 56 36 82 11 • Fax +32 56 36 84 86
E-mail: sales.bps.bsp@barco.com

www.simulation.barco.com

BARCO



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.