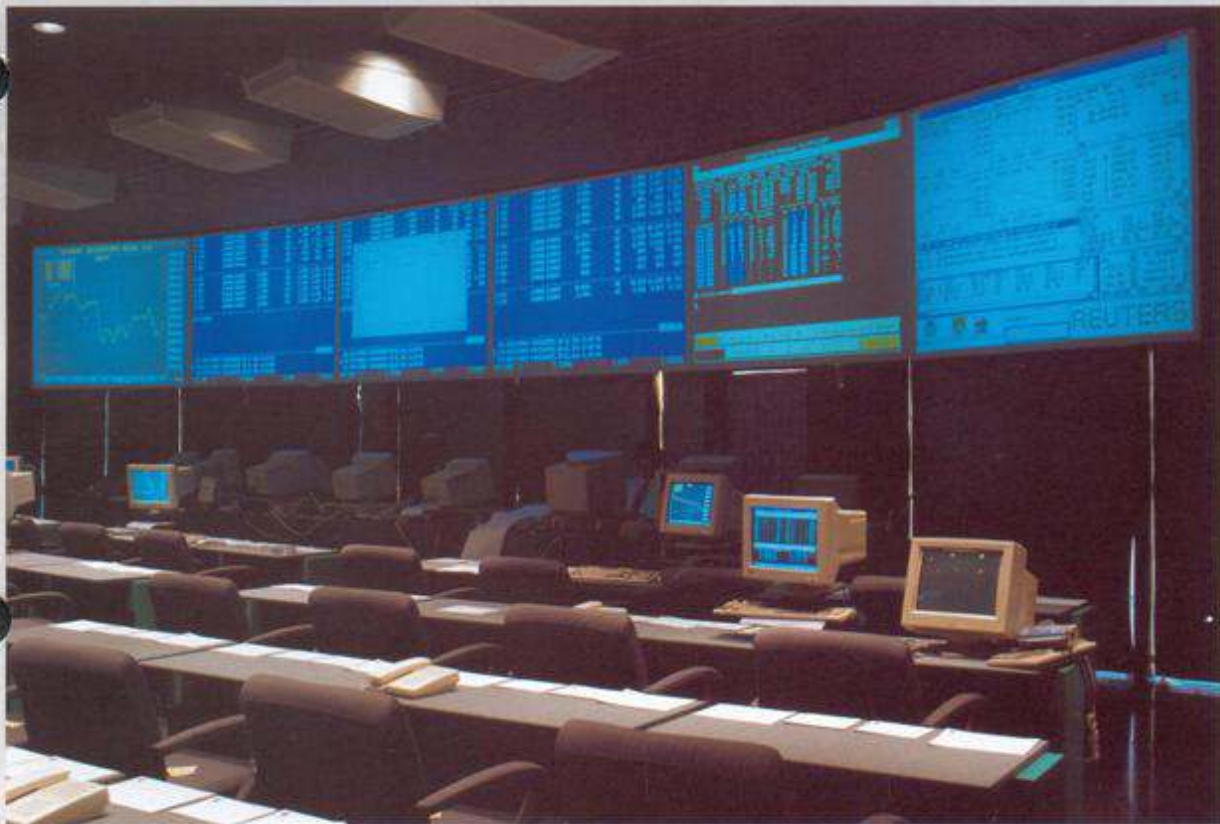# BARCO

BARCOGRAPHICS 808
High-Resolution, Large Screen Graphics Projector

KEY FEATURES

✓ Broad horizontal autolock scan range
up to 105 kHz
✓ Display compatibility from VHS video
tapes up to 1600 x 1200/78 Hz
✓ Ultra-high resolution through precision
optics, electromagnetic focus CRTs
and state-of-the-art electronics
✓ Complies with FCC part 15 Class B
EMI/RFI specifications

Universal, high-performance graphics projection system

BARCO has introduced the BARCOGRAPHICS 808, a high performance graphics projector designed to render high resolution, large screen images from a new generation of graphics workstations and PC graphics boards running at a resolution of up to 1600 x 1200 pixels/78 Hz. The BARCOGRAPHICS 808 represents a more economical solution for graphics applications which demand high visual fidelity at an affordable price. This makes it the perfect solution for large screen presentations for CAD/CAM/CAE imaging, training centres, trade shows, simulation, industrial design, process control and traffic management centres.

WIDE COMPATIBILITY

The BARCOGRAPHICS 808 offers a broad autolock scan range of 15-105 kHz, wideband 75 MHz RGB amplifiers, and a full complement of signal input connections. This allows the BARCOGRAPHICS 808 to display all worldwide video standards (PAL, SECAM, NTSC) as well as signals from a wide range of PC graphics boards and graphics workstations up to a resolution of 1600 x 1200 pixels /78 Hz (such as Cornerstone DualPage, Intergraph Interpro 2700,...).

EXTREMELY USER-FRIENDLY SET-UP AND CONTROL

The BARCOGRAPHICS 808 is based on BARCO's advanced digital architecture which provides user-friendly remote control of all set-up and display functions. Extremely precise, yet simple adjustments are accomplished through intuitive, on-screen menu-driven displays.

OUTSTANDING IMAGE QUALITY

Utilising BARCO's optional IRIS 800 Auto-Convergence unit, on-screen convergence can be achieved in less than three minutes. A sophisticated memory management system and auto-memory storage feature guarantee consistently sharp image quality.

▲ The unit's unprecedented performance and wide versatility make the BARCOGRAPHICS 808 the perfect solution for CAD/CAM/CAE imaging, boardroom meetings, simulation, expositions,...
Photo 1: Cockpit simulator at Celar, Rennes, France
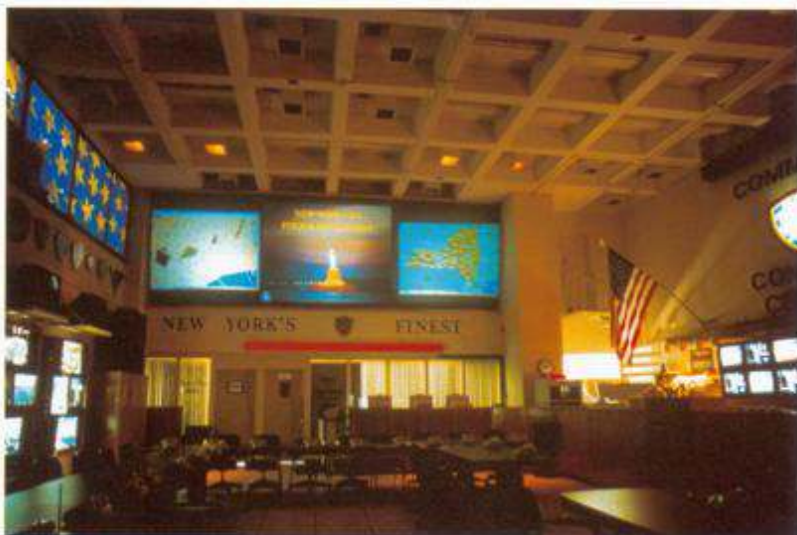Photo 2: Spiegel's headquarters in Chicago
Photo 3: Courtesy of TNO-Fel

Ultra high-precision optical system
Unequalled picture sharpness

Incorporating an advanced, high resolution optical system, the **BARCOGRAPHICS 808** delivers razor sharp images with very high light output on screens up to 6 m (20 ft.) wide.
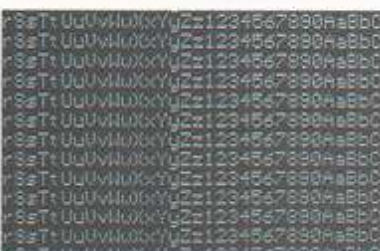

▶ *The BARCOGRAPHICS 808 is ideally suited for process control and surveillance applications. (Photo: New York City Police Department Command Center. Courtesy by General Audio-Visual, Inc.)*

▶ *The electrostatic focus system of conventional projectors offers good resolution only at moderate contrast levels.*
1) 50 % contrast
2) 100 % contrast

▶ *BARCO's electromagnetic focus system guarantees projected images that are razor sharp, even at maximum contrast levels.*
3) 50 % contrast
4) 100 % contrast

HIGH-DEFINITION OPTICS

- The BARCOGRAPHICS 808 utilises high brightness, high definition liquid cooled 8" electromagnetic focus CRTs with digitally controlled dynamic astigmatism, which offers consistently superb picture quality.

- High definition, fully colour corrected F1.06 hybrid lenses, with centre+edge focus adjustment, provide razor sharp images with improved contrast on screens up to 6 m (20 ft.) wide.

OPTICAL SCHEIMPFLUG CORRECTION

The BARCOGRAPHICS 808 is provided with a built-in Scheimpflug optical correction, with stepless adjustments for both horizontal and vertical axis. This feature guarantees optimal optical focus from left to right and top to bottom for projection under non-standard angles, and is particularly useful for specialised installations.

Unequalled user-friendliness
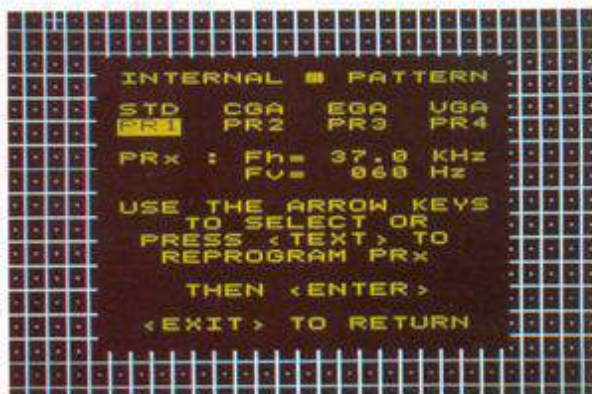# Easy set-up and control

The BARCOGRAPHICS 808 is based on BARCO's advanced digital architecture. This offers not only outstanding specifications, but also facilitates the use and installation of the projectors.

LOGICAL ON-SCREEN MENUS

For simple geometry and convergence adjustments, the BARCOGRAPHICS 808 projector combines a user-friendly backlit remote control unit with logical on-screen menus.

GUIDED ADJUSTMENT PROGRAM

The projector offers a guided adjustment program which directs the user through the complete alignment procedure in the most efficient way, and a random adjustment mode which can be used for immediate access to one specific parameter.

▲ Convenient, well organised on-screen menus (available in several languages), combined with the user-friendly infrared remote control unit, simplify all adjustments of the projector, even for first-time and non-skilled users.

▶ A convenient backlit infrared remote control unit facilitates control and adjustment of the projector.

▲ The BARCOGRAPHICS 808 projector utilises microprocessor control and BARCO ASICs (Application Specific Integrated Circuits), which simplify adjustment and guarantee a consistent superb picture quality.

INTERNAL PATTERN GENERATORS

Image adjustments may be accomplished 'on source', or through the use of an internally generated pattern, genlocked on the connected source or to a pre-programmed frequency, to allow for adjustment of the projector in the absence of an external source.

IRIS 800 AUTOMATIC CONVERGENCE SYSTEM

The IRIS 800 is an optional user-friendly, automatic convergence system. It automatically aligns the projected image on the screen faster and more accurately than ever before possible through the conventional 'manual' convergence process.

The user-friendly concept of BARCO's 'Projector Control' software, with mouse-driven pull-down menus and dialogue boxes, facilitates the adjustment of the projectors connected to the central ▼ computer.

◀ *The IRIS 800 has a lightweight, rugged enclosure, and can be easily installed to the front of the projector.*

32 MEMORY BANKS

All image adjustments are individually set for each source and stored in one of the projector's 32 frequency related memory banks. Once image parameters are designated for each source, the projector will automatically select the correct settings for the source in use, thus providing consistently perfect image quality.

LDI: LINEAR DIGITAL INTERPOLATION

Once parameters are selected for at least two sources, the LDI (Linear Digital Interpolation) feature of the projector will automatically calculate the image parameters of all additional sources in order to approximate the new source settings. The LDI feature creates these new settings through the use of frequency dependent weighting algorithms, thus eliminating the need for time consuming readjustments.

The IRIS 800 incorporates a unique hardware and software system, which utilises a high resolution CCD camera in conjunction with an ultra light, high-quality front-surface mirror assembly. Together with built-in digital enhancement software this guarantees both a quick and precise alignment of the three projected images on the screen, even under high ambient lighting conditions.

PROJECTOR SUPPORT SOFTWARE PACKAGE

Thanks to BARCO's unique projector support software package, it is possible to adjust brightness, contrast, hue, colour, sharpness and geometry and convergence settings for up to 256 projectors from one central computer. It is even possible to store image settings for each source for future use on a computer hard disk or diskette. The software is available for IBM (or compatible) computers equipped with a DOS operating system.

BARCO offers a wide range of peripheral devices and options, which further enhance the flexibility and versatility of the BARCOGRAPHICS 808.

RCVDS 05 SWITCHER

The Remote Controlled Video and Data Source Selector RCVDS 05 is a high-bandwidth (>200 MHz) source selector capable of selecting a wide range of video, data and graphics sources to one or more projectors and to adjust all picture settings via the projector's infrared remote control.

For expanded use of the projector, it is possible to set several RCVDS 05 source selectors in series, so that up to 90 different sources may be connected simultaneously to a single projector.

REMOTE INFRARED RECEIVER

An additional infrared remote receiver facilitates the use of the projector's infrared remote control in difficult installations.
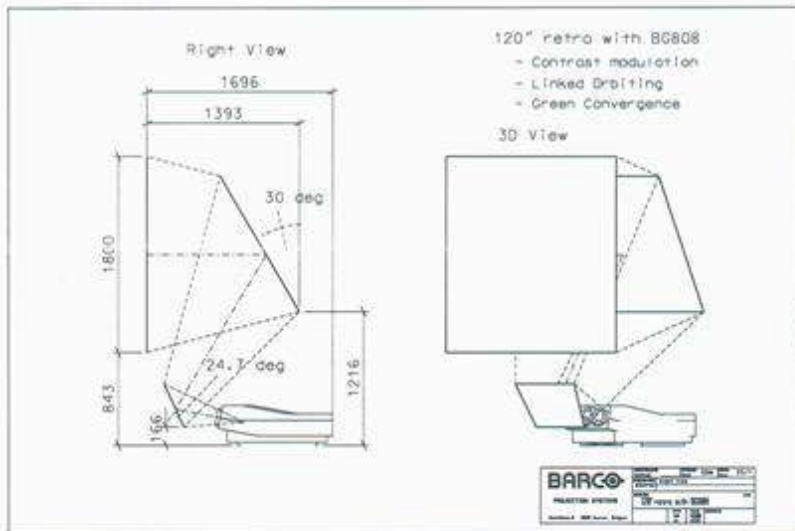
SUSPENSION SYSTEM

BARCO's suspension system allows the BARCOGRAPHICS 808 projector to be mounted from the ceiling, adapting the projector perfectly to the local mounting requirements.

FLIGHT CASE

Sturdy, easily transportable flight case for the packing of the BARCOGRAPHICS 808.

SPECIAL OPTIONS

BARCO offers a series of special options for non-standard applications (multi-screen applications, non-standard projection angles,...): contrast modulation kit, soft-edge matching kit, orbiting kit, convergence on green, automatic colour temperature alignment system...

▲ *The RCVDS 05 allows for the connection of a wide range of sources to one or more projectors, and the adjustment of all picture settings via a convenient infrared remote control.*

▶ *Using sophisticated CAD systems, BARCO's application engineers produce detailed technical drawings of custom-made configurations.*

COMMUNICATION CABLES

Additional RS232/422 cables (D9/D9), with a length of 5 m (16'), 15 m (50') or 30 m (100') are available.
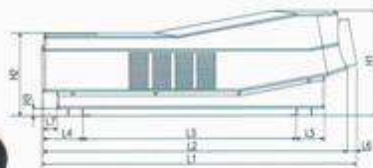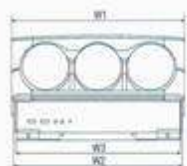
EXECUTIVE REMOTE CONTROL

An executive infrared remote control is available, to accommodate source selection and adjustment of user settings without allowing changes to the projector's geometry and convergence settings.

For special applications, a team of highly trained application engineers are available to assist in developing custom-made product solutions and special projector configurations using BARCO's sophisticated CAD systems.

The BARCOGRAPHICS 808 has a sleek, modern design, which perfectly fits into most installations.

Dimensions	mm	inch
L1	1076	42.36
L2	1040	40.94
L3	728	28.66
L4	136	5.35
L5	96	3.78
L6	32	1.26
L7	46	1.81
H1	362	14.25
H2	286	11.26
H3	27	1.06
W1	590	23.23
W2	576	22.68
W3	558	21.97

LIGHT OUTPUT
At 10 % peak white: 1000 lumen
ANSI lumen[1]: 210 lumen

CRTS
High brightness, high definition, liquid cooled 8" electromagnetic focus CRTs.

LENSES
High definition, fully colour corrected F1.06 hybrid lenses, with center+edge focus adjustments

OPTICAL RESOLUTION
10 lp/mm at 50 % MTF throughout the field

SCREEN SIZE
Minimum: 1.2 m x 0.9 m (4' x 3')
Maximum: 6.0 m x 4.5 m (20' x 15')

SCAN FREQUENCIES
Horizontal: 15-105 kHz autolock
Vertical: 37-140 Hz autolock

MINIMAL RETRACE TIME
Horizontal: < 2.5 μs
Vertical: < 200 μs

HORIZONTAL LINEARITY
< ±1.5 % distortion throughout the full horizontal frequency range

RGB BANDWIDTH
75 MHz

REMOTE CONTROL
A user-friendly backlit infrared remote control for control of:
- source switching
- user settings per source (sharpness, hue, colour, brightness, contrast)
- 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
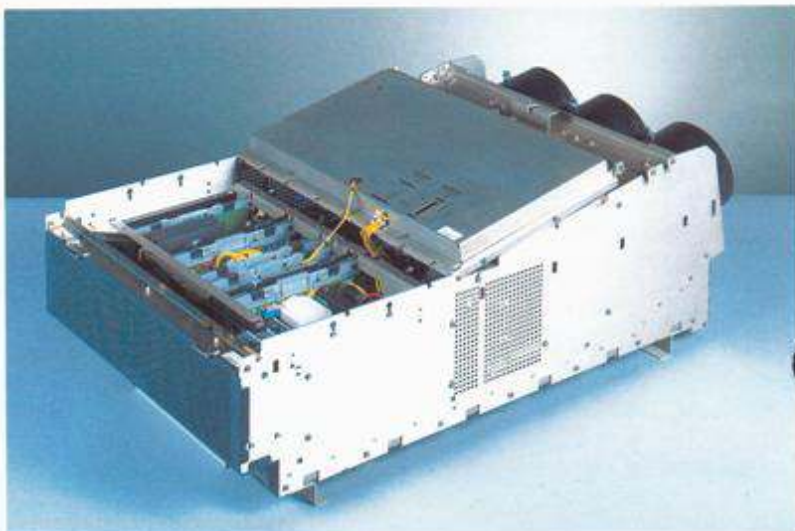
INPUTS
- RGB analog (5xBNC-connectors), sync on green or separate sync
- RGB analog input on D9-connector (optional D9-BNC adapter is available)
- Video (PAL, SECAM, NTSC 3.58, NTSC 4.43), loop-through (2xBNC) with 75 Ohm termination switch
- S-Video input (4-pin mini-DIN), loop-through with 75 Ohm termination switch

SPECIAL FEATURES
- 32 frequency-related memory banks
- L.D.I. (Linear Digital Interpolation)
- Effective on-screen display: installation screens, help screens, barscale display of user settings, on-screen display of source frequencies
- Automatic storing of all adjustments
- Ability to set parameters to midposition
- Colour temperature adjustment (3200 K, 6500 K, 9300 K or custom)
- Special RGB sharpness control: improves picture quality for high-frequency sources
- 100 % modular construction
- D.D.A. (Digital Dynamic Astigmatism) guarantees superb focus quality from centre to corners of projected image
- Built-in Scheimpflug optical correction, with stepless adjustments for both horizontal and vertical axis, guarantees optimal optical focus from left to right and top to bottom for projection under non-standard angles
- Text generators for other languages are available

(1) Measurement method conforms to ANSI IT 7.215 standard.

► *The BARCOGRAPHICS 808 has been designed with a rugged enclosure for extremely low RFI/EMI emissions for demanding military and industrial applications. The 100 % modular construction of the projector allows easy access to all controls and facilitates quick servicing.*

WEIGHT
Net weight: 67 kg - 148 lbs.
Shipping weight: 83 kg - 183 lbs.

POWER CONSUMPTION
500 W

ELECTROMAGNETIC INTERFERENCE
The BARCOGRAPHICS 808 complies with FCC part 15 Class B and VDE

SAFETY REGULATIONS
The BARCOGRAPHICS 808 complies with UL 1950 and IEC 950.

RADIATION REGULATIONS
The BARCOGRAPHICS 808 complies with DHHS radiation emission standards 21 CFR Subchapter J.

ORDER INFORMATION
BARCOGRAPHICS 808:

230 V:	90 00900
120 V:	90 00909

RCVDS 05:

230 V:	98 27880
120 V:	98 27889
Projector Control software (DOS):	98 27530
IRIS 800:	98 27695
Executive remote control:	98 27970
Remote infrared receiver:	98 27515

Communication cables:

5 m (16 ft.):	98 27770
15 m (50 ft.):	98 27560
30 m (100 ft.):	98 27570
D9-BNC cable adapter:	98 27840
Suspension system:	98 27341
Flight case:	98 28110

Special add-in boards:

- Soft-edge matching & contrast modulation kit:	
	98 2781
- Contrast modulation kit:	98 27800
- Orbiting kit:	98 27781
- Convergence on green:	98 28080

The information and data given are typical for the equipment described. However any individual item is subject to change without any notice.

Photo on front page: Global Securities Ltd. Barcelona/Spain. Installation by IGEYA, S.A. Project by W-B Architects.

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