

■ RETRO 801s Series Projectors
Rear-Screen Data and
Graphics Projection Systems



Ultra sharp and crystal clear projection in high ambient light

BARCO's new RETRO 801s Series projectors are self-contained, high-performance rear-screen projection systems, capable of displaying images with outstanding light output, contrast and clarity under high ambient lighting conditions. Two models are available: the RETRODATA 801s, for presentation and training applications, and the RETROGRAPHICS 801s, for high-resolution applications such as CAD/CAM, process control, surveillance and simulation.

TRANSPORTABLE, STAND-ALONE PROJECTION SYSTEM

The RETRO 801s Series projectors are transportable, stand-alone rear-screen projection systems with a built-in 67" (1.7 m) diagonal high-resolution Fresnel-type screen, which deliver high-resolution images with outstanding light output, excellent resolution and rich contrast - in full ambient light environments.

EXTREMELY USER-FRIENDLY SET-UP AND CONTROL

The RETRO 801s Series projectors are 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 an intuitive, on-screen menu-driven display.

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.

BROAD COMPATIBILITY

The RETRODATA 801s and the RETROGRAPHICS 801s can display all worldwide Video standards (PAL, SECAM, NTSC 3.58, NTSC 4.43) as well as S-VHS (Y/C) signals.

The RETRODATA 801s is compatible with a wide range of PC graphics boards from 15 to 61.5 kHz with resolutions up to 1180 by 900 pixels/60 Hz. This makes it ideally suited for a wide range of presentation and training applications such as multimedia events, trade shows, training sessions, boardroom meetings,...

The broad autolock scan range of 15 - 94 kHz make the RETROGRAPHICS 801s the perfect solution for large screen process control, air traffic control, surveillance and simulation applications.



► The flexible design of the RETRO 801s Series projectors make them the product of choice for rental business and exhibitions



The wide autolock facilities and unique mechanical design of the RETROGRAPHICS 801s make it an ideal tool for large screen traffic control applications. (Photo: Stockholm Traffic Control Centre of Swedish Railways - Courtesy by ▼ Studio toivo steen ab, Sweden)



State-of-the-art optical system Advanced mechanical design

The RETRO 801s projectors incorporate a unique, state-of-the-art optical system, based on a single high-quality mirror. The special mechanical design of the projectors make them an easy-to-use building block to form an impressive information wall.

HIGH-QUALITY SINGLE MIRROR

BARCO's RETRO 801s Series projectors are based on a new optical concept. The system incorporates a single front surface-coated mirror, which results in the projection of ultra sharp images with an extremely high light output.

HIGH DEFINITION OPTICS

- High reliability and a consistently superb picture quality due to high-definition, liquid cooled, 8" square CRTs with stabilised pressure chambers.

to-use building block to form impressive communication walls. For applications of this type, two projectors may be stacked to form a 2xN matrix 'RETRO Wall'. In this situation, the top projector is placed upside down on top of the other and its image is inverted accordingly. In a 2x2 configuration, a RETRO Wall measures 2.8x2 m (9x6.8 ft.), clearly viewable under a wide angle in almost any ambient lighting condition.



▲ The chassis of the RETRO 801s Series projectors is fully accessible from the front of the unit on sliding rails, which facilitates the installation and maintenance.

Photo right: The ruggedised construction and the fine borders around the screen make the RETRO 801s projectors ideally suited to form a 2xN matrix 'RETRO Wall'. (Photo: A 3x2 RETRO Wall at the Public Utilities Board of Singapore for the control of the power distribution of the region. Installation: Electro-Acoustics Systems, in cooperation with M3i Systems, Inc.)



- The integration of F1.1 colour corrected hybrid lenses result in an optical resolution of 10 lp/mm.

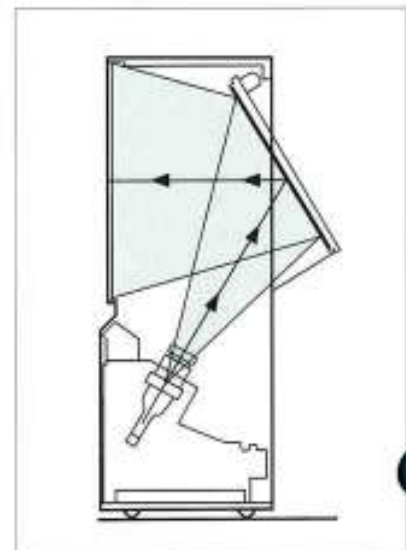
- Improved contrast, thanks to optical coupling between CRTs and lenses. The optical coupling is achieved using a high-quality liquid with a precision matched optical reflection index.

HIGH RESOLUTION SCREEN

A unique Fresnel/Lenticular-Blackstripe screen of 67" (1.7 m) diagonal offers not only a very wide horizontal and vertical viewing angle, but also crystal-clear images, even under high ambient light conditions.

IDEAL BUILDING BLOCK

For applications that require a very high data content, such as process control/monitoring applications, a RETRO 801s projector is an ideal, easy-



Unequaled user-friendliness Easy set-up and control

The **RETRO 801s Series** are based on **BARCO's advanced digital architecture**. This offers not only outstanding technical specifications, but also facilitates the use and installation of the projectors.

LOGICAL ON-SCREEN MENUS

For simple geometry and convergence adjustments, the RETRO 801s Series combine a user-friendly remote control unit with logical on-screen menus.

GUIDED ADJUSTMENT PROGRAM

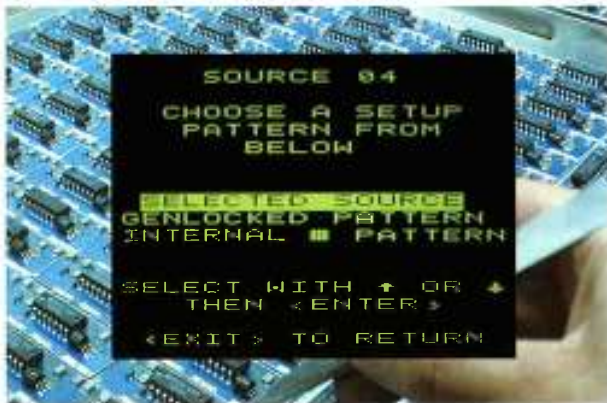
The projector offers a guided adjustment program which directs the user through the alignment procedure in the most efficient way, and a random adjustment mode which can be used for immediate access to one specific parameter.

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 by comparing them to previously set sources, to approximate all new source settings.

PROJECTOR SUPPORT SOFTWARE PACKAGE

Thanks to BARCO's optional Projector Support software package, it is possible to adjust user



▲ The special mechanical design of the IRIS 800 allows it to be installed on a tripod in front of a RETRO 801s projector.

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.

38 MEMORY BANKS

All image adjustments are individually set for each source and stored in one of the projector's 38 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, giving you a perfect picture.

settings and geometry and convergence settings for up to 256 projectors from one central computer, and to store the 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 DOS operating system.

AUTOMATIC CONVERGENCE SYSTEM

The IRIS 800 is an optional automatic convergence system designed to automatically align the projected image on the screen faster and more accurately than ever before possible through the conventional 'manual' convergence process.



Optional peripheral devices

BARCO offers a wide range of additional peripheral devices and options, which further enhance the flexibility and versatility of the RETRODATA 801s and RETROGRAPHICS 801s.



▲ *The RCVDS 800 can be easily installed into any RETRO 801s projector using a convenient cut-out in the rear of the projector.*

RCVDS 800 SWITCHER

The Remote Controlled Video and Data Source Selector RCVDS 800 makes it possible to connect up to ten sources to the projector and to adjust all picture settings via the projector's infrared remote control.

For expanded use of the projector, it is possible to connect up to ten RCVDS 800 source selectors in series, so that up to 90 different sources may be connected simultaneously to a single projector.

RCVDS 05 SWITCHER

The RCVDS 05 is a high-bandwidth (220 MHz) source selector which makes it possible to select a wide range of video, data and graphics sources to one or more projectors or monitors.

RCVDS 800 MOUNTING KIT

The RCVDS 800 mounting kit is a special kit for the installation of a RCVDS 800 in the back panel of a RETRO 801s projector.

REMOTE INFRARED RECEIVER

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

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.

▲ *The RCVDS 800 allows for the connection of up to 10 different sources to one projector, and the adjustment of all picture settings via a convenient infrared remote control.*

COMMUNICATION CABLES

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

SPECIAL OPTIONS

BARCO offers a series of special options for non-standard applications (such as multi-screen applications): contrast modulation kit, soft-edge matching kit, orbiting kit, convergence on green, automatic colour temperature alignment system... For these kind of special applications, a team of specially trained application engineers continuously develop custom-made solutions and configurations on sophisticated CAD systems.

Technical specifications



▲ The RETRO 801s Series projectors are available in two attractive cabinet types. The 120 V version comes standard in a fine rosewood cabinet, while the 230 V model comes standard in a stylish, modern gray cabinet. Custom cabinet finishes are available on special request.

	RETRODATA 801s	RETROGRAPHICS 801s
SCAN FREQUENCIES		
Horizontal:	15-61.5 kHz autolock	15-94 kHz autolock
Vertical:	37-140 Hz autolock	37-140 Hz autolock
MINIMAL RETRACE TIME		
Horizontal:	< 3.3 μ s	< 2.5 μ s
Vertical:	< 300 μ s	< 200 μ s
PROJECTION SCREEN		
Size (diagonal):	67" (1.7 m)	67" (1.7 m)
Type:	Fresnel/Lenticular Blackstripe	Fresnel/Lenticular Blackstripe
Pitch:	1.0	0.62
Viewing angle (50 % brightness):		
- Horizontal:	\pm 42°	\pm 38°
- Vertical:	\pm 13°	\pm 11°
LUMINANCE		
At 10 % peak white:	770 Nit (225 ftL.)	940 Nit (274 ftL.)
ANSI:	103 Nit (30 ftL.)	130 Nit (38 ftL.)

CRTS

High brightness, high definition liquid cooled 8" CRTs

LENSES

High definition, fully colour corrected, liquid coupled, F1.1 hybrid lenses

OPTICAL RESOLUTION

10 lp/mm at 50 % MTF throughout the field

HORIZONTAL LINEARITY

< 1.5 % distortion in the full horizontal frequency range

RGB BANDWIDTH

75 MHz

OPERATOR CONTROLS

All controls are accessible through a soft-touch front panel or through the user-friendly infrared remote control:

- source switching
 - user settings per source (sharpness, hue, colour, brightness, contrast, volume, bass, treble, balance)
 - geometry per source
 - convergence per source
 - MONO/STEREO switch, normal/expand switch and mute function (only via the front panel).
- An optional executive remote control unit is available for control of source switching and user settings per source.

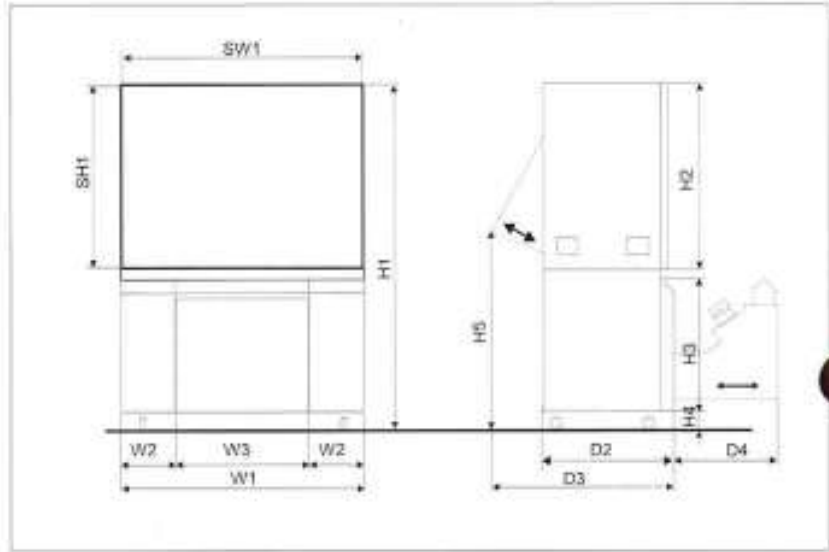
INPUTS

- RGB analog (BNC-connectors), sync on green or separate sync
- RGB analog input on D9-connector
- Video (PAL, SECAM, NTSC 3.58, NTSC 4.43), loop through (2xBNC) with 75 Ohm termination switch
- 4-pin S-Video input, loop through with 75 Ohm termination switch

SPECIAL FEATURES

- 38 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
- Text generators for other languages are available
- Easily transportable cabinet
- Ruggedised construction
- Extremely thin borders around the screen (1 cm). Adjacent screens can be separated by less than 0.8"
- A RETRODATA 801s can be upgraded to a RETROGRAPHICS 801s at the customer's location

Dimensions:		mm	Inch
W1	1378	54.25	
W2	310	12.20	
W3	757	29.80	
SW1	1358	53.46	
SH1	1021	40.20	
H1	2035	80.12	
H2	1059	41.69	
H3	815	32.09	
H4	110	4.33	
H5	1210	47.64	
D1	700	27.56	
D2	730	28.74	
D3	1028	40.47	
D4	585	23.03	



AUDIO

- Built-in stereo audio amplifier (2x15 W cont. sine wave), with 2 frontal 2-way bass reflex speaker systems (2x20 W)
- Stereo audio input on 2 Cinch (RCA phono) connectors
- 2 audio DIN connectors for external loudspeakers

WEIGHT

- Net weight: 213 kg - 470 lbs.
- Shipping weight: 313 kg - 690 lbs.

POWER CONSUMPTION

400 W

ELECTROMAGNETIC INTERFERENCE

The RETRODATA 801s and RETROGRAPHICS 801s comply with FCC part 15 Class A.

SAFETY REGULATIONS

The RETRODATA 801s and RETROGRAPHICS 801s comply with UL 1950 and IEC 950.

RADIATION REGULATIONS

The RETRODATA 801s and RETROGRAPHICS 801s comply with DHHS radiation emission standards 21 CFR Subchapter J.

ORDER INFORMATION

RETRODATA 801s:

- 230 V: 90 00851
- 120 V: 90 00858

RETROGRAPHICS 801s:

- 230 V: 90 00861
- 120 V: 90 00868

RCVDS 800:

- 230 V: 98 27450
- 120 V: 98 27459

RCVDS 05:

- 230 V: 98 27880
- 120 V: 98 27889

RCVDS 800 mounting kit:

98 27680

IRIS 800

98 27695

Projector Control software (DOS 3.x):

98 27530

Executive remote control:

98 27970

Remote infrared receiver:

98 27515

Communication cables:

- 5m (16 ft.): 98 27770
- 15 m (50 ft.): 98 27560
- 30 m (100 ft.): 98 27570

Special add-in boards:

- * Orbiting kit: 98 27781
- * Contrast modulation kit: 98 27800
- * Soft-edge matching & contrast modulation kit: 98 27810

Contact

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BARCO

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

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