IRIS³

CRT-Technology Now Becomes Plug & Play

IRIS³ (Intelligent Registration Interface System) is BARCO's fully automatic alignment system for BARCO's CRT-based projection systems. It efforlessly performs the alignment of the geometry and convergence of the projected image with exceptional speed and accuracy. BARCO's IRIS³ makes inherent set-up limitations of CRT technology transparent to the every-day user.

Easy-to-use, High-precision Automatic Geometry System
• Auto-Geometry time: less than 2.5 minutes
• Accuracy: 0.25% inside the edges of the screen

Easy-to-use, High-precision Automatic Convergence System
• Convergence time: less than 2.5 minutes
• 'Touch-up' feature for very fast (10 seconds) center convergence adjustment after source switching or after a user-defined time interval
• Accuracy: 1/4 of a line width
• Also useable in rear-projection systems with screen sizes up to 100″ (2.5 m) diagonal

Very Compact, Flexible, Built-in System
• IRIS³ is built into the projector
• Very compact monochrome CCD camera
• Use of Sub-Pixel Resolution Techniques [1], a state-of-the-art proprietary Digital Signal Processing System
• Compatible with most current and future BARCO CRT projectors
• No technical personnel needed to set-up geometry and convergence when connecting a source

New!

Now features Auto-Geometry

BARCO

Technical Specifications

Easy-to-use Convergence System

The IRIS[3] converges the image on the screen by measuring the alignment of a red and blue projected line with reference to a green projected line in a given zone. If a deviation in the positions of red and blue relative to green is detected, the IRIS[3] will instruct the projector to change its convergence settings. This process is repeated until all convergence errors are eliminated.

Automatic Geometry Process

The IRIS[3] adjusts the image on the screen by measuring the alignment of a green projected line with respect to the built-in reference source stored in the memory of the projector. The automatic geometry calculations are based on the same digital signal processing algorithms as for convergence adjustment.

Camera

Monochrome CCD camera
Resolution: 610 pixels x 312 lines

Auto-Convergence Time

Alignment: < 2.5 minutes
Touch-up: 10 seconds

Auto-Geometry Time

Alignment: < 2.5 minutes

Special Features

• The incoming video signal from the camera is digitized and edited through sophisticated, proprietary digital signal processing algorithms, called 'Sub-Pixel Resolution Techniques'[1]
• Auto-Convergence can be carried out on the selected source or on all sources
• Auto-Convergence is simultaneously adjusted in two adjacent zones . This results in more accurate and faster alignment compared to the conventional iterative process
• Auto-Convergence can be selected to start from the current convergence settings or from midposition
• 'Touch-up' feature for very fast static convergence adjustment after source switching and/or after a user-defined time interval
• The system can be used in table or ceiling mount configuration
• Auto-Convergence can also be used in rear-projection
• Self-Diagnostics feature checks all hardware components for correct operation
• No additional hardware is required when upgrading from IRIS[2] to IRIS[3]
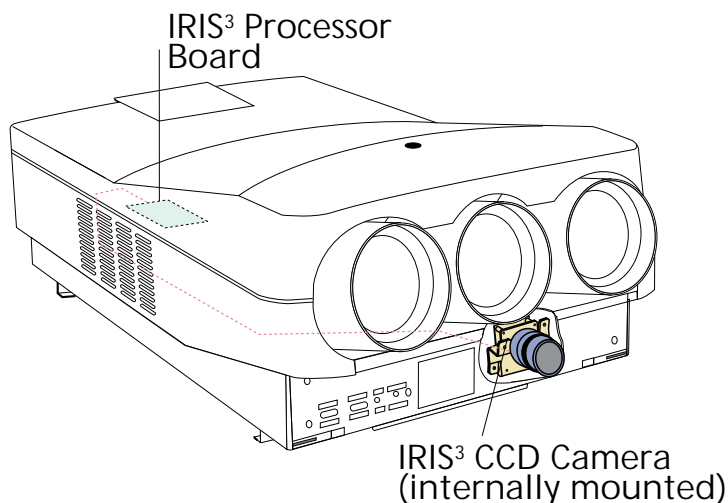
Compatibility

The IRIS[3] can be installed in all current BARCO CRT projectors, including the 708, 808s, 1208s/1209s and 1609s Series, as well as all future BARCO CRT projectors

Order Information

IRIS[3] Kit   R9828275
for 800/1200 Series

IRIS[3] Kit   R9828425
for 700 and Retro Series

Firmware Upgrade for projectors equipped with IRIS[2], available on request

IRIS[3] Processor Board

IRIS[3] CCD Camera
(internally mounted)

(1) Patent Pending

ISO 9001 DESIGNED UNDER

BARCO Projection Systems is an ISO9001 registered company.

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