Barco Meeting Room Visual Collaboration Solution with Polycom HDX Series

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Created by: Barco

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Polycom Inc.
6001 America Center Drive
San Jose, CA  95002 USA

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About this guide

The Partner Solutions Guide describes how a partner solution and Polycom combine to solve specific customer needs.

The Polycom Partner Solutions Guide for integration with Barco is for administrators who need to integrate Polycom HDX Series with Barco Meeting Room Visual Collaboration solutions.

Please read the Polycom and Barco documentation before you install or operate the system.
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Introduction
High profile meeting rooms and boardrooms are where high impact, strategic decisions are made. Therefore having an efficient and detailed view of complex data sets is paramount. You thus need a solution that can bring you both the big picture and the flexibility of telepresence collaboration.

View Better, Share Faster, Collaborate Easier

Overview

About Barco
Barco, a global technology company, designs and develops collaborative visualization solutions for a variety of selected professional markets: control rooms, defense & aerospace, digital cinema, healthcare, media & entertainment and simulation & virtual reality. In these markets Barco offers user-friendly imaging products that optimize productivity and business efficiency. Its innovative hardware and software solutions integrate all aspects of the imaging chain, from image acquisition and processing to image display, distribution and management. Barco has its own facilities for Sales & Marketing, Customer Support, R&D and Manufacturing in Europe, North America and Asia Pacific. Barco (NYSE Euronext Brussels: BAR) is active in more than 90 countries with about 3,900 employees worldwide.

About Barco OBLX
Barco's professional-grade, high-resolution LCD displays are the perfect solution for tiled video wall applications in small to medium-sized collaboration rooms. Barco’s OverView series comprises 55” LCD displays with LED backlights, combining high brightness and a wide color gamut with an extremely narrow bezel for excellent tiled visual performance.

![Picture 1 - Barco OBLX in a 2x2 config.](image1)
![Picture 2 - Barco OBLX in a 4x2 config.](image2)

About Barco CRPN-52B Panorama Projector
Barco’s panorama projector is the perfect solution for wide screen projection in business, educational or governmental applications that require multi-windowing features. With its exceptionally wide 21:9 aspect ratio, panoramic image and 2,560 x 1,080 native resolutions, the projector is the ideal alternative for blended projection. The CRPN-52B enables meeting participants to easily share multiple windows in one single, crisp image and allows them to collaborate locally or remotely on large data sets. Thanks to the
CRPN-52B’s outstanding image quality, high contrast and low noise levels, it improves collaboration for effective meetings.

About Barco ClickShare
Barco ClickShare makes connecting to the meeting room’s video system a matter of clicking a button. This one click wonder not only helps the presenter get the presentation on-screen in a second, but it also allows the other people in the meeting to participate more actively. Sharing can be done via laptop PC or MAC, or via iOS and Android-powered mobile devices. The result is enhanced meeting efficiency and better decision-making. By enabling to display the content of up to 4 users simultaneously, the Barco ClickShare Base Unit brings a complete ClickShare collaboration experience. 64 Buttons can be wirelessly connected to the Base Unit, ready to share. Furthermore, perfectly synchronized sound and video ensures that movie clips can be optimally enjoyed.

About Polycom HDX Series
With Polycom® HDX® solutions, connecting and collaborating visually with anyone across the organization is as easy as making a phone call. The Polycom HDX Series connects people and enhances their
collaboration. Whether holding a simple interview across campus or staging a large project team meeting with members dispersed across the globe, there are HDX solutions that fit the bill.

Polycom HDX Solutions deliver:

- Flexible, cost-effective, high-definition communications from low bandwidths using standards-based H.264 High Profile technology
- Polycom UltimateHD technology: HD voice, HD video, and HD content for exceptional performance
- Natural white boarding collaboration with Polycom VisualBoard Technology that is embedded into many HDX systems
- Breakthrough voice locating technology with the optional EagleEye Director allows users to have a truly in-person experience in any size conference room
- Increased usability and simplicity, with the optional Polycom Touch Control giving users total control at their fingertips
- Patent-pending Polycom SmartPairing™ technology makes it simple to use your own tablet to start and manage video calls
- Polycom's Packaged Solutions offer a single part number for the entire package for monitors, audio equipment and video system

Polycom® HDX® 9000 series systems powerfully and seamlessly integrate with rich-media tools to enhance any presentation or meeting environment. Through integration of Polycom HDX 9000 series systems' powerful set of APIs and abundant video and audio connectors, customers can create and customize conferencing solutions for simple to advanced applications, including auditoriums utilizing multiple cameras, projectors and displays; executive boardrooms with touch-panel displays, recessed lighting and individual participant monitors; and training facilities with high definition lecture recording systems and HD document cameras. Polycom HDX 9000 series systems also offer greater conferencing flexibly with the optional embedded multipoint feature, which allows multiple sites to be brought online quickly and easily.
Combined Solution
Firstly, by using a Barco professional display controller to drive the Barco 4x2 OBLX, this enables utilizing a high native resolution of 7680x2160 pixels to show collaboration content on an ultrahigh definition visual canvas. The Polycom HDX codec serves as an input to the Barco controller so as to be effectively displayed on the Barco 4x2 display.

Secondly, using Barco ClickShare enables more productive meetings by allowing meeting attendees to spontaneously participate with just one click of a button. Content of the composition is handled automatically to respect data integrity and create the best use of screen real estate. Thus, connecting the output of the Barco ClickShare as an input to Polycom HDX codec enables the flexibility of ClickShare to be extended to the far side as well. Thus, both sides can easily share content from their PCs, Macs or mobile devices.

Figure 1 - Technical schematic of the Polycom/Barco solution
Barco OBLX Implementation

Design Considerations
The Barco OBLX is a free standing structure with built in near seamless LCD panels. During pre-installation design the OBLX should be planned for being installed in a level floor surface. The system is designed to be self-supporting and therefore does not require anchoring to the floor or walls within the facility. Placement of the panels on the structure offers a limited range for height placement to accommodate optimum viewing within the space.

The OLBX structure can be used with the Barco 55” LED lit LCD panels only, which are available in the NSL-5521 version or the MVD-5521 version.

See the attached links for more information on the structure and panel options and specifications:


Installation

Barco ClickShare, OBLX display wall and controller with Polycom HDX

The OBLX video display wall consists of multiple HD LCD panels, depending on the configuration, that creates one large continuous display canvas with aggregated resolution. For example, a 4 wide by 2 high OBLX display configuration consists of 8 HD (1920x1080) LCD panels providing a display canvas of 7680 x 2160 pixels. When driven by a Barco video wall processor solution, a large MS Windows desktop can be generated to fill the complete display canvas at native resolution and support local applications installed directly on the processor, allowing each application to be opened at full resolution of the overall display. The Video wall processor contains input capture cards to accommodate the connection of various external graphical or video sources to be displayed on the wall. Considered an external “source” to the video wall processor, the Barco ClickShare base station can supply the video signal output to the processor. This allows the content shared to the ClickShare unit to be displayed within an independent source window that can be opened, sized and positioned anywhere on the display wall. Additionally, any Polycom codec with a video output connection in the form of DVI-I, VGA, HDMI or Display Port, can be connected to the Barco video wall processor as a video source input. This source can also be independently opened, sized and positioned anywhere on the display wall.

The ClickShare base unit can simultaneously feed the Polycom HDX series codecs as a source input to be shared across the Polycom network. The combination of the Polycom HDX codec and the ClickShare base unit as sources to the video wall processor can be presented on the local and remote display walls as a pre-defined layout, containing both video and data content in large scale and high resolution.

Please refer to the technical diagram above for an example illustration of the system interconnection.

As the installation of each component of the solution various depending on the configuration, we refer to the separate detailed installation documents available to Barco partners online via the my.barco.com portal.


Barco ClickShare and CRPN-52B Panorama Projector with Polycom HDX

Since the Barco CRPN-52B projector supports the direct connection of multiple sources simultaneously, the video outputs of the Barco Clickshare base unit and a Polycom HDX codec can be interfaced with the projector and presented in dual head mode as two separate windows simultaneously within the projected local image. Additionally, the 2nd ClickShare output, via the Display Port to Dual Link active adapter, can be fed into the Polycom codec as a "Content Input" and shared with the remote location.

As the installation of each component of the solution various depending on the configuration, we refer to the separate detailed installation documents available to Barco partners online via the my.barco.com portal.


For More Information

Product Information
For more information about Barco, visit www.barco.com.

For more information about Barco ClickShare, visit http://www.barco.com/clickshare.


Barco Support
Online support and by country support information is available at http://www.barco.com/en/Support

Barco Contact Information
Suchit Rout  
Director Global Strategic Alliances  
suchit.rout@barco.com

Corwin Hamm  
Business Development Manager, North America  
corwin.hamm@barco.com

Polycom Support
For support or service of Polycom products, please contact your Polycom distributor or go to Polycom Support at http://www.polycom.com/support

For more information about Polycom Technology Partner Program and the Technology and Developer Partner solutions, visit http://www.polycom.com/partners
Test/Validation Annex

Barco’s display, projection and video processing solutions are all designed to support various video signal types and formats. As such, these devices are fully compatible with the Polycom HDX series codecs, supporting both analog and digital RGB input and output capabilities with resolutions, including but not limited to, 720p, 1080i, and 1080p.

The Barco system components only support distribution of the video signal from the Polycom codecs. The audio output signals are processed through other devices. However, the Barco ClickShare unit supplies video and audio outputs that have been tested with the Polycom HDX series inputs, allowing both audio and video signals from the ClickShare to be shared as part of the VTC session.