

Take your VR expertise on the road

Barco's Transportable Cave



For both beginning and advanced virtual reality users

The transportable cave is a great solution for both new and experienced virtual reality users. It allows people who already own a cave or power wall to expand their capabilities by making the equipment and expertise accessible to their customers, colleagues, suppliers and other important stakeholders.

This technology allows people who currently rely only on head mounted devices (HMD) to begin exploring the benefits of a more collaborative and comfortable VR display solution. Being able to step into the cave with customers and colleagues while seeing each other and viewing content together is a major advantage of the cave compared to an HMD.

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Work in a comfortable way, expand collaboration, see more detail

Compared to an HMD, any Barco cave solution will allow the user to expand collaboration, see more detail and work in a more comfortable, ergonomic way. The 3D glasses are lightweight, wearable over reading glasses, and allow users to still see each other and the environment around them.

The cave provides a simultaneous view of the content by multiple people in the same space. One key user is tracked and responsible for controlling the content, and others can be in the cave with the key user with all parties able to interact with each other. They can review the details of the project together in the same environment, tremendously enhancing the scope of collaboration.

Multiple projectors provide content — 3 in total for this system. Images are projected onto 2 side walls and 1 floor screen. The sides are cave-optimized rear projection screens to provide wide viewing angles and high contrast. The broader viewing angle combined with the millions of pixels from the projectors' displays more detail and offers significantly more insight into the project.

The transportable cave makes all of the above possible, allowing you the flexibility of taking your VR expertise and your project on the road.



The concept of the transportable cave

The system is comprised of 2 sides and one floor screen. Major components include the projectors, the projector mounts, mirrors and the screens. Rear projection is applied on 2 sides, while front projection is applied onto the floor.

For each side, the major components are built inside a flight case, which holds the high quality rear projection screen, the projector, projector mount and mirror. Extra tools such as a ladder and shelves are mounted inside each flight case to make it a quick and easy process to set up and deploy the system.

The floor screen is stored in one of the side flight cases, with the floor-supporting structures located in the other side flight case. It is recommended to store projectors, lenses, cables in their boxes during transportation, for which another flight case is provided. A total of 3 flight cases is used, one for each side of the main cave structure and a third one for storage.

Compact, high-performance system

The T-CAVE is equipped with 3 F0-4K6 3D laser-phosphor projectors that are designed to provide a smooth and bright 3D stereo experience. The combination of these projectors and ultra-short throw lenses and mirrors, makes Barco's Transportable Cave a very compact system.

The system's rear projection screens are based upon Barco's diffusive rigid acrylic screen. Barco screens offer high contrast, superior image sharpness and wide viewing angles. A uniform image is maintained with accurate color reproduction from all perspectives.

Barco has a long track record in developing, designing, manufacturing and installing superior rear projection systems.



Overview specifications

TCAVE F70

Screen dimensions	2000 mm x 2000 mm
Projector type	Barco F70-4K6 3D
Illumination	Laser Phosphor
Pixels per screen	1600 x 1600
Pixel size	1,25 mm
Screen type (side screens)	Barco High contrast Rear projection screens
Screen type (floor screen)	Front projection screen
3D stereo	Active stereo @ 120 Hz
Required footprint (system in operation)	- 3200 mm x 3200 mm / 11 ft x 11 ft (w x d) - 3300 mm / 11 ft height (300 mm/1 ft top clearance needed)

Skills and expertise, around the world

Barco has the necessary experience and global reach to handle projects in all corners of the world. With offices in over 90 countries and a globally managed spare parts inventory, Barco support personnel are always accessible and dedicated to assist our customers as quickly as possible. In this way, we can reduce system downtime to a minimum, and keep you and your customers satisfied.

More information

Learn more about how you can make use of a high-quality, high-performance, compact display solution that is now transportable. The possibilities are now endless when it comes to taking your VR experience wherever you may roam.

Feel free to contact your Barco representative for more information.

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