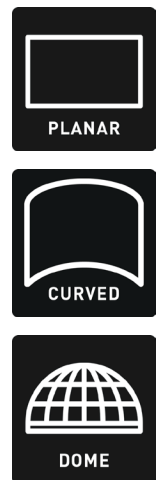
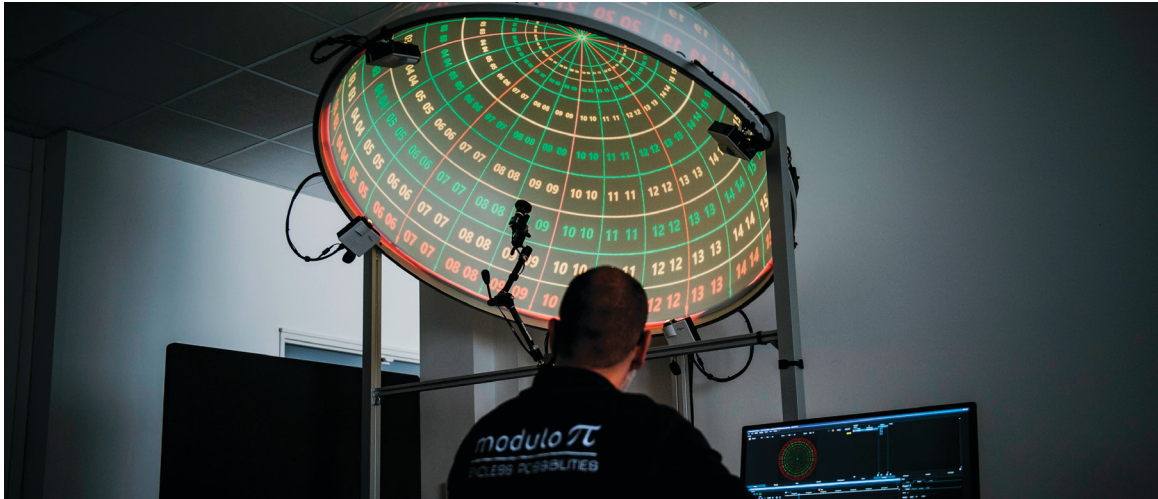


Auto-Calibration



Multi-projector auto-calibration system by Modulo Pi

REF: AUTOCAL-1-OUT

Optional module for automatic multi-projector calibration

Achieve a perfectly warped and blended projection within minutes thanks to Modulo Pi's auto-calibration solution. Available as an option for the **Modulo Player** and **Modulo Kinetic** media servers, the auto-calibration feature allows to automatically align multiple video-projectors on **planar, curved, and dome surfaces** for a pixel-perfect projection.

Developped by Modulo Pi, the auto-calibration module relies on PoE cameras for fast and simplified cabling. Use one camera to capture your whole projection surface, and the auto-calibration module will do the rest. Your Modulo Pi media server will project a series of patterns, and video-projectors will automatically align in a few minutes. The versatile masking feature ensures a perfectly fine-tuned projection.

With the auto-calibration option added in your **Modulo Player** and **Modulo Kinetic** media servers, you will benefit from a **reliable and significantly simplified workflow**: Get a high-precision edge blending, warping, and play your content within minutes, and with zero latency.

Hardware specifications

Dongle

Dongle-based option for Modulo Player and Modulo Kinetic
Dongle embedded in server or available as stand-alone
Dongle must remain connected to server(s)

Outputs

Support of independent calibration groups
Support of stacked video-projectors (dual, triad, quad...)
Price per output. Contact us for more details.



Optional travel case
with custom inserts

Model



Media servers

Mono server supported⁽¹⁾

Mono & multi-servers supported
Unlimited number of servers

Outputs / Canvas

Up to 6 outputs WQXGA⁽²⁾ or 4 outputs up to 4K⁽³⁾

Up to 6 outputs WQXGA⁽²⁾ or 4 outputs up to 4K⁽³⁾ in mono-server config.
Unlimited number of outputs in multi-servers configuration
Unlimited resolution in multi-servers configuration

⁽¹⁾ Compatible with Modulo Player Remote for PC only

⁽²⁾ 2560x1600

⁽³⁾ 4096x2160

Reference

AUTOCAL-1-OUT	Multi-projector auto-calibration module (price per output)
AUTOCAL-LUCAM	PoE camera with 1 x 15m cable
AUTOCAL-FILENS	High resolution fish-eye lens
AUTOCAL-8LENS	High resolution 8 mm lens
AUTOCAL-CASE	Travel case with custom inserts for 1 x PoE camera, 15m cable, auto-calibration dongle, and up to 2 lenses

Camera specifications

Camera and lens

Power over Ethernet camera for fast and simplified cabling
Compatible with fish-eye lenses for dome configurations
One camera required for each auto-calibration group

References supported below. Available through Modulo Pi,
or directly through the manufacturers or resellers.



[LUCID - Triton 20 MP](#)



[FUJINON - FE185](#)



[FUJINON - CF8ZA-1S](#)

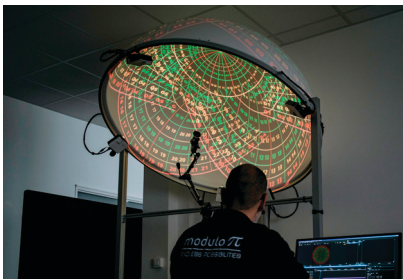
Software specifications

Software

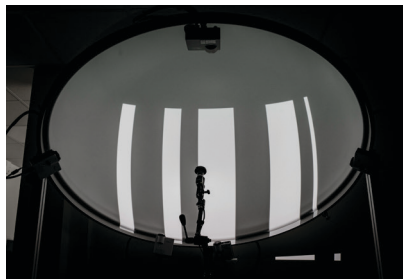
Auto-calibration wizard embedded in Modulo Player and
Modulo Kinetic for quick and easy calibration
One-click calibration mode

Advanced masking feature for pixel-perfect projection
Global warping capability
Zero latency

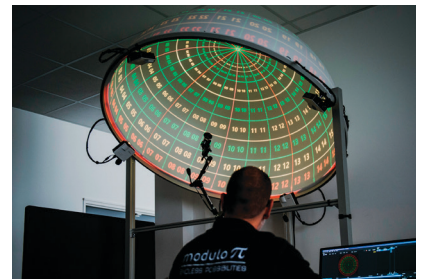
Process



Dome before calibration
5 video-projectors - 1 PoE Camera

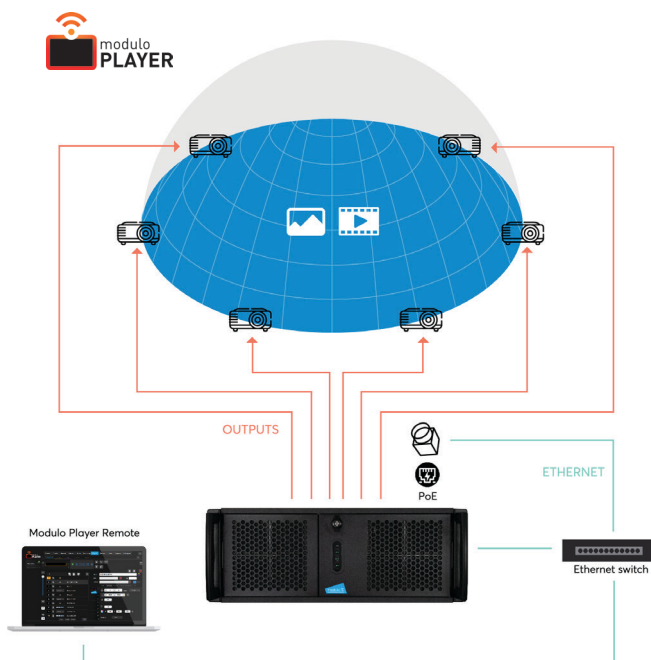


Patterns projected during
auto-calibration phase



Dome after calibration with
automatic blending and warping

Mono-server configuration Diagram with Modulo Player and a dome screen



Multi-server configuration Diagram with Modulo Kinetic and a semi-elliptical screen

