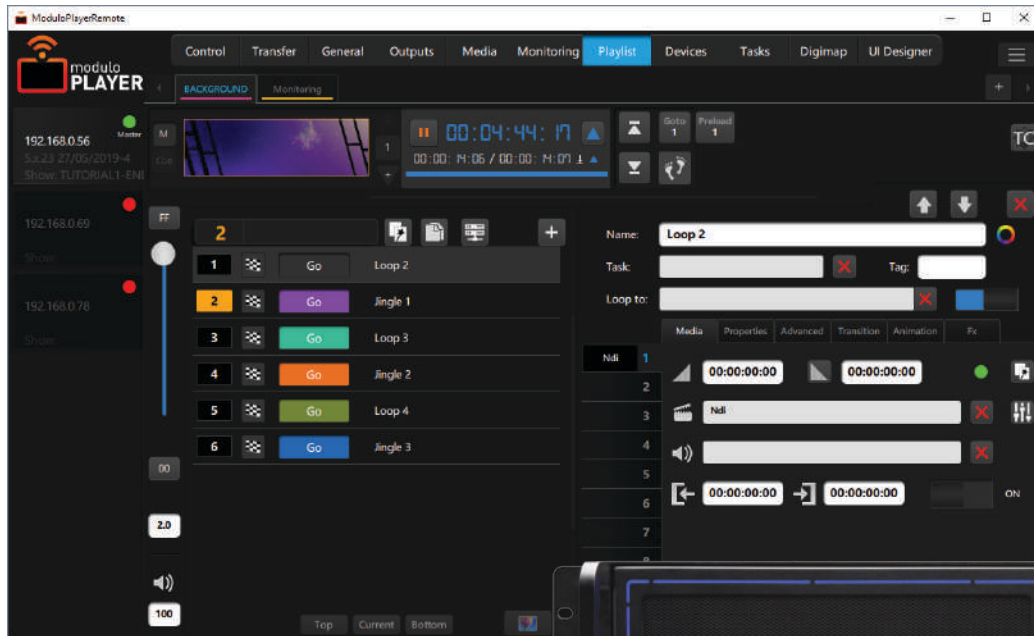modulo **PLAYER**

More than a Media Player
Modulo Player, a cost-effective media server
ideal for your everyday projects

Easy to learn, setup, and operate, Modulo Player combines the extensive capabilities of a Media Server, a Live Mixer, and a Show Controller. Seamlessly process media, encode, and play your show through its super intuitive user interface. Simple-to-use workflow and playlist enable fast show setup, and last-minute changes.

- Flexible Playlist management
- Advanced 2D mapping through our exclusive X-Map function
- Embedded low-latency Live Mixer **| INDUSTRY FIRST |**
- User-friendly tools for Interactivity
- Multi-projector Autocalibration module **| BY MODULO PI |**
- Easy, yet powerful Show Control
- User Interface Designer to easily create your own UI
- True multi-user mode for optimized setup and operation
- Available in 4 customizable hardware configurations

*Hardware + Software
designed & manufactured*

modulo π

Contents

## Modulo Player Remote, embedded Remote Control Software

Modulo Player comes with **Modulo Player Remote, a dedicated Remote Control Software** designed to easily prepare and control your show.
Compatible with PC and Mac, Modulo Player Remote centralizes the whole setup, from media transfer to show control through an intuitive sequenced tab menu.

Intuitive and multi-user

The setup menu in Modulo Player Remote is straightforward and logical: The system is ready to use after just a few clicks.
To maximize efficiency, Modulo Player Remote is a **multi-user application**. Several users can connect to Modulo Player Remote from separate PC/Mac, and run some features simultaneously, such as warping outputs or encoding media.
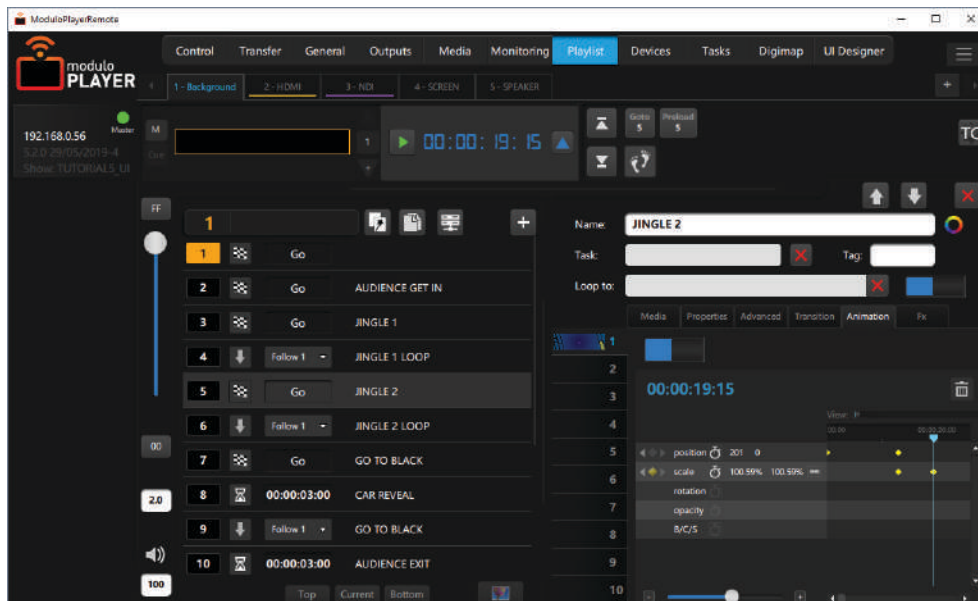
Media servers in network

You are offered the ability to work with one or several Modulo Player severs in network.
No matter the number of server(s), one Modulo Player Remote is needed to work on the server(s) settings, media encoding, transferring, and show playback.

Once your setup is done, the playback servers can run autonomously without the Modulo Player Remote. This helps optimize costs and maintenance for some projects, such as permanent installations.

Modulo Player Remote

MASTER
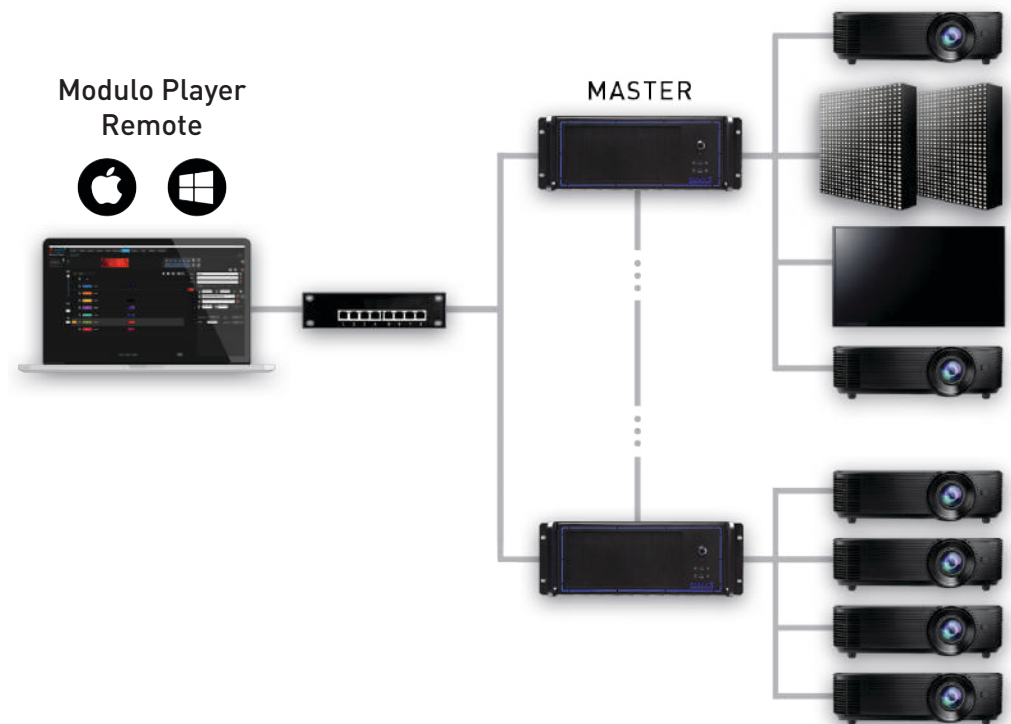
Smooth media playback for a variety of formats

Modulo Player is designed to process media seamlessly and provide the best image quality, while running on a streamlined hardware configuration.
All supported media formats were selected so that they always run smoothly, and can be synchronized on all the servers.

Image:
JPEG
PNG [2]
TIFF [2]

Audio:
AIFF
FLACC
OGG
WAV

Multi-channel audio with professional sound cards & ASIO

Independent audio channels for simplified routing to one or several outputs

Video:
Apple ProRes 10-bit support
NotchLC 10-bit support
GoPro Cineform
H.264 - 4:2:0
HAP, HAP Alpha [2], HAP Q, HAP R
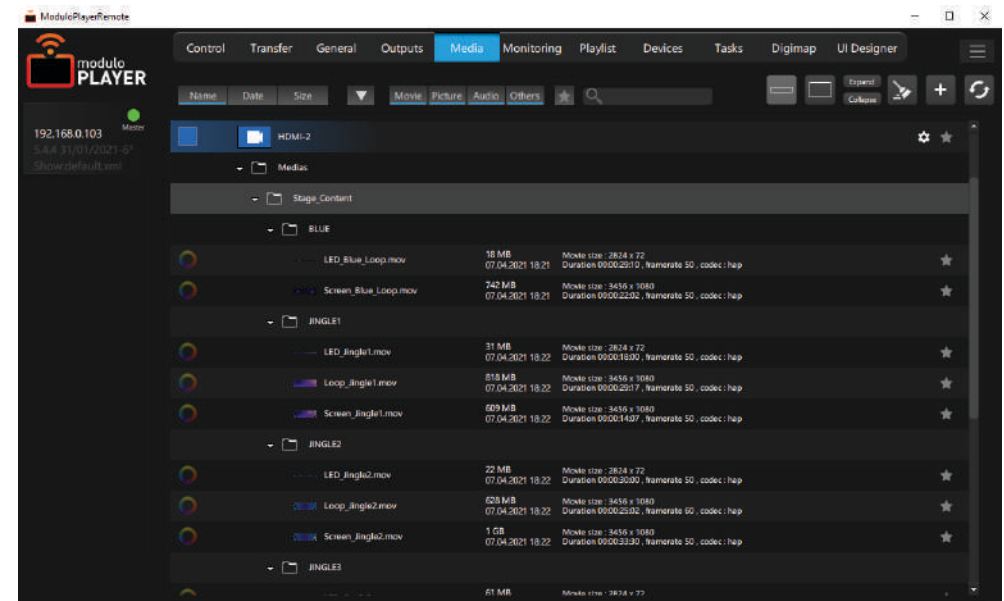MPEG2 - 4:2:2

Uncompressed Video [1]:
DPX 10 bits sequence
QuickTime RGB [2]
QuickTime YUV 8
QuickTime YUV 10 bits
TGA sequence [2]

Stereoscopic projection [1]:
3D 120Hz processing

Other:
Clock [2]
Counter / Countdown [2]
Scrolling text [2]
ISF
Solid
Test patterns
Text [2]
Web pages

[1] *Depending on Modulo Player model*
[2] *Alpha channel supported*

Soft edge blending capabilities

Achieve seamless projection using multiple video-projectors.
Display a test pattern on your outputs (grid, fine grid, greyscale, checkboard, SMPTE or colors). Easily adjust any parameter including the soft edge length, gamma, gain, black level...

Color level adjustment

It is possible to adjust the RGB gamma and level globally and/or by color channel.
Color level adjustment can apply to an output or an X-Map (see next section).
It provides the ability to easily create custom masks: Simply use a PNG still image as a mask on your output. It will use the alpha channel of your PNG as mask.
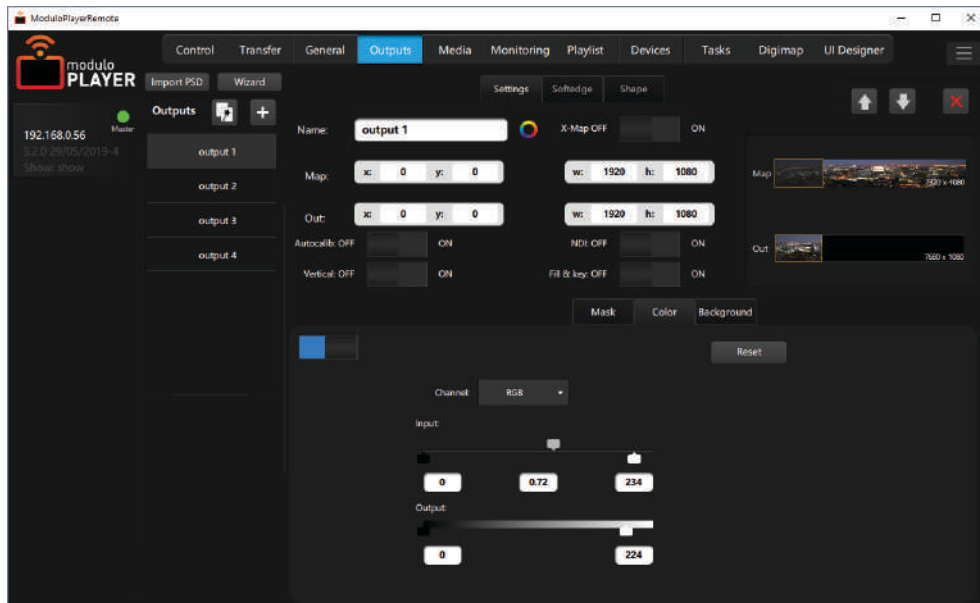
Soft edge blending configuration featuring Live Mixer, Show Control and Speaker panel

See full application note
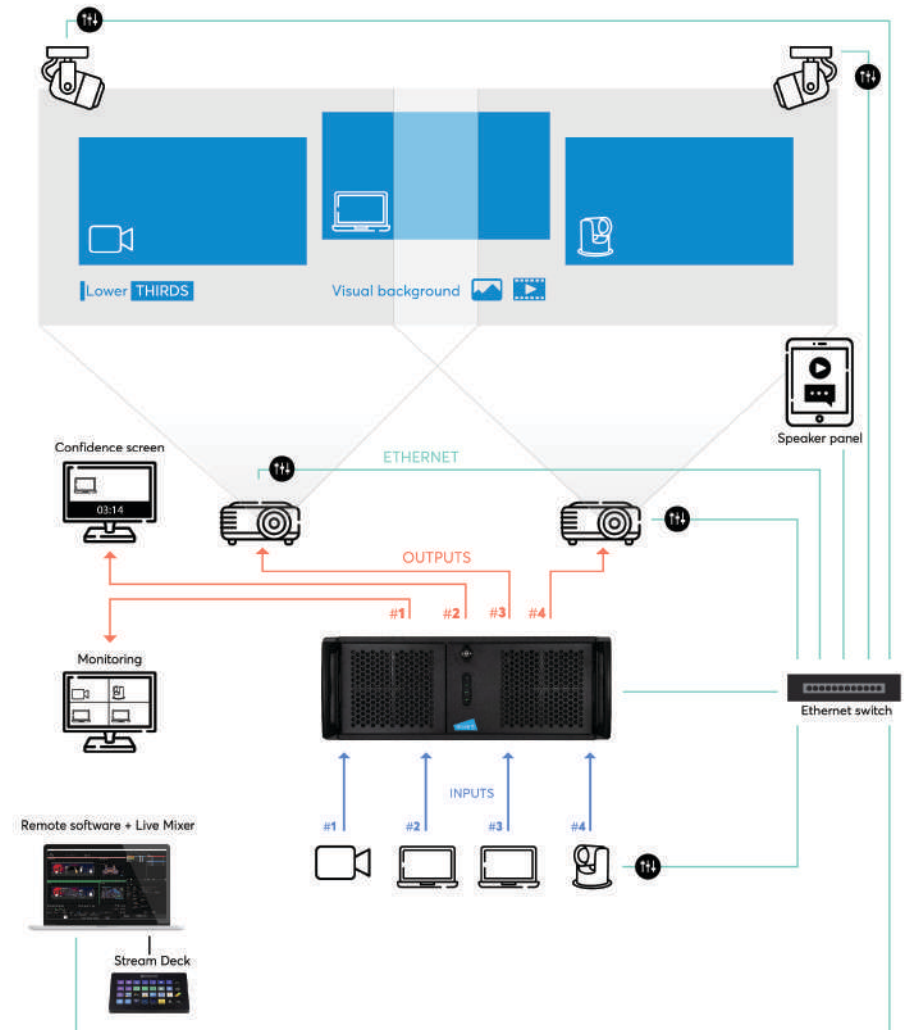
Keystone and Curve modes
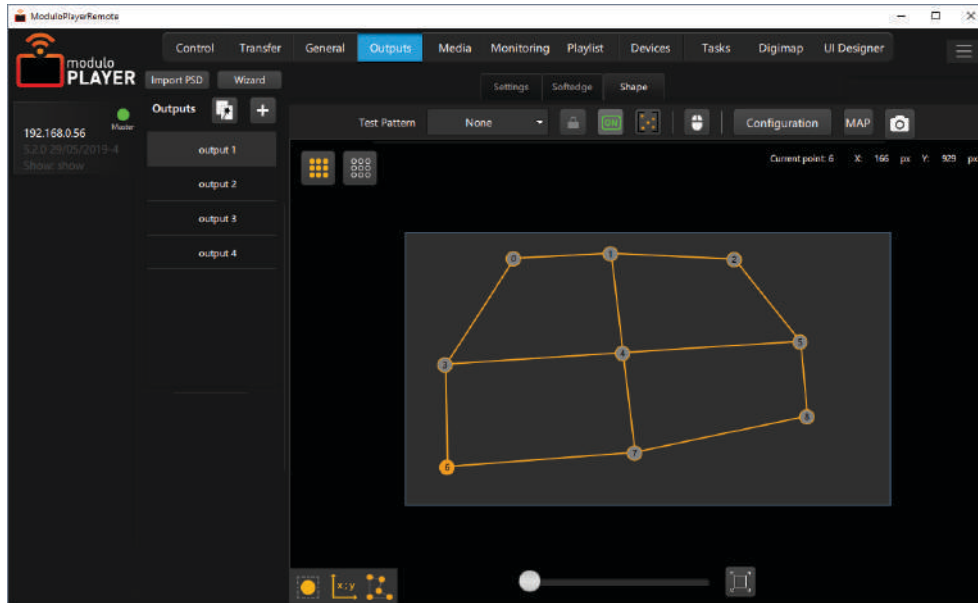
Modulo Player offers a complete set of tools for projection mapping, including Keystone 2x2 and Curve modes.

In Curve mode, easily increment the number of control points with existing warping work perfectly maintained.

For projection mappings involving different levels of depth or complex shapes, basic warping tools are not adapted. 3D mapping is an alternative, but it implies a complex and expensive workflow.

Modulo Pi has developed a 2D mapping alternative: The X-Map function.
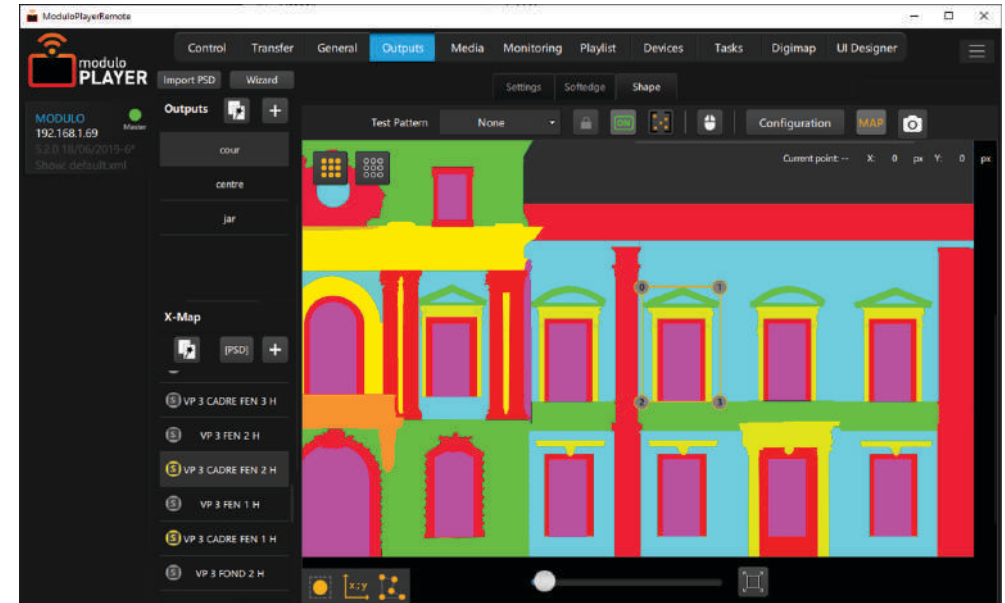
Exclusive X-Map function for advanced 2D mapping

Stunning projection mapping is within your reach thanks to the X-Map feature, an exclusive function developped by Modulo Pi.

X-Map provides a **user-friendly and cost-effective approach to video mapping with a simple 2D workflow**: Photograph your projection area, organize layers in Photoshop, then import the Photoshop file in Modulo Player Remote, and warp layers independently.

1.

2.

3.

Multi-projector Autocalibration
allowing pixel-perfect projection

Multi-projector Autocalibration in dome configuration
See full application note
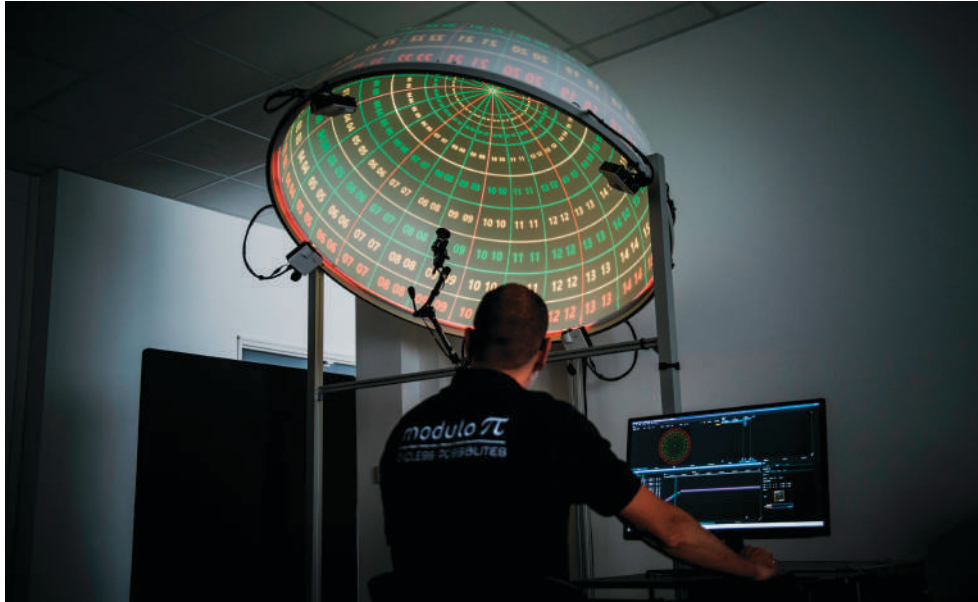
Automatic alignment of multiple video-projectors

PLANAR   CURVED   DOME

Modulo Pi developed its own autocalibration solution.
Available as an option, the autocalibration module allows to **automatically handle multi-projector soft edge blending and geometry on planar, curved, and dome surfaces.**

Up to one Modulo Player server can be supported, i.e up to 6 x WQXGA outputs, or 4 x 4K outputs. The dongle-based option relies on Power over Ethernet (PoE) cameras for fast and simplified cabling.
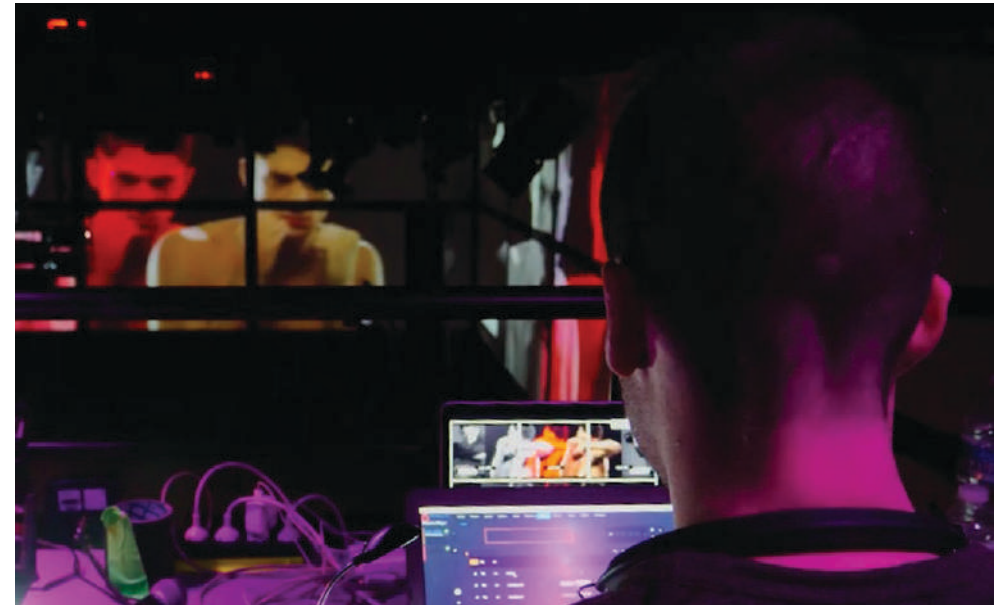
Using the Modulo Player and the auto-calibration option, **high-precision edge blending, warping, and media playback is achieved within minutes and with zero latency.**

See Autocalibration datasheet

OUTPUTS

PoE

ETHERNET

Modulo Player Remote

Ethernet sw

User-friendly and versatile playlist system

Modulo Player is based on an intuitive playlist system.

Available through Modulo Player Remote, the playlist tab allows fast show encoding. Very flexible, the playlist allows to **easily deal with last-minute changes.**

- Unlimited number of playlists and cues
- Cues can be triggered manually or automatically
- Advanced layer settings (position, scale, rotation, color, movie speed...)
- Synchronization with MTC or LTC timecode [1] whenever needed

[1] Timecode card reader available as an option

Benefits of the playlist management:

- **Live events:** Medias are preloaded. To cope with last minute changes, jumping from a cue to another can be done instantly in cut or fade.

- **Permanent installations:** A Loop mode allows to seamlessly and endlessly play your media.

## As a world first, an embedded low-latency Live Mixer

All the capabilities of a true live mixer and a versatile media server, now within one fully integrated system. **As an industry first, Modulo Player embeds a low-latency live mixer:**

- Dedicated application (PC, Mac)
- Live Program, Preview, and Confidence screens
- Unlimited number of destinations and mix engines
- Workspace area selection turned into a source
- Presets management & Quickset function
- Mask & Keying
- Transition effects: fade, flying,...
- Cut & Take buttons

↗ *See Live Mixer datasheet*
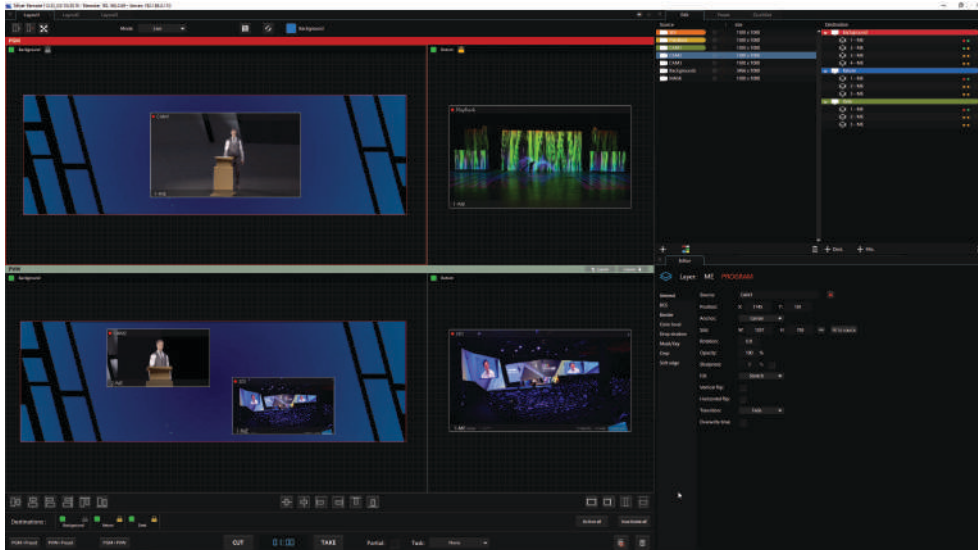
Multi-user capabilities

For better ease of setup and operation, Modulo Player is a **multi-user device**: Several operators can work simultaneously on the media server and mixer interfaces. **All contents and operations are perfectly synchronized.**

Full support of the Stream Deck control pads

Thanks to an editor integrated in Modulo Player Remote and Mixer application, easily customize the LCD keys of the Stream Deck Mini, Stream Deck, or Stream Deck XL. **All parameters entered in the editor appear real-time on the Stream Deck pads.**
Modulo Player and its embedded mixer can support any number of Stream Deck pads simultaneously, providing a user-friendly solution to control presets or recall tasks.

modulo PLAYER
Live input boards
to match any of your requirements
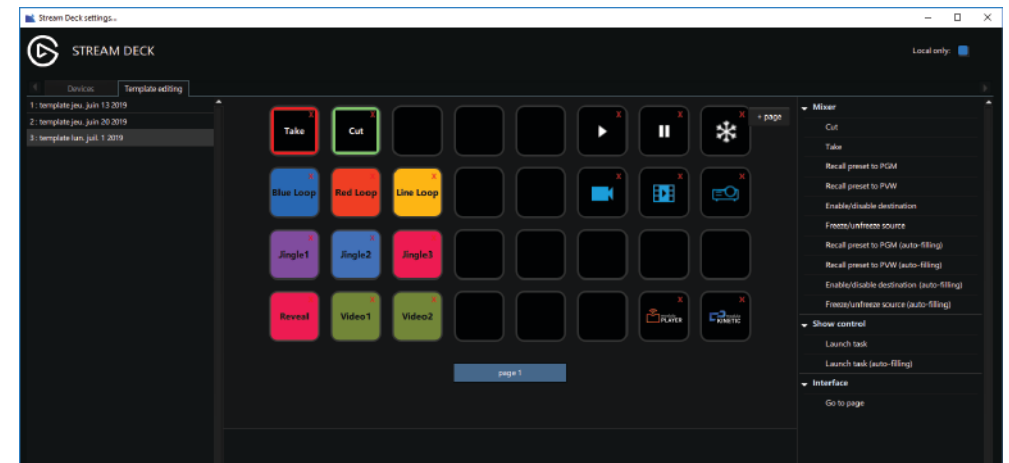
Live capture cards and Flex modules

Our GPU-based solutions integrate live input cards, including FLEX video I/O technology by Deltacast.

- Up to 12 x SD/HD/3G-SDI, or 6 x 12G-SDI inputs
- Up to 2 x 4K HDMI 2.0 inputs

FLEX
DELTACAST FLEXIBLE VIDEO I/O PRODUCTS
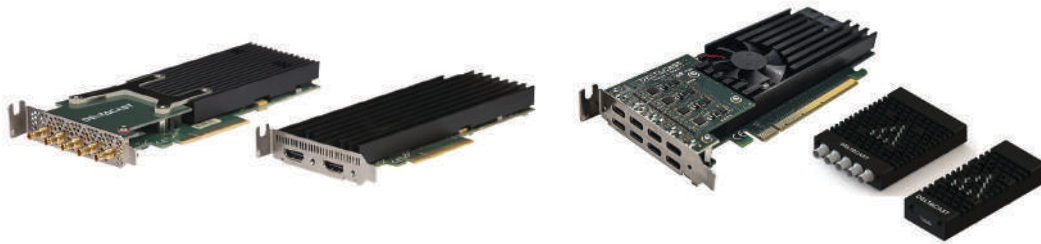
Newtek's NDI technology

NDI

Modulo Player supports the NDI (Network Device Interface) technology by NewTek.
It allows you to stream multiple high-quality live video sources across an Ethernet network, and use them as inputs.

Visualize all your live sources on your custom designed monitoring output and/or stream them over NDI.

Soft edge blending & Projection mapping featuring Live Mixer, LED mapping, Show Control and Speaker panel

See full application note
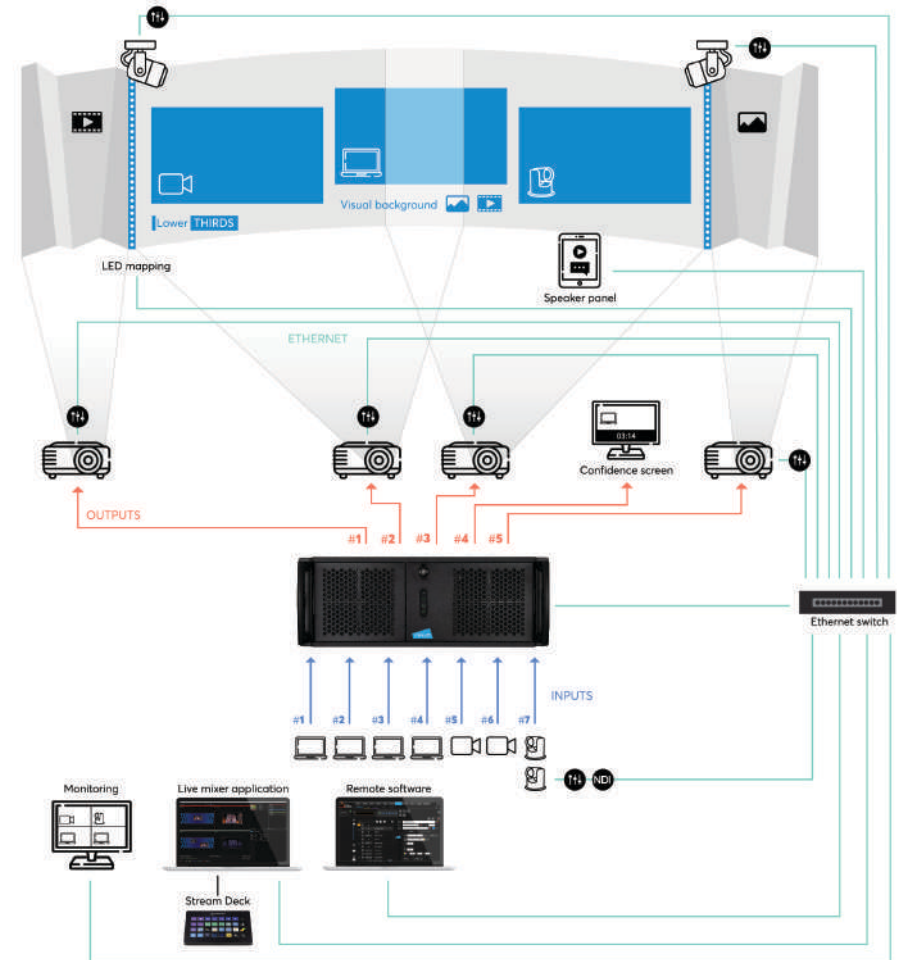
Embedded Chroma Keyer

To support the production of virtual events, Modulo Player offers green screen keying. Thanks to Modulo Player's Chroma Keyer, easily key out your backdrop green screen and replace it with an image or video content.
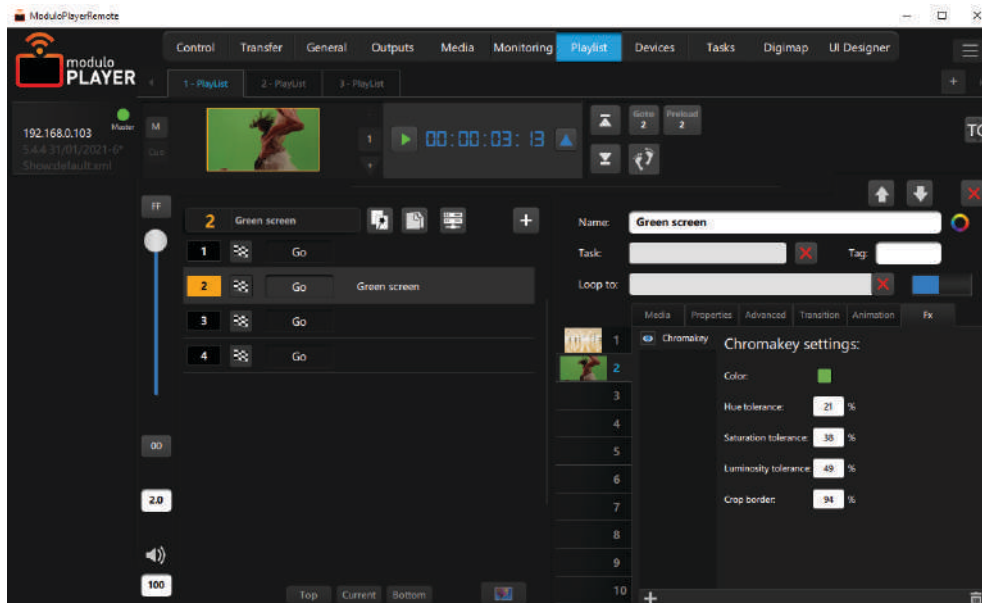
DMX & Art-Net compatibility for lighting control

Easily playback video content as DMX to control LED stripe and lighting fixtures. Modulo Player offers a video to Art-Net converter which uses the GPU to deliver pixel accurate DMX over Ethernet in real time.
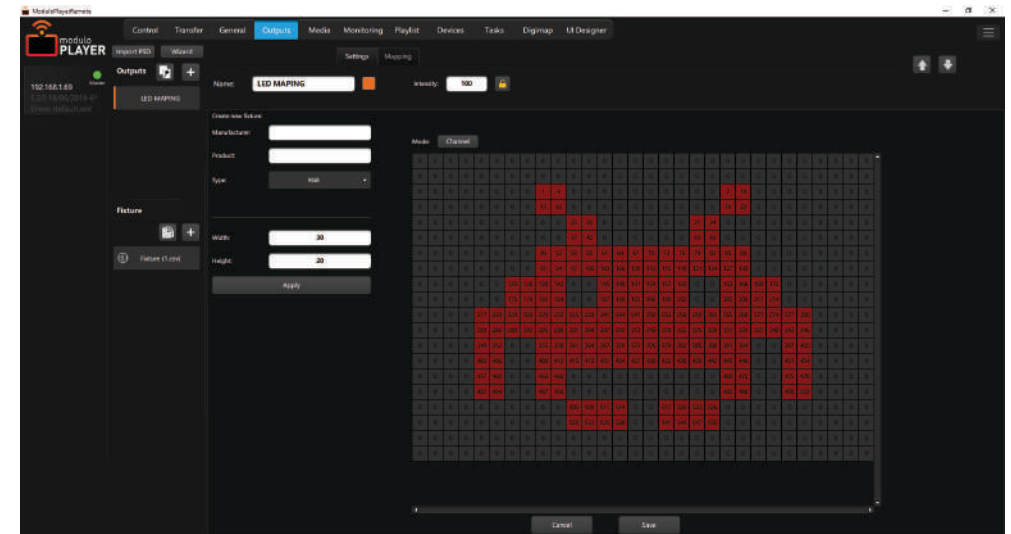
An extensive library of devices

Modulo Player embeds an large library of external devices including video-projectors, matrix switchers, video processors...
The preloaded devices are available with their main parameters to allow a fast and easy control through Modulo Player.
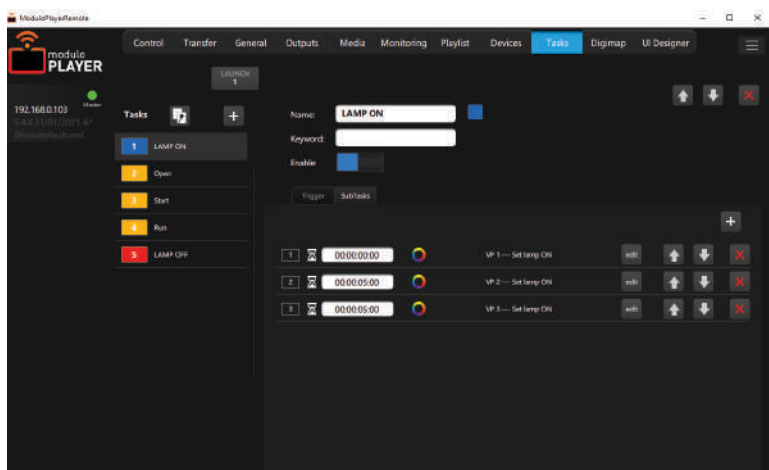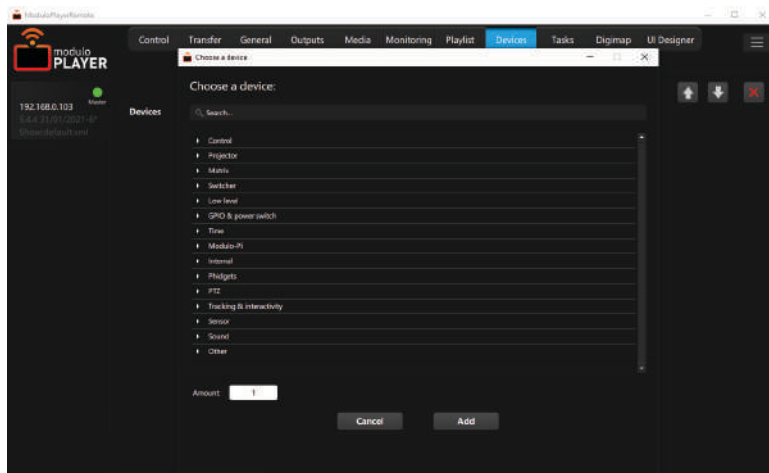
Automated tasks and subtasks

Save an external Show Control solution. **Create, control, and play automated tasks for external devices directly in Modulo Player Remote.**
Trigger tasks from specific devices such as Calendar, MIDI, OSC, GPIO, Art-Net and DMX.

Tasks:

Art-Net

DMX   MIDI

GPIO   OSC
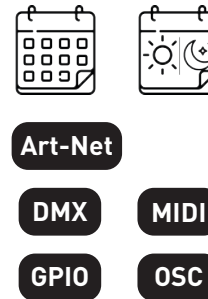
Triggers:

• Manual
• Playlist
• Live Mixer
• Stream Deck
• Custom panels
• External devices
• External Show Control
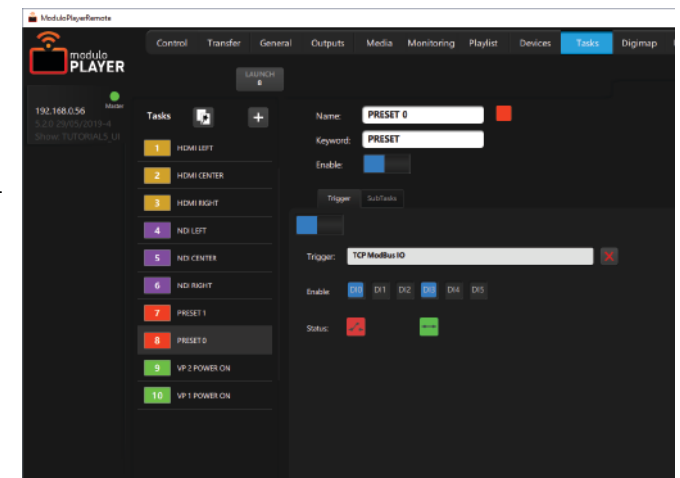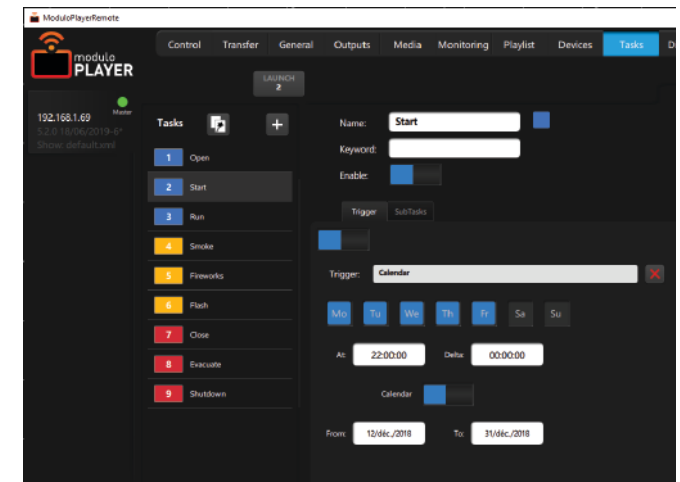
Easy tracking through the Digimap function

Simple tracking can be achieved using Modulo Player's Digimap function.
Easily control the parameters of your media – including position, rotation, opacity, color… – **using external devices** (OSC, Art-Net, MIDI, TCP/IP rotary encoder, K2 motion control console by Kynesis…).

For example, you can project on a moving screen on stage and have the projection perfeclty mapping the position of your screen.
You can also change the layer opacity from a lighting control, control your show from a custom OSC control panel, etc.

Modulo Player's wizard allows easy and quick calibration of the incoming data, so that you can link it to your media parameters.
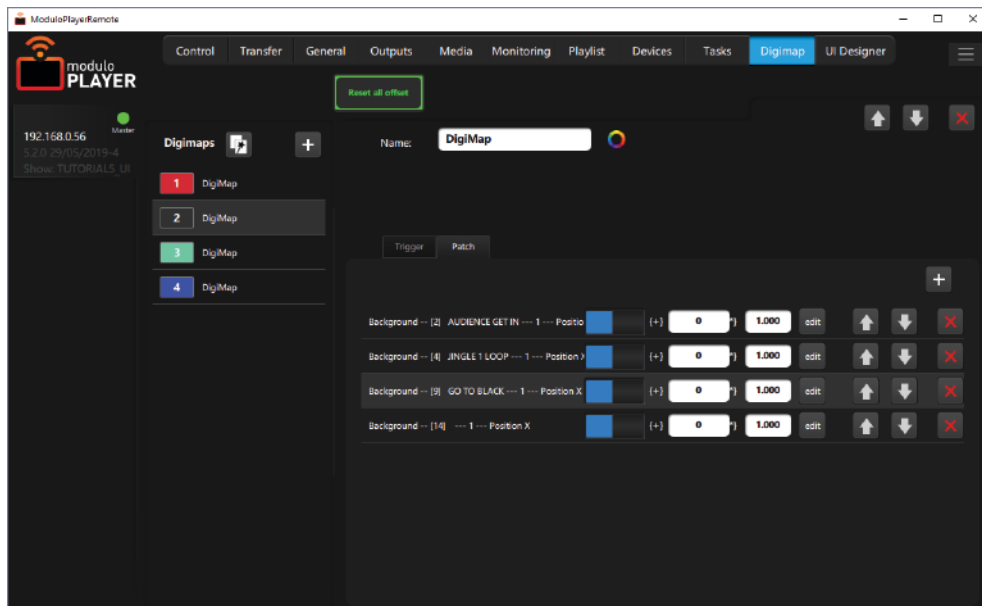
Projection on moving screen with Digimap function
See full application note
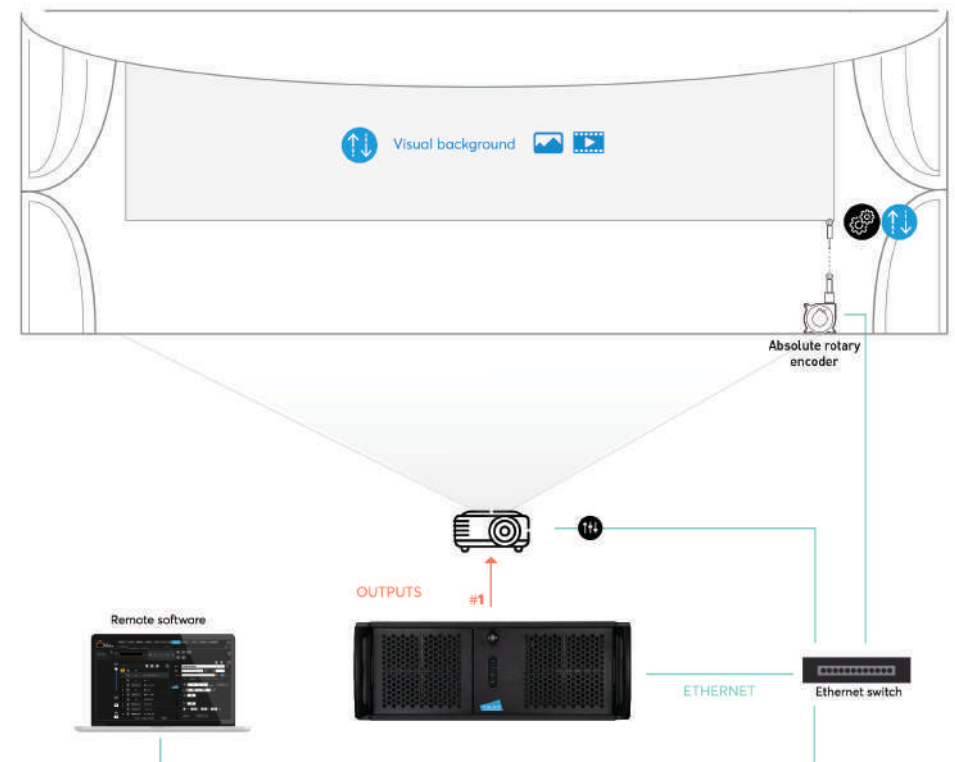
Phidgets

Library of Phidgets devices

Modulo Player's library of external devices includes **+40 USB sensors by Phidgets**: Controllers, sensors, motors, GPIO, RFID tags, and more.

These devices represent a cost-effective solution to add interactivity to a project. One can easily create tasks in Modulo Player that will trigger automatically depending on the phidgets' variables such as temperature, humidity, lux levels, distance, and more.

+40 USB Phidgets

A UI Designer
to create custom panels
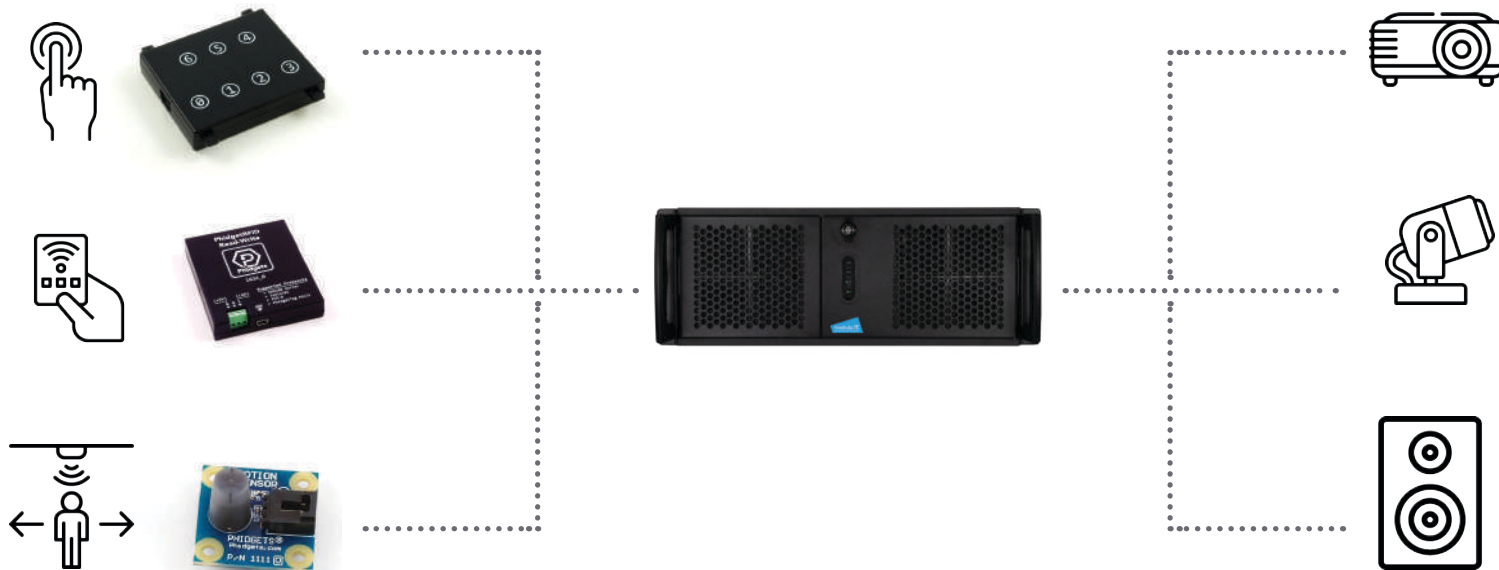
Embedded UI Designer

Easily **create custom panels** using Modulo Player's UI Designer.
Available in Modulo Player Remote, the UI Designer offers a very intuitive interface to create control or maintenance panels in just a few minutes: **Drag & drop tasks, add buttons, texts, images, web pages, etc.**
Each custom user interface can be protected with a user login and password.
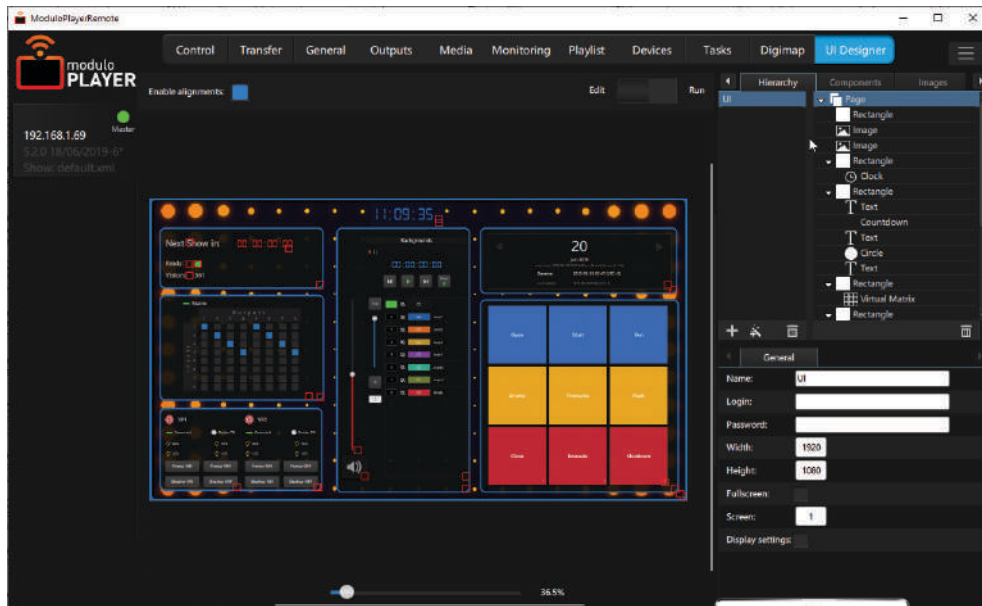
Versatile control opportunities

The user panels created with Modulo Player's UI Designer are **compatible with PC, Mac, iOS, and Android devices.**

LED display configuration with Show Control & User panel
See full application note
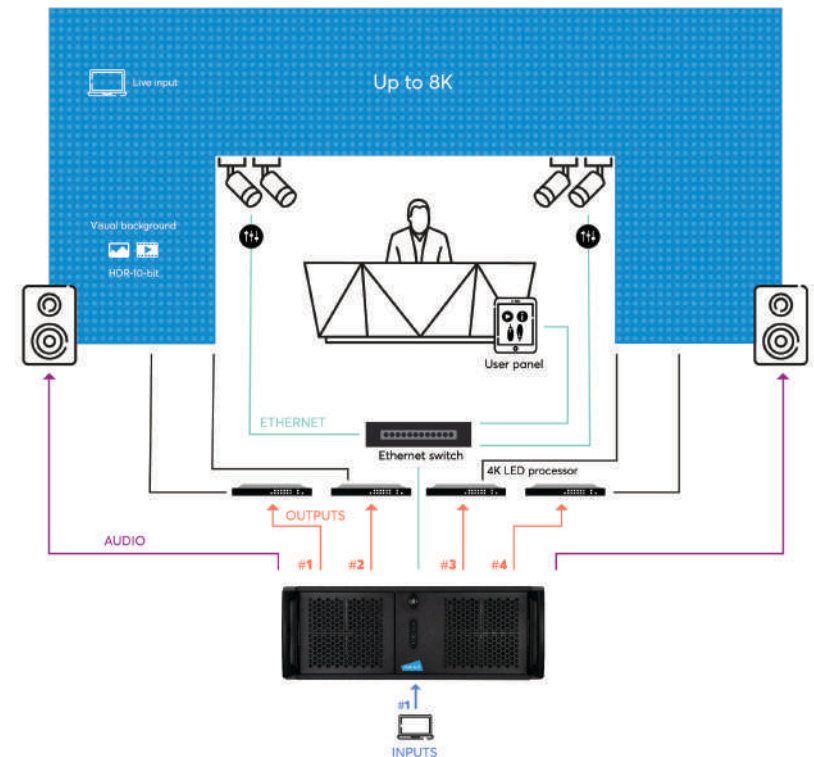
Hardware settings and drivers update

All information about the hardware is available in Modulo Player Remote.
Here are some of the parameters settings that you can make directly through the Remote:

- Setup Deltacast cards and update drivers
- Setup sound cards
- Select networks and IP
- Force all EDIDs using embedded EDID generator
- VNC integrated
- Create multi-screen configuration...
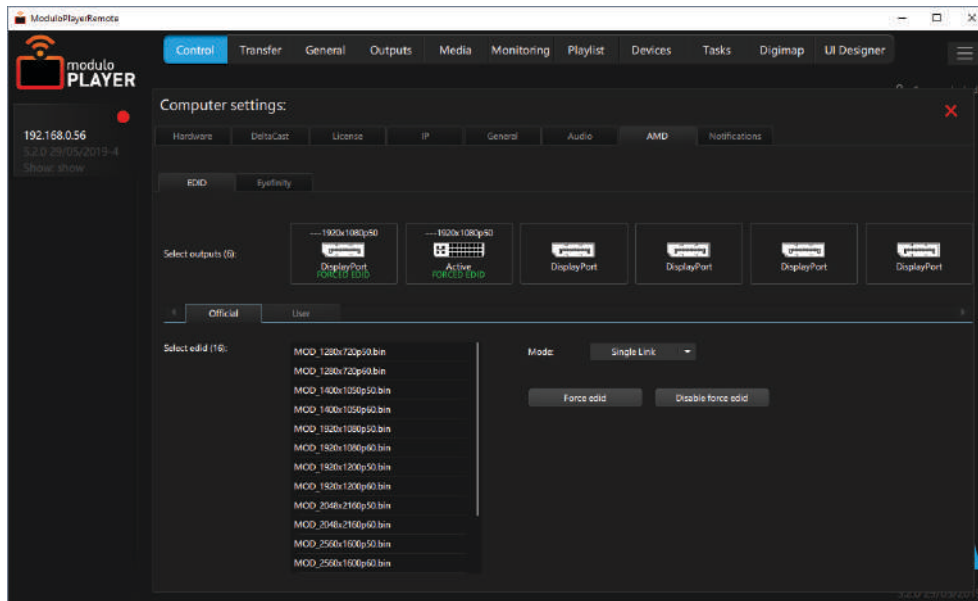
- In multi-server configuration, the setup of all servers can be performed through one Modulo Player Remote.

- The hardware panel and information remain available when the show is running.

Hardware monitoring and notifications

Hardware information can be monitored anytime in Modulo Player Remote.
It shows data about the operating system, processor, CPU, GPU...
Additional information about the hardware state will help you check the server is properly installed and functioning:

- RAM memory
- Hard drive
- Temperature
- Graphic card installed and running...
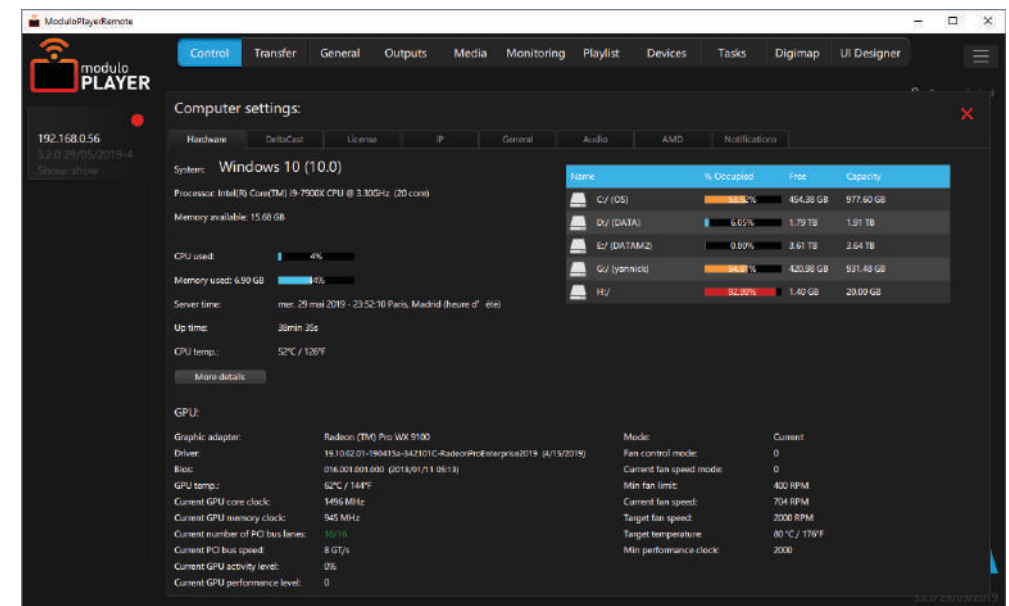
Email notifications can be created to automatically receive information or alerts about the hardware state. As an example, you can be notified when the server starts, when the GPU reaches a temperature limit, and so on.

Delivering as promised

To ensure utmost reliability, our media servers come as hardware + software solutions.
All our platforms are based on **strictly qualified GPUs and components.**
Modulo Pi is a technology partner of leading manufacturers of graphic cards and live input boards. All our systems are running on Windows 11 CBB 64 bits [1].

Depending on the model, Modulo Player is available in different enclosures:

Small form factor [2]:
Modulo Player Nano

Regular chassis: Modulo Player Standard, Pro, Ultra

Ruggedized chassis: Modulo Player Pro, Ultra
Features a reinforced suspended framework and professional connectivity to endure rough conditions.

Made in France

Our software is fully developed in-house. Based nearby Paris, our team of developers keeps on updating and improving our media servers.
In addition, **our hardware is fully assembled and tested in our offices before shipping.**

[1] As of October 2024. Prior models running on Windows 10 SAC 64 bits
[2] New hardware available as of January 2022

Customizable configurations

To fit your needs and budget without oversizing your hardware, Modulo Player is available in different hardware configurations.
These versions can be customized: Add a timecode card, a live capture card, additional storage capacity... depending on the model.

NANO

Modulo Player Nano is the perfect choice if you need a very small player for simple use.
Warping and embedded show control remain available through this model equipped with 1 output.

◆ Small form factor
↗ *Modulo Player Nano datasheet*

STANDARD

Modulo Player Standard is a cost-effective solution with a hardware configuration specially designed for permanent installations such as corporate venues, museum exhibitions, or theme parks.

◆ Regular chassis
↗ *Modulo Player Standard datasheet*

PRO

Modulo Player Pro features a powerful configuration combined with additional storage capacity.
Perfect for corporate or live events, with customization options: Add up to 3 low-latency live capture cards (2, 4 or 8 inputs depending on the model of your card).

◆ Regular or Ruggedized chassis
↗ *Modulo Player Pro datasheet*
↗ *Modulo Player Pro Ruggedized datasheet*

ULTRA

Modulo Player Ultra was designed to answer the most specific needs. It can host low-latency live capture cards, and read still uncompressed TGA/DPX images sequences, active 3D stereo display, and more.

◆ Regular or Ruggedized chassis
↗ *Modulo Player Ultra datasheet*
↗ *Modulo Player Ultra Ruggedized datasheet*

Customizable Hardware configurations
to adapt to your needs and budget

REFERENCES	OUTPUTS	SSD	OPTIONAL CAPTURE CARD
Modulo Player NANO			
NANO-1	1 output 2560x1600	1000 GB + 400 GB SSD	
Modulo Player STANDARD			
MP-STD-1	1 output 2560x1600	250 GB + 500 GB SSD	
MP-STD-2	2 outputs 2560x1600	250 GB + 500 GB SSD	
MP-STD-3	3 outputs 2560x1600	250 GB + 500 GB SSD	
MP-STD-4	1 output 4K or 4 outputs 2560x1600	250 GB + 500 GB SSD	
Modulo Player PRO			
MP-PRO-1	1 output 2560x1600	250 GB + Fast NVMe PCIE 2 TB	✓
MP-PRO-2	2 outputs 2560x1600	250 GB + Fast NVMe PCIE 2 TB	✓
MP-PRO-4	1 output 4K or 4 outputs 2560x1600	250 GB + Fast NVMe PCIE 2 TB	✓
MP-PRO-6	1 output 4K or 6 outputs 2560x1600	250 GB + Fast NVMe PCIE 2 TB	✓
MP-PRO-2x4K	2 outputs 4K or 6 outputs 2560x1600	250 GB + Fast NVMe PCIE 4TB	✓
MP-PRO-3x4K	3 outputs 4K or 6 outputs 2560x1600	250 GB + Fast NVMe PCIE 4TB	✓
MP-PRO-4x4K	4 outputs 4K or 6 outputs 2560x1600	250 GB + Fast NVMe PCIE 4TB	✓
Modulo Player PRO - Ruggedized			
RMP-PRO-1	1 output 2560x1600	250 GB + Fast NVMe PCIE 2 TB	✓
RMP-PRO-2	2 outputs 2560x1600	250 GB + Fast NVMe PCIE 2 TB	✓
RMP-PRO-4	1 output 4K or 4 outputs 2560x1600	250 GB + Fast NVMe PCIE 2 TB	✓
RMP-PRO-6	1 output 4K or 6 outputs 2560x1600	250 GB + Fast NVMe PCIE 2 TB	✓
RMP-PRO-2x4K	2 outputs 4K or 6 outputs 2560x1600	250 GB + Fast NVMe PCIE 4TB	✓
RMP-PRO-3x4K	3 outputs 4K or 6 outputs 2560x1600	250 GB + Fast NVMe PCIE 4TB	✓
RMP-PRO-4x4K	4 outputs 4K or 6 outputs 2560x1600	250 GB + Fast NVMe PCIE 4TB	✓

⬆ New upgraded hardware

As of 2022, Modulo Player comes with a new hardware. The upgrade significantly improves the servers' performance. It includes [1]:

- Bigger RAM (up to x8)
- Doubled bandwidth with PCIE 4.0
- New GPU generation
- New server motherboards

[1] *Depending on model.*
For more details, please consult the technical datasheets.

Customizable Hardware configurations
to adapt to your needs and budget

REFERENCES	OUTPUTS	SSD	OPTIONAL CAPTURE CARD
Modulo Player ULTRA			
MP-UX-1	1 output 2560x1600	250 GB + Fast NVMe PCIE 2 TB	✓
MP-UX-2	2 outputs 2560x1600	250 GB + Fast NVMe PCIE 2 TB	✓
MP-UX-4	1 output 4K or 4 outputs 2560x1600	250 GB + Fast NVMe PCIE 4TB	✓
MP-UX-2x4K	2 outputs 4K or 6 outputs 2560x1600	250 GB + Fast NVMe PCIE 8 TB	✓
MP-UX-3x4K	3 outputs 4K or 6 outputs 2560x1600	250 GB + Fast NVMe PCIE 8 TB	✓
Modulo Player ULTRA - Ruggedized			
RMP-UX-1	1 output 2560x1600	250 GB + Fast NVMe PCIE 2 TB	✓
RMP-UX-2	2 outputs 2560x1600	250 GB + Fast NVMe PCIE 2 TB	✓
RMP-UX-4	1 output 4K or 4 outputs 2560x1600	250 GB + Fast NVMe PCIE 4 TB	✓
RMP-UX-2x4K	2 outputs 4K or 6 outputs 2560x1600	250 GB + Fast NVMe PCIE 8 TB	✓
RMP-UX-3x4K	3 outputs 4K or 6 outputs 2560x1600	250 GB + Fast NVMe PCIE 8 TB	✓

OPTIONS

REFERENCES			
DELTA-2x3G	Live Capture: 2 x 3G SDI	TC-PCIE-R	Timecode card reader
DELTA-1x12G	Live Capture: 1 x 12G SDI + 2 x 3G SDI or 4 x 3G SDI	TC-PCIE-RW	Timecode card reader writer
DELTA-2x12G	Live Capture: 2 x 12G SDI + 4 x 3G SDI or 8 x 3G SDI	TC-USB-R	Timecode card reader - USB
DELTA-6x12G	Live Capture: 6 x 12G SDI or 12 x 3G SDI	**Multi-projector auto-calibration**	
DELTA-2xHDMI	Live Capture: 2 x HDMI 2.0	AUTOCAL-1-OUT	Multi-projector auto-calibration per output
DELTA-MIXED	Live Capture: 4 x 3G SDI + 1 x HDMI 2.0 or 2 x 12G SDI + 1 x HDMI 2.0	AUTOCAL-LUCAM	PoE camera with 1 x 15m cable (LUCID)
DELTA-HOST [1]	Flex Host Card [1]	AUTOCAL-FILENS	High resolution fish-eye lens (FUJINON)
MOD-HDMI [1]	Flex Module single HDMI 2.0 [1]	AUTOCAL-8LENS	High resolution 8 mm lens (FUJINON)
MOD-DP [1]	Flex Module single DP 1.2 [1]	AUTOCAL-CASE	Travel case with custom inserts for 1 x PoE camera, 15m cable, auto-calibration dongle, and up to 2 lenses (FUJINON)
MOD-SDI4 [1]	Flex Module 4 x SDI 3G [1]		

[1] *Option limited to ruggedized models*

modulo PLAYER

An ecosystem of software & tools
for an enhanced experience with the platform

Companion Apps

Modulo Player comes with a series of companion apps designed to further enhance your experience working with our media server:

- **ModuloDMXTool:** Send and receive Art-Net DMX from/to any device
- **Modulo Panel:** Access your custom user panels on Android, iOS, Mac, PC
- **Modulo Shortcut:** Take control of Keynote or PowerPoint presentations
- **Modulo Sync:** Transfer media to several Modulo Player simultaneously
- **Modulo Wing:** Access your playlists and tasks on Android, iPad, Mac, PC
- **VNC Viewer:** Remotely connect to the Modulo Player server

Download Companion Apps on Customer Area
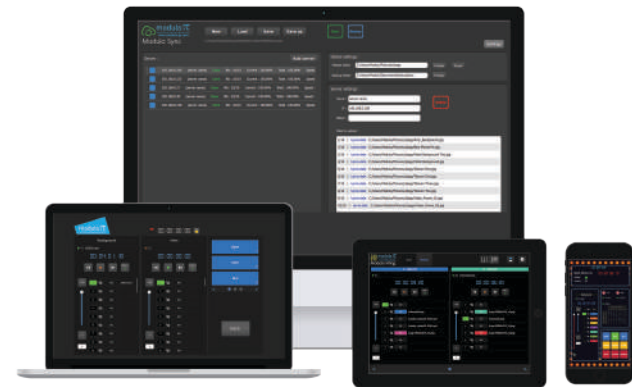
Practising & Offline Programming

Modulo Pi's eshop shows different licenses and accessories to support you in your daily projects and workflow.
A **Modulo Pi dongle** and **Modulo Player Lite** license offer the opportunity for offline programming. Pre-program any project from your PC without having to be connected to a media server. The pre-programming work can be saved for later use, and easily transferred to the media server whenever needed.

A **Learning kit** is also available to discover how to use Modulo Player step by step. The kit includes shapes, a self-assembly castle, a media kit, and in-depth tutorials.

Visit Modulo Pi eshop

Online user manual

To find out more about Modulo Player, an online user manual is available and often updated with technical information, tutorials, application notes...

User Manual
Starter Guide
Training & Video Tutorials available in French & English

modulo PLAYER

A field-proven media server solution
ready for any application

Hundreds of successful projects worldwide
Our all-in-one approach and advanced features perfectly answer the needs of a wide array of applications:
Live events or permanent installations, creative mappings, theme parks, museums, and touring.

Live events: Corporate events, fashion shows, mappings, opening/closing ceremonies, touring...

Corporate event in The Netherlands | BeamBrothers

Balenciaga SS19 Paris Fashion | Fosphor

Mont Saint Michel Millenium | VLS, Les Ateliers BK

Permanent installs: Museums, theme parks, corporate venues, permanent/semi-permanent mappings...

Chasseurs de Tornades attraction | Futuroscope

Mapping in Bordeaux cathedral | Lotchi

Encounter with Wuyuan | EZPro International

modulo PLAYER

More than a Media Player

A cost-effective media server ideal for
your everyday projects

- Flexible Playlist management
- Advanced 2D mapping through our exclusive X-Map function
- Embedded low-latency Live Mixer **| INDUSTRY FIRST |**
- User-friendly tools for Interactivity
- Multi-projector Autocalibration module **| BY MODULO PI |**
- Easy, yet powerful Show Control
- User Interface Designer to easily create your own UI
- True multi-user mode for optimized setup and operation
- Available in 4 customizable hardware configurations

modulo KINETIC

More than a Media Server

The ultimate video solution tailored for
your most challenging projects

- Non-linear, real-time Timelines editing with Keyframes
- Embedded low-latency Live Mixer **| INDUSTRY FIRST |**
- Advanced 2D & 3D warping tools incl. exclusive X-Map function
- Multi-projector Autocalibration module **| BY MODULO PI |**
- Real-time 3D engine with generative content, incl. particles
- Real-time Study and Simulation in 3D & VR
- 3D video-projector calibration
- Flexible Nodal Programming
- Easy, yet powerful Show Control
- User Interface Designer to easily create your own UI
- Dedicated tools for Virtual Productions with AR & XR
- KineMotion, powerful Optical Tracking module **| BY MODULO PI |**
- True multi-user mode for optimized set-up and operation

Modulo Pi | 113-121 avenue du Président Wilson 93210 La Plaine Saint Denis - France | +33 (0)1 7024 9964 | contact@modulo-pi.com | modulo-pi.com

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