

NOVA STAR

All-New
MX Series Solution

**Creativity
Unleashed**

Creativity Unleashed

One Brand New Software

Two Core Technologies

Three Highlights





VMP

Creativity Unleashed

Multiple Operating Systems



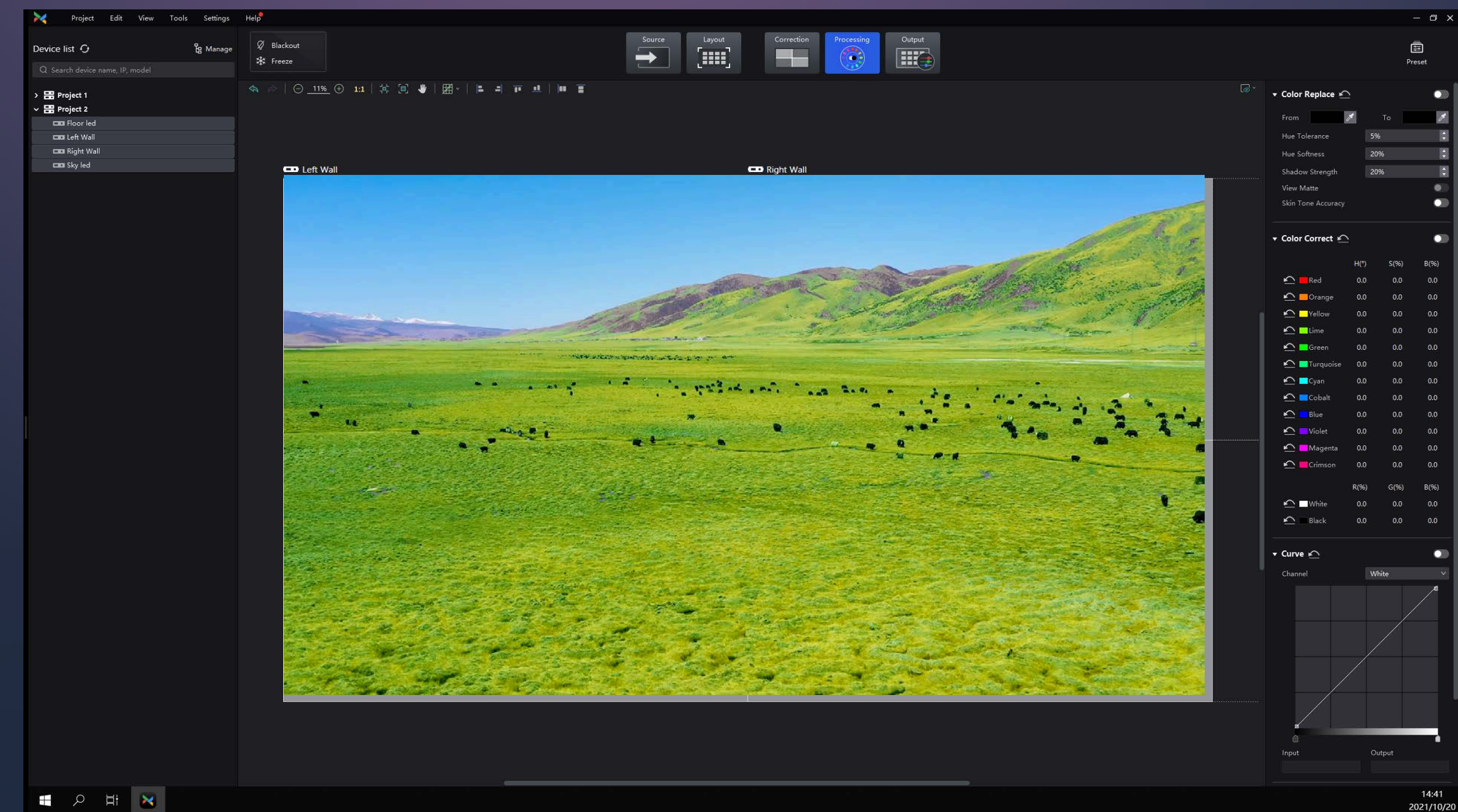
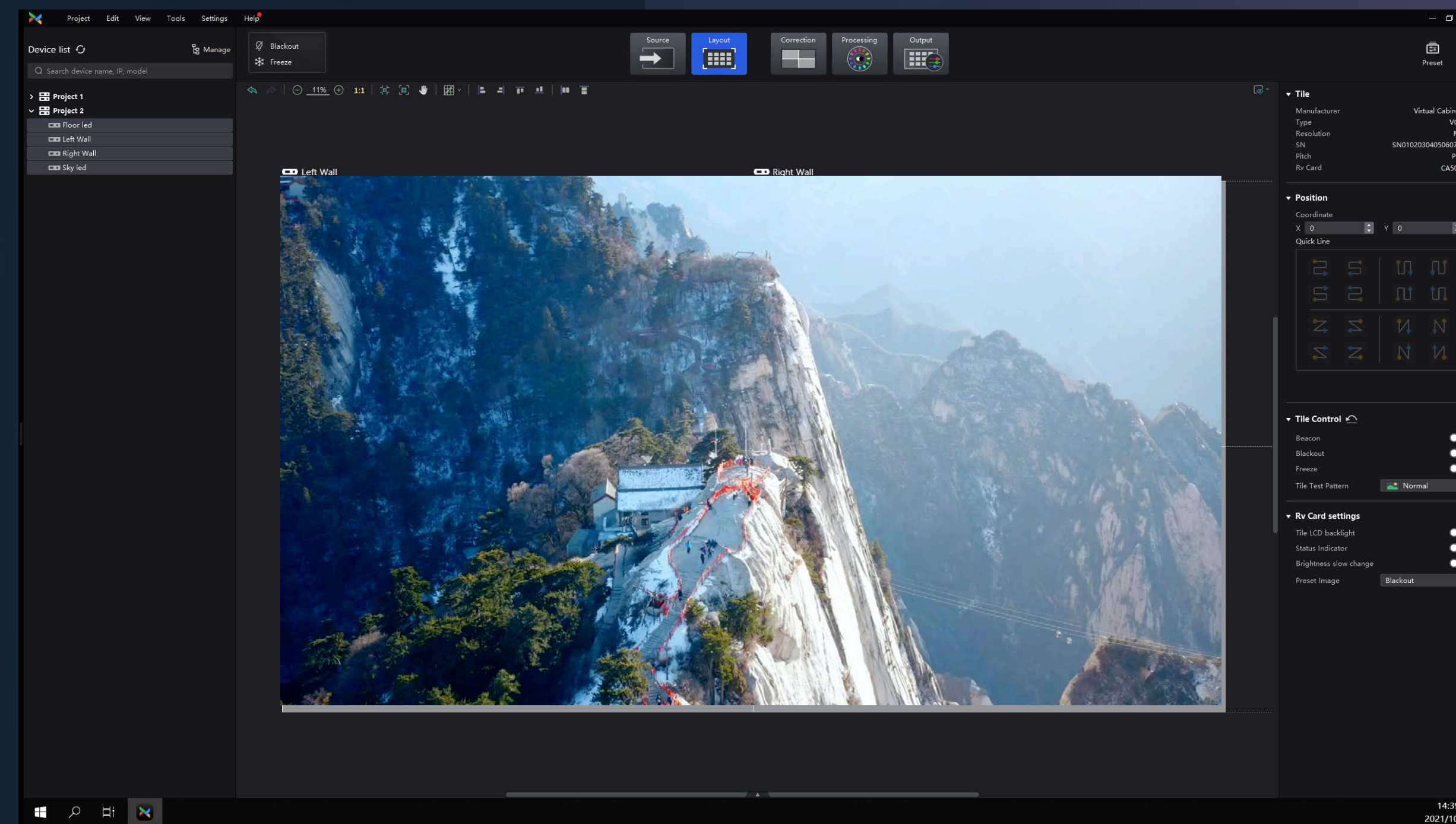
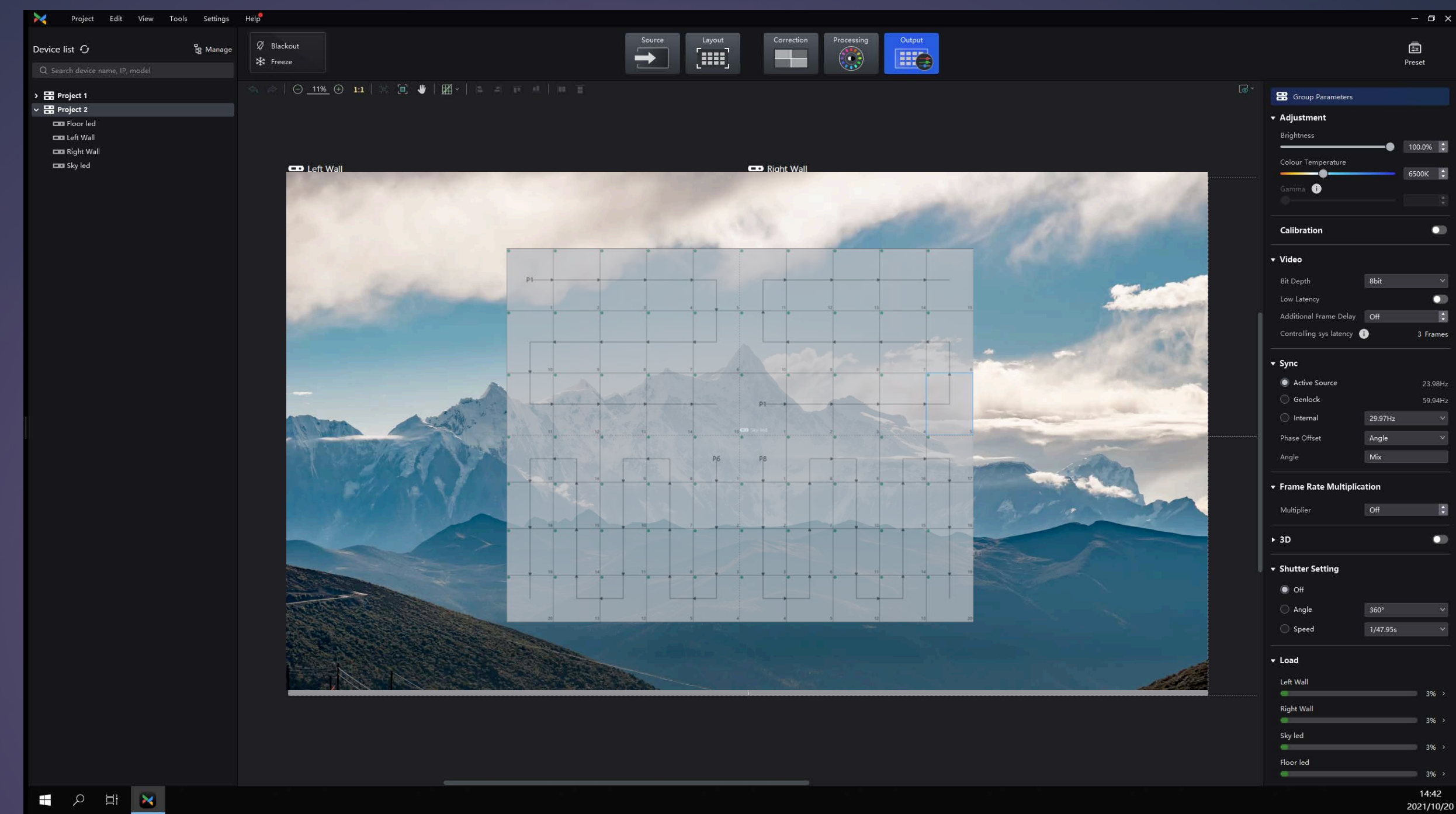
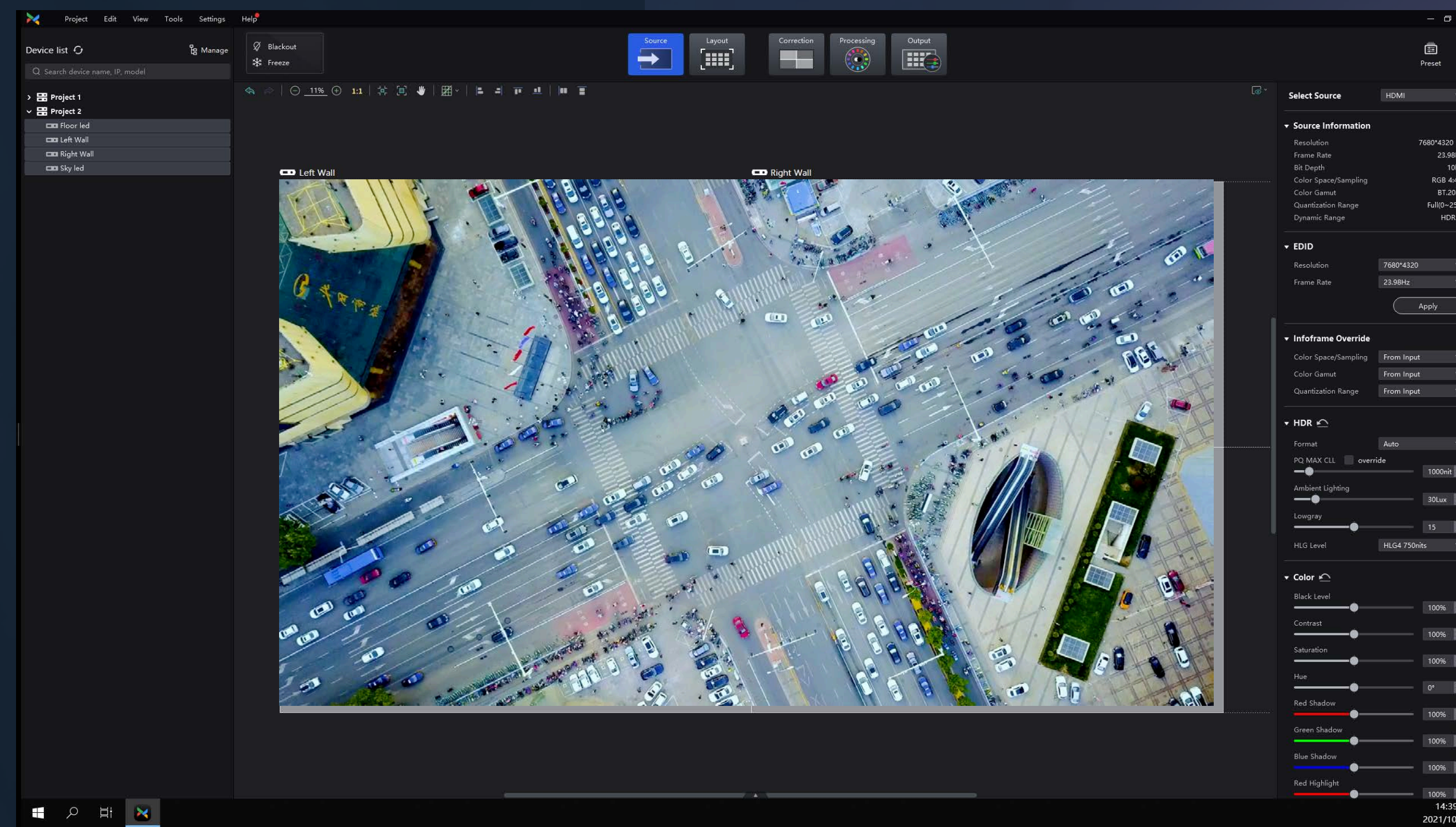
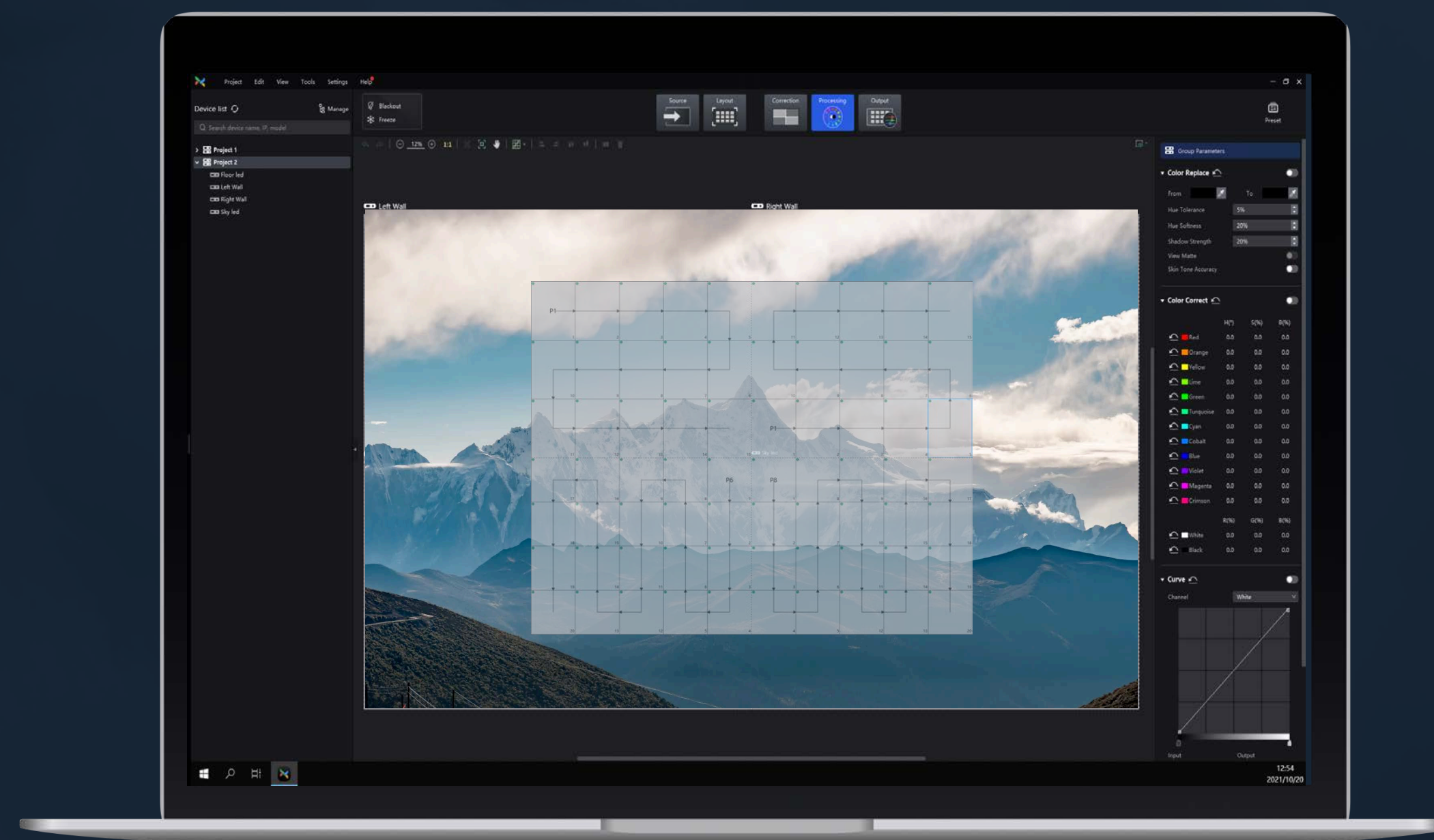
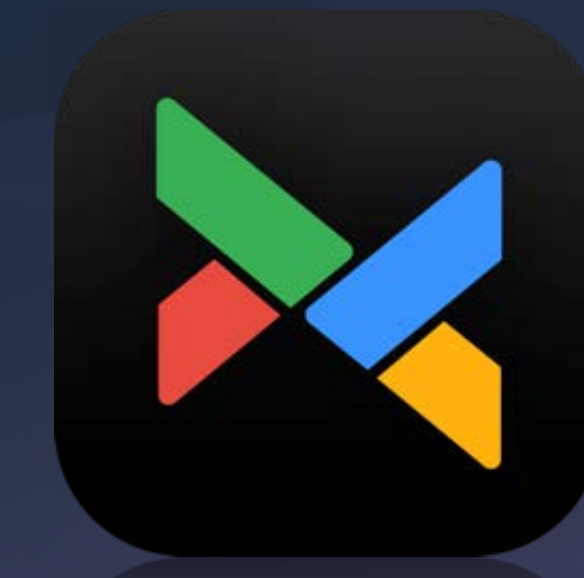
Windows



Mac OS



Linux



Device list Manage

Search device name, IP, model

- Project 1
- Project 2
 - Floor led
 - Left Wall
 - Right Wall
 - Sky led

Sidebar Device List

Blackout

Freeze

Navigator Screen Workflow

Source

Layout

Correction

Processing

Output

Preset

11%

1:1

Left Wall

Right Wall

Floor led

Sky led

Screen Operation Canvas

Properties Bar Parameters

Group Parameters

Adjustment

Brightness 100.0%

Colour Temperature 6500K

Gamma

Calibration

Bit Depth 8bit

Low Latency

Additional Frame Delay Off

Controlling sys latency 3 Frames

Sync

Active Source 23.98Hz

Genlock 59.94Hz

Internal 29.97Hz

Phase Offset Angle

Angle Mix

Frame Rate Multiplication

Multiplier Off

3D

Shutter Setting

Off

Angle 360°

Speed 1/47.95s

Load

Left Wall 3%

Right Wall 3%

Sky led 3%

Floor led 3%

Device list

Search device name, IP, model

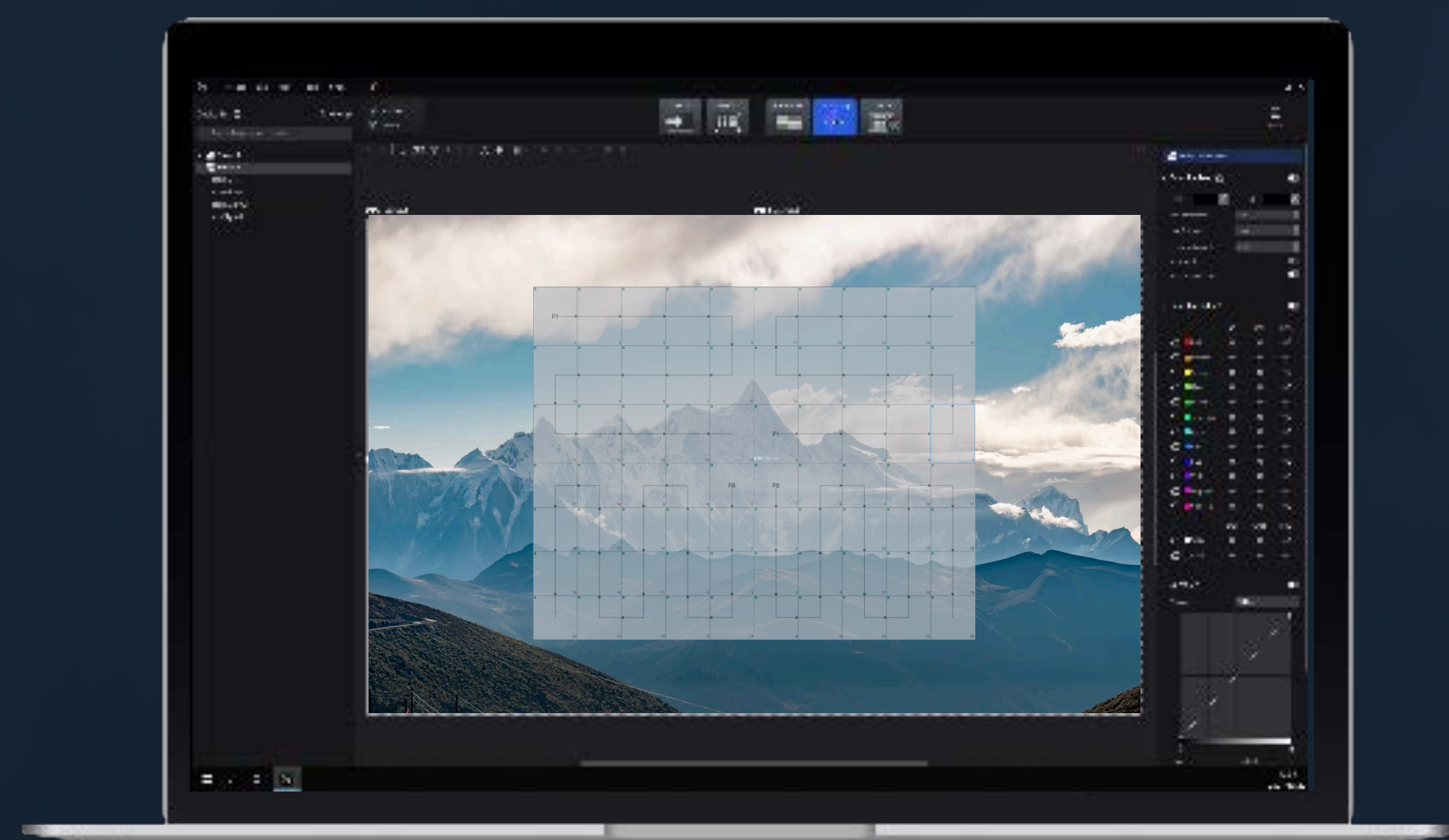
Device Name	IP	Model	Status	Mapping
> project 1				<input type="checkbox"/>
> project 2				<input type="checkbox"/>
left wall 1	192.168.10.11	MX40 PRO	<input type="checkbox"/>	<input type="checkbox"/>
left wall 2	192.168.10.12	MX40 PRO	<input type="checkbox"/>	<input type="checkbox"/>
right wall 1	192.168.10.13	MX40 PRO	<input type="checkbox"/>	<input type="checkbox"/>
right wall 2	192.168.10.13	MX40 PRO	<input type="checkbox"/>	<input type="checkbox"/>

+ Create group

Group Management



Router
IP Switcher



Multiple Screens

Ultra Large Resolution

Tight Timeline

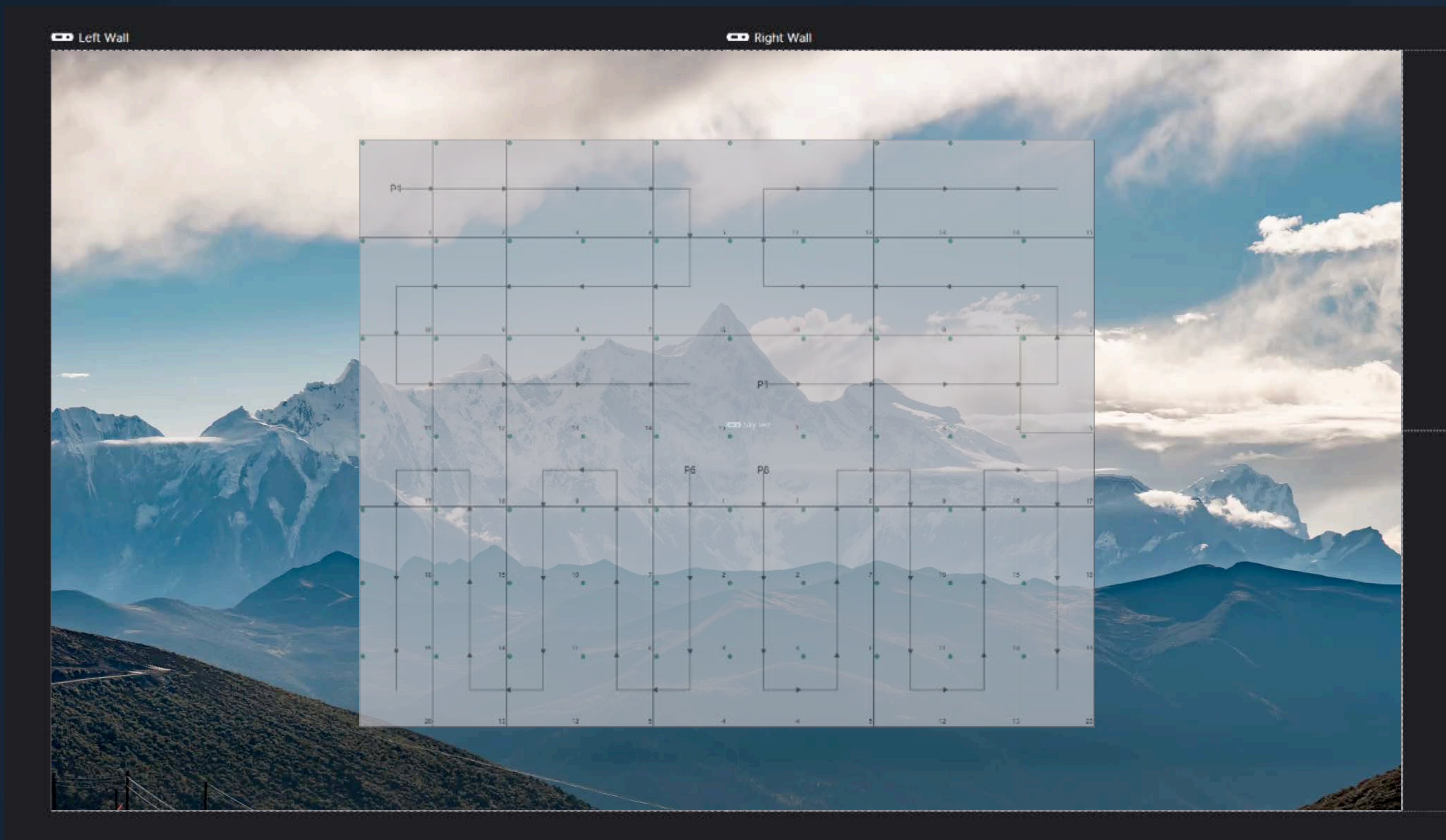


Multiple Devices

Hard to locate

Complex configuration

What You SEE is What You GET!



Tile & Source
Source Preview
Tile Only
Source Only

Select Source

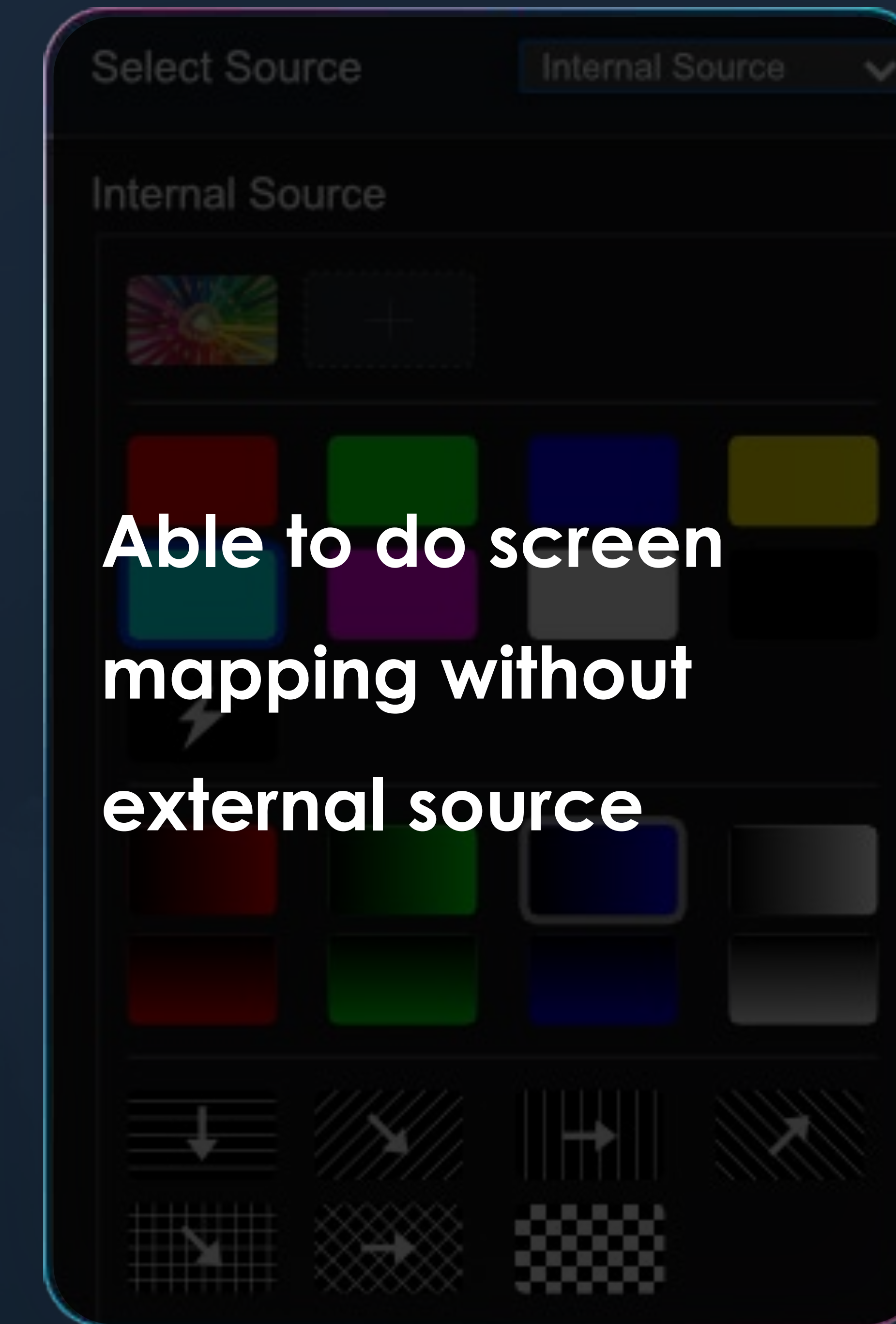
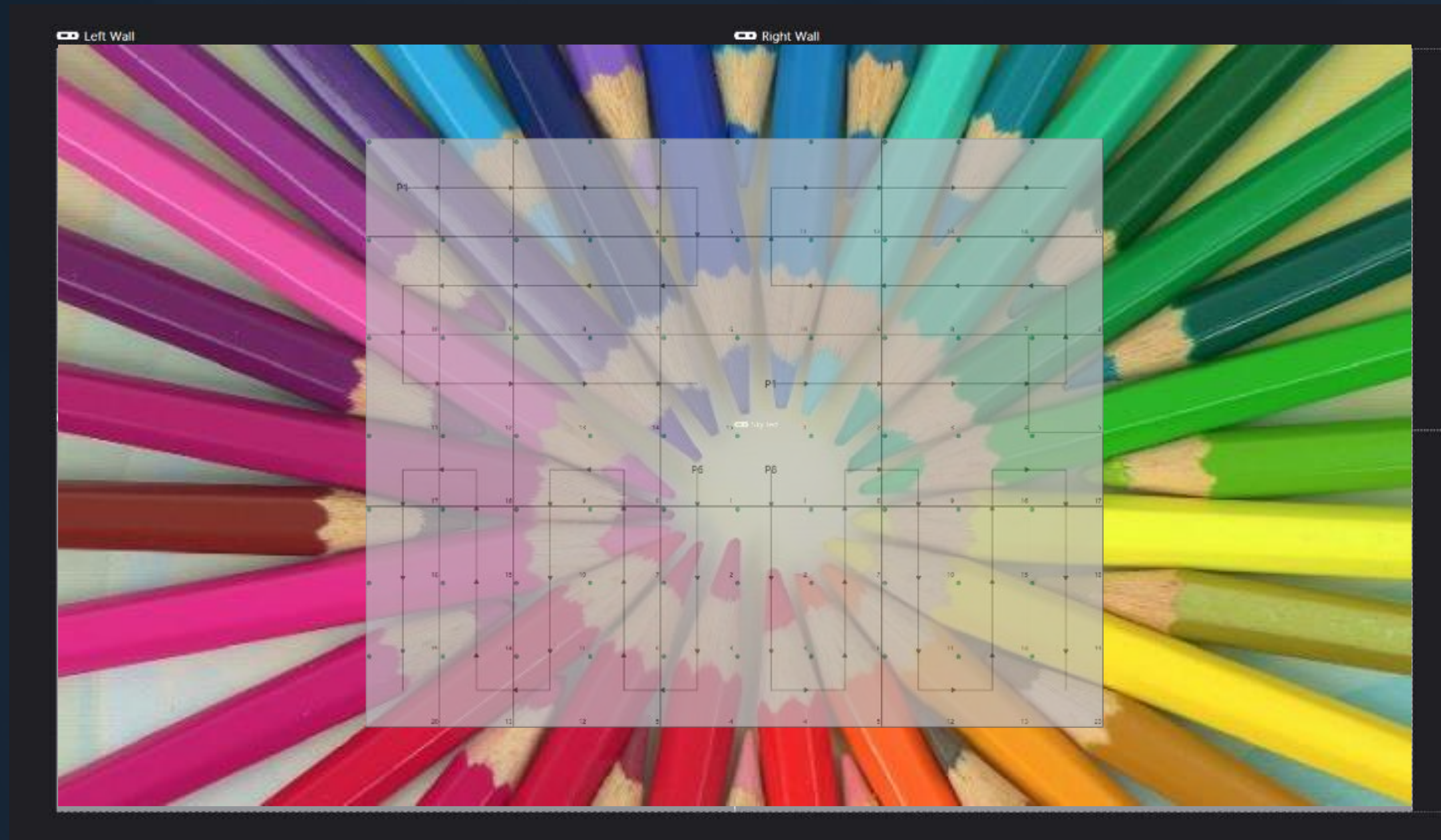
- HDMI
- HDMI
- DP**
- SDI
- Internal Source

Source Switch

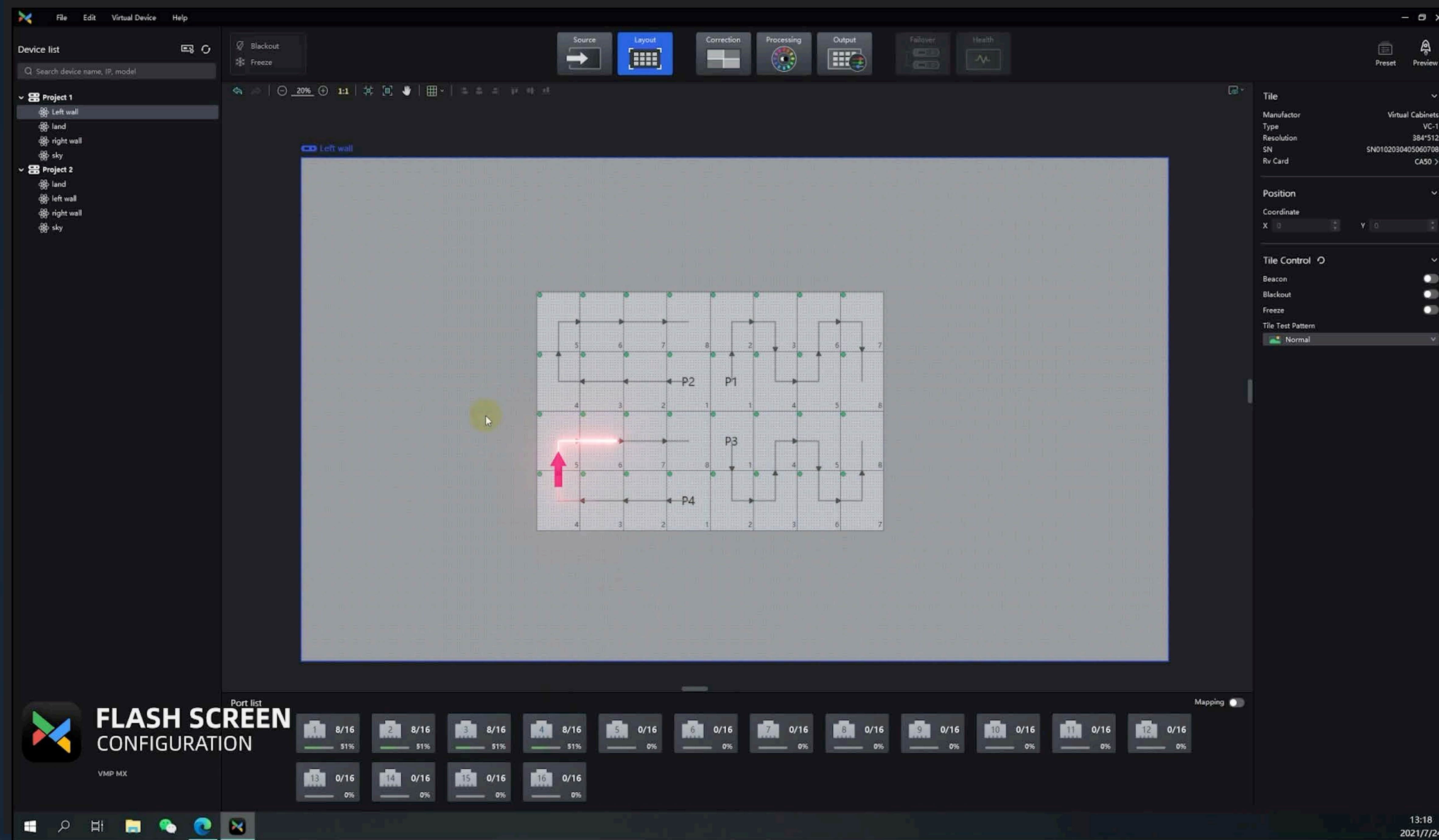
Resolution
Frame Rate

What You SEE is What You GET!

Built-in Source



Quick Screen Mapping



Screen Configuration

Smart Wiring

Position
Coordinate X: 2465 Y: 1235
Quick Line

No Rectangle Limitation

Tile Control

- Beacon
- Blackout
- Freeze
- Tile Test Pattern: Normal
- Status Indicator
- Brightness slow change
- Preset Image
- Ports Backup

Cabinet Info

Tile
Manufacturer: Virtual Cabinets
Type: VC-1
Resolution: 384 * 512
SN: SN0102030405060708
Rv Card: CA50>

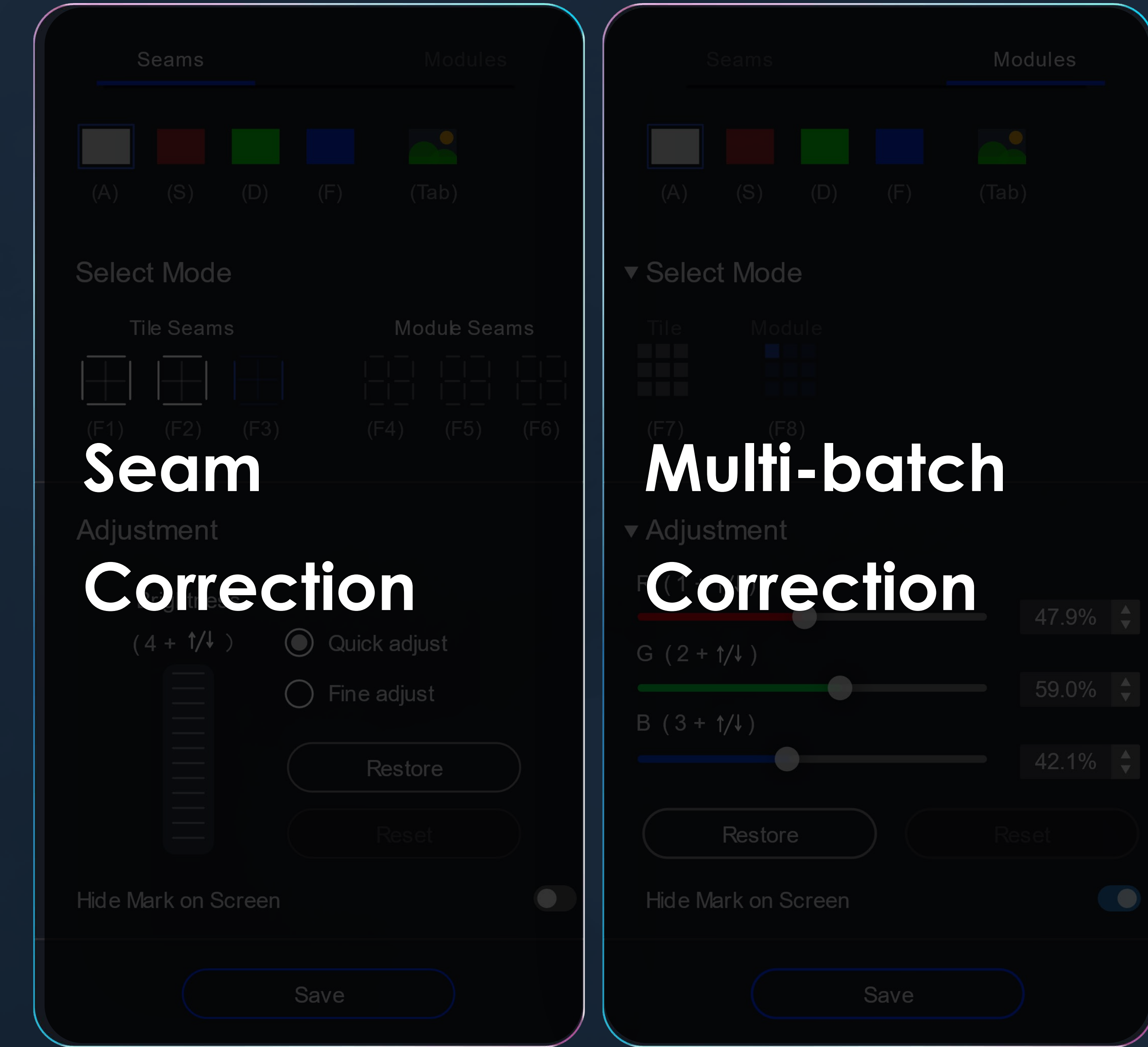
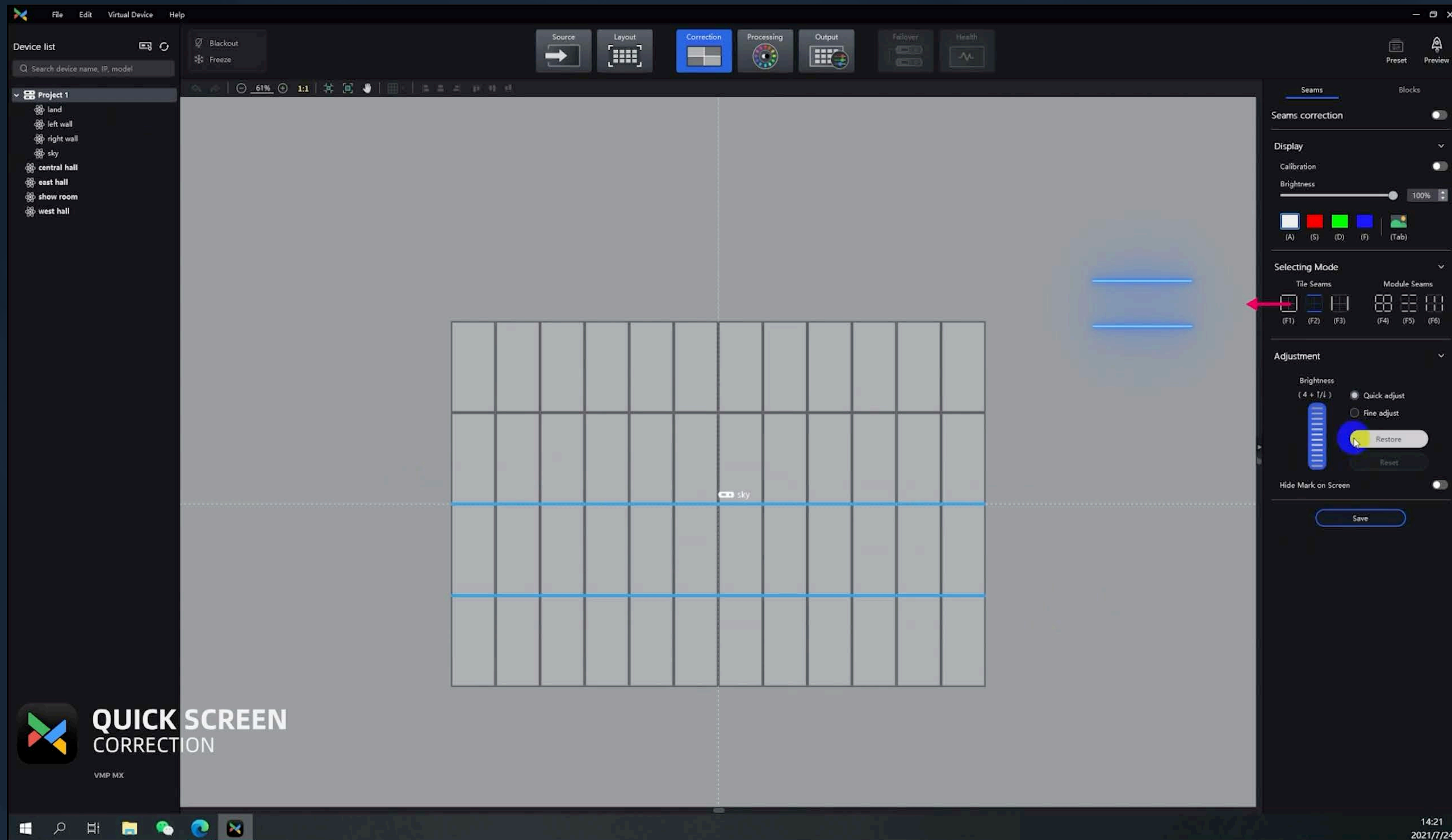
Loading Status

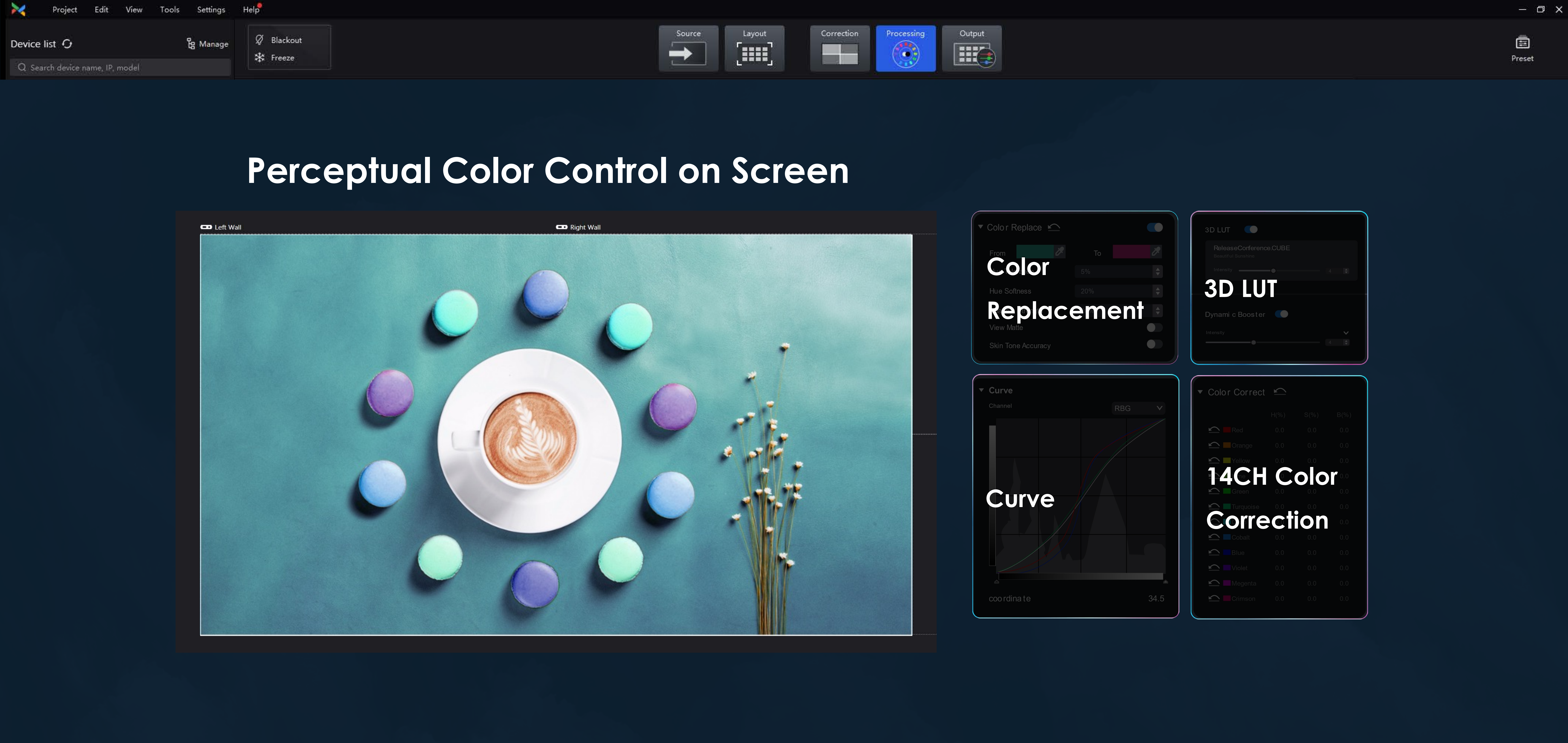
Position (32/256) Swift Lay out | Mapping

1 8/16 51%	2 8/16 51%	3 8/16 51%	4 8/16 51%	5 0/16 0%	6 0/16 0%
9 0/16 0%	10 0/16 0%	11 0/16 0%	12 0/16 0%	13 0/16 0%	14 0/16 0%

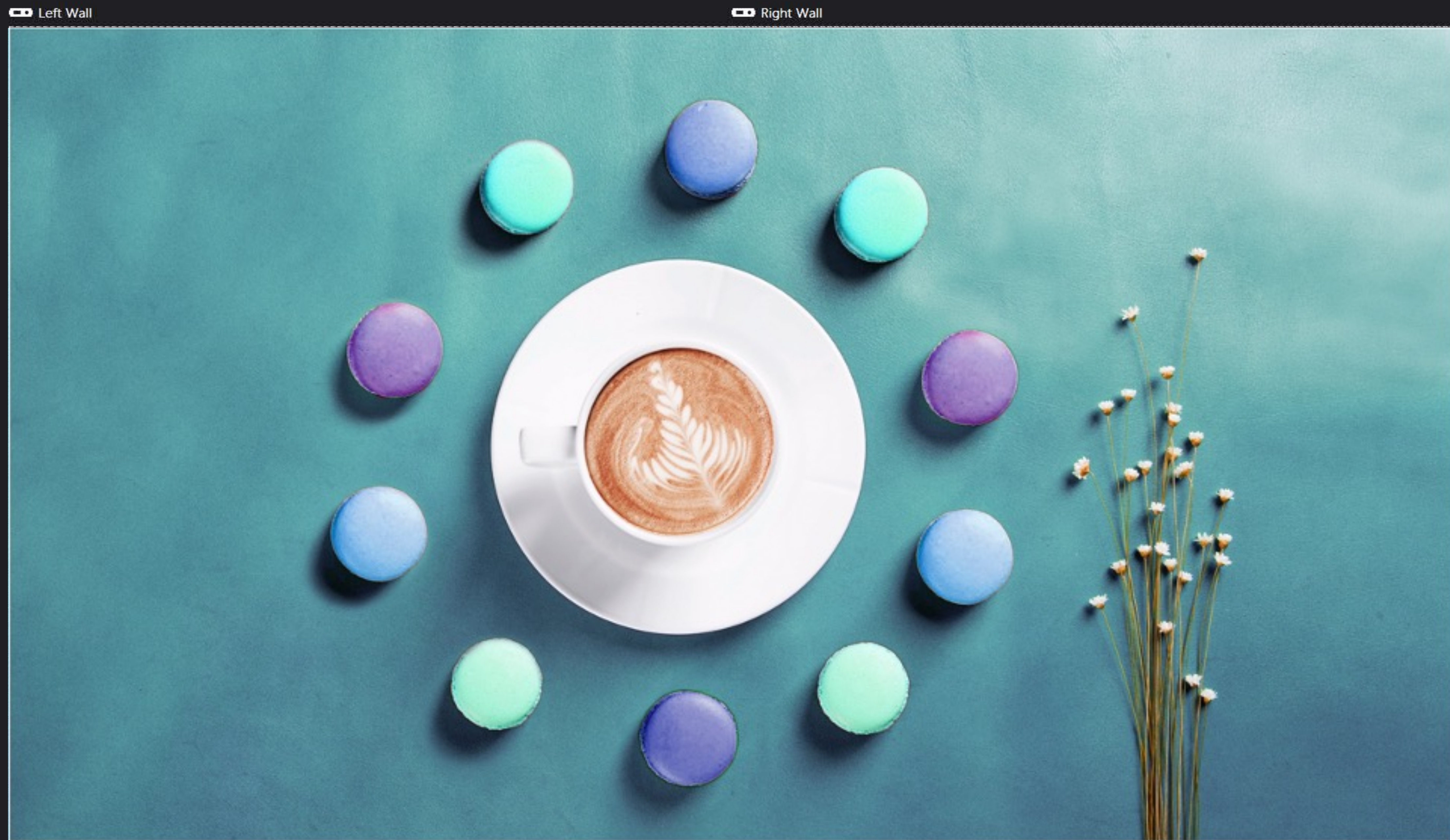
Screen Correction

Visualized Adjustment





Perceptual Color Control on Screen



Color Replace

From To

Color Replacement

Hue Softness: 20%

View Matte:

Skin Tone Accuracy:

3D LUT

ReleaseConference.CUBE

Intensity:

Dynamic Booster:

Intensity:

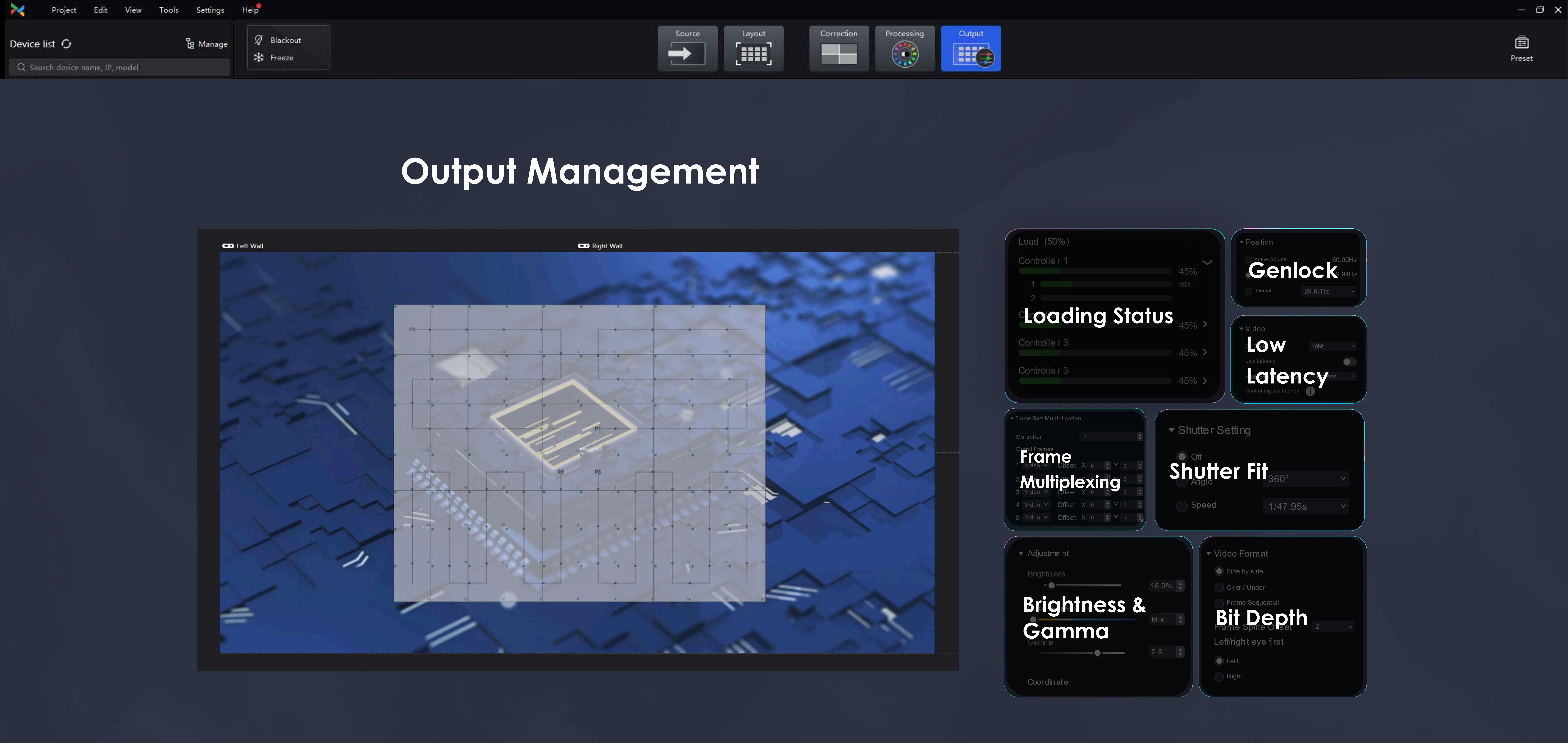
Curve

Channel: RGB

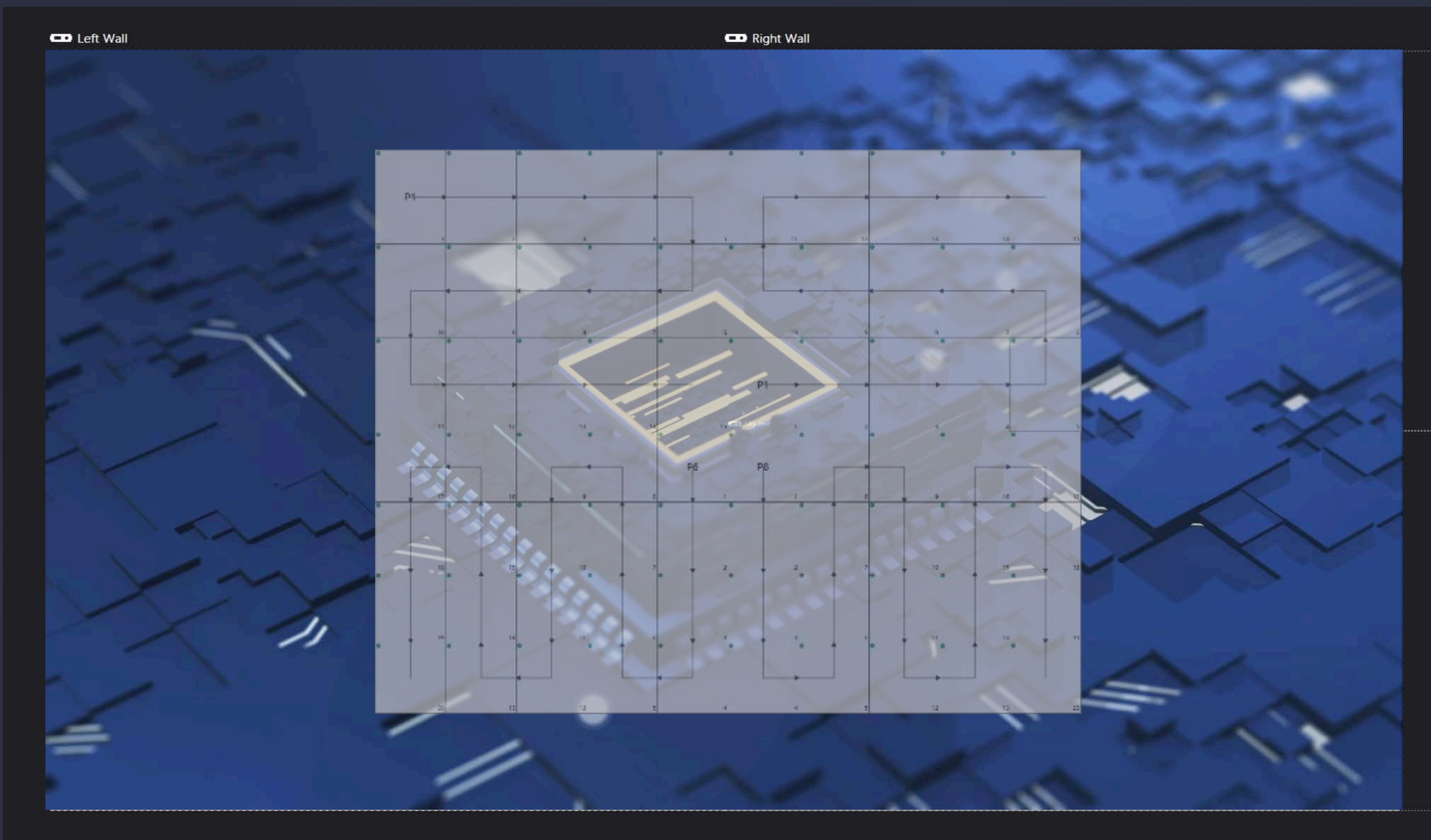
coordinate: 34.5

Color Correct

	H(%)	S(%)	B(%)
Red	0.0	0.0	0.0
Orange	0.0	0.0	0.0
Yellow	0.0	0.0	0.0
Green	0.0	0.0	0.0
Turquoise	0.0	0.0	0.0
Cobalt	0.0	0.0	0.0
Blue	0.0	0.0	0.0
Violet	0.0	0.0	0.0
Magenta	0.0	0.0	0.0
Crimson	0.0	0.0	0.0



Output Management



Load (50%)

Controller 1 45%

1 45%

2 ...

Loading Status

Controller 3 45%

Controller 3 45%

Position

Active Source 60.00Hz

Genlock

Internal 29.97Hz

Video

Low Latency 10bit

Latency

Controlling sys latency

Frame Rate Multiplication

Multiplier 2

Frame Multiplexing

Output Frames

1 Video Offset X 0 Y 0

2 Video Offset X 0 Y 0

3 Video Offset X 0 Y 0

4 Video Offset X 0 Y 0

5 Video Offset X 0 Y 0

Shutter Setting

Off

Shutter Fit

Angle 360°

Speed 1/47.95s

Adjustment

Brightness 18.0%

Brightness & Gamma

Mix

Gamma 2.8

Coordinate

Video Format

Side by side

Over / Under

Frame Sequential

Bit Depth

Frame Splice Offset 2x

Left/right eye first

Left

Right

Content Monitoring

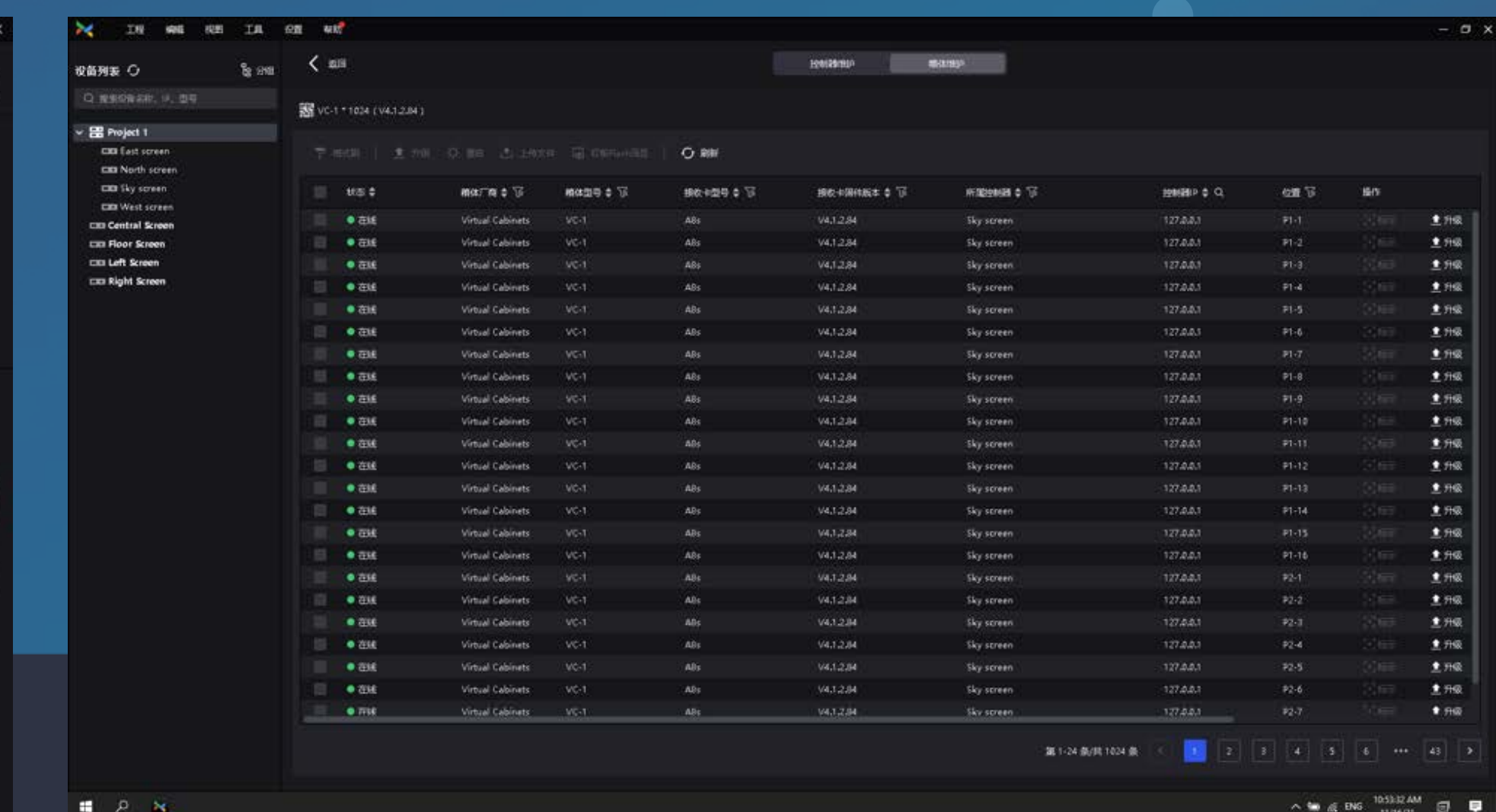
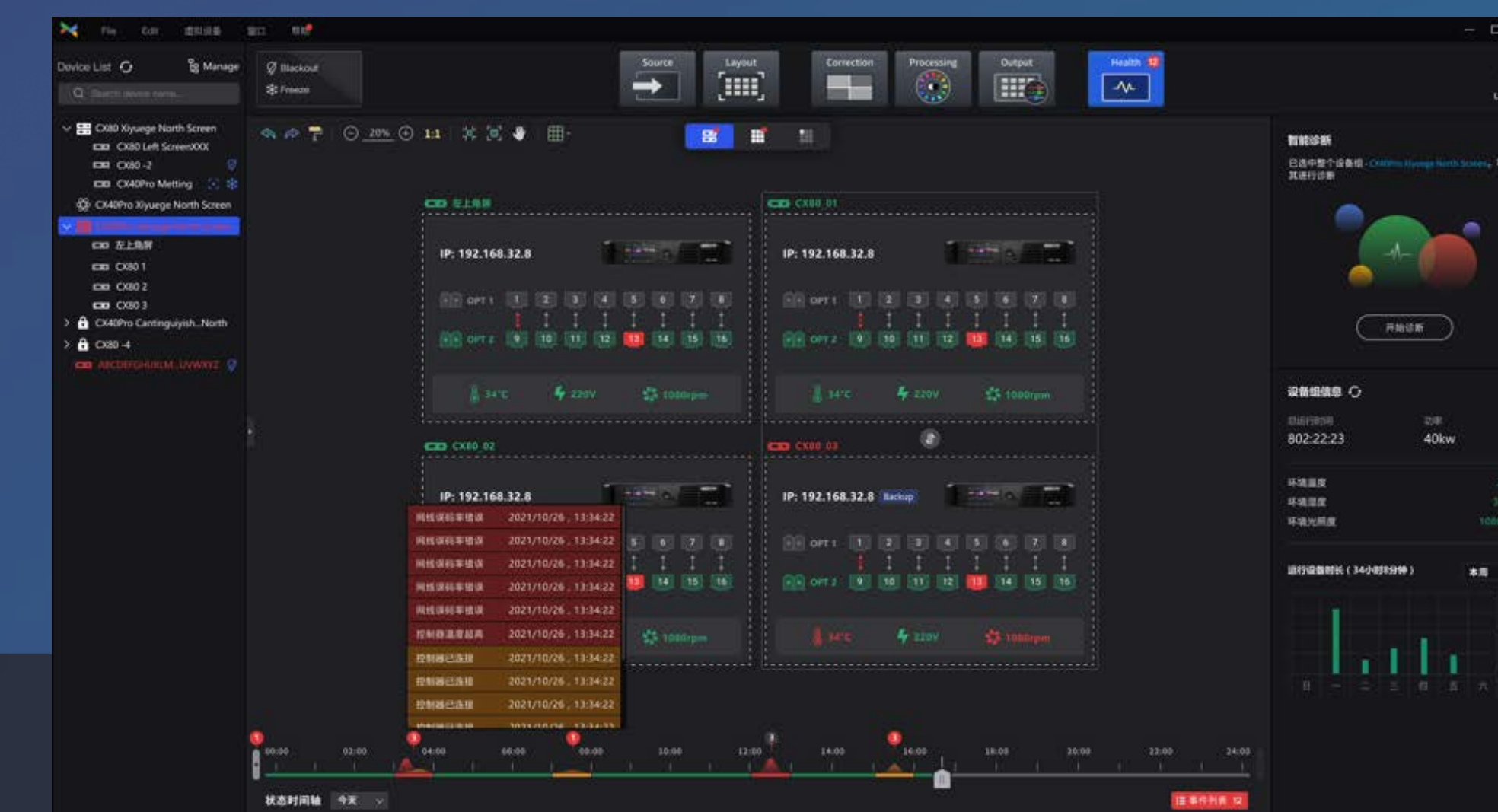
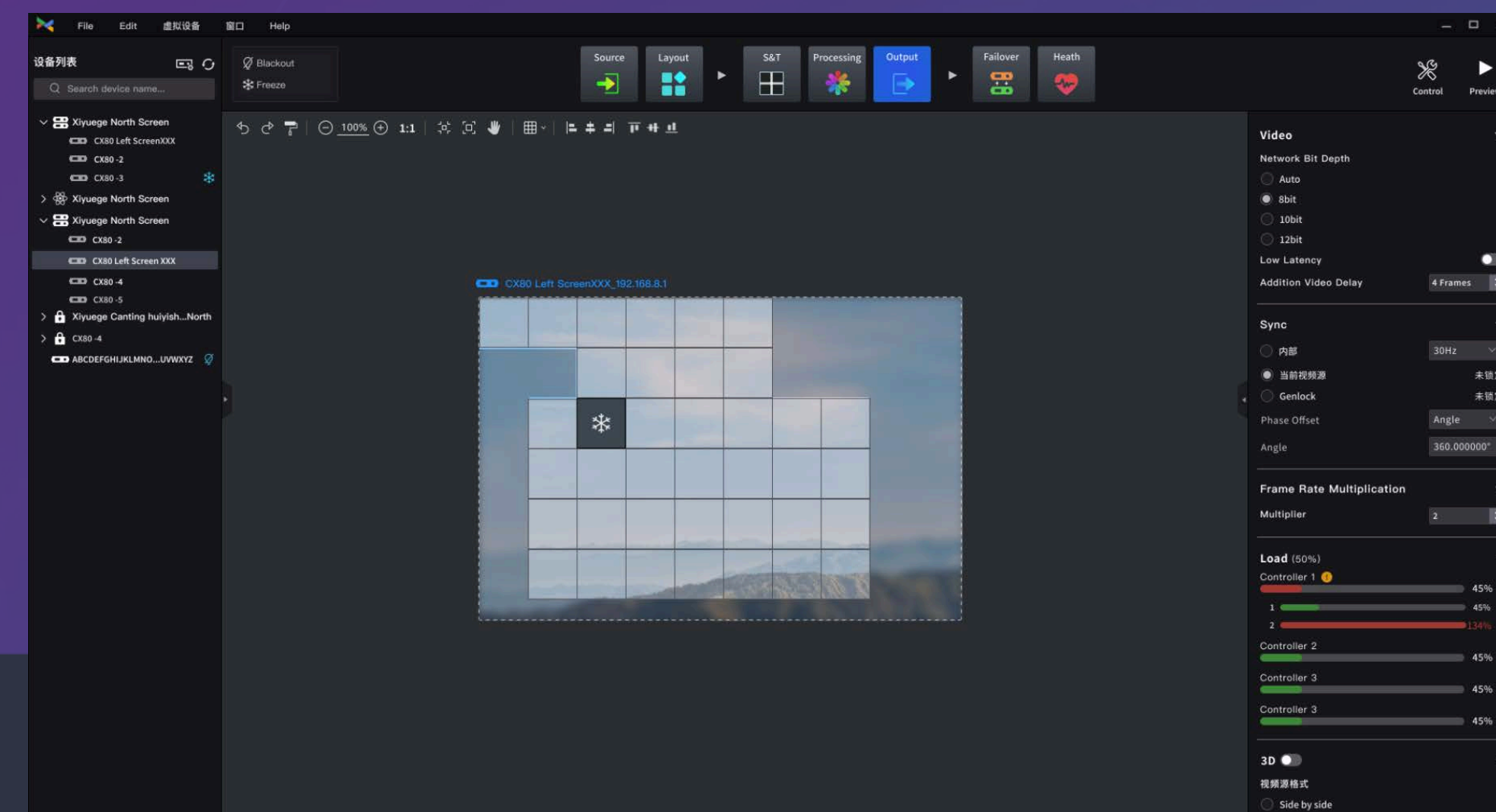
Know your LED screen content in software directly

Status Monitoring

Temperature Detection

Real-time Alarm

Firmware Upgrade



Health Status

End to end health status monitoring and real-time alarm

Creativity Unleashed

VMP



One Brand New Software



Multiple Operating
Systems



Intuitive Interface
Design



Device Group
Settings



No rectangle
frame limitation



Source Preview
Built-in Source



Visualized Seam
Correction



Perceptual Color
Control



Output
Management

Two Core Technologies

Three Highlights

Creativity Unleashed

VMP



One Brand New Software

Two Core Technologies



Dynamic Booster



Full Grayscale Calibration

Three Highlights



Dynamic Booster

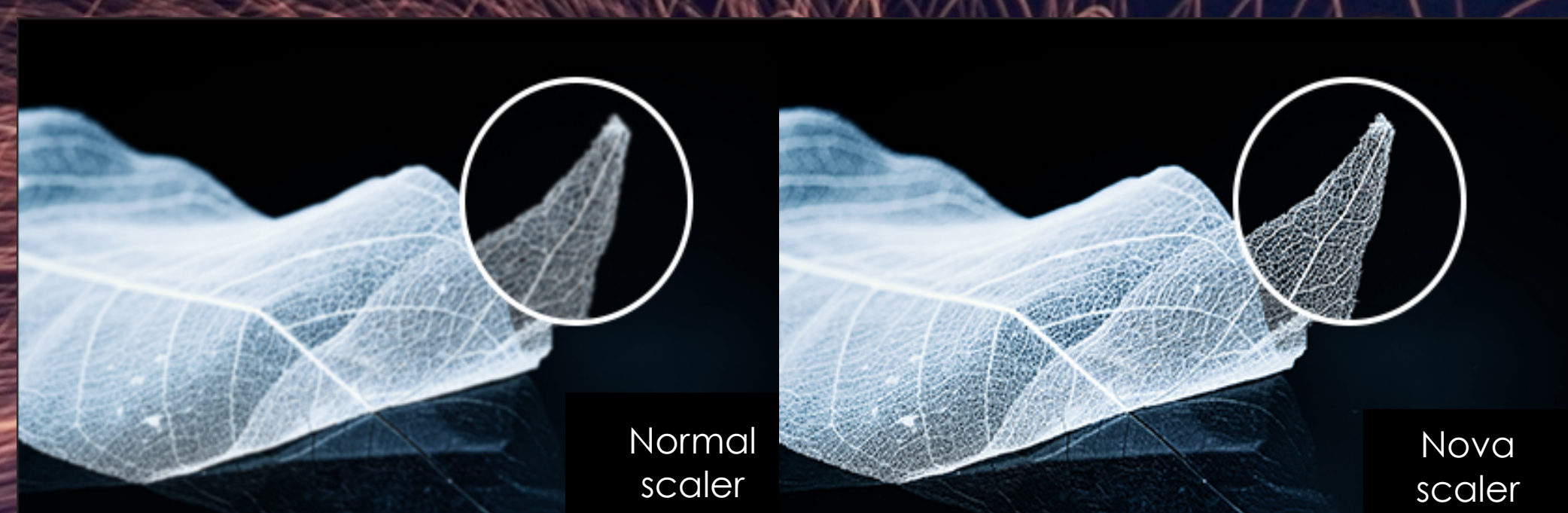


Dynamic Booster

Dynamic
Brightness



Sharper
Details



SDR Source
HDR-like Effect



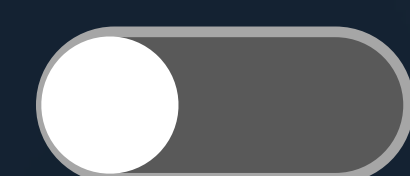
Dynamic Algorithm

Based on image analysis frame by frame

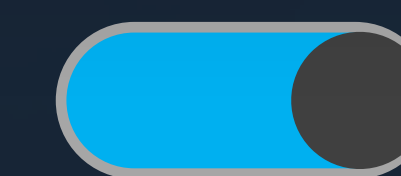
No overexposure in highlights

No loss of details in shadows

Dynamic Booster



Dynamic Booster





Power Consumption Test

kWh

1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0

36.58%

32.46%

5.56%

18.37%

Pure White

PPT File

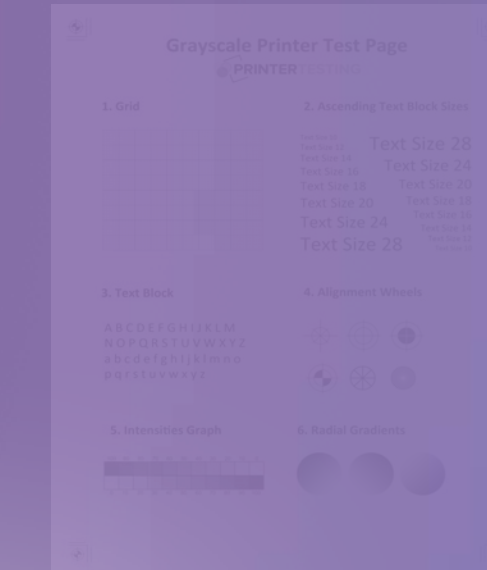
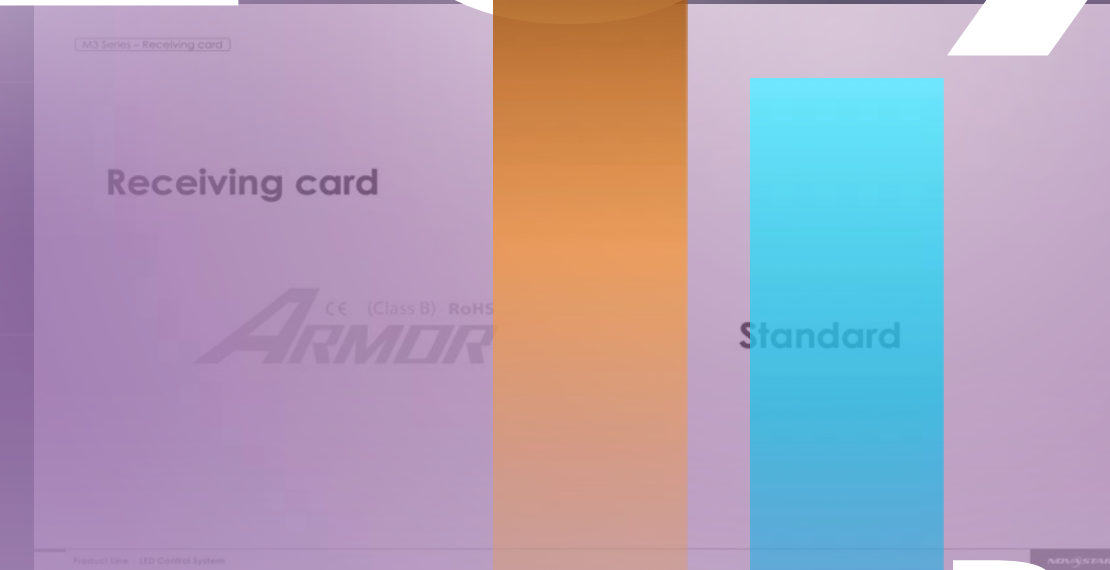
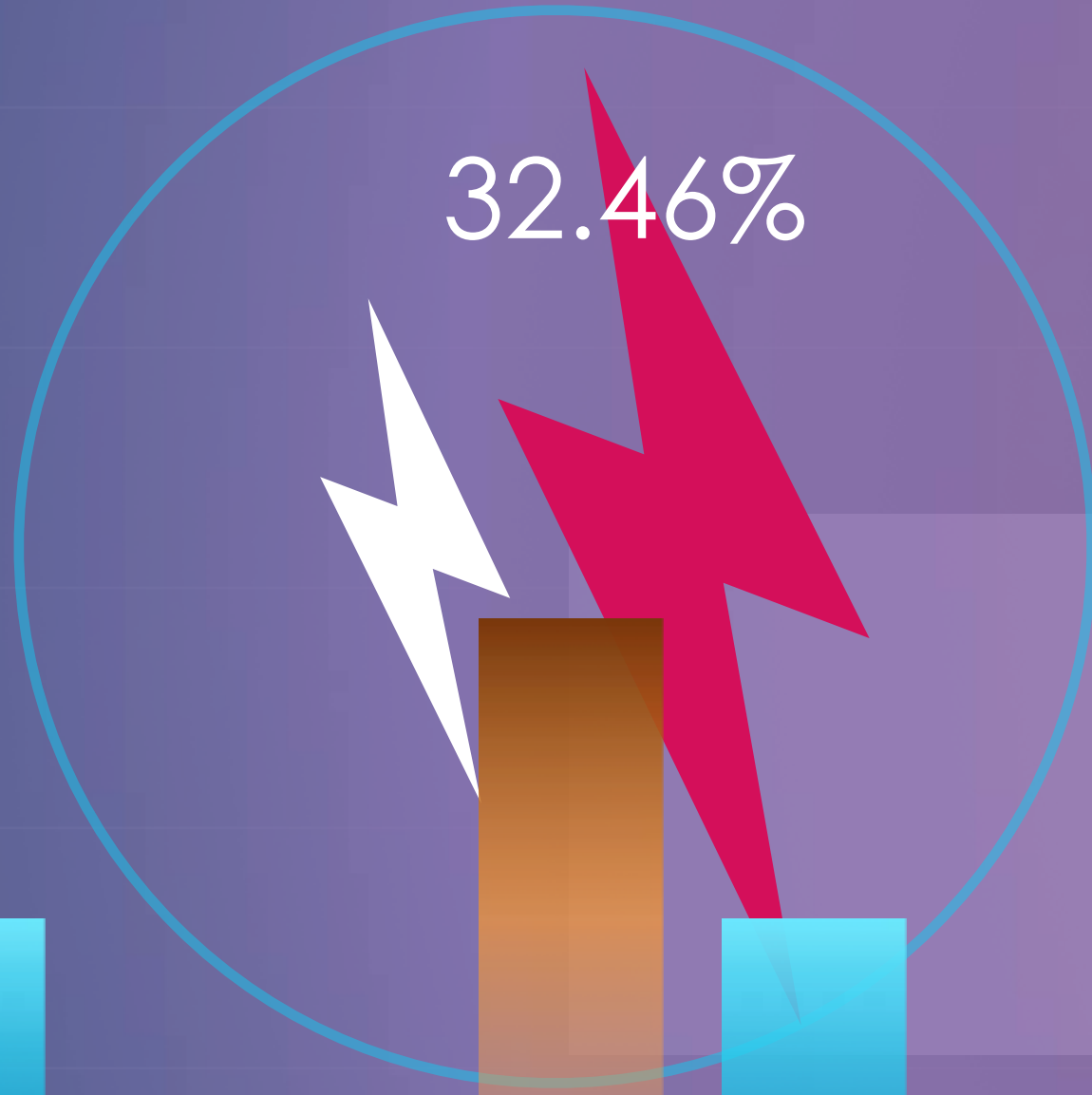
Grayscale

Printer Test Page

20%

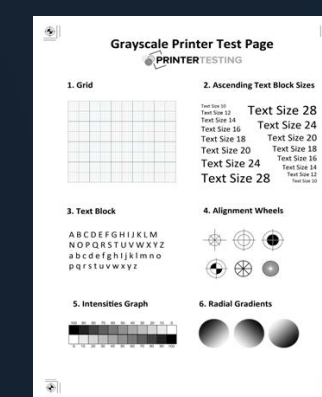
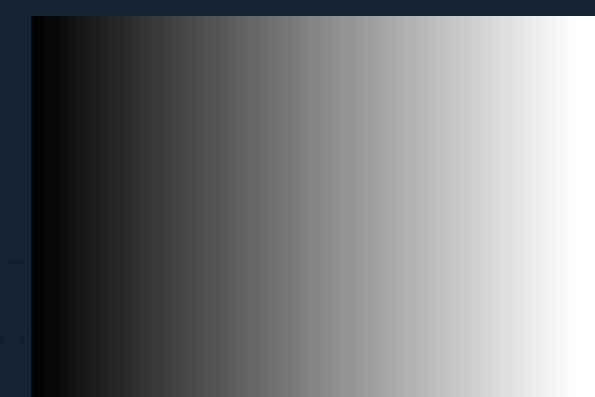
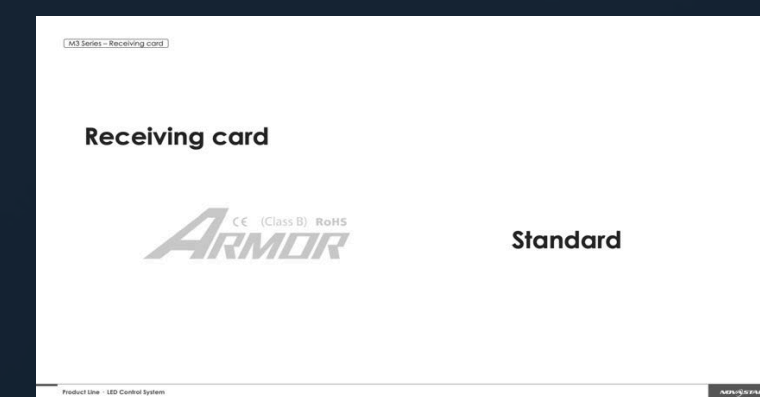
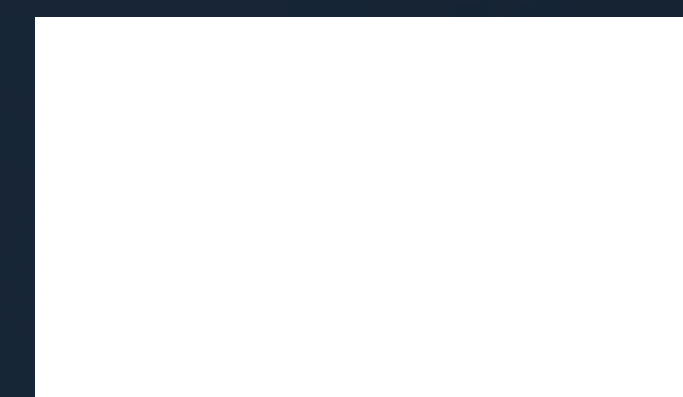
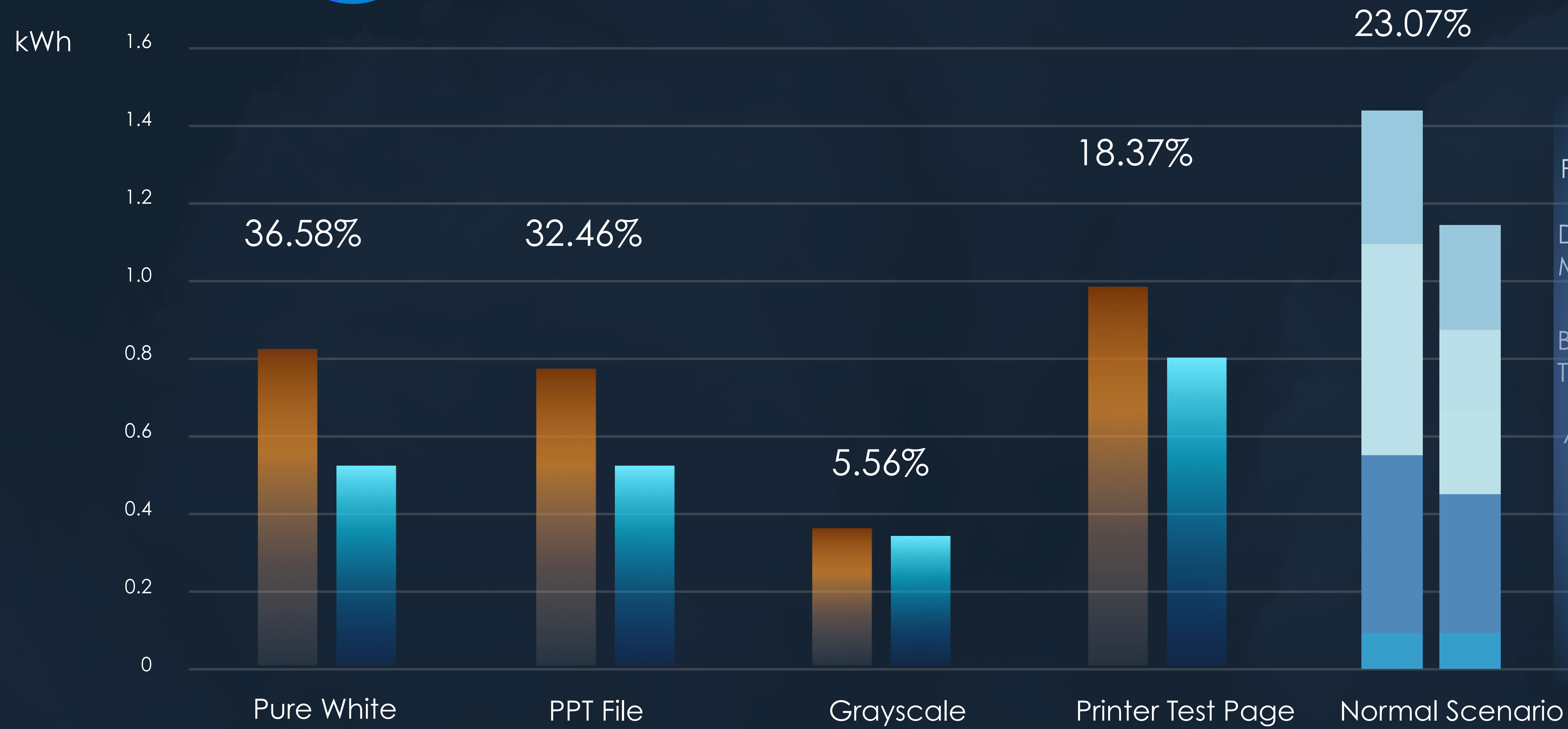
Average Power Saving

Testing Materials

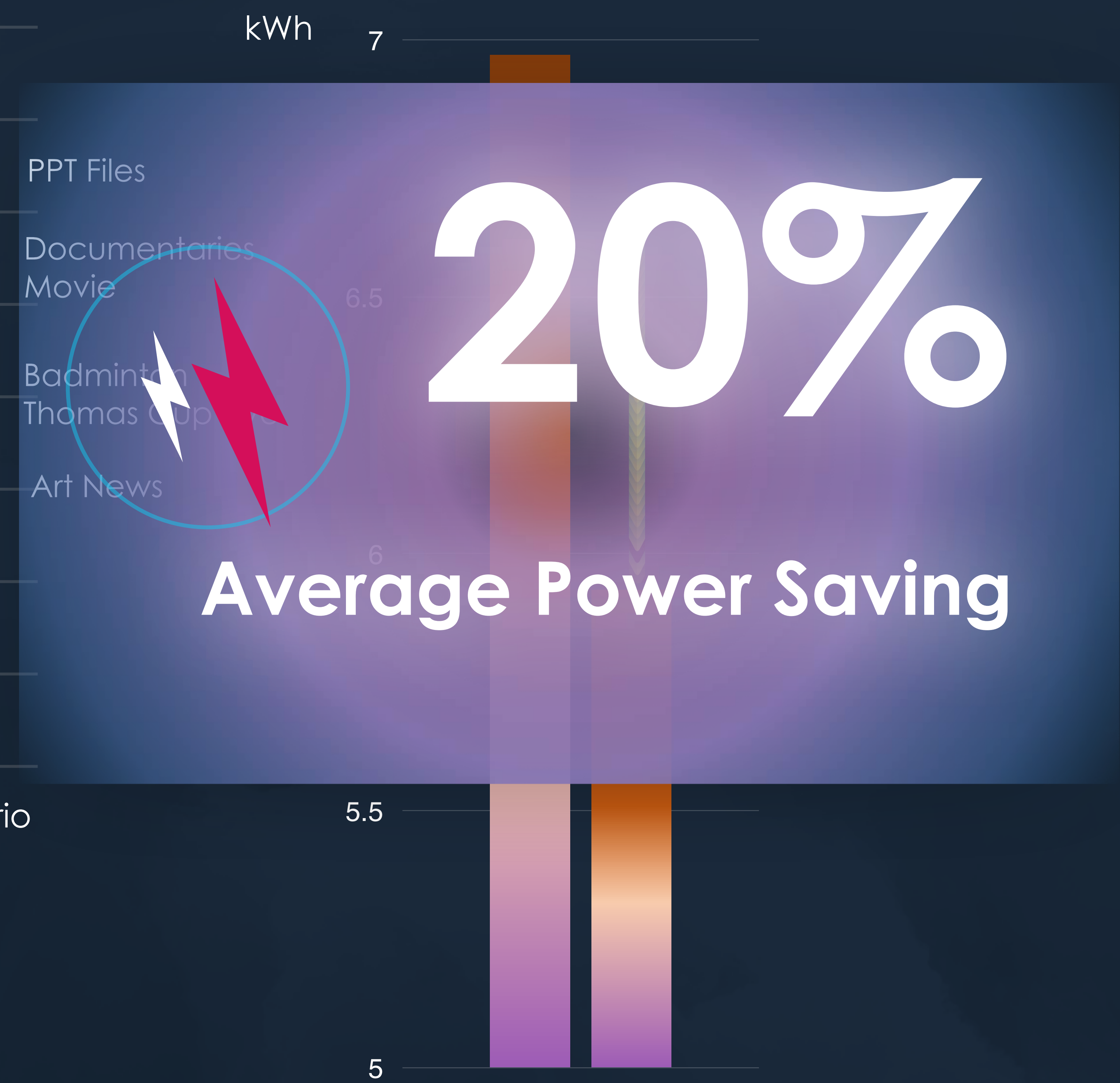




Power Consumption Test



Testing Materials

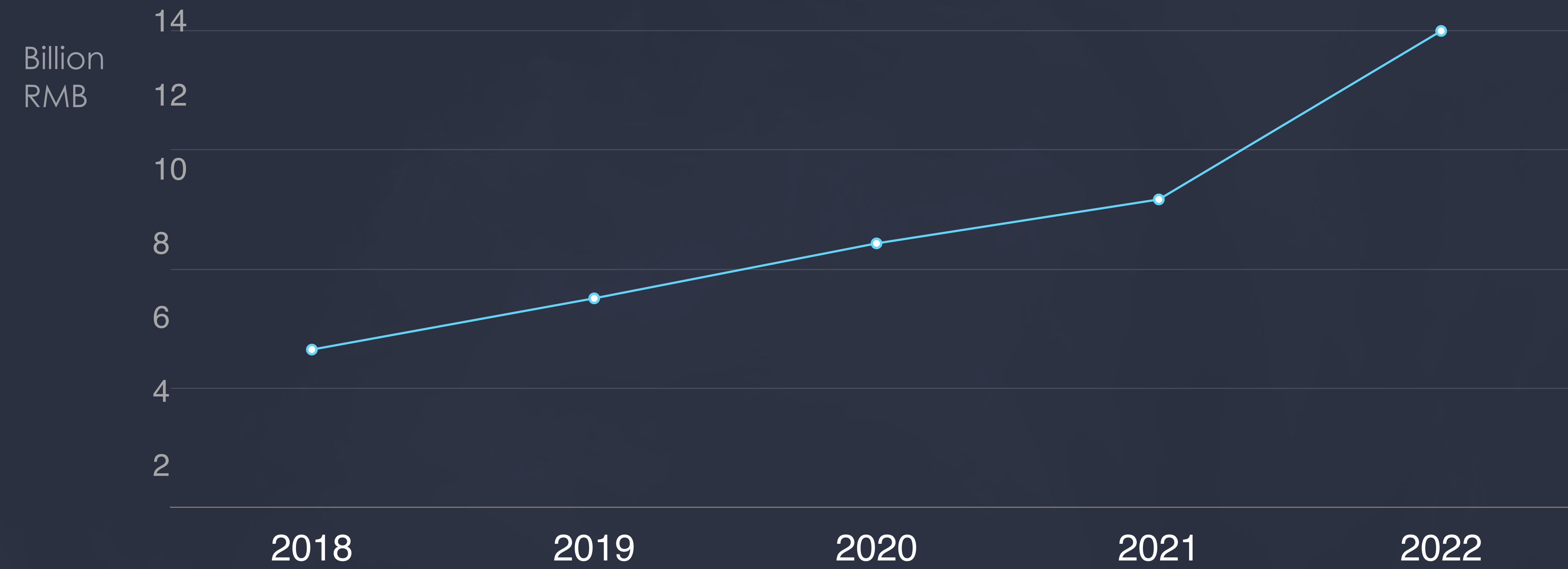


Full Process Testing Result



Full Grayscale Calibration

Mini LED & Micro LED Increase



Full Grayscale Calibration

Born to solve color block and inaccurate color issues of Mini LED and Micro LED



Micro LED P1.25 2K



Micro LED P0.93 4K



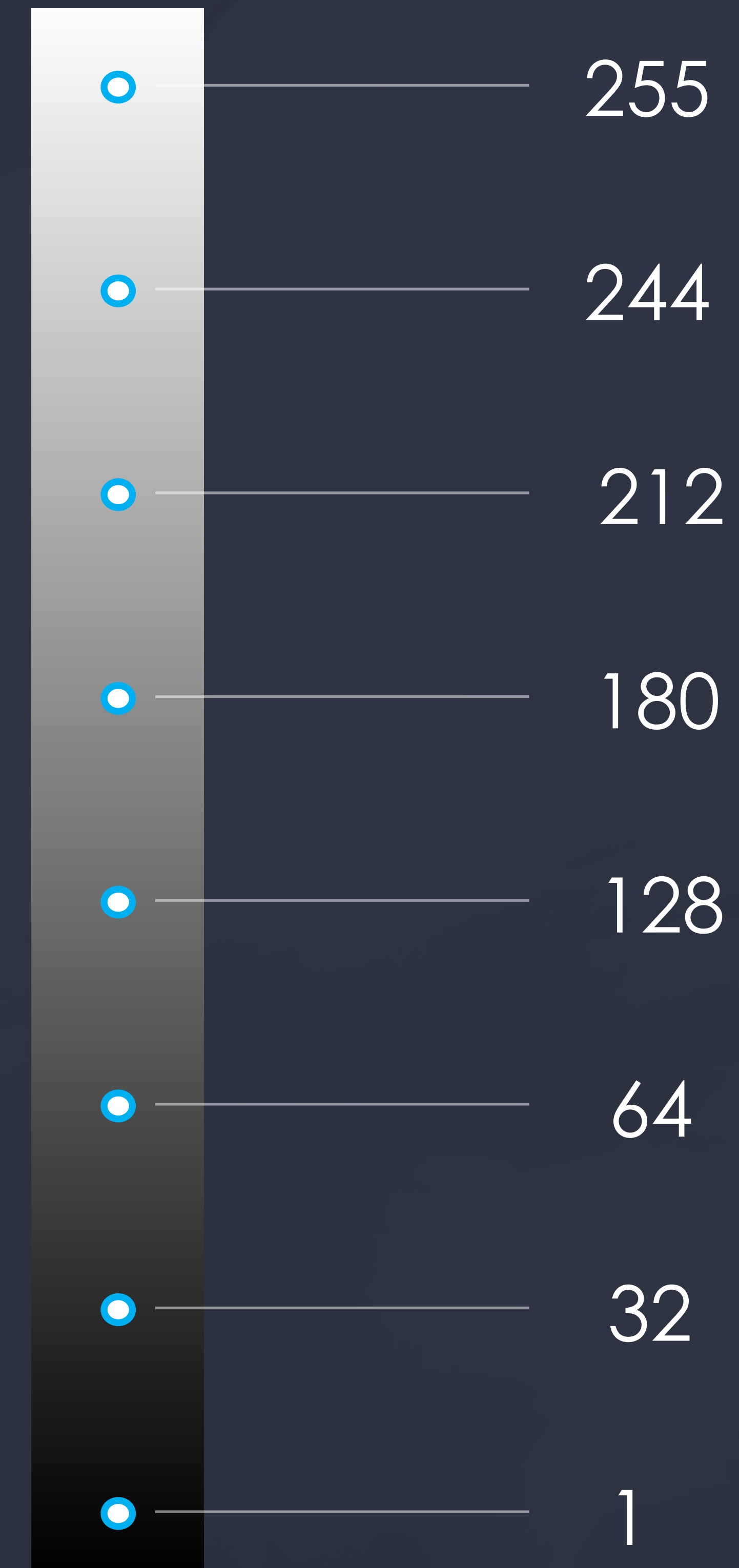
Micro LED P0.78 8K



Full Grayscale Calibration



The non-linear performance of LED chips under low current is the main cause of non-uniformity in different grayscales.



Creativity Unleashed



One Brand New Software

Two Core Technologies



Dynamic Booster



Full Grayscale Calibration

Image Enhancer

For exceptional visual experience

Power Saving

Lower screen temperature
Extend lifespan of LED displays

Multi-layer Calibration

Born for Mini LED & Micro LED

Greatly solve inaccurate grayscale
and color issues

Three Highlights

Creativity Unleashed



One Brand New Software

Two Core Technologies

Three Highlights



Flexible Color Adjustment



Scenario Presets



Frame Processing



color

I n f i n i t e P o s s i b i l i t y

Flexible Color Adjustment for Input & Output



Color

Black Level 123*

Contrast 45%

Hue 43*

Saturation 43%

Red Shadow 43%

Green Shadow 43%

Blue Shadow 43%

Red Highlight 43%

Green Highlight 43%

Blue Highlight 43%

Color Correct

	H(%)	S(%)	B(%)
Red	47	58	73
Orange	-56	-35	-60
Yellow	0.0	0.0	0.0
Lime	0.0	0.0	0.0
Green	0.0	0.0	0.0
Turquoise	0.0	0.0	0.0
Cyan	0.0	0.0	0.0
Cobalt	-35	-26	-27
Blue	-56	-35	-60
Violet	0.0	0.0	0.0
Magenta	0.0	0.0	0.0
Crimson	0.0	0.0	0.0
Magenta	0.0	0.0	0.0
Crimson	0.0	0.0	0.0

	R(%)	G(%)	B(%)
Magenta	0.0	0.0	0.0
Crimson	0.0	0.0	0.0

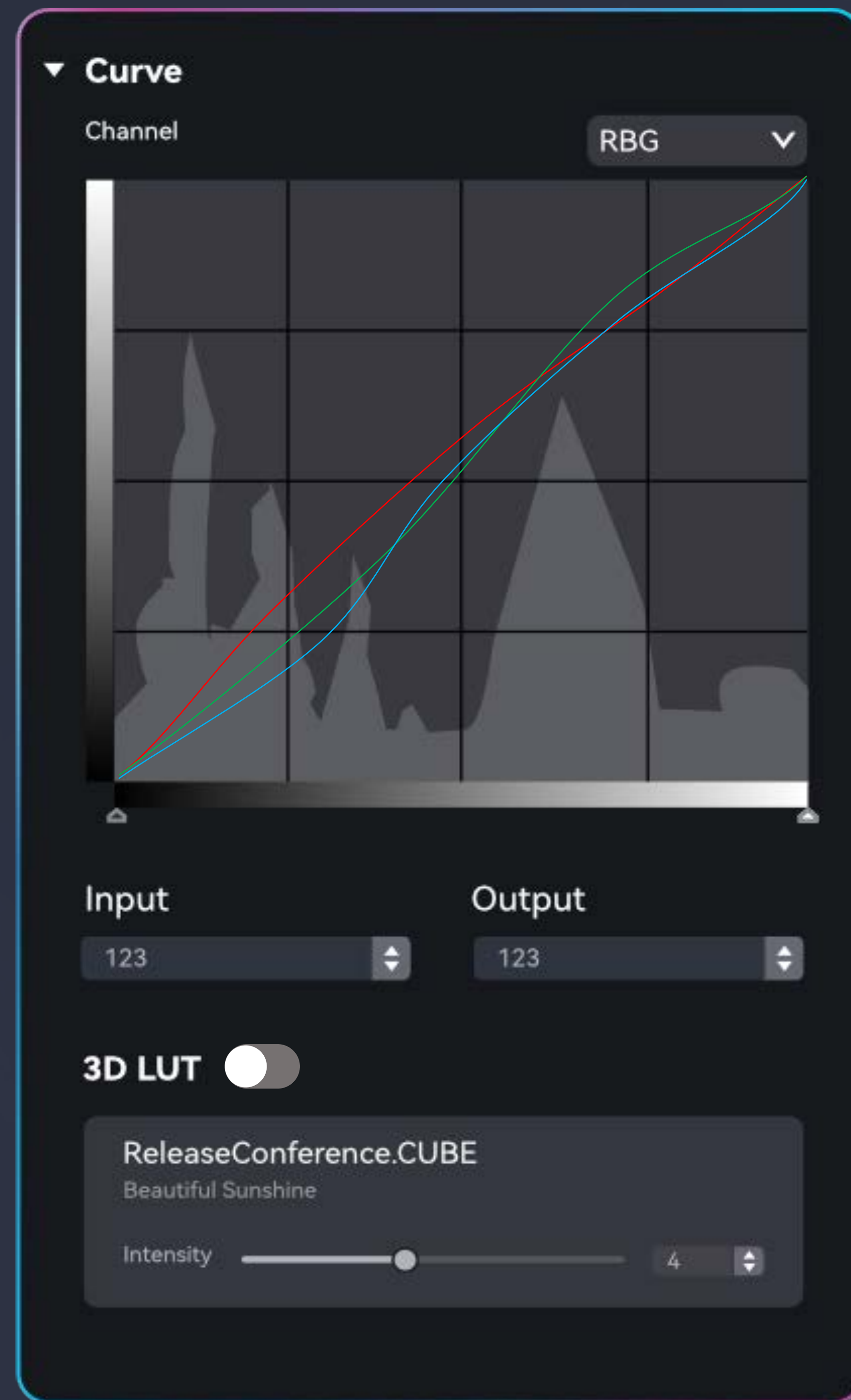


Input Source Management
Independent adjustments of RGB highlights and shadow help present the best visual experience.

14CH color correction

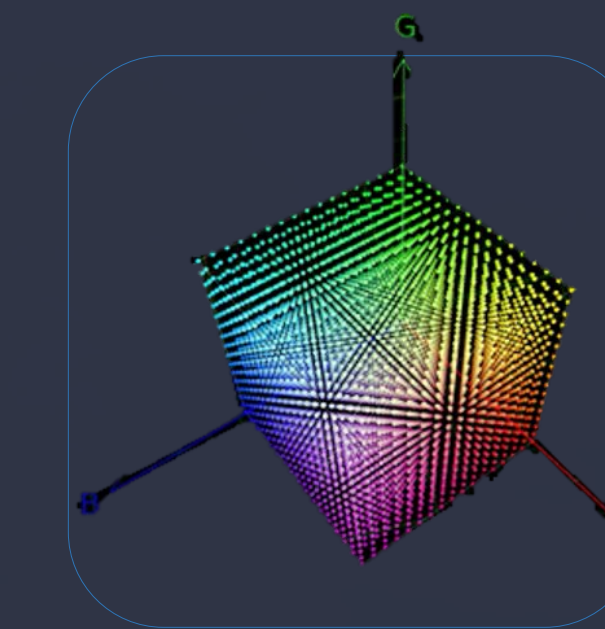
14CH color correction helps guarantee the color accuracy of your video source.

Advanced Color Correction Tools



Curve

W. R. G. B
independent
adjustment for
different style effects



3D LUT

It allows colors to be
mapped in a three-
dimensional space more
accurately.

Scenario Presets

Let users preset all parameters of input source, even HDR information.

▼ EDID

Resolution 3840*2160

Frame Rate 59.94Hz

Apply

EDID

▼ Inframe Override

Color Space/Sampling From Input

Color Gamut From Input

Quantization Range From Input

Select Source HDMI

▼ Source Information

Resolution 3840*2160 px

Frame Rate 59.94Hz

Bit Depth 10bit

Color Space/Sampling RGB 4:4:4

Color Gamut BT.2020

Quantization Range Full(0~255)

Dynamic Range HDR10

Preset Preview

Black Level

Black Level 123%

Contrast

Contrast 45%

Hue

Hue 43%

Saturation

Saturation 43%

Red Shadow 43%

Green Shadow 43%

Blue Shadow 43%

Red Highlight 43%

Green Highlight 43%

Blue Highlight 43%

▼ HDR

Format Auto

PQ MAX CLL override

HDR 10 Bit 4:4:4

PQ Mode 1000nit

30Lux

Lowgray 15

HLG Level HLG4 750nits



Scenario Presets for Quick Retrieval



Frame Rate Multiplication

Multiplier: 6

Output Frames

1	Video	Offset	X	2	Y	0
2	Video	Offset	X	4	Y	0
3	Video	Offset	X	6	Y	0
4	Video	Offset	X	8	Y	0
5	Video	Offset	X	10	Y	0
6	Color					

Shutter Setting

Off
 Angle
 Speed

180°
 360°
 270°
 180°
 172.8°
 120°
 90°
 45°
 22.5°
 11.25°

Load

MX

Sync

Active Source 60.00Hz
 Genlock 59.94Hz
 Internal 29.97Hz

Phase Offset: Angle

Angle: 0.000000°

Color Correct

	H(°)	S(%)	B(%)
Red	0	0	0
Orange	0	0	0
Yellow	0	0	0
Lime	0	0	0
Green	0	0	0
Turquoise	0	0	0
Cyan	0	0	0
Cobalt	0	0	0
Blue	0	0	0
Violet	0	0	0
Magenta	0	0	0
Crimson	0	0	0
	R(%)	G(%)	B(%)
White	0	0	0
Black	0	0	0

Presets

1 Camera A Posit...	2 Camera A Posit...	3 Camera A Posit...	4 Camera B Posit...	5 Camera A Posit...	6 Camera B Position 1	7 Camera B Position 2
8 Camera B Position 3	9 Camera B Position 4	10 Camera C Position 1	11 Camera C Position 2	12 Camera C Position 3	13 Camera C Position 4	14 Camera C Position 5

Source
 Processing
 Output

Save



Shooting Issues



Genlock
Generator



180°

1/60 s

1/60 s

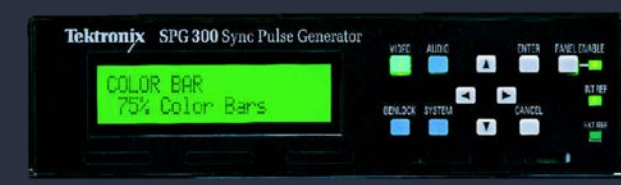


Black Field



Scan Lines

Shooting Issues



Genlock
Generator



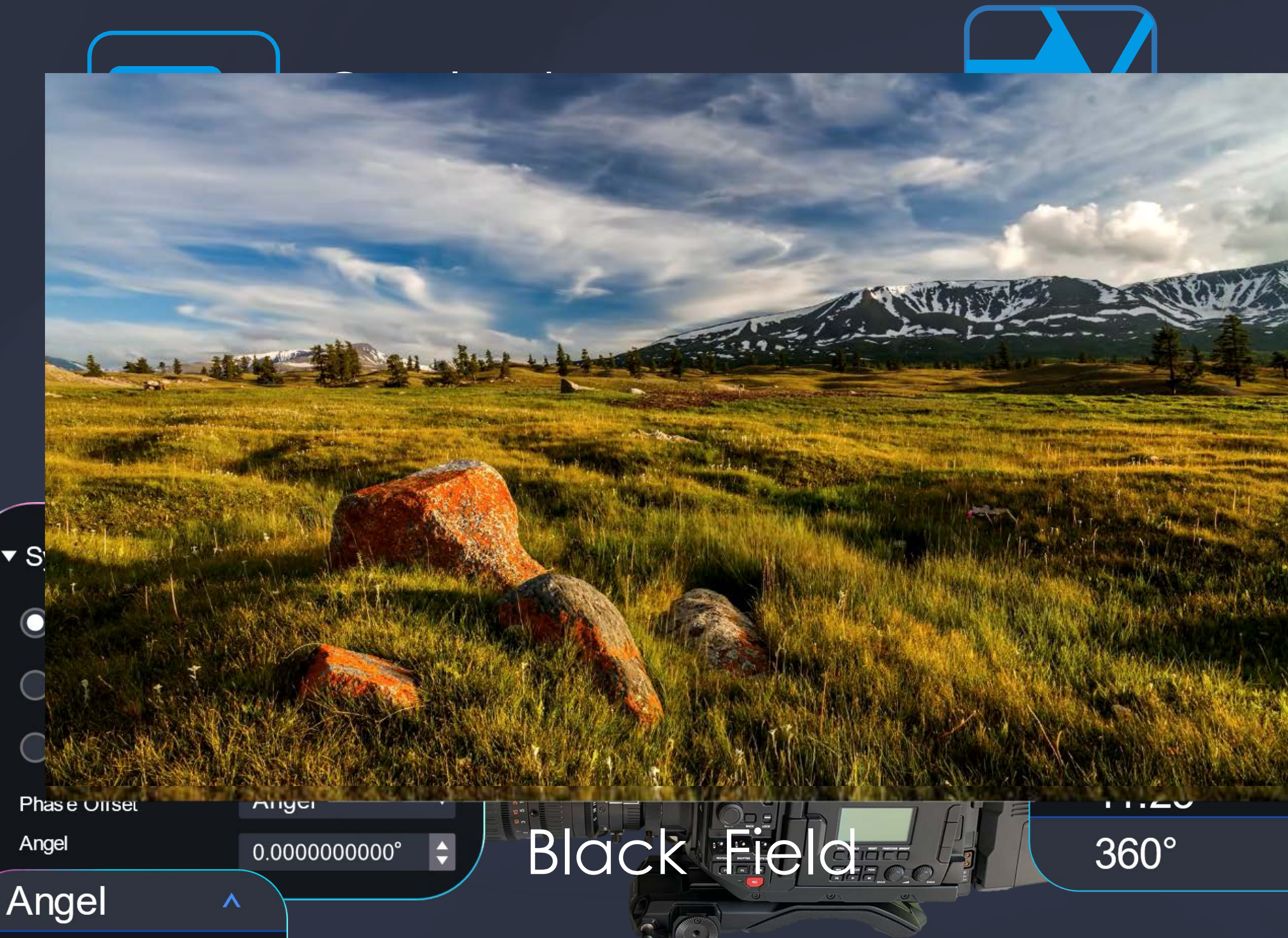
180°

1/60 s

1/60 s

1/120 s

1/120 s



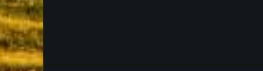
Black Field

360°

tter Fit

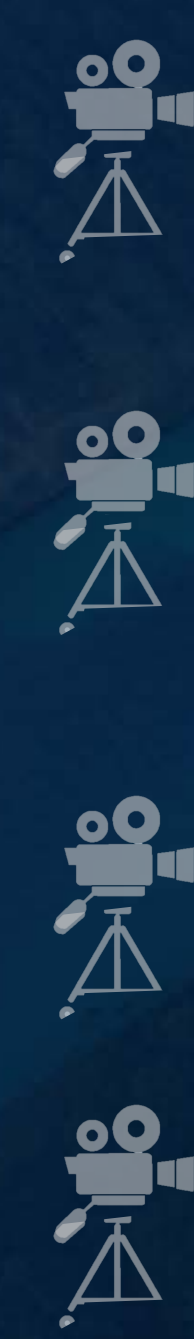


Scan Lines



Multi-source for Multi-camera

Genlock
Generator



Frame Multiplexing



▼ Frame Rate Multiplication

Multiplier

▼ Frame Rate Multiplication

Multiplier 4

Output Frames

1	Video	Offset	X 0	Y 0
2	Video	Offset	X 0	Y 0
3	Video	Offset	X 0	Y 0
4	Video	Offset	X 0	Y 0

Multi-source for Multi-camera



Shooting Effects captured by 4 cameras simultaneously



Frame Multiplexing



▼ Frame Rate Multiplication

Multiplier

▼ Frame Rate Multiplication

Multiplier

Output Frames

1 Video ▼ Offset X Y

2 Video ▼ Offset X Y

3 Video ▼ Offset X Y

4 Video ▼ Offset X Y

Solution for Virtual Production

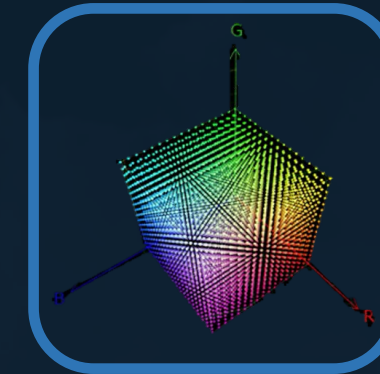
14CH Color Correction



Curve



3D LUT



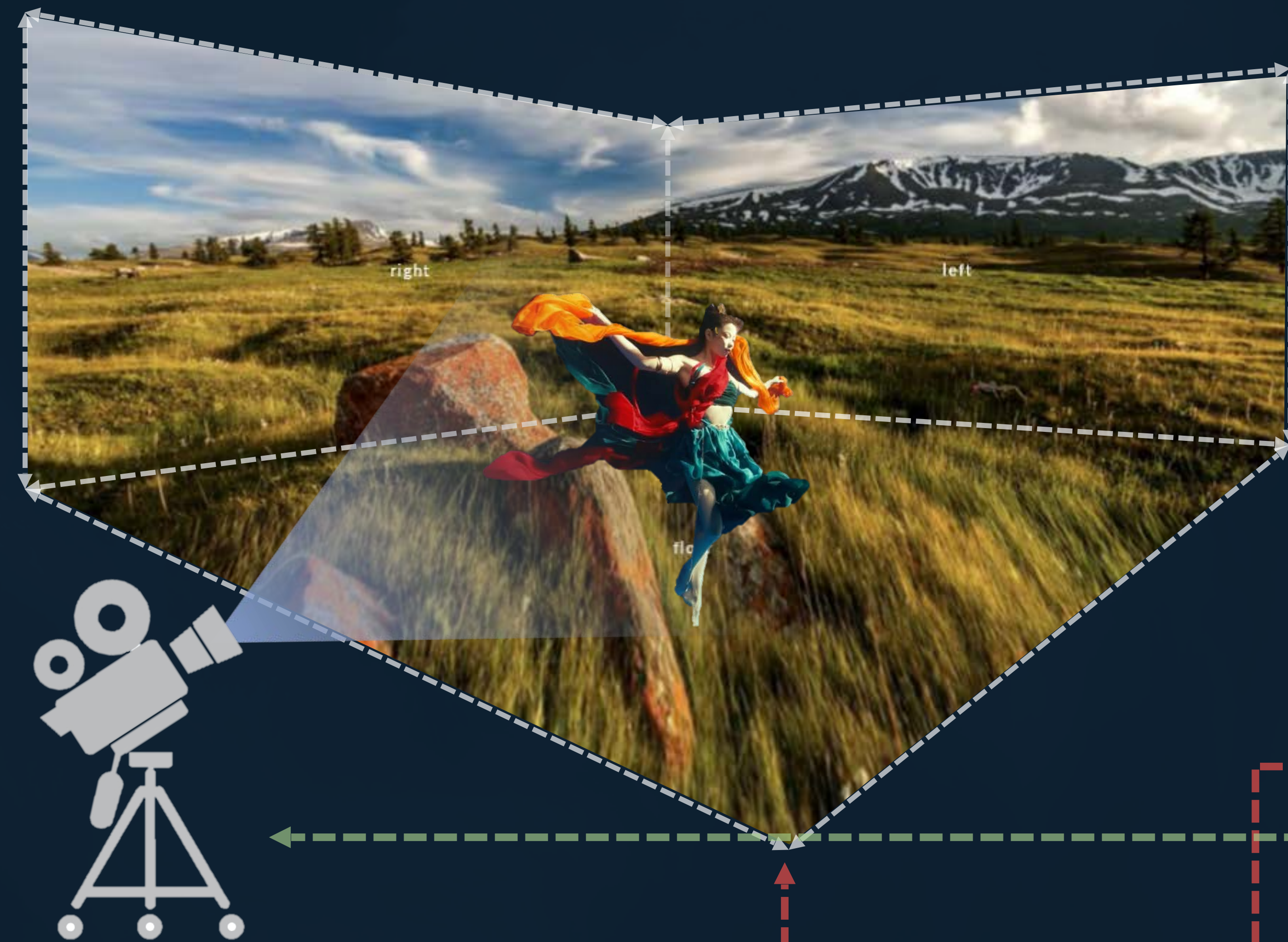
Shutter Fit



Frame Multiplexing



Genlock Phase Offset



Dynamic Booster



Full Grayscale Calibration



Image Booster

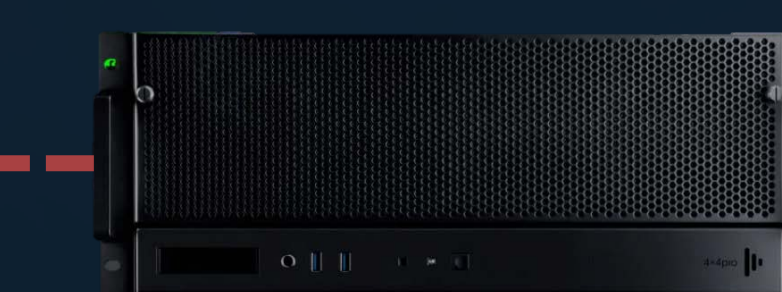


High Color Depth



VMP

HDR 10 Bit 4: 4: 4
PQ Mode



Creativity Unleashed

One
Brand New Software

Two
Core Technologies

Three
Highlights

System Structure



VMP Software



MX40 Pro



A10s Pro



Creativity Unleashed

Inputs

Outputs

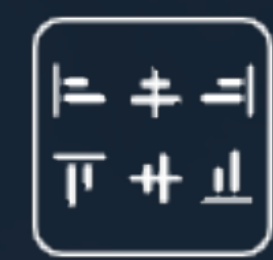
512 × 512 @ 60Hz

3 x HDMI2.0 & Loop
1 x 12G SDI & Loop
1 x DP1.2

20 × EtherCON
4×10G OPT



Smart Mapping



Quick Alignment



Painter



Monitoring



Color Replacement



14CH Color Correction



Curve



Black Level



Image Booster



Dynamic Booster



240 Hz



Full Grayscale Calibration



Mac OS



Maintenance Alarm



Multi-batch Adjustment



Seam Correction



3D LUT



3D LUT creator



DaVinci Color Adjustment



RGB Gamma Independent Adjustment



HDR 10Bit 4 : 4 : 4



10/12 Bit



Low Latency



Frame Multiplexing

NOVA STAR

**Thanks
for your time**

