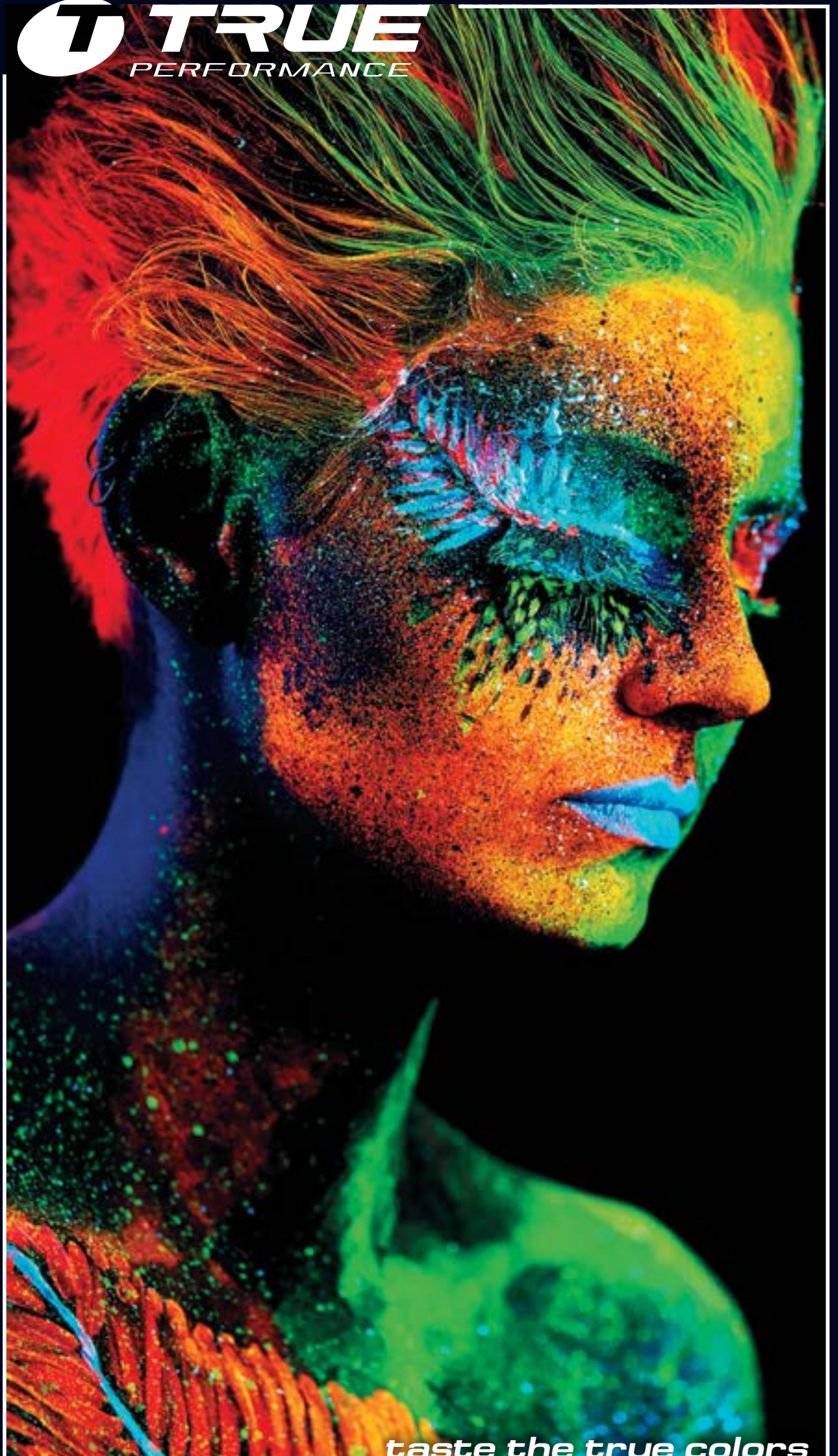


T TRUE
PERFORMANCE



taste the true colors



The pride of TRUE Performance displays is building on its roots from the high-quality LED screen manufacturer EKTA.

TRUE Performance Series is a product that is based on long experience and development and combines innovations of the future.

A highly experienced team from the LED display industry, a team of researchers, developers, engineers and experts from technical sales and support, took the challenge to develop an LED-display series that stands out from the standard

LED-screens of other manufacturers through the architecture, design and processing of the TRUE performance screens powered by EKTA ERMAC control system.

The LED Processing offered by TRUE Performance has been on the market for 25 years and has its research, development and production facilities in Europe.

The main advantage of True Performance products is their unrivalled reliability. The company's

quality control system operates on the principle of Total Quality Management and ensures fault-free equipment operation throughout the entire lifetime due to the high IP protection level, the robust, reliable module frame and the unique pre-sales testing system.

Another essential feature of the TRUE Performance product range is its technological superiority. Due to the know-how of the company - Uniformity² calibration and screen alignment, as well as the intelligent cluster architecture, the

TRUE Performance LED displays ensure brilliant picture at any brightness level and operating temperature.

The next advantage of True Performance is the convincing price. Even when you are on a budget, you can get technological superiority at a reasonable price.

The professional team provides well suited LED solutions, considering customer's current needs, overall requirements and performance priorities.

TOTAL SOLUTION Provider

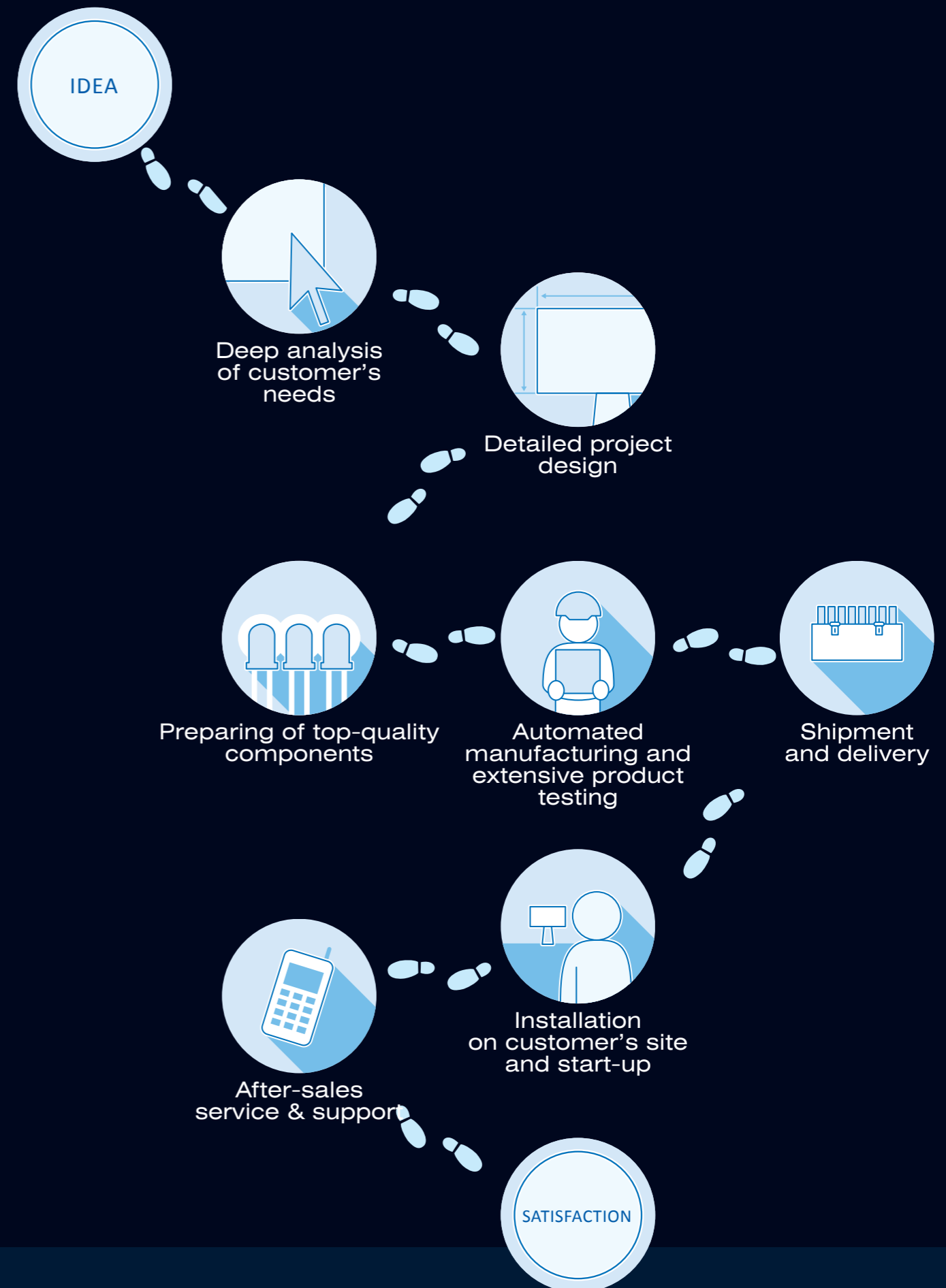
Being a design engineer and manufacturer of the whole turn-key solution, including architecture, LED modules, control system, commutation and software, EKTA meets all customers' needs and takes full responsibility for solutions' performance.

What does the customer receive from TRUE Performance?

- Screen complex design
- Full integration with related systems
- Custom software development
- Deployment and assembly
- After-sales service

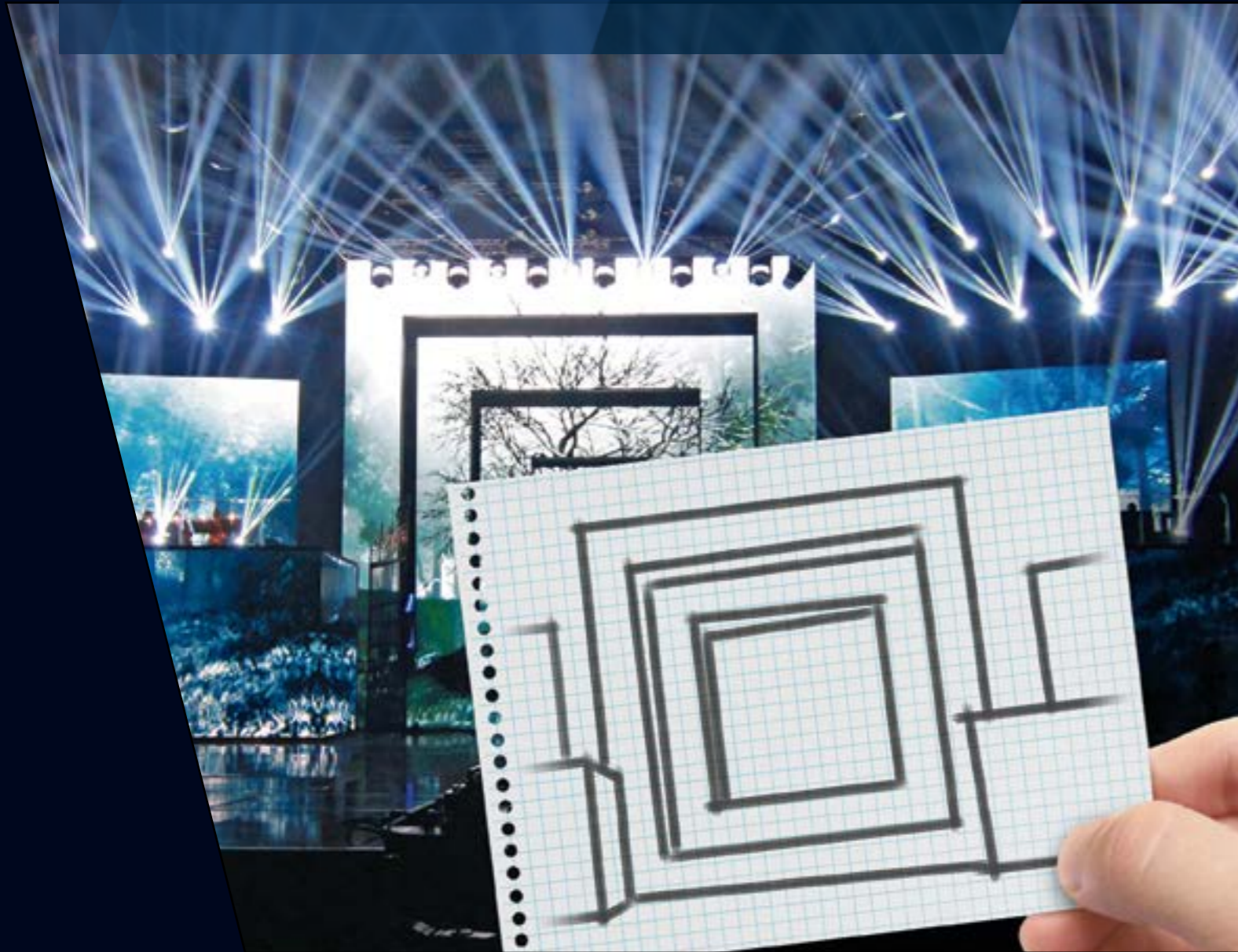


EASY STEPS TO REALIZE YOUR IDEA WITH TRUE PERFORMANCE TECHNOLOGY



COMMITTED to Challenge

Carrying rental DNA, based on own long-time rental business experience, TRUE Performance realize rental and fixed installation projects of top complexity for most demanding customers around Europe. Come and challenge us with your most creative ideas. Make your dreams real with TRUE Performance!



UEFA Draws

20 sqm of iLVM 6C-Q
and 106 sqm of LVM
9C-S, Monaco, 2014

Ultimate live visual performance at low brightness thanks to EKTA cutting-edge video processing and delicate color adjustment of EKTA LED screens on the backdrop to the projecting screens on the front.



Adidas

200 sqm of WOWFloor
in Paris, France, 2016

A luxurious and durable LED WOWFloor mounted on an uneven roof surface and turned it into a giant interactive sports ground proved its resilient and tough design, resisting dynamic vibration loads.



Uniformity² calibration and screen alignment

- Up to 99% color and brightness uniformity
- Pixel-by-pixel brightness and color high-precision calibration
- Real-time alignment after cluster replacement
- No external equipment needed for alignment
- Alignment of screens with different pixel pitch and LED batch

HDR-ready

ERMAC video processing

- 4K resolution support
- Multilayer video mixing, scaling, cropping and lots of other integrated functions
- Real-time image properties control with easy-to-use software
- Smooth processing of high-definition video
- Low latency
- Full range of frame rates support, from 30 Hz to 120 Hz

Multipoint Gamma Correction

Intelligent Cluster architecture

- Perfect image quality at low brightness
- High performance and no artifacts while shooting on camera thanks to superior refresh rate
- Hot-swap cluster replacement
- Remote cluster and module diagnostics with instant screen monitoring

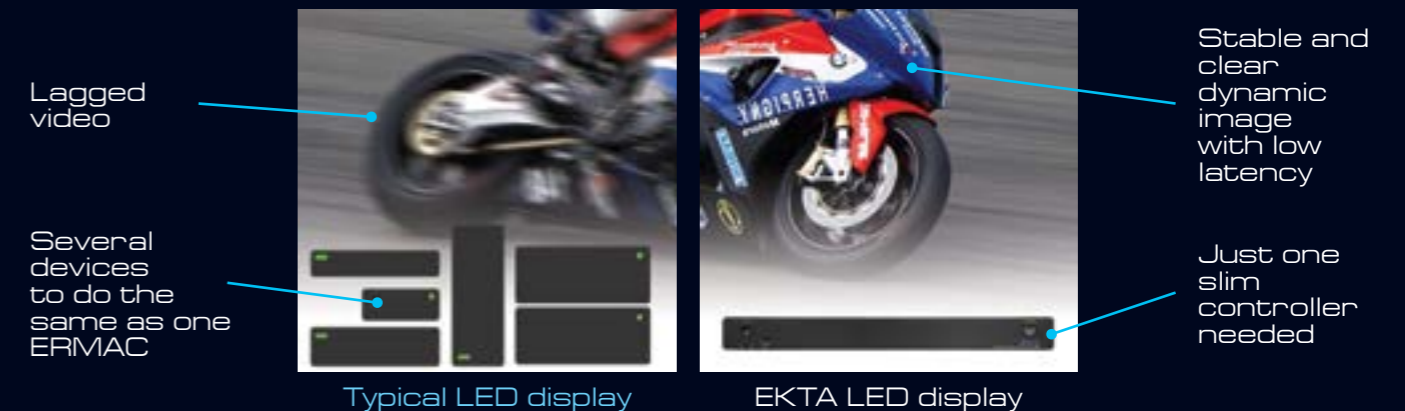
Combined screen with different LED batches



Low brightness viewed by naked eye or camera



Dynamic content with high frame rate



ONE TOUCH Full control

Unique design of ERMAC three-level architecture has revolutionized LED video processing technology for LED displays, regardless of the model and configuration



One SPU allows controlling up to 32 LED screens of different size and shape

ERMAC Control System Family

ONE BOX

To replace a full stack of equipment

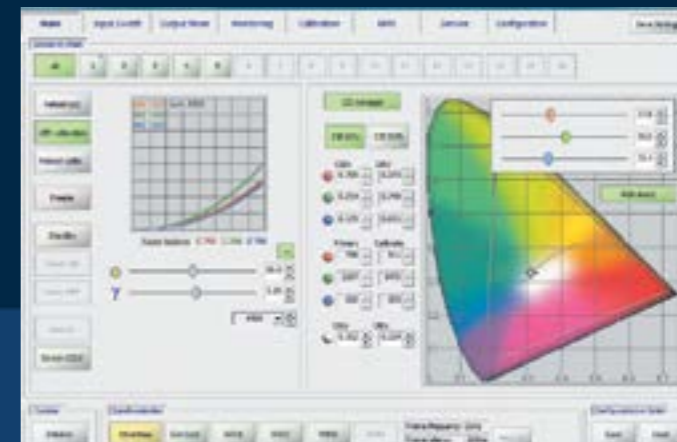
- LED control system
- Multilayer image processor and scaler
- Color uniformity system
- Embedded PC
- Automated control features
- Advanced screen technical monitoring



ONE TOUCH

Real-time adjustment

- Color temperature from 3000K to 10000K
- Brightness from 0.1% to 100%, 1024 gradations of each color
- Gamma curve
- Output mixer, picture in picture
- Image cropping and scaling
- Screen and stage designer



ONE POWER

Outstanding performance for top-demand solutions

- 10/12-bit internal signal processing
- 18-bit LED control
- 30/50/60/75/100/120 Hz frame rates
- 4K resolution
- Up to 32 displays controlled by one SPU
- 3D ready





World's leading LED screen control and video processing power in a thin blade

The all-in-one controller brings outstanding image quality and high performance to advertisement, digital signage, industrial TV and other special purpose screens.



ceLSC-102

MODEL	SPU-10B	SPU-10M / M+	SPU-10F	SPU-16
SYSTEM				
Embedded PC	-	+	+	+
Embedded OS	-	+	+	+
Image Channel (simultaneous)	2	3	4	2-6
CONTROL				
Control Interface (simultaneous)	USB 2.0, DMX		System, USB 2.0, Ethernet, DMX	
Configurable and Control Software	ESConsole, Screen Builder (Desktop/ laptop PC Location)		ESConsole, Screen Builder (Embedded PC Location)	
INPUT				
Display Port	1920 x 1200 x 60 Hz	2560 x 1600 x 60 Hz	3840 x 2160 x 60 Hz	3840 x 2160 x 120 Hz
HDMI	1920 x 1200 x 60 Hz	2560 x 1600 x 60 Hz	3840 x 2160 x 30 Hz	3840 x 2160 x 120 Hz
CVBS	+	+	+	+
3G SDI (Copper)	1	1/2	2	1x ... 4x (6G)
3G SDI (Fiber)	-	-	2	2x ... 4x (6G)
NDI	-	-	-	+
Audio Input	3G SDI, DP, HDMI	3G SDI, DP, HDMI	3G SDI, DP, HDMI	3G SDI, DP, HDMI
Genlock	+	+	+	+
OUTPUT				
Fiber optic display link	1 x 2.3 Mpx	2 x 2.3 Mpx	4 x 2.3 Mpx	8 x 2.3 Mpx
Gigabit Ethernet	-	-	-	+
HDMI Loop	-	+	+	+
SDI Loop	-	+	+	+(6G)
Audio Output	AES / EBU Audio packet transfer over FO	AES / EBU HDMI Output audio packet transfer over FO		
FEATURES				
Output Resolution, 60 Hz	2,3 Mpx	4,6 Mpx	8,3 Mpx	16,6 Mpx
HDR /10bit / 3D	+	+	+	+
Signal delay, frames	1	1	1	1
Video Processing	Scaling, PIP, Cropping, Switching			

SYSTEM	
Embedded PC	Q7-BT system, Intel® HD 4000 1.91 GHz CPU, RAM DDR3L 4GB, SSD 32GB
Operating system	Windows Embedded
INPUT	
USB	2 x USB 2.0 (1 channel configurable as client), 1 x USB 3.0
Ethernet	100 Mbit LAN
Memory card	micro SD slot
Video	DisplayPort 1.1
OUTPUT	
Screen Interface	6 Ethernet output ports
Output resolution	Up to 1920 x 1080 pixel
Audio Output	S/PDIF, Line
Video Output	DisplayPort 1.1
CONTROL	
Control Interface	Ethernet, system console
DIAGNOSTICS	
Feedback values	LED cluster temperature; module power supply values; LED module current; outside temperature; outside luminance
GENERAL DESIGN	
Dimensions	170 x 190 x 40 mm
Power	12 VDC, 10 Watt
Operating temperature	-25° to 60° C

TRUE Control System Family

TRUE Receiving Cards



For TRUE Performance products, special Receiving Cards with especial technical characteristics have been developed that make possible to provide in the TRUE Performance products the most unique advantages of EKTA control systems.

MODEL	ceLSC-e	SCU-2E	SCU-4E	SCU-6E
SYSTEM FEATURE				
Embedded PC	Player	-	-	-
Embedded OS	-	-	-	-
Image Channel (simultaneous)	1	1	1	1
CONTROL				
Control Interface (simultaneous)	USB 2.0, LAN, WiFi	USB 2.0	USB 2.0	USB 2.0
INPUT				
Display Port	-	-	-	-
HDMI	-	-	1920 x 1200 x 60 Hz	1920 x 1200 x 60 Hz
DVI-D	-	1920 x 1200 x 60 Hz	1920 x 1200 x 60 Hz	1920 x 1200 x 60 Hz
CVBS	-	-	-	-
3G SDI (Copper)	-	-	-	-
3G SDI (Fiber)	-	-	-	-
Audio Input	-	-	-	-
Genlock	-	-	-	-
OUTPUT				
Fiber optic display link	-	-	-	3x
Gigabit Ethernet	1x	2x	4x	6x
HDMI	-	-	1920 x 1200 x 60 Hz	-
3G SDI LOOP	-	-	-	-
Audio Output	1/8" TRS	-	-	-

MODEL	RC G24	RC G32	RC G40
SYSTEM FEATURE			
Input Interface	Gigabit Ethernet	Gigabit Ethernet	Gigabit Ethernet
Bit Per Pixel (Input)	30	30	30
Output (Module) Interface	LVC MOS	LVC MOS	LVC MOS
RGB Group (Output)	24	32	40
Bit Processing (Max.)	18	18	18
Max. Size X (Pixel)	512	512	512
Max. Size Y (Pixel)	512	512	512
Max. Total Pixel	174 698	174 698	174 698
Bandwidth	31.25 Mpixel/s	31.25 Mpixel/s	31.25 Mpixel/s
Flash Management Interface	SPI	SPI	SPI
Configuration Storage	Yes	Yes	Yes
Fame VS Jitter	125 ns	125 ns	125 ns
EMC Suppression	Yes	Yes	Yes
Monitoring	All Parameter	All Parameter	All Parameter





T **TRUE**
PERFORMANCE

SERIES

XF Product family

- indoor • fix installation • front maintenance • PP 0.9 - 2.5 • high image quality • real seamless and easy splicing • dot to dot display • high refresh rate • 16 bit broadcast-quality gray scale processing • wide viewing angle • power and signal dual link • Wide Color Gamut •



PARAMETERS XF

	0.9	1.2	1.5	1.8	2.5
Pixel pitch, mm	0.9	1.2	1.5	1.8	2.5
Condition	indoor				
Cabinet Dimensions (width in mm)	600				
Cabinet Dimensions (height in mm)	337.5				
Cabinet area (sq.m.)	0,2				
Cabinet weight (kg)	8,5				
Maintenance	front				
Brightness max. nit	800				

Note: different configurations will have slight difference accordingly. Please contact our sales manager for details.

XF

XG Product family

- in & outdoor • fix & rental installation • smart die cast cabinet • front & rear maintenance • PP 2.6 - 4.8 • magnetic modules • lightweight • excellent gray scale • excellent frequency stability • high contrast •



XG

PARAMETERS XG				
Pixel pitch, mm	2.6	3.1	3.9	4.8
Condition	indoor			
Cabinet Dimensions (width in mm)	500			
Cabinet Dimensions (height in mm)	1000			
Cabinet area (sq.m.)	0,5			
Cabinet weight (kg)	13,5			
Maintenance	front / rear			
Brightness max. nit	1000 - 4500			
<small>Note: different configurations will have slight difference accordingly. Please contact our sales manager for details.</small>				

XL Product family

- large outdoor series • fix installation • smart cabinet design • front & rear maintenance • PP 5 - 16.7 • magnetic waterproof modules
- lightweight • excellent gray scale • excellent frequency stability • easy service •



PARAMETERS XL					
Pixel pitch, mm	5	6	8	10	16
Condition	outdoor				
Cabinet Dimensions (width in mm)	1200		960		
Cabinet Dimensions (height in mm)	900		960		
Cabinet area (sq.m.)	1,08		0,92		
Cabinet weight (kg)	38		36		
Maintenance	front / rear				
Brightness max. nit	6100	6200	6000	6500	6000

Note: different configurations will have slight difference accordingly. Please contact our sales manager for details.

XS Product family

- outdoor sport series / perimeter
- fast & easy installation
- front & rear maintenance
- PP 6 - 16
- broadcast edition
- hidden cables
- removable modules & pd box
- customized processing for sponsor
- excellent frequency stability
- FIFA, UEFA, FIBA, IHF standards

- outdoor sport series / fascia
- easy installation
- smart top access
- hidden cables
- removable pd box
- excellent gray scale
- excellent frequency stability
- easy service



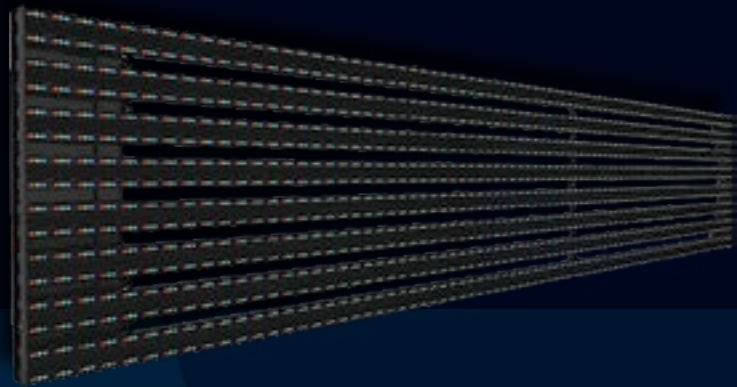
XS

PARAMETERS XS				
Pixel pitch, mm	6	8	10	12
Condition	indoor	outdoor		
Cabinet Dimensions (width in mm)	1280	1200		
Cabinet Dimensions (height in mm)	960	900		
Cabinet area (sqm)	1,23	1,08		
Cabinet weight (kg)	52	45		
Maintinace	front / rear			
Brightness max. nit	1200	6000	6200	5700

Note: different configurations will have slight difference accordingly. Please contact our sales manager for details.

XM Product family

- outdoor mesh series • easy installation • front or rear maintenance • PP 13 - 50 • full solution with structures • high variability in pixel pitch • lightweight design • high transparency •



XM

PARAMETERS XM

	13	16	20	25	31
Pixel pitch, mm	13	16	20	25	31
Condition	outdoor				
Cabinet Dimensions (width in mm)	1200	1536	1600	1500	
Cabinet Dimensions (height in mm)	320	256	320	250	
Cabinet area (sq.m.)	0,38	0,39	0,51	0,38	
Cabinet weight (kg)	8,8	7,8	9,2	5,6	4,5
Maintenance	front / rear				
Brightness max. nit	7000	7500	6500	7500	6500

Note: different configurations will have slight difference accordingly. Please contact our sales manager for details.

FrameLED Product family

- one frame - all pixel pitches • fine pixel pitch for tv studios • versatile mainstream solution for indoor rental and fixed projects •



Camera-friendly



High contrast



Lightweight



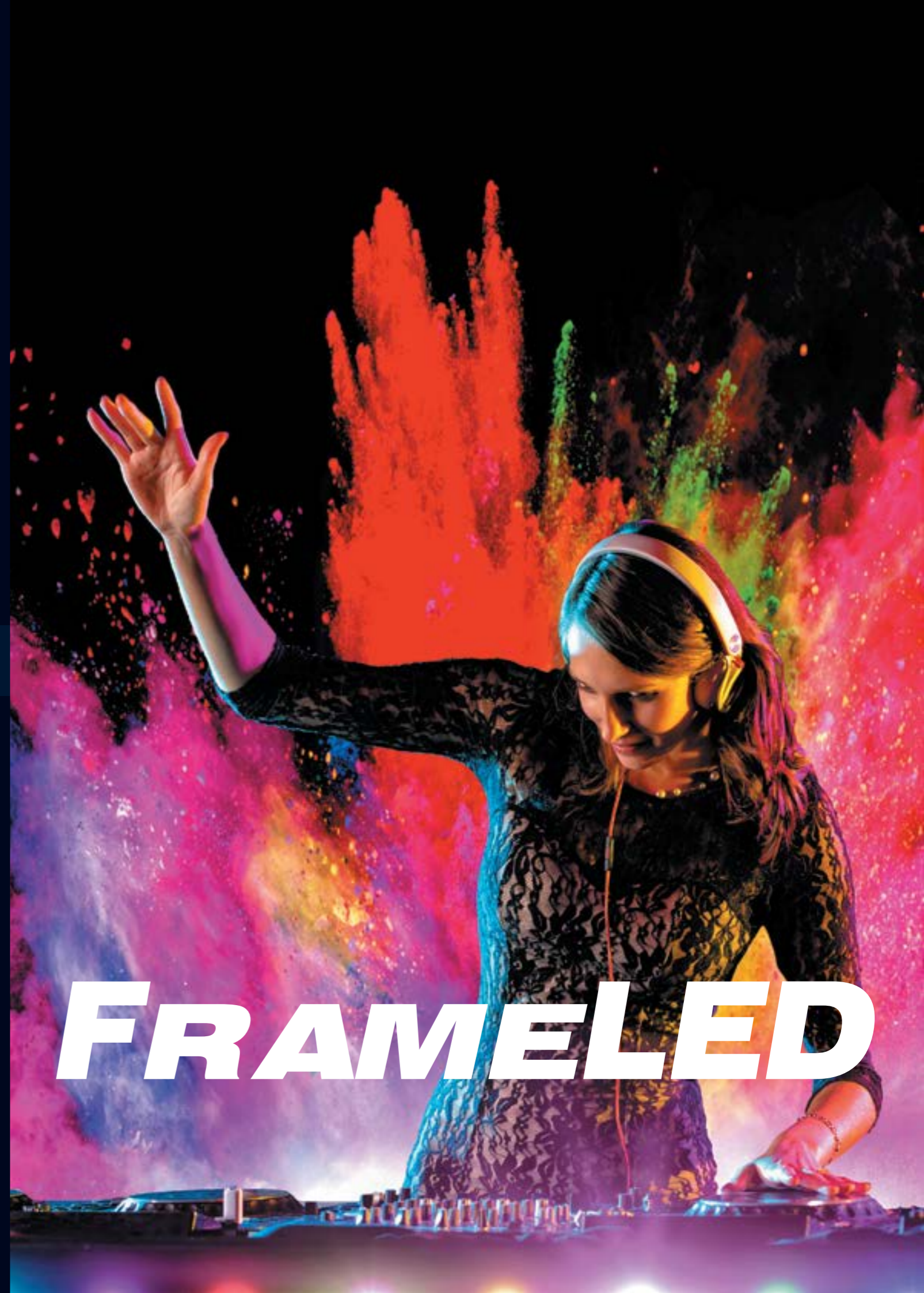
Precise frame



Unique form factor

MODEL	INDOOR		OUTDOOR
	iLVM 1.7C-P	iLVM 2C-P	LVM 3C-P
Pixel pitch, mm	1.7	2.68	3.86
Brightness, nit	1000	1800	3800
Viewing angles, H/V	160°/160°	160°/160°	140°/140°
Grey scale, bit	15	15	15
Refresh Rate, Hz	1920	3840	3840
Maximum power consumption, W/m ²	800	800	800
Module weight, kg	4.2	28	5
Screen weight, kg/m ²	28	28	33

BLACK FACE
HIGH CONTRAST



FRAMELED

Ultimate component selection for the best performance and reliability



World-renowned Nichia LEDs



Designed for top-demand projects



Unbeatable brightness up to 15,000 nit

		INDOOR		OUTDOOR		
MODEL		iLVM 4C-Qs	iLVM 4C-Q	LVM 6C-Q	LVM 9C-S	LVM 8C-vpR
Pixel pitch, mm	virtual physical	- 4.03	- 4.83	- 6.90	- 9.66	8.05 16.10
Brightness, nit		3000	3500	9000	9000	15000
Viewing angles, H/V		160°/160°	160°/125°	150°/85°	150°/90°	110°/60°
Grey scale, bit		18	18	18	16	16
Refresh Rate, Hz		7200	7200	7200	600 - 32,000	600 - 32,000
Maximum power consumption, W/m ²		1000	900	950	1000	1000
Module weight, kg/m ²		4.2	4.2	5	5	5.2
Screen weight, kg/m ²		28	28	33	33	33

Tempered glass interactive LED Floor for brilliant real-time visual experience



Luxury look



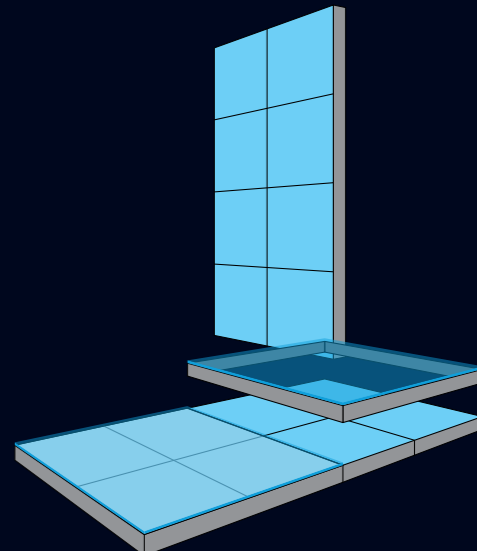
Hard heel-proof surface



Ultrastrong to support load capacity up to 1000 kg/m²

INTERACTIVE		
MODEL	iLVF 24C	iLVF 32C
Pixel pitch, mm	24.15	32.20
Brightness, nit	650	500
Module dimensions, mm	773 x 773	773 x 773
Levelling	adjustable jack, up to 15 mm	
Grey scale, bit	16	16
Refresh Rate, Hz	600 - 32,000	600 - 32,000
Max. power consumption, W/m ²	350	270
Screen weight, kg/m ²	32	32
Protective coating	Impact resistant laminate safety glass	

NON-INTERACTIVE			
MODEL	iLVF 4C	iLVF 6C	iLVF 9C
Pixel pitch, mm	24.15	32.20	9.6
Brightness, nit	650	500	1400
Module dimensions, mm	773 x 773	773 x 773	773 x 773
Levelling	adjustable jack, up to 15 mm		
Grey scale, bit	16	16	16
Refresh Rate, Hz	3840	7200	up to 32000
Max. power consumption, W/m ²	1000	1000	960
Screen weight, kg/m ²	33	33w	33
Protective coating	Impact resistant laminate safety glass		



Glass covering is compatible with any FrameLED module

Well-known EKTA LED screens for high-end rental and fixed installations



EKTA Selected LED



Widely used rental solutions



Camera-friendly

		INDOOR		OUTDOOR		
MODEL		iLVM 4C-Qsc	LVM 4C-Qc	LVM 4C-Qcb	LVM 6C-Qc	LVM 9C-c
Pixel pitch, mm		4.03	4.83	4.83	6.9	9.66
Brightness, nit		2500	8500	3300	8000	7000
Viewing angles, H/V		145°/130°	140°/120°	140°/120°	140°/120°	140°/90°
Grey scale, bit		18	18	18	16	16
Refresh Rate, Hz		4800	7200	7200	7200	600-32,000
Maximum power consumption, W/m ²		1000	1000	1000	1000	960
Module weight, kg/m ²		4.2	5	5	5	5
Screen weight, kg/m ²		28	33	33	33	33

BLACK FACE
HIGH CONTRAST

Especially designed cost-effective rental solution



EKTA Selected LED



Camera-friendly



Unique FrameLED form factor 386.4 x 772.8 x 86 mm

		INDOOR		OUTDOOR	
MODEL		iLVM 4C-Qc R2	LVM 4C-Qc R2	LVM 6C-Qc R2	LVM 9C-Qc R2
Pixel pitch, mm		4.8	4.8	6.9	9.6
Brightness, nit		2300	6500	7000	8000
Viewing angles, H/V		145°/125°	140°/120°	140°/120°	140°/90°
Grey scale, bit		16	16	16	16
Refresh Rate, Hz		3840	3840	7200	up to 32,000
Maximum power consumption, W/m ²		1000	1000	1000	960
Module weight, kg/m ²		10	10	10	10
Screen weight, kg/m ²		30	30	30	30

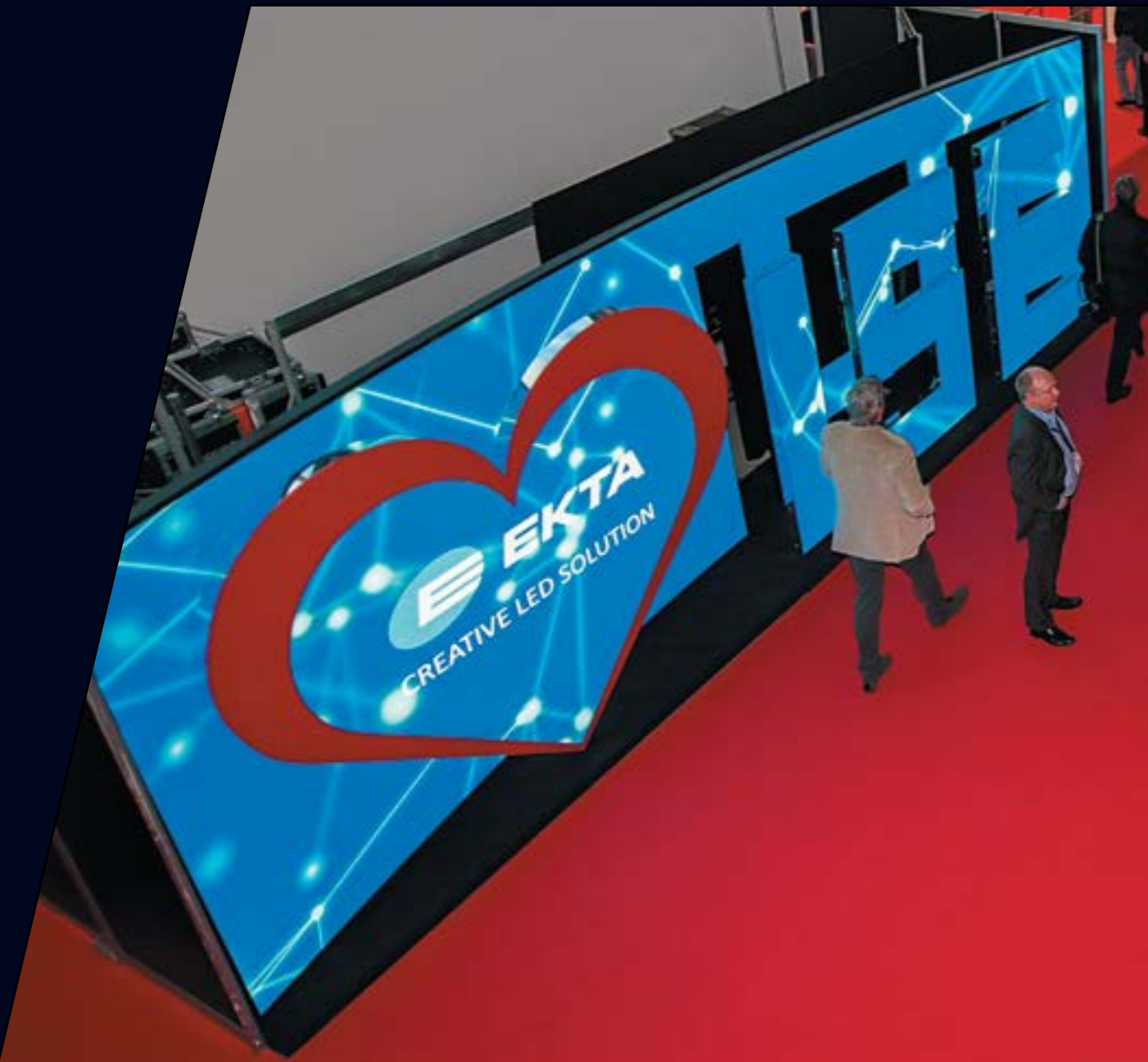
PERFECT SOLUTION FOR:

- Stages
- Night clubs
- TV studios
- Children's activity rooms
- Shopping centers
- Casinos, bars and restaurants
- Advertising projects for automotive, fashion etc.



about **EKTA**

The power of TRUE Performance display solutions, an EKTA GROUP company, is based on more than 26 years LED experience in the AV industry, more than 16 years experience in LED screens production and video processing as part of the high quality LED screen manufacturer EKTA.



EXPERIENCE

For more than 25 years, EKTA has established an unchallenged reputation for carrying out hundreds of top quality projects, aimed at installing LED equipment in the fields of advertising, show business, sports, shopping, entertainment, transport, and television.

With an automated manufacturing plant, based in Europe, and a team of Ukrainian, highly-experienced, professional engineers, EKTA steadily improves its innovative solutions in production and application of LED technologies, ensuring brilliant customization strategies and rendering steadfast service and support.

We create visual technology in the atmosphere of fostering partnerships firmly based on self-fulfillment, thus opening a new perspective on the world

EVOLUTION

- 1992** EKTA Company foundation
- 1995** EKTA plasma panel display was first installed in Europe
- 2000** EKTA designed and developed its first large LED display
- 2002** EKTA LED screens became the lightest and the thinnest LED displays in the world
- 2004** EKTA introduced the Total Quality Management system
- 2009** EKTA developed breakthrough ERMAC integrated LED display control system
- 2011** EKTA 3D LED TV won a Guinness World Record
- 2013** EKTA received the ProIntegration Award for "Best Solution using Digital Signage Technology"
- 2016** EKTA launched ERMAC Ultra – multifunction control system family
- 2017** EKTA launched Fine pixel pitch displays for TV studios
- 2018** EKTA installed the first TV studio Chip-On-Board LED screen powered by ERMAC Ultra control system

5 KEY FACTS

about TRUE Performance

1

Reliable partner with a flawless reputation

2

*Skilled R&D team
Advanced production facilities located in Europe*

3

Creator of LED display fully integrated solution

4

Expert in LED panel mechanical and electronic engineering

5

World leader in LED control and video processing



**TAKE MORE PROJECTS
WITH
TRUE Performance**



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