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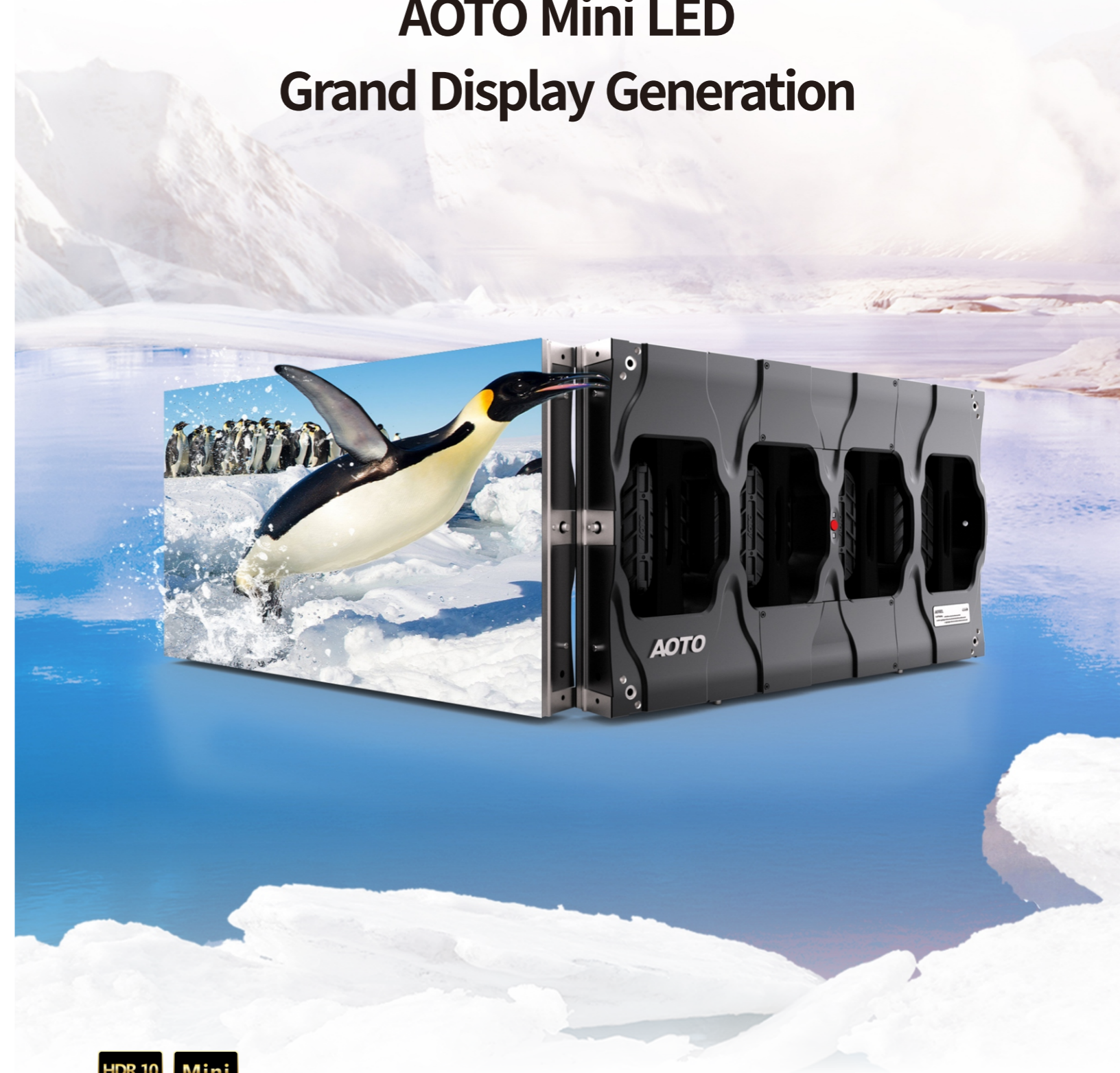


AOTO APP

# AOTO<sup>®</sup>

Mini LED  
Grand AOTO

## AOTO Mini LED Grand Display Generation



www.aoto.com



★ Introduction ★

SINCE 1993  
SHENZHEN AOTO ELECTRONICS CO., LTD.

AOTO Electronics (Stock:002587), which was founded in 1993, is the first listed company of LED industry in China and specialized in designing and manufacturing high-end quality LED display system. It owns 560 patents and 66 software copyrights.

1993 Establishment	560 Patents	66 Software copyrights	50+ Countries
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Under AOTO there are four key strategic business units, including highest quality LED display, banking electronics, lighting engineering and sports operation. Over the years AOTO has grown to become a world-leading display provider that offers a complete line of indoor and outdoor direct view LED display products. It has over 15,000 cases over 50 countries.



★ R&D and Mini LED Technology ★

R&D Policy and Mini LED Patents

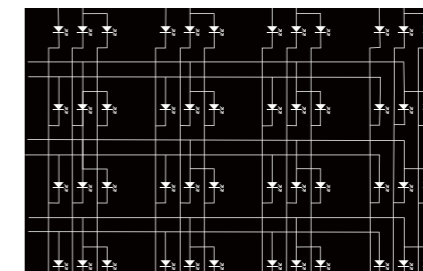
With 26-year R&D experience, AOTO invents the world's first P2.8mm outdoor LED and first P0.75mm indoor LED. Its core team members are highly professional and all of them have over 15-year R&D experience. Currently, AOTO's key technology includes Mini LED technology, 3D display technology, HDR and energy-saving technology. Especially for the Mini LED technology, it adopts 4-in-1 package, electronics circuit and cross groove design, which owns over 30 patents all over the world.

AOTO Mini LED technology is patented and own-developed technology since 2013, aiming to deliver robust LED display, high contrast, reflection free, moiré reduction, super-high definition and extremely superior image quality, which caters for a variety of applications to maximized the client's brand awareness.



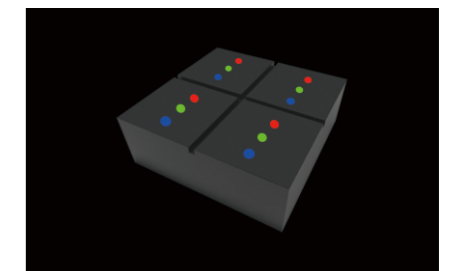
All-in-one Packaging Technology

All-in-one packaging technology supports smaller pixel pitch and increases the robustness. The display effect is highly enhanced through the 100um chips to achieve more black zones in the single package and the surface black nano-spraying technology.



Electronics Circuit Design

Latest design to reduce the difficulty and cost of the PCB design, improve production efficiency, reduce maintenance difficulty and cost, and achieve smaller pixel pitch.

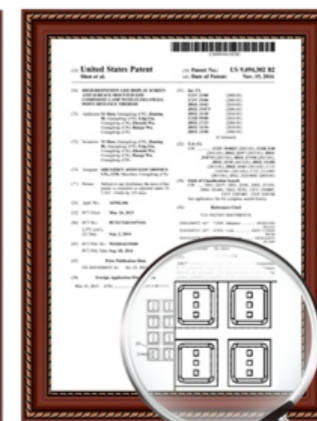


Cross Groove Design

A light-shielding fence is set around each group of LED pixel lights, and a cross-sectional groove is formed between each light-shielding fence; at least two sides of the light body are set with a plurality of staggered protrusions. Groove anti-lighting technology makes the image clearer and improves contrast.



JP Patent



US Patent



CN Patent



EU Patent

★ Advantages of AOTO Mini LED ★

**Moiré Effect Reduction**

Mini LED has also optimized Moiré reduction effect by surface light source design, especially fits into requirement of broadcasting application.



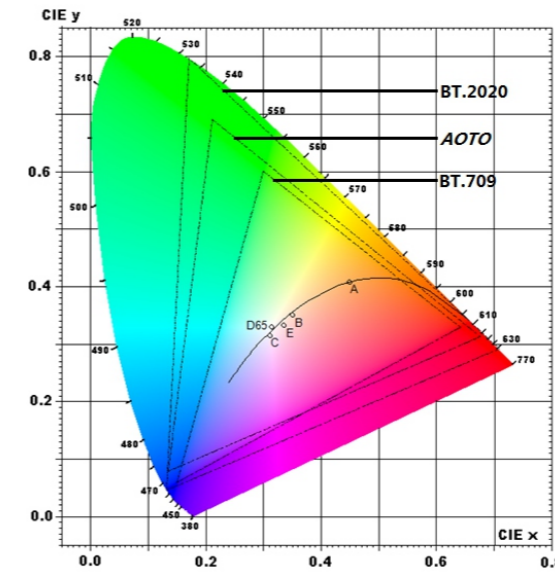
**High Dynamic Range**

Support HLG and HDR10 format fully present every detail of the HD images, bringing stronger visual impacts.



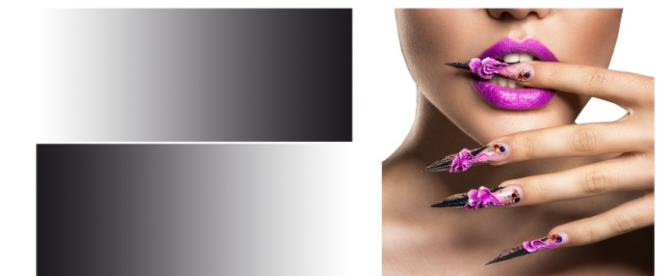
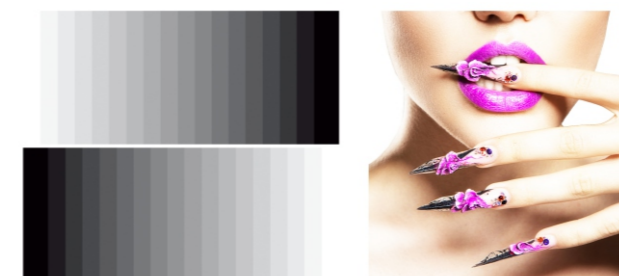
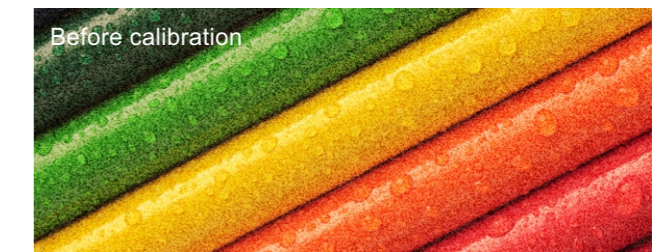
**Wider Color Gamut**

Perfectly defines the red/green/blue color with the wide color gamut, even the skin tone, could be well reproduced



**Precise Color Reproduction**

Accurate color correction, stronger brightness and perfect color consistency. The smooth transition gives you an immersive feeling

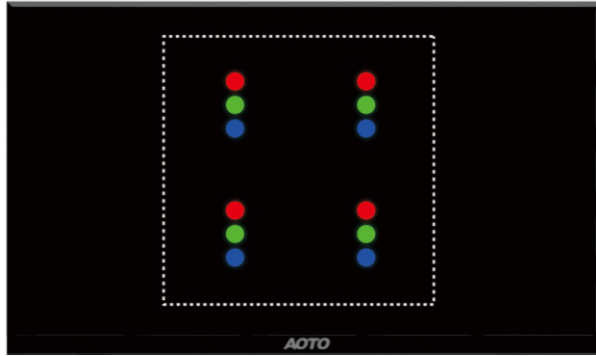


Traditional image processing display effect

AOTO innovative image processing display effect



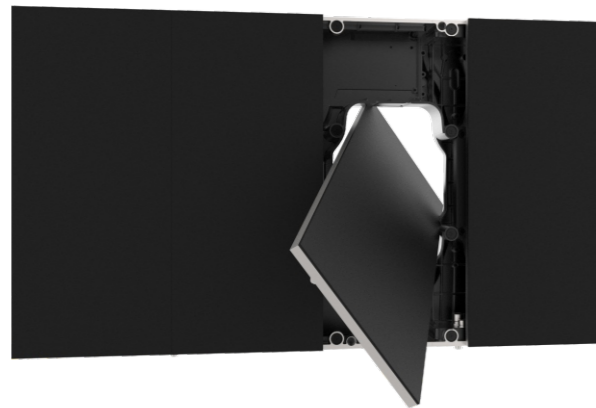
## ★ Mechanical Features & Specifications ★



New Generation Packaging Technology



Reliable and Robust Panel



Front or Rear Maintenance



Super Slim Design

### Mini LED Commercial Display Screen Splicing Resolution

Diagonal	Cabinet	CLD27ES0.7	CLD27ES0.9	CLD27ES1.2	CLD27ES1.5	Screen size (W x H)
27 "	1x1	768x432	640x360	480x270	384x216	600x337.5mm
54 "	2x2	1536x864	1280x720	960x540	768x432	1200x675mm
81 "	3x3	2304x1296	1920x1080	1440x810	1152x648	1800x1012.5mm
108 "	4x4	3072x1728	2560x1440	1920x1080	1536x864	2400x1350mm
136 "	5x5	3840x2160	3200x1800	2400x1350	1920x1080	3000x1687.5mm
163 "	6x6	4608x2592	3840x2160	2880x1620	2304x1296	3600x2025.5mm
189 "	7x7	5376x3024	4480x2520	3360x1890	2688x1512	4200x2362.5mm
216 "	8x8	6144x3456	5120x2880	3840x2160	3072x1728	4800x2700mm
243 "	9x9	6912x3888	5760x3240	4320x2430	3456x1944	5400x3037.5mm
270 "	10x10	7680x4320	6400x3600	4800x2700	3840x2160	6000x3375mm
297 "	11x11	8448x4752	7040x3960	5280x2970	4224x2376	6600x3712.5mm
324 "	12x12	9216x5184	7680x4320	5760x3240	4608x2592	7200x4045mm

2K

4K

8K

## Specifications

Model	CLD27ES0.7	CLD27ES0.9	CLD27ES1.2	CLD27ES1.5
Pixel Pitch	0.78mm	0.93mm	1.25mm	1.56mm
LED Type	Mini LED 4 in 1			
Pixel/m <sup>2</sup>	1,638,400	1,138,489	640,000	410,881
Resolution/panel (W x H)	768 x 432	640 x 360	480 x 270	384 x 216
Screen Dimensions	27 Inch, 600mm(W) x 337.5mm(H)			
Color Processing Depth	24bits			
Refresh Rate	3840Hz			
Brightness	500nit	600nit	600nit	800nit
Contrast	5000:1	5000:1	5000:1	8000:1
Viewing Angle (V x H)	160°±5°/160°±5°	170°±5°/170°±5°	170°±5°/170°±5°	170°±5°/170°±5°
Input Power ( Max)	150W	150W	150W	135W
Input Power (Typical)	55W	55W	55W	40W
Input Voltage	AC100V~AC240V; 50 Hz~60 Hz			
Weight	8.3kg			
Lifespan	100,000Hours			
Operating Temperature	Temperature: -10°C~40°C; Humidity: 10%~80%RH			
Ingress Protection	IP40			
Material and Surface Color	Aluminum; Black			
Pixel Configuration	1R, 1G, 1B			
Cabinet Area	0.2025m <sup>2</sup>			

## Processors & Controllers

### Control System

AOTO has dedicated years to innovate the ATLVC controllers. The controllers are perfect for rental business, stage performance, control rooms and TV studios. Support off-line working with the following features: support fast installation, high color depth display, high processing depth, wide color gamut, 3D technology, multiple interfaces, ultra large loading capacity, flexible setting.



ATLVC-2K



ATLVC-4K



ATLVC-8K



ATLVC-8K Pro

### Image Processing Array

Compounding all the innovation power, AOTO has now launched the Intelligent Image Processing Array. It's made for command centers, control rooms, TV studios, design centers and big stage performance. With the following features: voice recognition, image interaction, off-line working, fast installation, high color depth display, high processing depth, wide color gamut, 3D technology, multiple interfaces, ultra-large loading capacity, flexible setting.



IA16



IA32



IA64

### Control System ATLVC LED Video Control System

#### Features

- 1 Support 2K/ 4K/ 8K resolution.
- 2 Support wireless and remote control via mobile devices.
- 3 Support video scaling, video conjunction and 3D movies.
- 4 Support 8bit/ 10bit/ 12bit video input sources.
- 5 Support smart and quick start.
- 6 Integrated with DMX512/ gunlock input and loop interface.
- 8 Supports 12bit, 10bit, 8bit color depth, automatically change to different color depth display mode for a certain video signal source, and switches to different color depth for video display according to actual demands.
- 9 Adjust the contrast ratio and saturation on the controller or LED constructor software according to actual demands.
- 10 HDMI and DVI video interfaces are available, and flexible configuration of video interfaces.
- 11 Adjust brightness, contrast ratio, saturation and color temperature of LED display via turning the rotary knob on the front panel of controller.
- 12 With the function of monitoring the video output, and supports DVI cascade.
- 13 Adopt double backup system pattern, setting up two independent systems in control system, which ensures that one system is still working even the other fails.
- 14 One controller can control multiple LED displays, and each LED display can display same or different video signals at the same time. Moreover each screen can display a number of different video signals at the same time.



#### Specifications

Model	Resolution	Dimensions (mm)	Communication
ATLVC - 2K	2048 x 1,152	483 (mm) x 400 (mm) x 44 (mm)	CAT - 5E Communication (< 100m) & Fiber - Optic (< 10,000m)
ATLVC - 4K	4,096 x 2,160	483 (mm) x 400 (mm) x 88 (mm)	
ATLVC - 8K	8,192 x 2,160	482 (mm) x 482 (mm) x 133 (mm)	

★ Applications ★

- ① Superior image quality
- ② High interactivity and efficiency
- ③ Safe design and quick operation
- ④ Front serviceable structure and double backup function

Conference Room



- ① Movable integrated advertising display solution.
- ② Superior advertising display effect.
- ③ Easily renew advertising contents by built-in WiFi and controller.
- ④ Fanless design, excellent heat dissipation.

Digital Media



★ Case ★

Six Group Auditorium, Switzerland



Humana Building, US

