

LED DISPLAY PRODUCT SPECIFICATION

UK FC CE

SHENZHEN CRTOP TECHNOLOGY CO.,LTD

Website (INT): WWW.CRTOP-LED.COM

Add.: 1001, Building 1, Guole Technology Park, No. 1 Lirong Road, Longhua District, Shenzhen, Guangdong, China.

Version:1.0

Date:February 2025

CONTENTS

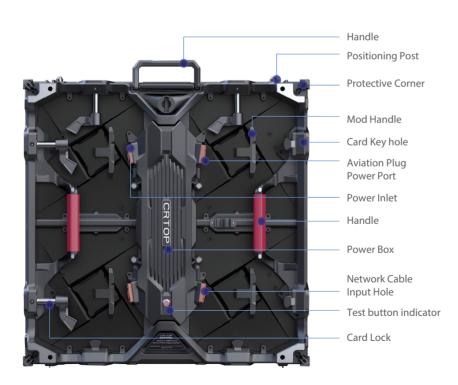
Product Information ————————————————————————————————————	01
Technical parameter	03
Experimental project ————————————————————————————————————	04
Matters needing attention —————	06
Contact information ————————————————————————————————————	80

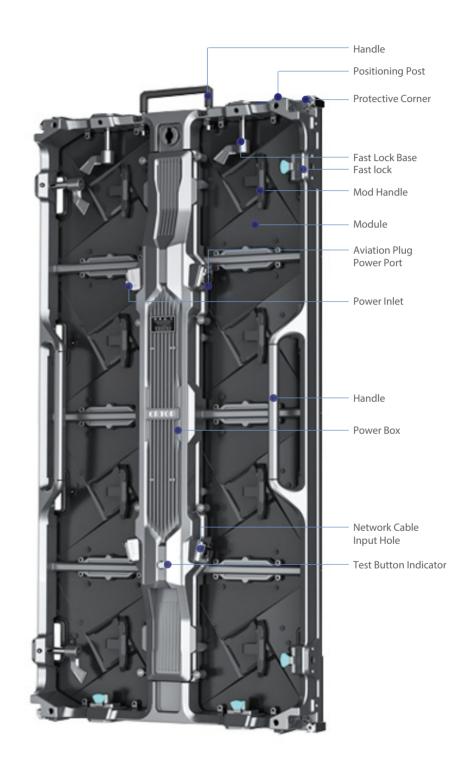
WWW.CRTOP-LED.COM | FULL COLOR LED DISPLAY

Product Information

- Cabinet size (Indoor): 500×500×76/500×1000×76mm
- Cabinet size (Outdoor): 500×500×79/500×1000×79mm
- Module size: 250×250mm
- Weight:8.2kg /12.5kg
- Indoor (mm): P1.89 / P1.95 / P2.6 / P2.97 / P3.9
- Outdoor (mm): P2.6 / P2.97 / P3.9 / P4.8
- White balance brightness: 4500-6500 nits
- Input: AC100-240V 50/60HZ
- Maintenance Method: Front/Rear maintenance
- Material: Die-cast aluminum
- Usage: Indoor/Outdoor
- curving (concave&convex):

(+15°+12.5°±10°±7.5°±5°±2.5° 0°) optional





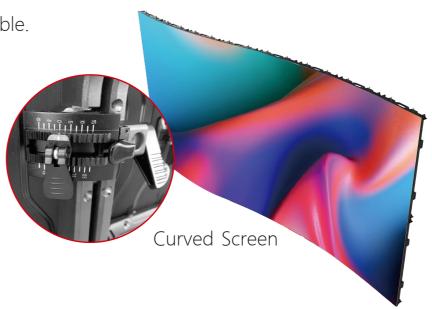
Curved Lock System

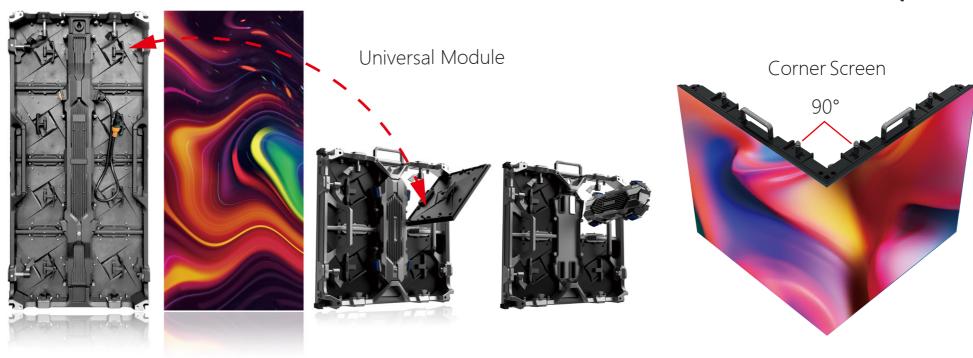
• Unique curved connection design.

• Support concave and convex connection.

• Support $(+15^{\circ}+12.5^{\circ}\pm10^{\circ}\pm7.5^{\circ}\pm5^{\circ}\pm2.5^{\circ}/0^{\circ})$ arc adjustable.

• Each module is modular in design and fully compatible with the large or small cabinet frame.





Scope Of Application

• Suit for advertisement, stadium, exhibition, TV-Show, mansion, video wall, shopping mall, banks, schools, bus station, airport, gym, market, factories, monitoring centers, hospital, bar etc.





SPECIFICATION

Operating Humidity (°C/RH)

Operating Voltage

Input Voltage (V)

Storage Temperature (°C/RH)

Maximum Power Consumption

Average Power Consumption

10 %- 80% RH No Condensation

–20 °C to 60 °C

AC200-240V 50/60 HZ

DC 4.2-5V

700W/m² 260W/m²

Technical parameter	:(T=25℃)						
Application	Indoor						
Pixel Pitch	1.89mm	1.95mm	2.6mm	2.97mm	3.91mm		
Pixel Structure	3IN1 SMD	3IN1 SMD	3IN1 SMD	3IN1 SMD	3.91mm 3IN1 SMD		
Pixel Density (dots/m²)	279947/m2	262984/m ²	147928/m ²	113367/m ²	65410/m ²		
Module Resolution (W×H)	132(W)X132(H) dots	128(W)X128(H) dots	96(W)X96(H) dots	84(W)X84(H) dots	64(W)X64(H) dots		
Module Dimension (mm)	250mm x 250mm	250mm x 250mm	250mm x 250mm	250mm x 250mm	250mm x 250mm		
Cabinet Dimension (mm)	500x500x76mm / 50		250Hill X 250Hill	25011111 X 25011111	250HIII X 250HIII		
Weight (kg) / set	, , , , ,	0.8.1.0.00.8.7.0111111					
Material	Die-cast Aluminum	8.2kg / 12.5kg					
Maintenance type	Front/Rear maintenan	00					
Certification	·						
Single Point Brightness		CCC, CE, ETL					
Chroma Correction		support .					
/hite Balance Brightness		support					
olor Temperature		800–1000cd/m²					
/iewing Angle (H/V°)	H: 140° V: 120°	2000–12500K Adjustable					
Optimal Viewing Distance (m)	1–4 meters	·					
Brightness Uniformity							
Contrast Ratio		≥97%					
Signal Processing Bits	≥5000:1						
Gray Scale		16 bits*3					
Control Distance		12–14Bit					
Drive Mode		Cable: 100 m,Optical Fiber: 10km					
Frame Rate		Constant current source driver					
Refresh Rate (Hz)		>60HZ					
Vay to Control		≥3840HZ					
Brightness Adjustment Range	· ·	Synchronize					
Continuous Operation Time	0–100Stepless Adjust	TIETI					
Life Span		≥72Hours					
IP Level	>100,000Hours						
Operating Temperature (°C/RH)							
Operating reinperature (O/TICI)	-20 C 10 50 C	–20 ℃ to 50 ℃					

SPECIFICATION

Technical parameter: (T=25℃)

Application	Outdoor						
Pixel Pitch	2.6mm	2.97mm	3.91mm	4.8mm			
Pixel Structure	3IN1 SMD	3IN1 SMD	3IN1 SMD	3IN1 SMD			
Pixel Density (dots/m²)	147928/m2	113367/m²	65410/m ²	43402/m²			
Module Resolution (WxH)	96(W)X96(H) dots	84(W)X84(H) dots	64(W)X64(H) dots	52(W)X52(H) dots			
Module Dimension (mm)	250mm x 250mm	250mm x 250mm	250mm x 250mm	250mm x 250mm			
Cabinet Dimension (mm)	500x500x79mm / 500	500x500x79mm / 500x1000x79mm					
Weight (kg) / set	8.2kg / 12.5kg	·					
Material	Die-cast Aluminum						
Maintenance type	Rear maintenance						
Certification	CCC, CE, ETL	CCC, CE, ETL					
Single Point Brightness	support						
Chroma Correction	support						
White Balance Brightness	4500-6500cd/m²						
Color Temperature	2000–12500K Adjusta	2000–12500K Adjustable					
Viewing Angle (H/V°)	H: 140° V: 120°						
Optimal Viewing Distance (m)	1-4 meters	1–4 meters					
Brightness Uniformity	≥97%	≥97%					
Contrast Ratio	≥5000:1						
Signal Processing Bits	16 bits*3						
Gray Scale	12–14Bit						
Control Distance	Cable: 100 m,Optical F	Cable: 100 m,Optical Fiber: 10km					
Drive Mode	Constant current source driver						
Frame Rate	>60HZ						
Refresh Rate (Hz)	≥3840HZ						
Way to Control	Synchronize						
Brightness Adjustment Range	0–100Stepless Adjustmen						
Continuous Operation Time	≥72Hours						
Life Span	>100,000Hours						
IP Level	IP65						
Operating Temperature (°C/RH)	−20 °C to 50 °C						
Operating Humidity (°C/RH)	10 %- 80% RH No Condensation						
Storage Temperature (°C/RH)	−20 °C to 60 °C						
Operating Voltage	DC 4.2-5V						
Input Voltage (V)	AC200-240V 50/60 HZ						
Maximum Power Consumption	850W/m²						
Average Power Consumption	300W/m²						

Categories	Item	Reference Standard	Experimental Conditions	Duration Time	Receiving Standard
		LED	Lamp		
Environmental	Temperature Cycle	JESD22-A104-A	-40°C~25°C~100°C~25°C30min , 5min, 30min, 5min	Cycle 100 times	0/50
Experiments	Cold & Heat Shock	JESD22-A106	-40°C~100°C30min,30min	Cycle 100 times	0/50
High temperature storage		JIS C 7021 (1977)B-11	Ta=60°C RH=90%	1000 hours	0/50
		JESD22-A108-A	Ta=25°CTest Conditions: Power on and lit	1000 hours	0/50
		JESD22-A101	Ta =85°C RH=85%Test Conditions: Power on and lit	1000 hours	0/50
Mechanical Vibration	Mechanical Vibration	MIL-STD-883 Method 2007	20G minutes, 20 to 2000Hz4 cycles, 4 minutes. Each,X,Y,Z		0/50
Experiments					
		LED Finished	I Unit Cabinet		
Environmental Storage	Low temperature storage tests	GB2423.2	Storage at (-40±2)°C for 4h, recovery at room temperature	8 hours	0/50
Experiment			for 4h,normal display and uniformity without abnormalities		
			and no uncontrolled spots		
	High temperature storage tests	GB2423.2	Storage at (60±2)°C for 4h, recovery at room temperature	8 hours	0/50
Ageing Test		for 4h, normal display and uniformity without abnormalities			
		and no uncontrolled spots			
Ambient temperature ageing test			Ta=25°C72-hour uninterrupted power-on display playing	72 hours	0/50
	High temperature ageing test	GB2423.2-89	Check every hour for 8h at (40±2)°C.Normal display and	8 hours	0/50
		uniformity without abnormalities and no uncontrolled spots			
Mechanical Vibration	Mechanical vibration	GB6587.4-86	Vibration frequency 5HZ-55HZ-5HZ,amplitude 0.19mm, 5	5 min	0/50
Experiments			minutes		

Using environment

- This product is an outdoor display; avoid using it in high temperature, high acid/alkali/salt environments.
- Keep away from flammable materials, gases and dusts; the normal operating temperature of this product is $-20\sim50^{\circ}$ C, the optimal ambient temperature is $-10\sim40^{\circ}$ C.
- Avoid storage in high temperature, high humidity, high acid/alkali/salt environment; keep away from flammable materials and gases.
- Avoid strong collisions and sharp objects during transport.

Cleaning

• If cleaning the module surface, please use a soft bristle brush and brush gently. Do not use any liquid substances to clean the surface of the LED module, as this may damage the SMD-LED.

Operation

- This product is DC +5V power supply (working voltage: 4.5~5.2V), AC power supply is forbidden; power terminals are forbidden to be reversed.
- If the product is faulty during the warranty period, please send it back to our company for repair, or repair it under the guidance of our after-sales staff.
- During dismantling/assembly of the product, be sure to operate with care and avoid tools hitting the product.
- lightning and static protection should be done during operation and use; the box and steel structure should be earthed
- The product should not be switched on and off continuously during use; at least 1 minute should elapse between operations
- This product should not be turned off for a long time, it is recommended to use it once in half a month with 4 hours of power on; in high humidity environment, it is recommended to use it once in a week with 4 hours of power on.
- This product is not allowed to play the highest brightness all-white screen for more than half an hour, it is recommended to play dynamic video mainly.



Moisture-proof and storage requirements

- 1. After opening the package, the product must be stored in the temperature <30°C and humidity <60% environment.
- 2. If the screen is not used for more than 3 days, please use the pre-lighting method first: 30%-50% brightness for 4-8 hours, and then adjust it to normal brightness (80%-100%) to light up the screen, for eliminating the moisture and normal operation.
- 3. If the screen is not used for more than 7 days, please use the pre-lighting method first: 30%-50% brightness for more than 12 hours, and then adjust it to normal brightness (80%-100%) to light up the screen, for eliminating the moisture and normal operation.
- Ø More than 3 days, LED screen (30%-50% in brightness) pre-lit 4-8 hours;
- Ø More than 7 days, LED screen (30%-50% in brightness) pre-lit more than 12 hours;

The operation process is as follows:





Normal lighting





SHENZHEN CRTOP TECHNOLOGY CO.,LTD

Add.: 1001, Building 1, Guole Technology Park, No. 1 Lirong Road, Longhua District, Shenzhen, Guangdong, China.

BEIJING Chontdo Optoelectronics Co., Ltd. (Headquarters)

Add: JinYi Street, GaoLiYing Town, ShunYi District, BeiJing(101300)

TOP SHINE LTD.

Add.: Halle, Belgium