

XST-P1.2 Full Color LED 320*160 Module

Revision History

NO.	Version Number	Brief description of revised content	Date	Revised
1	A1	First release of Product Specifications	2024.9.30	CCX
2				
3				
4				
5				
6				

Production:C C X

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Catalogue

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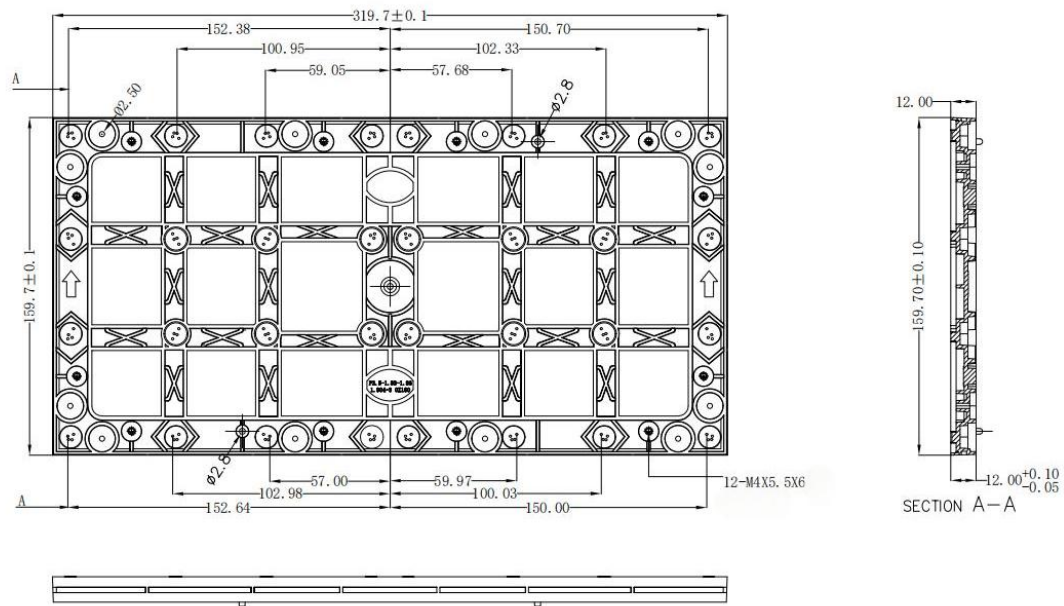
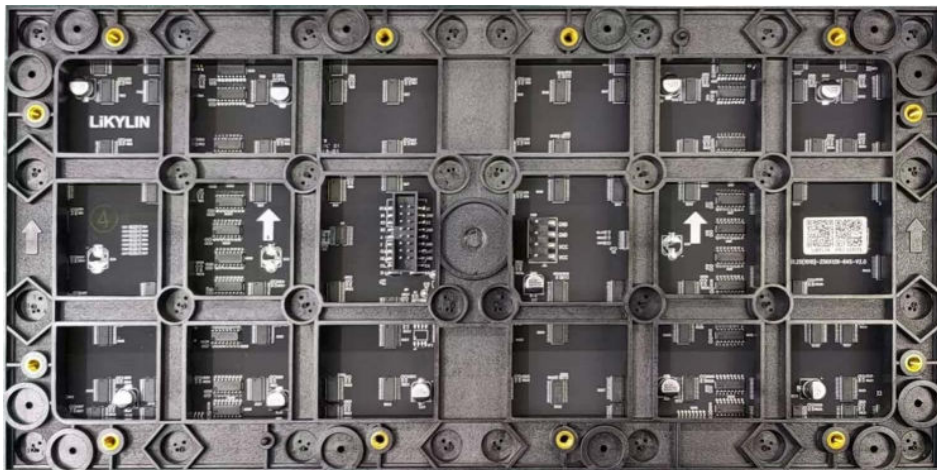
1. Product Introduction

Indoor XST-P series is a universal product suitable for the mainstream control system in the market. It has practical functions and simple to operate, using high-quality professional lights and experienced packaging engineers on site control. The process, process, materials and production are strict according to the production standards of national, industry and new vision. Be flexible, lightweight, and easy to install and maintain. Widely used in building facade, shopping malls, wedding decoration, festival activities and other engineering tools.

product superiority:

- High-performance suite security is more guaranteed;
- General power supply and signal interface;
- The ESD electrostatic protection ability is higher than the industry standard;
- 120% NTSC ultra-high color domain, display more restore;
- 160° ultra-wide perspective view is wider;
- Single-point correction technology makes the display more delicate;
- The whole system adopts high brush PWM chip, the refresh rate can reach 3840Hz;
- Color temperature and brightness can be adjusted , display more humanized;

2. Product Appearance and Dimensions (mm)



3. Product Specifications

	Parameter	XST-P1.2
Module Parameter	LED Type	SMD3in1
	Pixel Pitch(mm)	1.25
	Module Resolution(W*H)	256*128
	Module Size (W*H, mm)	320*160
	Weight (kg)	≤0.45±0.05
	Unit Size(m²)	0.0512
	Pixel Density (point /m²)	640000
	Brightness(nits)	≥450
	Color Temperature(K)	3000—15000 Adjustable
	Horizontal Viewing Angle(°)	≥160
	Vertical Viewing Angle(°)	≥140
	Color Uniformity	<3%
	Brightness Uniformity	≥97%
	Contrast Ratio	≥6000:1
Electrical Parameter	Max Power Consumption (W/m²)	≤390
	Average Power Consumption(W/m²)	≤130
	Power Supply(V)	DC:4.5
	Single Board Current(A)	5
Performanc e Parameter	Scan	64S
	Frame Frequency (Hz)	50&60
	Refresh Rate (Hz)	≥3840
Operating Parameter	Lifespan (hrs)	100,000
	Operation Temperature(°C)	-10~40
	Storage Temperature(°C)	-20~50
	Operation Humidity (RH)	10%~60%condensationless
	Storage Humidity (RH)	10%~65%condensationless

4. Product Use Considerations

Since LEDs and CMOS integrated circuits are electrostatic sensitive devices, care needs to be taken to strictly prevent static electricity when using LED modules.

Taking the following measures can effectively prevent static electricity:

Personnel in contact with the product must wear a grounded electrostatic hand ring or electrostatic gloves

Switching power supply shell, box, screen and other strict grounding, grounding resistance is required ≤ 10 ohms, every six months for a spot check

Assembly process of various tools must be strictly grounded

When cleaning the surface of the LED module, do not use unknown chemical liquids, so as not to damage or corrode the LED:

When cleaning the LED tube, use a clean soft rag dipped in alcohol to wipe gently, wait for drying before starting to use it

When cleaning the kit, use a clean soft cloth dipped in water to wipe gently, no water residue after wiping, and need to be dried before use

When repairing the LED module, it is recommended to use a constant temperature soldering iron, the temperature of the soldering iron is adjusted according to the composition of the tin wire:

Soldering LED, soldering iron temperature is generally set at about 315 °C, the welding time is not more than 5s (preferably 3s), the number of welding is not more than three times

Complementary welding CMOS devices, the soldering iron temperature must be kept below 315 °C, the welding time can not exceed 3s, the number of welding times not more than three times

In order to ensure the stability and service life of the LED, the surface temperature of the module when working can not exceed 60 °C , the storage temperature can not exceed 60 °C, or must take the necessary cooling measures

In order to prevent improper use of power supply, and reduce the service life of the module or burn the module, LED module power supply access should strictly follow the following precautions

Use LED display special switching power supply, module using DC 4.5V input, not directly access to 220V, otherwise it will cause the whole screen module is burned

Please pay attention to the correct wiring of the power port when installing the LED module, the positive and negative poles must correspond to each other; if the positive and negative poles are reversed, the power must be disconnected in a timely manner, so as not to damage components

The working voltage of the module should not exceed its maximum allowable working voltage of 5V.

Module in -10 °C and the following areas are not recommended to use magnetic suction mounting module deformation affects the flatness of the display, the need to use the screw locking mounting

Requirements for the power distribution box with surge protector and other lightning protection facilities

During the use and transportation, the module should not be dropped, pushed, squeezed or pressed to avoid damage to the module.

5. Safety Tips

- 1、 Please read these safety instructions carefully before installation.
- 2、 Keep these safety instructions properly for future references.
- 3、 Follow all safety instructions.
- 4、 Do not install equipment in dusty environments or where there is liquid drip, especially for indoor series displays.
- 5、 Do not expose indoor series screens and equipment to water or moisture.
- 6、 Avoid installing equipment near heat sources, including radiators, heat registers, stoves, fireplaces, and other equipment that can generate high heat (including amplifiers).
- 7、 Do not block any ventilation openings. Install equipment according to the manufacturer's instructions.
- 8、 Protect power cords and related electrical facilities properly, particularly power plugs, simple power outlets, and connections between power cords and equipment. Avoid stepping on or pressing these facilities.
- 9、 Only use electrical accessories certified by the equipment manufacturer.
- 10、 Seek qualified professional technicians for maintenance and service when the following occur: damage to the power cord or plug, liquid entering the equipment, objects falling into the equipment, exposure to water or moisture, equipment malfunction, or equipment falls.
- 11、 Do not use chemical solvents to cleaning the equipment.

- 12、 Ensure proper grounding during product assembly; must be reliably grounded.
- 13、 Requirements for usage environment: altitude $\leq 2000\text{m}$, maximum operating temperature 40°C , and maximum operating humidity 80%.
- 14、 Use a coupler to disconnect power to the equipment.
- 15、 The equipment does not come with a plug; ensure an easily accessible power disconnect switch or circuit breaker is available near the equipment, with recommended ratings of 250VAC, 16A or better.
- 16、 Do not place open flame sources (e.g., candles) on the equipment. If the operating temperature exceeds 40°C , use air conditioning for ventilation and cooling to maintain the required temperature range.
- 17、 Connect the equipment to a power grid with protective grounding.
- 18、 The grounding conductor size should be 1.5mm^2 .
- 19、 Calculate thermal load power using: $P(\text{BTU/hr}) = 3.412 * P(\text{W})$.
- 20、 To prevent harm, the equipment must be securely fastened to the floor/wall according to installation instructions.