Outdoor Rental Screen Series LED Display

Product Series: Outdoor Rental Screen Series

Department: Technical Department

Version: A0

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Catalog

I. Product Introduction

(1) Lightweight design, easy to assemble

The weight of a single box is only 7.5KG, a person can easily put together.

(2) Four-level energy-saving technology

Level I dynamic energy saving: when the signal is not displayed, the part of the drive circuit of the constant flow tube chip is turned off;

Level II black screen energy saving: when the display screen is completely black, the static consumption current of the chip drops from 6mA to 0.6mA;

Level III full-screen energy saving: when the low level is maintained for 300ms, the static consumption current of the chip drops from 6mA to 0.5mA;

Level IV shunt power supply step-down energy saving: the current first passes through the lamp bead, and then to the negative electrode of the IC, so that the forward voltage drop becomes smaller, and the conduction internal resistance also becomes smaller.

(3) True color, high-definition visual display

Refresh rate up to 3840Hz, contrast ratio up to 5000:1, grayscale 16 bit, the picture display is realistic and delicate, not harsh, no grainy. Red, green, blue SMD LED beads, good consistency, viewing angle can reach more than 140 °.

(4) A screen with multiple uses, flexible installation

Support straight screen, curved screen, right angle screen, tesseract screen installation, with the seat and hanging two installation methods, to meet the needs of different customers, different scenes.

(5) Power supply even flow backup power supply, never black screen

Adjacent boxes can supply power to each other to avoid black screen of boxes due to power line failure, power supply navigation plug failure, power supply failure, etc.

(6) Drive solution

With column up and column down fading function, high refresh rate, first row darkening improvement, low gray off-color, pockmark improvement, etc.

(7) Bump protection corner

The protection corner can effectively protect the four corners of the box, reducing the problem of knocking off the light and damage to the lamp beads and lampshades during transportation.

(8) Stable and reliable performance

Good heat dissipation, low temperature rise, IP65 protection level, support low voltage switching, safe and reliable, long service life.
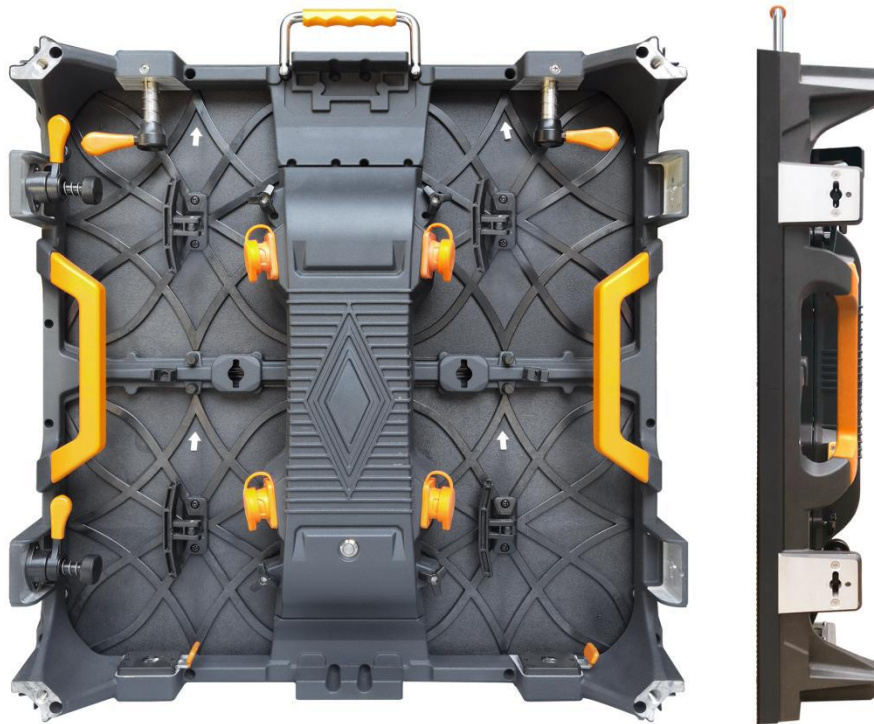
(9) Efficient maintenance

Fully modular design (case, module, detachable power box), supports front and rear maintenance, convenient and fast.

II. Structure Appearance

External View-Module(250*250*15mm)
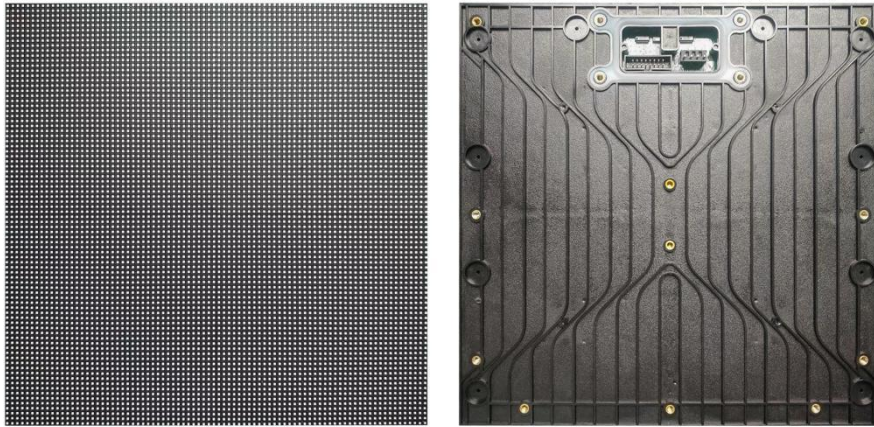
Appearance - Die-casting Aluminum Cabinet (500*500*100mm)

III. Product Detailed Parameters

Model Number	AX1.9	AX2.6	AX2.9	AX3.9(16S)	AX3.9(8S)
Parameter Name	P1.9	P2.6	P2.9	P3.9(16S)	P3.9(8S)
Pixel Structure (SMD)	1516	1516	1516	1921	1921
Pixel Pitch	1.95mm	2.604mm	2.97mm	3.91mm	3.91mm
Module Resolution (W×H)	128*128	96*96	84*84	64*64	64*64
Module Size (mm)	250*250*15				
Module Weight (Kg)	0.58				
Cabinet Module Composition	2*2				
Cabinet Size (mm)	500*500*87				
Cabinet Resolution (W×H)	256*256	192*192	168*168	128*128	128*128
Cabinet Area (m²)	0.25				
Cabinet Weight (Kg)	7.5				
Cabinet Material	Die-cast Aluminum				
Pixel Density (dots/m²)	262144	147456	112896	65536	65536
IP Rating	IP65				
Single-point Chromaticity /Brightness Correction	With				
White Balance Brightness (cd/m²)	4000				

Color Temperature (K)	6500-9000				
Viewing Angle (Horizontal/Vertical)	140°/120°				
Contrast Ratio	5000: 1				
Maximum Power Consumption (W/m²)	800	800	700	800	800
Average Power Consumption (W/m²)	268	268	235	268	268
Maintenance Type	Front/Rear Maintenance				
Frame Rate	50&60Hz				
Scanning Number (Constant Current Drive)	1/32s	1/24s	1/21s	1/16s	1/8s
Gray Scale	Arbitrary within 65536 levels of gray(16bit)				
Refresh Frequency (Hz)	3840				
Color Processing Bits	16bit				
Lifespan (h)	50,000				
Operating Temperature /Humidity Range	-10°C-50°C/10%RH-98%RH(No condensation)				
Cabinet Area (m²)	0.25				

IV. Packing List

Packing Parts	Quantity	Unit
Display	1	Set
Instruction Manual	1	Portion
Certificate	1	Portion
Warranty Card	1	Portion
Construction Notes	1	Portion

V. Accessories

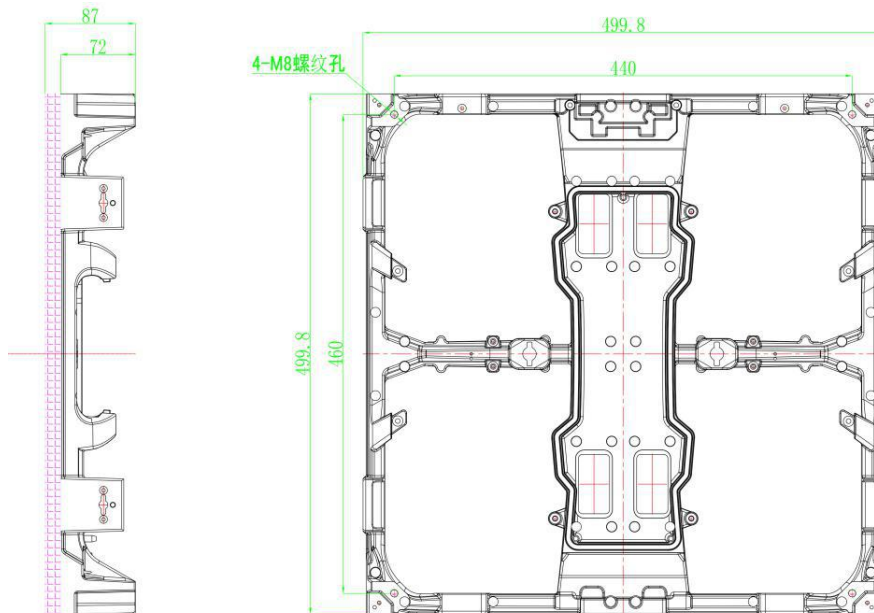| Accessory Category	Name	Pictures
Assembling Accessories	Power and signal cables	
	Sleeve, screw connection piece	

VI. Installation

6.1. Kit Installation

Kit Installation Hole Diagram
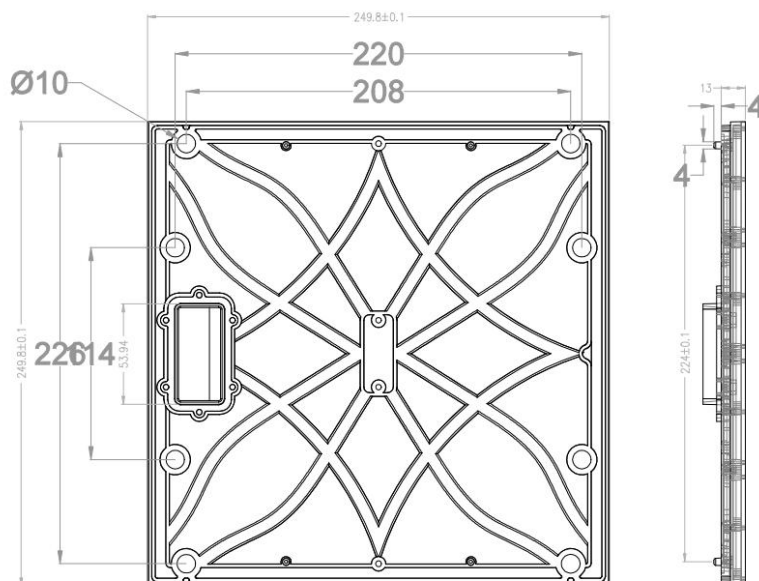
6.2. Cabinet Installation

Cabinet Installation Diagram

6.3. Cabinet Front Installation

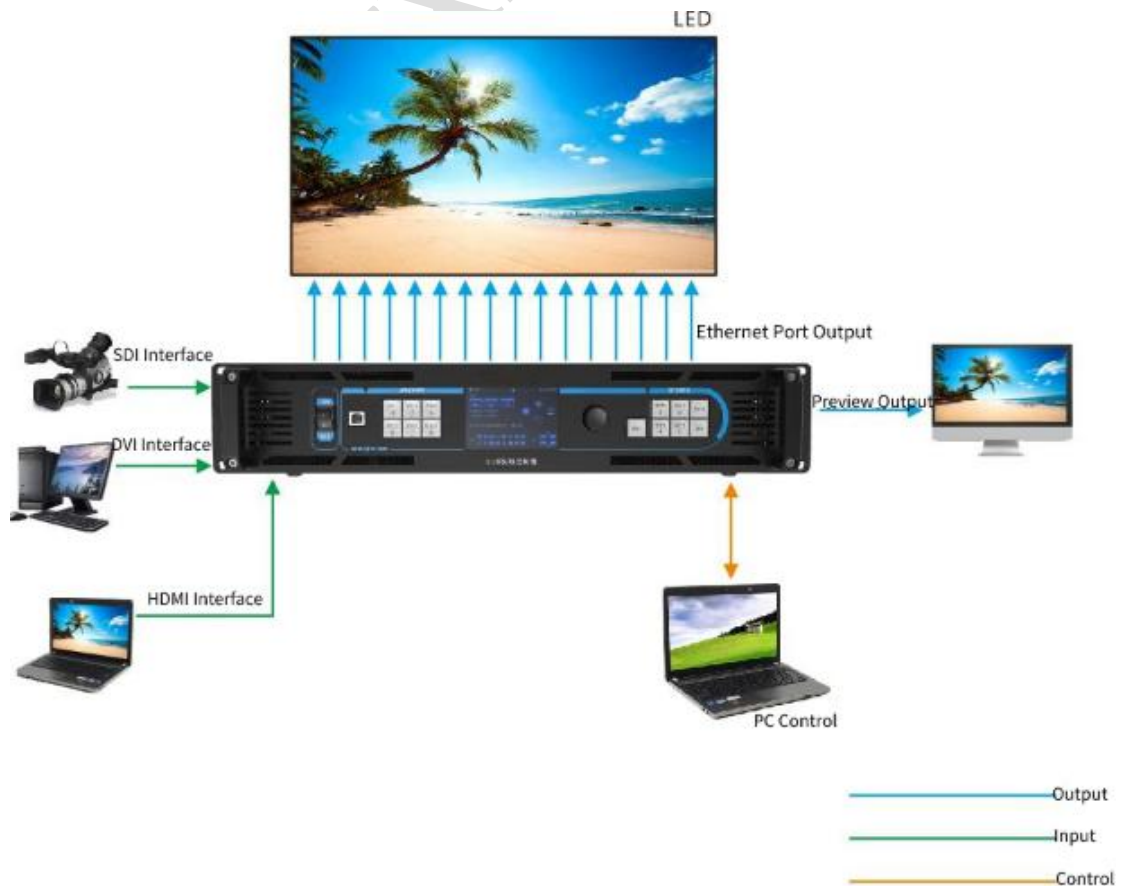Exploded Diagram of Front Installation of Cabinet

The Cabinet Before the Installation of the Finished Picture

VII. Display Installation

7.1. Connection Schematic

Display Connection Diagram

VIII. Usage Instructions

8.1 Precautions

Projects	Precautions
Temperature Range	Working temperature control at -10℃～50℃
	Storage temperature control at -20℃～60℃
Humidity Range	Working humidity control at 10%RH～98%RH
	Storage humidity control at 10%RH～98%RH
Anti-electromagnetic Radiation	The display should not be placed in an environment with high electromagnetic radiation interference, which may cause abnormal screen display.
Anti-static	Power supply, box, screen body metal shell needs to be well grounded, grounding resistance <10Ω, to avoid damage to electronic devices caused by static electricity

8.2 Instructions

Projects	Instructions for use
Static Protection	Installers need to wear static rings and static gloves, and the tools need to be strictly grounded during the assembly process.
Connection Method	The module has positive and negative silkscreen markings, which cannot be reversed, and it is strictly forbidden to access 220V AC power.
Operation Method	It is strictly forbidden to assemble the module, case, the whole screen under the condition of power on, need to operate in the case of complete power failure to protect personal safety; display in the light prohibit personnel to touch, so as to avoid electrostatic breakdown of LED and components generated by human friction.
Disassembly and Transportation	Do not drop, push, squeeze or press the module, prevent the module from falling and bumping, so as not to break the kit, damage the lamp beads and other problems.

Environmental Inspection	The display site needs to be configured with a temperature and humidity meter to monitor the environment around the screen, in order to find out in time whether the display has moisture, moisture and other problems.
Use of Display Screens	Ambient humidity in the range of 10%RH ~ 65%RH, it is recommended to open the screen once a day, each time the normal use of more than 4 hours to remove the moisture of the display.
	When the environmental humidity is above 65%RH, the environment needs to be dehumidified, and it is recommended to use normally for more than 8 hours a day and close the doors and windows to prevent the display from being caused by moisture.
	When the display has not been used for a long time, the display needs to be preheated and dehumidified before use to avoid moisture caused by bad lamps, the specific way: 20% brightness light 2 hours, 40% brightness light 2 hours, 60% brightness light 2 hours, 80% brightness light 2 hours, 100% brightness light 2 hours, so that the brightness incremental aging.

IX. Applications

Suitable for all places inside and outside the house, such as: exhibition and display, stage performance, entertainment, government meetings, various business meetings, etc.