

G2.5

Die-cast Aluminum Cabinet -Indoor Interactive

LED Floor Specification



1.1 Module composition

Pixel composition	SMD LED 1R, 1G, 1B
Pixel pitch (W*H)mm	2.5*2.5
Module resolution (W*H)	100*100
Module size (W*H*D)mm	250*250*18
Module weight (KG)	0.75

1.2 Unit composition

Cabinet composition (W*H)	2*2
Cabinet resolution (W*H)	200*200
Cabinet size (W*H*D)mm	500*500*78
Cabinet area (m ²)	0.25
Pixel density (dot/m ²)	160000
Protection level	Indoor(Front IP54, Back IP43)
Cabinet flatness (mm)	≤1
White balance brightness (nits)	≥600
Color temperature (K)	6000-9300 adjustable
Horizontal viewing angle (°)	>120
Luminous point center distance deviation	<3%

1.3 Cabinet and outer packaging

Cabinet weight (KG/cabinet ; KG/m ²)	11 ; 44
Floor support weight (KG)	1
Total weight(KG/Cabinet+carton)	8 in 1 carton, 120KG
Outer packing size (L*W*H)	1040*660*670mm (L*W*H)

1.4 Electrical parameters

Power consumption (A/unit module)	DC 6~7
Peak power consumption (W/m ²)	800
Average power consumption (W/m ²)	300
Power requirements	AC220V

1.5 Processing performance

Pixel sharing technology	YES
Drive mode	Constant current drive
Frame rate (Hz)	50&60
Refresh rate(Hz) @60Hz	≥3840/≥7680

1.6 Screen parameters

Lifespan(hrs)	100,000
Working temperature(°C)	-20 — 55
Storage temperature (°C)	-30 — 60
Working humidity (RH) no condensation	10 - 90%
Storage humidity (RH) no condensation	10 - 95%
Screen thickness (mm)	Module+cabinet: 78 screen+floor support: 150~170 adjustable or customized
Defective ratio	≤4/100000
Unit module splicing gap(mm)	Uniformity and ≤2mm
Best view distance (m)	3-15m
View angle (°)	Horizontal>120
Surface flatness(mm)	Max tolerance≤1
Screen surface color	Uniformity 95%
Uniformity	The brightness uniformity of the screen reaches 95%

1.7 Load bearing and friction index

Loading bearing capacity	0.8 tons/m ²
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2.1 Computer configuration requirements

System	Windows 7 64bit、Windows 10 64bit、Windows 10 64bit.
CPU	Intel Core i7 6200U
CPU frequency	2.3GHz
Maximum turbo frequency	2800MHz
Number of cores/threads	Dual Core/Four Threads
L3 cache	3MB
Storage	4GB
Memory type	DDR3L(Low voltage version)1600MHz
Number of slots	2Xso-DIMM
Maximum Storage	16GB
Hard drive description	5400 rpm
Screen technology	>1366*768
Graphics card type	Performance level discrete graphics card
Memory capacity	2GB
Wired network card	1000Mbps Ethernet card
Data interface	3Xusb3.0
Video interface	VGA、HDMI

- ▶ The whole series of products have passed the professional organization 3C, RoHS, CE, FCC quality certification ;
- ▶ The whole series of products have passed the professional organization's waterproof testing, fire testing, load-bearing testing, radiation protection testing, heating testing, friction coefficient testing, single-point force testing, anti-UV ultraviolet testing, high and low temperature testing, blue light testing, salt spray testing, on-site pressure testing.

500*500MM Die-cast Aluminum Cabinet

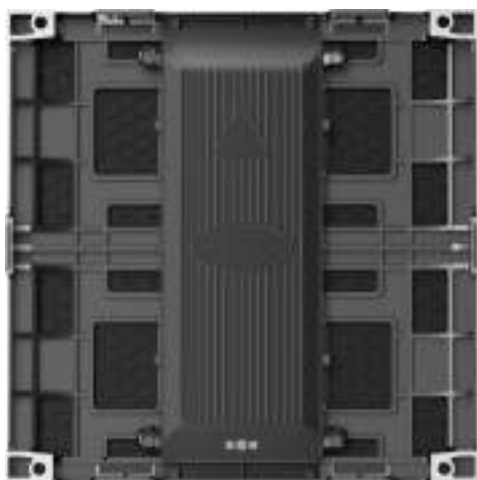


Front view



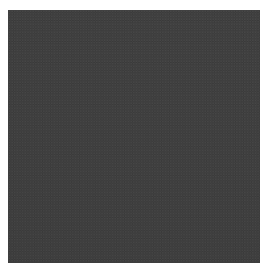
Side(A/B)

Die-cast Aluminum Cabinet

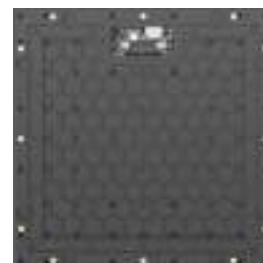


Rear view

250*250MM Module



Module front view



Module rear view

4.1 Product introduction

X-HD-2K is a basic independent interactive master; it has a load capacity of up to 2.6 million pixels; it has powerful processing capabilities, ultra-stable performance and ultra-high cost performance.

4.2 Features

- 1 x DVI and 1 x HDMI video signal input
- 1 x AUDIO input, synchronously transmitted through the network cable
- 6 x Gigabit Ethernet port output, support two up and down, left and right arbitrary splicing
- 1 x USB interface communication, can cascade multiple sending cards on the same PC to control
- Support network port loop backup, dual master backup
- Supports multiple preset resolutions : 1024×768, 1280×1024, 1366×768, 1600×1200, 1920×1080, 2048×1152, 2560×960, And supports resolution customization
- Compatible with 30HZ, 50HZ, 60HZ, 120HZ and other frame rate input
- Support ST_EXT expansion board for cascade brightness control and automatic brightness adjustment
- Support the PC software to monitor the running parameters and status of the sending card
- Support configuration parameter readback
- Support gigabit network bit error rate detection

4.3 Application

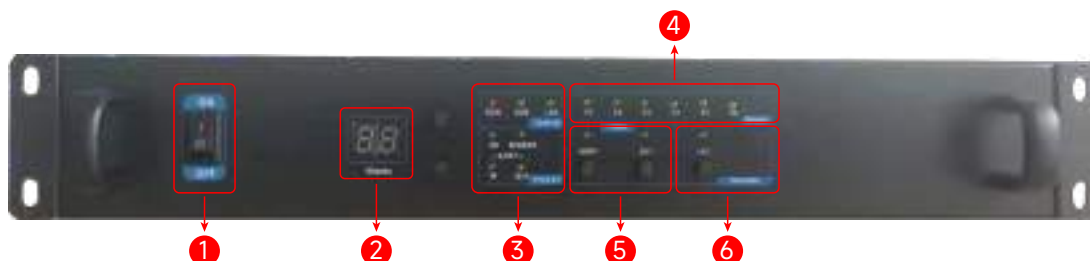
It can be widely used in conventional LED display screen and LED interactive floor screen field. It has significant effects in application scenarios such as education and training, exhibitions, museums, planning halls, science and technology museums, cultural and tourist attractions, high-speed rail platforms, municipal squares, corporate exhibition halls, hotel stages, bars, TV live broadcasts, outdoor advertising, and commercial complex projects.

4.4 Basic Parameters

Load Capacity	Single port	65W pixels	Not fully loaded
	Whole controller	260W pixels	When a single port is fully loaded with 650,000 pixels, it is limited to 4 ports
Load Range	Width	128— 4096 pixels	
	Height	64— 4096 pixels	
Offset Range	Width	0— 4095 pixels	
	Height	0— 4095 pixels	

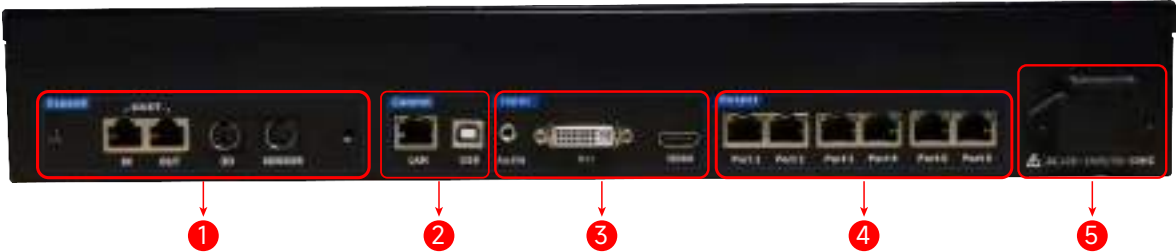
4.5 Hardware Introduction

Front Panel



No	Name	Description
①	Switch	Main controller power switch
②	Display&Button	Display: brightness value, Button to add or subtract brightness value
③	Power indicator, Control interface indicator, Expansion interface indi cator	Display power status、 Control interface status、 Expansion interface status
④	Output network port indicator	Display the output network port status
⑤	Input signal button	Switch signal input port
⑥	Extended function button	①. Short press the button, the INC indicator will flash quickly, the sending card will always check the offset of the sub-control, the image size of the sub-control, and the offset of the receiving card;when the INC indicator is flashing quickly, press the button, the INC indicator will be off Immediately release the button, the INC indicator no longer flashes rapidly, and the inspection function is turned off. ②. Press and hold the button for more than 3S and then release, the INC indicator light flashes slowly, the sending card starts to inspect, and the inspection contents are all inspection contents configured by the host computer (sub-control configuration,receiving card brightness,receiving card network port offset,white balance, gamma,receiving card parameters). When the inspection is over, the INC indicator turns off. ③. Press and hold the button for more than 10s and then release, the INC indicator is always on, the sending card solidifies the inspection content to the designated receiving card and sub-controller, and the solidified content is the inspection content configured by the host computer. During the curing process, Do not perform other operations. When curing is complete, the INC indicator goes out. ④. The above operations are performed when the USB interface is disconnected. ⑤. AC110V-240V/50-60HZ

Back Panel



No	Name	Description
③	Audio	3.5mm Audio input interface
	DVI	DVI Video signal input interface
	HDMI	HDMI Video signal input interface

No	Name	Description
②	USB (B type)	Type B USB socket,connected to PC software communication
	LAN	Induction signal return

No	Name	Description
⑤	AC power connector	AC-100-240V-50/60HZ AC power interface

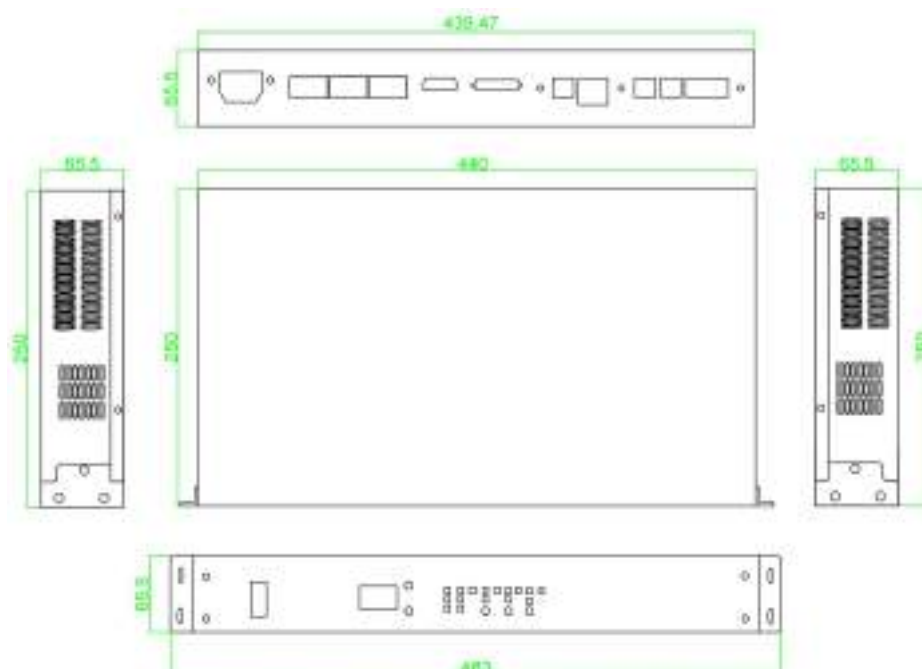
No	Name	Description
④	Gigabit Ethernet port	▲ P1-P6 are output network port 1- 6 ▲ The maximum load of a single network port is 650,000 pixels ▲ Support loop backup between network ports ▲ Only supports P1 output network port audio transmission

①	No	Name	Description
		IN	Serial communication input
		OUT	Serial communication output
		3D	3D transceiver communication interface (reserved)
		SENSOR	Light sensor communication interface

4.6 Indicator Light Description

Output					
P1-P6	Flashes evenly	Gigabit network signal communication is normal			
	Always bright	Gigabit network signal is not working			
Input					
DVI	Always bright	DVI signal input is normal, DVI signal is not used			
	Slow flash	DVI signal input is normal, DVI signal is being used			
	Always off	No DVI signal input			
	Button	Select DVI input			
HDMI	Always bright	HDMI signal input is normal, HDMI signal is not used			
	Slow flash	HDMI signal input is normal, HDMI signal is being used			
	Always off	Always off No HDMI signal input			
	Button	Select HDMI input			
Control					
USB	Always bright	The USB cable is connected normally			
	Always off	USB cablenot connected			
LAN	Slow flash	When using the interactive function	The sensor signal return connection is normal	When not using interactive function	Communication signal is normal
	Always off		The sensor signal return not connected		Communication signal is abnormal
Expand					
3D	Slow flash	3D signal transceiver connection is normal			
	Always off	3D signal transceiver not connected			
SENSOR	Slow flash	Light sensor connection is normal			
	Always off	Light sensor not connected			
IN	Slow flash	Serial input connection is normal			
	Always off	Serial input not connected			
OUT	Slow flash	Serial output connection is normal			
	Always off	Serial output not connected			

4.7 Dimensions



4.8 Specifications

Electrical parameters	Input voltage	AC-100-240V-50/60HZ
	Rated power	16W
Working environment	Working temperature	-20°C - 70°C
	Working humidity	10%RH-90%RH without coagulation
Size	483mmX250mmX65.5mm (L x W x H)	
Net weight	3.1KG	

5 Interactive Controller series X-HD-4K

Interactive Controller

5.1 Product Introduction

X-HD-4K has a variety of video signal receiving capabilities, ultra-high-definition full 4K×2K @60Hz image processing capabilities and send capabilities; the processed video can be sent to the LED display through the network port and fiber port;and It also has powerful processing capabilities, effectively improving the load utilization rate, powerful processing capabilities, ultra-stable performance and ultra-high cost performance.

5.2 Features

- Rich input interface: 1x DP1.2 input; 1x HDMI2.0 input; 1 x AUDIO audio input
- Various types of output interfaces: 20 x Gigabit Ethernet port output; 4 x optical fiber bidirectional duplex transmission
- Various communication control methods: 1 x USB interface; 1 x serial port interface; 1 x 100M network interface
- Support network port loop backup, dual master backup
- Supports multiple preset resolutions; and supports resolution customization
- Compatible with 30HZ, 50HZ, 60HZ, 120HZ and other frame rate input
- Support the host computer software to monitor the running parameters and status of the sending card
- Support configuration parameter readback
- Support gigabit network bit error rate detection

5.3 Application

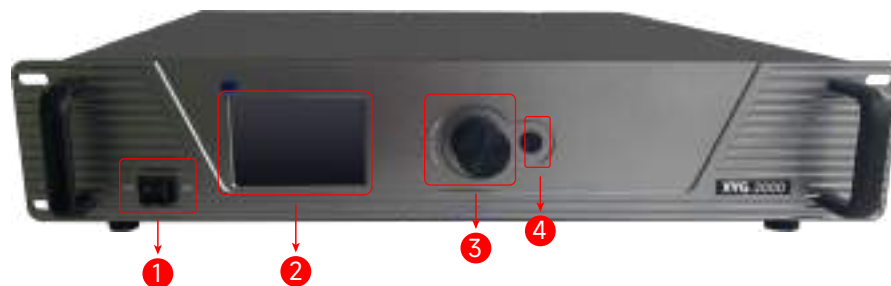
The powerful video processing and transmission capabilities of X-HD-4K can be widely used in education and training, exhibitions, museums , planning halls, science and technology museums, cultural and tourist attractions, high-speed rail platforms, municipal squares, corporate exhibition halls, hotel stages, bars, TV live broadcasts, outdoor advertising, commercial complex projects, and other application scenarios have significant effects.

5.4 Basic Parameters

Load Capacity	Single port	65W pixels	Not fully loaded
	Whole controller	1040 W pixels	Each port is limited to 16 ports with a load of 65W
Load Range	Single port	Width	128— 4096 pixels
		Height	64— 4096 pixels
	Whole controller	Width	128— 7680 pixels
		Height	64— 7680 pixels
Offset Range	Width	0-7679 pixels	
	Height	0-7679 pixels	

5.5 Hardware Introduction

Front Panel



No.	Name	Description
①	Switch	Main controller power switch
②	LCD	Used to display the current state of the device and set menu item parameters
③	Knob	In the main interface, press the knob to enter the menu operation interface. When the menu operation interface, rotate the knob to select the menu, press the knob to select the current menu or enter the sub menu
④	Back button	Exit the current menu or action

Back Panel

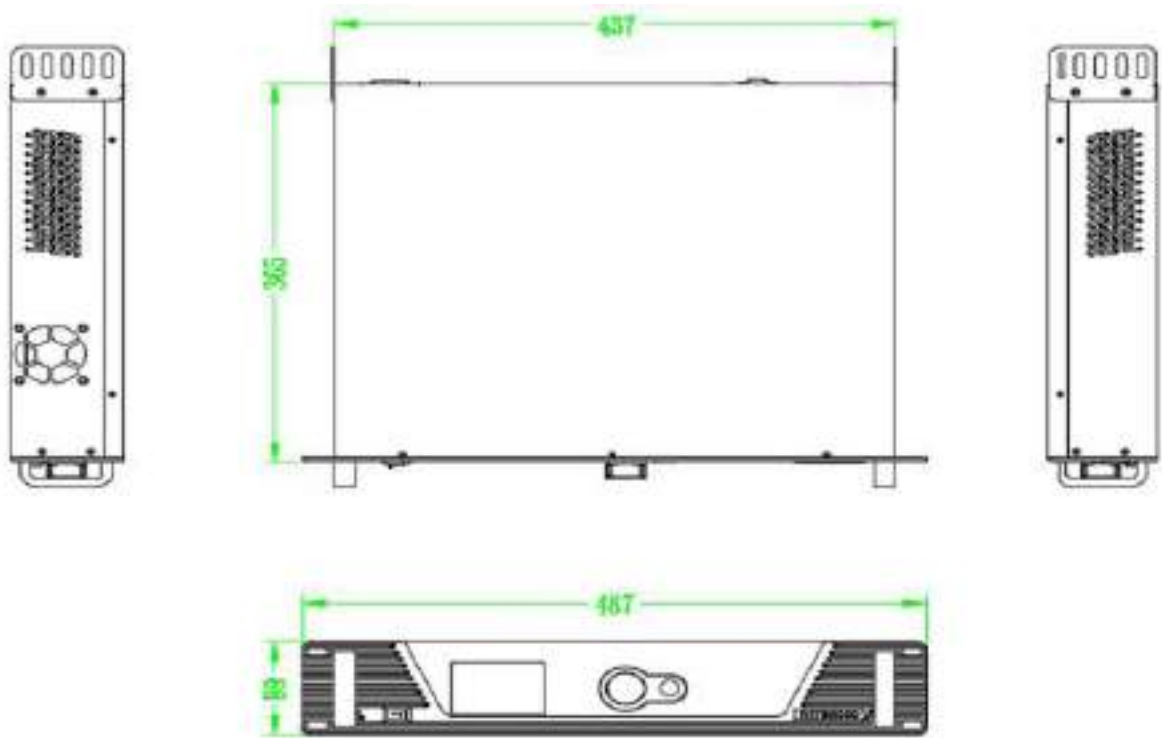


Input Interface			
Interface	Quantity	Description	
AUDIO	1	3.5mm Audio input interface	
DP	1	Support resolution 3840×2160 @ 60Hz, backward compatible; graphics card custom maximum width 7680,height maximum 7680.	
HDMI	1	Support resolution 3840×2160 @ 60Hz, backward compatible; graphics card custom maximum width 7680,height maximum 7680.	
Output Interface			
Interface	Quantity	Description	
Network port	20	20 x Gigabit Ethernet port output,with a load of up to 10.4 million pixels. (Note: 16 ports are used foreach loading time limit of 650,000 pixels, and the remaining ports are used as backup. When all 20 ports are used,each port can only carry 520,000 pixels) The maximum load of a single-channel network port is: 650,000 pixels when the input source bit is 8bit.	
Fiber	4	10G fiber interface, When used as output terminals:OPT1, OPT2 are main transmission; OPT3, OPT4 are standby outputs; When used as a receiver: OPT1, OPT2 are mainreceivers; OPT3, OPT4 are standby receivers;	
Control Interface			
Interface	Quantity	Description	
USB (square))	1	Connect to PC	
RS232	1	1 x DB9 female socket interface is connected to thecentral control device.	
LAN	1	Normal screen use	100M Ethernet communication interface to realize local area network communication
		Interactive screen use	Sensing signal backhaul communication

Extension Ports		
Interface	Quantity	Description
SD	1	Connect the SD card to store the device parameters, and the device can be read back from the SD card without debugging
3D	1	Connect 3D transmitter; (reserved interface,functionneeds to becustomized)
SENSOR	1	Connect the light sensor to realize automatic brightness adjustment.
Power Supply Interface		
Interface	Quantity	Description
Power interface	1	AC-100-240V-50/60HZ AC power interface

5.6

Dimensions



5.7

Specifications

Electrical parameters	Input voltage	AC-100-240V-50/60HZ
	Rated power	70W
Working environment	Operating temperature	-20°C - 70°C
	Working humidity	10%RH-90%RH without coagulation
Size	487mmX365mmX89mm ((L x W x H)	
Net weight	6.2KG	
Packaging Information	Accessories	1×DP 、 1 ×HDMI 、 1×USB 、 1 ×Power supply、 1× Certificate
	Outer box	565×445×185mm

6 Dimensions of maintenance tools& floor support(mm)

Dimensional Drawings

Maintenance tools



Floor support



7 Outer Packing Appearance (mm)

Dimensional Drawings



Carton size :
1040x660x670mm

8 Installation Diagram

Diagrammatic Sketch

