

MTB2000E-D

Sending Controller

Specification V4.0



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1 Update Records

Document Version	Hardware Version	Release Time	Update Record
V4.0	ST2000 (V2 .0.0)	July 21(th), 2025	First release

2 Product Introduction

The MTB2000E-D is an Sending controller independently developed by Mooncell that supports interactive communication protocols for floor led displays, supporting up to 10.4 million pixels. It features powerful processing capabilities, ultra-stable performance, and exceptional cost performance.

The MTB2000E-D's powerful video processing and transmission capabilities make it ideal for interactive display projects in education, entertainment, gaming, and more.

3 Product Characteristics

3.1 Improve the display effect

- Multiple input interfaces
 - 1×HDMI2.0
 - 1×DP1.2
 - Choose one of two options
- Output interface
 - 20 Gigabit Ethernet ports, supporting vertical and horizontal tiling in any configuration
 - Maximum load capacity: 10.4 million pixels
 - Pixel-to-pixel load depends on the input port.
- Audio interface
 - Support audio input, Synchronize via network cable
- Control interface

- 1×USB interface communication, which can be controlled by cascading multiple sending cards on the same PC.
- 1×LAN, 100M network interface connected to the host computer for debugging.
- 1×RS232 serial port for connecting to central control equipment

3.2. Diversified Practical Functions

- Compatible with multiple input frame rates including 30Hz, 50Hz, 60Hz, and 120Hz
- Supports host software monitoring of sending card operating parameters and status
- Supports configuration parameter readback
- Supports Gigabit Ethernet error rate detection
- Supports multiple preset resolutions and custom resolution settings.

4 Product Appearance

Front Panel

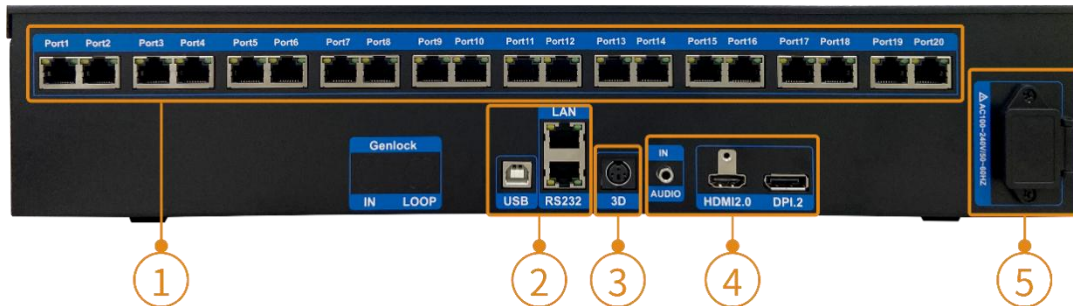


* Product photos are for reference only, please refer to the products actually purchased.

4.1 Description of Data Interface

#	Keys	Illustrations
1	ON/OFF	Power ON/OFF
2	LCD Display	To display the current status of the device and to have the menu settings. LCD Resolution: 320×240
3	Knob	Select menus, adjust parameters, and confirm operations
4	Esc	Return(ESC)/Cancel the current menu or operation.

Rear Panel

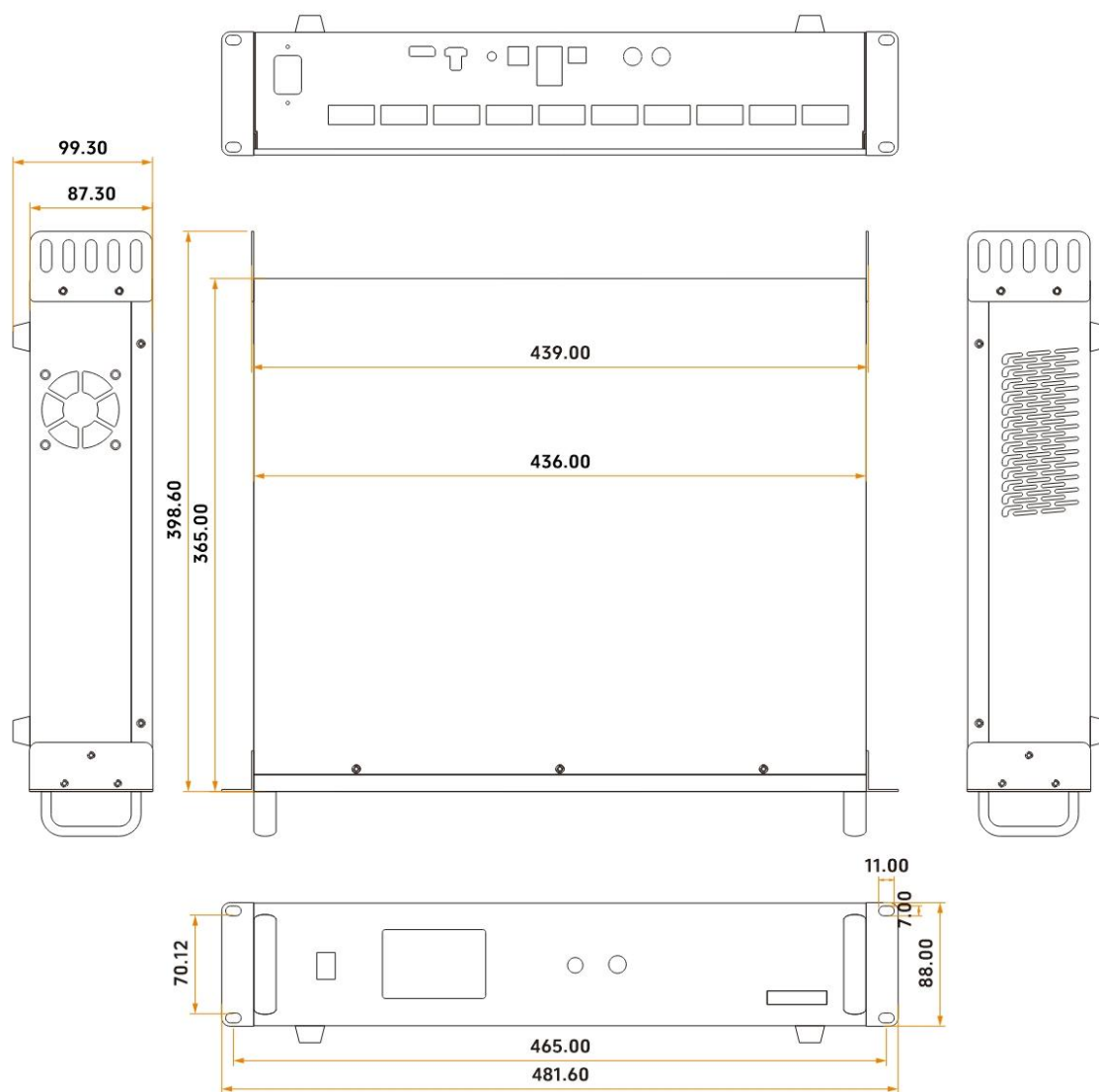


* Product photos are for reference only, please refer to the products actually purchased.

Rear Panel Description		
Input Interface		
#	Name	Illustration
4	HDMI2.0	1×HDMI 2.0, supports up to 3840×2160@60Hz with backward compatibility. Maximum customizable GPU width: 7680 Maximum customizable GPU height: 7680
	AUDIO	1×3.5mm audio input interface
	DP1.2	1×DP1.2, video signal input interface. Maximum resolution 3840×2160@60Hz, backward compatible. Graphics card customizable maximum width 7680 Graphics card customizable maximum height 7680

Output Interface		
#	Name	Illustration
1	Gigabit Ethernet port	◆ Port1-Port 20 correspond to output ports 1-20 ◆ Maximum single-port load capacity: 650,000 pixels, at 8-bit
Control Interface		
#	Name	Illustration
2	LAN	100Mbps Ethernet interface for connecting to host computer for debugging
	RS232	1×RS232 interface for connecting to central control equipment
	USB (B-Type)	Connects to PC software for communication
Extended Interface		
#	Name	Illustration
3	3D	3D Transceiver Communication Interface
Power supply interface		
#	Name	Illustration
5	Ac power Interface	AC-100-240V-50/60HZ AC power interface

4.2 Product Dimensions



Tolerance: ± 0.3 Unit: mm

5 Product Parameters

5.1 Basic Parameters

Loading capacity	Single network port	Maximum load 655360 pixels, network port load (width × height) 1280 × 512
	Whole Unit	10.40 million Pixels
Load Range	Single port width	128–4096 pixels
	Single port height	64–4096 pixels
	Overall width	128–7680 pixels
	Overall height	64–7680 pixels
Offset Range	Width	0–7680 pixels
	Height	0–7680 pixels

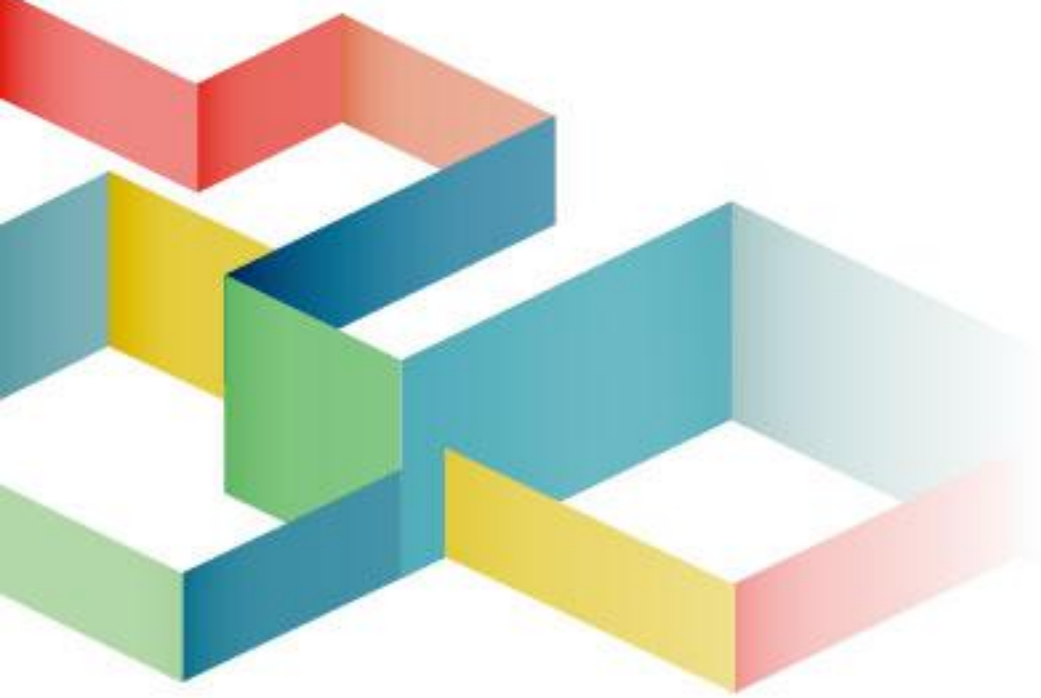
5.2 Specification

Electrical Parameters	Rated voltage	AC-100-240V-50/60HZ
	Rated power	70W
Working Environment	Operating temperature	-20°C~60°C
	working humidity	10%RH~90%RH non-condensing
Storage Environment	Temperature	-20°C~70°C
Chassis size	481.6mm×398.6×99.3mm	
Net weight	4.66Kg	
Outer box size	565×445×185mm	
Gross weight	6.4 Kg Description: Including accessories and packaging materials	
Accessory	1×Power Cord、1×USB、1×DP、1×HDMI、1×Certificate 2×hangers,4*M3 Screw	
Packing method	1 PCS/Carton	

*Current and power consumption may vary depending on factors such as product usage, environment, and settings.

6 Precautions

- High voltage hazard: This product operates at AC 100V~240V.
- Do not allow liquids or metal fragments and other conductive materials to enter the device, to prevent safety accidents.
- Please use the device in a dry and clean environment.



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