



*Shenzhen Mooncell Electronics Co., Ltd*

## *Master Controller Series*

### *MTB600E Product Specifications*

# 1 Product Overview

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## Product Introduction

MTB600E is a master controller with 6 gigabyte Ethernet out puts that fully researched and developed by Mooncell, the maximum loading capacity could reach up to 2.6 million pixels; with powerful processing capability to efficiently enhance the use ratio of the loading, and it perfectly supports the 2K resolution; with powerful processing ability, super reliability and high cost performance.

## Product Features

- 1x DVI video signal input, synchronous transmission via the network cable.
- 1x AUDIO input, synchronous transmission via the network cable.
- 6x gigabytes Ethernet output ports, it supports the arbitrary splicing.
- 1x USB port communication, multiple sending cards could be cascading connected to one computer.
- It supports Ethernet Port Loop Dual Backup, Dual Master Controller Backup.
- It supports to have multiple preset resolutions: 1024×768 、 1280×1024 、 1366×768 、 1600×1200 、 1920×1080 、 2048×1152 、 2560×960 and the user defined resolution is supported.
- It is compatible with 30HZ, 50HZ, 60HZ, 120HZ and other Frame Rate Input.
- It supports the upper computer software to detect the operating parameters and status of the sending card.
- It supports to read the configurations back from where it was stored ( configuration read back )
- It supports to detect the error rates of the gigabyte network.

## Application Scenarios

Mooncell MTB600E with powerful video processing and sending ability which has been widely used in various application scenarios such as: Stage, Conference, Event, Exhibition , High-end Rental and Small Pixel Pitch Led Displays.

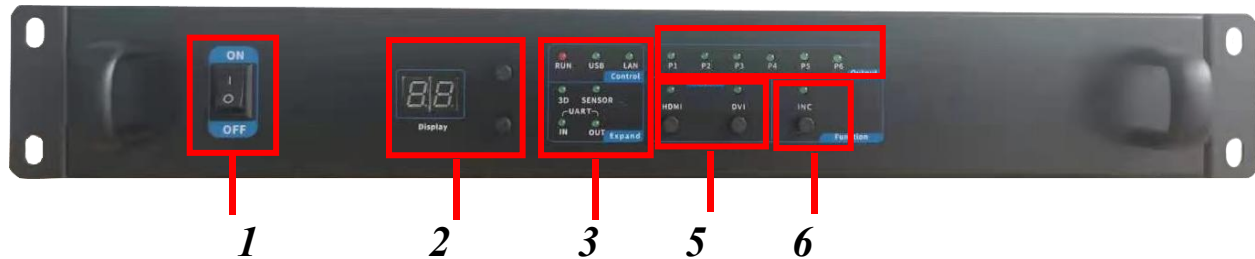
## 2 Product Parameters

### Basic Parameters

|                  |                |                     |
|------------------|----------------|---------------------|
| Loading Capacity | 1 Network Port | 650 Thousand Pixels |
|                  | Entire Unit    | 2.6 Million Pixels  |
| Loading Range    | Width          | 128—4096 Pixels     |
|                  | Height         | 64—4096 Pixels      |
| Shift Range      | Width          | 0—4095 Pixels       |
|                  | Height         | 0—4095 Pixels       |

### Hardware Introduction

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**Front Panel**

| <b>Front Panel Illustration</b> |   |   |
|---------------------------------|---|---|
| #                               | Name  | Illustration  |
| 1                               | ON/OFF  | Power ON/OFF  |
| 2                               | Digital Tube Display  | Display brightness value  |
| 3                               | Power indicator, control interface indicator, expansion interface indicator | Power indicator, control interface indicator, expansion interface indicator |
| 4                               | Output Ethernet port indicator  | Display output port status  |

| 5 | <i>Input signal button</i>      | <i>Switch signal input port</i>  |
|---|---------------------------------|--|
| 6 | <i>Extended function button</i> | <p><i>1. Short press the button, the INC indicator light flashes, and the sending card keeps checking the offset of the sub-control, the image size of the sub-control, and the offset of the receiving card; when the INC indicator light flashes, press the button, and the INC indicator light goes out immediately. Release the button, the INC indicator no longer flashes, and the inspection function is turned off.</i></p> <p><i>2. Long press the button for more than 3S and then release it, the INC indicator light flashes slowly, and the sending card starts the inspection. The content of the inspection is all the inspection content configured by the host computer (sub-control configuration, receiving card brightness, receiving card network port offset, white balance, gamma, receiving card parameters). At the end of the inspection, the INC indicator light is turned off.</i></p> <p><i>3. Press and hold the button for more than 10s and then release it. The INC indicator light is always on. Send the solidified inspection content of the card to the designated receiving card and sub-control. The solidified content is the inspection content configured by the host computer. During the solidification process, please do not perform other operations. After curing, the INC indicator light goes out.</i></p> <p><i>4. The above operations are performed when the USB interface is disconnected.</i></p> |



## Backside Panel

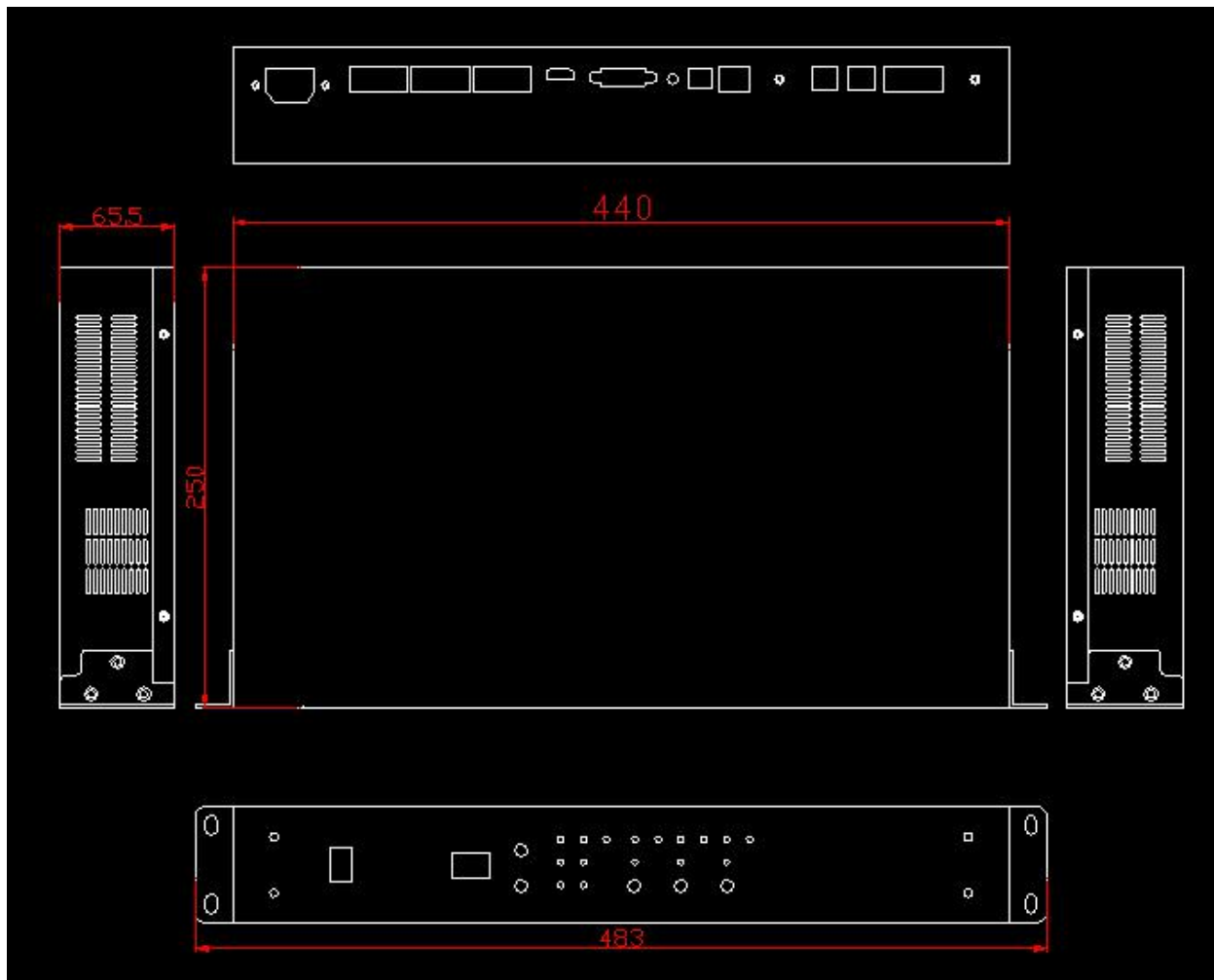
| <b>Backside Panel Illustration</b> |                        |   |
|------------------------------------|------------------------|---|
| <b>Input Interface</b>             |                        |   |
| 3                                  | Name                   | Illustration  |
|                                    | AUDIO                  | 3.5mm AUDIO INPUT Port  |
|                                    | DVI                    | DVI Video Signal Input Port   |
| <b>Output Interface</b>            |                        |   |
| #                                  | Name                   | Illustration  |
| 4                                  | Gigabyte Ethernet Port | <ul style="list-style-type: none"> <li>◆ OUT1-OUT6: Output Ethernet Ports 1-6</li> <li>◆ 650 thousand pixels for 1 network port</li> <li>◆ it supports network port loop backup.</li> </ul> |
| <b>Control Interface</b>           |                        |   |
| #                                  | Name                   | Illustration  |
| 2                                  | USB (B TYPE )          | to get it connected to the software on the PC to communicate.   |
| <b>Extension Ports</b>             |                        |   |
| #                                  | Name                   | Illustration  |
| 1                                  | IN                     | Serial Port Communication Input   |
|                                    | OUT                    | Serial Port Communication Output  |
|                                    | 3D                     | 3D transmitter and receiver communication port  |
|                                    | SENSOR                 | Light sensor port   |
| <b>Power Interface</b>             |                        |   |
| #                                  | Name                   | Illustration  |
| 5                                  | AC Power Port          | AC-100-240V-50/60HZ AC Power Port   |

## Indicator Illustration

| Indicator     | Illustration   |   |
|---------------|----------------|---|
| <b>Output</b> |                |   |
| P1-P6         | Flashes evenly | Gigabit network signal communication is normal. |
|               | Always on      | Gigabit network signal is not working           |
| <b>Input</b>  |                |   |

|                |                   |   |
|----------------|-------------------|---|
| DVI            | <i>Always on</i>  | <i>DVI Signal Input is normal</i>                 |
|                | <i>Always off</i> | <i>No DVI Signal Input</i>                        |
|                | <i>Button</i>     | <i>Select DVI Input</i>                           |
| HDMI           | <i>Always on</i>  | <i>HDMI Signal Input is normal</i>                |
|                | <i>Always off</i> | <i>No DVI Signal Input</i>                        |
|                | <i>Button</i>     | <i>Select HDMI Input</i>                          |
| <i>Control</i> |                   |   |
| USB            | <i>Always on</i>  | <i>USB Cable Connection is normal</i>             |
|                | <i>Always off</i> | <i>USB cable not connected</i>                    |
| LAN            | <i>Always on</i>  | <i>100M network connection is normal</i>          |
|                | <i>Always off</i> | <i>100M network is not connected</i>              |
| <i>Expand</i>  |                   |   |
| 3D             | <i>Always on</i>  | <i>3D signal transceiver connection is normal</i> |
|                | <i>Always off</i> | <i>3D signal transceiver is not connected</i>     |
| SENSOR         | <i>Always on</i>  | <i>Light sensor connection is normal</i>          |
|                | <i>Always off</i> | <i>Light sensor is not connected</i>              |
| IN             | <i>Always on</i>  | <i>Serial input connection is normal</i>          |
|                | <i>Always off</i> | <i>Serial input not connected</i>                 |
| OUT            | <i>Always on</i>  | <i>Serial output connection is normal</i>         |
|                | <i>Always off</i> | <i>Serial output not connected</i>                |

## Dimensions



# 3 Product Specifications

## Specifications

|                              |                              |                                      |
|------------------------------|------------------------------|--------------------------------------|
| <i>Electric Parameters</i>   | <i>Input Voltage</i>         | <i>AC-100-240V-50/60HZ</i>           |
|                              | <i>Rated Power</i>           | <i>16W</i>                           |
| <i>Operating Environment</i> | <i>Operating Temperature</i> | <i>-20°C - 70°C</i>                  |
|                              | <i>Operating Humidity</i>    | <i>10%RH-90%RH No Solidification</i> |
| <i>Dimensions</i>            | <i>483mmX250mmX65.5mm</i>    |                                      |
| <i>Net Weight</i>            | <i>3.1Kg</i>                 |                                      |

## Precautions

1. *High voltage danger: The working voltage of this product is AC -100V~240V.*
2. *It is forbidden to immerse conductive objects such as liquids and metal fragments into the equipment to avoid safety accidents.*
3. *Please use the equipment in a dry and clean environment.*