



ZH LED Control System



ZH-Z8M Video Processor

Product Specification





Product Specification

ZH-Z8M

I. Product Introduction:

The ZH-Z8M is a two-in-one HD video processor and transmitter card developed for large-screen LED display systems. It utilizes industry-leading lossless scaling technology and supports HD HDMI/USB flash drive input, audio output, and standard Gigabit Ethernet output, providing customers with a high-definition display solution for large LED screens. This product supports one-touch switching between synchronous HD video source and asynchronous USB flash drive content display, greatly simplifying the user's operation process and truly achieving the goal of simple operation. This product system supports online upgrades, ensuring customers can upgrade to new features from time to time.

II. Functional Features

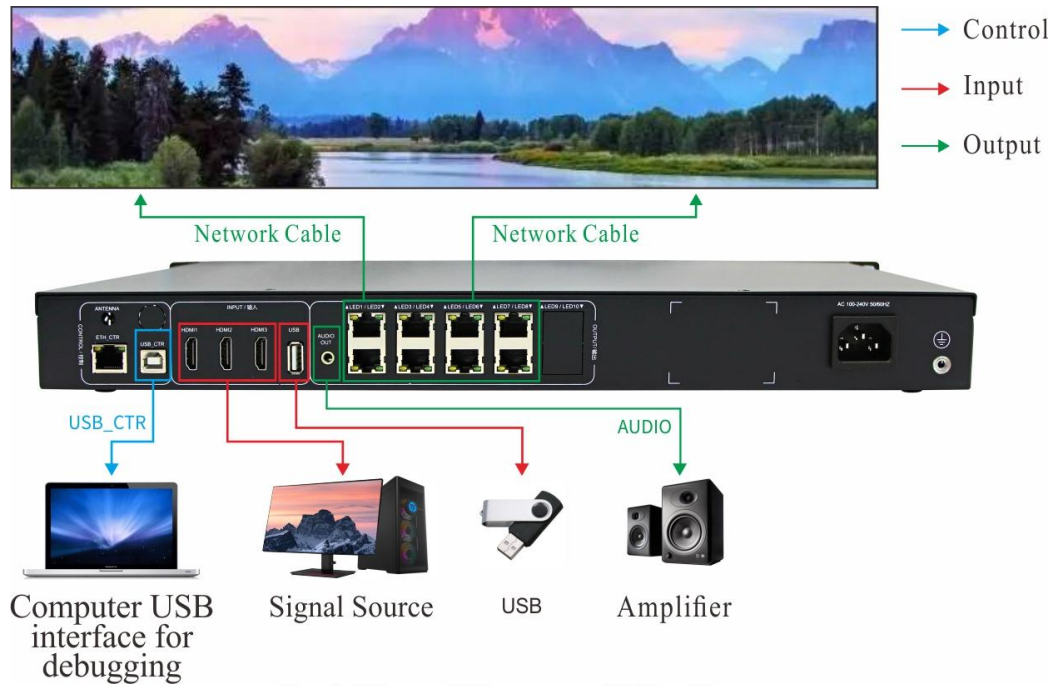
1. Multiple signal inputs: 3 HDMI inputs, 1 USB flash drive input;
2. Input resolution: Maximum 4096*2160 pixels at 30Hz, supports arbitrary resolution settings;
3. Simultaneous audio and video input;
4. Supports the following output signal interfaces: LAN (RJ45) × 8 (with network port connection status indicator), maximum supported resolution of 5.2 million pixels, supports custom resolutions, maximum width 16384 pixels, maximum 4096 pixels; Audio (PJ35) × 1;
5. Built-in USB flash drive playback function: directly plug in a USB flash drive to automatically play videos or pictures from the USB flash drive;
6. Arbitrary switching of video sources and scaling of input images according to display resolution;
7. Supports audio input and output;
8. Image brightness, contrast, saturation, and color temperature adjustment;
9. Supports custom resolution;
10. LED screen testing: arbitrary display switching between black, blue, and red screens;
11. Supports scene recall and saving;
12. Standard network port central control interface;



ZH LED Display Control System

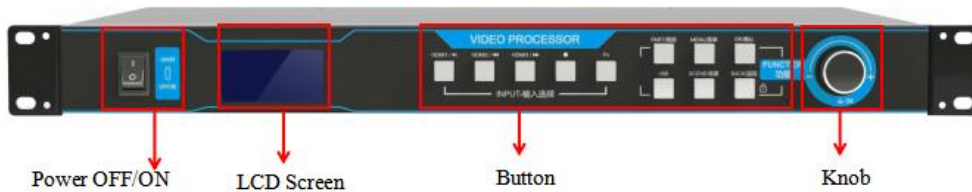
- 13. Supports online system upgrades;
- 14. Supports hot backup: hot backup of two network ports in the same group and multi-card hot backup;
- 15. Supports all series of ZH receiver cards, multi-function cards, and fiber optic transceivers.

III. System Topology



IV. Hardware Introduction:

The Front Panel



| | |
|--------------|--|
| Power ON/OFF | Power switch |
| LCD Screen | Display device status and user interface |
| Knob | Pressing the key enters the menu or confirms the selection; rotating or moving the cursor allows you to modify parameters. |

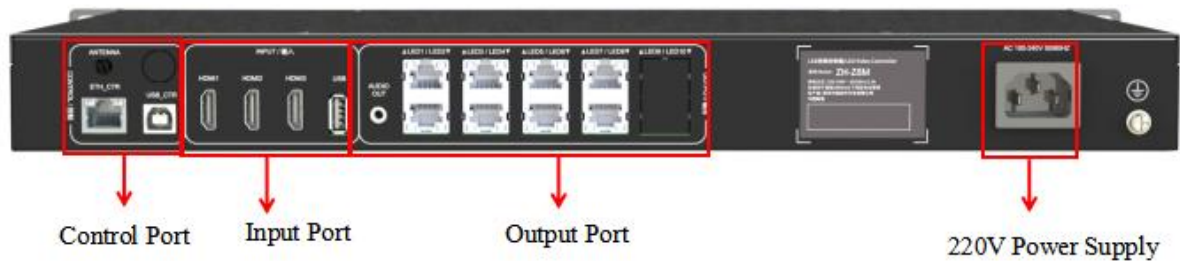
| |
|--------|
| Button |
|--------|



ZH LED Display Control System

| | | | |
|-----------|------------------------------|----------|-------------------------------|
| HDMI 1/▶ | 2K signal HDMI 1/Pause, Play | PART/局部 | Partial/full-screen switching |
| HDMI 2/◀◀ | 2K single HDMI 2/Previous | MENU/菜单 | Menu button |
| HDMI 3/▶▶ | 2K 信号 HDMI 3/Next | OK/确认 | Confirm button |
| ■ | Pause | USB | USB play signal |
| Fn | Composite buttons | SCENE/场景 | Scene list |
| | | ESC/返回 | Back |

The Back Panel



| CONFIG/控制 | | INPUT/输入 | | OUTPUT/输出 | |
|-----------|-------------------------------|-----------|-----------------|-----------|--------------------------|
| ETH_CTR | Central control interface | HDMI1/2/3 | 3*2K HDMI input | LED*8 | Output network port 1--8 |
| USB_CTR | Equipment debugging interface | USB | U-disk input | AUDIO_OUT | Audio output |
| ANTENN A | Reserved interface | | | | |

V. Parameters:

Input Standard:

| Input Port | Number | Resolution specifications |
|------------|--------|--|
| HDMI | 3 | EIA/CEA-861 standard, compliant with HDMI1.4 standard, supports HDMI input audio data output |
| USB | 1 | Standard USB2.0 interface |

Output Standard:

| Port | Quantity | Resolution specification |
|------|----------|--|
| LED | 8 | Standard gigabit Ethernet ports, supporting arbitrary splicing in the top, bottom, left, |



ZH LED Display Control System

| | | |
|-------|---|--------------------------------|
| | | or right directions. |
| AUDIO | 1 | 3.5mm standard audio interface |

Device specification:

| | |
|---------------------|---------------------------------------|
| Input power | AC 100~240V, 50/60HZ, No more than 2A |
| Operating power | ≤25W |
| Working temperature | -20~45°C |
| Volume size | 482*243*44.5(mm,L*W*H) |
| Weight | ≈2KG |

VI. Hardware Diagram:

Unit: mm

