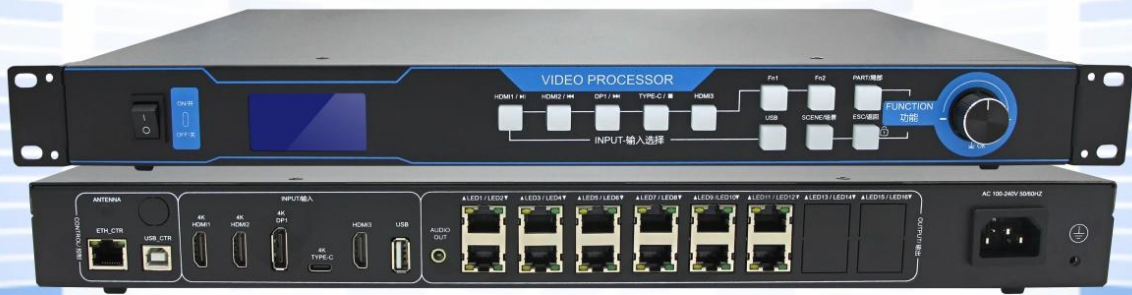




ZH LED Control System



ZH-Z12S

4K Two-in-one Video Processor

Product Specification





Product Specification

ZH-Z12S

(4K Video Processor)

I. Product Introduction:

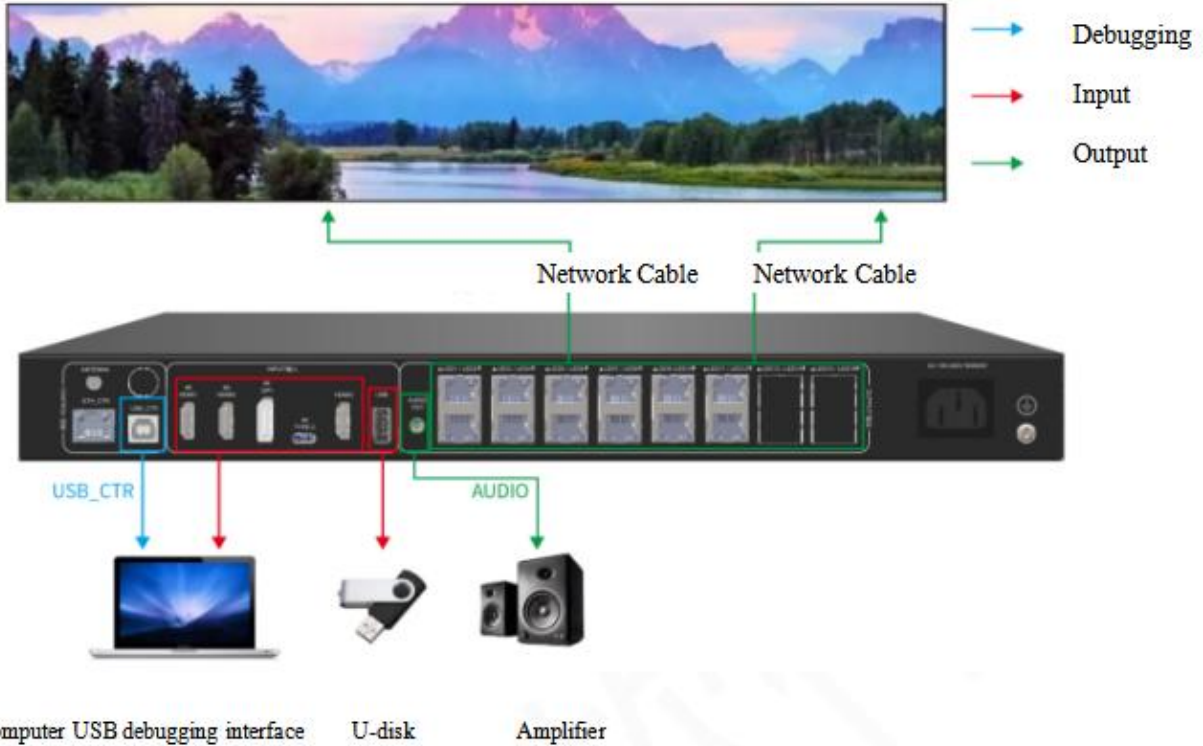
ZH-Z12S 4K two-in-one video processor is a product developed by ZH to meet the convenience of LED large screen installation. It supports high-definition signal input such as HDMI and DP; it supports max pixel 4096*2160@60Hz, 12pcs Gigabit network output port, and supports max width 16384 pixels or a max height 8192 pixels. It adopts a new communication architecture, high refresh, high brightness, new grayscale scanning engine, nanosecond synchronization, and can maintain smooth communication in poor communication conditions, allowing users to experience a more colorful and better LED world!

II. Functional Features:

1. Variety of input interfaces: including 2pcs HDMI 2.0, 1pcs HDMI 1.4, 1pcs DP1.2, 1pcs TYPE-C, and 1pcs USB flash drive;
2. Input resolution: max 4096*2160@60Hz pixels, supports any resolution setting;
3. The max load area: 7.8 million pixels, the max width 16384, and the max height 8192 pixels;
4. Arbitrary switching of video sources, and can scale the input image according to the display resolution;
5. Supports audio input and output;
6. Supports brightness and color temperature adjustment;
7. Low brightness and high gray;
8. Standard network port central control docking;
9. 12pcs Gigabit network output ports, arbitrary splicing up and down, left and right;
10. Hot backup: hot backup of two network ports in the same group and hot backup of multiple cards;
11. Supports ZH all series receiving cards, multi-function cards, and fiber optic transceivers;



III. Topology Diagram:



IV. Hardware Introduction:

The Front Panel



Switch	The power switch
LCD	Show the device status and operation interface
Knob	Pressing: To enter or confirm; Rotation: To move the cursor or modify parameters

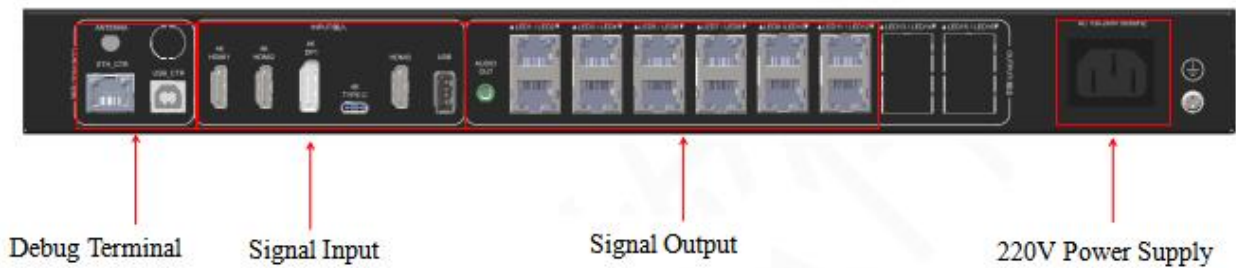
Button Part Manual



ZH LED Display Control System

HDMI 1/▶	4K signal HDMI 1/pause or play	Fn1	Composite button 1
HDMI 2/◀◀	4K signal HDMI2/the last	Fn2	Composite button 2
DP1/▶▶	4K signal DP1/the next	PART/局部	Partial/full screen switch
TYPE-C/■	4K signal TYPE-C/Stop	USB	U-disk play signal
HDMI 3	2K signal HDMI3	SCENE/场景	Scene List
		ESC/返回	Back

The Back Panel



CONFIG		INPUT Port		OUTPUT Port	
ETH_CTR	Central control docking interface	HDMI1/2	4K HDMI input	LED*12	Network output port 1--12
USB_CTR	Device debugging interface	DP1	4K DP input	AUDIO_OUT	Audio output
ANTENNA	Reserved port	USB	U-disk input		
		HDMI3	2K HDMI input		
		TYPE-C	TYPE-C input		

Input:

Port	Quantity	Resolution Specification
HDMI 1.4	1	EIA/CEA-861 standard
HDMI 2.0	2	EIA/CEA-861 standard, compliant with HDMI-2.0 standard, support HDCP2.2
TYPE-C	1	Standard TYPE-C port
DP	1	Match DP-1.2 standard, support HDCP1.3
USB	1	Standard USB2.0 port

Output:



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Port	Quantity	Resolution
LED	12	Standard Gigabit Ethernet port, support ZH V5 all types of receiving cards, support arbitrary splicing up and down or left and right
AUDIO_OUT	1	3.5mm standard audio output port

Chassis parameters:

Power Input	AC 100~240V, 50/60Hz,not more than 1A
Temperature	-20~45°C
Size	482*300*44.5(mm,L*W*H)
Weight	≈3.2KG

VI. Hardware Diagram:

Unit: mm

