



Description

The splicing matrix all-in-one machine is based on FPGA hardware architecture and adopts a plug-in card design. Different interfaces can flexibly match actual needs and are characterized by low failure rate and high reliability. A comprehensive, visual audio and video control platform that integrates high-score collection, output customization, visual management and other technologies. It is mainly used in command and dispatch centers in the fields of government, military, transportation and other fields, as well as large, medium and small conference rooms of government and enterprise units and other places. It is a display and control solution for various industries such as conference rooms, national defense forces, public security, electric power, rail transit, and industrial automation.

Feature

- * Pure hardware plug-in architecture design, 19-inch standard rack mounted installation, metal cabinet;
- * Using a 4U metal cabinet, the protection class of the prototype housing meets the requirements of IP20 in GB/T4208-2017;
- * Built-in 7-inch touch screen, monitoring status viewing, parameter setting, plan calling and other operations can be performed through the touch screen;
- * Using a plug-in design, with a built-in data exchange backplane, it can detect device temperature, voltage, and fan online status;
- * The device cabinet supports up to 64 inputs and 40 outputs, and supports preview and echo functions;
- * A single device supports up to 16 input cards, 10 output cards, 1 preview card, and 1 echo card at the same time;
- * Support logo function, text background and position are adjustable
- * Support the subtitle function, and the subtitle content, background, color, scrolling rate, scrolling direction, and position all support custom settings;
- * Support high-definition basemap function, and the basemap can reach 4K resolution;
- * Support hot-swap function of input card, output card, preview card and echo card, no need to shut down the device to restart and set up, and the previous layer data can be quickly restored after replacing the card, so as to ensure the normal playback of the screen, and to realize flexible replacement of cards and convenient maintenance;
- * Support HDMI, SDI, DVI, FIBER, HDBaseT, IP and other image interfaces;
- * With excellent heat dissipation system design, it adopts left-in and right-out forced air cooling circulation mode to ensure long-term stable operation of the equipment at an ambient temperature of 45 °C;
- * The system adopts B/S and C/S management and control architecture, supports web page web access system background management, and supports the management and real-time monitoring of the input box (acquisition box) and output box (splicing box) through a web browser. Support visual management of distributed systems using ipad tablet software, Android tablet software, and Windows computer clients; signal switching, screen overlay, picture-in-picture, screen stitching, screen roaming, screen scale, screen move/close, etc. Support real-time monitoring of the display control area; support multi-user multi-platform synchronous operation, support real-time synchronization of operation interfaces of different platforms.



- * With FPGA-based pure hardware architecture design, the system runs efficiently and stably, the internal video data transmission adopts the industry-leading CrossPoint matrix bus switching technology, the maximum bandwidth of input and output buses is 546Gbps, the video bus transmission bandwidth of a single input card is up to 4x6.5Gbps, and the video bus transmission bandwidth of a single output card is up to 16x6.5Gbps;
- * The IP input card supports simultaneous decoding of 4 IP streams of 4096*2160@30fps;
- * In order to improve the efficiency of equipment troubleshooting, it supports monitoring equipment temperature and power online status, and has intelligent identification of board and interface combinations, board and interface status monitoring, and signal loss warning;
- * Support firmware upgrade online, the firmware version is intelligently forward compatible, the upgrade process is safe, stable and fast, and the success rate is as high as 100%; the firmware version information of the display device and each card can be refreshed in real time, which is convenient for quickly confirming the upgrade results on site;
- * A single output card has no less than 16 layers, which can realize flexible windowing, superimposition, roaming, and infinite zooming of a single card;
- * Support simultaneous preview of all input sources, as well as real-time echo of all screen outputs (including IP stream echo) ;
- * When the video input source is 60Hz, the image delay time from video source input to output is 32ms;
- * Support superimposed display windows of multiple different video input signals on any video output display screen, support window image roaming, infinite scaling, screen capture, flip, freeze;
- * Support multiple users online and sending data at the same time, the operation response time is not more than 1s, and the online firmware upgrade operation can be performed;
- * A single card of the device can build a maximum of 4 screens, and a single device can build a maximum of 40 screens; it can build screens with irregular shapes, which can realize the creation of screens with a single card and a single interface;
- * Support setting 3,000 scene plans;
- * Support layer parameter settings, including zoom, layer top and bottom, layout mode, and overlay;
- * Support custom settings for input and output resolutions, which can be saved as EDID templates, and can be imported and exported. Multiple resolution setting modes are optional, including: preset resolutions, custom resolutions;
- * Support real-time viewing of monitoring device operating parameters and status information on the device side, including device name, device SN, device interface connection status, operating status, IP address, and firmware version;
- * The device can intelligently identify the card interface combination, monitor the status of the card and interface, and report the loss of the input source signal to an early warning;
- * Support dual control card backup function. When the main control card fails during work, it will automatically and seamlessly switch to the backup control card. During the switching process, there will be no black screen and no audio lag, achieving high stability of the equipment;
- * Support dual power supply backup function. Dual power supply access can be switched at will. If any power supply fails, it can be supported by the other power supply to achieve high reliability of the equipment.

Specification

Power button	1*Power button
Input card slot	16
Output card slot	10
Preview card slot	1
Echo card slot	1
Control card slot	2
Touchscreen	1
Technology Architecture	Centralized, private protocol
Power supply	AC 220V
Rated power	1095W
Size (L*W*H)	482.6mm*315mm*354.8mm
Weight	20kg
Environment temperature	0°C—+45°C
Environment humidity	10%-80%