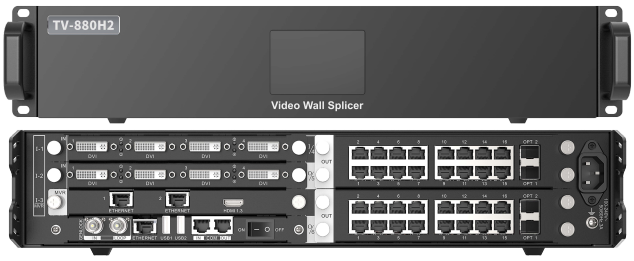
Video Splicing Server

TV-880H2



Description

It is a new generation of video splicing server developed for high-quality fine pitch displays. It can be used not only as a video processing and video control two-in-one video splicing processor, but also as a pure video splicing processor. Adopting the modular configuration and plug-in structure, characterized by hot-swap input and output cards and stable performance, it can flexibly configure input and output cards according to user needs. Based on the powerful hardware FPGA system architecture and modular design concept, it not only features the stable and efficient genetic genes of pure hardware architecture, but also supports various interface modules for flexible and personalized combination, realizing easy maintenance and lower equipment failure rate. Therefore, it can be widely used in various fields including energy and electricity, prisons, military command, water conservancy and hydrology, meteorology and earthquakes, enterprise management, metallurgy and steel, banking and finance, national defense, public transportation, exhibitions, production scheduling, radio and television, education and scientific research, stage rental, etc.

Feature

*Pure hardware plug-in architecture design, 19-inch standard rack mounted installation, metal cabinet; using a 9U metal cabinet, the protection class of the prototype housing meets the requirements of IP20 in GB/T4208-2017;
*Built-in LCD display not less than 3.5 inches, it can display the operating parameters and status of the equipment, including but not limited to: interface status, operating status, etc.
*The device cabinet supports no less than 16 inputs and 8 outputs; the interface supports single-link and dual-link input mode switching;
*A single device supports a maximum of 4 input cards and 2 output cards at the same time, and supports simultaneous output of video interface output card and two-in-one network port output card;
*A single device can connect up to 2 two-in-one network port output cards at the same time, and the output can be directly connected to the LED display for display, no need for other equipment;
*With excellent maintainability design, it supports hot-swap function of input card, output card, and preview 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;
*The system should have good compatibility, and the splicer configuration software should at least use Windows, Kylin, IOS, Android, Linux and other operating systems for accessing devices and interactive operations;
*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 1040Gbps, 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;
*In order to improve the device troubleshooting efficiency, it can monitor device temperature, voltage, fan online status, intelligent identification card interface combination, board card and interface status monitoring, signal loss warning, etc.
*Support screen background image display; support adding text or picture station logo, text and picture background, position adjustable; support adding OSD text or picture, attribute adjustable;
*With the built-in B/S splicer configuration software, the firmware upgrade can be completed 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;

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*A single output card has no less than 16 layers, which can realize flexible windowing, superimposition, roaming, and infinite zooming of a single card; it supports screen capture, layer setting, layer flipping, and layer freezing;
*Support simultaneous preview of all input sources; the output can echo all outputs (including IP stream echo);
*With hierarchical management of user permissions, super admin can assign user permissions to achieve simultaneous online editing, control, and screen operations for multiple users, and can preview other user operations;
*With real-time and pre-editing modes. Real-time mode can realize real-time on-screen display of screen control. The pre-editing mode supports pre-editing the display content on the software side, and then displays it on the screen.
*The maximum output video resolution of a single 16-port two-in-one output card is 10240x1016 or 1016x10240. The loading width and height can be set to a maximum value of 10240. When the output frame frequency is 60Hz, the maximum 10.4 million pixel loading can be achieved;
*The maximum output video resolution of a single 20-network port two-in-one output card is 10752x1220 or 1220x10752. The loading width and height can be set to a maximum value of 10752. When the output frame frequency is 60Hz, the maximum 13 million pixel loading can be achieved;
*The single output interface has 1 background image and 1 OSD superimposed display. The background image can be displayed at a maximum of 8Kx8K, and the OSD can be displayed at 19200x3240; the transparency and position can be adjusted; parameters such as font spacing, color, position, transparency, and motion effects can be set, with flexible scaling;
*With hot-swap input card, output card, and preview card function, no need to shut down the device for restart and setup, after replacing the card, the previous layer data can be restored, and the picture can be played normally;
*The image quality adjustment of the output interface includes brightness, contrast, saturation, hue, color temperature, Gamma adjustment; 22 kinds of test picture images can be added, with spacing, speed, brightness adjustment;
*With self-check function, including: running status, CPU, EMMC, cross-point communication, memory, voltage, temperature and other state detection;
*Support adding a station logo (text or picture) to the input image screen, and the background and position of the station logo text and picture can be adjusted;
*With irregular screen construction, single-card and single-interface screen construction, the maximum 2K DVI and HDMI interface output resolution is 2560x972 or 884x2560, the maximum resolution of single DVI and HDMI output card is 10240x972 or 884x10240;
*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;
*A single splicing screen supports one background image overlay display, the background image does not occupy layer resources, has renaming settings, and can be zoomed in full screen; single background image display supports up to 15360x4096;
*There are 4 adjustment modes for screen quality adjustment: standard mode, document mode, meeting mode, and video mode. Eye protection mode switch settings are available in each mode. When the eye protection mode is turned off, you can customize the adjustment of brightness, contrast, saturation, hue, color temperature, and Gamma;
*Support setting 2000 user scenes, realize the scene switching of pictures or videos, with fade in and out, switching without blackout, scene calling response speed < 60m;
*Equipped with a two-in-one network port output card; used with 3D glasses and an external transmitter (built-in 3D film source), it can display 3D effects on an external ordinary LED display;
*Enable HDR and play video with one button through the menu;
*Used with a visual management platform, it can be controlled wirelessly based on PAD mobile devices, with layer editing, signal replacement, scene saving/recalling, LED display brightness adjustment, screen control and other functions.

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Specification

Model	TV-880H2
Cabinet dimensions	2U
Max number of input cards	4
Max number of input channels	16
Max number of video output cards	2
Max number of output channels	8
Max loading pixels of LED display	26 million
Max number of layers	32
GENLOCK	Genlock signal interface, with Bi-Level and Tri-Level
ETHERNET	Gigabit Ethernet port, host computer communication interface, connected with routers, switches or PCs for web control and software screen configuration
USB×2	USB 2.0 interface, U disk upgrade of device program, U disk import/export of all configuration parameters of the device
Rs232	Protocol serial port, docking with the central control system for control
Voltage	100~240V, 50/60Hz, 4.0A
Standard power supply	1 (without power redundancy backup)
Power consumption	210W
Working environment	0℃~+45℃, 0%RH~80%RH, no condensation
Storage environment	-10℃~+60℃, 0%RH~95%RH, no condensation
Dimension	482.6×529.8×88.1mm
Weight	11kg (net weight)