



Functional description:

- Utilizes a Linux-based distributed architecture design with a decentralized framework, enabling scalability to any number of nodes without requiring servers or master nodes. Each node operates independently without mutual interference, reducing system operational risks and lowering maintenance costs.
- Fanless silent design, supporting standalone installation in a 1U rack or side-by-side installation of two units simultaneously;
- Each node unit employs H.265 data stream encoding/decoding chips with backward compatibility, ensuring smooth system operation;
- Video Interface: Supports RTSP, RTMP protocols, proprietary protocols, 2 HDMI ports, embedded audio synchronous or asynchronous input, supports port backup; supports 1 encoding channel, 1 HDMI loop-out;
- Audio Interface: Supports AAC, G.711, G.726, and proprietary protocols; supports CBR/VBR; supports adjustable frame rates from 1 to 60 fps; audio input interface with embedded synchronous or asynchronous audio input; supports volume adjustment; supports synchronous, asynchronous, and mixed audio modes; supports multi-channel audio mixing playback with lossless audio quality.
- Supports modular management of audio visualization, enabling control of output volume levels for each node via sliders. Displays audio as energy bars and uses animated effects to show the audio status of nodes.
- Features one factory reset button, four USB 2.0 ports, one Gigabit Ethernet port, one Gigabit fiber port, 2 HDMI video input/output ports, 2 3.5mm audio input/output ports, 2 3-pin Phoenix audio connectors, 1 relay port, 1 RS232 port, 1 RS485 port, 3 IR/IO ports, and 2 input/output DIP switches.
- Supports HDMI, DVI, VGA, and other signal formats with maximum resolution up to 3840×2160@30Hz, backward compatible; supports LED, DID, LCD, and DLP video wall configurations with roaming, drag-and-drop, custom partitioning, and multi-layer display overlay. Each screen supports simultaneous display and overlay of up to 16 video channels; standard resolution output enables seamless video wall integration.
- Supports unicast and multicast, supports fixed bitrate transmission with an adjustable range of 128 kbps to 40 Mbps;
- Supports integrated input/output design, allowing nodes to be defined as inputs or outputs via two DIP switches. Additionally supports remotely programming different firmware via software to define nodes as inputs or outputs.
- Supports H.264 and H.265 IPC encoding cameras. IPC network camera signals are directly output and displayed on the large screen without requiring a third-party transcoding server. Supports PTZ functions including zoom in, zoom out, pan left/right, and rotation.
- System scenes offer one-click restore functionality; node devices feature programmable storage capabilities, enabling automatic restoration of the system to its pre-power-off state after restarting following a power outage. This includes settings such as volume levels, large screen status, signal positioning, and lighting conditions.
- Supports classification, grouping, and sorting management of signal sources. All signal sources can be managed through three-level grouping displayed in a tree structure, and can be sorted by name, IP address, or custom criteria. The client software supports real-time preview display of no fewer than 50 dynamic video streams.
- When opening windows on the large screen, it supports both regular window layouts such as 2x2 and 3x3, as well as irregular layouts achieved by manually dragging to freely divide the window arrangement.
- Supports one-click screen mirroring functionality, enabling pre-arranged scenes or displays to be instantly mirrored to other screens, showing identical content.
- Supports mirror mode, allowing you to set up mirrored displays. When performing operations on the primary screen, other mirrored displays will follow suit.
- Supports tablet and seat interconnection, enabling any signal source to be pushed to the seat via the tablet for coordinated operation.
- Supports button linkage functionality, enabling a single button to control multiple buttons for box control and network control;
- Audio-only wall display functionality, enabling audio to be displayed on the large screen independently via client software;
- Signal Suppression Function: This feature enables the client software to disable buttons, preventing signals from appearing on the screen when clicked to avoid accidental operations.
- Annotation feature enables real-time markup on the display via the software interface. Arrows, symbols, ellipses, rectangles, text, and other elements can be instantly synchronized to the display with a single click.
- Supports remote KVM control, enabling remote management of server room computers and power cycling from the operator console. Supports hibernation and wake-up functions.
- Supports OSD overlay display of device name, time, and station logo; supports dual station logos with customizable text for each logo.
- Supports environmental control modules, enabling direct control of lighting, curtains, and other environmental elements via serial ports such as RS232 and RS485 without requiring central control devices.
- Supports OSD subtitle overlay and high-definition background images;
- Supports automatic recognition of EDID extended display identifiers and HDCP;
- Supports dual power supply modes: POE and external power supply.
- Supports over-the-air firmware upgrades for encoding devices;
- Supports optical network hot backup;
- Supports node LCD status display with multi-column layouts, featuring static IP address display and dynamic display of node name, signal status, temperature, and network status.
- Supports node highlighting functionality: When a node is selected in the software, its LCD screen will continuously flash, facilitating node identification.

Technical specifications:

Technical Specifications	VM-TS22
Video Interface	1 HDMI Input, 1 HDMI Loop-out
Video Resolution	Maximum supported signal resolution: 3840*2160@30Hz, downward compatible
Video Bitrate	Adjustable range 128kbps~40Mbps
Video Format	Utilizes H.265 data stream codec chip with downward compatibility, supports RTSP, RTMP protocols, private protocol
Audio Interface	2 x 3.5mm Audio Input/Output ports, 2 x 3-pin Phoenix Terminal Audio ports
Audio Format	Supports AAC, G.711, G.726, private protocol. Supports CBR/VBR, adjustable frame rate 1-60fps. Audio input interface, embedded audio synchronous or asynchronous input, supports volume adjustment, supports synchronous, asynchronous, and mixing modes. Supports multi-channel audio mixing playback without loss of audio quality.
USB Interface	4 x USB 2.0 ports
Network Interface	1 Gigabit Ethernet port, 1 Gigabit optical port
Control Interface	1 Relay interface, 1 RS232 interface, 1 RS485 interface, 3 IR/IO ports
Power Supply	Supports dual power supply modes: PoE and external power
Power Consumption	≤10W