

ET1S-G

Media Server



Specifications

Change History

Release Version	Release Date	Description
V1.2.0	2025-05-06	Detailed the hardware specifications.
V1.1.1	2024-12-12	Updated the certifications.
V1.1.0	2024-11-08	Optimized the mosaic function of HDMI 1.3 connector.
V1.0.0	2024-07-26	First release

Introduction

The ET1S-G is a media server designed for small-scale LED or LCD fixed installation applications. It not only boasts high-quality, ultra-high-resolution pixel-to-pixel display capabilities but also offers diversified mosaic creativity and outstanding media arrangements for professional stage performances. Built-in with intuitive and user-friendly multimedia playback and control software, the ET1S-G simplifies stage display management and provides best-in-class human-machine interaction. It is ideally suited for exhibitions, showrooms, small-scale conference rooms, and a variety of creative display applications.

Certifications

CE, FCC, IC, RCM, CB, KC

If the product does not have the relevant certifications required by the countries or regions where it is to be sold, please contact NovaStar to confirm or address the problem.

Otherwise, the customer shall be responsible for the legal risks caused or NovaStar has the right to claim compensation.

Features

- A single device supports 1x 4K×2K@60Hz output capacity, ultra-high-resolution video decoding and pixel-to-pixel display
- Multiple connector outputs
 - 1x DP 1.2 output

- 4x HDMI 1.3 together copy DP 1.2 output content
- 4x HDMI 1.3 mosaic output, with available mosaic layouts of 1×2, 1×3, 1×4, 2×1, 2×2, 3×1, and 4×1
- 1x HDMI 2.0 copies DP 1.2 output content
- Firmware update supported
- A single output can be split into up to 1024 partitions, allowing for quick mapping settings and ultra-wide screen configuration
- Playback of up to 4 layers and 1 audio simultaneously
- Visualized program arrangement and management
- Media library management, including videos, images, PowerPoint slides and audio files
- Media file sorting
- Media file batch import
- NDI sources, website sources, streaming media sources and text sources supported
- Media collection configurations
- Up to 1080p PowerPoint files supported
- Support using a laser pointer for moving between PowerPoint slides
- Playback progress management
- Program auto jump
- Adjustable media width, height and priority
- Main KV and main KV jumping settings
- Main media based playback progress management
- Crossfade on program switching
- Layer mask and cropping supported
- Hardware decoding supported
- One-click FTB
- Auto startup of built-in software on system power on, auto program playback on software startup
- Controlled via NovaStar's Visual Intelligent Control Platform (VICP), enabling a highly efficient and user-friendly control experience
- Professional cooling design, validated by 720-hour stress testing, ensures stable and reliable operation

Appearance

Note

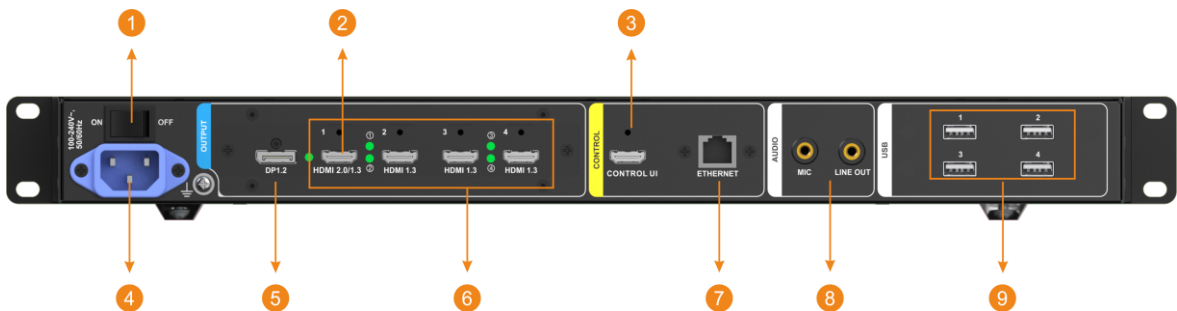
All product pictures shown in this document are for illustration purpose only. Actual product may vary.

Front Panel



No.	Area	Function
1	Power button	Turn on or turn off the device.
2	USB	2x USB 3.0 <ul style="list-style-type: none"> • Connect to the mouse and keyboard. • Insert a USB drive for importing media files.

Rear Panel



No.	Area	Qty.	Description
1	Power switch	1	<ul style="list-style-type: none"> • ON: Power on the device. • Off: Power off the device.
2	HDMI 2.0	1	HDMI 2.0/1.3 connector can be switched via software. When set to HDMI 2.0, HDMI 1.3 connectors 2, 3, and 4 are unavailable. <ul style="list-style-type: none"> • Max output resolution: 4K×2K@60Hz • Supported frame rates:

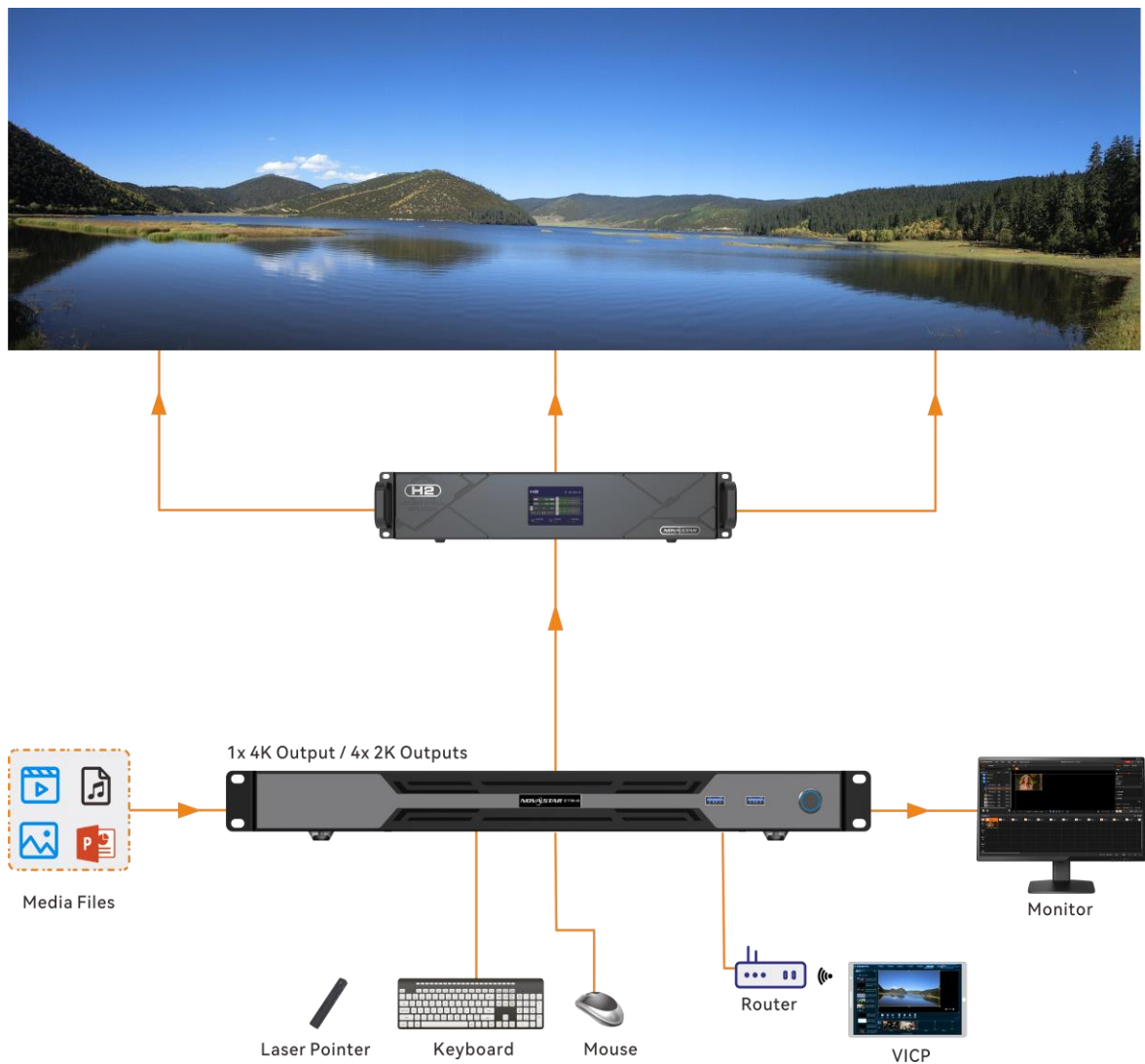
			<p>23.98/24/25/29.97/30/47.95/48/50/56/59.94/60</p> <ul style="list-style-type: none"> • Custom resolutions supported <ul style="list-style-type: none"> – Max width: 7680 pixels – Max height: 4095 pixels • 8-bit output • Supported color space/sampling rate: RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2 • Supported color range: Full and Limited • Audio output: Max 24 bit depth for dual-channel • Sampling rate: 24 KHz, 44 KHz, 48 KHz (default) • HDCP supported • Status LEDs: <ul style="list-style-type: none"> – Green: Normal connection – Off: No connection or abnormal connection • EDID lock supported
3	CONTROL UI	1	<p>Connect to a monitor for displaying the software interface.</p> <ul style="list-style-type: none"> • Max output resolution: 2K×1K@60Hz • EDID lock supported
4	Power connector	1	<p>Connect to an external power outlet for powering the device.</p>
5	DP 1.2	1	<ul style="list-style-type: none"> • Max output resolution: 4K×2K@60Hz • Supported frame rates: 23.98/24/25/29.97/30/47.95/48/50/56/59.94/60 • Custom resolutions supported <ul style="list-style-type: none"> – Max width: 7680 pixels – Max height: 4095 pixels • 8-bit output • Supported color space/sampling rate: RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2 • Supported color range: Full and Limited • Audio output: Max 24 bit depth for dual-channel • Adaptive sampling rates: 24 KHz, 44 KHz, 48 KHz (default) • HDCP supported • Status LEDs: <ul style="list-style-type: none"> – Green: Normal connection – Off: No connection or abnormal connection • EDID lock supported

			<ul style="list-style-type: none"> • Audio and video synchronization
6	HDMI 1.3	4	<p>4x HDMI 1.3 together copy the DP 1.2 output content.</p> <ul style="list-style-type: none"> • Max output resolution: 2K×1K@60Hz • Supported frame rates: 23.98/24/25/29.97/30/47.95/48/50/56/59.94/60 • Four HDMI 1.3 mosaic output, with a layout options of 1×2, 1×3, 1×4, 2×1, 2×2, 3×1 and 4×1 • EDID settings supported The EDID change is applied to all HDMI 1.3 connectors, while the change made to an individual connector is not supported. <ul style="list-style-type: none"> – Width: 640 to 2048 pixels – Height: 480 to 1280 pixels • 8-bit output • Supported color space/sampling rate: RGB 4:4:4 • Supported RGB color range: Full and Limited • HDCP supported • Status LEDs: <ul style="list-style-type: none"> – Green: Normal connection – Off: No connection or abnormal connection • EDID lock supported • Audio output NOT supported
7	ETHERNET	1	<p>1x RJ45</p> <p>Realtek 1Gb Ethernet port for networking</p>
8	Audio	2	<ul style="list-style-type: none"> • 1x MIC: 3.5 mm audio input connector • 1x Line OUT: 3.5 mm audio output connector
9	USB	4	<p>4x Type-A USB 2.0</p> <p>Connect to the mouse, keyboard or USB drive.</p>

Hardware/Software

Power supply	120W open-frame power supply
CPU	<p>Intel® Core™ i3-1215U Processor</p> <ul style="list-style-type: none"> • Physical cores: 2x performance cores (P-cores) + 4x efficiency cores (E-cores), totaling 6 cores and 8 threads • Base frequency: 1.2 GHz, with a maximum turbo frequency of 4.4 GHz • Cache size: 10 MB L3 cache
Motherboard	<p>High-performance motherboard</p> <ul style="list-style-type: none"> • Built-in PCIe slots: 0 • Maximum memory capacity with full slots: 64 GB
Memory	<ul style="list-style-type: none"> • Configuration capacity: 16 GB high-speed memory • Type: DDR4 • Number of modules: 2 • Read/Write speed: 2666 MT/s
Storage	<ul style="list-style-type: none"> • SSD quantity: 1 • Storage capacity: 256 GB
Graphics	<ul style="list-style-type: none"> • Type: Integrated graphics • Multi-screen support: Up to 4 displays
Keyboard & Mouse	Keyboard and mouse suit
OS	Windows 10 Enterprise LTSC
Built-in software	Kompass FX1

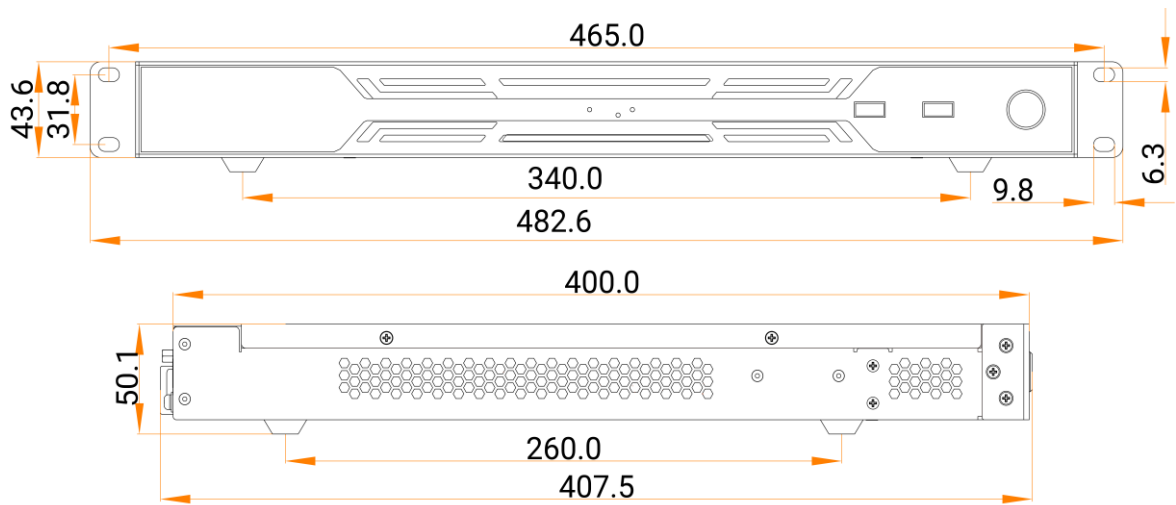
Applications



Note

- This product can only be placed horizontally. Do not mount vertically or upside-down.
- The product can be mounted in a standard 19-inch rack capable of withstanding at least four times the total weight of the mounted equipment. Four M5 screws should be used to fix the product.

Dimensions



Tolerance: ± 0.3 Unit: mm

Specifications

Electrical Characteristics	Power connector	100-240V~, 60/50Hz
	Max power consumption	80 W
Operating Environment	Temperature	0°C to +45°C
	Humidity	0% RH to 80% RH, non-condensing
Storage Environment	Temperature	-10°C to +60°C
	Humidity	0% RH to 95% RH, non-condensing
Physical Specifications	Dimensions	482.6 mm × 407.5 mm × 50.1 mm
	Net weight	5.2 kg
Packing Information	Accessories	1x Power cable 2x HDMI cables 1x DP 1.2 cable 1x Keyboard and mouse suit 1x Cat5e Ethernet cable 1x Label (Windows product key included) 1x Quick Start Guide 1x Safety Manual 1x Certificate of Approval
	Packing box	565 mm × 510 mm × 175 mm

Media File Types and Formats

The media server supports the decoding of various common video coding formats, such as H.264, H.265, MPGE-4/2 and WMV.

Type	Format
Video	mp4, avi, mkv, flv, mov, wmv, mpeg, mpg, m4v
Image	jpg, jpeg, bmp, png, gif, ico
Audio	mp3, aac, flac, amr, ape, wav, wma
Office	ppt (1080p)

Note

Recommended video coding formats:

Resolutions \leq 4K: H.264 (AVC) recommended

For a better image quality experience, the following video bitrates are recommended.

Recommended video bitrates for SDR uploads:

Type	Video Bitrate Standard Frame Rate (24Hz, 25Hz, 30Hz)	Video Bitrate High Frame Rate (48Hz, 50Hz, 60Hz)
2160 (4K)	35 to 45 Mbps	53 to 68 Mbps
1440 (2K)	16 Mbps	24 Mbps
1080p	8 Mbps	12 Mbps

Notes and Cautions

Notes For Battery

- The battery is not intended to be replaced.
- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery can result in an explosion.
- Leaving a battery in an extremely high temperature surrounding environment can result in an explosion or the leakage of flammable liquid or gas.
- A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Others

This is Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

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