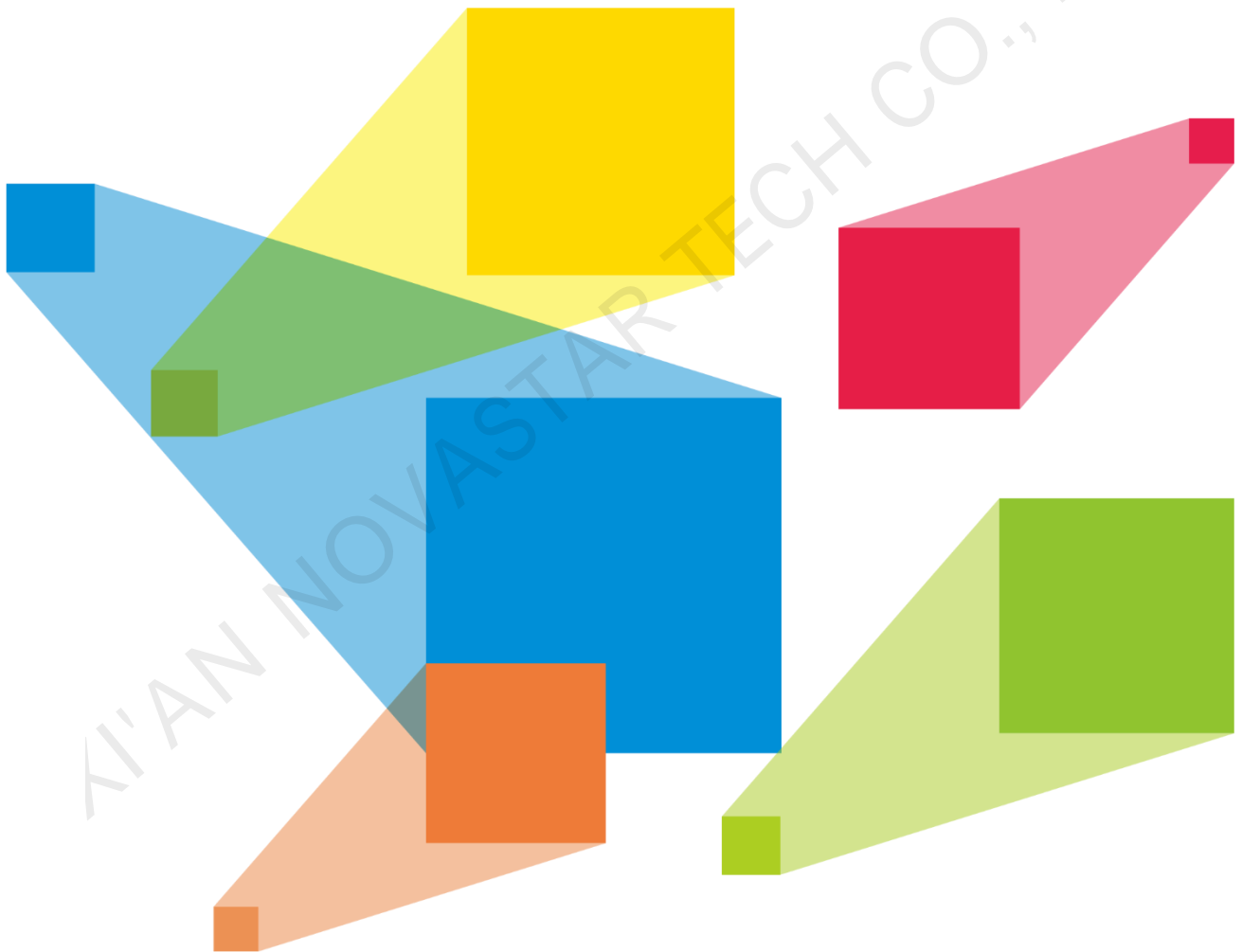# ET4000

Media Server

V1.0.4

Built-in software: Kompass FX3 V2.0

Specifications

Change History

Release Version	Release Date	Description
V1.0.4	2021-06-16	Updated the power consumption.
V1.0.3	2021-05-28	Updated the media file format descriptions.
V1.0.2	2021-05-14	Updated the product accessories.
V1.0.1	2021-05-12	• Updated the appearance and descriptions of the power module on the rear panel. • Updated the descriptions of the graphics card.
V1.0.0	2021-04-22	First release

Introduction

The ET4000 is a brand new media server developed by NovaStar, which is specifically designed for multimedia exhibition halls, banquet halls, stage performances and other creative fixed installation scenarios. The ET4000 provides an excellent pixel-to-pixel display with ultra-high definition, diversified mosaic creativity and outstanding media arrangements for professional stage performances. Built-in with intuitive and user-friendly media playback and control software, the ET4000 enables simplified stage display management and best-in-class human-machine interaction.

Features

- A single unit supports up to 8K×4K output capacity, ultra-high-resolution video decoding and pixel-to-pixel display
- Free partitioning, reorganizing and rotating of multiple outputs for irregular screen configuration, unleashing your creative mosaic ideas
- A single output can be split into up to 16 partitions, allowing for quick mapping settings and ultra-wide screen configuration
- Playback of up to 8 layers and 1 audio simultaneously
- Visualized program arrangement and management
- Live and pre-edit modes
  - The program editing and playback are in sync in live mode
  - Edit the programs first before displaying them on the screen in pre-edit mode
- Media library management, including videos, pictures, PowerPoint files and audios
- Media file sorting

- Media file batch import
- Up to 1080p PowerPoint files supported
- Using a laser pointer for moving between slides in PowerPoint
- Playback progress management
- Shortcut key for program jumping and auto jumping settings
- Configurable layer size and priority
- Main KV jumping settings
- Main media based playback progress management
- Crossfade on program switching
- Layer mask, cropping, keying, blurring and opacity adjustment
- Hardware decoding supported
- One-click FTB
- Auto startup of built-in software on system power on, auto program playback on software startup
- Control software VCCP (Visual Centralized Control Platform), enabling a highly efficient and user-friendly control experience
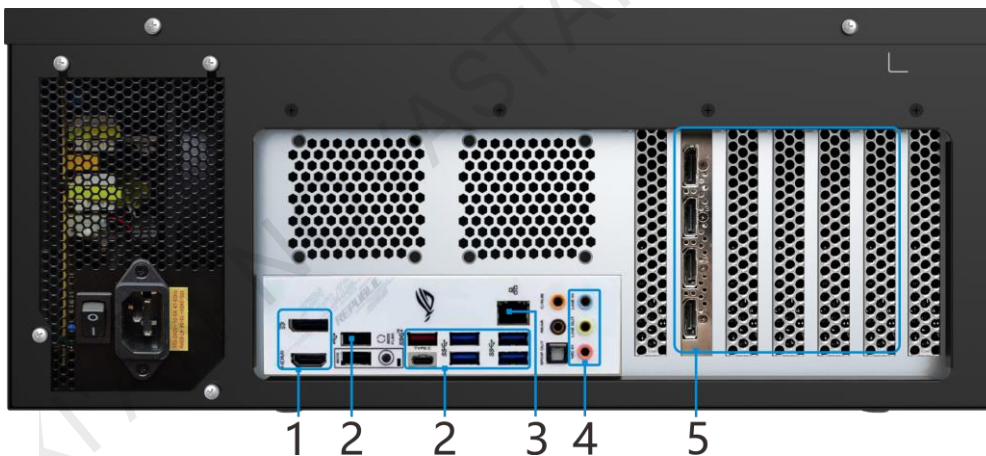
Appearance

Front Panel

No.	Area	Description
1	Power button	Power on or power off the device.
2	USB ports	2x USB3.0 • Connect to a mouse and keyboard. • Insert a USB drive for importing media files.

Rear Panel

No.	Area	Qty.	Description
1	HDMI 2.0 DP 1.2	1	Integrated graphics card output via a DP 1.2 or HDMI 2.0 connector • Connect to a monitor for displaying the software interface. • Max. output resolution: 3840×2160@60Hz
2	USB ports	7	• 2x Type-A USB2.0 • 4x Type-A USB3.0 • 1x Type-C USB • Connect to a mouse and keyboard, or insert a USB drive.

3	Ethernet port	1	1x RJ45 connector for Ethernet networking
4	Audio connectors	3	• 1x MIC IN: 3.5 mm microphone input connector • 1x Line IN: 3.5 mm external audio input connector • 1x Line OUT: 3.5 mm audio output connector
5	Graphics card and sync card	-	Graphics card and sync card slots Please go to Optional Items to select the desired graphics card. 📄 **Note** Graphics card is a must and the ET4000 supports at most one graphics card.

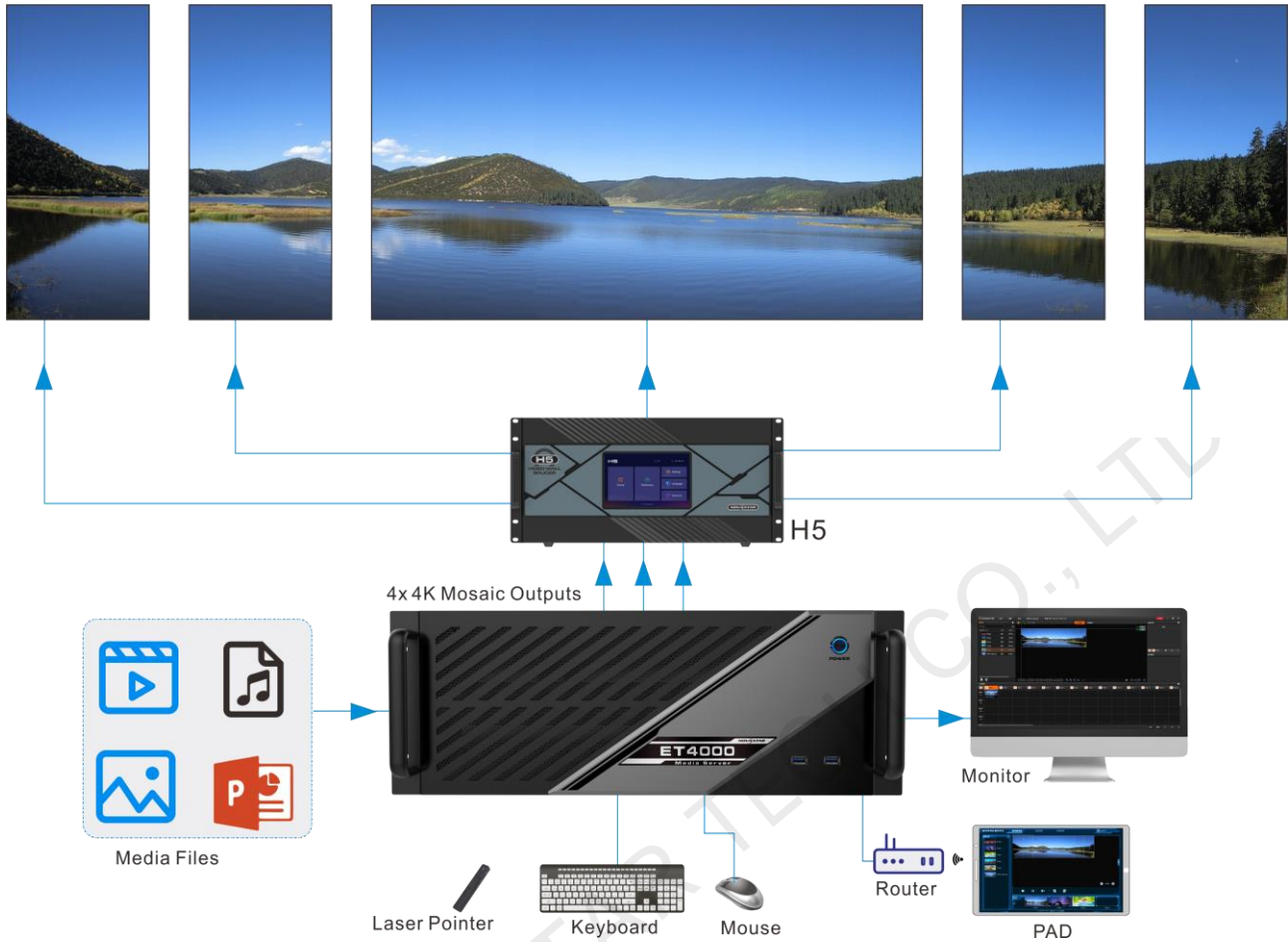| Hardware Performance	
Power supply	750 W (GreatWall)
CPU	10th Generation Intel® Core™ Processor (I7_10700K)
Memory	4x 8GB DDR4 (DDR4 2666)
Mainboard	High-performance ASUS Server Motherboard (Z490A)
Storage	• System disk: Samsung M.2 SSD 250GB (Samsung SSD 980) • Storage disk: Samsung M.2 SSD 500GB (Samsung SSD 980)
Fan	Quiet fans (PCCOOLER), dedicated to high-frequency processors
Keyboard & Mouse	Keyboard and mouse suit (Logitech)

Optional Items

The following table lists the optional items that you need to purchase from NovaStar separately.

Type		Description	Appearance
Graphics card and sync card	Graphics card MPG2200	4x DP 1.2 • Single connector resolution: Up to 4096×2160@60Hz • Four connector mosaic output: Up to 7680×4320@60Hz • Single connector width: Up to 8192 pixels • Single connector height: Up to 8192 pixels • Playback of 1 layer of 8K×4K@30Hz SDR video (hardware-decoding) • Memory: 5 GB • Type: GDDR 5X • Bit width:160 bit 📄 **Note** The MPG2200 graphics card cannot work with the sync card.	

Type		Description	Appearance
	Graphics card HPG5000	4x DP 1.2, 1x Mini DP • Single connector resolution: Up to 4096×2160@60Hz • Four connector mosaic output: Up to 7680×4320@60Hz • Single connector width: Up to 8192 pixels • Single connector height: Up to 8192 pixels • Playback of 1 layer of 8K×4K@60Hz SDR video (hardware-decoding) • Memory: 16 GB • Type: GDDR 6 • Bit width: 256 bit	 • Connectors 1, 2, 3 and 5 are for output. • Connector 4 is reserved.

	Sync card	The sync card must work with the HPG5000 graphics card currently.
		• 2x RJ45
		  Accept a frame lock signal and output the signal.
		• 1x BNC
		  Accept an external sync signal.
		• LED lights
		  Indicate the sync signal connection status.	

OS		Window 10 Pro	-
Playback and control software		Kompass FX3 software and dongle	-
Control App		Visual Centralized Control Platform (VCCP)	-

Applications

Notes

- 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.

Specifications

Electrical Specifications	Power connector	100–240V~10-5A 47-63Hz
	Power consumption	500 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	483 mm ✕ 177 mm ✕ 520 mm
	Net weight	25.9 kg
Packing Information	Packing box	690 mm ✕ 570 mm ✕ 300 mm
	Accessories	1x Power cable 4x DP cables 1x DP to HDMI adapter 1x Keyboard and mouse suit 1x Operating system 1x Quick Start Guide 1x Safety Manual 1x Certificate of Approval
Certifications	TBD **📄 Note** If the product does not have the relevant certifications required by the countries or regions where it is to be sold, please apply for the certifications yourself or contact NovaStar to apply for them.	

Media File Types and Formats

The ET4000 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
Picture	jpg, jpeg, bcmp, png, gif, ico
Audio	mp3, aac, flac, amr, ape, wav, wma
Office files	PowerPoint files (1080p)

Note

Recommended video coding formats:

- 4K < resolutions ≤ 8K: H.265 (HEVC) or VP9 recommended
- Resolutons ≤ 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)
4320 (8K)	75 to 90 Mbps	110 to 135 Mbps
2160p (4K)	35 to 45 Mbps	53 to 68 Mbps
1440p (2K)	16 Mbps	24 Mbps
1080p	8 Mbps	12 Mbps

Trademark

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Statement

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