

Kommander T3

Multimedia Server

(Multi-channel version)

Version: v2.0

Release date: 2023/05



Specifications



Hunan Bowan Technology Co. LTD

Innovative technology only for a better vision

Web: www.kommander.com.cn/en

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1. Overview

Kommander-T3 is a multimedia software with unlimited output and layers produced by Bowan Technology. It is mainly used for splicing and synchronous control of screens and special-shaped screen. With innovative technologies such as 8K hardware decoding, pre-compiled, virtual screen management and so on. T3 can easily realize the application of medium and large-scale stage performances and conference activities.



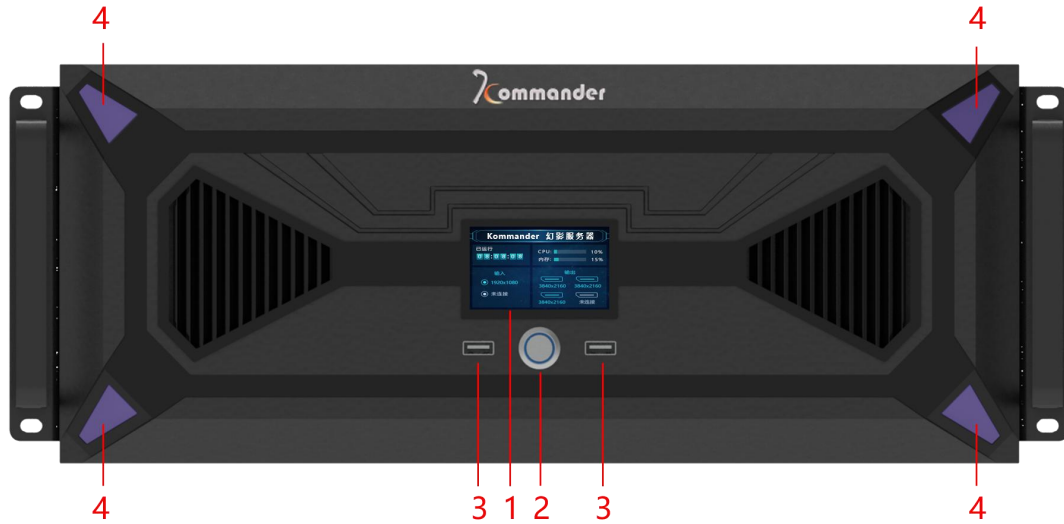
2. Features

- Free combination of 4K DP output and 2K DVI/HMDI, up to 16 channels of 2K, and support 8K pixel-to-pixel smoothly display.
- 1*DVI monitor output.
- Hardware decoding for excellent rendering capabilities and performance.
- Unlimited layers and outputs.
- Projector calibration and blending, support save the blending template.
- Subtitles, teleprompter, countdown and other practical tools.
- Multi-connection, realize the cascade of multiple devices with large screens.
- Support MIDI, DMX, OSC, Stream Deck, Companion.
- Input and output of timecode. Integrated control of sound and light.
- Convert various files into playable formats.
- Editing the plan without affecting the real-time output.
- Split physical layout and reorganize according to real layout.
- Various special effects.
- The output of the master and backup terminals is synchronized in real time.

- Automatically backup project files during the editing.
- Support NDI, Spout virtual output (Supports NDI 5, Spout1).
- Supports PowerPoint and PDF directly, and its animation.
- Customize layout of GUI.
- Pad control with Kommander central control system. (Both Android and IOS).
- 2 programming methods: timeline and plan, provides convenient functions such as plan jump, time cut, and shortcut.
- Supports UDP protocol and sending instructions to other devices.
- User-friendly panel design, monitoring operating status, including CPU, RAM and output etc.

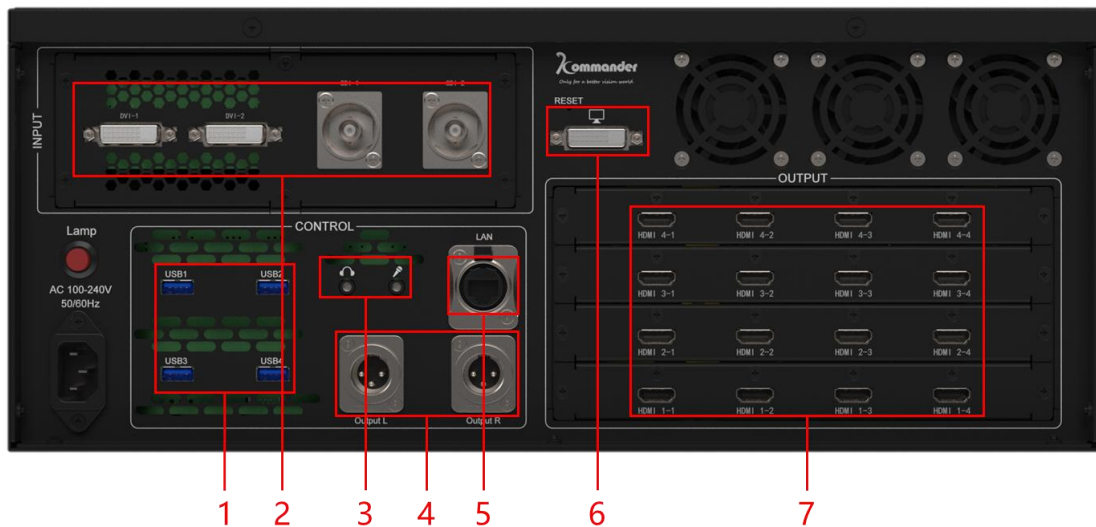
3. Specifications

Front Panel



No.	Item	Description
1	Full-color LCD performance monitor screen	Display information of media server
2	Power	Power on and off
3	USB 3.0	Connect mouse, keyboard, U-disk, etc.
4	Front panel light	Appearance light

Back Panel



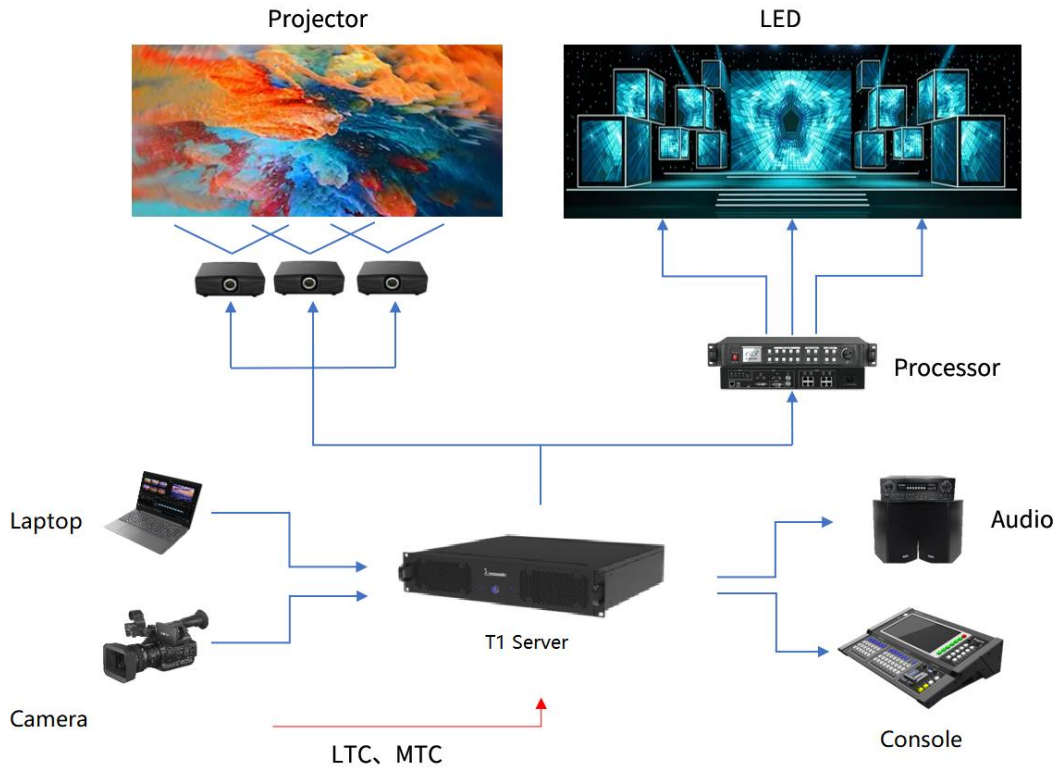
Interface Information			
No.	Item	Qty	Description
1	USB 3.0	4	USB 3.0×4
2	Capture Card	2	DVI Max. input 1920*1080@60Hz SDI Max. output 1920*1080@60Hz *A single capture card only supports one DVI or SDI input and supports interface customization.
3	3.5mmAudio	2	Headphone output Microphone input, LTC timecode input
4	Audio	2	XLR output
5	RJ-45	1	1000M
6	DVI-Monitor	1	Max. support 1920*1080@60Hz
7	DVI/HDMI	16	The 2K output supports optional DVI or HDMI, and supports up to 1920 ×1200@60Hz The 4 x 2K output can be replaced with 1 x 4K DP, which can be freely combined and optional

*Interface differences caused by hardware upgrades will not be notified separately.

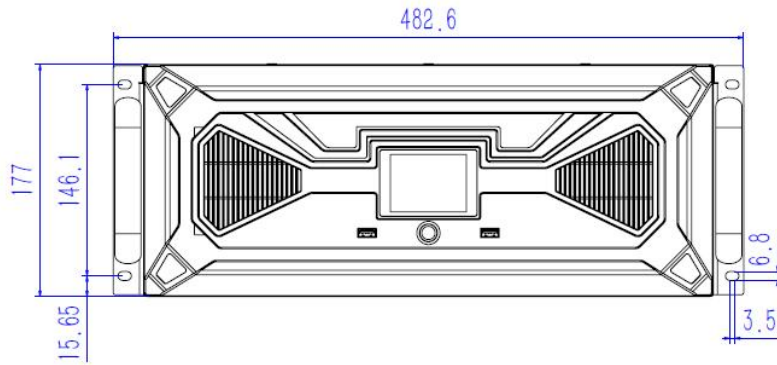
Hardware Information	
CPU	Intel Core
Mother board	ASUS
RAM	DDR4 32G High-speed
SSD	1T M.2 High-speed SSD (expandable)
Graphics Card	Quadro 8G
Power Supply	Standard
Audio	XLR
Flight Case	Kommander custom flight case

Machine Description	
Power supply	100-240V AC~50/60Hz
Operating temperature	0-45°C
Size	572×483×177mm (L*W*H)
Net Weight	15KG
Consumption	750W

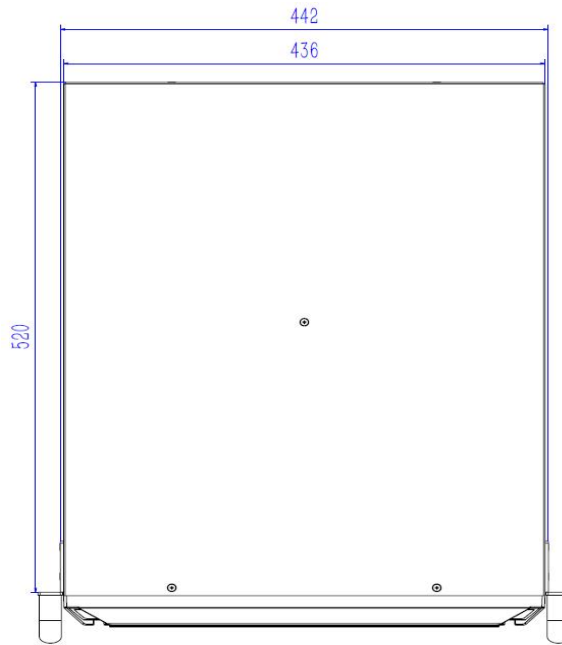
4. System Topology



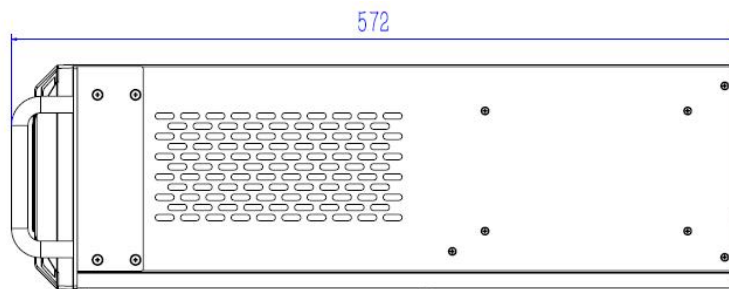
5. Dimensional View



Front View



Top View



Side View

6.Encoding Methods for Resolution

Encoding Methods for Resolution	
4k	Format: H264, H265; Resolution upper limit: maximum width 4096, and maximum height 4096
8k	Format: H265, Vp9; Resolution upper limit: maximum width 8192 and maximum height 8192

File Formats	
Encoding Format	AVC, HEVC, VP8, VP9, mpeg-1,mpeg-2
Package Format	mp4、 mov
Color Space	yuv420p *Hardware decoding does not apply to yuv444、 yuv422、 rgb
Color Depth	8bit

7. Media Formats

Media	Format
Video	MP4, AVI, MKV, WMV, FLV, MOV, ASF, MPEG, MPG, TP, TS, MTS, M2TS, VOB, RMVB, RM, RAM, DIVX, EVO, OGM, M1V, M4V, MPE, 3GP, WEBM, KRAWF, KTESTF
Picture	JPG, JPEG, GIF, BMP, PNG, TIF, TIFF, ICO
Audio	MP3, MP2, MPA, AAC, OGG, WAV, WMA, APE, AC3, FLAC, M1A, M2A, M4A, RA, DTS, DTSHD

8. Reference for Material Production

Reference for video production

Resolution	Frame Rate	Type	Coding Methods	Pixel Format	Graphics Card	Remark
		JPG		YUV420/YUV444		The width and height of picture are supposed to be within 16K, otherwise it should be reorganized.
		JPG image frame		YUV420/YUV444		Video will be better when the resolution exceeds 4K.
1080P	30FPS	MP4	H264	YUV420	P2200	Code rate: 10M
	60FPS	MP4	H264	YUV420	P2200	Code rate: 20M
4K	30FPS	MP4	H264	YUV420	P2200	Code rate: 40M
	60FPS	MP4	H264	YUV420	P2200	Code rate: 80M
		MOV	HAP		P2200	The HAP code rate is immutable. The width and height should be aligned to an integer multiple of 16.
8K	30FPS	MP4	H265	YUV420	RTX4000	Code rate: 80M
	60FPS	MP4	H265	YUV420	RTX5000	Code rate: 160M, Frame rate will be decreased for the high reproduction.
	30FPS	MOV	HAP		RTX5000	The HAP code rate is immutable. The width and height should be aligned to an integer multiple of 16.

*For materials exceeding 8K, it is recommended to split them into multiple files.

Reference for audio production

Coding Format	Format	Rate	Remark
ACC	S16	44100/48000	If there are more than 8 channels, it is recommended to divide them into multiple files.

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