

# Kommander T3

## Multi-display Software

Version: v2.0

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## Specification



Hunan Bowan Technology Co. LTD

Innovative technology only for a better vision

Web: [www.kommander.com.cn/en](http://www.kommander.com.cn/en)

# Revision History

Version No.	Description	Revise Date
V1.0	First release	2022/02/14
V2.0	Added updated product data and features	2024/01/04

Produce:

Review:

Approve:

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# 1. Overview

Kommander-T3 is a multi-display software launched by Kommander, a brand of Hunan Bowan Technology Co., Ltd. It is mainly used for splicing and synchronous broadcast of super large, multiple and special-shaped screens. With innovative technologies such as 8K hard decoding, pre-edit mode, virtual screen management, and pre-plan split-screen mode, it can complete medium- and large- scale stage performances and conference activities.



## 2. F

## eatures

- In the case of a single graphics card, there are no restrictions on channels, outputs, or layers.
- Projector calibration and blending.
- Split physical layout and rearrange according to actual screen layout.
- With hardware decoding, it has excellent rendering capabilities and playback performance.
- Edit the plan without affecting the real-time output.
- Support 9 encoding methods, 51 file format (see the list below for details).
- Play web page, streaming media and sequence frame.
- Support MIDI, DMX, OSC, Stream Deck, Companion.
- Support the input and output of timecode.
- Two programming methods: timeline and plan, and provides convenient functions such as plan group jump, time trimming, and shortcut links.
- Support SDI output.
- Support NDI, Spout virtual output (Supports NDI 5, Spout 1).
- Convert various files into playable encoding methods and file formats.

- Supports separate output of multiple videos and audios, multi-channel mapping.
- Automatically backup project files during the editing.
- Support several special effects.
- Support multi-device working modes: control, master and display, master and display, master and backup.
- Multi-connection, realize the cascade of multiple devices with large screens
- Multiple brands and types of capture cards (the capture card supports the output of the local machine to the display screen connected to the local machine in a multi-device situation. If cross-machine connection is required, the screen signal needs to be split).
- Play PowerPoint directly.
- Customize the layout of software interface.
- Generate plans in batch, and generate plan names automatically.
- Replace all specific contents.
- Support Pad control with Kommander cloud platform software.
- Support instructions under the UDP protocol and sending centralized instructions to other devices.

### 3. Configuration Requirements

Configuration Requirements				
	Operation System	CPU	RAM	Graphics Card
Minimum Configuration	Windows7/8/10 64	Core i5	8G	GTX 1050
Recommended Configuration	Windows Pro 64	Core i9	32G	Quadro RTX 4000

## 4. 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



## 5. Media Formats

Media	Formats
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

## 6. 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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