TriCaster® 1 Pro

Sales & Order Guide

TriCaster® 1 Pro

TriCaster® 1 Pro - Positioning

High-level description

TriCaster 1 Pro is an incredibly powerful production system for the modern producer, publisher, and content creator. The perfect balance of investment and power for mid-sized productions with intense demands on quality and feature set.

Target buyers

- Media companies, organizations, and publishers
- Stadiums, arenas and event production
- Corporate and enterprise communications
- Mega churches and large houses of worship
- Government agencies & departments
- Educational institutions & campus television
- Esports tournaments & events

Their requirements

- Agile video technology and workflows to facilitate new and changing business models
- Maximum creativity, productivity, and sophistication from their programs
- Maximum return on capital expenditure investment and minimal long-term risk

Unlike other solutions that

Do not offer comparable capabilities at a competitive in the same class for producing and delivering content. No other Live Production system is built with the integrated flexibility of software and IP networks - opening a world of opportunities with the tightest integration of NDI available in any product.

TriCaster 1 Pro is

An incredibly powerful production system for the modern producer, publisher, and content creator. The perfect balance of investment and power for mid-sized productions with intense demands on quality and feature set. Equipped with the industry's leading software-driven production technology and hundreds of future-ready capabilities.

TriCaster® 1 Pro – Core Messages

Positioning Statement

TriCaster 1 Pro offers all the functionality of a TriCaster TC1 with additional, future-ready features that make producing professional content where and when audiences want easier and more cost-effective than ever.

Value Proposition Statement

TriCaster 1 Pro is an incredibly powerful production system for the modern producer, publisher, and content creator. The perfect balance of investment and power for mid-sized productions with intense demands on quality and feature set. TriCaster 1 Pro is equipped with the industry's leading software-driven production technology and hundreds of future-ready capabilities that allow today's professionals to take advantage of established and emerging workflows to produce more of the incredible content their viewers crave and deliver it whenever and wherever they watch.

Unique Selling Proposition

No solution is as capable and cost-effective, in its class, for producing and delivering video content.

TriCaster® 1 Pro – Product Highlights

TriCaster 1 Pro is an evolution of one of the most complete live production systems available today. Equipped with the industry's leading software-driven production technology and hundreds of future-ready capabilities.

Live Call Connect - Increased agility with seamless integration of multiple remote callers from popular video communication applications like Facebook Messenger, WhatsApp, FaceTime, Zoom, Skype TX, Microsoft® Teams, Discord, Slack and Tencent as four unique video inputs.

Variables Support in Macros - A dynamic and powerful tool that allows operators to use logic in macros to deliver complex productions more easily.

Neural Voice Isolation - A powerful tool that cleans audio at the touch of a button. Using AI, TriCaster can cancel or reduce background noise and automatically detect voices; maintaining all-important production quality.

Live Streaming & Publishing - TriCaster 1 Pro supports encoding of 3 channels - configure and launch live streaming video to the web with built-in streaming encoders supporting a choice of connection types, resolutions, and streaming providers, including multiple preset options and custom profile settings.

Quality Monitoring - Operators will now be able to see the resolution / frame rate of every video source coming into their TriCaster to ensure they can always be confident of the quality of their sources

Alpha Channel Outputs - Perfect for remote workflows, operators can now send Alpha Channel through one of the MIX outs. Bringing postproduction closer to live, users can use the keying on TriCaster to feed graphics or real time 3D creation tools.

LiveGraphics™ - Design animated titles, motion graphics, and looping effects using popular Adobe® Creative Cloud® tools—then import them directly into your TriCaster 1 Pro. LiveGraphics™ lets you produce and present spectacular live graphics faster and easier than ever before.

LivePanel™ - Create your own software-based control panels and operate your TriCaster 1 Pro from any compatible desktop or mobile device—anywhere on the network. Easily accessible through any Web browser or operating system, LivePanel™ includes production-ready control panels for remote video mixing, media playback, audio mixing, and macro automation.

Plus access to many more advanced product features.

Technical Specifications

Video Input	16 x simultaneous external video inputs, supporting any combination of compatible sources in resolutions up to 4K UHD at frame rates up to 60fps (2160p 59.94)
Network Video Input	16 x IP video inputs via NDI™, resolution-independent, with support for key and fill
SDI Video Input[1]	4 x 3G/HD/SD-SDI connections supporting video input in any combination of standard formats, resolutions, and frame rates[2]
	• 1080p: 59.94, 50, 29.97, 25
	• 1080i: 59.94, 50
	• 720p: 59.94, 50, 29.97, 25
	• 576i 50
	• 480i 59.94
	[1] *Optionally supports up to 16 simultaneous 3G/HD/SD-SDI video inputs or quad-link 3G-SDI video inputs (4K UHD) via network integration with NewTek NC1 conversion modules*
	[2] *Available frame rates determined by session video standard (NTSC or PAL)*
PTZ	Support for up to 16 simultaneous Pan-Tilt-Zoom (PTZ) robotic cameras via serial and network protocols, including RS232, RS422 and IP, with integrated controls and preset system
Skype TX	Native support for up to 2 simultaneous Skype® video call inputs via Skype TX software integration, including tally and Talk Back communication
Video Output	Configurable for up to 4 independent video mix outputs, with simultaneous delivery via IP and SDI
Network Video Output	IP video output via NDI, optionally configurable for:
	• 4 x independent video mix outputs
	• 1 x 4K UHD video mix output
SDI Video Output	4 x 3G/HD/SD-SDI connections, optionally configurable for:
	• 4 x independent 3G/HD/SD video mix outputs
	• 1 x 4K UHD video mix output via 3G-SDI quad-link grouping
Stream Output	3 x resolution-independent streaming video outputs, independently configurable, with simultaneous stream archive
Multiviewer Output	3 x multiviewer outputs supporting standard display resolutions
	• 1 x DisplayPort (v1.4a)
	• 2 x HDMI™ (HDMI™ v2.1)
Mix/Effect Buses (M/E)	4 x M/E buses supporting video re-entry
	• 1 x Mix/Effect channel per bus with support for up to 4 sources
	• 4 x KEY layers per bus
	• 9 x memory slots per bus
	1 x PREVIZ configuration and preview bus
DSK Channels	4 x DSK channels
Media	5 x media players
	• 2 x DDR
	• 2 x GFX
	• 1 x Sound
	15 x media buffers
	• 10 x animation buffers
	• 5 x graphic buffers
	30 x clip players (available for use as transitions or media depending on function)

Keyers	Integrated LiveMatte™ chroma and luma keying technology on all source channels and M/E buses - 16 x input keyers - 4 x media player keyers - 4 x M/E keyers - 1 x PREVIZ keyer - 15 x buffer keyers
COMPs	Integrated video composition engine on the switcher and each M/E bus to create, store, and apply layer configurations and DVE-style motion sequences - 16 x configurable COMP presets per bus
Virtual Sets	Integrated LiveSet™ technology with 30+ live virtual sets and box effects included
DataLink	Integrated DataLink™ technology enabling real-time, automated data input from internal and external sources, including webpages, spreadsheets, scoreboards, databases, RSS feeds, watch files, XML, CSV, ASCII and more
Macros	Record, store, edit and automate commands and user-configured operation sequences - Attach to control panel buttons, keyboard shortcuts, hotspots, MIDI and X-keys® buttons or GPI triggers - Attach to internal events and state changes, including audio, media playback, tally and specific switcher actions - Supports control via web-based interface - Variables support allowing operators to use logic in macros to deliver complex productions more easily
Recording	16x configurable video recording channels - 16x NDI® recordings - 4 x QuickTime® archival video recorders - 3x H.264 distribution video recorders (multiple profiles) - 1 x MP3 audio recorder
Storage	2TB internal media storage - 2 x 2TB Media Drive - Capacity varies by format, resolution and file specification - Supports recording to external storage via USB 3.0 and eSATA - Supports shared storage integration and third-party partner solutions
Grab	Grab full-resolution, deinterlaced still images from external video sources and outputs
Export	Export video and image files to social media, FTP, local or external volumes, and network servers, with optional transcoding
Audio Mixer	Integrated multi-channel audio mixer with support for quad-channel audio, DSPs and 4x4x4 audio input routing
Local Audio Input	4 x SDI embedded 1 x Balanced XLR stereo pair (Line) 3 x Balanced 1/4" stereo pairs (Line)
Local Audio Output	4 x SDI embedded 1 x Balanced XLR stereo pair 1 x Balanced 1/4" stereo pair 1 x Stereo 1/4" (phones)
Network Audio	- Native support for network audio input and output via NDI - Embedded audio supported for all NDI input and output video signals - Integrated support[4] for Dante™ networking protocol from Audinate® - Support for AES67 protocol via compatible WDM audio drivers[5] [4] *Requires Dante Virtual Soundcard license from Audinate (sold separately)* [5] *Requires third-party virtual sound card license (sold separately)*
Supported Media File Formats	Import, store, and play back multimedia files, with optional transcoding, including: - Video: AVI, DV, DVCPro, DVCProHD, FLV, F4V, H.263, H.264, MOV, MKV, MJPEG, MPEG, MP4, WMV, WebM, and more - Image: PSD, PNG, TGA, BMP, JPEG, JPEG-XR, JPEG2000, EXR, RAW, TIF, WebP, and more - Audio: AIFF, MP3, WAV, and more
Monitoring	Support for up to 3 multiviewer displays with configurable workspaces and viewports
Signal Monitoring	Integrated waveform and vectorscope, full field rate with digital calibration, color preview and support for ITU-R Rec. 709

Processing	Video: YCbCr + Alpha color space, using 4:2:2:4 Audio: Floating Point 96 kHz
Throughput Latency	~1.0-1.5 frames
A/V Standards	• 4K UHD video conforms to SMPTE 2036 (UHDTV1 using Square Division Quad Split) • 3G-SDI video conforms to SMPTE 424M (Level A) • HD-SDI video conforms to SMPTE 292M • SD video conforms to SMPTE 259M and ITU-R BT.656 • Analog audio levels conform to SMPTE RP-155
Tally	Support for hardware tally via HD15 GPI connector, network tally via NDI, and Blackmagic Design® SDI tally standard
Genlock	Genlock input supporting SD (Bi-level) or HD (Tri-level) reference signals
GPI	Supports GPI signals via JLCooper Electronics eBox GPI interface
MIDI	Support for standard MIDI protocol enabling third-party device control
System Drive	250GB SSD
NIC	1 x 10 Gigabit LAN 1 x 2.5 Gigabit LAN 1 x 1 Gigabit LAN

USB	Front: 2 x USB 3.0 Type A
	
	Rear: 2 x USB 2.0 Type A
	
	    5 x USB 3.2 Gen2 Type A
	
	    1 x USB 3.2 Gen2x2 TypeC

System Physical	2RU chassis with 500W PSU and multi-tiered hardware and software fail-safe • 19.0 x 3.5 x 19.57 in (48.3 x 8.9 x 49.7 cm) with rack ears attached

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Frequently Asked Questions

Q: TriCaster 1 Pro is 4K-capable. How many 4K inputs? Outputs?

A: TriCaster 1 Pro supports up to 16 simultaneous, full-resolution 4K UHD external inputs at frame rates up to 60fps, and one produced video mix output deliverable via SDI and/or IP, for full-capacity, end-to-end 4K UHD video production.

Q: Is TriCaster 1 Pro compatible with NewTek connectivity products, specifically the NC2 Studio I/O Module?

A: Yes.

Q: How much network bandwidth does a 4K UHD signal consume with NDI?

A: Typical bandwidth consumption is approximately 325 Mbps.

Q: Can I record 4K UHD input signals?

A: TriCaster 1 Pro provides recording of the 4K UHD video mix output. ISO recording of 4K UHD input signals requires recording capability at the input source and appropriate storage. The NewTek NC2 Studio I/O Module, for example, supports ISO recording of 4K UHD input signals, which it sends to the network for use by TriCaster 1 Pro.

Q: Does the Skype TX software integration require the Skype TX controller software?

A: Yes. The Skype TX controller software is required for call management and control and must be run separately on a compatible external computer. For more information, including system requirements and install instructions, and to download the application, please visit https://www.microsoft.com/en-us/download/details.aspx?id=45887.

Q: Which control surface is best used with TriCaster 1 Pro?

A: TriCaster 1 Pro is ideally placed to be used with the NewTek IP Series 2-Stripe Control Panel; the perfect blend of power and versatility, built to handle interconnected productions—and environments—of any scale. Other TriCaster control surfaces can be used with the TriCaster 1 Pro, however, be advised that access to TriCaster 1 Pro features and functionality will vary.

Q: Are all Premium Access features available with the TriCaster 1 Pro?

A: With TriCaster 1 Pro, the advanced capabilities of Premium Access are included as standard, meaning you receive all of the benefits of optional software without any additional purchase.

TO BE CONTINUED…