TriCaster 2 Elite – One Sheet & Tech Specs

TriCaster 2 Elite is a more flexible approach to digital media production. With TriCaster 2 Elite, content creators can integrate current and future resources into digital media production models that employ standard network infrastructures. TriCaster 2 Elite supports distributed operation with access to more media formats, enablement of more workflow possibilities, and providing more business opportunities.

TriCaster 2 Elite is the most transformative digital media production solution in the industry. Designed for content creators that require a future-ready production ecosystem that grows with their business, TriCaster 2 Elite provides media input-output flexibility to address the needs of media content producers beyond just broadcast video.

No other solution enables digital media workflows of the scale and scope of NewTek TriCaster 2 Elite. The agile software driven IP native technology and functionality provides the capability, connectivity, and control needed to take on any sort of digital media production. With flexible implementation, a more complete set of capabilities, and a unique capacity for distributed production. TriCaster 2 Elite removes the traditional boundaries of media formats, I/O, channels, and delivery.

- **Complete Digital Media Production**
  Produce digital media content with multi-channel recording, multi-channel remote guest conferencing, upload of clips, multi-angle instant replay functionality, packaging of media content including multi-cam acquisition, compositing of sophisticated static and animated graphics, multimedia and visual effects, advanced audio processing, input and output of video in non-standard aspect ratios, frame rates, and resolutions for any platform and destination. Deliver with up to 8 3G or 2 UHD configurable mix outputs.
- **Limitless IP Processing**
  NDI® video, audio and data transmission over IP with near-zero latency and instant access to and seamless interchange with essentially unlimited IP sources from anywhere across the network in real time. Linking of multiple locations over IP to create sophisticated multi-system, multi-site workflows. Support for up to 32 video input sources and up to 48 output signals over IP, all independently configurable through software.
- **Interconnected Production**
  Inputs, outputs, and media assets are readily available and accessible by any user in any location on the network. Unrivaled, scalable capabilities include multi-source video processing, advanced audio, multimedia and visual effects, graphics integration, and multi-platform delivery output. Run shows using NewTek Live Story Creator production automation based on Microsoft Word® documents using teleprompter control with TriCaster 2 Elite mixing and effects together with LiveGraphics. Deploy pushbutton automation using NewTek LivePanel™ for creation of software-based custom control panels to operate TriCaster 2 Elite from a desktop or mobile device- anywhere on the network.
- **Distributed Operation**
  Use NDI® technology to move video, audio, and data from one TriCaster 2 Elite system to another. Encompass all compatible systems, devices, and applications available to the network.

Communicate with other systems and compatible edge devices over IP and become accessible for operation from any location on your network—even from multiple remote locations.

TriCaster 2 Elite Technical Specifications

Video Input	32 x simultaneous external video inputs, supporting any combination of compatible sources in resolutions up to UHD at frame rates up to 60fps (2160p 59.94)
Network Video Input	32 x IP inputs via NDI®, resolution-independent, with support for key and fill
SDI Video Input[1]	8 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, 29.97, 25 576i 50 480i 59.94 [1] *Optionally supports up to 32 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 32 simultaneous Pan-Tilt-Zoom (PTZ) robotic cameras via serial and network protocols, including RS232, RS422 and IP, with integrated controls and preset system
Conference Calling	Support for multiple simultaneous video call inputs with Microsoft Skype™, Microsoft Teams™, Zoom Meetings™, Slack, Discord™, and Tencent™ software integration using the Live Call Connect feature,
Video Output	Configurable for up to 8 independent HD or 2 UHD video mix outputs, with simultaneous delivery via IP and SDI
Network Video Output	48 x IP outputs via NDI® (HD and SD sessions only) 8 x video mix outputs in resolutions up to 1080p at frame rates up to 60fps (1080p 59.94) or 2 x UHD video mix outputs at up to 60 frames per second (2160p 59.94) 8 x direct IP source outputs via NDI® translation of local SDI inputs or 2 x upconverted UHD outputs at up to 60 frames per second (2160p 59.94) 4 x direct IP source outputs via NDI® translation of media players, with support for embedded alpha channel 15 x direct IP source outputs via NDI® translation of media buffers, with support for embedded alpha channel 3x Multiviewer outputs (if 3 monitors are connected). 4K support on 2x Multiviewer outputs while the 3rd outputs in HD 1x User Interface with dedicated multiviewer 1x teleprompter output (LiveStory™ Creator) 8 x selectable IP outputs via internal NDI® matrix router

SDI Video Output	8 x 3G/HD/SD-SDI connections, optionally configurable for: • 8 x independent 3G/HD/SD video mix outputs supporting standard NTSC and PAL formats, resolutions, and frame rates[3] • 2 x UHD video mix output via 3G-SDI quad-link grouping, supporting frame rates up to 60fps (2160p 59.94) [3] *Available frame rates determined by session video standard (NTSC or PAL)*
Stream Output	2 x resolution-independent streaming video outputs, independently configurable, with simultaneous stream recording. Support for SRT streaming has been enabled.
Multiviewer Output	4 x multiviewer outputs supporting standard display resolutions, using any combination of available connections. Support for 4K on 2x DisplayPorts • 1 x HDMI • 3 x DisplayPort

Mix/Effect Buses (M/E)	8 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 • 4 x DDR • 1 x Sound 15 x media buffers • 10 x animation buffers with GIF support • 5 x graphic buffers
Keyers	Integrated LiveMatte™ chroma and luma keying technology on all source channels and M/E buses • 32 x input keyers • 4 x media player keyers • 8 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
Recording	32 x total video recording channels • 8 x configurable M/E channels for HD or 2 x for UHD • 8 x physical SDI inputs • 4 x DDR's • 2 x streaming encoders • Support for growing file playback from DDR's • Instant Replay capability on each input • 32 x total configurable inputs
Storage	4 x 1TB SSD internal storage • Quantity varies by format, resolution and file specification • Supports recording to external storage via 7 USB 3.2 type A, and 1 USB 3.2 type C, 1 USB 2.0 2(Gen2, Type A) • 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	16 channels of audio passthrough Integrated multi-channel audio mixer with support for 8-channel audio, DSPs and 4x8x8 audio input routingSSD
Local Audio Input	8 x SDI embedded 1 x Balanced XLR stereo pair (Line) 3 x Balanced 1/4" stereo pairs (Line)
Local Audio Output	8 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[5] for Dante™ networking protocol from Audinate® • Support for AES67 protocol via compatible WDM audio drivers[6] [5] *Requires Dante Virtual Soundcard license from Audinate (sold separately)* [6] *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 4 multiviewer displays with configurable workspaces and viewports. Support for 4K on 2 multiviewers while the other 2 multiviewers output in HD.

Signal Monitoring	Integrated waveform and vectorscope, full field rate with digital calibration, color preview and support for ITU-R Rec. 709
Processing	Video: Floating Point YCbCr +A 4:4:4:4 Audio: Floating Point, 96 kHz
Latency	Processing Latency: ~1.0-1.5 frames Practical Throughput Latency: 4 frames
A/V Standards	• 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 GbE • 1 x 1 Gigabit NIC
System Physical	3RU chassis with 650W redundant PSU and multi-tiered hardware and software fail-safe • 19.0 x 5.25 x 19.57 in (48.3 x 13.34 x 49.7 cm) with rack ears attached • 34 lbs (15 kg)