



## The NewTek TriCaster® TC1 Base Bundle

- NewTek TriCaster TC1 2RU Live Production System
- NewTek TC1SP Control Panel\*

The NewTek TriCaster TC1 Base bundle is the essential solution for modern video production. With industry-leading, software-driven live production technology; a 16-input, multi-source video workflow with out-of-the-box support for four SDI hardware inputs; and an included 1.5-stripe control panel with 14 source buttons, the NewTek TriCaster TC1 Base bundle provides everything you need to create more incredible content, make it available in more places, and reach viewers—whenever and wherever they watch.

\*Actual control surface imprint may differ from above render.

All orders are subject to availability. Pricing subject to change without notice. International pricing may vary.

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### At a glance

#### • Complete Production

Produce amazing content with hundreds of advanced production capabilities for video switching, playback, mix effects, graphics, audio mixing, virtual sets, and more.

#### • 4K UHD 60p Capable

Deliver an immersive viewing experience for programs, performances, events, and sports with native support for true 4K Ultra HD resolution at 60 frames per second.

#### • Native IP Processing

Present your video as it was meant to be seen with NewTek's software-driven processing maintaining native resolution of every signal from input to output.

#### • Multi-Source Video Mixing

Create compelling content using any combination of compatible SDI and IP video sources, including local and remote cameras, mobile devices, Skype video calls, computers, streaming media, video files, graphics, and more.

#### • Multi-Destination Delivery

Produce content for any screen or schedule, with SDI and IP live output, multi-channel recording, multi-platform live streaming, social media publishing, and more.

# TriCaster® TC1 Technical Specifications

<b>Video Input</b>	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)
<b>Network Video Input</b>	16 x IP video inputs via NDI™, resolution-independent, with support for key and fill
<b>SDI Video Input<sup>1</sup></b>	<p>4 x 3G/HD/SD-SDI connections supporting video input in any combination of standard formats, resolutions, and frame rates<sup>2</sup></p> <ul style="list-style-type: none"> <li>• 1080p: 59.94, 50, 29.97, 25, 24, 23.976</li> <li>• 1080i: 59.94, 50</li> <li>• 720p: 59.94, 50, 29.97, 25, 24, 23.976</li> <li>• 576i 50</li> <li>• 480i 59.94</li> </ul> <p><sup>1</sup> 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</p> <p><sup>2</sup> Available frame rates determined by session video standard (NTSC or PAL)</p>
<b>PTZ</b>	Support for up to 8 simultaneous Pan-Tilt-Zoom (PTZ) robotic cameras via serial and network protocols, including RS232, RS422 and IP, with integrated controls and preset system
<b>Skype TX</b>	Native support for up to 2 simultaneous Skype® video call inputs via Skype TX software integration, including tally and Talk Back communication
<b>Apple® AirPlay®</b>	Native support for input of compatible iOS mobile devices via Apple AirPlay
<b>Video Output</b>	Configurable for up to 4 independent video mix outputs, with simultaneous delivery via IP and SDI
<b>Network Video Output</b>	<p>IP video output via NDI, optionally configurable for:</p> <ul style="list-style-type: none"> <li>• 4 x independent video mix outputs</li> <li>• 1 x 4K UHD video mix output</li> </ul>
<b>SDI Video Output</b>	<p>4 x 3G/HD/SD-SDI connections, optionally configurable for:</p> <ul style="list-style-type: none"> <li>• 4 x independent 3G/HD/SD video mix outputs</li> <li>• 1 x 4K UHD video mix output via 3G-SDI quad-link grouping</li> </ul>
<b>Stream Output</b>	2 x resolution-independent streaming video outputs, independently configurable, with simultaneous stream archive
<b>Multiviewer Output</b>	<p>3 x multiviewer outputs supporting standard display resolutions</p> <ul style="list-style-type: none"> <li>• 1 x DVI user interface with multiviewer</li> <li>• 1 x HDMI multiviewer</li> <li>• 1 x DisplayPort multiviewer</li> </ul>
<b>Mix/Effect Buses (M/E)</b>	<p>4 x M/E buses supporting video re-entry</p> <ul style="list-style-type: none"> <li>• 1 x Mix/Effect channel per bus with support for up to 4 sources</li> <li>• 4 x KEY layers per bus</li> <li>• 9 x memory slots per bus</li> </ul> <p>1 x PREVIZ configuration and preview bus</p>
<b>DSK Channels</b>	4 x DSK channels
<b>Media</b>	<p>5 x media players</p> <ul style="list-style-type: none"> <li>• 2 x DDR</li> <li>• 2 x GFX</li> <li>• 1 x Sound</li> </ul> <p>15 x media buffers</p> <ul style="list-style-type: none"> <li>• 10 x animation buffers</li> <li>• 5 x graphic buffers</li> </ul> <p>30 x clip players (available for use as transitions or media depending on function)</p>
<b>Keyers</b>	<p>Integrated LiveMatte™ chroma and luma keying technology on all source channels and M/E buses</p> <ul style="list-style-type: none"> <li>• 16 x input keyers</li> <li>• 4 x media player keyers</li> <li>• 4 x M/E keyers</li> <li>• 1 x PREVIZ keyer</li> <li>• 15 x buffer keyers</li> </ul>
<b>COMPs</b>	<p>Integrated video composition engine on the switcher and each M/E bus to create, store, and apply layer configurations and DVE-style motion sequences</p> <ul style="list-style-type: none"> <li>• 16 x configurable COMP presets per bus</li> </ul>
<b>Virtual Sets</b>	Integrated LiveSet™ technology with 30+ live virtual sets and box effects included
<b>DataLink</b>	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
<b>Macros</b>	<p>Record, store, edit and automate commands and user-configured operation sequences</p> <ul style="list-style-type: none"> <li>• Attach to control panel buttons, keyboard shortcuts, hotspots, MIDI and X-keys® buttons or GPI triggers</li> <li>• Attach to internal events and state changes, including audio, media playback, tally and specific switcher actions</li> <li>• Supports control via web-based interface</li> </ul>

<b>Recording</b>	6 x configurable video recording channels via IsoCorder™ technology <ul style="list-style-type: none"> <li>• 4 x QuickTime® archival video recorders (XDCAM HD compatible, 4:2:2 encoding, 24-bit audio, with timecode)<sup>3</sup></li> <li>• 2 x H.264 distribution video recorders (multiple profiles)</li> <li>• 1 x MP3 audio recorder</li> </ul> <p><sup>3</sup> QuickTime Player not required for playback in common NLE applications</p>
<b>Storage</b>	2 x 3TB internal drive <ul style="list-style-type: none"> <li>• Capacity varies by format, resolution and file specification</li> <li>• Supports recording to external storage via USB 3.0 and eSATA</li> <li>• Supports shared storage integration and third-party partner solutions</li> </ul>
<b>Grab</b>	Grab full-resolution, deinterlaced still images from external video sources and outputs
<b>Export</b>	Export video and image files to social media, FTP, local or external volumes, and network servers, with optional transcoding
<b>Audio Mixer</b>	Integrated multi-channel audio mixer with support for quad-channel audio, DSPs and 4x4x4 audio input routing
<b>Local Audio Input</b>	4 x SDI embedded 1 x Balanced XLR stereo pair (Line) 3 x Balanced 1/4" stereo pairs (Line)
<b>Local Audio Output</b>	4 x SDI embedded 1 x Balanced XLR stereo pair 1 x Balanced 1/4" stereo pair 1 x Stereo 1/4" (phones)
<b>Network Audio</b>	<ul style="list-style-type: none"> <li>• Native support for network audio input and output via NDI</li> <li>• Embedded audio supported for all NDI input and output video signals</li> <li>• Integrated support<sup>4</sup> for Dante™ networking protocol from Audinate®</li> <li>• Support for AES67 protocol via compatible WDM audio drivers<sup>5</sup></li> </ul> <p><sup>4</sup> Requires Dante Virtual Soundcard license from Audinate (sold separately)  <sup>5</sup> Requires third-party virtual sound card license (sold separately)</p>
<b>Supported Media File Formats</b>	Import, store, and play back multimedia files, with optional transcoding, including: <ul style="list-style-type: none"> <li>• Video: AVI, DV, DVCPro, DVCProHD, FLV, F4V, H.263, H.264, MOV, MKV, MJPEG, MPEG, MP4, WMV, WebM, and more</li> <li>• Image: PSD, PNG, TGA, BMP, JPEG, JPEG-XR, JPEG2000, EXR, RAW, TIF, WebP, and more</li> <li>• Audio: AIFF, MP3, WAV, and more</li> </ul>
<b>Monitoring</b>	Support for up to 3 multiviewer displays with configurable workspaces and viewports
<b>Signal Monitoring</b>	Integrated waveform and vectorscope, full field rate with digital calibration, color preview and support for ITU-R Rec. 709
<b>Processing</b>	Video: Floating Point YCbCr +A 4:4:4:4 Audio: Floating Point, 96 kHz
<b>Throughput Latency</b>	~1.0-1.5 frames
<b>A/V Standards</b>	<ul style="list-style-type: none"> <li>• 4K UHD video conforms to SMPTE 2036 (UHDTV1 using Square Division Quad Split)</li> <li>• 3G-SDI video conforms to SMPTE 424M (Level A)</li> <li>• HD-SDI video conforms to SMPTE 292M</li> <li>• SD video conforms to SMPTE 259M and ITU-R BT.656</li> <li>• Analog audio levels conform to SMPTE RP-155</li> </ul>
<b>Tally</b>	Support for hardware tally via HD15 GPI connector, network tally via NDI, and Blackmagic Design® SDI tally standard
<b>Genlock</b>	Genlock input supporting SD (Bi-level) or HD (Tri-level) reference signals
<b>GPI</b>	Supports GPI signals via JLC Cooper Electronics eBox GPI interface
<b>MIDI</b>	Support for standard MIDI protocol enabling third-party device control
<b>System Drive</b>	120GB SSD
<b>NIC</b>	2 x 1 Gigabit NIC
<b>System Physical</b>	<b>TriCaster TC1</b> 2RU chassis with 400W PSU and multi-tiered hardware and software fail-safe <ul style="list-style-type: none"> <li>• 19.0 x 3.5 x 19.57 in (48.3 x 8.9 x 49.7 cm) with rack ears attached</li> </ul> <b>TriCaster TC1 (Redundant Power Option)</b> 3RU chassis with 500W redundant PSU and multi-tiered hardware and software fail-safe <ul style="list-style-type: none"> <li>• 19.0 x 5.25 x 19.57 in (48.3 x 13.34 x 49.7 cm) with rack ears attached</li> </ul>

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