

## TriCaster® TC1 Technical Specifications

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| <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> | 4 x 3G/HD/SD-SDI connections supporting video input in any combination of standard formats, resolutions, and frame rates <sup>2</sup> <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 16 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>Video Output</b>                | Configurable for up to 4 independent video mix outputs, with simultaneous delivery via IP and SDI  |
| <b>Network Video Output</b>        | IP video output via NDI®, optionally configurable for: <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>            | 4 x 3G/HD/SD-SDI connections, optionally configurable for: <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 stream outputs, independently configurable, with simultaneous stream archive  |
| <b>Multiviewer Output</b>          | 3 x multiviewer outputs supporting standard display resolutions <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>      | 4 x M/E buses supporting video re-entry <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>                       | 5 x media players <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 <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> </p>  |
| <b>Keyers</b>                      | Integrated LiveMatte™ chroma and luma keying technology on all source channels and M/E buses <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>                       | Integrated video composition engine on the switcher and each M/E bus to create, store, and apply layer configurations and DVE-style motion sequences <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>                      | Record, store, edit and automate commands and user-configured operation sequences <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>   |

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| <b>Recording</b>                    | 12 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>• 8 x H.264 distribution video recorders (multiple profiles)</li> <li>• 1 x MP3 audio recorder</li> </ul> <sup>3</sup> QuickTime Player not required for playback in common NLE applications   |
| <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<br>1 x Balanced XLR stereo pair (Line)<br>3 x Balanced 1/4" stereo pairs (Line)   |
| <b>Local Audio Output</b>           | 4 x SDI embedded<br>1 x Balanced XLR stereo pair<br>1 x Balanced 1/4" stereo pair<br>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> <sup>4</sup> Requires Dante Virtual Soundcard license from Audinate (sold separately)<br><sup>5</sup> Requires third-party virtual sound card license (sold separately)    |
| <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<br>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 JLCooper 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><br>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> <li>• 26 lbs (12 kg)</li> </ul><br><b>TriCaster TC1 (Redundant Power Option)</b><br>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> <li>• 34 lbs (15 kg)</li> </ul> |