

VT[5] comes in a choice of three different packages: VT[5] LIVE SDI™, VT[5] LIVE™ and VT[5]™

	VT[5]LIVE SDI	VT[5]LIVE	VT[5]
LiveSet Technology	●	●	●
LiveSet Constructor	●	●	●
SpeedEDIT HD/SD resolution independent multi-format editing	●	●	●
CG Designer (Character Generator)	●	●	●
DDR (Digital Disk Recorder)	●	●	●
RS-422 Remote control	●	●	●
DV-Support (Requires IEEE-1394 interface)	●	●	●
DSK (Downstream Key)	●	●	●
Chroma / Luma Key	●	●	●
Proc Amp (colour & signal calibration)	●	●	●
Video Scope (Waveform & Vectorscope)	●	●	●
On-screen Video Monitors	●	●	●
Video Paint (2D Paint, anim & compositing)	●	●	●
LightWave3D [9]	●	●	●
VT[5] 32-Bit PCI 66 MHz card	●	●	●
1 in/out Component YUV or Y/C or composite	●	●	●
1 in/out Unbalanced stereo audio	●	●	●
Alpha out / preview out	●	●	●
SX-84 switcher expansion module (6U breakout box)	●	●	●
8 component or 8 Y/C or 24 composite inputs	●	●	●
4 component or Y/C outputs	●	●	●
4 composite program outputs	●	●	●
4-Channels XLR balanced audio in/out	●	●	●
12/8 RCA unbalanced audio in/out	●	●	●
1 Tally / GPI connector	●	●	●
SX-SDI switcher expansion module (2U breakout box)	●	●	●
8 Serial Digital inputs	●	●	●
1 Serial Digital Preview + 1 Program outputs	●	●	●
5 Serial Digital routeable outputs	●	●	●
Embedded Serial Digital audio: 1 input /1 output	●	●	●
AES-EBU Serial Digital audio: 1 input /1 output	●	●	●
RS-8 T-Bar 8-channel mixer remote	●	●	●
SDI I/O	—	●	●
Genlock	●	●	●
24-month manufacturer hardware warranty	●	●	●
Technical Support with Callback service (English & French speaking)	●	●	●

● Included ● Option — not applicable ● included with SX-84 option ● included with SX-SDI option

Note: The SX-SDI requires the SX-84 to operate - The SDI CARD is not compatible with the SX-SDI

Specifications subject to change without notice.

OUR CUSTOMERS SAY :

«A revolutionary product, a summary of technology and genius in a single solution. The best that a digital television would want for the production of its content.»
Massimo Mazzanti
 Sailing Channel

«... a unique product that combines the functions of a live switcher with those of an edit suite. All designed to work the way production professionals really need.»
Paulo de Andrade,
 Digital Post Production

«It does the same work as other non-linear products, faster, cheaper, better and with no fat!»
Rich Helvey
 NBC's Access Hollywood

«Thanks to the power and technology engineered in NewTek's VT, Mania TV! is delivering the next revolution in television.»
Drew Massey
 CEO - Mania TV!
 Visit <http://www.maniatv.com> to check out the world's first Internet Television Network! It's got tons of new music videos and short films!

«...perhaps the best tool on VT is its image quality. Along with [my co-workers on Soeur Emmanuelle: An exceptional woman for France 5], I was surprised by the superb quality of the images I achieved. The colour correction... is particularly powerful and gives excellent quality...»
François Boulene
 Visual Effects Artist, Editor, Producer

«VT integrates my LightWave animations, video capture, editing, 2D painting and After Effects all in one. Time is money and this new system is the best in the video industry at saving you time... and money.»
Dan Ablan
 AGA Digital

«You have exceptional hardware and software working in concert to give you maximum creative freedom. No one does this better than NewTek...»
Robert Levine
 Florida State University Media Production Program

Live Switching - Titling - Internet Streaming - Broadcast - Post Production - DVD Authoring - Real Time - Multiformat



Authorized Dealer



NewTek Inc.
 5131 Beckwith Blvd - San Antonio, TX 78249
www.newtek.com

In Europe, Turkey, The Middle East, Africa, Russia and Pakistan :
Newtek Europe / 3D Storm
 17 avenue Léonard de Vinci - Europarc
 33600 Pessac, France
 T: + 33 (0) 5 57 262 262 - F: + 33 (0) 5 57 262 261
info@newtek-europe.com
newtek-europe.com

LightWave and LightWave 3D, TV-Studio-in-a-Box, VT[5], VT, SpeedEDIT, CG Designer, Video Toaster, VT[5] Live! and VT[5] Live SDI! are registered trademarks of NewTek inc. Windows is a registered trademark of Microsoft. After Effects and Illustrator, are registered trademarks of Adobe Systems inc. Other products, pictures, company names shown or mentioned herein may be trademarks of their respective companies.

© NewTek Europe/3D Storm 2007

Swing.com Communication multimédia - Tél. +33 (0)5 57 262 264



VT[5]™
 Integrated Production Suite

TV-Studio-in-a-Box™



VT[5] provides all the tools you need for Live and Post-Production Live video mixer with complete integrated virtual sets, real-time keying, titling, HD/SD Editing, 3D animation, DVD authoring and 2D video paint and animation.

With VT[5] your investment is 100% productive - when it's not in use for live production the VT[5] is equally at home for post production. VT[5] switcher offers up to 32 inputs, complete integrated LiveSet technology, multiple DDRs and comes standard with SpeedEDIT - an ultra-fast non-linear multi-format HD/SD editor; CG Designer for titling; Video Paint; LightWave 3D - the world-famous 3D package can be used for anything from flying logos to Hollywood-class Special FX and much more.

VT[5] is designed to deliver amazing video production at an unprecedented price level.



NEWTEK VT[5] FEATURES

Live Switching

- More than 500 reversible DVEs (Fades, Wipes, Curls, Trajectories, Rotation, Compression, Borders, Chroma FX, Overlays and much more...)
- 2D and 3D DVEs Design
- Up to 32 inputs using SX-84 and SX-SDI expansion modules
- 16:9 wide-screen and 4:3 support
- LiveSet™ real-time virtual studio environments with multiple camera angles and focal lengths
- Support for transitions between virtual sets
- Live virtual studio environments with real-time shadows, reflections, lighting and more
- LiveSet Constructor utility to easily create upstream key graphics, virtual sets, fixed background keys and more
- Dual-channel upstream Effects bus for double-box interviews
- Luminance and Chroma keying.
- Advanced new keying capabilities with full spill removal and adjustable tolerance, smoothness and edge manipulations
- Key settings are stored per each camera input
- Key preview before taken live
- Garbage mattes
- Integrated DSK with fade in/out
- Titling, graphics, videos and animations directly assigned to mixer buses
- iVGA adds external computer (MAC&PC) displays as a switcher input. Multiple inputs selectable interface
- Dynamic mixer buses reconfiguration (no need to recable the video inputs)
- Save/load mixer configuration

Titling or Character Generator CG Designer™

- WYSIWYG editing
- Interactive template based CG module
- «Save As Title Template» feature to create the «Live Title Templates» for VT and TriCaster
- Display Program output within CG interface
- Use any installed TrueType font
- Save pages as 32-bit images or animations
- Create and insert graphic objects (boxes, circles, splines, images)
- Instantly save or recall text styles
- Powerful drawing tools

Digital Disk Recorder (DDR)

- Multi-format, multi-standard on-screen tape deck
- Play back a single clip or list of clips
- Cue in/out clips to roll when triggered by Switcher
- DDR can be assigned to the Downstream Keyer (DSK)
- Count up or count down project time or clip time
- Operate multiple DDRs simultaneously
- EDL import/export (Grass Valley, CMX, Sony, Excel)
- Record program out to hard drive in DV and up to uncompressed quality

Internet streaming

- One button internet streaming
- Windows Media encoder

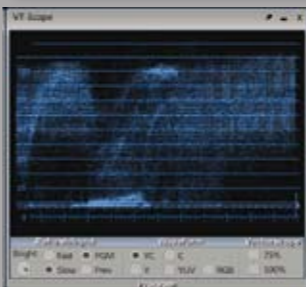
External Controller

- Control external RS-422 and DV decks from your VT[5] desktop
- Batch capture deck lists and configurations
- Record allows user to enter time code generation settings

Audio Mixer

- Mix 8 stereo live and 8 4-channel online audio sources
- 4-track audio: 4 discrete channels of audio in and out
- Talk over (reduces mix levels for mic inputs)
- 4 adjustable XLR balanced mic/line inputs with Phantom power
- 8 stereo inputs from computer sources
- 3 band EQ, balance, mute and mono for all 16 audio inputs
- DV and SDI audio inputs
- 6 stereo unbalanced audio inputs from lives sources
- Audio-follows-video capability
- Automated mixing: transition between audio presets
- PA Mix Output: for live PA or control room feed

■ Indicates features new to VT[5]



Signal correction Proc Amp

- Brightness, contrast, hue, saturation
- U offset, V offset / U gain, V gain
- More than 70 adjustable parameters
- Calibrate computer sources as well as analog sources
- Auto calibration for 75 IRE bars, 100 IRE bars and video passthrough mode (requires SX-84)

Video Scope

- Monitor program or preview
- Waveform of Y/V, Y, C, YUV or RGB
- Vectorscope at either 75% or 100% Chroma
- Adjustable display brightness and tint.

Video Monitors

- Fully fielded on-screen playback on computer monitor
- YUV video display
- Monitor program, preview, key or DSK buses
- Display supports includes 4:3 and 16:9 aspect
- Underscan mode
- Zebra stripes for 75 IRE and illegal video
- Proc-Amp for matching computer display to reference video monitors

Non Linear video Editing SpeedEDIT™

- Resolution independent: output any frame-rate, any resolution, any aspect ratio
- Combine HD and SD clips on the timeline
- Linked timeline and storyboard editing
- More than 500 real-time transitions
- Edits in native formats

■ Indicates features new to VT[5]

Native editing of HDV and DVCPRO HD Internally process all clips in HD with full-res, real-time HD previews

- Multi-format, mix AVI, QuickTime, Mpeg1, Mpeg2...
- MXF Support (depends on codecs)
- WMV HD and VC-1 output
- Unlimited Undo/Redo saved with project
- Real-time slow motion and reverse
- White Balance correction and real-time 3-wheel color correction
- 4-band color selection
- Real-time video and audio filters
- Intelligent background rendering
- Project backup tool
- CG Post™ animated titling
- Real-time 3D position, size and rotation
- Spline-based control of all clip properties
- Real-time TGA sequence playback
- Real-time chroma and luma keying with spill suppression
- Real-time mixing of unlimited audio layers
- 3D audio positioning
- Real time FireWire in/out and SD video in/out up to uncompressed quality
- VST™ Audio plug-in support
- Optimized for Dual-core and Quad-core systems

2D Video painting

- Amazingly fast 2D paint and animation engine
- Paint over live video
- Four-point pixel tracking
- 3D compositing
- Stroke recorder
- Instantly use a graphic alpha channel
- Animate text along path

3D Flying logos and animation design Lightwave 3D® (optional)

- Established industry standard
- World-class rendering
- 3D titling
- 3D flying logo
- Fast, versatile modelling tools
- Character animation tools
- Explosions and particles
- Multiple cameras per scene
- Easy import of Illustrator® / EPS data

INPUT/OUTPUT

- 8 component inputs
- 8 Y/C inputs
- Up to 24 composite inputs



- DV inputs and real time DV output (requires IEEE1394 OHCI compliant I/O)
- SDI video up to 8 inputs
- Native program output to projector up to QSXGA (2560x2048)
- 4-Channel balanced inputs switchable between mic and line levels
- 6 unbalanced line inputs
- Aux send and return
- 1 SDI program output, 1 SDI preview and 5 SDI routed outputs.
- 4 Component outputs
- 4 Y/C outputs
- 4 Composite outputs
- 1 Composite preview output / Alpha-channel output
- Audio AES EBU or Embedded - 1 input / 1 output
- 4 balanced line outputs
- 4 unbalanced line outputs
- 2 control room outputs
- 3 RS-422 machine control ports
- Tally light / GPI support

VT[5] Supported File Formats

- Video Formats:**
- Avi, DV, RTV, Mpeg1, Mpeg2 Program Stream, Mpeg2 Transport Stream, HDV, Quicktime, Mpeg4 (including PSP and iPod output), image sequences, Flash, WMV HD and VC-1.

- Graphic formats:**
- jpg, jpeg, png, tga, tif, gif, bmp, wbmp, pcx (alpha-channel support for tga and png)

- Audio Formats:**
- wav, mp3, au, snd, m3u, aif, aifc, aiff, wax, dif

NEWTEK VT[5] HARDWARE SPECIFICATIONS

VT[5]	
Type	3.3V / 5V half-length 32-bit PCI, 66 MHz
Video In/Out	PAL composite, Component, S-Video, SDI (optional board) alpha channel out
Digital format	8bit ITU-R BT.601
Analogue video connectors	15 pin high density (adapter cable with BNC connectors included)
Time base corrector	Internal. External unit not required
Analogue audio connectors	3,5 mm stereo
Digital video/Audio connector	90-pin digital video/audio bus Firmware Field Upgradable
Genlock	Syncs VT[5] to external sync. Genlock loop-through available on SX-84 subcarrier phase controls : vertical, horizontal
Comb filter	2-line luma and chroma comb filters

RECOMMENDED VT[5] SYSTEM CONFIGURATION*

A free 66MHz PCI slot for the VT[5] card is recommended for best performance.
 Pentium 4 or Athlon XP processor that supports SSE2.
 AGP or PCI Express-based graphics card.
 1 Gigabyte of RAM.
 4x U160 U320 SCSI drives, with the controller on a 64bit PCI bus (preferred); or 4x software-striped SATA drives.
 8 GB space for DVEs and content.
 IDE or SATA system drive with 500Mb of free disk space.
 DVD Drive.

Operating System:
 Windows XP 64-bit and 32-bit
 Windows Vista 64-bit and 32-bit

Software:
 Windows Media Player 9 or higher
 Windows Media Encoder 9 for streaming
 DirectX 9.0c or higher - Latest graphics card drivers.

For Hi Definition editing, dual CPUs or dual dual-core CPUs are suggested for the smoothest and fastest operation.

*As new technology becomes available, system recommendations may change and will be updated. Please refer to www.newtek-europe.com or www.newtek.com for the latest information. Specifications are subject to change without notice .

NEWTEK VT[5] OPTIONAL HARDWARE SPECIFICATIONS

RS-8 T-BAR MIXER & TRANSITION CONTROLLER	
Preview bus	8 input
Program bus	8 input
Controls	T-Bar Take and Auto transition buttons Take and Fade DSK buttons Effect selection knob Speed adjustment knob Digital Disk Recorder jog knob
SX-84 SWITCHER EXPANSION MODULE (6U Breakout Box)	
Video inputs	8 component or Y/C or 24 composite Proc Amp control for each input (You may have inputs of differing formats on differing rows, so you can have all three formats feeding to the VT[5] at any time.) (Multiple inputs internally synchronized; camera do not require genlock capability.)
Video outputs	4 Component or 4 Y/C program outputs 4 Composite program outputs Alpha out (can also display preview output)
Genlock	1 Genlock in - 1 Genlock loop-through
Audio in	4-Channel XLR balanced (switchable mic or line level , phantom power) - 12 RCA unbalanced (6 stereo pairs) - 2 AUX return
Audio out	4 XLR balanced - 8 RCA unbalanced (6 stereo pairs) - 2 AUX send - 1 PA Mix
Remote control	3 RS-422
SX-SDI SWITCHER EXPANSION MODULE (2U Breakout Box)	
Video inputs	8 Serial Digital inputs
Video outputs	1 Serial Digital Program output 1 Serial Digital Preview output 5 Serial Digital outputs (routed from the 8 SDI inputs)
Audio inputs	1 Embedded Serial Digital audio input 1 AES-EBU Serial Digital audio input
Audio outputs	1 Embedded Serial Digital output 1 AES-EBU Serial Digital output
SDI Video in / out conforms to SMPTE 259M Embedded Audio conforms to SMPTE 272M Digital Audio in / out conforms to AES/EBU standards; 20-bit 48kHz (2 channels)	
<i>Note: The SX-SDI requires the SX-84 to operate. SX-84 analog and Serial Digital inputs/outputs are simultaneously active.</i>	

SDI CARD	
Type	3/4-length PCI card (requires free PCI slot)
Video input	1 SMPTE 259M Serial Digital
Video output	1 SMPTE 259M Serial Digital 1 SMPTE 259M Serial Digital Preview or Alpha Channel out
Audio input	1 AES/EB Serial Digital
Audio output	1 AES/EB Serial Digital

Note: The SDI CARD is not compatible with the SX-SDI.

