

Product Review: NewTek's VT-4 Live!

By: Anthony D. Coppedge, CTS
Church Media Consultant

Originally published in the January 2005 issue of the Church Media Hotlist newsletter

NewTek has really stepped up to the plate and hit a home run with their latest product, the newly released Video Toaster, version 4 - or, as they like to call it: VT[4].

I reviewed their previous iteration, the VT[3] in an issue of the Church Media Hotlist last year. This year, I had the privilege of flying to San Antonio, Texas, and spending a full day with the VT[4] and a good portion of NewTek's senior team members: VT[4] Video Evangelist, Paul Lara; Senior Director of Video Marketing, Philip Nelson; President & CEO, Jim Plant, VP of Video Software Engineering, Dr. Andrew Cross and the famed originator of the Video Toaster, Tim Jenison.

I was afforded the luxury of not only a serious demo of the system, but the ability to push the VT[4]'s abilities and explore the strengths and weaknesses of this robust hardware and software product.



The VT[4] PCI card

I'll tell you right up front that the VT[4]'s updates are significant enough for me to make the statement that it's not just an upgrade from the VT3 - it's a whole new system.

VT[4] LIVE! which includes the VT[4], SX-84 (Input/Output break out board) and the RS-8 (hardware switcher interface) is available now in North America, priced at \$6,495 (U.S.). The VT[4] Card and Software only is priced at \$3,995. Registered owners of previous versions may purchase an upgrade to VT[4] software for \$995.

Not just better. Way better.

Every module in the VT[4] has been significantly upgraded. I was especially pleased with the included Non-Linear Editor, VT Edit.

VT Edit offers two modes of workflow: Storyboard editing and the more common Timeline editing. If you've ever edited on even a consumer NLE, you know that Timeline editing is a sequential format of editing that allows for instant changes to the duration of the video while including options for adding effects, transitions and multiple audio and video tracks. VT Edit can do all of that - with an unlimited number of tracks, if you have the hard drives to handle the space - but it ties in Storyboard editing - a pictorial representation of the sequential story.

Folks, I've edited on everything from Adobe's \$500 *Premiere* NLE to \$100,000+ Avid NLE's and just about everything in between. I can authoritatively say that for long-form editing, such as that of a church service edited for TV, there simply isn't a faster way to edit. I know, that's a big statement, but I've edited church TV shows and I'm telling you this is a fact.

Now I'm also going to say that while I am very impressed with VT Edit, if I **only** needed to buy a Non Linear Editor, I would choose Apple's *Final Cut Pro HD*.

But since the VT Edit also *comes with* a video switcher, character generator, video paint program, Emmy-Award winning 3D animation program, Digital Disk Recorders/Players and a built-in VGA scan converter, it's not exactly comparing apples-to-apples. It's more like Apples to Toasters.

The thing about the VT Edit was that the two forms of editing were updated via meta-data in real time. You can change editing styles on the fly, as your content requires. Very impressive. But even more impressive is the ability to then take an edited video and instantly use it from the Switcher to play back the video - Live.



The VT[4] Digital Disk Recorder and playback - just like a VCR, but from your hard drive

Live Switching - improved

"A preferred workflow in the church would be a dual-screen monitor with the RS-8 (remote switcher)," explains Paul Lara. "Now, with a system preferences menu selection, the VT[4] interface can be assigned to any of the desktop monitors. For example, in a 'Spirit-led' service (free-flow), using the VT[4] with a dedicated CG operator on the PC keyboard and mouse, the Director can use the RS-8 to call and change shots (inputs) and simultaneously have a graphics operator still using the VT[4] software."

This kind of flexibility is critical for churches that want to use the I'm-not-kidding-it-looks-just-like-network-TV Character Generator (CG) during services to make changes to graphics and text on the fly. A good example of this is when the sermon notes are handed to the operator *during* the praise & worship portion of the service (like that never happens!).

Further enhancements and additions also allow for instant streaming of the video to the local network or even the Internet - also Live.

In fact, NewTek has done a very good job on making the content from the various modules more accessible right from the Switcher interface. This allows the operator (many times a volunteer) to focus on the action and not on menus or awkward keyboard commands.



Trinity UMC in Huntsville, AL uses the VT[4] for live video switching and graphics.

Big additions to VT4

Because NewTek utilizes a processor that is scalable - that is, it can do more than it's doing right now with additional software code - their software engineers are in a position to create very significant updates to the software. Not only has the interface been streamlined and improved in the VT[4], but the additional *feature sets* that have been added in software are now taking even greater advantage of the scalable processor architecture.

One of the best new features is the ability to grab information right off of the VT[4]'s host PC with a scan conversion process that I think is simply revolutionary. I talked with Paul Lara about this VGA capture and convert feature.

"New in VT[4], we have added a scan converter *in the software*. Anything that is displayed on the computer screen can be added as a switcher input. So in a dual screen configuration, software such as PowerPoint(tm) or worship software can be used in *real time* on the second monitor. By using the RS-8 (remote switcher interface) as the switcher control, the Director can take - in real time - content running on the same PC as the VT[4]," enthused Mr. Lara.

It's worth pointing out that I am of the opinion that this new scan converting process that NewTek has just included - for free - in the software, *easily* matches the quality and performance of independent hardware scan converters that are priced at over \$5,000. You heard right. It's *that* good, I promise.



The VT[4] can have any combination of modules opened, and saved, as you need.

New and Upgraded Features bullet-list:

- 4 channel audio with in and out balanced connections.
- 3D Audio positioning (surround sound) of all 4 channels in VT-Edit which are fully key-frameable. Whoa.
- Improved floating-point audio now allows 12dB of headroom.
- Real-time DV output.
- Two Outputs now mean that two NTSC (not just VT Vision preview on the desktop) video outputs - for Preview and Program are finally (about time, boys!) available.

- VT Vision monitor modules are now refreshing faster than on the VT3 (previous version).
- An additional 150 effects and transitions (now up to 500) have been added.
- *LightWave* is the DVE engine, so custom DVE's are possible for those familiar with the *LightWave* (included) software.
- Real-time CG with real time anti-aliasing - which is exceptional for resizing fonts with *zero* distortion or pixelization.
- All new graphic content produced by Tim Johnson, the lead graphic artist with KUTV, the CBS-owned station in Salt Lake City. For churches getting the Media Ministry Bundle, you'll get 100 additional templates which are really, really high quality and easy to use.
- The CG allows the user to save new templates, and even creates a new folder with all of the graphic pages saved as .png files (with alpha - transparency).
- Gradient fills now are available per line of text and/or object or individually. Very nice!
- Each line of text now has an entire new tree of manipulation and effects - fully key-frameable.
- Unlimited Undo's on a *per page* basis as long as the CG project is open. This is not the same as global, sequential undo's - these are page specific undo's, meaning you can undo a dozen times on page one, change to page two, make 3 changes, go back to page one and continue with more undo's. Amazing!
- DSK smart control. "One of the things we've changed in VT[4] is that any time a DSK source is launched (like the CG), the switcher is smart enough to automatically load it into the DSK," explains Mr. Lara, "but it requires the Director to enable the Fade/Cut DSK before it goes live." VT3 owners will know the pain of accidentally loading a CG graphic onto a live screen while in build mode - not a happy accident, but no longer an issue in VT[4].
- Real-time key-frameable color correction and blur - per object and/or layer.
- Hotlist buttons have gone to quick tabs across the bottom of the Add files window
- Every module has a help section, which will launch that chapter of the manual in .PDF format on the monitor.
- Tool Shed bonus: Cut-to-music feature *Auto Edits* clips on the Storyboard/Timeline. It now sets markers in the music track, and the VT[4] inserts the video clips at the appropriate marked points on the audio waveform. Holy smokes - this shaves **days**, not just hours, off of music video editing!
- The module icon can be dragged to the Windows desktop and forced to stay "on top" regardless of which of the 6 pages are open.
- Stream live events or finished productions to the Web in real-time
- PowerPoint(tm) added as a switcher input.

With so many new features, it's really a lot more than the typical software upgrade!



The VT[4] stabilization module for smoothing out shaky video

More power like this needs, well, more power

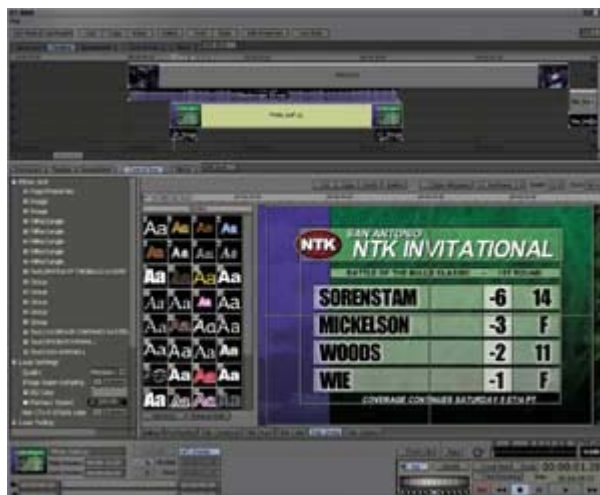
The average consumer PC is not going to be up to the job of harnessing the power of the VT[4] engine as this card needs *a lot* of real CPU horsepower.

The Recommended PC specs: *Dual* 3 GHz Pentium 4 processors with SCSI 320 drives, at least 1 Gigabyte of RAM, and a respectable video card (AGI or PCI-express 128 meg video cards, for example). The software interface is designed to run at a *minimum* of 1280x1024 resolution, but can easily be used with much higher pixel counts, depending on how much screen real-estate you desire.

Furthermore, a dual monitor setup is highly recommended. I personally wouldn't want to use the VT with only 1 monitor, as it would be too limiting.

That's a lot of PC to buy, but when you consider the whole point of having an integrated system like this is to *not* have to make several expensive purchases of independent hardware, the costs for the PC are easy to accept.

In truth, the all-in-one approach has been exactly why the Video Toaster line has been so well accepted. The additional expense of a really nice computer rig is a fraction of the cost of trying to replicate each component of the VT[4] with dedicated software and hardware running on multiple machines.



The VT[4] CG Post interface

The Final Word

NewTek's team of engineers and developers has really done an outstanding job of making the upgrade to VT[4] a no-brainer for owners of previous versions. And for first time users, these new features and upgrades mean that the VT[4] has a much broader appeal for churches needing a reasonably priced and robust video production system.

In my opinion, a church will end up spending anywhere from \$9,000 up to \$15,000 for the PC, monitors and VT[4] Live! system. That's not cheap, but it is inexpensive when you compare it to the expense of trying to duplicate all of its features at the same quality level.

For those of you considering a purchase like this one, the biggest determining factor will be if you need everything - or at least most - of what the VT4 has to offer. I maintain that while you can buy individual components that will outperform various features of this system, you can't buy a better all-in-one system than the VT[4].

Is the VT[4] Live! system right for your church? That's a question you'll have to answer based on your needs and budget. For thousands of churches that needs more than just a projector, screen and remote control, the VT[4] could be a welcome addition to their technical toolboxes.

Anthony Coppedge provides consulting to Churches for developing and growing a Media Ministry, building teams, casting vision and even choosing the right equipment. He lives in Bedford, Texas with his wife and two daughters and can be reached at anthony@anthonycoppedge.com

**WEB: www.anthonycoppedge.com | EMAIL: anthony@anthonycoppedge.com
PHONE: 817.819.7288 | FAX: 817.887.3700**

Copyright 2004
Do not duplicate in any form whatsoever
without the written permission from Anthony D. Coppedge.