

## Selected V-Station®HD Case Studies

V-Station HD Multi-Channel DVR Systems are often called “the Swiss Army Knife” of multi-cam video recording and streaming devices due to their exceptional flexibility to accommodate diverse applications and workflow styles. They combine project management, media management, recording, switching, automatic line-cut creation, live streaming, and content distribution in a 2U rack-mount enclosure. V-Station HD has become the choice of exacting users in Business, Academia, and Government.

### ***Observation & Analysis***



### **APPLICATION**

Eight-channel synchronous recording and playback of rocket launch from multiple angles.

### **PRINCIPAL SYSTEM COMPONENTS**

Phase 1: Eight custom V-Station HD Studio8 Multi-Channel/Multi-Stream DVR Systems with add-in Studio Companion Software. Phase 2: Three additional custom V-Station HD Studio8 systems.

### **USER EXPERIENCE**

Note: The classified nature of this project precludes more than a cursory overview of the application.

The Indian Space Research Organisation (ISRO) needed to synchronously record and play back certain rocket launch aspects of Satish Dhawan Space Centre’s (SDSC) Chandrayaan 2 mission to land on the moon’s south pole. Chandrayaan 2 was launched 22 July 2019 from the Sriharikota Space Centre (SHAR) located off the coast of India’s Andhra Pradesh state. SDSC chose FutureVideo over several other DVR manufacturers and FutureVideo engineers provided certain special capabilities that were needed.

### **The Bottom Line**

Studio8’s long recording times and project management capabilities provided SDSC with the ability to log and annotate any frame being recorded—or to do so later during playback. With up to 8TB of video storage and 8 channels of simultaneous 1080p60 synchronized recording/playback, SDSC can record up to 320 hours per channel (2,560 total hours) with each of their custom Studio8 units.



Launch of Indian Space Research Organisation’s (ISRO) Chandrayaan 2 from Sriharikota Space Centre (SHAR)

## **Broadcast**



### **APPLICATION**

Multi-channel line-cut proxy recording of network TV show.

### **PRINCIPAL SYSTEM COMPONENTS**

FutureVideo V-Station HD Studio4 Multi-Channel DVR System.

### **USER EXPERIENCE**

Broadcast engineering services behemoth NEP provides the production services for the television show "The Talk" airing daily on CBS. It's shot in a sound stage on the CBS lot in Studio City, California (once the home of Republic Pictures).

#### **The Workflow Bottleneck**

As one of his daily tasks, NEP engineer Jason Celek burned and distributed low-resolution SD copies of show episodes on DVD to various production and network departments. He sought a way to replace the inefficient optical-based system with an advanced yet affordable file-based proxy HD recording solution.

#### **V-Station HD Solution**

Celek's evaluation of FutureVideo's V-Station HD Multi-Channel/Multi-Stream DVR Systems convinced him the Studio4 model would meet his needs and provide additional capabilities that would be quite useful.

With NEP's newly acquired V-Station HD Studio4 system installed, Celek gained the ability to simultaneously record up to 4 video feeds, but uses 3 in the application at this time. He assigned Channel 1 to record the line-cut with a window-burn of LTC. Channel 2 records the same feed without the time code burn. Channel 3 was set to record the same "line-cut" signal at a low 6Mb/sec rate (for reduced file size) which is then shunted off to the network as the show's "return feed."

Though V-Station HD can record full 1080p 60fps HD at high bit rates, Celek opted to use its lower resolution and lower bit rate settings to make the proxies. These became immediately distributeable, without format conversion, thanks to V-Station HD's H.264 MP4 file-based recording technology and its FTP site uploader. Studio4's Project & Media Asset Management software enabled the entire process to be efficiently controlled and for desired content to be easily located.

#### **The Bottom Line**

NEP's V-Station HD Studio4 system enabled them to save time and reduce workflow steps, while speeding up access to the show's content. Plus, Studio4 provided them with a cost-effective way to record 4-cam HD rehearsals, which the show's Producers can access at will through DropBox.

## Training



### APPLICATION

Multi-camera/multi-room training.

### PRINCIPAL SYSTEM COMPONENTS

V-Station HD Studio Multi-Channel Production DVR System, 6 x Canon camcorders, Video Projector.

### USER EXPERIENCE

Irvine, California-based SWDS (SouthWest Dealer Services) conducts specialized courses for retail automotive industry sales people. Role playing, an integral part of the week-long course, is captured on multiple video cameras in different training rooms. Upon completion, the students are each provided with a video of their course activity—including their individual practice sessions and critiques.

### **The Workflow Bottleneck**

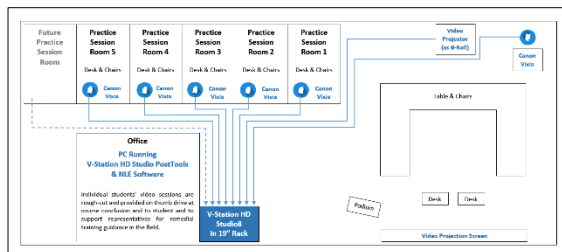
SWDS needed a way to improve training results and overcome inefficiencies in their course-produced videos. Workflow was clearly a problem. A V-Station HD Studio Multi-Channel DVR System proved it could satisfy both needs. A test run convincingly demonstrated how unnecessarily convoluted their existing workflow of capturing, editing, and converting video truly was. Until then, VP Training & Development, Peter Velau, and his staff had been burning the footage taken from each of the 4 camcorders onto DVDs, then from the DVDs to a Windows PC editing system (Microsoft Movie Maker and Roxio, each for different purposes), then converted the video back to DVD format, and finally burned the edited version onto a new DVD. They would then mail the DVD to the student. All this took about two days of each training week and Velau was overdue for a more efficient solution.

### **The V-Station HD Solution**

According to Peter, “We developed a top-notch training curriculum. But, I had to find a better way of handling the video observation & analysis aspect. It was tedious! V-Station HD seemed to provide the capabilities and features I sought—in one system. Once our V-Station HD Studio4 system was operational, I was amazed at how much time we saved. Now, we’re able to edit and process student performance during session breaks. When the course concludes, we’re able to place a USB thumb drive with the V-Station HD-produced content in the students’ hands as they exit our facility. We then send duplicates to our field support team to guide them with student follow-up.”

### **Corporate Growth Leads To Studio8 Upgrade**

After using the V-Station HD Studio4 system for three years in their original location, SWDS’ growth triggered relocation to larger facilities with more session rooms. They added more cameras and had their system factory-upgraded to the new V-Station HD Studio8 (HDMI) specification. More students can be accommodated now—with no learning curve for the training staff. Congratulations to Peter Velau and his colleagues at SouthWest Dealer Services.



SWDS Training Facility



V-Station HD Studio8 in SWDS' 19" Rack

### **The Bottom Line**

With V-Station HD, SWDS was able to radically simplify their workflow. Tasks that had taken days now take hours. Plus, the finished video content is immediately available to their students.

## Live Event



### APPLICATION

Multi-cam recording and live streaming of presentation.

### PRINCIPAL SYSTEM COMPONENTS

FutureVideo V-Station HD Pro4 Plus Multi-Channel Production DVR System (HDMI), Teradek VidiU broadcast streamer.

### USER EXPERIENCE

USC's Viterbi School of Engineering planned to shoot their largest on-campus event—"Discover USC!"—with multiple camera angles and broadcast the production to Facebook Live.

#### **The Workflow Bottleneck**

USC needed a way to enable those not in the auditorium to instant message questions to Undergraduate Admissions Director Paul Ledesma through Facebook. Producer Daniel Druhora took up the challenge. He was confident FutureVideo's V-Station HD Pro4 Plus Multi-Channel DVR System, combined with a Teradek VidiU broadcast streaming device, would accomplish the task.

#### **The V-Station HD Solution**

"V-Station HD made it possible to broadcast 4-channels simultaneously, including channels dedicated to sound and the presenter's deck," said Druhora. "Bringing all those elements together with the power to broadcast HD wirelessly was the magic formula." With student workers Victoria Stein and Tiana Lowe on the Blackmagic Pocket Cinema, the Canon 7D and Vixia, and Simone Attenni as audio engineer, Druhora directed the entire 90-minute multi-cam production from the Pro4 Plus' multi-view control panel. Using the V-Station HD Pro4 Plus' built-in multi-cam switcher, Druhora was provided with greater artistic freedom to direct the event by switching between camera angles during the live presentation. In addition, the V-Station HD created a "line-cut" recording that later was uploaded to the school's ftp site immediately after wrapping. V-Station HD also recorded all the camera angles synchronously—giving Druhora the option of re-creating the shoot and re-editing the camera angles in his NLE software. With the kinks sorted out and a last-minute camera swap, the shoot was a success.



Daniel Druhora operating the V-Station HD Pro4 Plus while monitoring the live stream on Facebook Live with his smart phone

#### **The Bottom Line**

As Druhora put it, "...getting personalized attention from the FutureVideo team made all the difference."

### PRODUCT UPDATE

V-Station HD Pro4 Plus models now feature built-in live line-cut streaming. V-Station HD Studio series models now feature built-in live multiple streaming and live line-cut streaming. Costly external streaming devices are unnecessary.

## **Government Proceedings**



### **APPLICATION**

Multi-camera recording of City Council proceedings and community events for upload to the city's website.

### **PRINCIPAL SYSTEM COMPONENTS**

FutureVideo V-Station HD Studio Multi-Channel DVR System (HDMI), FutureVideo V-Station HD Field Multi-Channel DVR System (HDMI).

### **USER EXPERIENCE**

The City of Chino Hills is a young, progressive community located in south-eastern Orange County, California.

#### **The Workflow Bottleneck**

Community Relations Manager Valerie McClung and Video Production Manager Robert Wells, needed an efficient means to do multi-camera recording of City Council sessions, interviews, and community events. Their single-cam capability was mostly limited to recording City Council sessions. They envisioned one system being hard-wired into the city's new Community Events Center building. The other would be deployed in City Council chambers as needed and stored when not.

#### **The V-Station HD Solution**

McClung and Wells discovered V-Station HD while attending a Technology Showcase event put on by one of FutureVideo's local pro video resellers. FutureVideo had been asked to conduct a presentation about multi-cam video production at the event and had a demo V-Station HD Studio System on hand to provide immersion into V-Station HD's technology. It quickly became apparent to them that both V-Station HD systems' capacity to quickly upload a production to the city's website was a very important plus. After putting an evaluation system through its paces, the City of Chino Hills authorized the purchases.



**Video Technician Robert Wells operating V-Station HD Studio during an interview in the City Council chamber**

#### **The Bottom Line**

V-Station HD technology provided the range of event of onsite and remote recording capabilities the city needed.