



## PRG Provided Live Video Services to a 2017 U2 Worldwide Concert Tour Using Lightspeed Live Capture

Lightspeed Live Capture enabled live capture of 4K/UHD concert footage, with simultaneous copying to multiple storage devices

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**Wolfgang Schram,**  
Director of Video Engineering,  
Production Resources Group  
(PRG), Los Angeles, CA

For U2's 2017 Joshua Tree Tour, the band's management team wanted to capture and archive all the live 4K and HD concert footage from each of the fifty-two concerts on the world-spanning international tour. The goal was to store and preserve this valuable footage for future use and access.

Typically, capturing and archiving nearly 27 hours of high-resolution video footage every night would involve capturing the cameras to multiple recorders then tasking a staff or crew member with the time-consuming job of consolidating all the files and transferring the data to multiple hard drives after show. This process could take hours.

Prior to the start of the tour, PRG offered an innovative alternative to the management team—to do it all at once in less time and with less manpower. As a major audio and video equipment supplier specializing in live concerts and events, Production Resources Group (PRG) has been integrally involved with major concert tours for such high-profile artists as Paul McCartney, Metallica, Beyonce, the Rolling Stones and Roger Waters. For the U2 2017 Joshua Tree Tour, PRG was already providing rental equipment, such as lighting kits and 4K/UHD and HD camera systems, as well as crews to operate them. Paying for crewmembers' travel, salary and room and board, gets very expensive. If there was a solution that could get the job done more efficiently for less money, then deploying it on tour made sense.

Using a powerful new capture and ingest solution from Telestream, Lightspeed Live Capture, PRG showed the production team that they could both capture and copy the live concert footage as a simultaneous process. With this additional video service, PRG would be able to save the management company many man-hours of work, and free up a crewmember's time for other tour-related tasks.

## The Challenge

To provide this service, PRG acquired three Lightspeed Live Capture systems from Telestream that would allow them to record all of the live multi-camera concert footage—including a mix of 4K/UHD and 1080/60p—onto one of the system's internal storage drives.

Deployed as a fly-pack that was set-up near the stage, the configuration included two Lightspeed Live Capture systems used to ingest the 1080/60p broadcast-quality signals from eight cameras, with a third used to ingest a 4K/UHD program line feed coming from the production switcher. These video sources included multiple 1080/60p HD cameras covering the show from all angles, as well as the 4K/UHD resolution program line feed being output by the production company's switcher.

Lightspeed Live Capture also posed the value proposition of simultaneously copying that footage into the Apple ProRes files needed for editing onto an external disk array all in a single, time-efficient workflow.

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Another reason simultaneous capture and copying was critical was that the production crew would only have 10 minutes following the show to put the ProRes media drives into the hands of the editor working for the band's production management company.

Each night, ten minutes after the show would end, the generator trucks powering all of the production equipment throughout the venue would be shut off to save expenses and get them ready to go to the next venue. For this reason, taking three hours to copy the 4K/HD video onto external drives was out of the question. It all had to be done as a concurrent, real-time process.

## The Workflow

The on-duty operators could also open and play back the growing ProRes copies the moment they began recording. This capability let them see, evaluate and scrub the video while it recorded from start to finish, rather than waiting until the recording was complete.

If the production team noticed a recording problem early on, they could make changes and adjustments right then, without waiting until the end of the show when it would be too late to fix. And with an editing system, like Premiere, they could also start editing the files right away. The ability to view and edit growing files was a huge benefit.

## The Solution

The Lightspeed Live Capture system supports—and transcodes—over 20 industry standard codecs, as well as container formats, such as QuickTime, MFS and MPEG Transport Streams. Supported codecs include:

- MPEG2 TS
- DNxHD and HR
- AVC Intra
- HEVC
- Apple ProRes
- XDCAM
- XAVC
- AVC-Intra

In addition to the workflow considerations and extensive format choices, PRG also chose Lightspeed Live for its ability to expand into a streaming encoder should any of its future customers want to distribute their events via an OTT platform. With rack space, power and AC considerations, PRG will be able to tailor the gear and associated wiring to meet the needs of any future project.

"Lightspeed Live Capture's unique ability to simultaneously record mezzanine video onto local storage and an external storage system in a variety of formats was the key functionality we needed. Being able to control and manage multiple capture channels from a single web page, and inspect, open or edit growing files as they captured were all great bonuses for us."

– Wolfgang Schram, Director of Video Engineering, Production Resources Group (PRG), Los Angeles, CA

## The Results

The reliability of Lightspeed Live Capture, and the ability to inspect files while they were being recorded, reassured the production team that this extremely valuable, irreplaceable footage was being captured reliably. These high-resolution video masters also preserved important metadata, such as video timecode that identifies exactly when and what was shot.

“The Lightspeed Light Capture units have a compact footprint that doesn’t consume much rack space or power -- that’s a big deal on the road. That and their ability to concurrently capture and copy our masters streamlined our overall live-to-edit workflow, accelerating the process by 3-4 hours per concert. Without Lightspeed Live Capture, we would not have been able to securely capture and deliver multiple hours of hi-res concert footage on such a tight turnaround, show after show.”

– Wolfgang Schram, Director of Video Engineering, Production Resources Group (PRG), Los Angeles, CA

## To Learn More

To get more information about products and services mentioned, call 1-530-470-1300, or see:

- *Production Resources Group (PRG)*, Los Angeles, CA: <https://www.prg.com/>
- *Telestream, Inc., Lightspeed Live Capture* <http://www.telestream.net/lightspeed-live/lightspeed-live-capture.htm>

