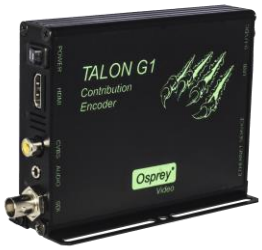
Montgomery County Public Schools Connects With Students on YouTube Through Talon G1

With nearly 160,000 students, Montgomery County Public Schools (MCPS) is the largest school system in Maryland and the 17th largest school system in the United States. The district's full-service television and multimedia facility, MCPS-TV, is an essential communication tool, providing a vital link to students, staff, and the community through quality television and electronic media.

MCPS-TV'S flagship program is a live, interactive call-in show hosted by MCPS teachers called "Homework Hotline Live!" (HHL). During this popular show, which is in its 31st year, students phone in, send texts, or email questions to MCPS teachers, and then they can watch and hear the teachers work through their questions. "HHL" broadcasts live three times a week on MCPS-TV's website and community cable TV channel. In addition, in an effort to meet students where they are on social media, MCPS-TV recently launched the Homework Hotline Live! YouTube channel and began live-streaming every "HHL" broadcast. (MCPS-TV is also just weeks away from launching an HHL smartphone app.)

For most programs, MCPS-TV uses a content delivery network (CDN) for live streaming, a process that involves CDN service fees and the use of the CDN's proprietary server. Since using a CDN for YouTube streaming would be an expensive and cumbersome proposition — and even then, likely wouldn't support embedded closed captions — MCPS-TV wanted to be able to stream "HHL" to YouTube on its own. So MCPS-TV technicians began looking for an encoding solution that would allow them to stream live to YouTube with embedded closed captions. The closed-caption component was critical for meeting federal mandates.



After looking at several streaming encoders, the obvious choice was Osprey Video's Talon G1 three-channel hardware-based streaming contribution encoder. The Talon G1 accommodates the SDI signals coming from MCPS-TV master control. The closed captions come in from MCPS-TV's caption provider and get embedded in the SDI signal that feeds the encoder. From there the Talon G1 converts the video to H.264 and delivers it over IP to YouTube.

"We couldn't find any other streaming device that can do what the Talon G1 does. And it does it in one small, self-contained device that's easy to set up through a simple web interface. Plus, it just works … all the time … with no special care," said John Brittain, an engineer with MCPS-TV. "It also puts out a very good-looking picture to YouTube." MCPS-TV can now stream "HHL" in-house without relying on a special computer or expensive CDN. Since implementing YouTube streaming with the Talon G1, MCPS-TV has steadily added subscribers to its YouTube channel and has even started getting calls from students in other states.

“The Talon G1 saves us a lot of money over using CDN services and equipment, which aren’t even capable of doing everything we need them to do,” Brittain said. “Right now, we’re only streaming to one destination, but if we decide to expand in the future, we will expand with the Talon G1. We won’t even bother to look at other vendors.”