

# Live streaming a music festival

## *featuring Epiphan Pearl*

### Learn how this local festival expanded its reach with easy-to-use, high quality live streaming

The Pretty Good Festival takes place annually outside Oxford, Pennsylvania. The full day, outdoor event features a packed lineup of local bands with a mix of original and cover music.

This year, the event organizers wanted to find a way to increase awareness of the festival and expand the festival's reach to fans outside the local zip code. With YouTube live streaming available at no charge, they knew this is exactly what they wanted to do. They turned to their friends at PTZOptics for help capturing and streaming the event.

### The obvious choice

Given a long festival day and numerous possible camera and streaming hardware operators working different shifts, Paul Richards from PTZOptics knew pulling this off necessitated a solution with an easy-to-use interface that would produce consistent results no matter who was using it or how much (or how little) training they had.

Although PTZOptics had used a computer with streaming software and video capture cards at previous live events, the desire to simplify the live streaming experience made Pearl the obvious choice. *"We like how everything is integrated into a single box. Pearl is definitely one of my favorite pieces of gear for live streaming."* said Richards. He also finds that Pearl's rugged design and hard carrying case make it durable to use and easy to transport to and from the outdoor festival.

***"Pearl is definitely one of my favorite pieces of gear for live streaming."***

*- Paul Richards, PTZOptics*



### EPIPHAN VIDEO

Designers of some of the world's most reliable audio visual communication solutions for live event production, education, healthcare, aerospace, security and transportation.

Our field-proven video grabbers and professional streaming and recording products capture, record and stream video from just about any source. With over 10 years of experience in audio visual communications, Epiphan's family of products deliver critical communications in every industry.

## Putting it together

To make a dynamic and engaging stream for online viewers, Richards wanted to offer both wide views and close ups of the band. To accomplish this, he chose two SDI pan-tilt-zoom (PTZ) cameras: a PTZOptics 12X-SDI and a PTZOptics 20X-SDI. The cameras, plugged into Pearl's SDI ports, were configured with presets for different shots and controlled by a connected RS-232 joystick.

The team created a set of Pearl layouts that included wide shots, close shots and picture in pictures that included both cameras. They added semi-transparent overlay images to brand the video with the event name and logo.

To make sure audio was perfect, Tom Worthington, the audio mixing specialist who handled sound for the bands at the event, provided left and right 1/4" TRS audio for Pearl from the audio mixing panel.

In the final piece of configuration, Pearl was connected to an internet connection with 10 Mb/s of upload bandwidth and the event's YouTube live streaming configuration was copied and pasted in Pearl's RTMP streaming setup.



Throughout the show, operators with varying degrees of technical know-how quickly and successfully learned how to use the camera remote joystick to set camera angles and Pearl's touch screen to perform live switching and production. One of the best parts about this setup was its simplicity and ability to be used by people aren't tech-savvy.



**“The touch screen definitely opens up a whole new audience of live stream operators,”**

*- Paul Richards, PTZOptics*

Using Pearl, the final produced show was simultaneously live streamed to YouTube at 1080p at 30 fps and recorded to the 1 TB internal Pearl hard drive in AVI format.

As an added bonus for performers, Pearl's automatic file upload feature was used to load USB with copies of the produced show for distribution to the bands. The bands were so impressed with the quality of the recorded performances, many have uploaded them to their own YouTube channels.

## Unbeatable results

The result is a nearly **7 hour long YouTube video** with crystal clear 1080p video and audio quality that makes you feel as though you are watching in person.

Richards reports *“The Pretty Good Festival team was thrilled with the results.”* The band performers and their fans were also really pleased with the HD quality recordings provided from Pearl after the show. On location, everyone was amazed at how much Pearl accomplished. Richards tells us *“For a quick and easy plug and play set up, nothing beats Epiphan Pearl.”*

We look forward to seeing next year's festival! Thank you PTZOptics and Pretty Good Festival for sharing your adventure in live streaming and recording your music festival.

# “For a quick and easy plug and play setup, nothing beats Epiphan Pearl!”

- Paul Richards, PTZ Optics

## About PTZOptics

PTZOptics is a HD camera manufacture from Philadelphia, Pennsylvania. We offer HD-SDI, HDMI, USB 3.0 and IP streaming camera (now with h.265). Our cameras feature simultaneous video outputs ideal for live streaming and broadcast video applications.



[www.epiphan.com](http://www.epiphan.com)

Email: [info@epiphan.com](mailto:info@epiphan.com)  
North America +1-877-599-6581  
International +1-613-599-6581

™ and © 2016 Epiphan Systems Inc.

Epiphan, Epiphan Video, Epiphan Systems, its products names and logos are tradenames or trademarks of Epiphan Systems Inc. All other company, interface and product names and logos are trademarks or registered trademarks of their respective owners in certain countries. Product descriptions and specifications regarding the products in this document are subject to change without notice.