

Leeds Student Television
Technical Innovation Entry 2018

LSTV has always been about giving its members opportunities to have a great time making the TV they want to make. This year there has been a key focus on refining the ways in which we produce content, along with making the entire process of making and storing our content easier in aid of assisting in our move to a greater focus on bigger scale videos and broadcasts.

Our office/studio space has received multiple upgrades and quality-of-life improvements to ensure the space is capable of being an efficient and effective hub for content creation, including the incorporation of a DMX software-controlled, rig-mounted four spot setup in tandem with two backlighting bars and a selection of coloured screen rolls, which have greatly enhanced the production values of our content shot there.

Although a few pieces of equipment are new, in many areas we've had to be more resourceful. Despite the lack of almost any external support, we've managed to develop a fast and effective gigabit LAN shared storage solution, made from the ground up from scavenged server components.

On top of this, seeking to enhance the capabilities of our current setup for multi-camera projects, we've switched out our old encoding and broadcasting solution, an aging Teradek Vidi-U, for a much more reliable and powerful software-based option, XSplit Broadcaster, installed in combination with an Elgato capture card. Despite these products being initially created for recording and streaming video games, using them has finally allowed us to take full advantage of our members' skills to create detailed effects and animated transitions for use in live broadcasts, along with the ability to simulcast to multiple online platforms and locally monitor and record the stream in lossless quality for future use.

And speaking of broadcasts, our systems have been put to the test this year with the sheer scale and number we've conducted, the highlight being our eight hour overnight general election broadcast. For this we not only coordinated and managed two multi-camera panel setups on campus, but also regularly switched to our reporters at the results announcement at Leeds Town Hall. Utilising a cloud-based RTMP server, configured using Nginx, we were able to bring live interviews and reports from the other side of the city directly into our main livestream. This doesn't even mention the integration of uniquely designed macros designed to trigger animated graphic overlays that

specified whether an area had been lost or gained by one of the major parties. Since our video hub, the ATEM Production Studio 4K, only has two media player outputs, and a limited media resource pool, we had to specially code the required macros and implement them into an easily usable system using Just Macros, so the many vision mixers for the rotating gallery crew could jump right into the fray with little hassle.

All these improvements have allowed us to push our content and our members' skills much further this year, especially in terms of live capabilities.