



CASE STUDY

Shedding new light on Moorside



Made by ITV Studios and the same award-winning team behind the acclaimed *Appropriate Adult*, *The Moorside* reveals how a group of ordinary women brought the community together as one to try to find a child who had disappeared in their midst.

The focus of the drama is on the spirit and determination of the women who led the local campaign to find Shannon, and the impact on them when the truth was revealed that her disappearance was a sham and her mother knew where she was.

The drama, produced by Ken Horn (*The Street*, *Our Girl*) and directed by Paul Whittington (*Cilla*, *Mrs Biggs*), was shot on the Panasonic VariCam 35. It was written by Neil McKay; the executive producers are Jeff Pope, ITV Studios Head of Factual Drama (*Appropriate Adult*, *Mrs Biggs*, *Mo*, *See No Evil*) and Neil McKay (*Appropriate Adult*, *Mo*, *See No Evil*). The first episode was watched by an average of 9.9 million viewers.

Provision in Leeds supplied two cameras and a lighting package for the shoot, which made extensive use of the dual native ISO feature.

The Director of Photography Stephan Pehrsson, whose previous credits include *Luther*, *Jonathan Strange and Mr Norrell*, and the production team carried out side-by-side camera tests, looking at how they would handle the sodium street lighting prevalent throughout the Moorside estate, where the filming took place.

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"The sodium colour came out so well on the VariCam, the other camera we were testing turned the street lighting quite red," said Stephan Pehrsson. "The VariCam was more orange and yellow, exactly how you would expect it to look."

The VariCam has two native ISO settings: 800 and 5000. This means it achieves very high sensitivity while maintaining a low noise level at 5000 ISO. The noise level at 5000 is nearly identical to that seen at 800 ISO.

The filming took place in January and February 2016, which meant that natural light was limited.

"We tested the 5000 ISO, as well as 1600, but most of the drama was shot at 3200 ISO. Anything you could see with your eyes the camera saw, sometimes more," continued Stephan Pehrsson.

"It was our hope that we could shoot without cherry pickers or large lighting rigs. In fact, our main night lamp was a Velvet LED panel light with a crome orange gel on it and a couple of sodium street lamps to help eliminating the camera and crew shadows we occasionally had problems with. Those sources and the actual streetlamps was all the light we needed using this camera. It was definitely a first for me and I was surprised how well it worked."

"we could spend more time shooting and getting better performances"

"Working at 3,200 did create a little noise, but to be honest it was limited and very easy to clean up in post."

"There are some pitfalls to working with a camera that is capable of capturing usable footage at such low light levels. We had a scene outside the Moorside Community Centre and the light from inside the centre was too bright and made the scene look unnatural. We had to use a 1.2 ND filter on the fluorescent tubes, which is double the normal amount I would use and it still looked bright. So rather than worrying where the light was going to come from, we had to control the light to ensure there wasn't too much."

The innovative modular design of the VariCam 35 allows users to interchange the camera head between the 4K VariCam 35 or the 2/3 type HS. With an optional 5m or 20m extension cable, the camera head can be detached from the recorder to be used on a crane or jib or even handheld.

"Often we were shooting in very limited spaces. The houses are quite small with 10m² rooms and quite small doorways. We used the extension cable to split apart the camera and recording unit. It meant we were able to achieve the handheld, documentary feel we were after without any worries about moving round the houses," Stephan Pehrsson added. "With other cameras it's very likely that we would have wasted takes as inevitably we'd have smacked the back-end of the camera on the walls and doorways. But with the compact camera and a grip right behind the operator carrying the recorder end of the camera and a battery, we could move around the locations with ease."

VariCam was used in conjunction with 35mm Cooke S4i's and Angenieux Optimo 15-40 & Angenieux Optimo 45-120 lenses, and shot at ProRes 4444, as the BBC didn't request 4K.

"This is a delicate subject matter, and we were looking for something authentic. In the past I've used an Arri Alexa, the VariCam performed as well as an Alexa during the day, with the bonus that we were able to get great usable footage at night with minimal light," added Stephan Pehrsson.

“Our mission was to be as invisible as possible, to allow that cinéma vérité feel. Because we weren’t spending so much time resetting lights, we could spend more time shooting and getting better performances from a brilliant cast. We were shooting each setup 7 or 8 times as we were able to turn around on the location so quickly. I pity the DIT who had to deal with such a massive amount of material.

“The Line Producer loved it, the economic saving from having such limited lighting on set allowed us to bring in more extras, which just enhanced the show.

“Keeping it small meant that we were also able to have a much lower profile. Obviously it is a sensitive subject and we didn’t want to over-do it. In actual fact, we had such a minimal lighting set-up that Jeff Pope, the Executive Producer, came on set and couldn’t find us. Normally you can’t miss a drama crew.”

Photography courtesy of Stuart Wood