

CASE STUDY

ARENA TELEVISION



PHABRIX's Qx 12G and Sx Series selected for Arena Television's growing OB portfolio

Introduction

By their very nature, live OBs always come with a high degree of pressure, given that they offer a single opportunity to capture the action – whether a sports match, a public event or a live link from a special location. With an inherent risk of the unexpected, outside broadcast companies work hard to eliminate as many variables as possible – including choosing the best test and measurement solutions to keep broadcasts legal, on schedule and delivered with optimum quality.

Growing demands

Family-owned since its inception nearly 30 years ago, Arena Television is one of the UK's largest outside broadcast facility providers, with a fleet of 12 production trucks and numerous support vehicles. Arena holds contracts with the nation's major broadcasters to provide coverage of events, music, large studio shows and sport.

To meet the growing demands of these high profile broadcasters and sports events, Arena Television continually pioneers advanced OB broadcast technology, the latest of which is the world's first glass-to-glass IP-based UHD HDR OB fleet. The first of these vehicles was launched in 2016.

With these large and complex files and a new reliance on IP technology, it was imperative that the quality of content was guaranteed, so testing played a key part in the vehicle specification.

"As we embarked on the design of OB X, our first IP UHD unit, we engaged with a number of vendors to explore their UHD HDR test and measurement portfolio," recalls Dafydd (Daf) Rees, Deputy Director of Operations at Arena Television. "Our main criteria were real world usefulness with detailed analysis, a simple user interface for complicated tasks, and cost efficiency."

Selecting PHABRIX

After considering various manufacturers' systems, the Arena team selected two PHABRIX solutions: for critical in-rack UHD and HDR monitoring, they chose



Arena Television: OBX

the top-of-the-range Qx 12G signal generation, analysis and monitoring solution, which is designed for next generation, hybrid IP/SDI environments using 4K/UHD (12G/6G/3G-SDI) and HD-SDI plus SMPTE IP formats; and for handheld testing, the Sx portable system was the ideal choice.

While there were many options, the choice of system – and company – turned out to be a relatively simple one. "The range of PHABRIX' analysis tools, particularly in the UHD and HDR domain is quite spectacular, all with a user interface that doesn't require a thick manual to navigate," says Rees. "As well as an adept product range, PHABRIX's enthusiasm for the product and how it fits in our project made their offer quite compelling. Plus, there's no question that the PHABRIX products are solid value for money."

Launching OB X, OB Y, OB Z & OB12

Since launching the OB X in 2016, Arena Television has added a further three IP UHD HDR vehicles to its fleet – OB Y, OB Z and a double-expander named OB12. Each of them is built around a powerful IP core developed in conjunction with Grass Valley and Cisco, and each one has PHABRIX Qx and Sx test and measurement solutions on board.

PHABRIX' Qx 12G offers the latest hybrid IP/SDI test and measurement tools required for the transition to the next generation of broadcast industry standards, including the latest SMPTE IP formats. Other major features of the Qx Series include the Packet Profile Generator (PPG), offering an advanced toolset for stress testing video networks, and Packet Interval Timing (PIT)