



## CASE STUDY

## Metro Broadcast Boosts HD Capability With Ukon™ Universal Conversion Platform

Snell & Wilcox's Ukon shares duty with Archangel™ Ph.C for HD mastering

"We receive a lot of masters in 24p, and until we began using the Ukon, there was no straightforward way to up or downconvert material in that format," said **Richard Baker**, media and operations manager at Metro Broadcast. "We do envisage the HD market expanding quite rapidly over the next year to 18 months, and the added conversion capability we have with the Ukon gives us significantly greater flexibility in the HD environment."

### The Customer

Metro Broadcast has 25 years experience in providing pioneering services to the broadcast market in the United Kingdom. The company, with offices in London, Edinburgh, and Glasgow, offers an unrivaled range of services including editing, duplication, content restoration, equipment rental, live events, webcasting, and digital media. Metro Broadcast was one of the first companies in the U.K. to invest in high definition, establishing itself as a pioneer in use of the technology.

### The Challenge

With an increasing number of client masters arriving in 24p, Metro had no elegant way to up or downconvert to formats such as 25 or 60 fps. In addition, the facility needed to upconvert standard definition video to HD for broadcast.

### The Snell & Wilcox Solution

Metro acquired Snell & Wilcox's Ukon, a platform that provides upconversion, downconversion, and crossconversion, either singly or in any combination. Designed to handle different frame rates, image sizes, and aspect ratios, Ukon includes features such as tilt, pan and zoom, timecode conversion with precise frame mapping, comprehensive audio handling, and 3:2 cadence detection and repair. Unlike any other format conversion system, Ukon executes all these functions at the same time, in a single pass. Frequently used conversions can be programmed for reuse at the touch of a button.

Ukon allowed Metro Broadcast to add flexible SD and HD conversion capability to its VT duplication and restoration areas. A shared resource in the facility's machine room, the Ukon is being used as an upconverter for restoration on a Snell & Wilcox Archangel Ph.C system and as a duplication tool for Metro's increasing volume of HD mastering work.

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► The addition of the Ukon has given Metro the ability not only to crossconvert 24p masters to formats such as 25 or 60 fps as required, but also to upconvert SD material for HD broadcast.

“We receive a lot of masters in 24p, and until we began using the Ukon, there was no straightforward way to up- or downconvert material in that format,” said Richard Baker, media and operations manager at Metro Broadcast. “We do envisage the HD market expanding quite rapidly over the next year to 18 months, and the added conversion capability we have with the Ukon gives us significantly greater flexibility in the HD environment. It’s a simple yet highly functional solution that makes our work much easier.”

**The Results**

The Ukon has enabled Metro Broadcast to take on SD-to-HD conversion projects. Among the most notable was the company’s conversion of a Cadillac commercial, originally produced in SD, to HD for playout during the HD broadcast of Super Bowl XXXIX. Metro Broadcast was able to integrate the Ukon into its operations quickly, and it proved to be a “plug-and-play” solution that delivered a new level of flexibility in handling format conversion.

“With the Archangel Ph.C and Alchemist™, and now the Ukon, we’re quite a big Snell & Wilcox house,” added Baker. “We’ve expanded our HD operations significantly, and with the Ukon being an integral part of our facility, we’re able to offer clients an exceptionally versatile conversion unit with performance surpassing that of other available solutions.”

**Archangel Ph.C**

Source: SDI A  
Material: (Video)  
Standard: (525)  
File phase: (1:1)  
Reference: Input  
Clock: 100.000

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