

Surveyors Opt for 360 Degree Colour Imaging



Capturing the finer details and colours of a Norman castle for an orthophoto can be challenging. One survey company found the Spheron HDR camera was just right.

There is an increasing demand for survey companies to use technology which effectively captures reality, right down to tiny details. One device which can help is the Spheron SceneCam, a unique mobile reality capture device – an automatic camera technology which is able to provide full spherical imagery of sites or locations. The camera captures high quality full spherical HDR 360° × 180° uninterrupted views and is also able to provide 3D measurements.

Following extensive evaluations of different colour imaging technologies, MK Surveys found that the Spheron camera's ability to automatically capture high quality HDR environments along with the SceneCenter visual asset management software offered a compelling advantage. MK invested in the HDR Camera and it has already been busy on a prestigious cultural heritage project.

They were commissioned to undertake a measured survey of the famous Oxford Castle, a grand Norman medieval building situated on the western side of Oxford, England. Lewis Hook, MK's survey manager explains 'We were contracted to document an underground part of the castle beneath St George's Tower. It was an area with minimal lighting known as the St George's Chapel Crypt.'

Hook found 'the camera's ability to capture automatically precise clear colour details of the 11th-century Norman column structures was exceptional. Both the high dynamic range and high resolution plus additional lighting capabilities allowed us to record excellent image quality throughout.'

The MK Surveys' team set out to use the data for a number of deliverables, such as the best HDR colour to apply to the laser-scan point data. 'Unlike other systems we had previously tested, this RGB overlay process was simple and the tone-mapped imagery matched the laser-scan data precisely with no parallax distortion issues,' adds Hook.

The data was also used in the production of orthophotographs, which formed a necessary part of the preservation documentation requirements as well as aiding in the digitizing of the captured detail within MK's CAD software. 'Being able to see such clear details, really assisted our CAD technicians to accurately highlight the ornate stone details,' explains Hook.

MK Surveys director, Stuart Dimond adds, 'Capturing reality is an emerging development within our geospatial markets and we see our investment in Spheron as a great complement to this. Spheron's image sensor technology delivers superb clarity, ensuring we can record onsite every detail, which can be vital on some of our latest client projects.'

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