Press Release

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Automatic Stereo Production – a new camera system with integrated pre- and post-processing for 3D stereo data

3D Production – Compact and Automatic

Raising quality and lowering costs in 3D stereo production was the mission of the Automatic Stereo Production (ASP) project. ASP is a project of the 3D Innovation Center at the Fraunhofer Heinrich Hertz Institute with its partners Fraunhofer IIS, Carl Zeiss, KUK Film and P+S Technik. It has developed a concept for a compact and easy-to-use camera system for 3D stereo production whose integrated automation technology completely does away with the usual need for manual pre- and post processing in 3D stereo production. This concept for an automated side-by-side camera system is now being premiered at NAB 2013.

To keep the 3D camera system as compact as possible, Fraunhofer HHI and its partners use miniaturized powerful components like the zoom objective of Carl Zeiss. At the same time, the system’s side-by-side setup critically means that it has no need for mirrors which not only take up a great deal of space and are expensive and easily damaged, but also have a negative impact on the quality of the 3D image through loss of brightness and color shifts. This makes the ASP camera system easy to operate and also reduces the potential for loss of quality.
What’s more the ASP camera system also features integrated automation technology which uses complex algorithms to configure and correct the parameters for the quality of 3D capture – such as color matching and the settings of the two cameras – electronically and in real-time. Thus there is no longer any need for the usual lengthy manual setup procedure for cameras in stereo production – nor for post-processing once the film is shot. This is made possible by the STAN stereoscopic analyzer assistance system. STAN sends the values computed for a particular shot directly to the two cameras, and identifies incorrect settings which can either be manually or automatically corrected. STAN is an integral part of the ASP camera system which reduces both time and costs whilst also offering guaranteed improved stereo picture quality.

The 3D Innovation Center
Specialized in 3D production, 3D content and 3D distribution, the 3D Innovation Center at the Fraunhofer Heinrich Hertz Institute opened in August 2012 and offers its 50 partners from industry and science both an experimental playground and a marketing environment. Partners can participate in the Center’s Steering Committee to help shape the future of the 3D Innovation Center while numerous working groups offer them the opportunity to discuss and debate forward-looking themes. The solid expertise of the Center’s partners across the whole 3D systems chain generates new synergies in product development, marketing and distribution, and helps give the Center a prominent position both on the market and in the public eye. For more information, see: www.3dinnovationcenter.de

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