

Press Release

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TILL Photonics Introduces New Microscope Z-Drive “VoiceCoil” at the Annual Meeting of the Neuroscience Society 2011 in Washington

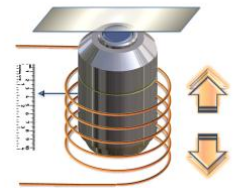
TILL Photonics introduces “VoiceCoil”, the fastest microscope z-drive in the industry. It combines the range of a stepper motor driven coarse drive (22mm) with the precision of a piezo at an exceptional speed. Accuracy of 20nm pp is available at full range, thus enabling 3-D scans of unprecedented quality. Settling time for a 2µm step is 10ms allowing z-stacks which are only limited by the speed of the camera. A voice coil drive works similar to a dynamic loudspeaker where the coil is moving the membrane of the speaker. Simply speaking: In TILL’s VoiceCoil the membrane is replaced by the microscope objective. Here, however, a very precise optical position measurement system with a closed loop feedback ensures nm precise position control of the objective. The VoiceCoil z-drive will be used in TILL’s digital microscope iMIC. For more details please visit TILL Photonics at booth 3017 during this year’s Neuroscience Meeting at the Convention Centre in Washington, 13-16 November 2011.

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[www.till-photonics.com/
Products/voicecoil.php](http://www.till-photonics.com/Products/voicecoil.php)



Principle of VoiceCoil z-drive



Objective mounted on VoiceCoil drive

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TILL was founded in 1993 as systems provider for fluorescence microscopy. From its very beginning TILL had placed its focus on the development of innovative, enabling technologies for the study of live cells. Setting out with a novel light source for ratio imaging and the first real-time imaging system on the market, TILL developed a novel, award-winning microscope platform concept, which allows integrating an unprecedented number of functionalities into a single instrument. Based on this technology TILL has subsequently become a provider for complete microscope systems, and the new TILL intends to step into these footsteps and plans to extend the platform concept in order to grow into a wide range of markets, both in basic research, screening and medical diagnostics.

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