

8 December 2016

The Manager ASX Limited Exchange Centre 20 Bridge Street Sydney NSW 2000

Dear Sirs,

## Audio Pixels Collaborates with Bar-Ilan University, to develop wearable devices that will enable congenital blind people to "see"

Audio Pixels Holdings Limited (ASX: AKP and OTC: APDXY), a leader in the digital transition of loudspeakers, is pleased to update its previous announcement of November 4<sup>th</sup> 2016, that it has delivered a number of sample acoustic transducer chips (our MEMS Chips) to Bar Ilan University. The chips will support and advance development efforts by Bar Ilan University to produce a wearable device that can be used to restore sight to visually impaired and congenital blind people.

The patented technology, which has been funded in part by Israel's Chief Scientist has been developed by a joint team of experts from Bar Ilan and Tel Aviv Universities. The technology consists of a tiny camera that receives visual information from the environment, processes it, and spatially stimulates the cornea in a non-contact manner via ultrasonic pressure waves. The ultrasonic pressure waves generated by Audio Pixels transducers stimulate the cornea with spatial tactile sensations that are passed to the relevant sensory brain areas. The usage of Audio Pixels transducer serves to eliminate a number of complications associated with previous versions of the technology involving contact lenses. The current spectacle mounted version leverages the ultrasonic frequency regime of Audio Pixels' transducers' to stimulate the cornea in a noncontact manner.

"This technology is good news for humanity, in bringing sight without requiring surgery or damaging other vital senses or organs, especially for people who have been blind from birth," says Prof. Zeev Zalevsky, head of the electro-optics track in the faculty of Engineering at Bar-Ilan University, who heads the research team.

The techniques to encode and transmit the image information to the cornea using Audio Pixels MEMS devices are being developed by Professor Zalevesky's team. "This specific collaboration bypasses our need to first complete the acoustic integration between our MEMS and transducer and ASIC controller thus ensuring our development teams continue to maintain their full focus on fulfilling the acoustic related requirements of our industry altering loudspeakers." said Shay Kaplan Audio Pixels' Chief Scientist.

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Beyond the commercial value associated with a technology that contributes to the betterment of humanity, this effort with Bar Ilan helps to substantiate management's assertion that Audio Pixels technological platform has far reaching applications that extend well beyond the commercial markets of loudspeakers.

Yours faithfully,

Fred Bart Chairman



## **About Bar Ilan University and Professor Zalevsky**

The technology of the tactile spatial stimulation of the cornea was invented by Professor Zeev Zalevsky from Bar Ilan University and Professor Michael Belkin from Tel-Aviv University.

Bar Ilan University is a leading institution of higher education in Israel, comprised of some 30,000 students from Israel and abroad. Bar-Ilan is notable for its pursuit of cutting-edge scientific research, in Nanotechnology, Engineering, Medicine, Multidisciplinary Brain Research Life Sciences, Exact Sciences, Social Sciences, Humanities, Jewish Studies, and Law. The faculty of Engineering was established at 2001 conducts cutting edge research in the fields of electro-optics, nano-electronics, signal processing, data communication, bio engineering and computer engineering.

Professor Zeev Zalevsky serves as Vice Dean of the Faculty of Engineering where he heads the Electro-Optics study program in addition to his role as Director of the Nano-Photonics Center at the Institute of Nanotechnology and Advanced Materials. Professor Zalevsky is world renown for his work in super optical resolution. In addition to being the holder of over 50 international patents, Professor Zalevsky has published more than 450 refereed journal papers, over 250 conference proceeding papers, and 6 authored books. For his work Professor Zalevsky has received many national and international awards such as Krill, Juludan, ICO, SAOT, NANOSMAT, Image Engineering Innovation prize and the serial innovator award. He is the fellow of OSA, SPIE, IET, EOS and a senior member of IEEE. As well as being an associate editor of the journal of Optics Express and IEEE open access journal.

## **About Audio Pixels Holdings Limited**

Audio Pixels Limited, founded in 2006, is a wholly owned subsidiary of Audio Pixels Holdings Limited, listed in Australia under the stock code of AKP (ADR's on NASDAQ International under the code ADPXY). Backed by exceptional multidisciplinary scientific research, design, and production capabilities, Audio Pixels has become a world leader in digital loudspeaker technologies. Audio Pixels' patented technologies employ entirely new techniques to generate sound waves directly from a digital audio stream using micro-electromechanical structures (MEMS). Its revolutionary technological platform for reproducing sound enables the production of an entirely new generation of speakers that will exceed the performance specifications and design demands of the world's top consumer electronics manufacturers. For more information, visit <a href="www.audiopixels.com.au">www.audiopixels.com.au</a>

## **Forward-looking statements**

This release may contain certain forward-looking statements with respect to the financial condition, results of operations and business of AKP and certain of the plans and objectives of AKP with respect to these items. By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future and there are many factors that could cause actual results and developments to differ materially from those expressed or implied by these forward-looking statements.

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