

## **Universal Display to Develop Infra-Red Phosphorescent OLEDs on Metal Foil**

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Universal Display Corporation, a leading developer of organic light emitting diode (OLED) for flat technologies for flat panel displays, lighting and other opto-electronic applications, has been awarded a \$69,999 Small Business Innovation Research (SBIR) Phase I contract by the U.S. Army Communication Electronics Research and Development Engineering Center, in Ft. Monmouth, NJ . This contract is aimed at developing a novel, top-emission infra-red pixel on metal foil substrates for use in military applications utilizing the Company's proprietary PHOLED TM phosphorescent and top-emission OLED display technologies.

The focus of this project, entitled "Flexible Day/Nighttime Phosphorescent OLED Displays," is on developing novel infra-red emitting OLEDs that will be compatible with current-generation night vision capabilities employed by the military. These devices can be incorporated into a color display with conventional full-color emitting pixels to produce a display that has both daytime and covert nighttime functionality. Integrating these visible and infrared-emitting OLEDs on a flexible steel foil substrate will provide a rugged package to ensure survivability in an uncontrolled battlefield environment.

This program is part of a larger initiative in which Universal Display and its university partners have pioneered the development of a number of key proprietary OLED technologies to enable flexible OLED displays on steel foil substrates, including the Company's PHOLEDs which address the need for high-efficiency, together with its TOLED top-emission



OLED and FOLED flexible OLED technologies.

"We are very pleased to add this new project from the U.S. Army to our current work on developing flexible OLEDs on metal foil," stated Steven V. Abramson, President and Chief Operating Officer of Universal Display Corporation . "We believe that this program can result in another advanced military application designed to help commanders and soldiers alike communicate better on the battlefield. In addition, the development of novel infra-red OLED materials themselves may further broaden the potential for a host of military products including helmet mounted displays, and may also lead to novel uses in the commercial and consumer sectors."

The Federal SBIR Program is designed to stimulate technological innovation in the small business sector and typically consists of three phases. During the first phase, the scientific, technical and commercial merit and feasibility of a novel idea is demonstrated. If successful, a subsequent Phase II program might be awarded that is typically \$500,000 to \$750,000 over a 24-month period, to pursue further research and the development of a well-defined prototype. Universal Display Corporations has been awarded seven Phase II programs to date as a result of its success during its Phase I programs. In a final Phase III program, the demonstrated prototype is developed into a viable product for sale to the military and/or private sector.

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