

# DHS Science and Technology Directorate

## Activation of Body-Worn Cameras without Responder Manipulation

### Promoting Transparency and Accountability

Body-worn cameras worn by law enforcement officers improve transparency and promote added accountability during police interactions with the public such as traffic stops and arrests. Yet, they are particularly useful for capturing and recording “unusual situations.” In response to growing demand from police departments and increasing concern from the public, the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) is working with Hitron Technologies, Inc. (HTI) to develop and pilot body-worn cameras that can activate without the user manually turning on the camera.

### Project Description

HTI will develop a multi-factor automated activation system for body-worn cameras. This device will be comprised of individual sensors, which will activate a camera for data capture automatically in response to certain critical events – upon the removal of a responder's weapon from its holster, upon exit from vehicle, upon recognition of elevated voice or sound levels, or upon detection of elevated physical stress, in addition to both manual activation and remote activation by a third party.

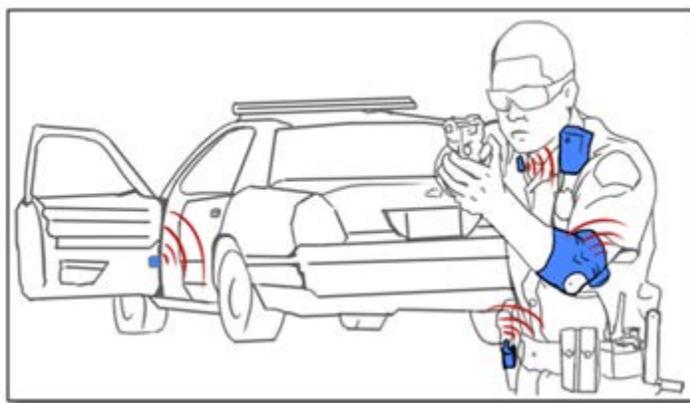
The sensor system is intended to supplement and improve the current process of camera activation rather than replace it. Under normal circumstances, the first responders will be following standard local procedures regarding camera activation, capturing sound and video data as needed. However, under exceptional circumstances, such as a sudden emergency or confrontation, or simply because of human error, the standard procedure might not be followed. The sensors are intended to ensure that camera activation will occur even in unusual circumstances.

The system consists of an activation device for an existing body-worn camera (or alternatively, a standalone body-worn camera device provided by HTI) and a collection of independent sensors with wireless communication capabilities. This collection of devices may either be utilized independently or as an enhancement for existing body-worn camera systems, potentially reducing expense and increasing the likelihood of device adoption. A software suite will allow remote activation via interface with common smartphones.

The system will be able to be retrofit into existing body-worn cameras, as well as be incorporated into a standalone camera.

### Efficiency without High Costs or Workload Impact

The system aims to offer significant benefits to police departments and personnel around the country. The introduction of automatic activation allows body-worn cameras to be utilized with maximum efficacy, with minimal impact on procedural workload and minimal additional expense.



System Concept – A collection of sensor units communicates wirelessly with the camera unit to activate video recording

### Project Activities and Milestones

The Activation of Body-Worn Cameras without Responder Manipulation effort objective is to develop the project elements from proof-of-concept models to fully functional prototypes to be used in real-world testing. The project established feasibility during Phase I, and is now focused on developing sensor and camera unit hardware designs and performing functional testing.

After construction of the test units and system testing is complete, the final phase of this project will develop the prototype units and perform complete system testing to ensure the sensors and wireless communications operate as expected. This activity is slated to begin in late 2017 and conclude in March 2018. During this testing and evaluation period, DHS will conduct an operational field assessment with police departments and law enforcement personnel to determine how well the system performs in real-world situations.

