

### **University of Huddersfield Repository**

Silkstone, Robert, Greenwood, Oliver, Hoare, James and Marriott-Manning, Calum

Using light and sound to make a house seem occupied

#### **Original Citation**

Silkstone, Robert, Greenwood, Oliver, Hoare, James and Marriott-Manning, Calum (2016) Using light and sound to make a house seem occupied. In: Secure Societies Institute Launch, 17th March 2016, 3m Buckley Innovation Centre, Huddersfield.

This version is available at http://eprints.hud.ac.uk/id/eprint/27928/

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

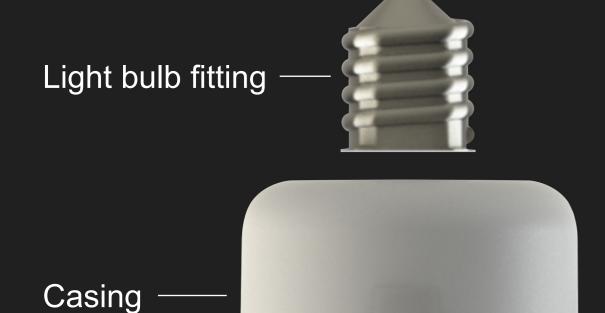
http://eprints.hud.ac.uk/

# Using light and sound to make a house seem occupied

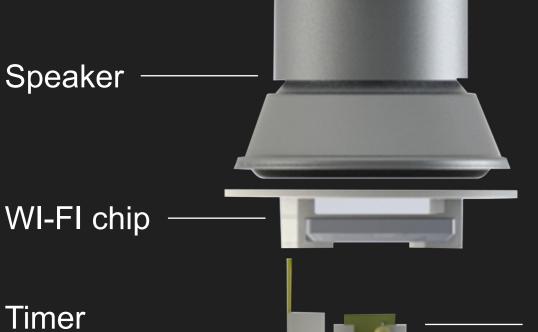
Product Design BA/BSc Yr.1 Lead Supervisor: R. Silkstone r.silkstone@hud.ac.uk Authors: O. Greenwood, J. Hoare, C. Marriott-Manning

# PRESENCE

Presence is a stand-alone product that attaches into a light bulb fixture in between the fixture and the light bulb.



Presence responds to a doorbell and door knock by playing household sounds and also turns the light on and off at random or present intervals to give the perception that the house is occupied.



circuit-board

Infrared receiver
Sound sensor
and Mic







### Research question / opportunity

The direction of the design was driven by research into burglary statistics as well as primary research into a burglar's mind-set. The Office for National Statistics stated that 63% of attempted burglaries occurred at night [1], as this is when there is a lower risk of confrontation. Having found that burglars often knock on doors and ring doorbells to see if a house is empty, a key focus was to create a product which would give the impression that a house is occupied. If a house seems occupied then a criminal would be much less likely to try and enter it.

## **Conclusions / recommendations**

Having received feedback from the industry panel, it became clear that there were no products similar to this on the market. It was said that as a retro fit product it would be easily marketable, and could appeal to a large audience.

A key recommendation is compatibility with a smart phone. This would benefit a younger demographic as it would allow the product to be controlled from their device. The user would then be able to remotely set the device if they had left the property without having set it.

### References

