# Brief description of AFM2 protocol and operation

All Xanboo products have a uniform communication protocol. The only variation within the range of products is the method of trigger and operation

# The communication protocol:

Modulation: FSK Manchester encoded 50kHz swing.

Duration: less than 20 mS.

The code structure: A Preamble, followed by device class ID, device serial.

number and trigger code Frequency: 418 MHz

Operation Cycle: Typical operational cycle for all devices is anticipated to be less than four per day when Armed. In most cases when the premises are occupied the system is unarmed.

### Operation

### XWS50M

When this device is Armed and a movement is detected, the device sends one packet of code as above and then goes back to the sleep mode to conserve battery. The devise has a minimum silent time of:10s before it can be triggered again.

#### XPC240

This device can be commanded to Turn on a load connected to it via the above code structure.

It acknowledges the command and activates the load.

#### XWC900

The motion detector in this device, when Armed, turns the Camera section on causing it to send an analogue video signal (Via the 2.4 GHz transmitter) to the Gateway. This is preceded with one packet of code in accordance with the above structure.

This device can also be turned on Via the Gateway in a similar fashion.

### XSC501

This device sends one packet of code in accordance with the above protocol every time it is triggered. This can be initiated by a door opening, detection of moisture or similar event. This device also has the ability to transmit ambient temperature within the same code structure.

# XWC700

The operation of this product is identical to XWC 900.

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