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WatchOUT DT detector – operational description

The unit is a wired Dual Technology Outdoor detector, powered by 9-16VDC by a power supply (usually control panel).

The unit incorporates a PIR (Passive Infrared) channel and a 10.525GHz MW channel.

The MW channel is implemented by a X-band module transceiver based on the Doppler Effect, which transmit pulses and upon the frequency change of the received pulses can detect movements. The module is sending pulses in two frequencies around the center frequency with a deviation of 5Mhz max between them (example 10.522 and 10.527Ghz)

Upon detection of movement in both channels the detector will send an alarm signal.

Time Domain specifications:

1. The unit will transmit continuously.
2. The unit transmit a 2x 12us CW pulses every 500us
3. The 12us pulses have a fixed frequency deviation between them of 5Mhz max
4. The unit is in this transmission mode from power up and has no other work modes regarding the MW transmission.