



Seriously solid, or sensor overload?

Visonic - Tower 20 AM MCW

In recent years there has been a substantial growth in the use of external detection devices, and the products within this sector that are currently sought after are wireless options. Visonic offers the Tower 20 AM MCW, which utilises no less than eight detection elements to deliver reliable and stable performance.

The recent recession has had an effect on many industries, and amongst the general tightening of belts, a large number of companies are also having to rethink their levels of vulnerability to risk. Sites that were considered low risk in pre-recession times are now considered high risk, as crime trends shift on a number of levels.

Because of the way that certain crimes are traditionally viewed by society, it could be argued that some of the trends are catching businesses unawares. Also, certain trends are creating losses that cost more than the total worth of the items stolen.

The theft of metals has hit epidemic levels in the UK. Whilst stealing scrap metal might be considered by some as a less than serious crime, the cost of replacing items is often passed on to the public. However, the rising price of scrap metals has seen metal theft skyrocket, and the implications now outweigh the cost of the materials.

For example, the theft of cables for their copper cores has risen, and often there is a bigger issue than the cost of replacement. The items have been stolen from traffic management applications, railways and other sites where they play a role in safety solutions. Delays and a lack of safety measures have caused transportation links to be shut down.

Another sector that has suffered is the construction industry. Materials have been targeted, as has heavy plant. These losses have led to delays in projects, which has a knock-on

effect with regard to several other industries - including security installation and systems integration!

In rural areas, record levels of poaching and rustling have been reported.

One thing many of these crimes have in common is that they are committed in external locations that have been left unsecured due to a lack of infrastructure. It is because of this that external detectors - and particularly wire-free variants - have become much sought after solutions. Visonic's offering in this space is the Tower 20 AM MCW.

Specification

The Tower 20 AM MCW is a wireless external detector. It delivers a coverage pattern of 90 degrees, with a range of 12 metres. External detectors need higher levels of reliability and stability when compared with internal options, and to achieve this Visonic uses what it refers to as Octa-Quad technology.

Octa-Quad technology makes use of eight independent PIR quad detection elements.



84%

BENCHMARK RATINGS

Product Design:	84%
Features and Functions:	82%
Ease of Installation:	85%
Stability:	85%
Catch Performance:	85%
Overall Rating:	84%
Tel: 0845 075 5800	
www.visonic.com	



Download the Tower 20AM specsheet



Each element has its own true motion recognition processing, as well as a central processing engine. This advanced level of processing delivers results that allow a definition between genuine human motion and innocuous movement in the protected area, according to the manufacturer.

Being designed for external use, the detector requires a high level of accuracy. The unit features a black mirror, as well as smart protection to ensure that performance is not affected by climatic or environmental conditions.

The unit is also immune to animals up to 18kg in mass.

The detector uses the Powercode protocol for communication. Our test unit was linked to an MCR-308 Powercode receiver.

The detector is powered by two CR123A batteries. Battery life is quoted as three years for typical use. A hard-wired version of the detector - the Tower 20 AM - is also available.

One point to note is that the instruction sheets refers to 'night and day or night only settings'. The DIP switches do not offer such functionality. This is included in the hard-wired version, but its appearance as a spec for the wireless model appears to be a mistake.

Installation

The installation is not going to be an issue for any competent installer or integrator. The cover base is removed; it is held in place with a single cross head screw, and is tamper protected. This then reveals a sealed compartment cover held in place with three screws. This is removed to show the two battery compartments (batteries are supplied) and a four way DIP switch block which is where the settings are carried out.

Mounting the unit is straightforward, and the detection head can be adjusted through vertical and horizontal planes. The unit does include an instructions addendum regarding positioning, but it's relatively obvious, including information like not pointing the unit at a low boundary onto a street!

Once the batteries are inserted the unit goes into walk-test mode for 15 minutes. The walk test can be initiated at any time using the tamper switch. This is also used to activate the detector when enrolling the unit.

Once mounted, the only adjustments are made via the DIP switches. These are for LED enable or disable, false alarm filtering for normal or harsh environments, anti-mask on or off, and masking attempts signalled as masking or tamper and masking.

That's all there is to it, aside from enrolling the device which will depend upon which panel or receiver you are using.

Performance

When it comes to external detection, there are always a host of conditions that will cause false alarms. Obviously in such applications it would be foolhardy for any installer or integrator to specify space detectors. Benchmark used two sites with varied conditions, but all were within levels that an external PIR should be able to cope with.

False alarm levels were very low; it would be fair to say that after an initial tweak or two within the first few hours there were no false alarms. During the test period there were a few torrential downpours, but the weather was pretty well behaved for November in the UK. Towards the end of the test a firework display was held in an adjacent site, and this caused no problems at all.

The detector's range was spot on, and you could probably push it a bit beyond that without issue; just walk test first!

All actual intrusions into the protected area were detected, and detected rapidly. Attempts to cloak genuine motion did slow the detection time a tad, but the attempts were all sensed, and often more rapidly than we'd expected. Masking attempts were also detected swiftly.

In our experience, the Tower 20 AM MCW worked and it worked well. Of course, the real test for such devices comes over time, and as environmental conditions change. However, we have no reason to suspect it won't deliver.

Verdict

The Tower 20 AM MCW has some interesting technologies. However, for the installer, it feels very much like a basic detector. This isn't to detract from its performance, which was good.

In the near future, we'd like to see how it compares with other options available in the wireless external detection market.