

Latest digital night vision technology on show at the 2012 New Zealand Security Conference.

A range of Pulsar professional night vision systems were on show at the 2012 New Zealand Security Association Conference, which gained a great deal of interest from a variety of potential end-users. Systems on show included monoculars, binoculars, digital night vision recorders, and thermal imaging units. Particular interest was shown in the new digital night vision systems due to their combination of performance and cost effectiveness.

Digital technology has revolutionized nearly every aspect of our lives, from photography through to our banking system, delivering faster, easier, and more cost effective ways of living and working. Digital night vision (DNV) systems are at the cutting edge of night vision technology, and are gaining worldwide popularity for security, law enforcement, and surveillance operations.

Traditional night vision systems use an image intensifier tube (IIT), which is a technology that was first developed in World War 2, and that works on the same principle as the old cathode ray tube (CRT) television. Though high-end IIT systems still represent state-of-the-art performance, they are costly, prone to bright light damage, and have reached the end of any feasible further development.

DNV systems use a highly sensitive close couple device (CCD) array that is optimized for the near infrared spectrum. These CCD arrays are able to withstand bright light exposure, are easier to mass produce, and can have a whopping 25,000 hour mean time to failure (MTF). Extra features such as video-out sockets, in-built digital recorders, and image enhancements are easily incorporated into a DNV unit. DNV systems also represent outstanding value, costing only a fraction of their analogue IIT counterparts, which is the trend with any digital system (remember how much new CRT televisions used to cost).

Pulsar Systems USA Inc. are a major player in the night vision market, and are global leaders in DNV. Their hand-held Pulsar Recon 550R epitomizes what is possible with a professional DNV system, with performance and features that are extremely useful in any situation where covert observation in complete darkness is necessary, especially when an offender may be armed. This unit is already in use in New Zealand, having been evaluated and purchased by the Ministry of Primary Industries for use by their Fisheries Compliance and Response officers.

The advantages of the Pulsar Recon 550R can be summed up by performance, features, and cost as follows:



Pulsar Recon 550R



The Pulsar Recon 550R with the 'Stealth' illuminator is easy to hold and use with one hand.

Pulsar products are available from Archetype Precision Systems Limited, who are the exclusive New Zealand and the South Pacific distributor.

Performance

The Pulsar Recon 550R produces a high resolution black and white image that is capable of detecting a person at 250m in normal night-time conditions (starlight/quarter moon), but can also be used in total darkness with the aid of a 940nm infrared 'stealth' illuminator (supplied with the unit), which has the added benefit of making black clothing look bright.

Features

The Pulsar Recon 550R is lightweight and compact hand-held unit with an in-built digital video recorder with a motion detection mode for remote surveillance. The video and stills are stored on an SD card, and can be time and date stamped for evidential proof or to support written evidence. The unit has four viewing modes, normal- for good detail rendition; high contrast- enhances the image in low contrast situation; green image- more restful for prolonged observation; red image- helps to retain natural night vision.

Cost

A Pulsar Recon 550R and 'Stealth' illuminator kit cost less than \$1400, which is remarkable for a professional night vision unit, especially when it has the ability to record. Other models in the Pulsar Recon range start from around \$800, up to around \$2500 for the soon to be released Pulsar Recon X750. (All prices plus GST)

DNV systems are readily available, and due to their low investment cost, are another useful tool for increasing the efficiency and safety of security personnel, private investigators, and law enforcement officers.

Spot'em with a Pulsar night vision system.



Pulsar Recon 550R
Digital night vision video/still recorder

Pulsar Quantum HD38
Professional thermal imager



Pulsar Edge GS 2.7x50
Night vision binocular



www.pulsar-nv.co.nz ph: 03 9700 570

Burglar recorded with a Pulsar Recon 550R at 70 metres in very dark conditions.

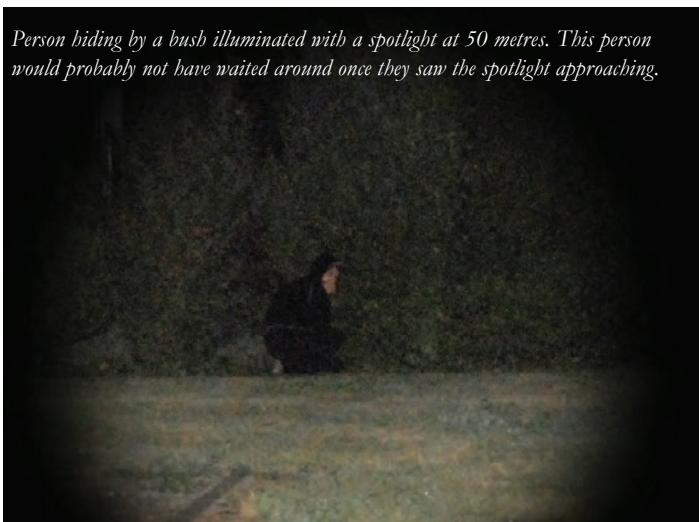


Person hiding by a bush illuminated with a Pulsar Recon 550R and 'stealth' illuminator. This person would not know that they were being watched and recorded under these conditions.

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Person hiding by a bush illuminated with a spotlight at 50 metres. This person would probably not have waited around once they saw the spotlight approaching.



Person dressed in black whilst being viewed with a Pulsar Recon 550R and 'stealth' illuminator. The advantage lies clearly with the security person who would be invisible to a potential offender in extreme darkness.

