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[Case Study – Collision investigation]

Law enforcement - Warwickshire Police

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Organisations involved: Warwickshire Police

Products used: NCTech iSTAR Pulsar

"To us iSTAR was a revelation! It has become one of the first bits of kit that comes out of the car and is used by every member of the team"

[Colin Humphreys, Forensic collision investigator]



This unit is manned by five police officers who cover the department 24/7, 365 days a year. Our role is to investigate fatal, serious and life changing road traffic collisions.

We have an array of equipment at our disposal, which enables the unit to operate in a self-sufficient manner when out at an incident.

Unlike many other areas of policing, we only 'get one go' at an RTC scene, before it is cleared up and traffic allowed to flow.

Our core role out in the field, is to gather and

document physical evidence found at the scene. This is done in a methodical manner and time is a factor. Road closures cost British Industry a lot of money.

A motorway closure can cost £1 million an hour. We are continually under pressure to 'get in and out' in as short a time as possible. In order to achieve this we use industry standard surveying equipment, digital cameras, emergency lighting and we carry two of everything. Space, size and weight is at a premium.

iSTAR in the field

To us iSTAR was a revelation! It has become one of the first bits of kit that comes out of the car and is used by every member of the team.

Why? Ease of use. Its small and will fit easily into the car, the unit is rugged and I can testify that it can be dropped from 3' onto tarmac, bounce and still operate flawlessly.

The first thing that strikes users is it's small form factor but instantly you can tell it's a quality product. A huge amount of thought has been incorporated into the build quality and design. It comes securely packed in the smallest Peli case.

Not every incident requires a full survey. Sometimes it's 'images only' and although an image is good at depicting a scene, it takes many to make up a whole picture. In fact the iSTAR can be used anywhere in all conditions, in all environments, in all light conditions with minimum user input giving high quality output.

When we are faced with that scenario, the iSTAR is generally put to good use.

Several shots from various positions takes a fraction of the time of a survey but the detail collected by the unit is extremely valuable. On average, our data shows that a scanner potentially saves upto an hour on a detailed survey situation.

iSTAR would take around 15mins to cover the scene, potentially 45mins saved.

Our workflow - Collision investigation

1 - Arrive at the scene, set up a take a series of images progressing through the scene whilst other services are still present.



2 - Identify marks and features. Use the iSTAR at various levels including on the road surface.



3 - Place the iSTAR inside the vehicle and have a drivers view or capture the interior damage safely.



4 - Finally another walk through the scene, this time, clear of other vehicles and personnel.



Crime scenes

Most people have seen the 'Estate Agents' online property views showing 360 views room by room. Imagine that's a crime scene, a burglary or serious assault. It's human nature (police and detectives are no different) to want to have a look. But realistically that's not possible or is it? I recently covered an eight room house plus the outside front & rear in under 40mins for CID.

Give an iSTAR unit to a Scenes of Crime Officer (SOCO) as part of their kit. One set up in each room or area; one detailed 360 image taken in seconds. Pass the SD card or USB to someone outside with a laptop and within minutes important personnel can look around and get a real feel for the scene. More importantly, directions could then be given to the SOCO, as to particular areas of interest.

With scenes marked up with SOCO tags and markers a similar methodology can be followed. The iSTAR is used for a second time, using a fresh SD card/USB stick to capture the placed indicators, giving another digital record that can now be cross referenced with detailed close-up camera stills. Back in the office, the captured iSTAR data can now be viewed or screen projected to a wider audience for intelligence or briefing purposes.

Conclusion

Fantastic. The iSTAR is a highly original camera, a cube.....packed full of features, so many in fact you naturally think it will be complicated but with a little practice it is so simple to use! We could now capture the scene in detail and have it in full colour. Evidentially, iSTAR can be the first on the scene. What better evidence to present to Judge and jury?

I don't think the iSTAR's strengths in the forensic field is solely all down to time saving though. Everyone wants things done in record time, it is more about the quality of detailed evidence it gathers and it's simplicity for the user in the field.

For further information about iSTAR or NCTech software visit www.nctechimaging.com or contact us sales@nctechimaging.com