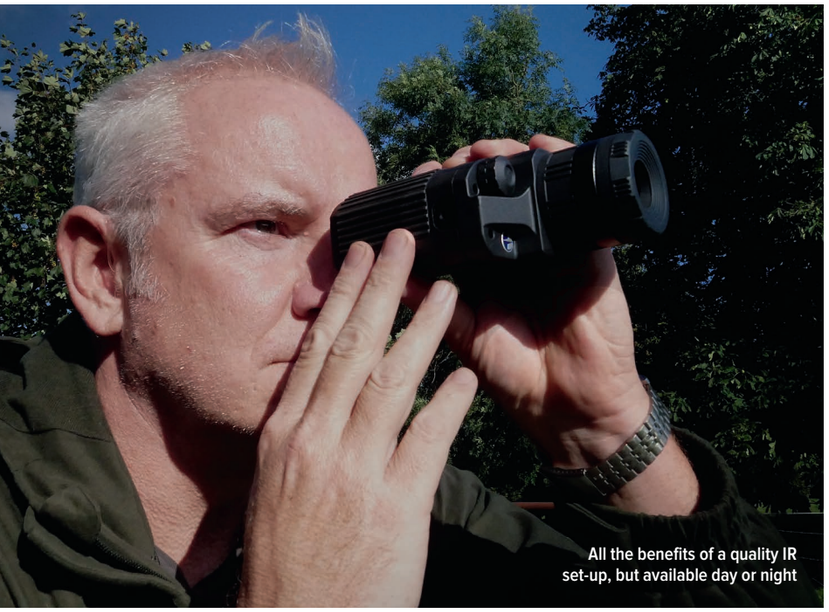
Thermal for the people

Pulsar turns up the heat with the Quantum Lite XQ30V. Paul Austin takes a close look at their entry level thermal spotter

WORDS AND PICTURES PAUL AUSTIN



All the benefits of a quality IR set-up, but available day or night

Prior to the launch of Pulsar's Helion series, its predecessor – the Quantum range – was up there with the best of them and had a price tag to match. To the credit of Pulsar, it didn't simply dump the older models but just added a new lens design and re-badged them, slashing the price and making quality thermal – a realistic proposition for many.

The elephant or elephants in the room are the Helions. I've tried both the XQ (384x288 sensor) and the XP (640x480 sensor) models and the image clarity and features are superb. The Quantum Lite XQ30V offers the same (384x288 sensor) as the entry level Helions, but can't honestly compete in terms of image clarity or features such as Wifi connectivity and built-in recording.

Having said that the Quantum Lite is almost £800 cheaper than the entry level Helion and a whopping £2,370 less than the top of the range XP50! At £1,299 for the XQ30V and £1,199 for the XQ23V, Pulsar is bridging the gap between who can and can't add thermal to their arsenal.

QUANTUM OR OLD SCHOOL IR?

If like me you've invested heavily in IR, shoot predominantly at night and you're an enthusiast rather than a pro £1,299 is a big ask. If you generally shoot smaller permissions from fairly fixed positions, you can certainly get by with your existing IR set-up. Do I want the Quantum? Definitely! Can I justify it? I'm certainly trying to.

The biggest selling point for me is that the Quantum brings night vision into the daylight. My IR gear is useless to me during the day but a thermal delivers full body eye shine day or night. As a detection tool it's a game changer and its enhanced daytime potential could well be the clincher for many.

If you shoot large permissions and cover a lot of ground, target bigger game like deer or do a lot of foxing, you should start saving or sell something. If money is no object get a 640x480 Helion. For financial mere mortals the Quantum Lite offers a route into serious thermal at a still painful but bearable price.

Form and function

In terms of functionality, it's faultless. It has every button and feature where you'd expect and you could go all day without putting both hands on the unit and still access all the major functions. Flipping display modes, zooming (x5 & x10 digital), calibration etc. – it's iPhone-esque in terms of ease of use.

The depth of field is so deep you really need to touch the focus ring. The control knob on the front allows you to adjust brightness and contrast, access the main menu and scale the stadiametric range finder. With a bit of practice you can even drive it with your pinky at a push.

The Quantum offers seven colour modes, but in reality once the novelty of playing with funky colour schemes wore off I only used three. White hot and black hot via mode 1 and coloured highlight in mode 2.

Pulsar's experience in terms of ergonomics comes to the fore. In mode 1, a short press on one button cycles the zoom while a longer press switches between white hot and black hot. While using an alternate palette, the switch is between the basic colour scheme and the enhanced. The same methodology applies to the power button, a long press does the obvious, while a short one switches off the 640 x 480 display conserving power but leaving the unit instantly available if the need arises.

Tripod attachment plus a Picatinny rail if you want to add an MPR

What does thermal deliver?

In terms of real-world performance, it's very hard to knock. I spotted crows out to 200m, rabbits 250m. A couple of foxes, again around the 200m mark, plus countless squirrels and pigeons.

The only situation that caused a slight drop in performance was an evening's rabbiting. Persistent cold drizzling rain dropped the relative temperature of everything to pretty much the same level, losing contrast and flattening the overall image.

The rain had no effect on the critters which still stood out strongly. Colonies of bugs in the trees and even those under the bark were easily spotted at close range. Perhaps the important point being that I didn't really think twice about continuing to use the Quantum in wet weather, I'm not sure I'd do the same with some of the thermal phone add-ons on the market.

Introducing Scrappy! Retired ratter and part time rabbit impersonator at 25 meters

Like most screen grabs these don't do the unit justice but good old Scrappy is still easy to spot at 100 meters

TECH SPECS

Resolution:	384x288 17 micron sensor
Refresh rate:	50hz refresh
Detection Range:	up to 900m (man sized object)
Display Resolution:	640x480
Field of view:	12.4 x 9.3deg
Close up distance:	3m
Power:	4 x AA batteries
Weight:	350g
Dimensions:	200x86x59 mm
FOV:	12.4°

"My first trip pretty much personified what the Quantum is all about"

A key feature that users of older thermals will be keenly aware of is the importance of a decent refresh rate. I'd used units with rates as low as 9hz and they're truly painful. Constant freezing and blurring – it's a nightmare. One feature that's easy to overlook is the superb 50hz refresh of the Quantum. It's so good you're not really aware it's digital. It's totally lag freeze free with no blurring or distortions whatsoever.

The manual claims a two second warm-up time but it takes five to six seconds to boot up from cold. In my opinion that's too long, so I left the unit on constantly; only disabling the display and closing the built in lens cover when relocating.

It ships with a free additional battery pack, but I was fully expecting to carry a pocket full of spare AAs using my "power always on" approach. I couldn't have been more wrong. On average I was getting three trips per charge, roughly 10 hours of run-time per pack using AA rechargeables.

Budding film makers may aspire to add a Yukon MPR recorder via the built-in picatinny, plus there's the option to mount the unit on a tripod if needed. A connecting cable, detachable lanyard and the obligatory lens cloth are all included.

The only disappointment in terms of extras is the shockingly-bad design of the carrying case. It looks the part, quality materials, but for some unknown reason the sling attaches half way down the case making it very prone to flipping over and dumping the expensive contents on the deck if unclipped – which is exactly what happened while I was out and about! The Quantum survived the fall, but the case certainly needs a re-think.

Out in the field

My first trip out pretty much personified what the Quantum is all about. A warm afternoon, 20 to 21 degrees, the idea being to spot the difference between critters and false positives, such as horse muck, rocks, farm gear etc.

I fired-up the Quantum and scanned a large oak about 75m away, instantly spotting three distinct hot blobs at the heart of the tree, the countless leaves and constant movement made no difference, could I tell what they were? No... but they were certainly something! Out with the binos and following the map provided by the thermal, there they were – a squirrel and two wood pigeons.

I could have stared at that tree all day long and I wouldn't have spotted them. With the thermal it was instant, they were certainly indistinct but, nevertheless, obvious. That's what thermals imagers are all about – instant detection, day or night, rain or shine.

The same pattern repeated itself time-after-time, whether it was ratting, rabbiting or foxing. The combination of environment, size, experience and movement usually gives the game away, but you often can't be 100 per cent sure until you've grabbed your binos or levelled the scope. **SG**

MORE INFORMATION

Price: £1,299.95.
Available from: Scott Country
Visit: www.scottcountry.co.uk
or tel: 01556 50 3587.