



# INSIDE INFORMATION

DO FASTER, SMALLER, CHEAPER WIDE-ANGLE LENSES SACRIFICE PERFORMANCE?

**T**HERE was a time, not so long ago, when wide-angle lenses were invariably the poorest performers in any lens range.

Then, a 35mm lens was the accepted wide-angle focal length, with a modest maximum aperture of f/3.5. A 28mm lens was considered quite adventurous and if it opened up to f/2.8, it was a bit special.

Even so, the performance of these lenses often left something to be desired when used wide-open, especially at the edges of the picture.

Wider wide-angles than 28mm were available of course, going down to 21mm or even shorter, but these were invariably very big, heavy and expensive. Also, the very widest lenses had such a short back-focus that the rear elements extended right back inside the camera making it necessary to lock an SLR's mirror up out of the way and use a separate viewfinder.

Now things have changed. Today a 35mm lens isn't bought as a wide-angle at all but as a 'standard' lens. Many people prefer the slightly steeper perspective produced by its closer viewpoint.

The 28mm lens is now the accepted wide-angle, with a maximum aperture of f/2.8 or faster. A 24mm lens is still thought to be a little too wide by some, but there are many photographers who use almost nothing else.

And as angles have been getting wider and wider, so too have apertures, with f/2 becoming commonplace. At the same time, today's lenses are also smaller, lighter, cheaper, and have much better performance!

If all this sounds too good to be true, look at the performance tables for the latest range of Vivitar compact wide-

angles in this issue. They are as good as any lenses in their class that you're likely to come across.

Take Vivitar's 28mm f/2 lens for example. It gives really top grade performance, and at £100 or so, it's *one third* of the price quoted by some leading camera makers for a similar lens.

How come? Are the camera manufacturers trying to rip us off? Do you merely pay for the name, or is this 'loss-leader' marketing by Vivitar? No, no and no.

It's a difficult and complicated question, but most of the answer can be explained by the simple economics of mass production. Whereas Nikon lenses are restricted to Nikon cameras, Canon to Canon and so on, independent manufacturers make their lenses to fit almost all popular makes and models.

Their research, development and production costs are therefore spread over a much greater number of lenses and the considerable savings are passed on to the consumer.

You could argue that independent maker's lenses aren't quite so good as the camera

manufacturer's own, and in the past I would have agreed with you, but not now — not as a general rule anyway.

Some independent lenses are really very good optically — that's beyond doubt. Mechanically? Here again, some are just as good as marque lenses, though some others are not.

A point to consider here is that if a faulty lens from an independent maker should breakdown and somehow damage the camera, then you couldn't expect a free camera repair under guarantee. In our experience, this seems a pretty unlikely danger, but camera manufacturers tell us it's a common problem. Maybe it's a case of one or two poor

*This cross-section of the 28mm f/2 Vivitar Compact wide-angle shows it has eight separate elements. Usually, at least two lens elements are cemented together in a 'group', but this means the mating surfaces must have an identical curve. Advanced optical technology now allows more elements to stay apart and their completely different surface curves can give improved performance.*

quality products tarnishing the undoubtedly good reputation of most independents.

What about quality control? We've tested a few lemons from just about every manufacturer on the market, from the cheapest to the most expensive, and the only really definite conclusion you can draw is that lenses *do* vary. If you're sensible though, you'll run a quick check before buying a new lens by exposing a few frames from the dealer's doorway. If you then note the serial number and process the film quickly, you'll know your lens is up to scratch.

One camera retailer, R. G. Lewis Ltd of High Holborn, London WC1, who conduct MTF lens tests for us, have spent £10,000 setting up a machine to check all the lenses they sell. They will supply you with an individual performance graph and in many cases, you can take your pick of several samples they have in stock, choosing the very best. True, their prices are a few per cent higher than the cash-and-carry stores (some of which won't even let you open the box before paying), but if you want the best, it's money well invested.

There's one thing you definitely do get with marque lenses though, and that's uniform styling — focusing and aperture rings which turn in the same directions, controls with a similar feel, and a similar appearance. These can be very important points when it comes to fast, confident handling.

However . . . We're still left with a question: are these advantages really worth, in some cases, two or three times the price? I've always been a strong believer in the old maxim 'you get what you pay for' — now I'm not so sure.

**Richard Hopkins**

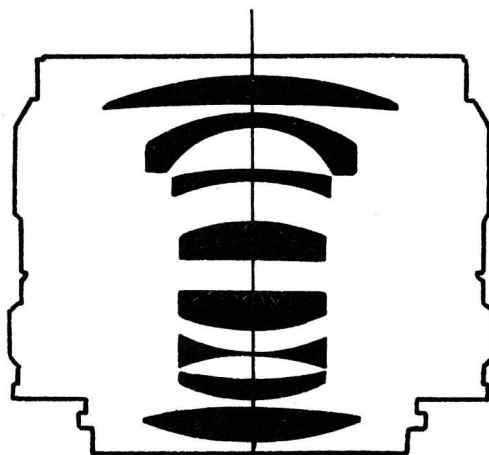


diagram shows lens life-size