

Professionally Compact

John Henshall continues his search for a professional-quality compact camera.

A surprising number of professional photographers ask me to advise them which compact camera I feel would be best for them to buy.

This might at first seem a strange question. Surely we want only the very best, such as one of the top-end DSLRs?

That may indeed be true but there are occasions when we are 'off duty' or don't want to carry a heavy bag around. Or perhaps we just want to blend into all the other photographers.

The choice of compact cameras is now truly bewildering and there is no way we can possibly keep track of them all. Just look at the phenomenal number of digital imaging magazines on sale in your newsagents, most of them giving star or percentage ratings to cameras.

The virility contest gives the very definite impression that 'more is better', especially as far as pixel count is concerned. But what about picture quality? Are any of them remotely likely to be suitable for professional use?

I am just like everyone else who wants to find the perfect compact camera. And I want the best.

The first feature I look for is the ability to save raw files, so that I can make decision later about how to process my images.

And, yes, I want a lot of pixels – enough of them to make good big files suitable for sale on a picture library.

I want the camera to be small enough and light enough to fit into my shirt pocket, ready to be available at all times.

Good battery life is another essential.

Back in May 2006 I reported on the Panasonic DMC-LX1 which I'd taken with me on a trip to China. I described the camera as 'a serious piece of truly

professional equipment ... exactly the compact digital camera we've all been dreaming about.'

I compared the camera to the original Leica camera, designed by Oskar Barnack and introduced in 1925.

Well, the news is that there is now an update to this camera and it is available in two iterations – the **Panasonic DMC-LX2** and the **Leica D-Lux 3**.

The cameras are very similar, so far as the layout of the controls, the display and lens are concerned.

The bodies are slightly different.

The Panasonic body has sloped away edges to the top and bottom plates and has a grip at the front right. Although it is shown in brushed silver finish in the illustration, it is also available in black.

4:3 format of old-style television and many computer monitors.

My advice is to just forget these. In fact, a spot of Blu-Tak may be a good idea, to ensure that the switch doesn't get moved accidentally.

The reason is that the squarer formats are merely cropped from the 16:9 format. All formats have 2376 pixels across the smaller dimension but only the 16:9 format has 4224 across the longer dimension. If you want one of the other formats then you can simply crop in post-production. Why throw away any of the resolution you have paid for?

The 16:9 format is almost panoramic and may seem strange at first but you'll soon get used to it – just as television cameramen have got used to it. But you

have a feature which tv cameramen don't have – the ability to turn the camera on end to produce tall, portrait format, pictures.

Strictly speaking the tv camera could be turned on its side but it's not very convenient for the viewer to do this with a tv receiver.

The lens on both cameras is a **Leica DC Vario-Elmarit 1:2.8–4.9/6.3–25.2** [mm] which is equivalent to

28–112mm on a full-frame 35mm SLR.

The cameras are clearly a collaboration, though which company makes what I am not sure. The Leica states 'Leica Camera Germany' at the bottom of the LCD screen but the base plate tells us that the camera is made in Japan. Whatever the case, the Leica looks and feels like a true Leica.

In fact it might look uncannily like a Leica 1 if it was not for the absence of one component: the optical viewfinder.

Have you noticed how easy it is to spot a digital snapshotter by their extended arms? The problem is that, as



The Leica body is smoother and has that impressive circular red badge which tells everyone that this is a marque with real photographic heritage.

The sensor resolution has been increased from the 8.4 megapixels of the DMC-LX1 to 10 megapixels, again in a 16:9 widescreen format.

This format is unusual in stills photography but very familiar in television, where everything is now shot in 16:9 landscape format.

A switch on the top of the lens enables selection of the normal 3:2 ratio we are used to from 35mm SLRs and the

we grow older, our arms need to be longer in order for our failing eyes to be able to focus on the viewfinder.

Extended arms mean wobbly cameras. There is no substitute for holding a camera with elbows against the chest when it comes to keeping it steady at the moment of exposure. But this doesn't work if your only viewfinder is a big wide screen covering fifty percent of the camera back area.

Both models have a tantalising space on the top plate, between the pop-up flash and the main dial, where an optical finder could be sited. It's right above the centre of the lens, too.

I have been tempted to find a piece of brass sheet and fashion a sports finder from it. Maybe Hama, or one of those other accessory manufacturers, has one?

Perhaps to compensate for W.A.S. (Wobbly Arm Syndrome), the cameras have Mega O.I.S (Optical image Stabilisation) built in.

This facility works well. Take a look at my night shot of Times Square, New York, in the picture below. It's nice and sharp, even though hand-held at 1/13 second. The OIS enables the camera to be used at shutter speeds twice, four or even six times longer than would otherwise be possible.

My method is to frame the shot at arm's length, then bring elbows into the body and squint at a close-up screen which my eyes can't possibly focus on.

If the LCD screen wasn't so huge I'd

be trying to fix an old loupe onto the back of the camera.

Of course, another way to reduce camera shake in the shot of Times Square would've been to use a higher ISO. The camera goes up to ISO1600.

ISO400 would've pushed the shutter speed up to 1/26sec, ISO800 to 1/50 and ISO1600 up to a very respectable 1/100sec. The trouble is that this would introduce another problem.

Image noise.

Without a doubt, image noise is the worst aspect of these cameras. Even at ISO100, the images are not completely smooth when viewed at 100%. The noise rises at an alarming rate to the point where, at ISO1600, it is unusable and quite ridiculous.

Why they even bothered to put ISO1600 on these cameras I really don't know. Could it be that it looks impressive in the literature?

It isn't just the noise itself but the crass way it is processed.

I shot my standard test of Bear House on each camera at each ISO setting and enlarged just the name plate to 300% of the normal 300 ppi resolution we use in the magazine. The results are over the page. The magazine printing process masks some of the noise but I think you should be able to get the idea of how badly the noise rises with ISO setting.

I did the test on each camera because Leica claims that it uses different firmware which improves image quality.

I can see no difference between them.

The problem of noise seems common to most compact cameras which pack ten million pixels into a tiny sensor. Each sensor 'bucket' is minuscule, so it can't hold many electrons when full. The signal-to-noise ratio is therefore high.

I would prefer to have fewer pixels and lower noise images. But then I don't have to do the sales and marketing hype.

My advice is never to use Auto ISO and never to set the ISO higher than 200, except in dire emergency. This way, you'll be very happy with the pictures.

One feature I really do like is the ability to set AF mode, metering area, white balance, ISO and JPEG compression level or raw by direct access. Just push and hold the largest (unlabelled) joystick button. This is much quicker and better laid out than menus.

The cameras use SD cards and, if you shoot raw, you will certainly need the highest speed and highest capacity (HC) cards. The new SanDisk 4GB SD-HC cards can save a raw image in four seconds and have the capacity for at least 170 images.

Prices range downwards from £490 list for the Leica iteration, including a beautiful 'retro' leather case. But no one pays list. Look on the Internet or consult your favourite dealer.

Would I have one? You bet. Which one? Well I'm nostalgic. If I could afford the extra cash it would be the Leica. Mind you, I'd be glad of either.



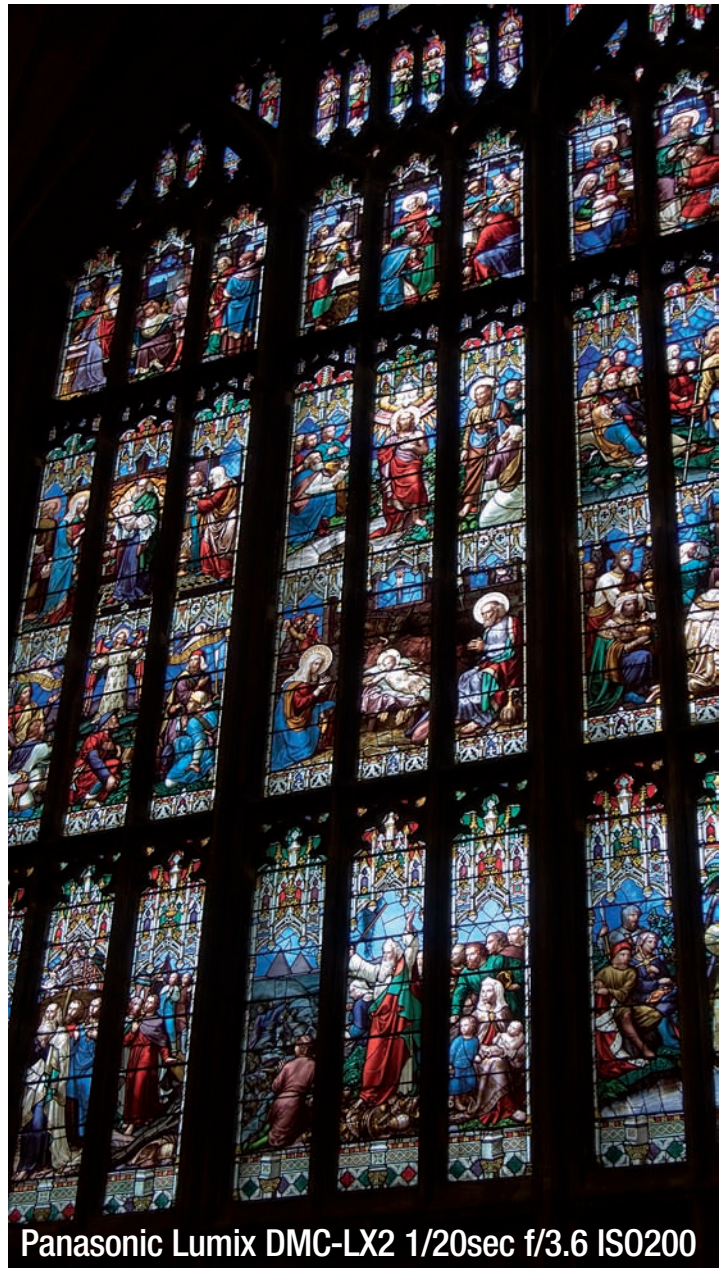
Panasonic Lumix DMC-LX2 1/13sec f/2.8 ISO200

Copyright © 2006 by John Henshall john@epi-centre.com

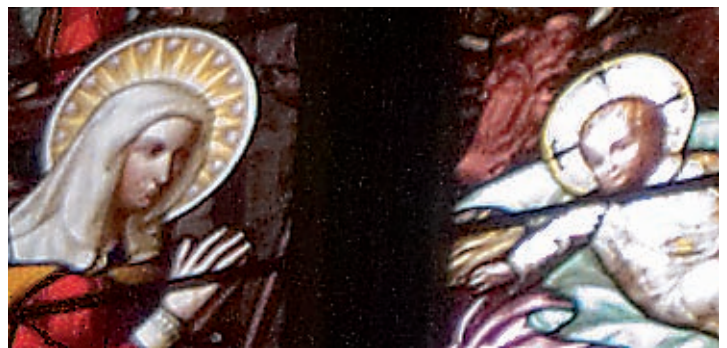
John Henshall's Chip Shop



Leica D-Lux 3 1/100sec f/3.2 ISO400



Panasonic Lumix DMC-LX2 1/20sec f/3.6 ISO200



TOP LEFT: Even at ISO400 noise is evident in this 6.3mm wideangle (equivalent to 28mm lens on a 35mm SLR). I chose this shot because of the roof structure which reveals chromatic aberration in the Leica DC Vario-Elmarit 1:2.8-4.9/6.3-25.2 Asph lens, used on both the Leica and Panasonic iterations of the camera.
 CENTRE LEFT: Section from the top left of the same shot at 300% showing the aberrations at the edge of the lens at wideangles. The colour fringing is far more apparent in the RGB file than in the CMYK separation necessary for reproduction here, which does not have sufficient colour gamut to show the level of the effect.
 BOTTOM LEFT: Section from the centre at 300%. Sharp but unfortunately noisy.
 ABOVE: Window in Gloucester Cathedral at 12.5mm (equivalent to about 50mm). I held the ISO down to 200 to reduce noise, which is barely visible even in the dark areas in the section enlarged to 300%. The question now is whether the 'Mega O.I.S.' image stabilisation can keep the image sharp at the slower shutter speed.

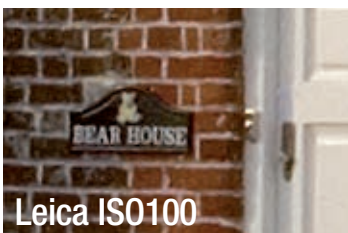
Copyright © 2006 by John Henshall, john@epi-centre.com



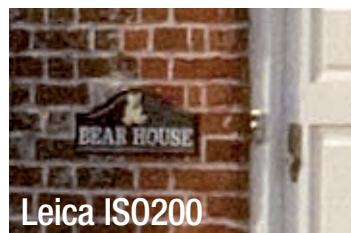
Leica D-Lux 3



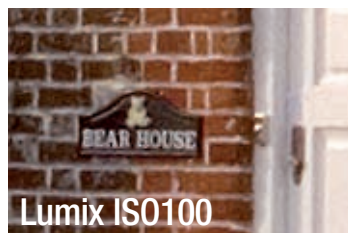
Panasonic Lumix DMC-LX2



Leica ISO100



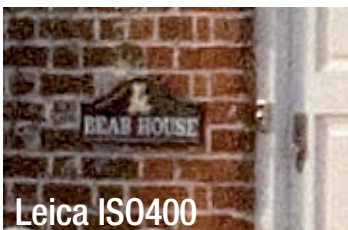
Leica ISO200



Lumix ISO100



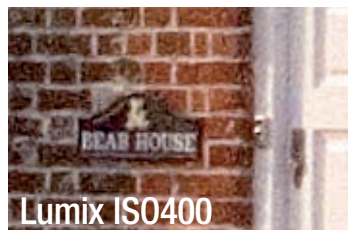
Lumix ISO200



Leica ISO400



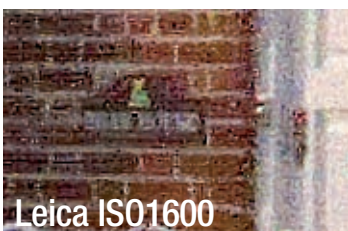
Leica ISO800



Lumix ISO400



Lumix ISO800



Leica ISO1600



TOP: Test shot set-up using my standard rig made by Manfrotto. CENTRE: What the cameras saw. LEFT: The familiar full-frame shot. TEN SMALL IMAGES: Sections of full-frame shots at different ISO settings, all reproduced at 300% of normal 300 pixels per inch res.



Lumix ISO1600