

“The new Leaf shutter lenses offer users the ability to sync at up to an incredible 1/1600sec with compatible digital backs”

▶ note is the diopter adjuster to the left of the viewfinder and a little switch to close the internal viewfinder shutter for when you want to take long exposures for example.

Around the front, on top of the comfortable, ergonomically shaped grip, there's a heavy-duty shutter release, surrounded by a power switch that also lets you quickly select between Single, Continuous shooting and M.U.P., which lets you lock the mirror up. In the centre is a connector to let you screw in a cable release.

On the front there's just a depth-of-field preview button to the left of the lens and a switch that lets you toggle between continuous, single and manual focus. It's been deliberately designed to make it difficult to switch accidentally, so you have to connect your thumb and forefinger with two raised points to rotate it.

The back view of the camera will differ according to the digital back you choose to couple the camera body with, but our review sample came with a Phase One P40+. The interface on the P+ backs couldn't be simpler, there are just four large silver rectangular buttons flanking the LCD and a power button – that's it!

On the left-hand side of the back is a magnetic door, which opens to reveal the memory card slot (CompactFlash). On the opposite side of the back there's a slot for its rechargeable lithium-ion battery, note you'll

need a further six AA cells to power the body separately. Happily, power consumption in both is well managed, with the body's batteries lasting for several extended shoots. The back is, obviously, more power-hungry, so a fully charged spare battery is recommended.

The whole package is incredibly robust, solid and weighty, just as a camera in this price bracket should be. It's a very well made piece of kit that's designed to withstand the rigours of life in the hands of a hard-working professional, and should, judging by our time with it, be more than up to this task.

Internally, the 645DF benefits from a much-improved, faster AF system that's blisteringly quick to find a lock. With no discernible lag between half-depressing the shutter release and the AF system finding your target, it's easy to keep up with subjects in fast-paced fashion shoots and the like. The focus confirmation beep is unobtrusive and undeniably useful whatever situation you find yourself working in. A further nice touch is the fact that the beep continues to operate when you're working with manual focus too, giving you added peace of mind that you've got your subject perfectly sharp.

In operation, we found the P40+ back we had on loan worked beautifully, producing richly detailed, sharp images that are breathtaking to look at as a whole, then zoom in and marvel at every line, hair and texture that's been recorded. Occasional issues arose with Auto White Balance accuracy under mixed lighting conditions, but shooting RAW (IIQ) files and editing them using Phase One's formidable Capture One software makes correcting this a job of mere moments. The screen, as mentioned in past reviews, isn't the best we've used, but the camera really excels when shooting tethered to a computer or laptop via the back's built-in FireWire connection. If you're shooting untethered, LCD issues are helped by detailed shooting information, including highlight warnings and a clear, easy-to-interpret histogram. Another handy tool with the P+ backs is a built-in virtual horizon, helping you get your lines perfectly straight, as well as an orientation sensor, which ensures comfortable reviewing of images, whichever way you're shooting.

As previously mentioned, images remain clear throughout the ISO sensitivity range. While dynamic range is particularly impressive, there's plenty of detail to be recovered from darker areas if you don't get the exposure spot-on in-camera. In the right hands, the results you can get leave very little to be desired.

DEPTH OF FIELD PREVIEW BUTTON
Press and hold this to switch the lens down to the selected aperture



ERGONOMIC GRIP
The generously sized, rubberised grip is contoured for maximum comfort

POWER/MODE SWITCH
Rotate this to power the camera on/off and select from Single and Continuous shooting, or lock the mirror up

Phase One 645DF
Technical data

Model	Phase One 645DF
Price	£12,500 (body, 80mm lens & back)
Web	www.phaseone.com
Phone	01903 741 821
Megapixels (effective)	By digital back
Max resolution	By digital back
Sensor information	By digital back
Lens data	By lens
Zoom	By lens
Focus/macro	By lens
Shutter speed	60min - 1/4000sec
ISO sensitivity	By digital back
Exposure modes	P, S, A, M, X, CF, CL, C2, C3
Metering options	Av, S, Auto
Flash modes	N/A
Connectivity	Remote, X-Sync, FireWire (back only)
Weight	1030g (body only)
Dimensions	153 x 128 x 184mm
Batteries	Li-ion / 6xAAA
Storage	CF / II
LCD	By digital back
Viewfinder	Fixed eye-level prism

Verdict

Features	9/10
Build quality	10/10
Handling	9/10
Quality of results	9/10
Value for money	8/10

Total 9/10
Offering the ultimate in flexibility, as well as superb image quality and handling, the 645DF is a highly professional tool

Contenders

Leica S2
Price: £15,996 (body only)
Web: www.leica.co.uk
Tel: 020 7495 2261



The S2 incorporates a 37.5MP Kodak CCD, 3", 460,000-dot LCD and native sensitivity range spanning ISO 80 to 1250. Users can shoot continuously at 1.5fps, for up to eight RAW DNG files, so can't match the 645DF for speed.

Hasselblad H4D-40
Price: £15,269
Web: www.hasselblad.co.uk
Tel: 020 8731 3250



This DSLR features a 40MP CCD sensor, with new low noise colour filters. As an integrated system you get the back and body as a package. For the price, you get the body, viewfinder and an 80mm lens.

INDETAIL ▶ Menu functions

INTERFACE: By default, the screen offers quick access to the main menu system, playback menu, ISO and WB options, which are accessed via buttons flanking the LCD.

PLAYBACK: The playback menu offers the option to magnify your image. You can also opt to rate your images using a 5-star system, which can be viewed/amended post-capture.

HISTOGRAM: The playback menu also allows you to display an RGB histogram, to 'flash' overexposed areas, or you can cycle through to display details for each image.

Capture Setup
Shutter
File Format
Sensor
Virtual Horizon
Orientation

CAPTURE SETUP: Here you can set up the camera for operation, including the shutter operation (Normal/Zero Latency), file format, activate the virtual horizon and alter ISO.

Configuration
Storage
Power Source
Format Disk
File Extension
Disk Checking

CONFIGURATION: This is the place to format memory cards, select power source, set the file extension and perform tasks like setting the time and date, turning the Ready Beep on/off, etc.

VIRTUAL HORIZON: A virtual horizon can be displayed on the rear LCD, reacting to the photographer's movements in real time to ensure your lines are perfectly straight.