



On test

# Phase One XF



 MURRAY LAIDLAW

*Five years in the making, the Phase One XF camera system is here. Murray Laidlaw sees if it has been worth the wait*

**T**he Phase One XF brings together a completely redesigned camera body, IQ3 back and the latest version of the company's popular Capture One Pro software. There are also two new 'blue ring' lenses from Schneider Kreuznach; a 35mm LS f/3.5mm and the 120mm LS f/4 macro lens.

The camera body has been a long time coming. It has taken around five years to reach production. Phase One says it has developed the body based on their experience with the original Mamiya 645DF body, feedback and a very long wish list from photographers. Let's hope it's been worth the wait.

The first thing you notice about the XF body is the more angular design, compared to the sweeping style of the DF models. It is much sharper, cleaner


and the buttons and connection covers, although in the same positions, have been refined. There is a new button on the prism housing; this releases the unit to enable a waist-level finder to be attached – something DF users were keen to see included in the new specification.

Looking at the camera head on, the gentle curve that connected the body to the handgrip has been replaced by a prism housing with straight sides and a much stronger profile. Allied to this is the taller, more rectangular grip with a flat top-plate incorporating a new 1.6in touchscreen. The changes don't stop here though.

The drive selector has gone along with the exposure mode wheel and the row of buttons along the rear edge of the top-plate. All the functions previously controlled by these buttons are now

accessed through the software using two top-plate keys and three control wheels, resulting in a cleaner and less cluttered area with the extra space accommodating the larger display.

The shutter release button is where your index finger falls, almost exactly in the same position as it is on the DF and there is an additional release where the depth-of-field preview button was. Another button, located on the front of the grip where your middle finger naturally rests, is by default set to be the DOF preview but like all the buttons, none of which has a legend, is customisable.

On the DF the camera was switched on using the shutter release mode selector, but this has gone so the camera is now powered up using a button at the rear of the top-plate. 



RIGHT: Image quality from the XF is simply “stunning”, says Murray Laidlaw



As delivered the control wheels are set to be: front – shutter speed, rear – aperture and at the back of the grip, nearest to the body – ISO. None of this is fixed and you may choose your own settings from the menu.

Everything is customisable through the menu-driven software, written from scratch by a team of in-house developers to be continually upgradeable. Access to the menus is via the control wheels and buttons or via the camera’s touchscreen on the handgrip. The camera settings can also be accessed via the 3.2in touchscreen on the IQ3 back and in tethered mode from the camera control panel in the latest version of Capture One Pro 8.

There are two display modes for the handgrip screen: Classic and Simplified. In Classic mode the shutter speed, aperture, ISO, exposure compensation, battery state and drive modes are displayed along with FPS for focal plane or LS for leaf shutter. In the Simplified option the drive mode and shutter type (LS/FPS) are not visible but revealed by swiping across the screen iPhone-style.

Having determined the auto mode (Tv/Av), it is possible to set upper and lower limits of either shutter speed or aperture. These are represented by a tortoise and a hare for shutter speed, and wide open and stopped down aperture ring graphics.

If, for example, you want to work in aperture-priority mode, setting the shutter to auto illuminates the speed in ▶

“EVERYTHING IS CUSTOMISABLE THROUGH THE MENU-DRIVEN SOFTWARE, WRITTEN BY A TEAM OF IN-HOUSE DEVELOPERS”

The Temperature graph tool



Confirms that the back has warmed up to the optimum temperature prior to making long exposures.

Exposure zone



The new exposure zone tool presents a small colour display of your image with a standard histogram and two images showing your exposure as recorded by the sensor. Areas in blue are underexposed by 2 stops while any red areas are two stops over. The Clip warning tool complements this.

Exposure Calculator



Landscape photographers who shoot long exposures or use ND filters may welcome this – it could be a real time saver. First shoot the scene exposing at a high ISO and large aperture for correct exposure. Enter the ISO and aperture you want to use into the calculator and it gives the correct exposure time.

The clip warning tool



Allows you to set a peak level (up to 255) and choose the colour to indicate where the level has been reached in the image. In this example a safe level of 252 has been selected to be displayed in red. Anything above this is shown in purple. In practice anything in red should be recoverable in Capture One.

The Seismograph



The same as displayed on the handgrip, this shows how the camera is being affected by wind, noise or vibration.

Exposure bracketing



The same as displayed on the handgrip, I found it useful as you could review a shot and then select the bracketing option rather than use the handgrip.



**RIGHT:** Teaming the Schneider Kreuznach blue ring 35mm with the XF is a joy, according to Murray Laidlaw

**BELOW:** The IQ3 range comprises the 50-megapixel CMOS, 60-megapixel and 80-megapixel CCD backs. The 80-megapixel is a new and exclusive sensor enabling an exposure of up to 60 minutes

blue, while other settings remain white. The auto part of the equation is always displayed in blue. Tapping +/- accesses exposure compensation.

Mirror lock-up is now with the shutter options, selectable by touching the grip display icon, but the more interesting option is vibration mode. Built in to the body are a number of sensors to measure vibration, similar to those used in drones/helicopters to determine movement, and in this mode it is possible to view a seismographic display showing how the camera is being affected by noise, wind or vibration. Currently, in this mode when the shutter is released the mirror swings up and the image is taken after a predetermined length of time. In the future, the shutter may be programmed not to release until all camera movement has stopped. It is very revealing to see just how much the camera is affected by its surroundings. It is still possible to set a shutter delay for a range of seconds.

HAP-1, the Honeybee Autofocus system is a big improvement on the DF and way quicker in action. It features a Hyperfocal setting that allows users to register a hyperfocal point for each lens and then autofocus to that point at any time, maximising depth-of-field. The really good news is it works with the waist-level finder as it is built into the body rather than the prism housing.

One of the improvements Phase One has been able to incorporate during the design process is standardising the battery type – one battery size and shape now powers both the back and the camera. In practice this works really well and a quick check on the IQ3 display will indicate the relative states of both batteries. Tapping the battery symbol on the handgrip display will bring up a



health check of the camera; green ticks indicate all is well. Power sharing is made possible by the addition of extra pins on the back connecting with the camera body. This is the only feature that will not be available on the IQ2 backs through a free software upgrade.

Ergonomically the grip feels better in the hand and for me the buttons are perfectly placed. The balance of the camera is excellent and the menus are easy to navigate. It is heavier than before as a result of the improvements in the materials used for the body and IQ3 back; aircraft-grade aluminium together

with a solid glass prism has added to the weight. But it is better balanced and more comfortable to use than the DF. The display in the viewfinder is excellent and as a varifocals-wearer I could see all the information clearly and easily. There is no longer any need for an additional handgrip and working in portrait format is very comfortable. Goodbye V-Grip.

Wi-Fi has been incorporated into all IQ3 backs. Using a network created by the IQ3 it is possible not only to review images on an iPad or iPhone and rate them using the Capture Pilot app but with an additional plug-in control the

**“THE BALANCE OF THE CAMERA IS EXCELLENT AND THE MENUS ARE EASY TO NAVIGATE”**





**RIGHT:** Shot with the 50-megapixel CMOS and Schneider LS 80mm f/2.8



## “IF YOU’RE IN THE MARKET FOR A MEDIUM-FORMAT SYSTEM, TEST DRIVE THE XF”

camera settings. In the latest version of the IQ software the GPS co-ordinates of your location, generated by the iPad or iPhone, can be included in the EXIF data recorded on the image. I can see that this could be useful for landscape photographers as an easy way to log your location. I am surprised though that the GPS is not built into the back.

At the time of reviewing only the 35mm was available; the 120mm has just started shipping but is in short supply. Both the new lenses, designated blue ring by Schneider Kreuznach, are designed to resolve beyond current sensor technology; Phase One in its promotional material suggests beyond 100 megapixels.

The 35mm lens is a joy to use, the focus ring is smooth in manual operation and snaps in really quickly in auto mode. So much so that I found myself de-focusing the lens just to check the AF was working. Images are sharp to the edge and although it is a big lens, it is not as heavy as you would expect it to be.

As I’ve already said I found the XF to be heavier than the old DF, but the improved handling and balance more than compensate for this. There is a bit of a learning curve with everything being menu driven, but by the end of the test, I was certainly on top of most of the facilities offered, only time prevented me for exploring every possible option on offer.

### Verdict

If you’re in the market for a medium-format system, then you should definitely test drive the Phase One XF, I don’t think you will be disappointed. Taken on its own the new body is outstanding, the features and potential for future upgrading put it well ahead of many other options.

The IQ3 back, with improved processing speed and faster communication with the camera, is class leading. Images are displayed virtually instantly after capture, the display is better and the software intuitive. The new features offer so many benefits now with the potential for more through firmware upgrades. Power sharing between the camera and back is a bonus as is the one size fits all battery. Image quality? Outstanding.

This is a system for today, tomorrow and the future. With a platform designed in-house with upgrading uppermost in mind there is no reason why Phase One should not add new features to the camera as suggestions from users come in. I’m told user feedback has already thrown up a few good ideas that the software team is looking at.

To buy the XF kit with a 50-megapixel CMOS sensor and 80mm lens will cost about £23,500 excluding VAT. If you already have lenses and an IQ back then the XF camera complete with prism is a more affordable £4600. **N**

### SPECIFICATIONS

**STREET PRICE** XF kit with 50-megapixel CMOS & 80mm lens £27,600; XF with prism £4600

**RESOLUTION** 50, 60 or 80 megapixels

**SENSOR SIZE/TYPE** 44x33mm CMOS (50-megapixel); 53.9x40.4mm CCD (60-megapixel); 53.7x40.4mm CCD (80-megapixel)

**IMAGE SIZE** 8280x6208 pixels (50-megapixel); 8984x6732 pixels (60-megapixel); 10,328x7760 pixels (80-megapixel)

**ISO SENSITIVITY** 100-6400 (50-megapixel); 50-800 (60- & 80-megapixel)

**AF MODES** Spot, Average, Hyperfocal

**SHUTTER SPEED RANGE** 60mins to 1/4000sec

**FLASH SYNC SPEED** Focal plan shutters 1/125sec; leaf shutters 1/1600sec

**FRAME RATE** 0.8fps (80-megapixel, full resolution)

**REAR LCD** 3.2in touchscreen (on IQ3 back)

**METERING MODES** Average, Spot, Auto

**EXPOSURE COMPENSATION** +/-5 stops

**COMPATIBLE BACKS** IQ1, IQ2 and IQ3

**STORAGE MEDIA** UDMA 7 CF

**DIMENSIONS (WxHxD)** 152x135x160mm (body, back and prism viewfinder)

**WEIGHT** 1390g (body, back and prism viewfinder)

### WHERE TO BUY

**DIRECT DIGITAL** [directdigitalimaging.co.uk](http://directdigitalimaging.co.uk)

**TEAMWORK PHOTO** [teamworkphoto.com](http://teamworkphoto.com)

**DTEK SYSTEMS** [dtek.co.uk](http://dtek.co.uk)

**PHOTOLEASE** [photorelease.co.uk](http://photorelease.co.uk)

### VERDICT

