

# ULTIMATE GROUP TEST

# SUPERZOOM LENSES



## WHAT'S ON TEST

A selection of eight superzoom lenses, available in a range of lens mounts.

- » Canon EF-S 18-200mm f/3.5-5.6 IS £465
- » Nikon 18-200mm 3.5-5.6G AF-S VR DX £415
- » Olympus ED 18-180mm f/3.5-6.3 £315
- » Pentax smc DA 18-250mm f/3.5-6.3 £389
- » Sigma 18-200mm f/3.5-6.3 DC OS £299
- » Sony DT 18-200mm f/3.5-6.3 £399
- » Tamron AF 18-270mm f/3.5-6.3 Di II VC £449

Superzooms cover a massive focal range, from wide-angle to telephoto, so are they a lens for every occasion or just a compromise?

TEST BY PHIL HALL

FIND  
YOUR  
NEXT  
SUPER-  
ZOOM LENS  
HERE!

**THERE'S OFTEN A MISCONCEPTION** that when you invest in a D-SLR, you'll end up with a bag full of kit with an array of different lenses for every conceivable shooting situation. For many people, that's the last thing they want, and they'll avoid the D-SLR thing altogether, opting instead for a bridge compact with a long zoom. For others, even if the norm is to lug half their weight in lenses whenever they go out, there'll always be times when they'll

want to travel light and rely on a single lens that'll cover most options. Don't think lens makers have missed out on this - there are a breed of superzooms out there that cover an epic focal range and give every general option you're likely to need. Most cover 18-200mm, with some extending even further. This kind of range does away with the need to have separate standard and telephoto zooms, covering anything from wide-angle to long telephoto shots.

TURN OVER FOR YOUR GUIDE  
TO SUPERZOOM LENSES >>>

« **WITH SUCH A STAGGERING ZOOM RANGE,** there's a lot of pressure on the optics to perform well at all focal lengths. Superzooms are normally stacked with lens elements to achieve the extreme focal range - zoom lenses with shorter lengths have less of these to worry about. With more optical elements, there's a greater risk of vignetting, distortion and chromatic aberration occurring somewhere in the range. But with modern lenses and better

designs, is this still the case - and if so, is it worth the sacrifice for the flexibility of just a single lens? We'll answer those questions here.

With any telephoto focal length, it's always desirable to have some form of stabilisation system to reduce camera shake. Sony and some Olympus and Pentax D-SLRs have a system in-camera, so all lenses will offer anti-shake, but if you're using a Nikon or Canon model, you'll need the system to be part of the lens itself.

**KNOWLEDGE**

**WHAT TO LOOK FOR...**

**ZOOM RING**

Should have a decent grip and a fluid movement throughout the zoom range.

**ANTI-SHAKE**

With long focal lengths, image stabilisation is often a must to combat camera shake and achieve sharp shots.



**BARREL EXTENSION**

As the focal range is extended, expect the zoom barrel to lengthen, almost doubling the lens in length.

**MAXIMUM VARIABLE APERTURE**

Normally ranging from f/3.5 at 18mm to a slow f/6.3 at the long end.

**KNOWLEDGE**



**HOW WE DID THE TEST...**

All the superzoom lenses were tested on 10Mp D-SLRs (Canon EOS 1000D, Nikon D60, Sony A200, Pentax K10D and Olympus E-520), and each one was assessed for distortion, vignetting, sharpness and fringing. These are all flaws that can be a particular problem with superzooms, so test shots were taken through the entire focal range and at different apertures.

**CANON EF-S 18-200MM F/3.5-5.6 IS**



» E465 » DIMENSIONS (UNEXTENDED): 79X102MM » WEIGHT: 600G » WWW.CANON.CO.UK

Until recently, the choice of affordable superzooms in the Canon line-up was a bit limited, with the only other options being the 28-200mm and 28-300mm - both not wide enough to make them an attractive all-in-one option. The gap's now been plugged with the recent arrival of this 18-200mm superzoom, and it's a large, solid-feeling piece of kit. It tips the scales at 600g and has a sturdy build, balancing well once attached to a camera body.

On a Canon D-SLR, it has a 35mm equivalent focal range of 28.8-320mm, while the maximum aperture of f/5.6 at the long end is faster than many of the others on test here.

It incorporates Canon's Image Stabilizer (IS) system to reduce camera-shake, allowing you to maintain sharp shots at 4 stops slower than you would be able to normally. The IS works very well - during testing, it was still possible to achieve sharp shots at shutter speeds as low as 1/15sec at 200mm.

There's no Ultrasonic motor (USM) to reduce AF noise, but it's actually still pretty quiet during operation, while AF is fast and reliable.

**RATINGS**

- FEATURES & BUILD ★★★★★
- PERFORMANCE ★★★★★
- IMAGE QUALITY ★★★★★
- VALUE FOR MONEY ★★★★★





# NIKON 18-200MM F/3.5-5.6G AF-S VR DX

» £415 » DIMENSIONS (UNEXTENDED): 77X96.5MM » WEIGHT: 560G » WWW.NIKON.CO.UK

Nikon's 18-200mm f/3.5-5.6G AF-S VR DX has a 35mm focal length equivalent of 27-300mm on a DX format Nikon D-SLR with a 1.5x crop factor. Like the Canon lens opposite it has a relatively fast maximum aperture of f/5.6 at 200mm in comparison with the other lenses on test. It has a solid feel and there's a nice, though relatively short, rubberised zoom ring at the front of the lens, with a manual focus ring just before that.

Nikon's Vibration Reduction (VR) anti-shake technology is employed and, just like the Canon model, this offers a 4-stop shooting advantage. We found that the VR system successfully allows you to shoot as low as 1/15sec at 200mm and still maintain blur-free shots. Great stuff!

This 18-200mm lens also incorporates Nikon's Silent Wave Motor (AF-S), resulting in almost near-silent AF operation. It also means that D40/D40x/D60 owners can achieve full AF operation as well, thanks to the built-in motor that isn't found on those bodies. It's hard to fault the AF performance - it's precise and locks on quickly to subjects.

RATINGS	
FEATURES & BUILD	★★★★★
PERFORMANCE	★★★★★
IMAGE QUALITY	★★★★★
VALUE FOR MONEY	★★★★★



# OLYMPUS ED 18-180MM F/3.5-6.3

» £315 » DIMENSIONS (UNEXTENDED): 78X84.5MM » WEIGHT: 435G » WWW.OLYMPUS.CO.UK

This 18-180mm FourThirds lens from Olympus is a pretty compact piece of glass and thanks to the 2x focal length conversion of FourThirds, it has a 35mm focal length equivalent of 36-360mm. This makes it less wide than the others here, with a 36mm film equivalent at the short end, though at the long end it does have a greater reach.

It's got a decent feel, with a chunky, largely-grooved zoom ring and well-sized manual focus ring, too. All-in-all, it's been well put together and feels reassuring in the hand.

At the 180mm end, the maximum aperture is a lowly f/6.3 - like many of the lenses on test - and so in most cases when hand-holding, you'll need some form of anti-shake. As the Olympus system is in-camera and featured only on some newer models, this will be an issue if you've got an older D-SLR.

There are no AF motors featured, so be prepared for some noise when it's focusing, and during operation. It was also quite slow to lock on, with a tendency for the AF to hunt in low-contrast conditions.

RATINGS	
FEATURES & BUILD	★★★★★
PERFORMANCE	★★★★★
IMAGE QUALITY	★★★★★
VALUE FOR MONEY	★★★★★



## PENTAX SMC DA 18-250MM F/3.5-6.3

£389 DIMENSIONS (UNEXTENDED): 85.5X75MM WEIGHT: 455G WWW.PENTAX.CO.UK

Considering the slightly extended focal length of this 18-250mm from Pentax, it's still relatively compact. The extra length means that this lens has a film focal length equivalent of 27.5-382.5mm - offering you a substantial reach.

There's a large, grooved zoom ring which, in operation produced a fairly fluid movement through the focal range, though not the best on test. The manual focus ring at the front of the lens is quite thin and doesn't offer the most precise control, plus there was a bit too much free play. The overall look and feel is similar to the Pentax 18-55mm kit lens, so if you have one of those, you'll know what to expect.

There's no need for an anti-shake system as the latest Pentax D-SLRs have Shake Reduction built in, but some kind of AF motor to reduce the noise would have been good, as it's quite loud in operation, with a mixture of buzzes and whirrs. It's also fairly slow at focusing and often struggled to lock on first time. A generally disappointing performance from this Pentax model.

### RATINGS

FEATURES & BUILD



PERFORMANCE



IMAGE QUALITY



VALUE FOR MONEY



## SIGMA 18-200MM F/3.5-6.3 DC OS

£299 DIMENSIONS (UNEXTENDED): 79X100MM WEIGHT: 610G WWW.SIGMA-IMAGING-UK.COM

Along with a standard 18-200mm, Sigma also produces this 18-200mm with the addition of Optical Stabilising (OS), and like the systems on the Canon and Nikon lenses on test, this offers a 4-stop advantage. It works a treat, with sharp shots achievable at 1/15sec at 200mm.

The lens has a matte exterior, similar to that of Sigma's EX range of lenses, and the finish is hard to fault, especially at the price. The zoom ring isn't massive, but it's well placed and there's a generous manual focus ring, too, both having a good, rubberised feel.

Our test lens was Nikon-fit and comes with Sigma's Hyper-Sonic Motor (HSM), which reduced the AF noise to near silence, and its inclusion also makes the lens fully compatible with D40/D40x/D60 models. If you're a Canon or Sigma D-SLR owner, then this lens is only available as a non-HSM version, which seems a little unfair. We've tested the non-HSM version in the past, and apart from a little more noise, it's the same decent performer.

### RATINGS

FEATURES & BUILD



PERFORMANCE



IMAGE QUALITY



VALUE FOR MONEY



# SONY DT 18-200MM F/3.5-6.3

» E399 » DIMENSIONS (UNEXTENDED): 73.5X85.5MM » WEIGHT: 405G » WWW.SONY.CO.UK

Along with an 18-250mm model (which Sony was unable to supply for this test), Sony also offers this 18-200mm superzoom in its line-up, with a virtually identical finish that carries a very simple, understated design. It's dominated by the zoom and manual focus rings, both of which are very finely grooved. At the rear, the lens mount is predominantly plastic, and the overall feel doesn't really reflect the asking price.

As all Sony D-SLRs feature an in-built image stabilisation system (known as Super SteadyShot), there's no need for it in the lens. This lens has been in the Sony line-up for a couple of years now, so doesn't feature the Super Sonic wave Motor (SSM) to cut down on AF noise. As such, without the need or inclusion of either of these features, weight has been cut down to a slender 405g. In use, the AF is very loud, with a real mechanical buzz as the motors kick in. It's also slow, often hunting before it locked-on to the subject, and the movement through the zoom range isn't as smooth as we'd like.

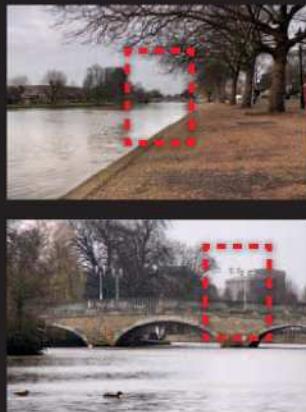
<b>RATINGS</b>	
FEATURES & BUILD	★★★★☆
PERFORMANCE	★★★★☆
IMAGE QUALITY	★★★★☆
VALUE FOR MONEY	★★★★☆



COMPARISON

## IMAGE QUALITY

Along with our A3 test grid, constructed of horizontal and vertical lines, a series of test shots were taken through the zoom range of each lens at a variety of different apertures. Images through the focal range were assessed for sharpness, fringing, distortion and vignetting.



**Canon 18-200mm**  
At 18mm, vignetting and distortion was a problem. Soft in the corners at 200mm and vignetting at f/5.6.

**Nikon 18-200mm**  
Vignetting was a real problem wide open from 18-200mm. Sharpness was good, however.

**Olympus 18-180mm**  
Vignetting was well controlled, with minimal distortion. Soft through aperture range at 200mm.

# TAMRON AF 18-270MM F/3.5-6.3 DI II VC

» £449 » DIMENSIONS (UNEXTENDED): 80X101MM » WEIGHT: 550G » WWW.TAMRON.CO.UK

Pushing the boundaries of focal lengths on superzooms even further, this Tamron lens has a range of 18-270mm - on a 1.5x Nikon D-SLR, that'd be the 35mm equivalent of 27.5-405mm, and on a Canon, it's 28.8-432mm - quite a jump from a more traditional 18-200mm. Even though it has got the extra focal length, it's still relatively compact in size, with a large, chunky zoom ring a key feature of the design. It's got quite a plasticky finish, but it's been well put together and doesn't detract too much from the overall experience.

This is the second Tamron lens to feature Vibration Compensation (VC) and during tests allowed us to shoot as low as 1/15sec at 200mm without signs of blur, while this was still achievable at 270mm. While there are no specific motors to reduce AF noise, AF was still possible on a Nikon D40/D40x/D60, while actual AF noise was minimal and accurate.

There is a non-VC 18-250mm version available, too, for Pentax and Sony users, as well as Nikon and Canon fits.

<b>RATINGS</b>	*****
<b>FEATURES &amp; BUILD</b>	*****
<b>PERFORMANCE</b>	*****
<b>IMAGE QUALITY</b>	*****
<b>VALUE FOR MONEY</b>	*****



**Pentax 18-250mm**

At 18mm, vignetting, distortion & extreme softness in the corners wide open. Poor performance.



**Sigma 18-200mm**

Vignetting wide open at both 18mm and 200mm. Great levels of sharpness though.



**Sony 18-200mm**

Vignetting at 18mm with soft corners. Soft at 200mm with signs of fringing.



**Tamron 18-270mm**

Bad vignetting 18mm and 200mm wide open, and soft in the corners. Sharpness improves at f/11.

## « THE RESULTS

**THOUGH THE APPEAL OF SUPERZOOMS** is their portability and flexibility, it's clear that image quality is compromised, and that goes for all lenses on test here.

Though great efforts have clearly been made to control these optical flaws in each lens, there are obviously still problems in bringing in these extreme focal length ranges at a price (and a weight) that photographers want.

Every lens displayed barrel distortion at 18mm, while pin-cushion distortion was evident at the long end, and vignetting was also an issue for any lens when wide-open. Some lenses did a better job than others at controlling these defects, as well as resolving more detail. As such, some lenses have been rated highly for image quality as they have performed the best

in this specific class, though they wouldn't stand up to a comparison with a zoom offering a smaller, more dedicated range. It's worth remembering though, that you can now easily correct distortion and vignetting faults in Photoshop, so this should be taken into account.

### Flexibility

If you're prepared to sacrifice a bit of image quality for the sake of convenience, and don't mind doing a little tweaking in software, then the all-in-one nature and weight-saving of a superzoom still makes a pretty good argument for itself.

If you're a Pentax or Sony D-SLR owner, your choice is limited, and the options that are available to you aren't great – both the Pentax

18-250mm and Sony 18-200mm were weaker than the others optically, and their build and features didn't really live up to their price tags.

For FourThirds D-SLR owners, things look a bit better, with the Olympus 18-180mm performing well, though it would be nice to see a wider focal length available at the short end instead of the extended telephoto range.

The Tamron 18-270mm VC is a decent superzoom and though it performed well, the price is similar to the better-performing offerings from Canon and Nikon.

And it's these two – the Canon 18-200mm IS and Nikon 18-200mm VR that pick up joint *DP* Silver Awards. Both lenses are fully specified, including built-in anti-shake and AF motors for reduced operational noise, and both perform remarkably well, too. They're let down a little optically, with the pair suffering from image quality issues, but these are controlled better than on many others, so good marks are awarded for a decent set of results across a huge range of focal lengths.

“ Some lenses, though, did a better job than others at controlling these image quality defects ”

HOW THE LENSES COMPARE...	 <b>Canon EF-S 18-200mm f/3.5-5.6 IS</b>	 <b>Nikon 18-200mm f/3.5-5.6G AF-S VR DX</b>	 <b>Olympus ED 18-180mm f/3.5-6.3</b>	 <b>Pentax smc DA 18-250mm f/3.5-6.3ED</b>
Street price	£465	£415	£315	£389
Maximum aperture	f/3.5-5.6	f/3.5-5.6	f/3.5-6.3	f/3.5-6.3
Minimum aperture	f/22-36	f/22-36	f/22	f/22-45
Minimum focus	0.45m	0.5m	0.45m	0.45m
Filter thread size	72mm	72mm	62mm	67mm
Aperture blades	6	7	7	7
Lens construction	16 elements in 12 groups	16 elements in 12 groups	15 elements in 13 groups	16 elements in 13 groups
Dimensions (unextended)	79x102mm	77x96.5mm	78x84.5mm	85.5x75mm
Weight	600g	560g	435g	455g
Lens mounts	Canon EF-S	Nikon DX	FourThirds	Pentax
Visit	<a href="http://www.canon.co.uk">www.canon.co.uk</a>	<a href="http://www.nikon.co.uk">www.nikon.co.uk</a>	<a href="http://www.olympus.co.uk">www.olympus.co.uk</a>	<a href="http://www.pentax.co.uk">www.pentax.co.uk</a>
<b>FEATURES &amp; BUILD</b>	*****	*****	*****	****
<b>PERFORMANCE</b>	*****	*****	*****	****
<b>IMAGE QUALITY</b>	****	****	****	****
<b>VALUE FOR MONEY</b>	****	****	****	****
<b>OVERALL RATING</b>	*****	*****	*****	****

WHICH ONE TO BUY?

**OVERALL WINNER...**  
**SIGMA 18-200MM F/3.5-6.3 OS**

Snatching the *Digital Photo Gold Award* is the Sigma 18-200mm DC OS. It's well made and highly featured, but we really want to see the inclusion of HSM on the non-Nikon versions, too. That said, it performs really well, with the OS anti-shake system working a treat.

Optically, this was the best lens we tested, just nudging ahead of the Canon and Nikon 18-200mm models. Like all the models, it has its faults, but it's still the best around. And as for the price, at £299 it's the cheapest lens on test, so in our books that makes it top dog!



MORE OPTIONS

**OTHER OPTIONS TO CONSIDER...**



**Fujifilm FinePix S100FS**

» Bridge Compact » £349 » [www.fujifilm.co.uk](http://www.fujifilm.co.uk)

» The Fujifilm FinePix S100FS bridge compact camera with a 14.3x 28-400mm superzoom is a solid, cheaper alternative to a D-SLR+superzoom combination. It features a range of film simulation modes and an 11.1Mp CCD sensor.



**Sigma 18-50mm f/2.8 EX**

» £269 » [www.sigma-imaging-uk.com](http://www.sigma-imaging-uk.com)

» If your main concern is optical quality, why not upgrade your kit lens to a 'fast' standard zoom. It will have a similar focal length, but with the large maximum aperture and pin-sharp optics, you won't be disappointed. Our choice is the Sigma 18-50mm f/2.8 EX.



**Nikon 70-300mm AF-S VR**

» £299 » [www.nikon.co.uk](http://www.nikon.co.uk)

» Giving a longer reach and improved optics over a superzoom, a 70-300mm telephoto zoom lens is a must-have piece of kit, though you will have to use it alongside your kit lens to match the versatility of a superzoom.

		
<b>Sigma 18-200mm f/3.5-6.3 DC OS</b>	<b>Sony DT 18-200mm f/3.5-6.3</b>	<b>Tamron AF 18-270mm f/3.5-6.3 Di II VC</b>
£299	£399	£449
f/3.5-6.3	f/3.5-6.3	f/3.5-6.3
f/22	f/22-40	f/22
0.45m	0.45m	0.49m
72mm	62mm	72mm
7	7	7
18 elements in 13 groups	15 elements in 13 groups	18 elements in 13 groups
79x100mm	73x85.5mm	80x101mm
610g	405g	550g
Canon, Nikon & Sigma	Sony	Canon & Nikon
<a href="http://www.sigma-imaging-uk.com">www.sigma-imaging-uk.com</a>	<a href="http://www.sony.co.uk">www.sony.co.uk</a>	<a href="http://www.tamron.co.uk">www.tamron.co.uk</a>
★★★★★	★★★★	★★★★★
★★★★★	★★★★	★★★★★
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