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Tamron adds Vibration Compensation to its fast 17-50mm f/2.8 zoom

Even sharper, even easier wide-angle photography in low light using Tamron's high-speed, high-definition zoom and VC image stabilisation

Tamron Co., Ltd. and Maxwell International Australia have announced the release of the **SP AF17-50mm F/2.8 XR Di II¹ VC LD Aspherical [IF] (Model B005)**, a high-speed f/2.8 lens zooming from wide to moderate telephoto, featuring Tamron's proprietary tri-axial Vibration Compensation (VC) mechanism that minimises the effects of handheld camera shake.

The new SP AF17-50mm F/2.8 Di II VC covers the extremely popular 17-50mm focal length range (equivalent to 26-78mm in the full-frame 35mm format²) making it extremely versatile. The new lens delivers impressive sharpness and striking contrast over its entire range of focal lengths and apertures. At its maximum aperture of f/2.8 it produces beautiful images enhanced by shallow depth of field and excellent *bokeh* (i.e. smooth, natural transitions in the out-of-focus areas of the image). The new lens is equipped with Tamron's proprietary Vibration Compensation (VC) image stabilisation mechanism, which controls the effects of camera shake, providing more opportunities for sharp handheld photography at the slow shutter speeds needed when shooting in low-light conditions (e.g. night or indoor scenes), dramatically enhancing the user's level of photographic freedom.

¹ Di II (Digitally integrated design) lenses are intended only for use with DSLR cameras (equivalent to APS-C size), as their optical systems are optimised for their characteristics. Di II lenses are not intended for use on digital SLRs with image sensors larger than APS-C size or 35mm film SLRs.

² Tamron's conversion value is 1.55x.

VC (Vibration Compensation)

The Tamron Vibration Compensation mechanism employs a tri-axial system in which three driving coils move internal optical components within the VC lens electromagnetically, based on signals originating from three steel ball bearings. Because the VC compensating lens elements are held in place solely by contact with these bearings, smooth, virtually frictionless movement is assured, providing the stabilised viewfinder images and excellent tracking performance that are characteristics of VC photography.

VC mechanism incorporated with negligible increase in size

Tamron's current fast standard zoom, the **SP AF17-50mm F/2.8 XR Di II LD Aspherical (IF) (Model A16)** has been heralded for its combination of superlative optical performance and compact design. In the new Tamron SP AF17-50mm F/2.8 Di II VC, the compact size and ease of use have been retained while its performance has been further enhanced. Tamron's state-of-the-art VC mechanism has been incorporated into the new lens without materially increasing its size and weight. As the VC lens

Print-resolution image at <http://highres.maxwell.com.au/tamron>



Specifications*

Model Name	B005
Focal Length	17-50mm (26-78mm equivalent)
Maximum Aperture	F/2.8
Angle of View	78°45'–31°11' (equivalent angles of view when converted to 35mm)
Lens Construction	19 elements in 14 groups
Minimum Focus Distance	0.29m/11.4" (over the entire zoom range)
Maximum Magnification Ratio	1:4.8
Filter Diameter	72mm
Overall Length	94.5mm (3.7")**
Maximum Diameter	79.6mm (3.13")**
Weight	570g (20.15oz)**
Diaphragm Blades	7 blades
Minimum Aperture	f/32
Standard Accessory	Flower-shaped lens hood
Mounts	Nikon (with built-in AF motor), Canon

* Specifications, appearance, functionality, etc. may be changed without prior notice.

** Length and weight values given are for Nikon cameras (with built-in AF motor). Tamron's conversion value is 1.55x.

elements move parallel to the image plane via electronic control alone, the structure of the VC mechanism is simplified, and the lens is more compact.

As a result of this success, the SP 17-50mm F/2.8 XR Di II VC makes pin-sharp handheld photography possible under a vastly expanded range of photographic situations, with maximal convenience and ease of use.

Product Features

1. All the advantages of a fast zoom lens are enhanced by Tamron's proprietary VC (Vibration Compensation) image stabilisation mechanism

One of the greatest technical and creative photographic challenges is creating natural-looking images in lower levels of available light – for example, indoors, in deep shadow or in the evening. Photographers know that a 'fast' lens – one with a wide maximum aperture – extends their creativity in this respect, because the increased amount of light transmitted to the sensor at f/2.8 allows a longer shutter speed at the same ISO setting. Being able to capture an image handheld avoids the time and intrusiveness of setting up a tripod to stabilise the camera and increases the spontaneity and flexibility of shooting. It also allows the same scene to be captured at a lower ISO setting, resulting in less noise or 'digital grain' and thus a higher-quality image.

Another common solution to the problems of shooting handheld in low light is the use of flash to 'freeze' blur from camera shake. This not only results in a less natural-looking image but can also be intrusive during shooting.

Equipping a fast lens with VC technology extends the range of handheld shutter speeds, and all the consequent advantages, even further. Adding the versatility of a 17–50mm zoom range – and the ease of use from this lens' compact design – establishes new thresholds of naturalistic photographic expression.

And finally, even when shooting in light levels where handheld photography is generally possible, combining the fast f/2.8 maximum aperture of this lens with the VC image stabilisation permits dramatic blur from subject movements – in situations where setting up a tripod is inappropriate or even impossible.

2. Compact size with a filter thread of Ø72mm, while delivering both a large f/2.8 diameter and VC

Naturally, the addition of an image stabiliser tends to increase the size of a lens. As the new Tamron SP AF17–50mm Di II VC lens is a large-diameter f/2.8 zoom, the optical image stabilisation system is also relatively large compared with other VC models. However, through improvements to optical, mechanical and VC designs, Tamron has kept their new zoom to a remarkably compact size with a filter thread of 72mm.

To achieve the same anti-shake effect as the renowned VC mechanism incorporated into Tamron's high-power zoom lenses – models B003 and A20 – the engineers had to enhance the VC unit itself, the mechanism that controls the optical image stabilisation system. This initially led to an increase in size compared with existing lenses. A prolonged program of research, development and testing simultaneously reduced the size of the VC unit while increasing its torque; innovations in both manufacturing technology and production engineering improved the precision, weight, and strength of the lens' components. Tamron's engineers achieved their goal of a fast, compact zoom lens with a filter thread of 72mm incorporating both a large f/2.8 maximum aperture and an effective Vibration Compensation mechanism.

The result: The Tamron SP AF17–50mm F/2.8 XR Di II VC, an extraordinarily complex lens to manufacture but a joy to use.

3. Meeting the optical requirements of digital cameras, multiple elements of special glass enhance optical quality while maintaining compactness

With its innovative use of XR (Extra Refractive Index) glass, Tamron has optimised the overall optical power distribution and reduced the size of the lens, while at the same time advancing the correction of optical aberrations.

In addition, the optimal positioning of three compound aspheric elements has enabled further shortening and compression of the entire optical system while maintaining outstanding imaging performance.

Two LD (Low Dispersion) lens elements are also employed to make effective corrections for axial chromatic aberrations and chromatic aberrations due to magnification, a major factor in enhancing optical quality in digital photography.

The result: excellent image performance throughout the zoom range.

Optimising the angle of light rays striking the image sensor

To reduce the impact of changes in aberrations due to zooming, the optical design developed for this lens literally guides the angles of light rays entering from the centre to the periphery of the lens. This ensures that the light rays fall within a set range on the image sensor, enhancing image quality.

Reduced fall-off of peripheral brightness

The fall-off in peripheral brightness that limits resolution in wide-angle shooting is very well controlled, resulting in excellent image detail from the centre to the outer edges and corners of the image field.

Superior resolution

As an SP Di II class of lens, it delivers top imaging performance in all key parameters: it provides high resolution, high contrast, and excellent detail rendition.

Countermeasures reduce ghosting and flare

The latest BBAR (Broad-Band Anti-Reflection) multi-layer coatings reduce reflection from the lens, ensuring excellent performance in all photographic conditions. These coatings enhance light transmission in both short and long wavelengths. Internal coatings have also been applied to all the cemented surfaces of lens elements, providing sharpness, optimum colour reproduction and excellent colour balance.

4. Minimum focus distance of 29cm across the zoom range, with macro capability of 1:4.8

Even with its VC image stabilisation optical system this lens delivers a minimum focus distance of 29cm (11.4") over the entire zoom range, enabling stress-free close-up photography. The maximum magnification ratio is 1:4.8³ at 50mm.

³ This lens enables photography of virtually the same range as when using a lens with a maximum magnification ratio of 1:3.1 on a full frame format camera, as the format of the APS-C size image sensors is smaller than 35mm film. For this reason, this lens is capable of filling the frame by capturing an area that is almost the same as an area covered by a lens designed for the 35mm format and providing the maximum magnification ratio of 1:2.3.

5. Streamlined, classic exterior design

A simple, classic design with a smooth silhouette ensures that this lens conveys quality and precision when mounted on any DSLR camera. Premium-quality textured paint provides a superb finish.

6. Zoom-lock mechanism, useful when carrying the lens/camera over the shoulder

Tamron's zoom-lock mechanism prevents the weight of the lens barrel from extending the lens when carried on the camera pointing downward.

7. Flower-shaped hood is supplied with the lens to shield stray light

Provided as a standard accessory, the flower-shaped hood matches the rectangular shape of the image sensor to effectively block the interference of light rays entering from outside the borders of the image area, helping to ensure sharp, clear, flare-free performance.

Product name

SP AF17-50mm F/2.8 XR Di II VC LD Aspherical [IF]
(Model B005)

Mounts and availability in Australia

Nikon: November 2009; Canon: December 2009

Recommended retail price including GST

\$995.00

Distributed in Australia by

Maxwell International Australia Pty Limited

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