

Tamron announces a fast-aperture wide-angle zoom with Vibration Compensation

Tamron develops the world's first¹ full-size, fast-aperture standard zoom with built-in image stabilisation – SP 24-70mm F/2.8 Di VC USD (Model A007) with class-leading resolution and Tamron's proprietary Vibration Compensation

9 February 2012

Tamron Co., Ltd and Maxwell International Australia Pty Limited announce the development of the **SP 24-70mm F/2.8 Di VC USD (Model A007)**, the world's first¹ full-size fast-aperture standard zoom lens equipped with VC (Vibration Compensation) image stabilisation and USD (Ultrasonic Silent Drive)², with resolution at the top of its class. The lens packages the latest optical design technology in a lighter, more compact, more water-resistant body.

Features

- The world's first¹ full-size, fast-aperture standard zoom with built-in **VC (Vibration Compensation)**³. Tamron's acclaimed VC mechanism delivers anti-shake benefits of up to 4 shutter speed stops. This greatly extends the main advantage of a fast-aperture lens, which provides useable shutter speeds when shooting without a tripod in low light.
- Uses specialised high-grade glass in the three LD elements, three Glass Molded Aspherical Lenses, one Hybrid Aspherical Lens and two XR (Extra Refractive Index) elements, all contributing to the **top-of-class image quality** expected of a high-grade Tamron SP lens.
- A **fast maximum aperture of f/2.8** makes the viewfinder brighter, too, which makes composition and "selective focus" much easier in any light conditions.
- The **wide-end focal length of 24mm** captures more of the scene before the camera, making it ideal for travel, environmental portraiture and more.
- The profile of the aperture diaphragm blades creates a more rounded⁴ shape, resulting in more **natural-looking blur effects**. This is particularly important with a wide maximum aperture of f/2.8, where subjects can be isolated in a shallow zone of sharp focus against a blurred background. Blurred highlights appear in a circular shape which is attractive and natural. A near-perfect circular diaphragm shape is retained up to f/5.6 – two stops down from fully open – where the blur effects are most visible.
- **USD (Ultrasonic Silent Drive)**² powers a speedy autofocus drive, complemented by a continuous manual mechanism.
- **Moisture-resistant construction** helps prevent water from penetrating the lens.

1. For fast-aperture standard zoom lens compatible with full-frame size SLR cameras except with Sony full-frame size SLR cameras. Current as of February 2012. (Source: Tamron).

This image and more are downloadable at print resolution from <http://highres.maxwell.com.au/tamron>



2. USD (Ultrasonic Silent Drive) is Tamron's proprietary ultrasonic motor drive.
3. The Sony mount does not include VC, because the body of Sony digital SLR cameras includes image stabilisation functionality. The product name for Sony cameras is "SP 24-70mm F/2.8 Di USD" without the VC designation.
4. This rounded diaphragm retains a nearly circular shape even when taken two stops down from its fully open state.

Specifications*

Model number	A007
Focal length	24-70mm
Maximum aperture	f/2.8
Angle of view (diagonal)	84° 4' – 34° 21' (full-frame 35mm format) 60° 20' – 22° 33' (for APS-C format)
Lens construction	17 elements in 12 groups
Minimum focus distance	0.38m (15.0in.)
Maximum magnification ratio	1:5 (at f=70mm: MFD 0.38m)
Filter diameter	82mm
Length ¹	108.5mm (4.3in.)*
Entire Length ²	116.9mm (4.6in.)*
Maximum diameter	88.2mm (3.5in.)*
Weight	825g (29.1oz)*
Diaphragm blades	9 (rounded diaphragm)
Minimum aperture	f/22
Standard accessory	Flower-shaped Lens Hood
Compatible mounts	Nikon, Canon, Sony

Specifications, appearance, functionality, etc. may change without prior notice.

*Length, entire length and weight values given are for the Nikon mount.

1. Distance between the mount face and the tip of the lens.
2. Distance between the tip of the lens and the tip of the protrusion.

VC (Vibration Compensation)

VC (Vibration Compensation) is Tamron's proprietary image stabilisation system. Tamron's VC uses three driving coils to activate the shake-compensating VC lens group electromagnetically via three ceramic balls. The VC lens elements are held in place only by contact with the ceramic balls, achieving smooth movement with little friction. This provides a stable viewfinder image with excellent tracking performance. And as the VC lens may be moved in parallel using only the motorised control, the mechanical structure has been simplified, making the lens more compact in size.

New VC system – moving coil method

Tamron's original VC image stabilisation mechanism utilised a moving magnet system whereby a heavy magnet was positioned near the moving VC lens element. The new VC mechanism employs a moving coil mechanism with a lightweight coil attached to the VC optical lens. This reduces the load on the drive system, and as it also reduces the size and weight of the VC mechanism, the lens itself is lighter and more compact.

Because the **24-70 mm F/2.8 Di VC USD** is a fast zoom lens with maximum aperture of f/2.8, its VC system drives a lens that is larger and heavier than other zooms. Therefore, the shape, size and layout of the drive coils are all designed to deliver thrust sufficient for the same high level of vibration compensation.

USD – about the ultrasonic motor

In the ultrasonic motor, a piezoelectric element arranged in a ring formation generates ultrasonic vibrations in a metallic ring stator, and the vibration energy is used to rotate a metallic ring rotor that is attached to the stator. The rotation energy is in turn transferred from the metallic ring rotor to operate the focus lens.

Di – optimal image quality on digital and film

Tamron Di lenses have been optimised for digital capture using advanced multi-coating techniques and optical designs that assure excellent image quality across the entire picture field. Thus Di lenses provide outstanding performance on cameras with full-frame and APS-C format sensors as well as on 35mm film.

- Smallest and lightest of digital SLR all-in-one zoom lenses with a 15x zoom ratio (surveyed by Tamron as of May 2011).
- PZD (Piezo Drive) is a standing-wave ultrasonic motor system developed by Tamron. In AF operation the motor is faster and quieter than DC motors. The actuator is smaller in size than in ring-type ultrasonic motors, allowing a more compact lens design.

More information

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print images	highres.maxwell.com.au/tamron

Classification code change for Nikon mounts

Since the introduction by Tamron of the first Nikon mount lens featuring an internal AF motor, the **AF28-300mm F/3.5-6.3 XR Di VC (Model A20)**, all Nikon mount lenses with the internal AF motor had used the classification code "N II." Lenses using a coupler system* without an internal AF motor were designated as "N." Because future Nikon lenses will have the internal AF motor as a standard feature, Tamron has simplified the designation and consolidated all its Nikon mount lenses as "N," eliminating the "N II" designation for future models. This change began with the **18-270mm F/3.5-6.3 Di II VC PZD (Model B008)**.

The "N" classification lenses with coupler systems are:

- AF28-300mm F/3.5-6.3 XR Di (Model A061)**
- SP AF200-500mm F/5.6-6.3 Di (Model A08)**
- SP AF180mm F/3.5 Di (Model B01)**

*Coupler system refers to a system that uses a shaft to harness the AF motor built into the camera body to operate the lens.

About TAMRON Co., Ltd.

'New Eyes for Industry' is Tamron's slogan, as the company is a leading manufacturer of a comprehensive range of original optical products that contribute to many different industries. These include interchangeable lenses for SLR cameras, both digital and film; digital compact camera lenses; video camera lenses; CCTV camera lenses; automotive lenses; lenses for mobile phone cameras; and ultra-precision optical components.

Tamron is keenly aware of its environmental responsibilities and aspires to preserve the environment as much as possible in all business activities.

For a history of the achievements of Tamron Co., Ltd. please visit Tamron's Australian website at tamron.com.au

About Maxwell International Australia

Maxwell is a multi-brand distributor of imaging and personal electronics accessories to the retail photo and consumer electronics industry. The company is a wholly-owned subsidiary of DayMen Photo International, owner of the worldwide Lowepro brand. Maxwell operates from offices headquartered in Homebush, close to Sydney's Olympic Park.

The Maxwell name goes back nearly 40 years in Australian photo distribution. The current Maxwell started operations in October 2006 and is the leading supplier of protective bags and cases for photo and portable personal electronics to Australia's premier photo and CE retailers.