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PENTAX K-mount

DFA★ | HD PENTAX-D FA★ SINGLE FOCUS LENS

A new-generation, high-performance Star-series lens, designed for the high-resolution imaging of next-generation cameras

HD PENTAX-D FA★ 50mmF1.4 SDM AW

To be launched July 2018

- Superb imaging performance, assured by exceptional resolving power through out the edges of the image field — even when set to open aperture
- PENTAX-original, state-of-the-art lens coating technologies, delivering extra-sharp, high-contrast images free of flare and ghost images
- Dustproof, weather-resistant construction, providing outstanding dependability and durability for shooting in demanding outdoor conditions

Aperture: F2.2; Shutter speed: 1/800sec.; Exposure Compensation: 0.0; Sensitivity: ISO200; Custom Image: Portrait

A large-aperture, standard lens assuring exceptional image quality with minimal aberrations

HD PENTAX-D FA* 50mmF1.4 SDM AW

(Hood, lens cap, lens mount cap, and lens case included)

Aero Bright Coating | AW All Weather | HD Coating | SDM | KAF4 mount

Star-series lens, developed in pursuit of uncompromising imaging performance

PENTAX has set the strictest standards for its Star-series lenses: 1. Exceptional imaging performance, with distinctive visual elements such as a beautiful bokeh (defocus) effect 2. Large maximum F number 3. Outstanding optical performance and high-grade lens construction, providing a solid body construction, remarkable outdoor performance and superb maneuverability only when a lens satisfies all these standards is it designated as a top-of-the-line Star-series model. New-generation Star-series lenses are designed to meet even stricter standards than those established for existing models, to accommodate the much higher image quality and performance provided by advanced, next-generation digital SLR cameras.

High-performance, next-generation lens with a large F1.4 maximum aperture

The HD PENTAX-D FA* 50mm F1.4 SDM AW was developed as a member of the next-generation Star series, which delivers very high image resolving power. It assures exceptional imaging performance from the center to the edges of the image field, even at open aperture, while providing a beautiful bokeh (defocus) effect and outstanding image rendition at close ranges. Its large maximum aperture of F1.4 delivers bright, clear images in portraiture and indoor photography, making it versatile in capturing a wide array of subjects and scenes.

State-of-the-art optical technology

The lens has been treated with PENTAX-developed Aero Bright Coating II* — a lens-coating nanotechnology employing a super-low refractive film fabrication process. By coupling this advanced lens coating with the high-grade, multi-layer HD Coating**, which reduces average reflectance in the visible ray spectrum to less than 50% of conventional multi-layer coatings, this lens effectively reduces flare and ghost images to a minimum even in demanding lighting conditions such as backlighting.

*A state-of-the-art, PENTAX-original lens coating technology developed using nanotechnology. It applies a silica aerogel layer with a uniform porous structure over a regular multi-coating layer to reduce surface reflections across a wide range of wavelengths, and produce crisp, high-quality images.

**HD stands for High Definition.

Dustproof, weather-resistant construction

Developed as an All Weather (AW) model, this lens features a dependable dustproof, weather-resistant structure with eight special seals to prevent the intrusion of water and dust into the lens interior. When paired with a PENTAX weather-resistant digital SLR camera body, it forms a durable, reliable digital imaging system that performs superbly in demanding outdoor shooting settings.

The positioning of special seals

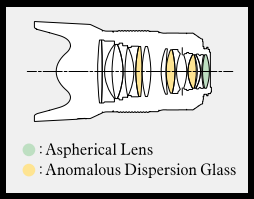
Newly developed ring-type ultrasonic motor SDM

The lens features a newly developed ring-type ultrasonic motor SDM, which generates almost twice the torque of a conventional lens-driving motor. Thanks to this enormous driving power, the lens assures smooth, high-speed shifting of the heavy, multi-element rear lens group during focusing operation.

Ring-type SDM

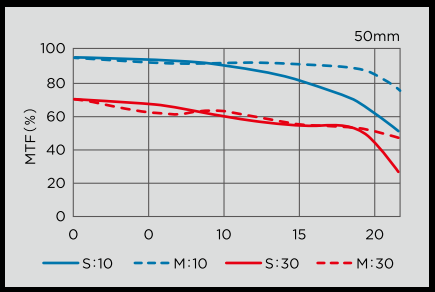
Other features

1. Nine-blade, round diaphragm to produce a natural bokeh (defocus) effect at up to F2.8 aperture setting, while minimizing the streaking effect of point light sources 2. A minimum focusing distance of 40 centimeters, effective in capturing images with a beautiful bokeh effect 3. Electromagnetic diaphragm-control mechanism*, for flawless, high-precision exposure control during video recording 4. SP (Super Protect) coating to keep the front surface free of dust and spots.



* This mechanism is available when the lens is mounted on a K-1 Mark II, K-1, K-3 II, K-3, KP, K-70, K-S2, K-S1 or K-50 camera body.
* Firmware update is needed in some of the models

MTF (Modulation Transfer Function) curves of the HD PENTAX-D FA* 50mm F1.4 SDM AW



(Geometric MTF)

Specifications

Focal Length	50mm Equivalent to 76.5mm in 35mm format (when attached to PENTAX APS-C size DSLR cameras)
Maximum Aperture	F1.4
Minimum Aperture	F16
Lens Construction	15 elements in 9 groups
Angle of View (Diagonal)	47.0° Equivalent to 31.5° in 35mm format (when attached to PENTAX APS-C size DSLR cameras)
Mount	KAF4
Minimum Focusing Distance	0.4m (1.3ft.)
Maximum Magnification	0.18x
Filter Diameter	72mm
Diaphragm Control	Electromagnetic diaphragm Fully automatic
Number of Diaphragm Blades	9 Rounded diaphragm (50mm F1.4-2.8)
Aperture Ring	N/A
Tripod Mount	N/A
Lens Hood	PH-RBB72 (included)
Lens Cap	O-LC72 (included)
Lens Case	S100-140 (included)
Maximum Diameter x Length	approx. 80mm x 106mm (approx. 3.1in. x 4.2in.)
Weight	approx. 910g / with hood approx. 955g (approx. 32.1 oz./ with hood approx. 33.7oz.)
Temperature	–10°C - 40°C (14°F - 104°F)
Humidity	85% or less (no condensation)

*Specifications and design are subject to change without notice.

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