

Superb ultrawide zoom for film and digital

What you should know: Single-focal-length 12mm lenses for SLRs are rare indeed, but the new 12–24mm zooms are near incredible, particularly this double-duty beauty.

Hands on: Massive but light, the lens is sturdy and cosmetically handsome in crackle-gray finish with heavily ribbed, rubberized, smooth-turning zoom and focus rings. Inset clear plastic window shows metric distance scales in light yellow, feet in white. All markings are quite legible. Minolta- and Pentax-mount lenses have depth-of-field scales for 12mm and 24mm; Sigma, Canon, Nikon lenses, 12mm only. EX marking stands for “Excellent,” indicating top-level pro quality; DG indicates optimized for digital cameras.

In the lab: SQF data were excellent at all focal lengths with minimum barrel distortion (0.22%) at 12mm and slight pincushion (0.93%) at 24mm. At the closest focusing distance of 10.5 inches at 12mm, center sharpness was excellent at all apertures. Corner sharpness was poor f/4.5–11, and acceptable f/16–22. Optimum performance at f/16. At closest focusing distance of 10.75 inches at 24mm, center sharpness was again excellent at all apertures. Corner sharpness was poor f/5.6–22, but acceptable at f/27. Optimum performance at f/27.

In the field: Test slides were very sharp and contrasty from center to corner at every aperture and focal length. Light falloff was gone by f/5.6 at 12mm, and by f/8 at 24mm.

Digital camera results: At 8 feet, 12mm resolution falloff at the edges compared with the center, using a Canon EOS 10D, was between 10%–0% from f/4.5–16; at 24mm the same f/5.6–16. An excellent performance for digital use.

Conclusion: A triumph in optical engi-

neering for both film and digital camera use. Extreme focusing of three-dimensional objects is OK; avoid flat copy work.



SPECIFICATIONS

12–24mm (12.48–22.97mm tested), f/4.5–5.6 (f/4.72–5.40 tested), 16 elements in 12 groups. Focusing turns 130 degrees counterclockwise. Zoom ring turns 60 degrees counterclockwise. Focal lengths marked at 12-, 15-, 17-, 20-, and 24mm. Diagonal view angle: 122–84 degrees. Weight: 1.4 lb. Filter: Rear gelatin type. Mounts: Canon AF, Minolta AF, Nikon G AF, Pentax AF, and Sigma AF. Included: lenshood, softcase. List price: \$843. Street price: Approx. \$650.

SUBJECTIVE QUALITY FACTOR

@ 12mm

Size	5x7	8x10	11x14	16x20	20x24
4.5	95.9	94.6	91.7	86.3	80.2
5.6	96.1	94.8	92.0	87.0	81.3
8.0	96.2	95.0	92.4	87.7	82.4
11.0	96.0	94.8	92.0	87.0	81.2
16.0	95.7	94.4	91.4	85.9	79.6
22.0	94.8	93.2	89.4	82.3	73.7

@ 24mm

Size	5x7	8x10	11x14	16x20	20x24
5.6	96.1	94.9	92.2	87.5	82.4
8.0	96.2	95.0	92.4	87.9	83.1
11.0	96.0	94.8	92.0	87.2	81.9
16.0	95.7	94.3	91.3	86.0	80.0
22.0	94.8	93.2	89.5	82.7	74.7
27.0	94.3	92.6	88.4	80.4	70.7

key

A+	A	B+	B	C+	C	D	F
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