



Sigma

Wide, wider, widest:
Superspeed Sigma trio

Sigma 20mm f/1.8 EX DG AF



SPECIFICATIONS

20mm (20.58mm tested), f/1.8 (f/1.76 tested), 13 elements in 11 groups. Focusing turns 90 degrees counterclockwise. **Diagonal View Angle:** 94 degrees. **Weight:** 1lb 2 1/8 oz. **Filter size:** 82mm. **Mounts:** Canon AF, Minolta AF, Nikon AF, Pentax AF, and Sigma AF. **Lenshood:** Included. **Case:** Included. **List price:** \$689. **Street price:** Approx. \$370.

SUBJECTIVE QUALITY FACTOR

| KEY | A+ | A | B+ | B | C+ | C | D | F |
|--------|------|------|------|-------|-------|-------|---|---|
| @ 20mm | | | | | | | | |
| MAG | 5 | 6 | 8 | 12 | 17 | 22 | | |
| Size | 4x6 | 5x7 | 8x10 | 11x14 | 16x20 | 20x24 | | |
| 1.8 | 96.3 | 95.8 | 93.6 | 87.2 | 77.0 | 68.7 | | |
| 2.0 | 96.8 | 96.3 | 94.4 | 88.7 | 80.0 | 72.7 | | |
| 2.8 | 96.9 | 96.4 | 94.5 | 89.1 | 80.6 | 73.7 | | |
| 4.0 | 97.2 | 96.8 | 95.2 | 90.6 | 83.0 | 76.5 | | |
| 5.6 | 97.4 | 97.0 | 95.5 | 91.3 | 84.3 | 78.2 | | |
| 8.0 | 97.5 | 97.1 | 95.8 | 92.0 | 85.4 | 79.3 | | |
| 11.0 | 97.2 | 96.8 | 95.3 | 90.9 | 83.4 | 76.6 | | |
| 16.0 | 96.7 | 96.2 | 94.3 | 88.9 | 79.5 | 71.0 | | |
| 22.0 | 96.1 | 95.5 | 93.3 | 86.7 | 75.7 | 65.9 | | |

Hands on: We've seen a number of 28mm f/1.8 AF lenses before, but 24mm f/1.8s are rather thin on the infield ground, and a 20mm f/1.8 is like a line drive right out of the park!

All three lenses are fairly large and heavy for their respective focal lengths primarily due to their large apertures, and, like

less light falloff than comparable lenses, said to be particularly important in digital photography. Both the 28mm and 24mm are labeled Macro, but the 20mm is not.

Each of the lenses features a very wide, grippably textured, rubberized manual-focusing collar (with natty gold ring at the front) that turns very smoothly with reason-

Sigma 24mm f/1.8 EX DG AF



SPECIFICATIONS

24mm (24.56mm tested), f/1.8 (f/1.80 tested), 10 elements in 9 groups. Focusing turns 90 degrees counterclockwise. **Diagonal View Angle:** 84 degrees. **Weight:** 1 lb 1 5/16 oz. **Filter size:** 77mm. **Mounts:** Canon AF, Minolta AF, Nikon AF, Pentax AF, and Sigma AF. **Lenshood:** Included. **Case:** Included. **List price:** \$574. **Street price:** Approx. \$300.

@ 24mm

| MAG | 5 | 6 | 8 | 12 | 17 | 22 |
|------|------|------|------|-------|-------|-------|
| Size | 4x6 | 5x7 | 8x10 | 11x14 | 16x20 | 20x24 |
| 1.8 | 97.3 | 97.0 | 96.1 | 93.9 | 89.4 | 83.8 |
| 2.0 | 97.4 | 97.1 | 96.2 | 94.1 | 89.8 | 84.4 |
| 2.8 | 97.1 | 96.9 | 95.9 | 93.6 | 88.7 | 82.6 |
| 4.0 | 96.6 | 96.3 | 95.2 | 92.5 | 86.5 | 78.9 |
| 5.6 | 96.5 | 96.2 | 95.0 | 92.1 | 85.9 | 78.0 |
| 8.0 | 96.9 | 96.6 | 95.6 | 93.0 | 87.7 | 81.0 |
| 11.0 | 97.0 | 96.7 | 95.7 | 93.2 | 88.1 | 81.6 |
| 16.0 | 96.7 | 96.4 | 95.3 | 92.6 | 87.0 | 80.0 |
| 22.0 | 96.1 | 95.7 | 94.4 | 91.3 | 84.6 | 76.2 |

other Sigma EX-series lenses aimed at pros, they're beautifully finished in an attractive matte black with tiny gold metallic flecks. The DG designation denotes that these lenses are claimed to deliver

able damping. The collars move forward to click into AF position, and conveniently back to select manual-focusing. All have very legible white-on-black aperture and distance scales (the latter under a Plexiglas window with adjacent depth-of-field scale and IR index), and each has a well-designed snap-on lenscap. The lenses bear such a close resemblance and have such similar dimensions that we found ourselves checking to make sure which was which.

In the lab: SQF data for the 20mm f/2.8 indicate very good overall imaging performance. Barrel distortion was slight (0.83%). Exposure at the film plane was judged extremely accurate, with 2/3-stop underexposure at f/1.8 due to light falloff, less than 1/10-stop underexposure from f/2 to f/16, and 1/3-stop under at f/22. At the

closest focusing distance of 7¼ inches (1:4.2), center sharpness was excellent at all apertures. Corner sharpness was poor from f/1.8 to f/11, acceptable at f/16, and good at f/22. Optimum performance was at f/22.

SQF data for the 24mm f/1.8 indicate excellent overall imaging performance. Barrel distortion was slight (0.63%). Exposure at the film plane was judged very accurate, with ⅔-stop underexposure at f/1.8 due to light falloff, ⅔-stop under from f/2 to f/11, ⅓-stop under at f/16, and ½-stop under at f/22. At the closest focusing distance of 7¼ inches (1:2.7) center sharpness was excellent from f/1.8 to f/2.8, very good from f/4 to f/5.6, excellent from f/8 to f/16, and very good at f/22. Corner sharpness was poor from

f/1.8 to f/2.8, acceptable at f/4, very good at f/5.6, excellent from f/8 to f/16, and very good at f/22. Optimum performance was at f/11.

SQF data for the 28mm f/1.8 indicate excellent overall imaging performance. Barrel distortion was minimal (0.43%). Exposure at the film plane was extremely accurate, with ⅔-stop underexposure at f/1.8 due to light falloff, less than ⅓-stop underexposure from f/2 to f/16, and ⅓-stop under at f/22. At closest focusing distance of 7½ inches (1:2.9), center sharpness was excellent at all apertures. Corner sharpness was poor from f/1.8 to f/2.8, acceptable from f/4 to f/5.6, very good at f/8, excellent from f/11 to f/16, and very good at f/22. Optimum performance was at f/11. Overall, distortion correction

Sigma 28mm f/1.8 EX DG AF



SPECIFICATIONS

28mm (26.99mm tested), f/1.8 (f/1.77 tested), 10 elements in 9 groups. Focusing turns 90 degrees counterclockwise. **Diagonal View Angle:** 75 degrees. **Weight:** 1 lb 7/16 oz. **Filter size:** 77mm. Mounts: Canon AF, Minolta AF, Nikon AF, Pentax AF, and Sigma AF. **Lenshood:** Included. **Case:** Included. **List price:** \$440. **Street price:** Approx. \$230.

@ 28mm

| MAG | 5 | 6 | 8 | 12 | 17 | 22 |
|-------------|------------|------------|-------------|--------------|--------------|--------------|
| Size | 4x6 | 5x7 | 8x10 | 11x14 | 16x20 | 20x24 |
| 1.8 | 97.0 | 96.7 | 95.7 | 93.2 | 88.0 | 81.4 |
| 2.0 | 97.0 | 96.8 | 95.8 | 93.4 | 88.3 | 82.0 |
| 2.8 | 97.0 | 96.7 | 95.8 | 93.3 | 88.4 | 82.1 |
| 4.0 | 97.1 | 96.8 | 95.9 | 93.5 | 88.8 | 82.8 |
| 5.6 | 97.3 | 97.0 | 96.1 | 93.9 | 89.4 | 83.8 |
| 8.0 | 97.5 | 97.3 | 96.4 | 94.4 | 90.4 | 85.4 |
| 11.0 | 97.5 | 97.3 | 96.5 | 94.5 | 90.5 | 85.7 |
| 16.0 | 97.1 | 96.9 | 95.9 | 93.6 | 88.9 | 83.1 |
| 22.0 | 96.4 | 96.0 | 94.8 | 91.9 | 85.8 | 78.0 |

was extremely low.

In the field: Test slides taken with all three lenses were uniformly sharp and contrasty from center to corners at all apertures, with the following exceptions: Corner images shot at f/1.8 (20mm) from f/1.8 to f/2 (24mm), and center-to-corner images at f/1.8 (28mm) were slightly soft. Flare was very well controlled with all the lenses. AF timing was average, and autofocus action was judged slightly noisy.

Conclusion: These three lenses provide superior picture-taking performance at their respective focal lengths. That this high level has been achieved at such extremely fast apertures is outstanding! We have no reservations in recommending any of them to pros or critical amateurs who need a really fast wide-angle lens.

