Building on N8008 Technology

by Mike Stensvold

Nikon's newest autofocus 35mm SLR camera, the N6006, offers excellent performance and lots of features, along with point-and-shoot ease of operation. It's ideal for anyone from the snapshooter who wants interchangeable lenses to the serious amateur photographer who wants to experiment with complex images. A companion manual-focus camera, the N6000, offers similar features for focus-yourself fans.

THE N6006

My first impression of the N6006 was that it's an economy version of the N8008, with an added built-in flash unit like that of the N4004S. But the N6006 is actually its own camera, with some unique features. FOCUSING: The N6006's autofocus system is based on the 200-CCD Advanced AM200 AF module used in the N8008, giving it quick, accurate AF capabilities in light levels down to EV -1 (dim enough to require an exposure of 4 seconds at f/1.4 with ISO 100 film). Both single-shot and continuous autofocus are provided, with automatic Focus Tracking of moving subjects (the camera computes the speed of the subject, and sets focus for its position at the instant of exposure). Both AF modes are focus-priority: You can't make an exposure until the system has focused on a subject. Focus-priority helps the less-skilled shooter avoid making out-of-focus images.

A green light in the viewfinder glows when focus has been achieved. This is particularly useful when you're focusing manually, whether using one of the 21 AF Nikkor lenses, or one of the 50 non-AF Nikkor lenses with maximum apertures of f/5.6 or faster. With slower non-AF lenses, you have to focus manually using the viewfinder screen, as with any manual-focus SLR.

All current Nikkor lenses can be used with the N6006, as can most previous Nikkor lenses. All camera functions can be used with AF Nikkor lenses; with AI and AI-S (and AI-modified) lenses, you lose program and shutter-priority AE and Matrix metering. The TC-16A autofocus converter cannot be used with the N6006 or N6000, nor can non-AI Nikkor lenses. But you do have a selection of lens focal lengths from 6mm fisheye to 2000mm mirror to use with the camera.

Below: The N6006's built-in flash-exposure compensation allows you to adjust the flash-to-ambient-light ratio as desired, should you want to override the automatic balanced fill-flash.
**METERING:** The N6006 offers three metering modes, which are selected by rotating the command dial while pressing the metering-system button. Matrix metering, the camera's standard mode with AF and AI-P Nikkor lenses (and usable only with these lenses), divides the image area into five segments (center, and upper and lower left and right), analyzes the scene's light pattern, then employs the best metering technique for the exposure (averaging, center-weighted averaging, low-brightness weighting, or high-brightness weighting).

Center-weighted metering, which can be selected in any shooting mode (and is the default mode when lenses other than AF and AI-P Nikkors are used), places 75% of its emphasis on the central portion of the scene (indicated in the viewfinder by a 12mm circle), and 25% on the surrounding image area.

Spot metering, in which the meter reads only a small central portion of the scene (indicated by the viewfinder by a 3.5mm circle), can also be selected in any shooting mode. It's not for point-and-shooters, though; spot metering is best used in manual mode by experienced photographers.

**EXPOSURE MODES:** The N6006 offers a variety of exposure modes, selected by rotating the command dial while pressing the mode button. In Auto Multi-Program AE (PM on the LCD display), the camera sets both shutter speed and lens aperture, favoring faster shutter speeds with longer lenses to minimize image blur due to camera shake. There's also a standard program AE mode (P), which is not keyed to lens focal length. In either program mode, you can use the camera's command dial to adjust the shutter speed/aperture combination when a specific shutter speed or aperture is desired.

Both shutter-priority AE (S on the LCD panel) and aperture-priority AE (A) are also provided. Exposure lock (via a lever on the back of the camera near the command dial) and ±5 stops of exposure compensation in 1/2-stop increments (set by rotating the command dial while pressing the +/- button) are available in all AE modes, as is automatic exposure bracketing (three or five frames, in 0.3-, 0.7-, or full-stop intervals).

For the purist, there's also metered manual mode (M), in which you set the shutter speed and aperture yourself, as per the built-in meter's recommendation, a handheld meter's reading, or personal experience. In manual mode, shutter speeds are set by rotating the command dial; apertures are set by rotating the lens's aperture ring.

**FLASH:** A built-in flash unit provides the N6006 user with handy light whenever it's needed (ISO 100 GN 43, in feet), along with TTL exposure control, automatic balanced fill flash, slow-sync flash, rear-curtain sync, and flash-exposure compensation. When the unit is activated (by pressing buttons on each side of it to pop it up), it automatically sets the proper flash-sync shutter speed, indicated by a steadily glowing lightning-bolt in the viewfinder display when it's ready to fire, and then fires when the shutter button is pressed.

TTL flash-exposure control provides the ultimate in flash simplicity and accuracy—the flash is metered through the lens, just like the existing light. With automatic balanced fill-flash, the flash exposure is automatically balanced with the existing-light exposure for good reproduction of both flashlit foreground subject and background. Slow-sync flash permits use of shutter speeds down to 30 seconds to properly expose a dark background (such as a night cityscape) by existing light, while the flash properly exposes a nearby main subject—automatically. Rear-curtain sync fires the flash at the end of a long exposure rather than at the start of the exposure, so that ghost-image "speed streaks" appear to follow rather than precede a moving subject for a more natural appearance.

You can control the flash-to-existing-light ratio by adjusting the flash output (with a range of one stop over to three stops under the "standard" ratio, in 1/2-stop increments) by pressing the shift button and rotating the command dial until the desired compensation is displayed—a handy feature.

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**SPECIFICATIONS**

**CAMERA:** Nikon N6006  
**TYPE:** 35mm SLR  
**LENS MOUNT:** Nikon F bayonet  
**FOCUSING:** TTL phase-detection autofocus (range EV -1 to 19, ISO 100); single-shot and continuous AF with focus priority; manual focusing via focusing ring of lens (focus-assist provided with lenses having a maximum aperture of at least f/5.6).

**SHUTTER:** Electronically controlled vertical-travel focal-plane type with speeds from 30 seconds to 1/8000 (sweepless in programmed and aperture-priority AE modes), plus B.

**METERING:** TTL five-segment Matrix, 75%/25% center-weighted, and spot metering available; metering range (ISO 100) EV 0–19 (EV 4–19 for spot metering).

**EXPOSURE MODES:** Lens-keyed and normal program AE (shiftable), shutter and aperture-priority AE, metered manual exposure compensation: ±5 stops, in 1/2-stop increments in auto modes; AE/AF lock provided.

**AUTOMATIC EXPOSURE BRACKETING:** Shutter speeds bracketed in 0.3-, 0.7-, or full-stop increments.

**FILM SPEED RANGE:** ISO 25–5000 set automatically with DX-coded cassettes.

**FILM TRANSPORT:** Automatic loading, advance (single-frame, or continuous at 1.2 and 2 fps), and rewind (manually activated at end of roll or mid-roll).

**VIEWFINDER:** High-eyepoint (18mm eye relief) fixed eye-level pentaprism shows 92% of image area; 0.75x magnification.

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NIKON N6006/N6000

ure not generally found with built-in flash. If you set the camera to manual-exposure mode and engage automatic exposure bracketing, you'll get a series of images in which the degree of flash-fill is bracketed, while the background (existing-light) exposure remains constant.

For more flash power, dedicated Nikon Speedlight flash units SB-24, SB-23, SB-22, and SB-20 can be attached to the N6006's hot-shoe, where they'll provide the same automated features as the built-in unit, and more.

MORE FEATURES

All of the routine camera operations are automated. Insert a film cassette, pull the leader over to the

1. TTL flash metering makes close-up work simple. Here, the N6000 was used with an old 28mm manual-focus lens and BR-2A reverse ring. A BR-6 ring was attached to the lens to restore aperture control, and an SB-21B ring flash was attached to the BR-6 ring. The flower was placed between the camera and the early morning sun, and the camera was set for +0.3-stop exposure compensation.

Exposure on Fujichrome Velvia using aperture-priority mode was V/60 at f/16, with center-weighted metering.

2. A 500mm f/8 Nikkor mirror lens was used with the N6000 body to make this handheld sunset shot. Center-weighted metering was used in program AE mode; exposure was V/6000 at f/8.

3. The N6006's Focus Tracking kept this biplane sharply focused as it flew by. A 300mm AF Nikkor lens was used. Exposure was V/6000 at f/4 (Matrix metering, shutter-priority AE).

4. Automatic exposure bracketing is a handy feature of both the N6006 and the N6000. Here, the N6006 was set to make a series of five exposures, in 0.7-stop increments, using Matrix metering and continuous drive mode. When the shutter button was pressed, the camera automatically made the bracketed series.