

Epson ups the ante on dual-purpose desktop scanners with the V-750M. Fluid-mount capability takes it beyond the average flatbed.

BY ELLIS VENER

Flat to *fluid*

EPSON PERFECTION V750-M PRO

The arrival of the Epson Perfection V750-M Pro desktop scanner is hot news. With the stated ability to scan film at up to 6,400ppi in Super Resolution Lens mode, adjustable height film carriers, and the V750-M optional Fluid Mount Tray, it's a step up from the discontinued Epson Perfection 4990 Pro. Among the bundled software extras is the useful Lasersoft SilverFast Ai 6 scanning program.

Perfection 4990 users grumbled when they discovered how frequently the film holders

failed to position the film at the right height over the scanner bed to achieve optimum focus, and how medium- or large-format film simply wasn't held flat. These are minor league concerns for low-resolution scans, but they escalate to mortal sins if your goal is to make even moderate 11x14-inch prints at 360dpi.

The adjustable height of the standard film holders in the V750-M Pro and its baby sister, the V700, alleviates the global focus problem, but the height is adjustable

Images on the right show detail from a 6x17cm-format film scan (below). The standard film holder scan (top) has higher contrast, and tonal compression with corresponding loss of detail, while the FMT scan (right) shows more shadow detail and tonal separation. Examine the scan details online in Bonus Content at www.ppmag.com.



specs:

Epson Perfection V750-M Pro



TYPE: Flatbed

PHOTOELECTRIC DEVICE: Color Epson MatrixCCD line sensor

OPTICAL RESOLUTION: Epson Dual Lens System: 4,800ppi and 6,400ppi

HARDWARE RESOLUTION: 4,800x9,600ppi; 6,400x9,600ppi with Micro Step Drive technology

EFFECTIVE PIXELS: 40,800x56,160 (4,800dpi); ^{©Ron Eggers} 37,760x62,336 (6400dpi)

COLOR HARDWARE BIT DEPTH: 48-bits per pixel internal, 48-bits per pixel external (External bit depth is selectable to 48 bits depending on the image editing software.)

OPTICAL DENSITY: 4.0 D-max

TRANSPARENCY UNIT: 8x10-inch transparency adapter built-in lid with four film holders: 35mm slides (12 frames), 35mm film strips (24 frames), medium format strips 2.25-inch, 120/220, 6x20cm (2-6 frames) and 4x5-inch film (2 frames); 8x10-inch film area guide. Fluid mount tray and film guide for wet mount film scanning. (Mounting fluid and supplies not included.)

MAXIMUM READ AREA: 8.5x11.7 inches (216x297mm)

LIGHT SOURCE: White cold cathode fluorescent lamp

INTERFACE: USB 2.0, FireWire

SCANNING SPEED: 4,800ppi high-speed mode: full color 10.8 msec/line

DIMENSIONS: 12x20x6 inches, 14.5 pounds

SOFTWARE: LaserSoft Imaging SilverFast Ai 6, MonacoEZcolor, Adobe Photoshop Elements, ABBYY FineReader Sprint Plus OCR, Epson Copy Utility, Epson Scan with Epson Easy Photo Fix Technology

MSRP: \$799.99

Here's advice that comes from hard-won experience: If you need to do professional high-end scanning, forget about using the standard film holders and go straight to wet mounting.

only in 0.5mm increments, so finer focusing still requires using shims for intermediate heights. Unfortunately, the problem of holding film flat persists, and the film holders feel flimsy and ultra-lightweight. Here's advice that comes from hard-won experience: If you need to do high-end scanning, forget about using the standard

film holders and go straight to wet mounting.

Wet mounting (also called fluid mounting) is a technique in which you coat the film with an oily liquid and place it between a piece of glass and an optical Mylar overlay. It's more time consuming than using standard film holders, and requires a perfectly clean work area with good ventilation to handle

the rapid fluid evaporation. Afterward, you have to clean the fluid from the film and tray in preparation for the next scan. But the excellent results make it worth the effort. Fluid-mount scans are far superior to dry-mount scans. The Mylar overlay holds film flat, and the fluid fills in surface imperfections in the film. A fluid-mount reveals more detail in the denser areas of the film, and there is visibly less noise in the shadows. The usable D-max range increases by about 5-10 points.

The V750-M comes with a fluid mounting tray and a mounting station to hold and position it while you mount the film to the glass. Not included are the required mounting liquid and cleaning supplies. You have two options. Aztek (www.aztek.net) has put together a supply kit—precut optical quality Mylar overlays, Kami mounting fluid, cleaning wipes, application bottle, and mounting tape—for \$160. Aztek is the standard supplier for most professional labs and service bureaus that scan film. The alternative is a new Canadian company called ScanScience (www.scanscience.com). The ScanScience kit includes its own fluid mount tray, Lumina Optical Super Fluid scanning fluid, optical glass cleaner, a large microfiber wipe, squeegee, Mylar overlay and a few other useful odds and ends. The ScanScience kit costs \$120 (USD).

Where the two options differ significantly is in the film positioning and the mounting fluid. With the Epson fluid mount tray (FMT), the film is mounted on top of the glass in the FMT, which is then placed on the glass bed in the scanner. This gives you two layers of glass between the film and the scanner's CCD, which can slightly degrade the sharpness of the image. In some images, a blue fringe of chromatic aberration around the edges of the fine detail can occur as well. The ScanScience method positions the film on the bottom of the glass in their mounting

tray, so there's just one layer of glass between the film and the sensor. The chemical composition of the scanning fluid also differs.

While Kami fluid evaporates rapidly, the less volatile Lumina fluid evaporates more slowly. ScanScience makes other claims about the safety of its chemistry, but as I barely passed organic chemistry in college, I'm not qualified to comment on them. The ScanScience FMT kit came complete with three shims to adjust the height of the film. I preferred the ScanScience approach.

How good are the wet-mount scans on the Epson Perfection V750-M Pro? Mac Holbert of digital fine art specialists Nash Editions (www.nasheditions.com) has compared scans of medium-format film made with their \$51,000 Kodak (nee Creo) EverSmart Supreme II and the V750-M Pro + FMT combination. He says he can't see \$50,000-worth of difference between the two scans, especially after making high-end prints from them. My experience making 3,200ppi scans matches Holbert's. The one downside is that we both see a little color fringing with the Epson FMT scan.

Despite the scanner's excellent qualities, the design of its standard film holders is not adequate for quality work. Better scanning.com offers variable-height film holders for dry-mounting medium-format films, as well as an anti-Newton Ring glass insert accessory. When set up properly—and getting the height exactly right takes an hour or two of careful experimenting—the dry-mount results are much improved. Doug Fisher of BetterScanning.com says that the holder won't turn the Epson Perfection V750-M Pro into a Nikon Coolscan 9000, but it does make a marked improvement over the standard Epson medium-format film holder.

The V750-M Pro includes MonacoEZcolor

software and targets, which in my tests generated a decent scanner profile. I used Joseph Holmes's new DCam 3, J. Holmes workspace, because it works in a more perceptually linear way than other workspaces. In other words, when Photoshop crunches the numbers,

the resulting relationship between the colors is truer to our actual perception of color.

Bottom line, the Epson Perfection V-750M Pro is an exceptional piece of gear at a good price, but to unleash its truly high quality potential you'll have to do a little customizing. ■