

Tripods

By Jason Schneider

For Serious Shooters

Every photographer committed to imaging excellence needs at least one tripod, but enthusiasts and pros should regard these two as essential tools:

The travel tripod in your bag, and the video-compatible middleweight.

It's easy to spot the real pros in a gaggle of shooters. Just look for the ones using or carrying tripods—usually fairly hefty medium-sized models, identifiable by their large diameter legs and robust metal yokes—the part that holds the three legs together at the top. Indeed, the unwritten rule for most pros is, “Always carry a tripod or have one readily accessible—no exceptions.” The pro's dedication to the tripod is based on experience—when the lighting is bad, or you have to shoot at a slow shutter speed or a smaller aperture than you want to, or you can't use flash, etc., using a tripod is often the only way to bring home the shot. For serious enthusiasts, the tripod rule is a little less severe: “The tripod you take with you is always better than the one you leave at home.” Like signing up for the gym and not working out, buying a super-hefty heavy-duty tripod will not improve your picture taking, or enhance your shooting range one iota if it's so big and heavy that it stays in the closet while you're out hiking and shooting wildlife pictures with that shiny new telephoto zoom.

Tripods, like cameras, lenses and camera bags, come in a myriad of different sizes and types, and the specific tripods that

will work best for you depend on your intended use—the kind of subjects you shoot and the equipment you use. However, if a 35mm DSLR is your main camera, the lightweight travel tripod and the middleweight tripod with a three-way fluid-effect head for shooting those increasingly popular HD videos, will cover well over 90% of your needs. To help you make intelligent choices, we offer this handy guide, which includes a selection of worthy three-leggeds, to help you choose wisely and well.

Compact Travel Tripods: Very popular with hikers, vacationers and travelers as well as photojournalists, the best lightweight compact travel tripods provide a stable shooting platform for all but the heaviest cameras and lenses. They're ideal for digital SLRs and moderate-sized video cameras and camcorders up to five to six pounds. Just make sure to check that the load-carrying capacity is sufficient for the heaviest outfit you ordinarily use. Typically, these tripods will extend to around 4½–5 feet for near-eye-level shooting. They'll fold down to two feet long or less for easy packing, and weigh about 4 pounds or less, making them easy to carry. These are tripods you'll take with you because they'll fit in most camera bags designed to transport your complete DSLR kit and caboodle.

Lightweight Tripods: They're a bit bigger and heavier than compact travel tripods—a little over two feet long when folded, and moderately heavier—between 4–5

pounds, but they will also support heavier cameras in the 6–9 pound weight class and extend to nearly 5½ feet for true eye-level viewing. The more sophisticated, higher capacity tripods in this class are excellent choices for the average photographer who wants one tripod to take along when traveling, or the enthusiast who needs a general-purpose tripod for hiking, wilderness shooting, or any application where weight is a factor. Models with fluid or video heads are great for shooting videos too.

Medium-weight Full-size Tripods: If you're a serious enthusiast who wants one tripod that will do practically everything, this category comes closest to being the mythical “universal tripod.” With maximum weight ranging from under 5 pounds, to over 10 pounds for the heftier models, load capacities ranging from 9–18 pounds and maximum heights ranging from 5–6½ feet, these are serious tripods—strong, stable, durable, and designed to support heavy equipment and to withstand the rigors of rugged use. While the smallest ones fold to a compact 26 or 27 inches, most range from 30–47 inches when folded, so you may want to strap them to your camera bag or carry them in a tripod bag. Since they're aimed at serious photographers and pros, many tripods in this category have extra features like grounder capability for low-angle shooting, 3-way fluid heads for panning and shooting video, reversible or two-section center columns, etc.



Davis & Sanford Carbonlite Transporter



Davis & Sanford Magnum GR



Gitzo Series 2 Traveler



Manfrotto 701HDV tripod with 755CX3K head



Vanguard Alta 264 AP



Vanguard Alta+ 254 CP



Velbon Sherpa 538



Velbon ULTRA LUXi L



Vista Voyager Lite

Quick Guide to Tripod Features

Legs: The relative virtues of round section (tubular) and channel type legs have been debated for decades, but both systems work well when properly designed. All things being equal, larger diameter legs of either type provide added stability, but weigh more. Fewer leg sections tend to increase rigidity of the tripod, but increase its folded length. As with all engineering, compromises are required in tripod design, and three-section legs of medium diameter (about 1 inch) or larger offer a good balance between convenience and stability. Legs with angle adjustments (e.g. three-position legs) that can be splayed out and locked in position at wider angles to the center post (also known as grounder capability,) are recommended for extreme low-angle shots, such as when photographing flowers and other nature subjects.

Leg Locks: There are two basic leg-lock systems used on 99% of the tripods in production—the snap lock (also known as the flip lock) and the twist lock. Snap locks are faster to operate, allowing quick and convenient setup—you can easily unsnap the locks, adjust all three legs at once by lifting the tripod to the desired height with the legs folded against the center post, then locking the legs in place.

With twist locks, you loosen each leg by turning a ring-like collar, pulling the leg out to the desired position, then turning the collar in the opposite direction to lock the leg. The advantage of twist locks is that they are self-adjusting—with flip locks you occasionally have to tighten the locking mechanism with an (hopefully furnished) Allen wrench if the leg slips when it's in the locked position. Some users claim twist locks are less likely to jam, especially in very cold conditions, but many tripod users, including me, prefer the convenience of snap locks.

Center Posts: The two basic kinds of center posts are the geared type—you raise and lower them by rotating a crank handle—and the lift type—you unlock them (while supporting any attached camera with your other hand) and simply lift or lower them to the desired height. Geared center posts make precise height adjustments more convenient, but generally add a bit of weight, while lift-type center posts are simpler and quicker to adjust and tend to be a bit lighter. Reversible center posts are a good feature that let you mount your

camera below the tripod yoke for low-angle shooting. Two-section center posts that come apart provide more flexible mounting options for your camera.

Heads: Most tripods come with a three-way head providing separate, lockable pan (horizontal swing) and tilt (vertical angle) movements, as well as a hinged platform, allowing you to rotate the camera platform 90 degrees from horizontal (landscape) orientation to vertical (portrait) orientation. Some tripods, especially video tripods, have two-way heads, providing the first two aforementioned adjustments, but not the last, which is not needed when shooting movies or videos. A few tripods have ballheads, which are very compact and

TRIPOD OPTIONS

**Davis and Sandford/
Vista Voyager Tripods**

www.tiffen.com

Gitzo

www.gitzo.com

Manfrotto Tripods

www.manfrotto.com

Vanguard Tripods

www.vanguardworld.com

Velbon Tripods

www.velbon.co.uk

portable, and allow a wide range of horizontal, vertical and oblique adjustments, but do not have a pan/tilt handle and are not intended for panning the camera while shooting—a useful technique for shooting videos and still pictures of action subjects that move laterally across the frame.

Fluid-head tripods are of great benefit when shooting videos since they provide a very smooth, well damped panning motion that virtually eliminates jerkiness and yields professional-looking video effects. True fluid heads, often sold as accessories for professional tripods that don't come with heads, contain a special viscous oil to damp the panning action, and can be adjusted to control the degree of damping required. Fluid-effect heads, which are often included on video tripods and general-use tripods, contain a solid viscous material that also provides a very smooth panning action, but the amount of damping is not adjustable—many have friction adjustments for adjusting the stiffness/smoothness of the panning action. Well

designed fluid-effect heads work very well in practices, and are much less expensive than the true fluid heads used by professional cinematographers and videographers. Fluid-effect heads also work well for still photography too, especially when panning horizontal action.

Leg Braces: These adjustable cross members, which join the legs together at the bottom, increase tripod stability by providing a fully triangulated structure when they're locked in position with a knob or lever. They're particularly useful on lightweight tripods, enhancing the rigidity of narrow-diameter legs when they're fully extended, but they can also be useful in imparting an extra degree of rigidity and freedom from flex to medium full-sized tripods.

Quick-release Plate: A quick-release plate is a small removable platform that screws into the tripod socket on your camera, lens or other accessory so it can be quickly and easily affixed to and removed from the head of the tripod and locked in place with a lever. This speeds things up considerably because you don't have to unscrew your camera, lens, etc., from the tripod each time you want to mount something else on the tripod. It also is less likely that the tripod will move from its set position when you make such switches. Most tripods with this feature come with an extra quick-release platform for a second camera or accessory.

Bubble Levels: These let you level the tripod and its platform precisely when shooting landscapes, architecture, video, etc. Having a single bubble level on the head is sufficient for most stationary subjects, but having two levels on the head is better because it makes it easier to align the tripod and camera when shooting verticals as well as horizontals. For panning, it's best to go for a three-level tripod with two bubble levels on the head and one on the yoke so you can align the legs first, then the head of the tripod to achieve perfectly level horizontal panning action for videos or stills.



Jason Schneider is best known as a prolific writer and editor on all aspects of photography. He began his career at Modern Photography in the late 60s and in 1987 signed on as editor-in-chief of Popular Photography, a position he held for nearly 16 years. Considered an authority on the history of camera design and technology, he has written three books on camera collecting, is an active contributor to leading photo magazines and websites, and is Senior Editor of Photo Industry Reporter, the industry's authoritative trade magazine.