

## Geotagging Devices

I've tracked down a number of these devices, and tried them out. Some are very similar; others are worlds apart. Accuracy varies from device to device, but, for the most part, I've found the majority to be quite reliable, a few amazingly so. The software is often important enough to sway a decision toward one device or another.

Notes: (1) All these devices connect to the computer via USB (cable included). DeLorme product uses dedicated USB cable. Eye-Fi card comes with USB card reader for conventional read/writes.

(2) GPS tracking sensitivity: higher negative numbers reflect greater tracking sensitivity.

(3) Where applicable, verify 64-bit support before purchase.

(4) We have not included devices offered by camera manufacturers or cameras with geotagging capability built-in.

**\*My top picks—in terms of geotagging capabilities, functionality, features, programmability, bundled software, mapping, ease of use (mostly with regard to software), and export support. 1st Place (tie): Qstarz BT-Q1000X and GISTEQ PhotoTrackr CD111; runner-up (tie): Wolverine GEO-35 and JOBO photoGPS.**

Device Source MSRP	Chipset/Satellite Tracking Channels/GPS Tracking Sensitivity (dBm)	Platform Support	Features	Supplied Software	Comments/Evaluation
<b>Amod AGL3080</b> <a href="http://www.amod.com.tw">www.amod.com.tw</a> <b>US distributor:</b> <a href="http://www.semsons.com">www.semsons.com</a> \$99	SiRF Star III 20 channels -158 dBm	Win/Mac	128MB storage capacity; manual placemark button; three AAA batteries: 15-hour continuous operation; 3.5x1.8x0.9"; less than 1.8 oz	Amod GPS Photo Tracker (Win) JetPhoto Studio (Win/Mac)	<b>Pluses:</b> Uses batteries that can be conveniently replaced anywhere, any time <b>Negatives:</b> Missed some locations; the bundled software proved awkward to use <b>Good value for the price</b>
<b>ATP GPS PhotoFinder mini</b> <a href="http://www.atpinc.com">www.atpinc.com</a> \$149	SiRF Star III 20 channels -155 dBm	Platform-independent owing to docking station (supports CF, SD/MMC, MS cards)	Embeds geotagging data onto memory card via docking station without a computer; can also produce and export route data into a "KML" log file that can be opened in Google Earth; replaceable Li-Ion battery: 16-hour continuous operation; 1.4x0.9x2.4"; 1.1 oz (excl. docking station)	NA	Evaluation sample not available at press time. <b>Pluses:</b> Docking station makes this especially intriguing <b>Negatives:</b> Insufficient data (but expected to work more reliably than original PhotoFinder) <b>Jury's still out on this one</b>
<b>DeLorme Earthmate GPS PN-40</b> <a href="http://www.delorme.com">www.delorme.com</a> \$399	STMicroelectronics Cartesio 32 channels	Windows (Mac support to come)	Cold/warm/hot start time: < 60/< 45/5-6 seconds; dual-core processor for rapid screen redraws on the built-in color LCD; 500MB on-board flash memory, plus accepts SD/SDHC card; on-board settings; three-axis electronic compass; barometric altimeter; manual placemark settings; almanac information (sun and moon, etc.); rugged rubberized, waterproof housing; two AA batteries or optional Li-Ion battery; 2.43x5.25x1.5"; 5.4 oz w/o batteries	Topo USA 7.0 topographic and detailed street maps of the entire US	<b>Pluses:</b> Can be used to track virtually any route in the U.S.A., with tons of information a click away; handy digital compass for trailblazers; reverse geocoding <b>Negatives:</b> Cumbersome geotagging process; does not support Google Earth or photo-sharing sites; not practical outside the U.S.A. <b>Great for the outdoorsman, but a poor choice for geotagging</b>
<b>Eye-Fi Explore</b> <a href="http://www.eye.fi">www.eye.fi</a> \$129	SD card supporting Wi-Fi network (802.11 a/b/g)	Win/Mac	2GB SD card comes with miniature card reader; card also stores raw/TIFF but only geotags JPEG; wirelessly downloads images directly from camera and then effortlessly uploads them to your	Software on card—activates automatically or by clicking Eye-Fi icon	<b>Pluses:</b> Convenient, since it only needs your camera and a network <b>Negatives:</b> Large data streams may drain camera battery; US/Canada support only <b>A convenient choice for</b>

			selected online photo-sharing site; size/weight similar to typical SD card		<b>cameras that use SD cards</b>
<b>GiSTEQ PhotoTrackr CD111*</b> <a href="http://www.gisteq.com">www.gisteq.com</a> \$129	MTK II 66 channels -165 dBm	Win/Mac	Cold/warm/hot start time: 36/33/1 seconds; 4MB flash memory; power management; Windows software supports raw files (not so for Mac); user-programmable time or distance intervals; manual placemark button; replaceable Li-Ion battery: 32-hour continuous use; 3.1x1.8x0.9"; 2.4 oz	GiSTEQ PhotoTrackr Pro (Win) GiSTEQ PhotoTrackr (Mac)	<b>Pluses:</b> Reliably accurate; talks to you (signal fix, time); colorful flashing lights; reverse geocoding down to street address; animated on-screen tracking display (in software) <b>Negatives:</b> A software wizard would be helpful when geotagging; mildly confusing software interface <b>1st Place (tie): for reliability &amp; reverse geocoding</b>
<b>JOBO photoGPS*</b> <a href="http://www.jobo.com">www.jobo.com</a> \$179	Rakon 6510 GPS satellite tracking: all in view -147 dBm	Win/Mac (Mac support not tested)	Cold/warm start time: 0.2/0.2 seconds; attaches to any camera via the hot shoe and automatically records each geo location (internally) when the shutter is released; supports raw with XMP sidecar file; internal Li-Ion battery charged via USB connection to computer; manual placemark button; creates KML file; user-programmable time intervals; battery usage: four weeks; 2.7x0.8x1.7" (hot-shoe adapter adds depth); 2.8 oz	JOBO photoGPS	<b>Pluses:</b> Reliably accurate; effortless operation; reverse geocoding, includes nearby points of interest <b>Negatives:</b> Impedes use of flash; software does not display geotagged file on a map or export directly to Google Earth or photo-sharing site (requires you to use generated KML file); software doesn't let you select specific files <b>1st runner-up (tie): for convenience and ease of use</b>
<b>Qstarz BT-Q1000X*</b> <a href="http://www.qstarz.com">www.qstarz.com</a> <b>US distributor:</b> <a href="http://www.buygpsnow.com">www.buygpsnow.com</a> \$129	MTK II 66 channels -165 dBm	Windows	Bluetooth-compliant; cold/warm/hot start time: 35/33/1 seconds; manual placemark button; user-programmable intervals can be set for car/bike/foot trekking for <i>both</i> time and distance; wide export support, including Google Earth and mapping apps; supports raw files; Li-Ion battery: 42-hour continuous use; smart power management; 2.8x1.8x0.8"; 2.3 oz (incl. battery)	Qstarz GPS Travel Recorder PC Utility QstarzGpsView locr GPS Photo	<b>Pluses:</b> Reliably accurate; software wizard aids in geotagging images; sleek and compact; admirable software suite; Qstarz Travel Recorder has dedicated flickr and locr export buttons, lets you time-shift to correct errors and has animated display with slide show (works best with JPEGs) <b>Negatives:</b> The only thing missing really is reverse geocoding <b>1st Place (tie): for use of latest technologies, reliability, functionality, and fun-to-use software</b>
<b>Sony GPS-CS1KA</b> <a href="http://www.sonymstyle.com">www.sonymstyle.com</a> \$149	12 channels -150 dBm	Windows	31MB memory; 15-second logging interval; AA battery: 10-14 hours (depending on battery type); 3.5x1.4x1.4"; 2 oz	Sony GPS Image Tracker Sony Picture Motion Browser	<b>Pluses:</b> Exports to Google Earth <b>Negatives:</b> Requires two software apps; may be better suited to supported Sony cameras <b>Functional, but having to go back and forth between two programs is a chore</b>
<b>Super Trackstick</b> <a href="http://www.trackstick.com">www.trackstick.com</a> \$249	16 channels -133 dBm	Windows	Cold/warm start time: 52/37 seconds; 4MB flash memory; rugged rubberized exterior; waterproof; power-saving mode; fully supports Google Maps; exports to Google Earth and other mapping applications; supplied with belt clip and removable magnetic mount; two AAA batteries: up to two weeks on Lithium cells (power save: to eight weeks); 4.5x1.25x.75"	Trackstick Manager	<b>Pluses:</b> Extremely durable design; excellent for tracking movements; optionally embeds geotag watermark on photo; reverse geocoding <b>Negatives:</b> Geotagging proved to be a cumbersome process; indicator light difficult to see in bright light; takes long time for satellite fix <b>Quite good for tracking, especially in the great outdoors, but not so good for geotagging</b>

<p><b>Wolverine GEO-35 GPS Auto GeoTag Receiver*</b>  <a href="http://www.wolverinedata.com">www.wolverinedata.com</a>          \$149</p>	<p>SIRF Star III          20 channels          -159 dBm</p>	<p>Win/Mac  <i>Cameras supported:</i>  <i>Nikon D3/D700/D300/D200/D2Xs/D2Hs/Fuji S5 Pro</i></p>	<p>Cold/warm/hot start time: 42/38/1 seconds; plugs directly into the camera's dedicated 10-pin remote terminal; powered by camera; geotags raw files; compatible with Google Map, Google Earth, and photo-sharing sites</p>	<p>Wolverine Geomet'r</p>	<p><b>Pluses:</b> Reasonably accurate; you can mount it in the hot shoe or pocket it while leaving it plugged into the camera; minimal power drain on camera so you never need to worry about keeping it running  <b>Negatives:</b> Occupies remote port, which might be needed for other devices; software only reads JPEGs  <b>1st runner-up: for convenience and ease of use</b></p>
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