

Power banquet

More power and less cable feeds versatile flash

Face it. Digital photography has made us more power hungry than ever. Sure, we've always wanted electronic flash equipment with high guide numbers so we could use slower, sharper films.

And we've wanted high-capacity batteries for fast flash recycling and extended shooting. Now, with digital cameras as well as electronic flash equipment eating up power, we need even greater battery capacity.

Quantum Instruments, longtime maker of portable battery and flash equipment for film photography, strides further into the digital photography marketplace with its latest release, the Turbo Compact battery and Qflash T4d flash head. (Disclosure: I've used Quantum Battery 1+ packs to power my on-camera flash units for years.)

My biggest dislike of the Battery 1+ and Nikon SB-80DX configuration I've been using is the cumbersome cable between the belt-mounted battery and the flash unit. No longer a problem. The Turbo Compact (TC) battery mounts beneath my camera, and the Qflash T4d flash head mounts to a flash bracket above, so it only takes a short cord to connect the two. As a bonus, there's a second outlet on the side of the TC battery to power a digital camera. Proprietary cables for nearly every digital camera and electronic flash ensure that the battery delivers the correct voltage for each.



The Turbo Compact battery provides fast flash recycling and extended battery life in a compact package. The manufacturer's flash unit was used here to provide wide-angle coverage.



During an all-day studio assignment shooting models for a car company, the Turbo Compact battery delivered better battery life than the camera manufacturer's battery.

All images ©Stan Sholik



For location portraits, bouncing the T4d into a silver umbrella delivers enough power to be used as the main light.

Like the previous Qflash flash head design, the Qflash T4d features a 4.5-inch parabolic reflector with a dimpled interior finish. This large reflector gives a broader light with softer shadow edges than shoe-mount flashes. The coverage with the standard Qflash T4d reflector is limited to 55 degrees (about like a 40mm lens on a 35mm film camera), but included with the head is a nicely designed flat diffuser that increases the coverage to 70 degrees (about like a 28mm lens on a 35mm film camera). Optional diffusers further increase the coverage, and you can remove the reflector completely for 360-degree bare-bulb operation.

The resemblance between the Qflash T4d and earlier models pretty much ends there. Quantum has updated the design while decreasing the weight. The head swivels and tilts, then locks into position with one control button. A wired control mode makes it possible to control two remote Qflashes from one Control Qflash using the twin accessory sockets. The flash indicator light on the front and the ones on each side provide confirmation that the head has fired. To preview the flash effect, there's a modeling lamp function, actually a quick burst of flashes. More options are available through the expanded options menu button.

The most important difference is the addition of dedicated through-the-lens (TTL) flash control with the latest digital and film camera systems. Like previous Qflash heads, the built-in sensor controls flash output when the flash is set to Auto, Manual or Stroboscopic mode. Setting the flash output or the fill flash ratio is accomplished by manually adjusting the *f*/stop setting on the flash head. However, by connecting the optional hot-shoe-mounted Quantum QTTL D-series adapter, full camera control of the flash is possible.

For cameras that support these functions, the QTTL D adapters provide a flash-ready indication in the camera viewfinder, rear-curtain sync, auto fill flash, auto camera shutter speed setting, TTL and pre-flash metering, autofocus assist and full dedication. In short, the adapters support every feature of every camera

Quantum Turbo 2x2 battery

The Quantum Turbo 2x2 battery is made for the truly power-hungry digital photographer. Like the Turbo Compact, the 2x2 has two outlets to power both a digital camera and a compatible electronic flash unit—of which there are many—either individually or simultaneously, or two cameras or two flash units. Attached to your belt or from a shoulder strap, the 2x2 doesn't free you from dangling cables as does the Turbo Compact, but in return you reduce the recycle time of the T4d on full power from 3.5 seconds to under two seconds and significantly extend shooting time and flashes per charge.

At just two pounds and 6.25 x 3.875 x 1.875 inches, the Turbo 2x2 battery is smaller and lighter than the standard Quantum Turbo and Turbo Z batteries. MSRP is \$654; cables, about \$45 each.

specs:

Quantum Turbo Compact battery

Battery type: Nickel metal hydride (NiMH)

Weight: 16 ounces

Dimensions: 5.5 x 2.2 x 2.2 inches

Charge time: 1.5 hours

T4d full power flash recycle time: 3.5 seconds

T4d full power flash capacity: 225-250

T4d and digital camera capacity at full power flash: 160-190, depending on conditions

MSRP: \$512



manufacturer's dedicated shoe-mount flash unit. What you gain with the Quantum system (TC battery, T4d flash head, and QTTL adapter) is a flash guide number of 160 with the normal reflector, about 3.5-

second recycle time on full output, and no cords running from your belt to your camera/flash system.

Assembling and setting up the system with a Nikon D1X is straightforward, but not without problems. The TC battery attaches to the camera tripod screw socket, and a nifty sliding lock on the battery ensures that it won't accidentally unscrew. However, the 2-inch nut that tightens the mounting screw is the only base on which the battery and camera rest, which makes the combination much less stable than if it were resting on the full camera base. The battery adds a pound and a little over 2 inches in height to the camera.

The base of the T4d head has a 1/4-20-tripod screw socket, not a hot shoe adapter, so I mounted it on a flash bracket. Unfortunately, I couldn't use the QTTL adapter's autofocus assist with this arrangement because it wasn't possible to raise the flash bracket arm high enough above the hot shoe for the adapter to clear the head. To fully utilize this system, the T4d must sit high above the camera. The flash head does tilt down, so this shouldn't be a problem at normal working distances. The additional 24 ounces added by the flash head and QTTL adapter made a heavy, but manageable assemblage, even when carried



The optional QTTL D-series adapters mount in the hot shoe, and when connected to the T4d head, provide all of the dedicated features that the camera manufacturer's flash units provide.

around for several hours mounted on my D1X with an 80-200mm f/2.8 Nikkor lens.

The system really comes into its own as a location lighting package, as I discovered while making a portrait of a jeweler at an art festival. With the T4d mounted on a light stand and bounced into a silver umbrella, I was shooting at f/8, using the Quantum system as a main light and the available daylight as fill. Quantum recommends performing a custom white balance before shooting, and I did this with an Expodisc. A couple of interconnected Quantum heads powered by Turbo batteries (*see sidebar*), and a digital camera powered by the TC battery would make an excellent, compact location, or even studio lighting system.



The Turbo Compact battery and Qflash T4d flash head system.

The Turbo Compact battery works well as part of this system. But when I didn't need the flash output power of the T4d, or needed even greater flash coverage than it provides with the wide-angle diffuser, I used the battery to power the camera and my hot-shoe mounted SB-80DX flash. This not only freed me of the belt-to-flash cable, it also cut the full-power recycle time of the SB-80DX from about four seconds to well under two. And for situations where flash or flash fill is not required, the TC battery can be used to power the camera alone, extending the D1X shooting time by about 25 percent over the Nikon EN-4 battery.

The Quantum Turbo Compact battery, Qflash T4d and QTTL adapter combination provides everything the power-hungry photographer needs in one system that frees you from dangling cords attached to belt packs. And the components of the system can be used individually or with compatible equipment to provide additional versatility for your investment. MSRP of the Turbo Compact battery is \$512; Qflash T4d, \$775; Nikon QTTL adapter, \$150; necessary cables, about \$45 each. □

specs: Quantum Qflash T4d

Flash power: 150 watt-seconds

GN, normal reflector, ISO 100: 160

Auto range, normal reflector, ISO 100: 114 feet

Weight: 23 ounces

Dimensions (without reflector): 6 x 3 x 3 inches

Turbo Compact battery recycle time: 3.5 seconds

Turbo 2x2 battery recycle time: 1.9 seconds

MSRP: \$775

