

THE GOODS: PRO REVIEW

The new PocketWizard ControlTL system adds flexibility to your lighting setup, and teams speedlights with big flash

BY ELLIS VENER

Control and POCKETWIZARD CONTROLTL *command*

The PocketWizard ControlTL system fuses the fluidity of TTL-controlled flash to the more deliberate demands of powerful studio-type electronic flash systems. ControlTL doesn't magically transform big flash into nimble TTL-controlled speedlights—though with a few camera-light groupings it will afford big flash output control through the camera's flash exposure biasing system. And it won't mystically transform a 65-watt-second Canon Speedlite 580EX II into a big light. But it does allow the two systems to work together smoothly and extend the capabilities of both.

ControlTL lets you wirelessly set and trigger

the power output on big flash units, as well as wireless TTL control of smart speedlights. Moreover, it gives you the ability to shoot at shutter speeds above the camera's X-sync limit, so for instance, you can better balance midday full sunlight and fill flash without having to switch a speedlight into battery-guzzling High Speed Sync or HSS mode (Nikon: FP sync). To a limited extent, it can allow virtual HSS with standard big flash units as well, even those without remote power output control.

With cameras that use focal-plane shutters, the maximum shutter speed for standard



PocketWizard AC3 fixed to the MiniTTL hot shoe

sync flash is determined by the gap between the first and second shutter curtain as the entire sensor is exposed to light through the lens. Use a shutter speed faster than that, and only part of the sensor is exposed at any instant. The faster the shutter speed, the narrower the gap, and the shorter the time each section of the sensor is exposed.

Standard HSS or FP sync works by making a smart speedlight stream hundreds of low-energy flashes, coordinated with the size and movement of the narrow gap between the shutter curtains. The narrower the gap, the greater the number of flashes, but with less energy per flash, which in turn lessens the amount of light that reaches your subject.

PocketWizard's ControlTL HyperSync feature bypasses Canon's battery-draining HSS system, and requires no special setup of the flash or the camera. It kicks in whenever the camera is set to shutter speeds above the camera's sync limit, so you can work with smaller apertures and at faster shutter speeds. The difference in light output between

For this portrait of photographer and author Kirk Tuck, I used the default settings of a PocketWizard ControlTL system, and a very high shutter speed. A 600-watt-second Profoto 6B was the key light and a Canon 580EX II Speedlite served as a kicker. The Profoto 6B was set to full power; the Speedlite output was dialed down to -2.66 stops in TTL mode on the PocketWizard AC3. Exposure: f/4 for 1/2,500 second, ISO 100. Camera: Canon EOS-1D Mark IV with EF 70-200mm f/2.8L IS II lens.



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Canon's HSS mode and the ControlTL HyperSync feature becomes really noticeable at shutter speeds faster than 1/1,000 second. By precisely timing when the flash burst begins and ends with the start and end of actual exposure, the number of shots you get from your batteries increases as well.

The HyperSync mode also works with non-TTL flashes, like monolights and pack and head systems. How much of the flash pulse you'll be able to use depends on the power setting and the design of the flash system, which varies from brand to brand, and even within same-brand product lines. To get the most out of it, you must do some simple reprogramming on the HyperSync Offset for the unit you're using on the camera, but that unit will then work with any PocketWizard receiver on the flash. Phil Bradon of MAC Group, PocketWizard's U.S. distributor, recommends setting your camera to its highest shutter speed and adjusting the HyperSync Offset in 10-percent increments until you get the best results for your camera and flash combination. You use the PocketWizard utility software and your computer to program the unit. The MiniTT1 and FlexTT5 have built-in USB ports for updating and reprogramming the firmware.

As of August, three PocketWizard ControlTL components were available: the MiniTT1 transmitter, the FlexTT5 transceiver, and the AC3 Zone Controller.



PocketWizard FlexTT5

The MiniTT1, which slips into your camera's hot shoe, has three settings: Off, Configuration 1 and Configuration 2, and a test/learn button. About one-third the size of the FlexTT5, the MiniTT1 has an internal antenna, and runs on a CR2450 battery, sold in many drugstores. There's a hot shoe on top for use with an on-camera flash (you'll be limited to the camera's top sync speed) or the AC3 Zone Controller.

The FlexTT5 has a more powerful transmitter, an antenna that swings out from the body, runs on two AA batteries (non-rechargeable recommended), and is substantially larger and heavier. Like the TT1, it has a hot shoe foot on the bottom for use as a transmitter when mounted on a camera and a hot shoe on top. For non-hot shoe mounted flashes, it has a mini-phone connection on the rear, and a second mini-phone port for triggering a remote camera.

If you work with more than one flash, you'll want to check out the optional AC3 Zone Controller. This neat device connects to the hot shoe of the transmitting unit. It lets you control up to three groups of lights.

Each group has three settings: Off, Manual and Auto. Auto provides TTL control over a six-stop range in third-stop increments. Manual lets you control each group in those increments over the same range, but it uses the +3 to -3 scale differently. In manual mode, +3 is full power, +2 is one stop down from full power, +1 is two stops down, 0 is three stops down, all the way down to six stops under.

Manual mode isn't just for Canon EX Speedlites. For certain high-power lighting units with a wireless control from the camera option, PocketWizard has new ControlTL receivers to integrate them with other lights.

For Elinchrom RX flashes, there's the PocketWizard PowerST4 receiver. For Paul C. Buff Alien Bees, White Lightning, and Zeus lights, there is the AC9 adapter, which



PocketWizard MiniTT1

attaches to a FlexTT5, and the new Paul C. Buff Einstein will have its own dedicated receiver, the MC-2, which will be sold exclusively through paulcuff.com. The output and other functions can be controlled through the AC3 Zone Controller, and global output is controlled through the camera's internal FEC setting. Using the AC3 with either Speedlites or these higher powered lights, you don't have to adjust output on the flash unit itself. Because it offers so much additional control, I think the AC3 Zone Controller is an essential part of the system.

Firmware updates to accommodate new components and improve system performance are released regularly, and require PocketWizard Utility software on your computer. The PW Utility is also the tool for custom programming the TT1, TT5 and the forthcoming "big flash" receivers as well as the second-generation MultiMAX. ControlTL electronic hardware remains compatible with earlier PocketWizard family members going back to the original 16-channel Classic and can be programmed to work with all 32 channels of the MultiMAX.

To make programming easy, both the TT1 and TT5 have two configuration settings. You might want to keep one set to the factory defaults and program the other, or have two sets of custom configurations. The default for both channels are channels 1 and 2 as used on the Plus II and MultiMAX units as

well as the original 16-channel Classic, Plus, and Max PocketWizards, but these can be changed using the Pocketwizard Utility software, or if you are using other PocketWizard transmitters in your setup, you can “teach” the TT1 and TT5 to use the channels you want them to receive or broadcast on. Once you have taught one you can then use it to teach the others to listen to those channels.

But there is a fly in the ointment. The problem is that some Canon Speedlite models (430EX, 580EX and 580EX II) emit a lot of radio noise right around the frequencies where these PocketWizards operate. Some, but not all, 580EX II Speedlites seem to be the worst offenders. The ones I use are not problematic, and apparently neither were the batch of Canon Speedlites used in designing and field testing the the ControlTL system. This noise interferes with reception of the ControlTL signal, drastically reducing the working distance between transmitter and receiver. There are two practical solutions to the problem. Either move the receiving FlexTT5 away from the flash unit using a Canon OC-E 3 cable or use either the PocketWizard AC5 RF Soft Shield or new AC7 RF Hard Shield for the Canon Speedlites. The AC7 has a connection at its base for the FlexTT5 and two stand mounting points, one for vertical and one for horizontal orientation.

I’ve been using the ControlTL system for about six months and am very impressed with its performance, ruggedness and versatility. Whether working in minimalist mode with smart speedlights only, or by combining speedlights and big flashes, I now have a lot more flexibility in how I light. Being able to change lighting balance from the camera saves me time and conserves creative energy. Fixing a big light in position as a key light and then using the small, cable-free battery-powered smart flashes as fill and accent lights lets me experiment to get something more interesting than

my initial idea. This minimizes downtime for the people in front of the camera, too. It isn’t a foolproof system—no complex system is—and it will take a little effort on your part to master it, but once you drop into the ControlTL groove you’ll wonder why you ever worked any other way.

Currently only a Canon version of the

ControlTL system is available, but a Nikon version is on its way.

Pricing: AC3 ZoneController \$69; ST4 Receiver for Elinchrom RX \$119; MiniTT1 for Canon \$199; FlexTT5 for Canon \$219. ■

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