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David Clark DC PRO-X Headset

With a retro design and superb performance, the DC PRO-X sets a new standard

By Marc C. Lee

I knew this headset was different the minute I took it out of the box. One thing I've noticed in recent years is that aviation headsets seem to be going the way of running shoes—they have more padding, wider headbands, bigger ear cups, and—with ANR models—bigger control boxes. Like puffy athletic shoes, newer headsets are starting to resemble cartoon versions of their earlier models, even if it's for valid engineering reasons. The new David Clark PRO-X bucks that trend, and does so in intriguing ways.

David Clark's newest headset features a magnesium alloy headpiece with "leatherette" earcups. The control module is powered by two AA batteries that last 50 hours.

Out of the box, the PRO-X is small and light. However, it embraces those qualities in a very aesthetically and phys-ically pleasing manner. In other words, it feels good and it looks good—quite different from the fray. And, knowingly or not, David Clark has produced what might be considered the first "retro" headset ever. There's so much that stands out about this headset that I imagine David Clark engineers started with a blank piece of paper and said, "Let's start from scratch and create something special."

First, the PRO-X is designed to sit on the ear and not around it. The "leatherette" (a synthetic leather-like, soft material) padded cups sit lightly against the wearer's ear. Typical headsets have ear cups that surround the ear (called "circumaural") to seal out noise with the ear cups themselves. The on-the-ear design is a throwback to headsets of yesteryear. They're what you see in World War II movies and in photos of early airliner cockpits. The earpieces are also tiny in comparison to most of today's headsets, and are round and not oval. At 2.5 inches in diameter, they're reminiscent of the Telex "Airman" headsets.

Innovation abounds in the PRO-X beyond the trademark "DC-green" earpieces. The entire headset is markedly smaller than anything before it, and it folds up to an easy-to-store-and-carry size. So many headsets today are confabulations of plastic that feel light but cheap at the same time, and somehow we've come to accept this cheapness. The PRO-X has a certain heft to it that it reminds one of a finely engineered mechanical instrument, and the only plastic I could find was on the earpiece. Holding it is very satisfying. At a featherweight of barely eight ounces, it's way ahead of competitors whose headsets weigh in around 13 ounces or more. Folded up, you could fit it in even the smallest flight bag pocket.

One key to all this is a magnesium alloy headpiece that provides considerable strength with almost no weight. The headpiece was obviously custom-engineered for this headset (not an off-the-shelf component), and extends to a unique hinging system. Each earpiece is attached to a "Y" bracket that meets at a single point about 2½ inches above the earpiece. There, it attaches to the headpiece with a sturdy hinge. The net effects are even and light clamping pressure all around the ear. That translates directly to unmatched comfort. I wore the headset for two hours-plus on a cross-country and forgot I was wearing it. Try that with a conventional headset.

Today, we're in an era where aviation headsets—especially ANR headsets—sound fantastic. Today's ANR headsets all have very similar sound performance, especially those from the major manufacturers. They've perfected what's essentially old technology (active noise reduction came about in the 1950s). As a result, there's no wide gap in sound from manufacturer to manufacturer. The differences are subtle and have to do more with EQ (equalization) curves.

The PRO-X sounds great, as expected. In fact, it has a sweet spot in the mid- and upper-mid range frequencies, which is a boon to anybody with typical hearing loss from aircraft noise (or age). This "bump" gives a silky tone to ATC communications and helps cut through the low-end garbage droning in from your engine. Less important but equally satisfying, the PRO-X is ideal for cell phone calls or music because of its bright EQ. There was definite thought devoted to the sound here, not just uniform blocking of a narrow band of low-end frequencies. The M-55 microphone is typical electret condenser: a lot of power, pure tone and great intelligibility. As a bonus, the flexible mic boom swings either way, so you can wear it on the left or right side.

I wondered how David Clark could achieve such good noise reduction and great sound using an on-ear design. One would think this would be difficult because of the lack of seal around the ear. David Clark does it by sampling noise with both an internal and external microphone on each ear. Then, using two distinct inversion circuits, matches the two noise sources, effectively blocking them. They call this "Hybrid Electric Noise Cancelling Technology" (ENC). Whatever it's called, it works.

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Once inside the cockpit, my attention turned to the slim control module. It's powered by two AA batteries that give the headset about 50 hours of ANR stamina. David Clark installed dual voice coil drivers, so when the batteries fail, the headset continues to work and will still provide passive noise attenuation, a feature now pretty standard on most ANR headsets. A light on the module pulses red when batteries are low.

Of course, the headset is fully Bluetooth-enabled, so you can pair it to your cell phone or music player without wires. I did just that, and pairing is a 30-second non-event. Once connected, the sound is seamless from device to device.

There's a mono/stereo switch, and a nice auto shut-off feature that you can turn ON or OFF. When set ON, the unit turns off automatically after five minutes if either the audio panel or intercom is turned off, you disconnect the headset from the intercom or your cell phone call ends. One minor complaint I have about the PRO-X has to do with the volume buttons. They're digital, and so you have no way of knowing if one side is higher or lower than the other. Mechanical sliders would be my choice for future models.

The market will determine if pilots can buy into the on-ear design of the PRO-X. As with any headset purchase, the key to avoiding buyer's regret is to wear the headset for at least an hour in the cockpit. Wearers will find the comfort of this headset hard to beat with anything but an in-ear unit. With a list price of $637, the "bang-for-your-buck" factor is impressive. The PRO-X is superb on every front. Between the sound, feel, comfort and design of this new headset, I would place the PRO-X at the top of my list. circuit. When we land at KPBI, we may be the smallest thing on the ramp, but we're also definitely the cutest. The Gulfstream IV pilots always check out our classic V-tail.

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