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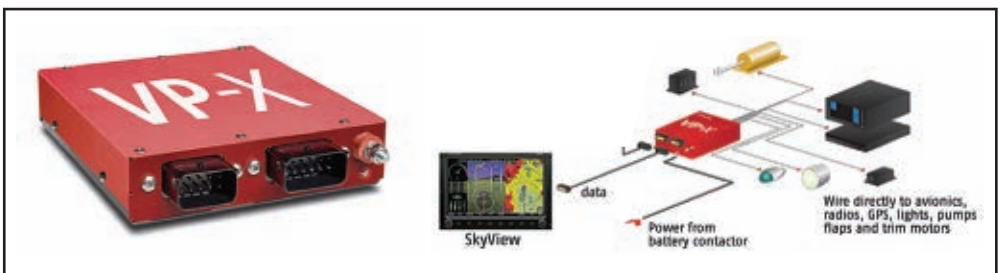


Dynon's EFIS-D10A fits into any 3-1/8-inch standard panel hole, making it ideal for replacing the attitude indicator in a traditional round gauge aircraft. It can communicate with other devices including an autopilot.

Dynon went a step further with the introduction in late 2009 of SkyView, its flagship system that integrates most avionics functions you'll find in the cockpit into a single display. Similar to the Garmin G1000, the glass cockpit most widely installed in certified light aircraft from Cessna and other major manufacturers, it includes primary flight instruments, engine monitoring, GPS navigation, a Mode-S transponder, synthetic vision technology that shows you where the hills and other obstacles are located and an autopilot. Dynon protects customer investments by continually introducing new features as software upgrades that earlier customers can upload into their older hardware. And since they're not subject to FAA certification procedures, the company can introduce new features quickly and inexpensively.

Best of all, Dynon is an American company. Based in Woodinville, Washington, it was founded by John Torode, a Ph.D. computer scientist who made his mark by founding a company that created the first microcontrollers with programmable analog circuitry. Selling that company to Cypress Microsystems provided the capital that enables Dynon to invest in the design of custom circuits produced in volume. This gives it a cost advantage over competitors, while still providing leading-edge technology. While many of the components in its products can only be sourced overseas, all final assembly, wiring, and testing occur in the Woodinville factory.

A man after my own heart, John owns not just one seaplane but three! If you were to visit his home on Lake Washington, you'd find a Cessna 180, a de Havilland Beaver, and a Murphy Moose, all on floats.



VP-X uses electronic circuit breakers that are user-configurable. This gives aircraft builders a high degree of flexibility in setting notification and operating parameters for each circuit.

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ELECTRONIC CIRCUIT BREAKERS

A major benefit of the Dynon's SkyView is its extensibility. Using industry standard interface protocols wherever possible, it can integrate with external third party devices like the GNS 430 (via ARINC-429) and traffic awareness systems, and display information from these devices on a SkyView Display. On March 1, Dynon announced that SkyView will support the VP-X Pro and VP-X Sport electronic circuit breaker systems from Vertical Power with software that displays and controls the VP-X directly within integrated SkyView software.

VP-X is an innovative system that lets pilots monitor and control their electrical system. At its core is a box that contains electronic circuit breakers that can be customized for each circuit. Pilots specify the current limit for each circuit and wire the box directly to all electrical devices in the aircraft, including avionics, motors, pumps, and lights. But the real power comes from customizing parameters for notification and control of each circuit.

For example, I just completed my multi-engine seaplane rating in a Grumman Widgion with a flap operating speed of 104 mph and a clean stall speed of 98 mph. That's an extremely narrow operating range in which to operate the flaps before falling out of the sky. With the VP-X system, a pilot can configure the flap circuit with overspeed warnings or to inhibit flap extension commands when above flap extension speed.

For lights, you can program the system to notify you when a light has failed or to blink the landing light above a specified airspeed to make yourself more visible in the air to other aircraft. You could also set up VP-X to disable the starter motor while the engine is running.

Clearly, innovation is alive and well in general aviation. Builders and fliers of experimental and light-sport aircraft will increasingly be the first to benefit. In the meantime, those of us who own and fly certificated aircraft can only dream of these kinds of capabilities. *EAA*



Max Trescott, EAA 531980, is an aviation author and publisher, and was the 2008 National CFI of the Year. For more of his articles, go to www.MaxTrescott.com.