

Product Watch

MINI REVIEWS OF EDITORS' FAVORITES

PowerBox SparkSwitch Pro

I'll start this conversation by saying that any electronic-ignition gas engine should have a transmitter-activated, electronic-ignition kill switch. Not a choke servo, not a throttle servo that closes all the way, but an independent way to kill the ignition despite any sort of mechanical failure of servos, linkages, etc. There is a common misconception that it's required by the Academy of Model Aeronautics, and while I can assure you that applies only to giant-scale racing, having one is just common sense.

PowerBox Systems, based in Germany and now represented in North America by PowerBox Systems Americas, has been quietly producing high-end power-distribution systems, gyros, batteries, and wiring systems for the discerning modeler for a number of years. These won't be found on your average 40-size trainer, but if you walk the flightlines



Ready to install, the SparkSwitch Pro is compact and robust.

at such large events as Joe Nall, Florida Jets, and Top Gun, you will find that the bigger and more complex the model, the more likely it is for it to have some PowerBox components.

On to the SparkSwitch. Some things you don't need to change, such as the PowerBox SmartSwitch ignition kill. It's been around since 2008, quietly doing its job and doing it well. I have a few that are older than most of my current fleet of airplanes that have been serving me well for years. After suffering some issues with a couple of \$12 ignition-cutoff switches, I decided it was time to put some premium equipment in my favorite and most expensive aircraft.

Technology, though, marches on relentlessly, and it was time for the SmartSwitch to take the next leap: Enter the SparkSwitch Pro. The SparkSwitch



The new PowerBox Core radio displaying the telemetry received from the SparkSwitch Pro, including the head temperature and engine rpm.

Pro brings forward the reliable SparkSwitch features and adds integrated telemetry for engine rpm, temperature, and ignition-battery voltage.

The telemetry in the SparkSwitch Pro is compatible with most of the popular radio brands, including the soon-to-be-released PowerBox Core radio P²-Bus system, Futaba S.Bus2, Jeti, Graupner HoTT, Multiplex M-Link, and JR DMSS (sorry, no Spektrum at this time).

The SparkSwitch Pro uses a bidirectional infrared connection between the ignition and receiver side so that ignition noise is fully optically isolated from the receiver while still allowing telemetry data to pass back to the receiver. A wide voltage range can be used, so whatever your ignition can handle can be used. The SparkSwitch can be configured to pass through battery voltage or regulate the ignition feed to 5.9 volts, which will operate the most common ignition systems on the market right now.

One thing I hear a lot: "I don't want to bump a switch and shut down in flight." I've been flying gas for years and have never managed to do that. I've run out of gas in a 5-foot hover, but I never killed my engine by mistake. No worries—the switch can be programmed as a conventional on/off switch or an arm-and-switch mode. As opposed to a typical switch flip, you have to switch from position A to B to arm the switch and back to A to execute either turning the kill switch on or turning it off. The switch costs \$99.00 and is well worth the investment.—Andrew Griffith
powerbox-systems.com