



1931

Perihelion Design ships most items free to the US, Canada and Mexico. Foreign shipments at our cost. We never charge handling or restocking fees.

“Perihelion” is Latin-Greek for *Close to the Sun*



WWW.PerihelionDesign.com

Eric M. Jones

113 Brentwood Drive

Southbridge MA 01550-2705

Phone: 508-764-2072

Email: emjones@charter.net

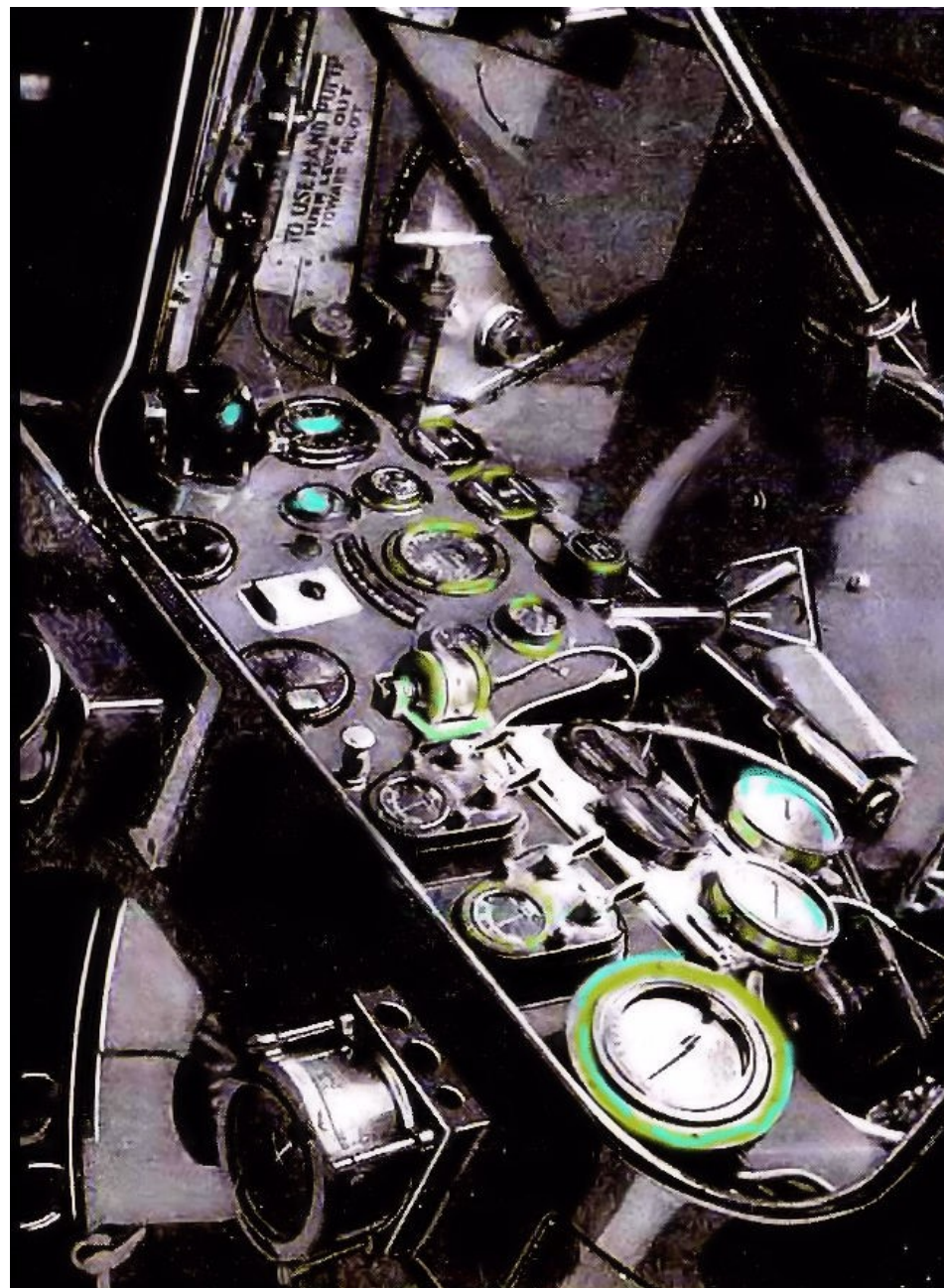
CAGE Code: 7CYT6 DUNS 137357138

MAR2021



www.PerihelionDesign.com

Boldly Innovative Products for Modern Custom Aircraft



LIGHTWEIGHT CCA FATWIRE



Copper is the best *bulk* conductor after silver, but if you want the best conductor *per weight*, aluminum is more than twice as good as anything else! It's almost magic!

Using plain aluminum wire in aircraft became unpopular years ago mostly due to half-vast ideas, misapplications and some regrettable misunderstandings about how and where it should be used. Plain aluminum wire can be difficult to use.

However, we get the best of both metals if we bury each aluminum strand in a copper cladding (called CCA). This copper cladding is not "plated-on" but fused to the aluminum rod before the first draw in the wire-making process.

Application? It works just like copper, has the low corrosivity of copper. In fact, it crimps the same and solders even easier than copper. Race-cars, dragsters, aircraft, balloons, and rockets use it. In fact any weight-sensitive application benefits....Why aren't you using it?

- AWG 2 equiv. Super-2-CCA FatWire \$6.99/foot
Lugs \$7.85 ea
 - AWG 4 equiv. Super-4-CCA FatWire \$3.79/foot
Lugs \$5.75 ea
 - AWG 8 equiv. Super-8-CCA FatWire White, TFE \$3.50/ ft.
Lugs \$2.25 ea
- (15' minimum applies)

La Trancheuse

Air "Slicer" Valve for 3-inch flexible duct. It was specifically designed for Lancairs® but will do the job in any aircraft that needs a remotely controlled ventilation duct. Uses a rugged Futaba S3004 ball bearing servo that is controlled by our (included) EGPNMSC. 9 Ounces.



La Trancheuse 3-inch Duct Servo Valve/Driver Price: US\$399.00

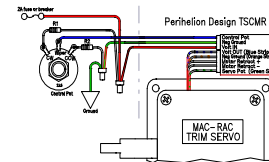


Perihelion developed the EGPFTSC for builders who want to use their own Futaba & other standard R/C servos for simple tasks such as controlling air vents, opening baggage or dipstick doors, etc. Servos require a special pulse-width-modulated signal, so driving them has not been as easy as falling off a log until now.

Extremely Gen'l Purpose Futaba-Type Servo Controller Price: \$49.99

True Servo Conversion for MAC-RAC "Sort-of-Servos"

The ubiquitous MAC-RAC commands a tiny motor by two buttons. So it's really a "Sort-of-Servo". A *true servo* has its internal pot wiper voltage fed back to a logic controller to drive the motor to a desired position automatically when you set (e.g.) a potentiometer knob slide pot or selector switch.



The TSCMR allows use of the MAC-RAC as a true servo, to trim control surfaces or for controlling heater or air vents, opening a baggage or dipstick door, and other tasks.

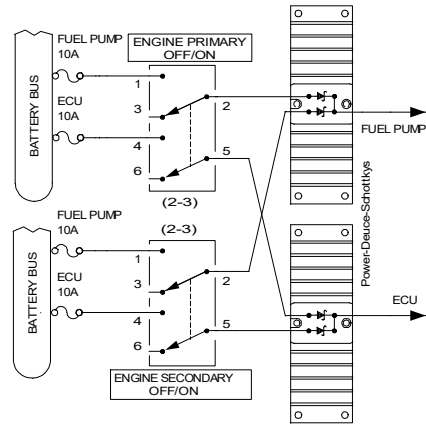
Original TSCMR True Servo Conversion Module USD \$52.00

Bi-Directional SnapJacks Replace Coil Diodes!

18V 600W Bi-Directional Zener Transient Voltage Suppressors (for 14.5V systems) that provide the most modern technical solution to relay coil suppression. We sell these as a set of twelve with the typical hardware needed to retrofit a small airplane.



\$29.89/Set



Power-Deuce-Schottky

For switching voltage sources to the fuel pump and ECU, nothing beats them. Low loss, high power, reliable solutions to two battery AeroElectric Z-19 and similar circuits. 20A each side, 45 V. Also usable as twin diodes for bus isolation.

US\$59.99 each \$99.99 for 2 (Z-19/RB requires 2 sets).

Free Shipping to US-Mex-Can



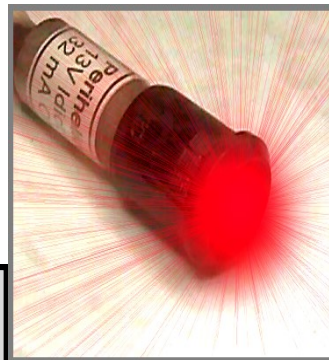
A white tail lamp is part of FAA req'd aircraft lighting. Our LED version draws 1000 mA, and lasts up to 50,000 hours. This lamp retrofits a Whelen A555 or Grimes A2064 tail light (not supplied). Long lifetime, solid-state LED reliability, lower current. Includes regulator.

White LED Tail Light

Price: US\$139.00

13V Idiot Light

Since your alternator voltage is 14.5 volts when the alternator is working, a Low Voltage Annunciator trips at 13 volts to tell you that your alternator has failed—so you'd better start making plans. Blinking red is standard, but we have dozens of options.



**The Cheapest and Best
13V Idiot Light.
Big 10 mm LED, Only \$49.95**

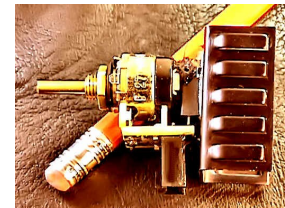


Logarithmic LED Dimmer

Perihelion Design developed the LEDVR for dimming LEDs specifically. Resistors can be added for max and min. 1/8" shaft. The logarithmic pot gives more natural control throughout with LEDs. Same price and size as the EGPAVR.

LEDVR: LED Volt Regulator
Mil-Style Knob for 1/8" shaft Included.

**Price: US\$34.75 each
(3 for \$99 Special)**



Lamp Dimmer (Adj. Volt Reg.)

Perihelion Design developed the EGPAVR for builders who want one or more voltage regulators to dim LEDs or incandescent interior and panel lights—or actually, anything at all. 1.5 amps. Weighs less than 1/2 oz. Resistors can be added for max and min. 1/8" shaft.

Extremely Gen'l Purpose Adj. Voltage Regulator
Mil-Style Knob for 1/8" shaft Included.

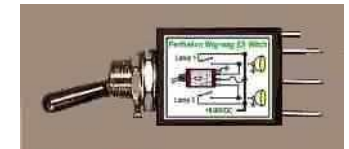
**Price: US\$34.75 each
(3 for \$99 Special)**



Wig-Wag Module (C) Price: US\$110.00

Steady (non-pulsed) lights during the daytime can actually *decrease* aircraft visibility! This device alternately flashes the taxi and landing light (or other lights), to improve your aircraft's visibility. Wig-Wag lighting is believed to markedly improve flying safety. A connection to a user-supplied panel mounted switch is provided. Epoxy potted module, of course.

During WWII Allied anti-submarine bombers were experimentally fitted with forward facing lamps. A rear-facing photocell set the lamps to match the background light. This would have been deadly to German U-boats which could not have seen the approaching aircraft until it was far too late! Steady (non-pulsed) lights during the daytime *can actually make an approaching airplane invisible!* This wig-wag is built *into* the switch—and will flash 250 W per side! There is no smaller, lighter, simpler, easier to install wig-wag.



Wig-Wag (D) Lamp Flasher

Price: US\$120.00



PDM-005 Space Shuttle Switch Guards

Hard-anodized A356-T6 aluminum (same as car alloy wheels and engines) 1.18" wide, 0.90" X 1.04". Precision investment castings. Very rugged and identical to the originals except they're aluminum, so they're very light weight. They are finished with a hard anodized coating. Discounts available.

Repro Space Shuttle Switch Guards

Price: US\$ 8.99 each



Now, how you could finish a really classy airplane without a bunch of these?...We have no clue! Guards from early X-planes (someone should X-plain it to us!) but common in many airplanes. Stud mount with supplied M4 nuts on 1.00" centers. We sell these in bare aluminium alloy, Black Anodized or, or nickel plate.

PDM-012 Classic X-Plane Toggle Switch Guards

Bare Aluminum Price:

US\$6.00/pair

Bright Nickel Plated or Black Anodized

US\$7.50/pair

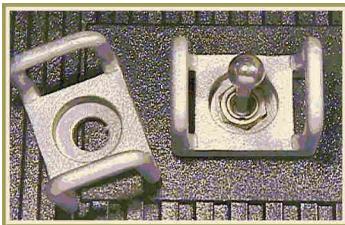


PDM-028 Rocker Switch Guards

These are less common but still great to guard the rocker switches you don't want to rock by mistake—or to stabilize your hand while doing so. Height 3/4"; Mount on 1.5" centers with supplied screws. Made of 3/16" round alum stock.

Rocker Switch Guards

Price: US \$7.75/pair



Switch Guards for those 1/4" (6 mm)- bushing switches that are becoming more common in lightweight designs. These elegant guards are crafted from rugged stainless steel to resist space helmet impacts and are furnished bare for your own paint. At a bargain price! (18 x 18 x 25 mm)

PDM-026 Mini-Switch Guards

Price: US \$4.75 each

Rugged Stainless Switch Guards



Perihelion Design developed these tough-as-nails switch guards for industrial and automotive use. They are roughly the same dimensions as our great X-plane guards but use 5 mm material in the loop, and use 3 mm studs and Nylock nuts for greater mounting versatility. Superb quality. All stainless steel

PDM-027 Stainless Toggle Guards

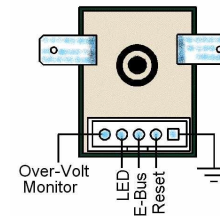
Price \$6.99 each



The original Apollo Spacecraft switch guards were all hand-welded 4130 steel by Rockwell International. The ones we sell are high-quality castings of 304 Stainless Steel. Supplied bare for your own paint or powdercoat finish. These are easy to make into runs on 1.000" centers because the end loops are easy to remove. These switch guards will fit both the standard 15/32" keyed bushings and the standard 12 mm keyed bushing switch guards. Quantity discounts are available.

Apollo Spacecraft Toggle Switch Guards

PDM-034 \$9.00 each



Old crowbar OVPs draw huge currents to blow circuit protection devices. But this tiny Dual PowerTrench® MOSFET Linear (non-crowbar) Over Voltage Protector simply turns off the circuit. Hey, what a concept! Conducts 5A, trips off at 16.2 VDC, 200 mS delay and resets with power cycle or reset switch.

Linear (Non-Crowbar) OVP

Price: US\$88.00



The Low Voltage Warning and Aux Battery Management Module was originally devised by Bob Nuckolls. It monitors the voltage on the E-bus, signals when it has fallen too low (<13V) and switches off the aux battery—thus preserving the battery for later. When the bus voltage returns above 13V the device returns to its normal state. All this in a domino-sized package.

LV Warning & Aux Batt. Management Module

Price: US\$82.00