

# ELECTRONIC IGNITION SYSTEMS

## FLYEFII DUAL SYSTEM32 ENGINE MANAGEMENT SYSTEM



The FlyEFII System32 Engine Management System Hardware is the first electronic engine management system ever designed specifically for the needs of experimental aviation. System32 is a state of the art, high speed, fully redundant system that represents the fulfillment of a ten year wish list of functionality. Dual 32 bit high speed ECUs and a sunlight readable graphical LCD Cockpit Controller combine for seamless power and efficiency

in managing your engine's electronic fuel injection and electronic ignition functions. System32 will be offered in ignition only and full ignition + injection versions.

### Specifications:

**Engine Computer:** • Advanced 32-bit microprocessor • EMI Filtering on all inputs • Operates down to 3.5 volts • Live Telemetry Interface • Integrated ADI Control • Up to 12 individually trimmable injector outputs • Onboard SD Card enables easy field updates, loading and saving map files, and data logging • Supports up to three O2 sensors • Integrated Boost Control • Lightning strike protection • Full 3D mapping of your ignition timing and fuel delivery • Compatible with standard left-right-both ignition switch.

**Cockpit Controller:** • Color LCD 1000-NIT sunlight readable display • Integral rolling tape Air Fuel Ratio display • Convenient full size SD card enables easy field updates, loading and saving map files, and data logging • Seamlessly interfaces with two ECUs • Effortless tuning – enter your engine size and compression ratio to instantly set fuel and ignition base maps • Fits in standard 3-1/8" aircraft instrument hole • Annunciator display for ECU power, fuel pump power, and two battery voltages • Multi-function knob and buttons provide intuitive access to functions.

| Description                     | Part No. | Price |
|---------------------------------|----------|-------|
| 4 Cylinder Ignition Only        | 07-19978 | .     |
| 4 Cylinder Ignition & Injection | 07-19980 | .     |
| 6 Cylinder Ignition Only        | 07-19979 | .     |
| 6 Cylinder Ignition & Injection | 07-19981 | .     |

## EFII THROTTLE BODY FLANGE ADAPTER KIT



The EFII Throttle Body Flange Adapter kit provides a convenient method to join a Van's Filtered Air Box or other flat surface interface to the EFII throttle body which is included in all EFII electronic fuel injection kits.

The EFII throttle body has a 3 1/4" rounded snout at its inlet. the TBFA kit includes a high quality silicone hose coupler which fits onto the EFII throttle body snout. The other end of the silicone coupler has a 3" ID which fits the included 3" aluminum flange adapter. Stainless steel hose clamps are included to complete the assembly of the TBFA.

The aluminum flange adapter can be riveted, bolted, welded or bonded to your air filter box or air inlet .....P/N 07-19987.....

## EFII FUEL FLOW INTERFACE



Required when Dynon or Garmin engine monitors are used with the EFII electronic fuel injection system. The EFII electronic fuel injection system does not require a mechanical fuel flow sensor to display fuel flow on your engine monitor. However, you will need our Fuel Flow Interface to translate the EFII Fuel Flow signal to the FloScan type signal required by Dynon and Garmin engine monitors. Grand Rapids and MGL engine monitors do not require this interface. The Fuel Flow Interface enclosure measures approx. 2" x 1.37" x 0.75".

P/N 07-19988 .....

## EFII GROUND BUS



The EFII Ground Bus, part number GB-1, is a great addition to a well designed wiring system. The GB-1 is a nicely designed "forest of tabs" type grounding junction that can clean up and organize all your avionics and system ground wires. Many people use two of these devices to lay out their grounding scheme. One for avionics or small signal grounds, and one for higher current grounds, such as lighting, strobes, pitot heat, etc. .P/N 07-19993 .....

## EFIS SPARK PLUG ADAPTERS



If you are going to run an electronic ignition on your aircraft engine, you will need a set of these to adapt the 18mm spark plug threads in your aircraft cylinder head to 14mm threads for use of automotive spark plug. These are the highest quality adapters you will find.

18mm to 14mm Long Reach 4 Pack .....P/N 07-19992 .....

## E-MAG SPARK PLUG ADAPTER FOR 14MM SPARK PLUGS



Auto plug adapters allow for an easy conversion of 18mm (standard engine plug thread) to 14mm (common auto plug thread). Both short reach and long reach adapters are available. The Spark Plug Adapter allows you to use: High performance 14mm automotive plugs, that offer an almost unlimited variety of heat ranges, & electrode styles, designed specifically to take advantage of electronic ignitions - see ignition manufacturer documentation for recommendations (note: not all plugs are equally suited). Shorter plugs with 90° silicon boots provides greater clearance for sleeker cowls and less drag. Some kits include 4 adapter gaskets.

Set of 4 without gaskets - Short Reach .....P/N 08-06753 .....  
Set of 4 with gaskets - Short Reach .....P/N 08-06753-1 .....  
Set of 4 without gaskets - Long Reach .....P/N 08-07608 .....  
Set of 4 with gaskets - Long Reach .....P/N 08-07608-1 .....

## BUS MANAGER



This Bus Manager is an important safety device for aircraft that have critical electronics that require a protected essential bus.

This would include aircraft that are running electronic fuel injection, electronic ignition, electric fuel pumps, or critical instrumentation. Provides a triple redundant essential bus for all critical electronic equipment. This redundancy is crucial for engines that rely on uninterrupted +12V power to critical items. The end user no longer has to attempt to come up with a home brew bus system for their plane. The Bus Manager has been professionally designed and over-built to faithfully provide extreme reliability..... P/N 07-01852.....

## BUS MANAGER ACCESSORY KIT



The Accessory Kit for the Bus Manager consists of all the parts necessary to setup a Bus Manager based electrical distribution system for experimental aircraft.

P/N 07-01853.....

## ELECTRIC BOOST PUMP MODULE



The EFII Boost Pump Module (BPM) brings a new level of installation simplicity and functionality to the fuel system of your aircraft equipped with Bendix, AFP or Precision

Airmotive type mechanical fuel injection. The BPM reduces a time consuming and frustrating plumbing job to a simple and clean, easy to set up installation. It is used to supply a steady source of 30PSI fuel to your engine during take-off, landing, priming, or emergency situations. The BPM has integral back flow prevention and pressure regulation valving.

Standard..... P/N 07-01854.....  
w/ 90° fitting..... P/N 07-02461 .....