

“SUPER SMOKE ELECTRONIC PUMP” **INSTRUCTIONS**

The New “Super Smoke” Electronic Pump kit contains, one super smoke electronic pump , one “T” Fitting for installation on a twin cylinder engine (if needed), one reverse flow check valve, one flow control valve and smoke fluid tubing.

You will need to supply a smoke fluid tank, a smoke pump battery and an engine with a muffler capable of getting smoke fluid into the hot exhaust system.

The “Super Smoke” Electronic Pump is quick and easy to install. It is a unit 3 1/2” long by 1 1/4” and 1 1/4” high weighing only 3 oz’s and has mounting flanges. The unit is self contained with the motor, pump and electronics internally installed. The electronics consists of a preprogrammed microprocessor and high current controller to drive the motor. Three wires exit the side of the smoke pump, one is a servo type cable with a plug for for connection into the receivers output. The red and black wires are for the pumps battery power. The single red wire wire is the plus battery connection, the single black wire is the negative battery connection. It’s the owners choice to install a switch in this power circuit. Caution, do not reverse the power input power or damage to the electronic package may result. To help select your smoke pump battery, the pump will draw less than 1000 ma. and considering that your smoke writing time is not as long as your flight time a large battery is not required.

The system requires a battery supply of 4.8V, 6V or 7.4V. It may be powered by a Ni-Cad, NiMh or Li-po battery. Minimum performance is obtained with a 4.8 Volt battery, great all around performance with a 6 Volt battery and outstanding performance with a 7.4 Volt Li-Po battery which is lighter in weight and smaller in size. The choice is yours !

If a Li-Po type of battery is used the instructions from the battery manufacturer must be strictly followed regarding charging and low voltage control limits of the battery.

The “Super Smoke” Electronic Pumps microprocessor is preprogrammed and controlled by the signal from the transmitter through the receivers output to operate the pump in a “full On or Off” condition.

The rate of fluid flow to the muffler is controlled easily by the supplied manual valve on the fluid tubing. This valve is always installed on the line between the smoke tank and the smoke pumps “in” connection. It is never to be installed on the line between the pumps “out” connection and the muffler. This will cause excess system pressure and more current to be drawn from the smoke pump battery.

A reverse flow or one way check valve is also supplied. (Check the direction flow by simply blowing through valve, one direction it will flow air, the other will seal and stop the flow of air.) This is installed on the line in the proper direction to allow flow between the pumps “out” connection and the muffler. We suggest a location close to the muffler, but not where it can get overheated.

We are not offering an opinion on what smoke oil to use as this is a subject that has been covered in many magazines and the choice is great. We do strongly suggest a filter be installed on the line that supplies smoke fluid to the models tank. This will insure a clean supply of smoke fluid to your models system and protect it.

The Installation was simple, make your transmitter command adjustments.....

Go write your name in the blue sky !