



Original release, May 22, 2003

### Description

The **Supr-** family of products from DIVA Automation are characterized by their incorporation of related functions normally required in typical applications of the product, but not normally included in competitive products. Our **SuprMotr** controllers, for instance, incorporate uncommitted digital and analog I/O lines, so that a separate assembly is not required in many applications. This feature not only reduces cost, but simplifies integration of the motion with other parameters and signals.

The **SuprAmpA** is an analog amplifier intended primarily for use in driving small motors. Its "**Supr**" feature consists of inputs from limit switches to prevent accidental motion beyond safe physical operating limits. The active state of the limit switches may be modified by on-board jumpers. When a limit switch is activated, no further drive is possible in the direction of that switch. However, drive in the opposite direction is unaffected.

It accepts an industry-standard +/- 10 Volt input to drive precision-size motors bidirectionally, with selectable gain.

A DB-15 connector provides direct connection to motor functions, to pass through those that require service in other assemblies.

A companion product, the **SprAmpD**, performs a similar function using a PWM driver for higher efficiency, but also introduces higher electrical noise into the circuit.

### Features

- Small size--2" x 3.5"
- Low power--20 mA quiescent
- Limit switch support
- Standard analog input-- +/- 10 V
- High voltage--up to +/- 40 V
- High current--5 Amps, continuous, 10 Amps, peak.
- FET input-- $10^{12}$
- Current limited--adjustable
- High power--up to 100 W

- Wide bandwidth--45 KHz
- Wide temperature range--up to 85° C.
- Low offset voltage--2 mV, typical
- Low offset current--1 pA, typical
- Low input bias current--4 pA
- Output swing--(Vs-10 V) at 5 A.
- High slew rate--6 V/ $\mu$ s

**Low cost--\$149**

In quantity of 100pcs.

