

# SS-100 UNIVERSAL "SOFT START" INSTALLATION INSTRUCTIONS

## PARTS SUPPLIED WITH THIS KIT:

(1) SS-100 "Soft Start" Circuit Board Assembly

It is not possible to give exact installation instructions for the Universal "Soft Start" module because I have neither the schematic nor the physical layout of your specific amplifier. I can give you enough information, together with the schematic of the Universal "Soft Start", to help you install this module.

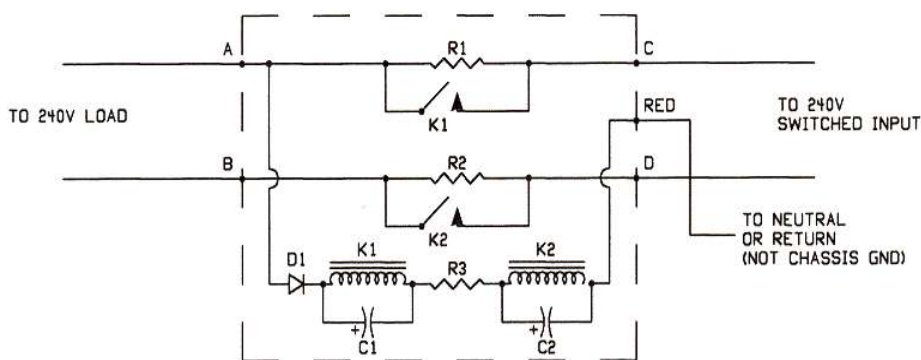
Please examine the SS-100 module. Note that there are letters on the foil side that designate the leads to be connected. The "C" and "D" leads will be connected to the switched power input. The "A" and "B" leads will be connected to the load. A **RED** wire between pads "C" and "D" (user supplied) is connected to the neutral or return of the input power line. Refer to the schematic below. The module will be mounted using silicone adhesive relay side to the chassis.

The overall operation is quite simple. When the power switch is turned ON, 240 volts is applied to the load through a 20 10W resistor in each side of the line. The voltage at the load is measured by the diode connected to pad "A". As the filter capacitors and other components charge or stabilize in current drain, the voltage at pad "A" rises. When this voltage reaches approximately 90 volts, the two relays are activated, shorting out the 20 resistors. Now the power circuit is back to its full power state and the soft start circuit is locked out of operation.

## 120-VOLT OPERATION

If this circuit is to be installed in equipment operating from 120-volt AC power lines, a modification must be made. The 20 10W resistors must be changed to 10 10W. These resistors are readily available at any electronic store. However, if the soft start is used with equipment running on less than 120 volts, the resistors probably do not need to be changed.

**NOTE: If only one side of the input power line is switched, be sure that the switched lead is on the "C to A" side of the soft start circuit.**



## PARTS LIST

D1	1N4005 (1A 600 PIV)
K1 & K2	SPDT 12A 48VDC
R1 & R2 (240VAC)	20 10W
R1 & R2 (120 VAC)	10 10W
R3	2400 2W 5%
C1 & C2	100µF 63VDC

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