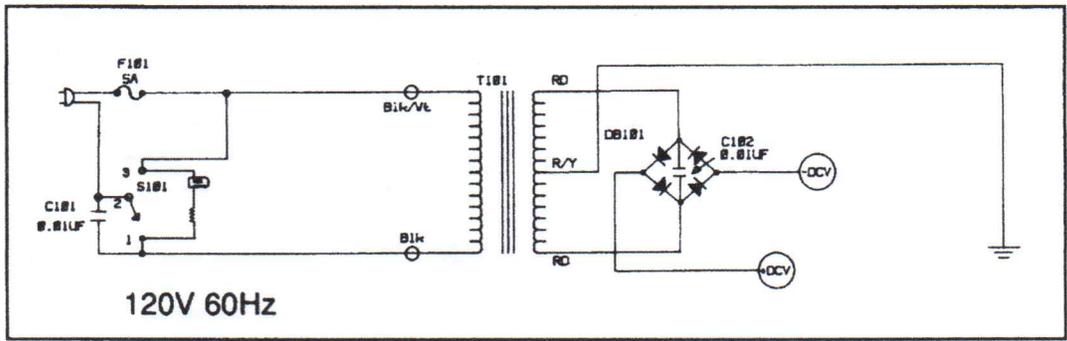
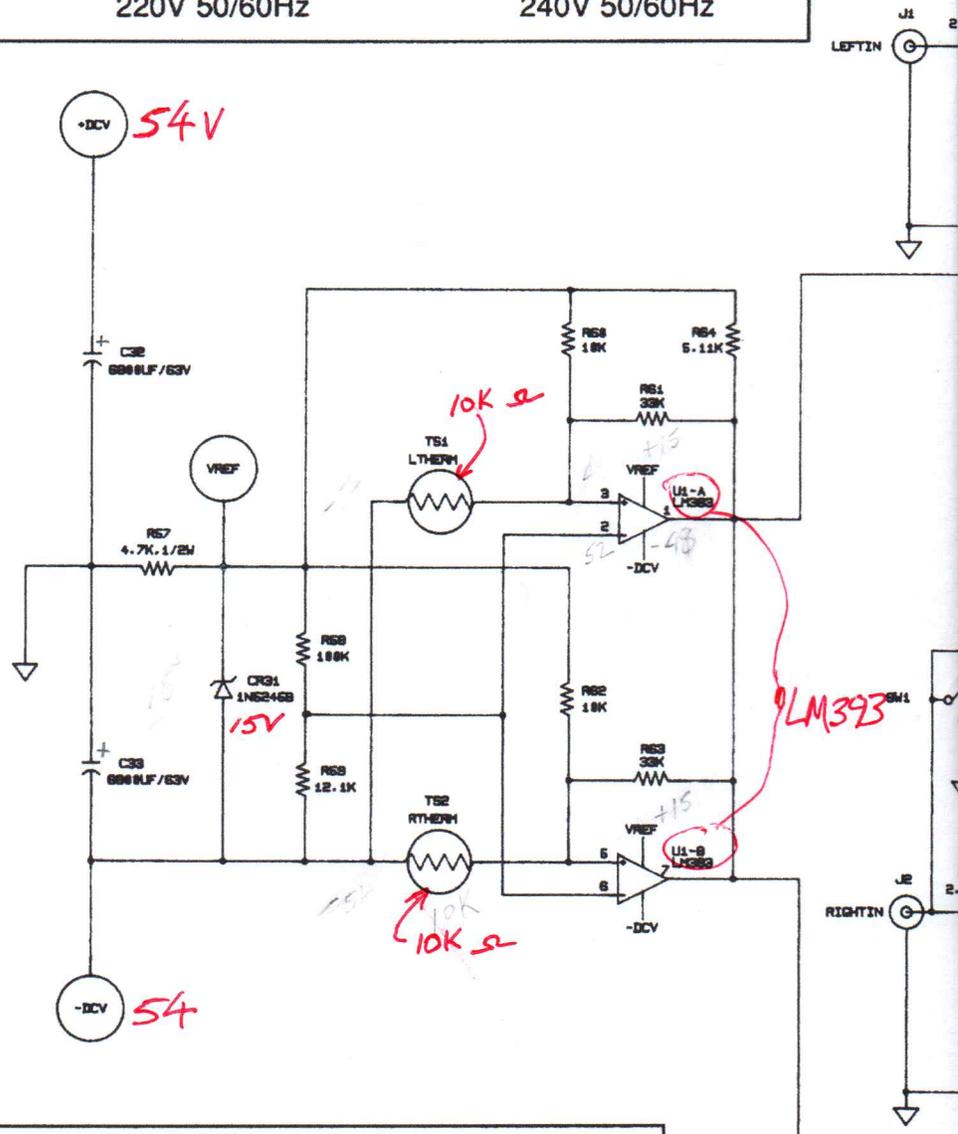


**SE120  
SCHEMATIC  
DIAGRAM**





in the bridged mono mode. The increased current could overheat the amplifier.

## OPERATION

The pilot lamp in the power switch will glow whenever power is applied to the SE120. If it does not light, check for a blown AC line fuse.

The SE 120 is equipped with a unique protection system that constantly monitors the temperature of the output devices and takes corrective action to prevent damage to the amplifier as a result of excessive overheating. Under most conditions, the SE120 heatsinks will dissipate the heat required to maintain safe operating temperatures, and the unit will play continuously. If the amplifier is driven at high volumes into speakers with an impedance of less than 8 ohms, and/or there is inadequate ventilation, the heatsinks could heat to a level that would cause the protection circuitry to shut off the amplifier for a short time (normally less than 15 seconds) to prevent damage. The SE120 will return to normal operation, and if the overheating condition is still present, the cycle will repeat. In this case, check the surroundings of the unit to insure sufficient air flow around the heatsinks and through the vent holes. Otherwise, check the load impedance connected to the outputs to see if it is far below 8 Ohms.

## FUSES:

The SE120 is supplied with a 5 Ampere Slo-Blo AC line fuse and four power supply fuses. If one of these fails, it is usually indicative of a fault which will require professional service.

### Bias current adjustment for the SE 120 needs to be performed in the following manner:

1. No signal applied to the input, no load on the output of the amplifier.
2. Line voltage to the amplifier should be set at the nominal value for the area.
3. Adjust one channel at a time.
4. With the unit off, remove either the + or - rail fuse in the right channel. Insert the ammeter across the fuse holder. Make sure that the ammeter is set at its highest current scale.
5. Turn the unit on and, after the unit has warmed up for approximately one minute, adjust the ammeter reading for 100mA. Turn the unit off. Allow the unit to discharge before removing the ammeter and replacing the fuse.
6. Repeat steps 4 and 5 for the left channel.

## TRANSISTOR VOLTAGE VALUES-

DC volts with respect to circuit ground, no signal applied.

NAME	Emitter	Base	Collector
Q1	-.755	-.130	51.5
Q2	-.756	-.159	51.7
Q3	52.3	51.7	51.5
Q4	52.3	51.8	51.8
Q5	51.4	50.9	-12.90
Q6	52.1	51.5	50.5
Q7	51.0	50.4	1.294
Q8	-1.157	-.532	1.314
Q9	-51.4	-50.7	-1.151
Q10	-.578	-1.153	-53.5
Q11	.711	1.303	53.5
Q14	-.737	-.126	51.5
Q15	-.755	-.130	51.5
Q16	-.756	-.159	51.7
Q17	52.3	51.7	51.5
Q18	52.3	51.8	51.5
Q19	51.4	50.9	-12.90
Q20	52.1	51.5	50.5
Q21	51.0	50.4	1.294
Q22	-1.157	-.532	1.314
Q23	-51.4	-50.7	-1.151
Q24	-.578	-1.153	-53.5
Q27	-.518	-.088	-53.8
Q28	-.737	-.126	51.5

	Source	Gate	Drain
Q12	.778	.087	53.8
Q13	-.518	-.088	-53.8
Q25	.778	.087	53.8
Q26	-.518	-.088	-53.8

## IC VOLTAGE VALUES

IC	PIN #	Value
1.		-48.9
2.		-52.2
3.		-49.7
4.		-53.9
6.		-52.1
7.		-48.7
8.		-38.5

-DCV -54.0

+DCV 54.0