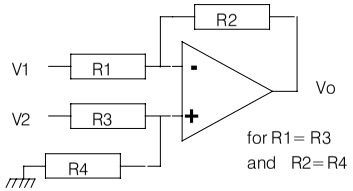
CHANNEL 1 AND CHANNEL 2

Each channel is a differential amplifier. The standard unit has unity gain, and provision is made to allow extra resistors to be fitted in parallel to change the gains if required.

MODES OF OPERATION

1) Unity gain follower. Connect -I/P to common and signal into +I/P
2) Unity gain inverter. Signal into -I/P
3) Differential mode Vout = (Vin+) - (Vin-)
4)High gain differential amp.

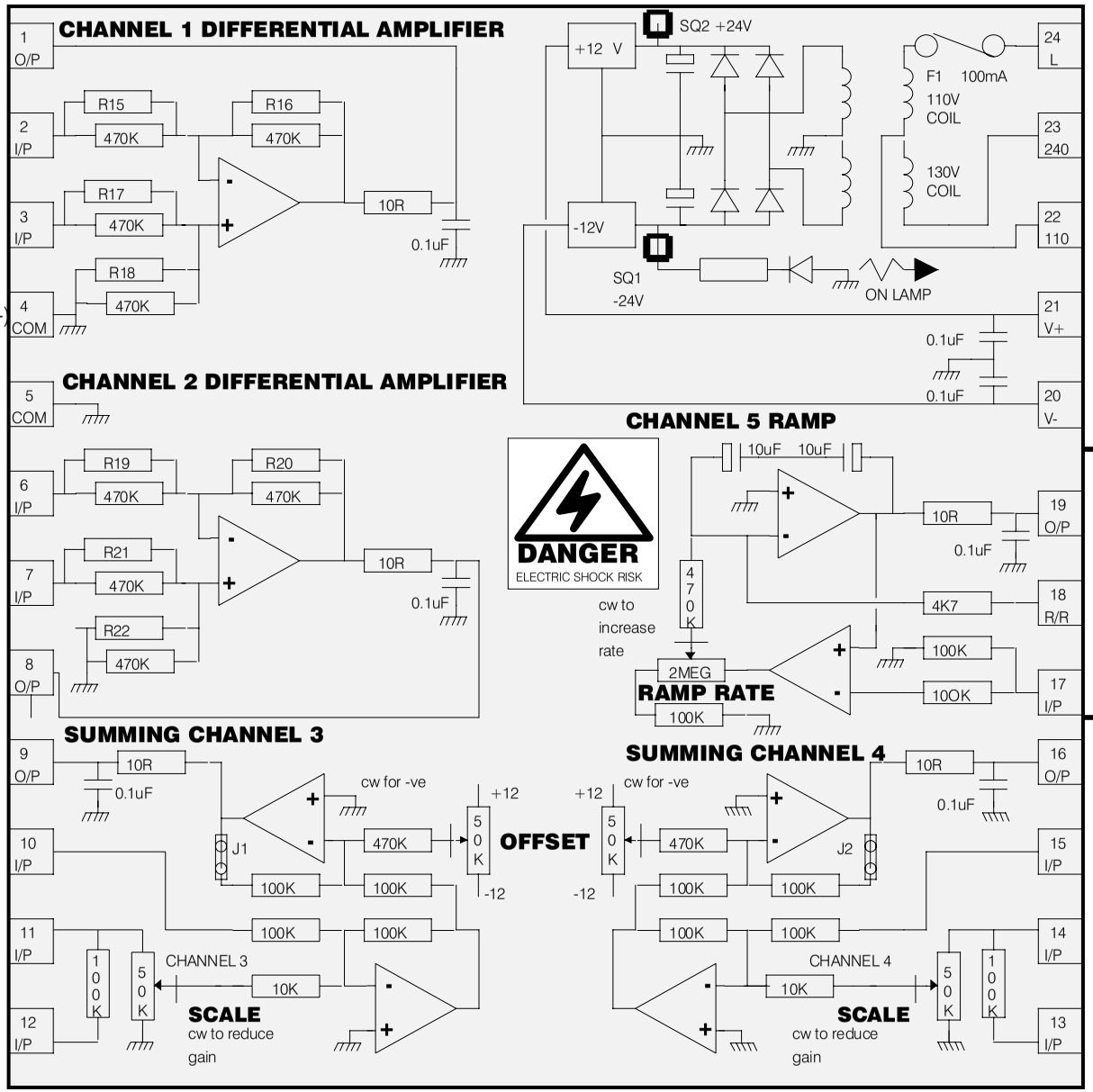


Vo=(V2-V1)(R2/R1)

Note.The voltages at the op-amp inputs must stay within +/-12V for correct operation.

CHANNEL 3 AND CHANNEL 4

These are summing amplifiers each with one fixed unity gain input, and one variable input. The variable input is summed via a 50K preset and X 10 input, giving adjustment between 0 and X 10 gain. It also has a dropper input for high voltages via a 100K resistor to the scaling preset. The summed inverted signal is then summed with a variable offset signal of +/- 2.5V and inverted again.
All ouputs have a capability of +/-10V and +/-10mA The outputs are short circuit proof to common. Power consumption 3 watts.



POWER SUPPLY

The unit can be powered from an AC supply. The line input is on T24. The neutral is on T23 for supplies in the range 200 to 264 volts. The neutral is on T22 for supplies in the range 100 to 130 volts.

Regulated supply output is available. Maximum current output 25mA.

Terminal 21 for +12V
Terminal 20 for -12V
+/-24V unregulated is available on pads SQ2/1

CHANNEL 5 Adjustable ramp

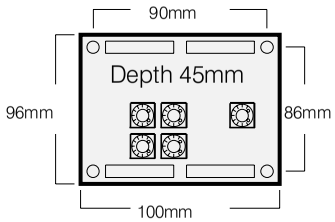
This channel can accept +/-10V signals. The ramp time is adjustable between 2 and 30 seconds for a 0 to +/-10V input. The output can be reset to zero by connecting R/R (T18) to O/P (T19).

CHANNEL 3 AND CHANNEL 4

These channels may also be configured as comparators by cutting the J link. The output op-amp will change state when the sum of the inputs equals zero. The offset preset may be used to adjust the threshold level.
Gain Change.
By substituting a resistor for the J link, the gain of the output op-amp may be increased.

UG101496 ISS11

Dimensions 100mm X 96mm
Fixing centres 90mm X 86mm
(5mm in from each corner)
Use 4mm X 20mm screws.



The BUFFER CARD is a complex component only for professional assemblers. The unit is CE marked according to LVD 73/23/EEC amended 93/68/EEC. Follow these installation guidelines for EMC compatability. Further measures may be necessary. Installers must have a level of technical competence to correctly install. The EMC behaviour is the responsibility of the manufacturer of the system or installation using this component. The BUFFER CARD is an analogue linear device with minimal noise emissions.

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