



## V3/04 Triaxial Voltage Source Amplifier

Gain Factor x 1, 3.16, 10, 31.6 and 100

Transducer O/C & S/C Fault detection O/L indicator, DC O/P

The V3/04 is a 3 channel interface for use with triaxial voltage (IEPE) accelerometers. Inputs to the V3/04 can be via a 3 standard Microdot The V3/04 is a three channel interface, for connectors or 4J, 4 way single input connector from the AT Series accelerometer. Each channel provides switchable gain over the range x1, x3.16, x10, x31.6, x100 = 40dB, 10dB steps Gain

Each amplifier (X,Y,Z) includes an integral 28V, 4mA transducer power source., O/C and S/C fault detection LED's and an output overload indicator LED, and AC/DC peak converter.

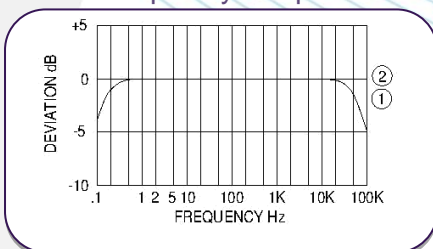
### Transducer Power Supply

Input is assumed to be a two wire active device (QVC) with the signal offset by a DC bias which is the de facto QVC operating voltage  $V_b$ . Temperature dependent signal excursion should not be constrained by virtue of power supply (voltage, current drive capability) limitations.

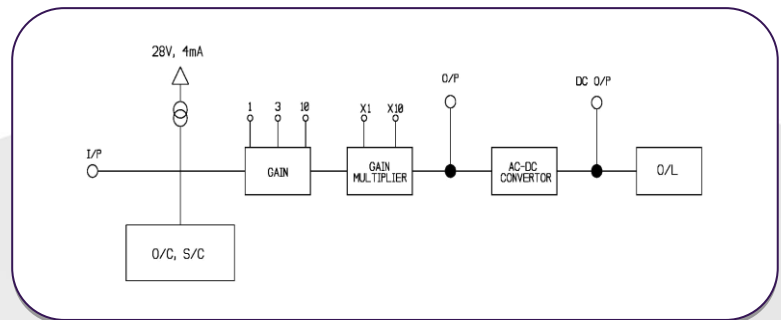
### DC O/P

The O/P Overload detector comprises a linear absolute value peak detector, comparator and LED. The peak detector's 5sec, time constant is conditional upon minimal loading, a 10ohm load will halve the t/c.

### Frequency Response



### Amplifier



	Gain	Multiplier
1	1	1
2	10	10

Type	V3/04
Input	3 Channel (X, Y, Z)
Max. input voltage pk.	10V
Gain Range	x1, x3.16, x10, x31.6, x100 Switchable Gain x1, x3.16, x10: 3 ways switch Gain x1, x10: 2 ways switch Gain Multiplier
QVC Supply	28V, 4mA, 500K $\Omega$ source resistance
Noise level r.t.i @ 10mV/g & 1g/V	<4mg
Outputs	3 Channel (X, Y, Z)
Output Impedance	10 $\Omega$ +47 $\mu$ F
Max O/P Volts pk. mA pk. $V_s = \pm 15V$	12,8
DC O/P	1V DC = $\pm 1V$ pk.
Warning Indicators	LED
O/P Overload	>5V
QVC O/C	$V_b > 15V$
Supply Voltage $V_s$ , V	$\pm 15$
Supply Current, mA	+55, -20