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OPERATIONAL NOTES: ALD.3 AUDIO LEVEL DETECTOR UNIT

This special product may be used with various audio signal levels, in such a manner that the presence of the signal is registered, and a switching relay is operated. Adjustments are included for gain (sensitivity), and for the amount of delay time that the relay is held following cessation of signal. The circuit requires an external unstabilised DC power supply - which may conveniently be supplied by the system amplification. The audio input is fully floating, and an optional phantom microphone supply is featured.

Application The unit may be connected across an audio line from an existing sound system to provide the ability to operate priority access triggering for an extension to the sound system, or to mute an unassociated loudspeaker system, etc. It is particularly useful where additional switching cables would otherwise be required.
The case design enables the lid to be fited at any 90 degree quadrant, and the two fixing holes are concealed and cannot interfere with the IP.65 protection rating.

Specifications

Input sensitivity range	200uV to 100V in 3 stages by DIL switch setting
Input impedance	600 ohms to 47k ohms - see table below
Input configuration	Floating free of earth
Delay adjustment range	1 second to 8 seconds nominal
DC supply requirements	Nominally 24V DC (11-40V) @ 4.5mA (50mA when triggered)
Phantom supply voltage	12V stabilised (except with DC supply below 13V) via transformer centre-tap; 1kohm source
20kHz surveillance tone	10dB rejection minimum ref 1kHz
Output relay contacts	Floating two pole change-over, 100V @ 5A
Environment protection	IP.65
Dimensions WxHxD	105 x 105 x 63mm
Weight	530gm net
Fixings	Two internal concealed holes to IP.66

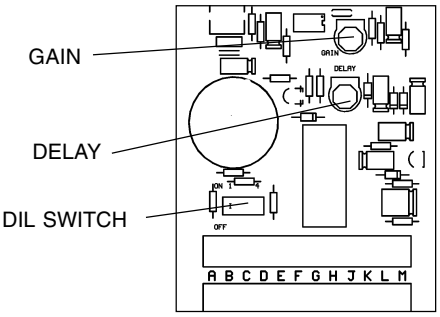
Adjustments

Input sensitivity ref 1kHz	Input impedance	DIL switch contact settings			
		1	2	3	4
200uV - 50mV	600 ohms	on	off	X	on
50mV - 3.5V	47k ohms	off	off	off	off
2.0V - 100V	47k ohms	off	on	off	off

Phantom supply: Move DIL switch position No. 3 to “on” to provide phantom supply. NOTE: This facility must not be in operation for the 1-100V sensitivity range. The gain control is located close to the integrated circuit. Adjust clock-wise to increase gain. The remaining control is the delay control which should be rotated clock-wise to increase the time during which the relay is energised.

Connections

Terminal A	Signal input screen. 0V	
Terminal B	Audio input, floating	
Terminal C		
Terminal D	No internal connection	
Terminal E	normally closed *	output relay contacts set No. 1
Terminal F	common	
Terminal G	normally open	
Terminal H	normally open	output relay contacts set No. 2
Terminal J	common	
Terminal K	normally closed *	
Terminal L	0V	
Terminal M	DC+ supply input	



* Normally Closed contacts are closed during power off, and closed with power on but no audio present.

In the interests of continuous development, specifications are subject to change without notice.

CE Electromagnetic compatibility (EMC) directive 89/336/EEC and amendment directive 92/31/EEC
This equipment has been designed and manufactured to the highest standards. If connected and operated as set out in this manual, there should be no Electromagnetic Compatibility problems. If any aspect of operation gives rise to concern, then please contact the manufacturer for advice.