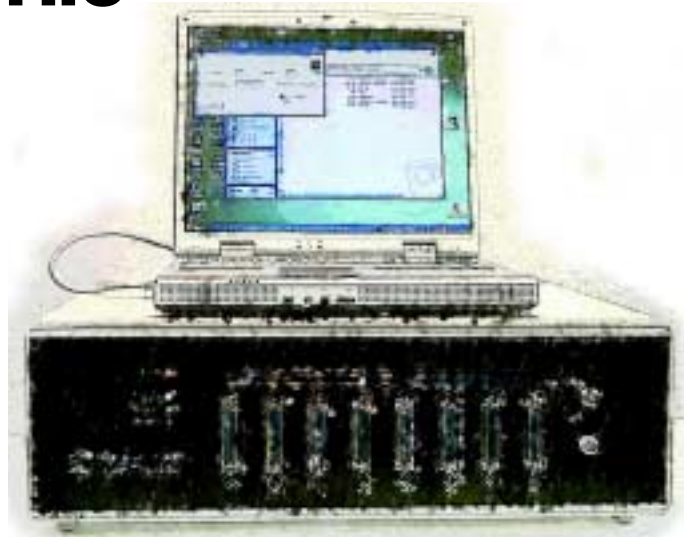




# Ultrasonics in Action

## J331 Ultrasonic Matrix Array Controller

*A 2 into 256 multiplexer for routing signals under direct PC control in ultrasonic pulse-echo applications.*



### ► Application

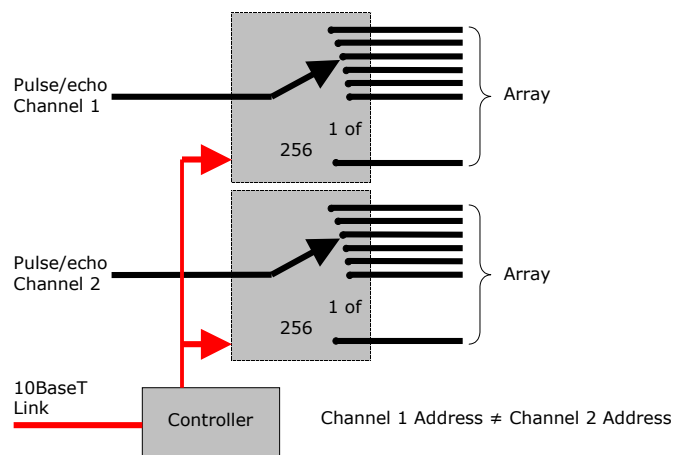
The J331UMAC was developed for laboratories, universities and other research establishments working with ultrasonic pulse-echo techniques where there is a requirement for multiple matrix array excitation.

The J331UMAC provides an automatic means of switching two ultrasonic excitation channels exclusively into any two of 256 routes. Computer control is via a 10BaseT Ethernet link running TCP/IP protocol. The instrument is provided as a standalone 19" rack system which can be interfaced directly to commercial pulse-echo investigation equipment.

The maximum configured system is capable of addressing up to 256 routes. However, a starter system of any multiple of 16 routes provides cost effective expansion options to the user. Expansion is achieved by installing additional PCB cards of 16 routes capacity each. For systems in excess of 128 routes an additional 19" enclosure is required.

The unit comes complete with DLLs for integration into test code, sample examples in Visual BASIC and C++, along with a full IP setup facility for large scale networking.

The extensive manual covers all aspects of use, including user upgrading.

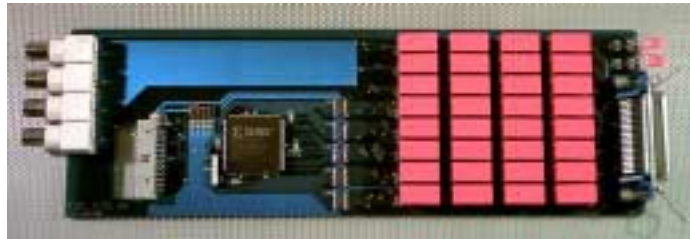


## *J331 Ultrasonic Matrix Array Controller Specification*



Signal I/O:	2 channel A & B. 50ohm BNC with isolated earths. 100V pulse capability.
Bandwidth:	DC to 50MHz
Switching capability:	Either channel into 256 routes (mutually exclusive)
Switch connection:	Centronics 36way, 16 switches/connector, common earth
Off channel isolation:	400V
Display:	Power LED, 10BaseT status LEDS. A & B 'ON' LEDS
I/O:	RS232 interface for PC configuration 10BaseT connection (RJ45) for network via hub.
Power:	240V AC 2A fuse via filtered IEC inlet
Enclosure:	Standalone 19" rack system. 180 x 430 x 535mm
Weight:	11kg (full system)
Environmental:	IP33

## *J331UMAC 16 switch expansion board*



User expansion is achieved in multiples of sixteen switches.

Maximum switches per rack:	128
Maximum switches per systems:	256 (in two 19" racks)
Supply:	PCB, 2off BNC interconnect, instructions
Part Number:	J331.010.000

## *J331UMAC Software Support*

Windows 95/98/2000/NT support package includes:

DLL for integration into user test code.

DLL tester/demonstration

Communication report screen

IP configuration programme

