

AUTOMATED PROCESSING OF QUAD ARRAY DATA

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Summary

A quad array acoustic imaging system used in underwater applications is discussed. In this configuration, a $2N$ -element crossed array results in an effective data aperture equivalent to that of a N^2 filled array. The underwater images of corner reflectors, wooden rods, and a planar letter E at an ultrasonic frequency of 152 kHz have shown the feasibility of the system with an electronic scanning capability.

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