

## HOW TO BUILD YOUR OWN SIMPLE, LOW-COST, SEISMIC SYSTEM

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Acquiring seismic data has typically been an expensive pursuit due to the high price of the acquisition systems. Such systems are also typically not easily adaptable to suit different acquisition scenarios. In this paper we detail the manufacture and performance of an easily adaptable, low-cost (~\$40/channel), seismic acquisition system. Data recorded using the system is comparable to that obtained using a far more expensive commercial seismograph.

Seismic sources are similarly expensive with the only low-cost option being a sledgehammer. In the second part of this paper we describe how to manufacture a small vibroseis unit from easily available components at a cost of less than \$3,000. This unit has a wider, more controllable, bandwidth than an impact source and can be easily adapted to create a shear wave source for MASW surveys.