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PIEZOELECTRIC PULSER-RECEIVER PPR5000

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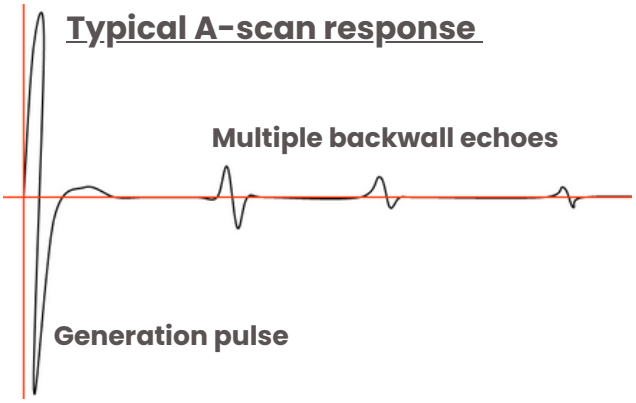
Product Features

- Compatible with most UT probes
- Easy to use interface
- Integrates with most oscilloscopes or ADCs
- Broadband spike pulse - peak energy around 5MHz

The PRP5000 piezoelectric pulser receiver system is designed to drive a broadband voltage pulse into most piezoelectric transducers and detect and amplify any signals returned from the transducer. It is compatible with a wide variety of piezoelectric transducers and virtually any oscilloscope or high speed analogue digital converter It is intended for teaching and/or research use in the laboratory

It is powered by a standard 220-240V 50Hz AC mains supply to be connected to the 2 A fused plug at the rear of the unit. Connections from the front panel are achieved using 50Ω BNC sockets. The socket labelled "Probe" provides a broadband spike pulse with a centre frequency around 5MHz. The "Scope" and "Trigger out" sockets can be connected to a suitable data capture/display system such as an oscilloscope or analogue digital converter (ADC) e.g. Picoscope. For best performance terminate the line with 1 M W impedance and set the trigger on a negative going slope at 3 V

Typical A-scan response



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UK CA

MADE IN BRITAIN

Specifications

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Feature	Description
Operation Mode	Pulse-echo mode probe (single channel)
Dimensions	190 x 320 x 130mm (L x W x D) approx.
Weight	1.0kg
Storage Temp.	-10°C TO +60°C
Operating Temp.	0°C TO +40°C
Broadband Spike Pulse	200V, 100ns width
Pulse Repetition Rate	1Hz - 1kHz (adjustable via dial)
Trigger	Internal/External (via switch), external negative -3V
Gain	42dB
Bandwidth	500kHz - 10MHz
Power	UK Mains Power Socket (220-240V at 50Hz)
Connections	4 x BNC (50Ω) coaxial
Compatibility	Most oscilloscopes or data capture devices

Safety:

The PRP5000 system emits a high voltage spike through the "Probe" BNC socket on the front panel. This voltage can cause injury or death. Do not use if this port is not connected to anything, or if the cable or transducer connected to it is damaged. When using the system in external trigger mode, do not exceed a maximum trigger repetition rate of 1 kHz.

The PRP5000 system contains capacitors which will store electrical charge for some time after the system is switched off. Do not remove any of the connections to the transducer port or remove any outer panel of the system for several minutes after switching the system off Also, do not remove any outer panel of the system if it is connected to the mains.

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