

High Voltage

High Frequency

Transmits Pulse Width for 2ns Step Size

Ultrasonic Pulser-Receiver

5CH PULSER RECEIVER

Your Ultrasound Technology Partners

The pulser-receiver is designed with performance in mind. It is a 5-channel high frequency ultrasonic analog front end with a programmable transmit beamformer. The user can choose to program the transmit delay sequence and activate the pulse generator to initiate the sequence, or the user can use an external trigger to control each channel individually. The 5 Channel Pulser is intended to provide electrical pulses to transducers and apply analog signal processing to the receive echoes.



Key Features

- Variable gain programmable, 14.5- 75.5 dB
- Adjustable analog time-gain compensation
- Up to $\pm 100V$ pulse amplitude
- 1ns delay resolution
- 2ns step size for transmit pulse width
- Excitation frequency between 15-50MHz
- Analog Bandwidth between 5-75MHz

Pulser Specifications

Trigger Inputs

Voltage Tolerance	5V CMOS
Minimum trigger width	20ns

TX Out

Frequency	15 – 50 MHz
Pulse width step size	2 ns
Amplitude	0-100V

EXT Trig

Pulse width	100ns
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RX Out

Voltage Range	$\pm 1V$
Frequency range	5-75 MHz
Gain	15.5 – 75.5 dB
Group delay	<10 ns variation between 5-75 MHz

About Dax

Daxsonics Ultrasound provides advanced ultrasound technology and consulting services to the pre-clinical and medical diagnostic imaging market. Out of Halifax, NS, Daxsonics specializes in high-frequency imaging and therapy technologies. Daxsonics provides design services for acoustic, electronics, and software, and offers technology such as high-frequency probes (currently sold through Verasonics) and ultrasound pulser-receivers. Please contact to learn more.

General Specifications and Operating Conditions

- Power Supply – 100/240 V; 50/60 Hz
- For indoor use in dry areas only
- Dust contamination level may not exceed category 2 (IEC61010-1). Device may not be used in an atmosphere with conductive dust.
- For altitudes up to 2000m above sea level
- Temperature range 5 °C to 40 °C
- Maximum relative humidity 80% for up to 31 °C decreasing linearly to 50% relative humidity at 40 °C
- Main power supply: Voltage fluctuation not to exceed $\pm 10\%$ of the nominal value
- Main power supply: Over-voltage Category II
- Device may not be installed or used near other devices that produce excessive amounts of heat
- In case of condensation, wait until all moisture has evaporated completely before connecting the device to any power source
- Dimensions- 48.1 cm x 9.6 cm x 44.2 cm (Width x Height x Depth)
- Weight- 3.0 kg