Transmitter (Tx)

What you would need:

1- Our in-house built transducer
2- Laptop or desktop computer with audio jack output
3- Xli2500 Two-channel 750W power amplifier

Note:

The transmitted signal is generated using MATLAB, we first transmit a pure sine at around 17kHz the resonant frequency of our transducer. Secondly, we employ pulse width modulation (PWM) where the '1' bit is twice as long as the '0' bit.