



The icTalk Smart Projector is a calibrated acoustic projector that produces a complex range of tones, sweeps and clicks. The icTalk is an omnidirectional sound source that has a frequency range of 10 to 200 kHz with configurable output patterns and operating modes.

The instrument can be deployed autonomously with a configured output pattern and powered by the internal batteries for more than 5 hours. In a cabled setup, the sound output can be initiated and configured in real-time or set up to output sound continuously.



All-in-one acoustic projector, icTalk.

Compact and can be carried in one hand

Create custom sounds with the combination of tones, sweeps, pulses, clicks and pauses available

Connect to power via data cable or use shorting plug to use internal battery

Calibrate other sensors with its known output

Synchronize icTalk and icListen Smart Hydrophones

Applications

Calibration Tone or Sweep

Beacon or Pinger

Source for Sound Channel Modeling

Underwater Acoustic

Sea Mammal Sound Simulator

System Quality Control

Frequency:
10 Hz to 200 kHz

Max Depth:
200m /3500m

Interface:
RS422 (19200 bits/
second)

Weight:
~584g (in air)

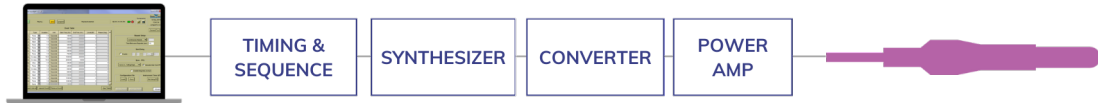
Dimensions:
42 mm dia. by 250 mm
long



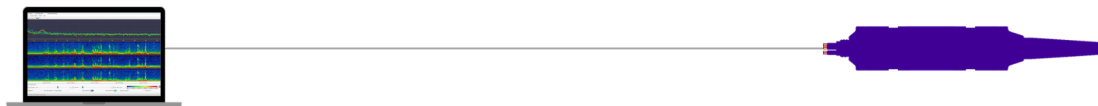
What makes icTalk different?

Using the icTalk eliminates the need for synthesizer, DAC, and Power Amplifier by combining these inside the instrument along with batteries and a precision timebase to create an autonomous or tethered instrument.

Traditional Approach



icTalk Approach



MECHANICAL		
Mass (Titanium Case)	0.953	kg
Mass (Plastic Case)	0.437	kg
Volume (Displacement)	32267065	cm ³
Overall Length, including connector	165	mm
Sensor Element Length	22	mm
Body (Can) Length	48	mm
Element Diameter	22	mm
Body Diameter	48	mm

POWER		
Internal Battery Life (active)	7	Hours
Internal Battery Life (Standby)	36	Hours
Metalic Lithium Equivalent Content	780	mg
Recommended Supply Voltage	18 - 36	V
Supply Voltage Limits	15 - 42	V
External Power (typ)	1.8	W
External Power (charging)	3.8	W
External Power (charging)	3.8	W

SIGNAL PERFORMANCE	HF	UNITS
Bandwidth, Standard	30 - 200	kHZ
SPL, Standard (+/-3 dB)	132	dB re μ Pa @ 1 m
Bandwidth, Extended	10 - 200	kHz
SPL, Extended (+/- 10 dB)	126	dB re μ Pa @ 1 m
Harmonic Distortion (THD)	1.0	%
Frequency Resolution	1.0	Hz
Attenuation	0 - 20	dB

SOFTWARE / INTERFACE	
Communications Interface	RS - 422
Talk Assistant Software Support	Yes
Continuous Tone	Yes
Frequency Sweep	Yes
Ping / Click	Yes