



# UNDERWATER SPEAKERS

*HIGH PERFORMANCE SPEAKERS FOR POWERFUL UNDERWATER SOUND*

Lubell Labs, the world leader in portable and in-wall underwater speakers.

*Synchronized swimming*  
*Hotels & private pools*  
*SCUBA Diving*

**Sound Level**

Up to 180 dB with only 20 V rms input voltage

**Frequency band**

Wide band coverage spanning an interval from 200 Hz to 20 kHz

**Durability**

Its extremely rugged construction provides long durability (up to 5 years warranty)



Portable and in-wall speakers





## DESCRIPTION

The LL916 is an economical yet powerful piezoelectric underwater speaker developed, patented, and manufactured by Lubell Labs Inc. (Columbus, Ohio). The LL916 series continue to set the world record for having the widest frequency response and output level of any commercial underwater speaker made, at a price that is reasonable and affordable. Because of its rugged PVC construction and cage mounting system, the LL916C is nearly immune to damage, and may be used in test tanks, swimming pools, rivers, lakes, and oceans.

The LL916 is provided with choice of audio isolation transformer box with cord, allowing phone jack connection to popular commercial sound amplifiers of various power and impedance ratings.

## APPLICATIONS

Lubell underwater loudspeakers and systems find application in a range of areas including synchronised swimming, hotel and SPAs, home pools, SCUBA instruction and diver recall. One single LL916 speaker is capable of filling a municipal pool or an olympic pool. These underwater speakers are very popular for its exceptional performance, easy applicability, and durability.

## SPECIFICATIONS

### Frequency Response

200 Hz - 21 kHz.

### Sound level

180 dB re 1µPa @ 1 m (at 1 kHz).

### Maximum Cable Voltage/Current

20 Vrms / 3A (100% duty cycle).

### Maximum power rating

38 W.

### Maximum operating depth

15 m.

### Finish

Blue PVC.

### Cable

8 m length 18/3 PVC (or customised).

### Cable Termination

3-pin proprietary (Conxall 3182-3PG-524) mates with transformer box.

### Weight

7 kg in air; 1.4 kg in water.

### Dimensions

Speaker: 23 cm diameter; 15 cm axial length;

Cage: 27 cm×27 cm×20 cm.

### Transformers

AC102 (50 W; 32 Ω; 40 V rms); AC201 (50 W; 2 Ω; 10 V rms); AC202 (50 W; 8 Ω; 20 V rms); AC205C (38 W; 16 Ω; 25 V rms); AC203E (80 W; 8 Ω; 25 V rms de 8 Ω air output and attenuator); AC211 (200 W; 10.7 Ω; 40 V rms; 8 Ω air output and attenuator).

### Warranty

5 years.

### THE LL916H UNDERWATER SPEAKER

The LL916H (harness) underwater speaker \ is the economical version of the LL916C model for flexible usage in pools and at sea.



### THE LL9484 UNDERWATER SPEAKER (IN-WALL)

The Lubell 9484 is a proven in-wall underwater speaker system for municipal pools, pools in hotels and private homes.



## MARSENSING LDA

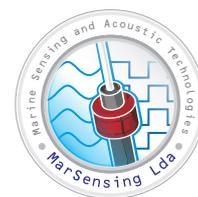
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