



## PRECAUTIONS FOR USE OF LL9161

The Lubell LL-9161 underwater speaker must be used with the Lubell AC202C transformer box. The AC202C provides electrical isolation, impedance matching, and a series resistor to flatten the response and limit current during broad-band operation. Input of AC202C is fitted with Switchcraft model 11 1/4" (6.35 mm) mono phone jack, and includes 18" male/male phone plug cord. Output of AC202C is Conxall 4182-3SG-300 (pin 3 hot) which mates with the Conxall 3182-3PG-424 fitted on the model LL9161 underwater speaker cable.

The LL-9161 and AC202C may be used with UL listed commercial sound amplifiers having "Class 2" rated speaker outputs. Because the LL9161 presents a reactive load, it must be powered by a Class AB amplifier rated between 75 watts to 240 watts. Recommended amplifier would be the Bosch PLE-1P240 power amplifier, which provides 30.9 Vrms on its 4 ohm output. Amplifier and transformer box must be located in dry air conditioned area, and power cord must connect to GFCI protected outlet.

For single or dual LL9161 applications, use Bosch PLE-1P240 4 OHM and COMMON taps.

Connect inputs of AC202C transformer boxes in parallel and in phase only (dual speaker use).

Do not exceed 30 Vrms to the input of the AC202C transformer box. For added protection against burn-out of the speaker, install a 3 amp fast blow fuse in series with the white (hot) lead connecting the AC202C box to the 4 OHM speaker terminal of the amplifier.

Frequency Range: 200Hz-20kHz

Maximum Voltage/Current: 30 Vrms or 3A, whichever comes first (3A fast-blow fuse recommended)

Maximum Output: 185dB/uPa/m @ 1 kHz

Depth Rating: 50' (15.24 meters) maximum; 6' (1.83 meters) minimum

Cable: Impulse IE2M-7/16 on 75' 18/2 SJOW, fitted with Conxall 3182-3PG-524 (pin 3 hot)

Do not suspend the LL-9161 from the power cable

Do not operate the LL-9161 out of the water

Inspect speaker cord before each use - replace if faulty (lubricating pin on cable before inserting into bulkhead connector with silicone grease).

The sound level produced in water close to the LL-9161 can be harmful to human hearing -- divers must maintain a minimum distance of 12' during operation.

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