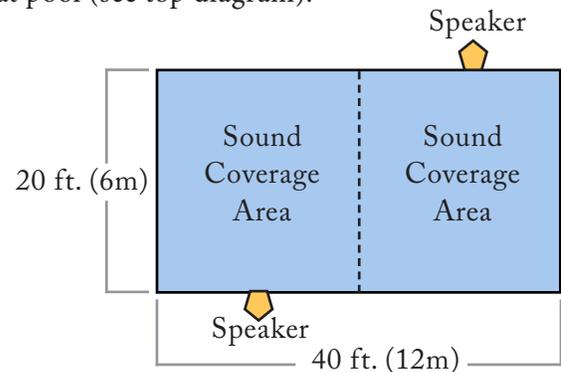


Placement Reference Sheet

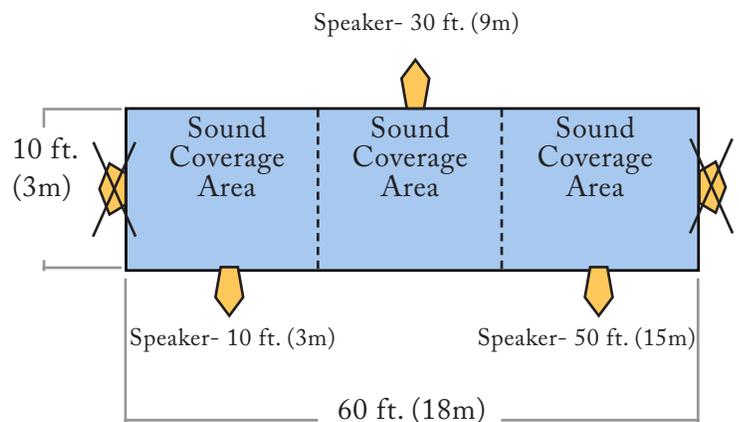
When planning the placement of your Diluvio™ Underwater Loudspeaker(s), there are a few key points to consider. The following suggestions address these points and are intended to help you maximize the performance and enjoyment of your speakers.

First, you will want to determine the number of speakers needed to deliver an adequate level of sound coverage throughout the pool. The general rule of thumb here is that one (1) Diluvio™ will provide sufficient sound coverage for a 20 ft. by 20 ft. (6m by 6m) area of pool. For example, if you have a 20 x 40 ft. pool (6 x 12m), you will need a minimum of two (2) Diluvio™ speakers to properly activate that pool (see top diagram).

However, for lap pools, or pools with long, narrow segments, it is better to place one speaker for every 20 linear feet (6 linear meters), rather than one for every 400 ft² (36m²). For example, if you have a lap pool that is 10 ft. by 60 ft. (3m by 18m), (600 ft²/54m²), it would be best to space out three (3) speakers down the length of the pool, rather than install only two (2) speakers, as determined by using the one speaker for every 400 ft² (36m²) rule (see bottom diagram).



Second, you need to choose the placement of the speakers in respect to the overall layout of the pool. It is usually recommended that the speakers are placed in such a way as to allow for the greatest area to be covered (see the Sound Coverage Areas in the diagrams above). Much like pool lighting, you want to place the speakers in a location that directs the speaker across the largest area where sound is desired. One final note in relation to speaker placement; it is best to avoid placing the speakers on walls where there is a high possibility the sound lens will be repeatedly kicked by swimmers turning and pushing off of the walls. Therefore, we suggest that you avoid placing speakers on the ends of lap pools.



Third, although there are no minimum depth requirements for the Diluvio™, insure the light niches that will house your speakers are placed at a depth so the speakers will be completely submerged in summer and below the freeze line in winter. A depth of approximately 18 inches (45cm) below the water's surface is common, but may need to be adjusted based on the climate and pool owner preferences.

Finally, for custom, non-symmetrical pools, one should still implement the general principles mentioned above. If a question remains as to the best placement after reading this document, the professionals at Clark Synthesis are happy to assist you in determining the best placement for your speakers. You can either fax or email a blueprint of the pool design to us and our staff will work with you to pinpoint the best speaker locations.