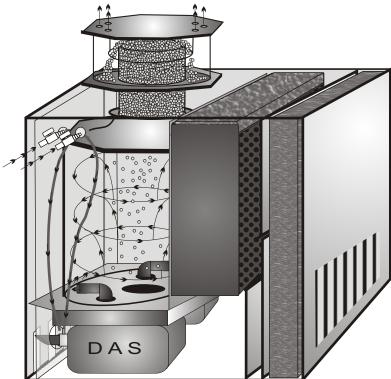


DAS Micro Foam Needle Impeller Skimmers



EX- External Series: EX-1, EX-2, EX-3, BX & Internal Series: BX-1, BX-2, BX-3

Compared to their natural habitat, marine specimens in aquariums live in an environment with less water volume. Therefore, regular feeding generates a high concentration of dissolved organics.



The DAS Skimmers are the most efficient skimmers in the market today. We use a German patented tech nology in the construction of the impeller assembly. It creates a water to air mixture that is unparalleled. Each pump injects 110 GPH of air into 280 GPH of water. Simply stated, every 2.5 gallons of water that passes through the skimmer comes in contact with 1 gallon of air. For the in-sump models, no other pump is needed. Just place it in your Sump and plug in. The in-sump models have a removable carbon chamber that holds up to 1 liter of carbon or other media. All water traveling through the skimmer passes through it. As the water exits the skimmer, it passes through a foam pad which removes any bubbles from getting into the sump. The external models need water to be delivered to the Skimmer. This can be done two different ways:

- 1 Using a small submersible pump in the sump to send water
- 2 Put a T-fitting in the overflow drain hose from the tank.

The amount of water can be regulated with the valve that is mounted on the intake of the skimmers. This way you can send the water to the skimmer and the access to the sump or wet/dry. The external skimmers can be put in the sump also.

BX Internal Series - BX-1, BX-2, BX-3

Operating Instructions:

Place skimmer in sump with water intake (1) on the left side. Make sure the sump has at least 4 to 6" of water. Plug in the skimmer. You will see foamy water being pumped (2) out of two 90 degree elbows (2a) facing opposite directions into the mixing chamber (3). The water will begin to swirl and rise. At the top of the mixing chamber, the foam rises up the neck to the collection cup (4). The water exits through the hole in the bottom then traveling to the carbon chamber (5). The water travels through the carbon, removing any color, ozone or chemicals not removed by the skimmer. The water then falls over the level gate (6) and through the bubble remover pad (7) and then exits the skimmer. To remove the collection cup for cleaning, simply turn it counter clockwise to unlock and lift out. Set back in place and turn clockwise to lock.

Skimmer performance is adjusted in two ways:

- 1 Raising or lowering the level gate. We recommend starting the water level at the top of the **mixing chamber (3)**.
- 2 Adjusting the air flow with the **air intake valves (8**).

We recommend closing them about 10%. Start with these recommended settings for the

Start with these recommended settings for the first five days to allow the skimmer to break in before adjusting.

Ozone can be used by attaching an ozonizer to the air-intake line.

