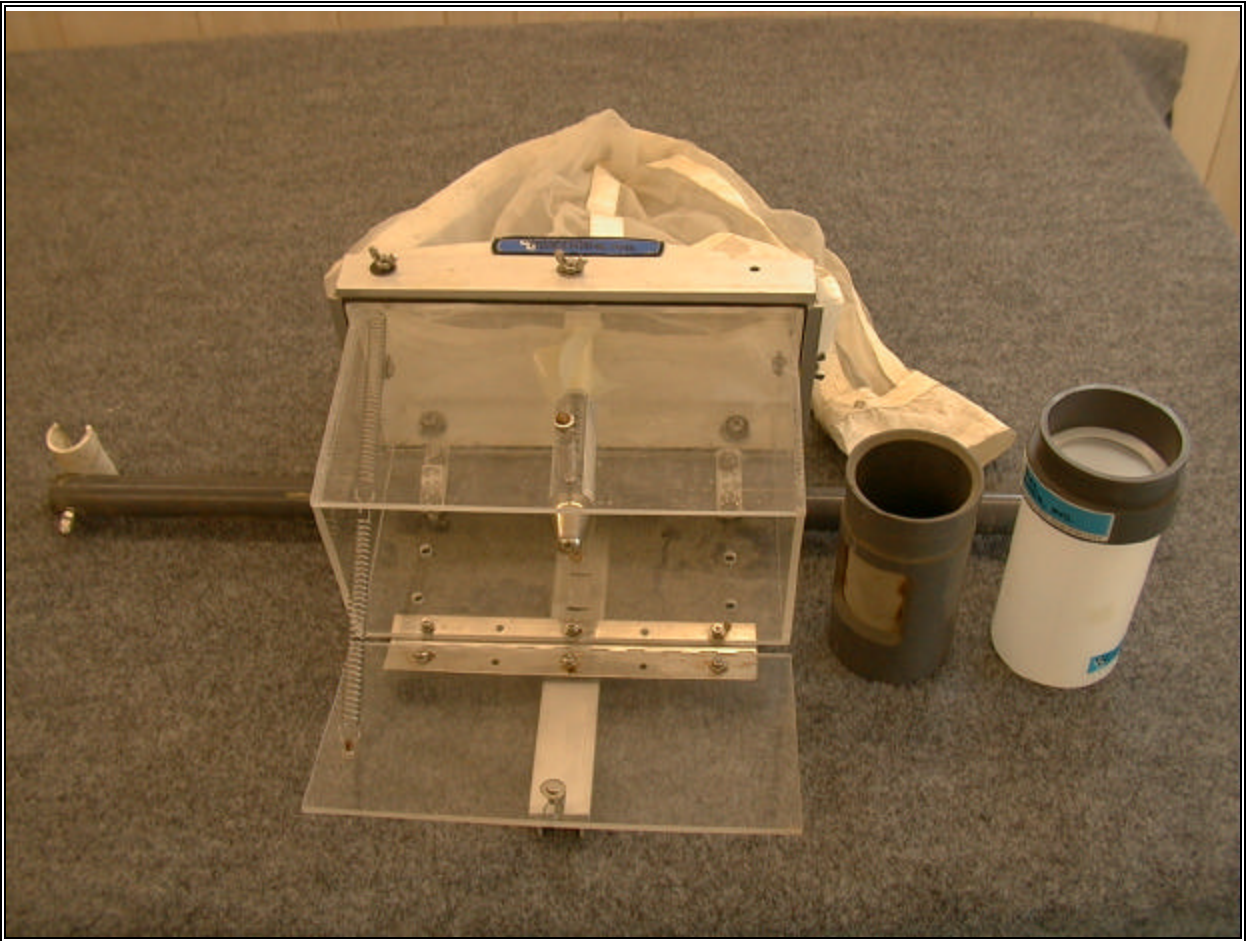


REMOTE OPEN/CLOSE PLANKTON NET SAMPLER



APPLICATION: The remotely open/closing plankton sampler is used to collect discrete samples of plankton from a calculated volume of water with a remotely operated vehicle (ROV) system.

DESCRIPTION: The plankton sampler consists of an 11.5" x 5.75" (29.4 cm x 15 cm) plexiglass frame with a door that can be opened and closed on the front of the frame and a 202 or 303 micron mesh plankton net attached to the rear of the frame. Suspended in the frame is a General Oceanics mechanical flow meter that measures flow going through the frame. The door on the front of the frame is left in the closed position to prevent the flow of water into the plankton net until a sample is desired. The door is opened via hand controller on the surface at which time water flows through the frame into the net. Water flow through the frame causes the impeller of the flow meter to turn, which actuates a counter much like the odometer in a car. Readings on the counter must be taken before and after deployment with the difference being total rotations of the impeller during the sample period. Using the known area of the frame and the rotations from the flow meter, total volume of water passing into the net can be calculated. A variety of cod-end jars or optional screen mesh bag are available for the cod end.