

## 623-8110 (78-015) Fieldmaster<sup>®</sup> Aquavue

**Introduction:** Underwater activities are fascinating, but as humans we are limited by what we can observe. When looking into water from above, reflections, refraction, and sediment obscure our vision. Likewise, in water our eyes cannot focus, so we are unable to see clearly even while submerged.



The ability to see underwater is an important part of studying the environment. For example, you can directly observe the behavior of fish, crustaceans, plants, and other life forms. Many complex ecosystems exist in streams, ponds and lakes, but unaided only a tiny fraction of these creatures can be observed.

In addition, it can be difficult to obtain an accurate secchi disc reading if the surface of the water is choppy, has large amounts of glare, or is otherwise disturbed.

**Description:** Our Fieldmaster Aquavue overcomes many of these drawbacks. In addition, unlike goggles, the user does not have to be submerged in order to see underwater.

The Aquavue is composed of crush resistant PVC tubing and is 26" long. The viewing plate is 4.5" in diameter and made of tough polycarbonate. This material is very strong and resists scratching; ideal for when the Aquavue is bumped against rocks or gravel. A neoprene mask cushions your face and helps seal out light, resulting in a better image. On the bottom of the tube is a neoprene collar that helps the Aquavue float, making it easier to hold. A large handle is included for convenience.

To use your Aquavue, submerge the viewing plate a few inches below the surface of that water. This will negate the effects of surface reflection and refraction. In addition, the black interior eliminates internal reflection. All of these attributes produce a much clearer image than the naked eye.

### **Warranty and Parts:**

We replace all defective or missing parts free of charge. Additional replacement parts may be ordered toll-free. We accept MasterCard, Visa, checks and School P.O.s. All products warranted to be free from defect for 90 days. Does not apply to accident, misuse or normal wear and tear. Intended for children 13 years of age and up. This item is not a toy. It may contain lead or small parts that can be choking hazards. Adult supervision is required.

**623-2010 Fieldmaster secchi disc:** Need to determine how clear the water is? Seeing may not be believing. Measure the turbidity or degree of visibility of the water you're testing with our limnological secchi disk. Results are meaningless if they're not repeatable and can't be compared.

Our sturdy plastic secchi disk handily meets industry standards. It is 200 mm in diameter (7-7/8") and has four quadrants, two white and two black. We include 20 meters of 1/8" diameter line on an orange styrofoam form that will float if dropped in the water. Instructions are written at a basic level.

Most scientists use a Secchi Disk to determine the index of suspended matter in the water. The smaller the index - say, five feet - the more suspended material there is. The water is, obviously, less transparent, with a lower degree of visibility.

You can also use a Secchi Disk to measure the depth of light penetration and can derive a rough estimate of the extent of the littoral zone.

Please note that this unit is designed for occasional student use only and is not meant to replace our 3-58-B10 Professional Secchi Disk.