

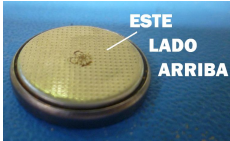
# User's Manual

July 2011

## Parts



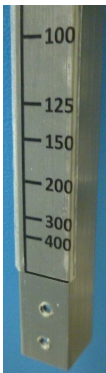
(1) White plastic block with top half of LED light glued on and bottom half of LED light screwed in



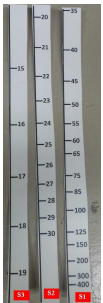
(4) Batteries - one of these batteries will already be in the LED light



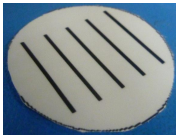
(1) Extra LED fixture



(1) Gray measuring stick



(1) Set of measuring stickers



(1) Pattern sticker



(2) Screws

Table 1: Parts of the Turbidimeter

## Assembly

Using the two screws provided, attach the white block to the measuring stick as shown.



Before doing any tests, make sure of the following:

- There is only 1 battery in the LED light
- That the light turns on and stays on (see below if you need help)
- That you can see the design pattern (see above) clearly on the white piece of plastic when the light is turned on
- That you can distinguish the lines representing values of NTU from 15 to 400 along the length of the stick

## How to take a Turbidity measurement:

1. Fill the water vessel with the water to be tested.
2. Cover the top of the vessel tightly with a cap, and flip the vessel at least 4 times to ensure thorough mixing.
3. Remove the top cap. on the measuring stick, turn on the LED light by gently twisting it clockwise as viewed from bottom.
4. Dip the measuring stick into the vessel, as far down as possible.
5. Look in the water vessel and **slowly pull the stick up** until you can clearly count the number of lines on the sticker.
6. At the point where the lines are visibly countable, take note of where the measuring stick hits the top of the water, and record this number in a notebook.
7. Empty the water out.

## Help

### LED light:

If light flickers, try the following solutions in order:

1. Screw cap on tighter
2. Tap (with some force) the bottom of the light
3. Unscrew cap and gently stretch the spring
4. Replace battery
5. Try using a new light fixture

## Battery:

The battery that was originally in the turbidimeter should last you for at least one month of regular measurement taking.

When replacing the battery make sure the plus (+) side faces down

## Stickers:

If the pattern sticker that is on the top of the white plastic block starts to fall off, you should replace it with the replacement sticker that has been supplied.

If the measuring stickers that mark the NTU values along the length stick begin to fall off, replace them with the replacement scale. The first sticker you should place is the one labeled S1 in the above picture. Place the thick dark line under the 400 NTU mark so that it lines up with the top of the white plastic block. Then place the next sticker (labeled S2 in above picture), the one that begins with the number 30 and ends with the number 20 and place this immediately above the sticker you just placed. The stickers should touch end to end and should not overlap. Then you should take the final sticker (labeled S3 in the above picture) and place this in the same way you placed the last one, with no overlap.

## Miscellaneous

- Always make sure there is a black O ring attached to the cap of the LED light. If it is missing then use a replacement cap.
- Some water may enter the battery compartment of the light, this is normal.
- A metal piece is used to keep the light from falling off the stick. This piece can be gently bent to remove/replace a light.