

# User's Guide

## Turbidity Meter TUB-430



CE

## **Introduction:**

We thank you for purchasing TUB-430 portable turbidity meter.

Before using the instrument, please note that the operation instructions should be read carefully, which will help you to operate and maintain the instrument, as well as to avoid trouble caused by unsuitable operation and maintenance.

TUB-430 portable turbidity meter employs leading edge technology with integrated microprocessor, which is suitable for measurement in water solutions for institutes, industrial labs and production fields.

The information presented in this manual is subject to change without notice as improvements are made.

## **Features:**

1. Microprocessor based for fast and accurate measurements.
2. ISO 7027 measurement method.
3. Large LCD 45 x 25 mm display for reading convenient.
4. Unit NTU, FTU, EBC are changeable.
5. Memory function stores and recalls up to 150 points.
6. Low battery alarm and auto shut off after 10 minutes of non use.

## Specifications:

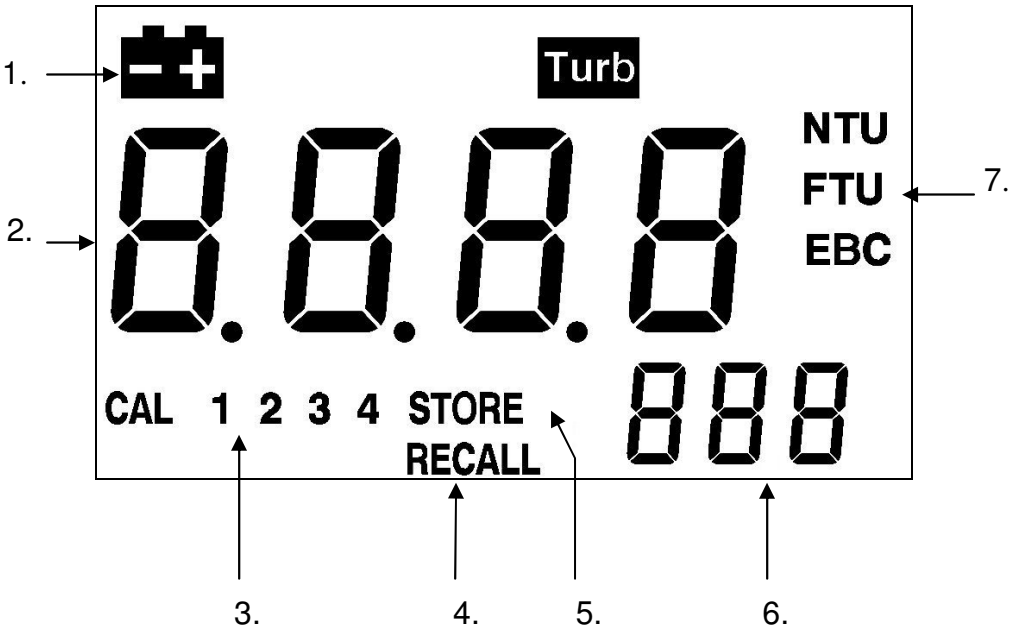
Range	0 ~ 19.99 NTU 20.0 ~ 199.9 NTU 200 ~ 1000 NTU
Resolution	0.01/0.1/1 NTU
Accuracy	± 3% reading + 1 digit at < 500 NTU ± 5% reading + 1 digit at > 500 NTU
Response	< 10 seconds
Operating	0 ~ 50 °C, <85% RH
Sample	10 ml
Data memory	Storage /recall up to 150 points
Power	DC 1.5V (UM4, AAA) battery x 4
Dimension	Meter: 70 x 135 x 65 mm
Weight	Meter: 168 g(including battery)

## Accessories:

Upon receiving the shipment, please inspect the container and equipment for any signs of damage. Please verify that you have received the corresponding accessories as below:





**Standard solution set , Glass testing bottle x 2,  
Distilled water, Clean cloth, Cup, Battery, Carrying  
case**

## Display Description:



1. Battery low sign
2. Reading
3. Calibration status indicator
4. Recall mode
5. Data stored sign
6. The ordinal number of the stored reading
7. Unit

## Functions of Keyboard:

	Power key. Press 3 sec. to enter Calibration mode
	Press 3 sec. to enter Recall mode. In Recall mode, browse records.
	Store the current reading. In Recall mode, browse records.
	Press to read turbidity. Press 3 sec. to choose units.

## Calibration standard solutions:

CAL 1: 0.00 NTU

CAL 2: 20.0 NTU

CAL 3: 100 NTU

CAL 4: 800 NTU

## Calibration:

1. Press "POWER" to turn on the meter, and the display will show "STBY"
2. Gently and slowly invert the calibration solution bottles five times but do not shake the bottles as air bubbles can affect the readings. If there is suspended material in the solution, please shake the bottles for

- 10 seconds, and wait for 5 minutes before calibration.
3. Press and hold “CAL” to enter calibration mode.
  4. After entering calibration mode, the display will show “0.00 NTU” and “CAL 1”. Place the CAL 1 standard solution into the sample well, and:
    - 1) press “READ” for calibration, and the “CAL” icon will be flashing, or
    - 2) press “DOWN ARROW/STO” to skip CAL 1 calibration.
    - 3) After The display will then show “20.0 NTU” and “CAL 2”.
  5. Repeat the above steps to calibrate (or skip) CAL 2 ~ CAL 4.
  6. After CAL 4, the display will show “SA” and “END”, and then the meter will return to measurement mode.
  7. Check corresponding numbers at the lower left of the display (calibration status indicator) to see which calibrations are done correctly.
  8. If any of the calibration fails, the corresponding number icons will be flashing. For example, “1” icon will be flashing if CAL 1 is not completed correctly or the standard solution is out of range.

**NOTE:** Before using this meter for the first time, please verify the meter calibration by reading back the standard solutions. This check is recommended prior to measuring a sample.

## Measurement:

1. Fill the sample solution into the glass bottle.
2. Place the bottle into the sample well.
3. Press “READ” and wait for around 10 seconds to get the reading.

## Notice:

During calibration or measurement, please use a piece of soft cloth to clean the glass bottle before placing it into the sample well.



During calibration or measurement, please make the line on the bottle aligned with the arrow on the meter.

## **Store and Recall mode:**

1. After getting a reading, press “STO” to store the current reading. The **Store** icon and the ordinal of this record will appear on the display.
2. Press and hold “RCL” for 3 sec. to enter Recall mode. In this mode, use “UP arrow” or “DOWN arrow” to browse records. Press and hold “STO” to exit this mode and return to measuring mode.
3. In Recall mode, press “UP arrow” and “DOWN arrow” together for 3 sec. to clean all the records in the memory.

## **Unit setting:**

Press and hold “UNIT”, and the unit icon will be flashing. Press “UP arrow” or “DOWN arrow” to choose the unit, and press “UNIT” to confirm.