

# User's Guide

## Free and Total Chlorine Meter FTC-420



CE

## **Introduction:**

We thank you for purchasing FTC-420 portable free and total chlorine 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.

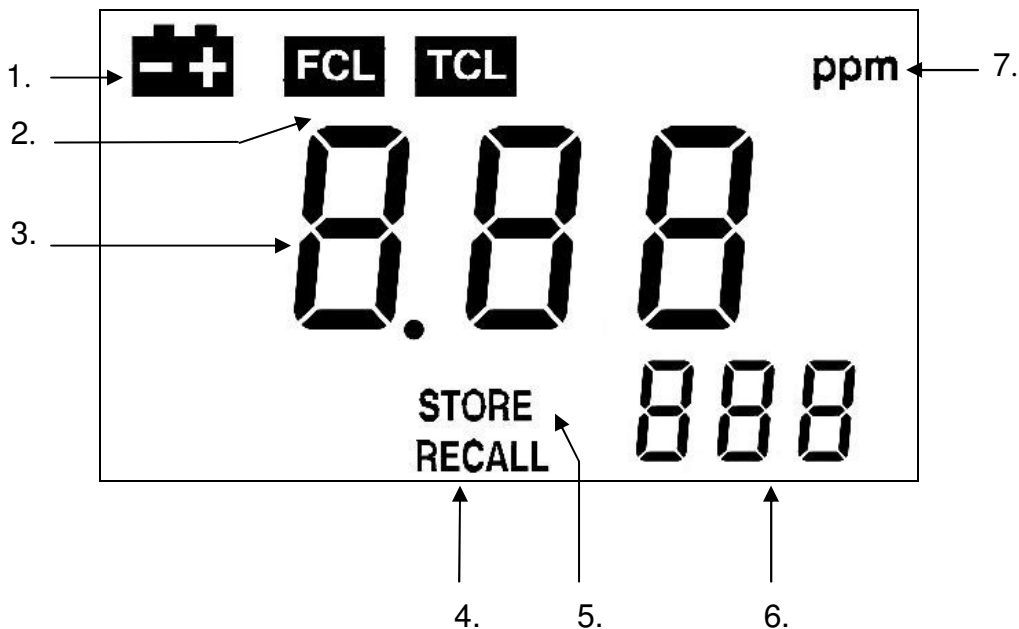
FTC-420 portable meter employs leading edge technology with integrated microprocessor, which is suitable for measurement in water solutions for institutes, industrial labs and production fields.

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. EPA approved DPD method.
3. Large LCD 45 x 25 mm display for reading convenient.
4. Memory function stores and recalls up to 150 points.
5. Low battery alarm and auto shut off after 10 minutes of non use.

## Display Description:






1. Battery low sign
2. FCL or TCL mode
3. Reading
4. Recall mode
5. Data stored sign
6. The ordinal number of the stored reading
7. Unit


## Functions of Keyboard:

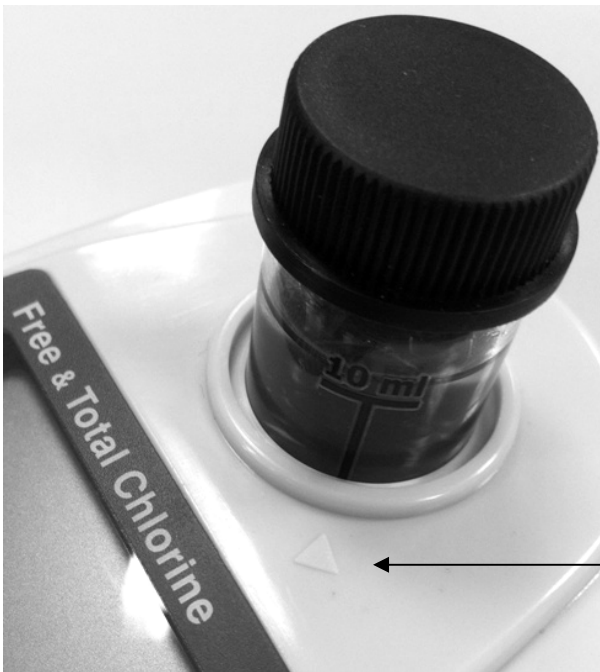
	Power key.
	Choose FCL or TCL mode. In Recall mode, browse records.
	Zero calibration. In Recall mode, browse records.
	Store the current reading. Press 3 sec. to enter Recall mode.

## Measurement:

1. Press  to turn the meter on.
2. Press and hold  for two seconds to choose FCL or TCL mode.
3. Fill the sample solution into the glass bottle and screw the lid back, and use the soft cloth to clean the bottle.
4. Put the bottle into the meter, and make the line on the bottle aligned with the arrow on the meter (as the following picture).
5. Press and hold  for two seconds to proceed ZERO calibration.
6. After the display stops flashing and shows "0.00", take








the glass bottle out.

7. Unscrew the lid and put the tablet/liquids/sachet for :  
free Chlorine or total chlorine into the sample (see note A)
8. Screw the lid back and use the cloth to clean the bottle.  
Put the bottle back to the meter and make the line on  
the bottle aligned with the arrow on the meter (as the  
following picture).
9. Press  to get the FCL or TCL reading.
10. Please rinse the glass bottle after testing to prevent  
the reagent from remaining in the bottle.



Please make the line on the bottle aligned with the arrow  
on the meter.

## Store and Recall mode:

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

## **NOTE A :**

## **MEASUREMENT**

### **STEP 7.**

#### **TABLET METHOD**

##### FREE CHLORINE

Remove the vial from the sample chamber and empty it, leaving a few drops remaining in the vial.

Add one DPD No. 1 tablet straight from the foil and crush the tablet using a clean stirring rod.

Add water sample to the 10 ml mark.

Close the vial tightly with the cap and swirl several times until the tablet is dissolved.

And continue with STEP 8.

##### TOTAL CHLORINE

Remove the vial from the sample chamber and empty it, leaving a few drops remaining in the vial.

Add one DPD No. 4 tablet straight from the foil and crush the tablets using a clean stirring rod.

Add water sample to the 10 ml mark.

Close the vial tightly with the cap and swirl several times until the tablet is dissolved.

And continue with STEP 8.

#### **LIQUID METHOD**

##### FREE CHLORINE

Remove the vial from the sample chamber and empty the vial.

Fill the vial with drops of the same size by holding the bottle vertically and squeeze slowly:

6 drops of DPD 1 buffer solution

2 drops of DPD 1 reagent solution

Add water sample to the 10 ml mark.

Close the vial tightly with the cap and swirl several times to mix the contents.

And continue with STEP 8.

#### TOTAL CHLORINE

Remove the vial from the sample chamber and empty the vial.

Fill the vial with drops of the same size by holding the bottle vertically and squeeze slowly:

6 drops of DPD 1 buffer solution

2 drops of DPD 1 reagent solution

3 drops of DPD 3 solution

Add water sample to the 10 ml mark.

Close the vial tightly with the cap and swirl several times to mix the contents.

And continue with STEP 8.

## **SACHET METHOD**

#### FREE CHLORINE

Remove the vial from the sample chamber.

Add the contents of one Chlorine FREE Powder Sachet straight from the foil to the water sample.

Close the vial tightly with the cap and swirl several times to mix the contents (approx. 20 seconds)

And continue with STEP 8.

#### TOTAL CHLORINE

Remove the vial from the sample chamber.

Add the contents of one Chlorine TOTAL Powder sachet straight from the foil to the water sample.

Close the vial tightly with the cap and swirl several times to mix the contents (approx. 20 seconds).

And continue with STEP 8.



## TEST STRIP METHOD

### FREE CHLORINE

Unscrew the lid and put one FCL (DPD-1) reagent strip into the sample solution and move the strip in a gentle back and forth motion (approx. 2 strokes/sec) for 20 seconds

And continue with STEP 8.

### TOTAL CHLORINE

Unscrew the lid and put one TCL (DPD-4) reagent strip into the sample solution and move the strip in a gentle back and forth motion (approx. 2 strokes/sec) for 20 seconds

And continue with STEP 8.