# Operation Manual

# Free Chlorine tester

FCL30 Free Chlorine tester

Thank you for selecting Clean products. Before using the tester, relevant person must read and understand the contents of this operation manual. Operation Manual should be kept accessible within the person who use the testers.

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# Mater Analysis Solutions

### 2. Precautions



Please wipe up the electorde with clean tissue or cloth before using Do not throw or beat , squash or twist the tester deliberately. Do not expose to the direct sunlight or put in high humidity or high

temperature environment.

Do not use for long time under water

#### 3. CONFIGURATION and LCD INTRODUCTION

offset Slope STD ATC

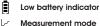
**8-8.8.8.8** 



S Data stabilized









Auto Lock after data stabilized

In calibration

- Sensor slope is between 50%-200%
- Sensor slope is between 33.3%-50% or 200%-300%

# 1. Product Overview

- Precise and easy operation, Comfortable holding, all functions operated in one hand.
- Large LCD with backlight, Multi-line display for easy reading, Auto-Power Off saves battery after 5 mins non-use
- 1\*1.5V AAA long battery life. User replaceable battery and high-impedance plane electrode.
- Floats on water, IP67 rated
- Field throw measurement( Auto Lock Function)
- Use tri-electroded method measuring: faster and accurate, matching up to DPD results.
- 2 points calibrate



Floats on water IP67 rated



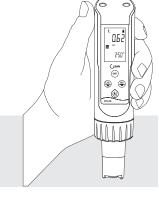
Large LCD with backlight Multi-line display for easy reading



Field throw ( Auto Lock Function)



1\*1.5V AAA lona battery life



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# 4. Key panel

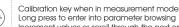
#### Key instruction

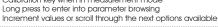
**Short press**: Short press means release the key once after pressing. (If there is no mark out below, default it as Short press) **Long press**: Long press means press the key for 3 seconds and then release it

Hold: Hold means not release the key and accelerate after a certain time. Not release the key until the value is set as needed.



Long press to Power ON/OFF Short press to ON/OFF backlight
Escape key when in calibration mode and setting up







Data setting Decrement values or scroll through the next options available



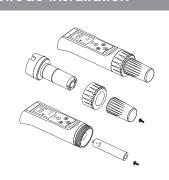
Press to unlock in Auto lock mode

#### 5. Battery and Electrode installation

Unscrew the screw cap by following the arrow direction, slightly unplug the electrode, install the battery(pay attention to the anode and cathode of the electrode).

Then install back the electrode and the

Low battery prompt is at the top of the screen when battery power is low.( You can refer to the LCD INTRODUCTION). Please change the same model battery.



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#### 6. Measurement Mode

Press " or power up. The tester will then enter into measurement mode.

The measurement icon will twinkle if the data is unstabilized. Once stabilized, the top stabilized icon will be displayed then.

#### 7. Calibration Mode

In measurement mode, press\* (CAL) " to enter calibration mode. Prompting icons will be displayed on the screen. The FCL30 adopts DPD comparative way to calibrate, which also requires constant flow rate.











Dip the electrode into the test solution, the stabilized icon will be displayed at the top of the screen once the data stabilized. Press "  $\left( \text{ENT} \right)$ " to confirm.

In Pic2, the screen will show STD. The standard value for calibration is at the below. Press " $\bigcirc$ A" "and " $\bigcirc$ SE" to adjust the value as the standard and press " $\bigcirc$ ENT" to confirm. The offset value will be shown after calibration (in Pic3). If wrong, the "ERR" will be displayed. In Pic4, zero point calibration. Press " $\bigcirc$ ENT" to confirm and view the offset value. In Pic5, you can also directly press" "to skip calibration and go back to measurement mode..

Long press\*  $(\underbrace{\frac{CAL}{\Delta}})$ " to browse the calibrated parameters in measurement mode. Press\*  $(\underbrace{\frac{CAL}{\Delta}})$ " and \*  $(\underbrace{\frac{SET}{\Delta}})$ " to check the zero offset and the actual measurement value.





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#### 9. Specification

| Range               | 0 -10.00 mg/L                        |
|---------------------|--------------------------------------|
| Resolution          | 0.01 mg/L                            |
| Accuracy            | ±2% F.S.                             |
| Temp. Range         | 0 - 100.0 °C / 32 - 212 °F           |
| Working Temperature | 0 - 60.0 °C / 32 - 140 °F            |
| Calibration Point   | 2 points                             |
| LCD                 | 20* 30 mm multi-line crystal display |
| Lock                | Auto / Manual                        |
| Electrode           | C\$5930                              |
| Auto backlight off  | 1 minutes                            |
| Auto power off      | 5 minutes without key be pressed     |
| Power               | 1x1.5V AAA battery                   |
| Dimensions          | (H×W×D) 185×40×48 mm                 |
| Weight              | 95g                                  |
| Protection          | IP67                                 |

#### 10. Package



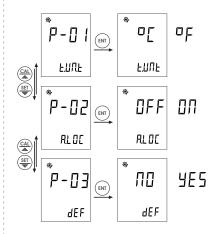
**Size**: L\*W\*H 210\*100\*65mm **Weight**: 350g

MFCL tester body CS5930 electrode 1.5VAAA battery

### 8. Set up

In measurement mode, press " $\underbrace{\overset{(\text{SET})}{\clubsuit}}$ " to enter SET UP. Corresponding icons will be displayed. You can press " $\underbrace{\overset{(\text{AL})}{\clubsuit}}$ " and " $\underbrace{\overset{(\text{SET})}{\$}}$ " to select the menu and then press " $\underbrace{(\text{ENT})}$ ". You can also press " $\underbrace{(\overset{(\text{AL})}{\$}}$ " or " $\underbrace{(\overset{(\text{SET})}{\$}}$ " to set up and confirm by press " $\underbrace{(\text{ENT})}$ ". You can also press " $\underbrace{(\text{ENT})}$ " to back to measurement mode.

The Set up menu as follow:



P01: Unit of the temperature. You can select between °C and °F.

PO2: Auto Lock. You can select "ON" or "OFF" to auto lock the data once stabilized.

P03: Factory defaults. You can select to revert to factory defaults.

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#### 11. GENERAL INFORMATION

#### Warranty

CLEAN Instruments warrants this product to be free from significant deviations in material and workmanship for a period of one year from the date of purchase. If repair is necessary and has not been the result of abuse or misuse within the warranty period, please return to CLEAN Instruments and amendment will be made without any charge. CLEAN Instruments Customer Service Center will determine if product problem is due to deviations or customer abuse. Out of warranty products will be repaired on a charge basis.

#### **Return Of Malfunction Instruments**

Authorization must be obtained from CLEAN Instruments Customer Service Center to issue a RIR number before returning items for any reason. When applying for authorization, please nclude date requiring the reason of return. Instruments must be carefully packed to prevent damage in shipment and insured against possible damage or loss. CLEAN Instruments will not be responsible for any damage resulting from careless or insufficient packing.

Warning: Damage as a result of inadequate packaging is the User / distributor's responsibility.

Please follow the guidelines below before transporting.

#### **Guidelines Or Returning Unit For Repair**

Use the original packaging material if possible, when transporting back the unit for repair. Otherwise wrap it with bubble pack and use a corrugated box for better protection. Include a brief description of any faults suspected for the convenience of Customer Service Center, if possible . If there are any questions, feel free to contact our Customer Service Center or distributors.