

USER MANUAL



MODEL NO.

CLUIX C011

Version 009/2023

Date of Issuance - September 2023



CLUIX C011

Hand Held IoT Digital
Water Quality Analyzer



The Water Quality Analyzer is fully user supervised, hand-held and automatic testing device for the physical parameters of water. It has robust design ideal for lab use and field trials.

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INTRODUCTION

Water is a basic element of the nature. It is an essential element for all the natural living forms on the earth. Purity of water is an important aspect of human wellbeing for drinking, daily life, manufacturing uses, food processing, and many activities etc. Water is highly affected by anthropogenic activities. It certainly creates water pollution an increase in the presence of Total Dissolved Solids, Color, Total Hardness, pH and other factors of the water. These factors are important for those who uses the water for consumption. Though, the potable water is supplied by the government bodies still due to many factors and issues it gets contaminated. So, the testing of quality and purity of water is important.

The digital water quality analyzer is very precise and stable device to determine the water's Total hardness, Free Residual Chlorine, , pH, Color, TDS and Lead.



FEATURES



Bluetooth



Wi-Fi



Touch Screen



IOT



Mobile App



GPS



Rechargeable



IP67

WHY THIS DEVICE?



User Friendly



IoT Data Sharing



Deeptech AI Powered



Mobile App



Pre - Calibrated



Web Dashboard



Easy Step Test

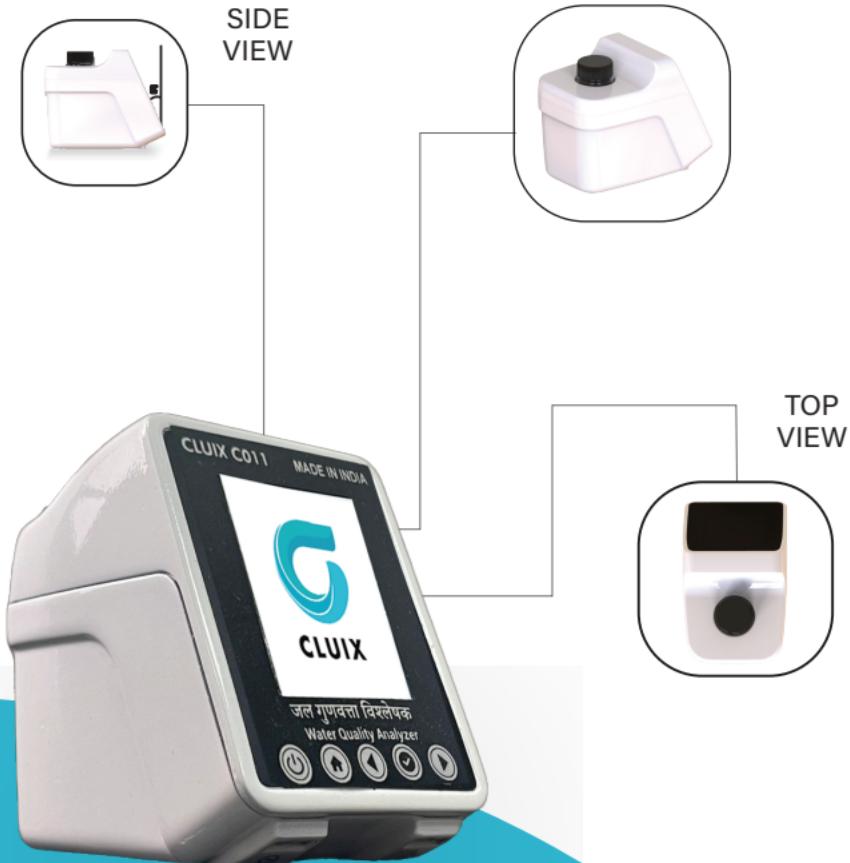


NABL Lab Approved



SALIENT FEATURES

1. Simple, hand-held, cost effective and user friendly device.
2. No specific instrumentation knowledge required.
3. Handy and interpreted by non-technical individuals.
4. Robust design which is compatible with field trials.
5. Reliable reagent and stable long shelf life.



APPLICATIONS



Water



Soil



Biotechnology



Chemical



Research



Pharmaceutical



Agriculture

INVENTORIES PROVIDED

Empty Sample
Bottle

15 ml



PB-C011



TH Reagents



pH Reagent



FRC Reagent



Microfiber Cloth



TDS Probe



Device Charger

0.02 NTU/ Clear
standard jar

SPECIFICATIONS

TEST PARAMETER	METHOD	REAGENT	
TUR	Turbidity (NTU)	N	Not required
HU	Colour-Hazen/ PtCo Unit	C	Not required
TDS	Total Dissolved Solids	C	Not required
EC	Electrical Conductivity	C	Not required
pH	Potential of Hydrogen	C	C011 - pH
FRC	Free Residual Chlorine	C	C011 - FRC
Pb	Lead - Heavy Metal	C	C011 - Pb
TH	Total Hardness	C	C011 TH-A, TH-B, TH-C

RESOURCE AND TECHNICAL DETAILS

Microcontroller	EPS 32 & Xtensa 32 - bit, 240 Mz dual Core
Connectivity	Wifi, Bluetooth, Aux Port, USB Type C
Input Voltage	5V @ 500ma
IPS LCD	Coloured Capacitive Touch, @ 2.4 Inch
LCD Resolution	320 * 240 Pixel
Lithium Battery	1800 mAh @ 3.7V
Battery Life	36 Hours

SPECIFICATIONS

RANGE	RES	ACC
0~10 NTU	0.01	± 1 %
0~15 HU (PtCo)	0.01	± 1 %
0~700 ppm (mg/l)	0.1	± 2 %
0~1413 µs/cm	0.1	± 2 %
3~10 pH units	0.01	± 1 %
0~3 ppm (mg/l)	0.01	± 1 %
5~500 ppm (mg/l)	0.1	± 2 %
0~600 ppm (mg/l)	0.1	± 2 %

N - NEPHLOMETRY
 C - CONDUCTIVITY
 C - COLORIMETRY

RESOURCE AND TECHNICAL DETAILS

Product Size	85 * 57 * 65 mm
Package Case Size	260 * 200 * 120 mm
TF Card Slot	16 Gigabytes Max
Operating Temp.	0° to 60° C
Case Material	Polypropylene
Sample Bottle	25.5 ø , 58 mm, Flat Bottom
Accessories	Carrying Case, User Manual, AC/ DC Charger, Type C USB Cable, TDS Probe, Sample Bottle, Micro Fibre Cloth

SAFETY INSTRUCTIONS



PRECAUTIONS FOR USER'S ADHERENCE



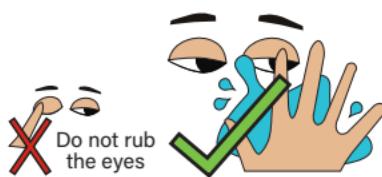
1. Avoid the direct contact with the reagent.



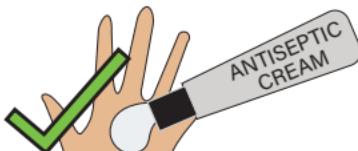
2. Advisable to wear gloves at the time of performing the test.



3. In case of any direct contact, wash immediately with the plain water for 15-20 mins.



4. If the chemical reagent comes in the contact with eyes, wash the eyes with plain lukewarm water continuously for 15-20 min.



5. Apply suitable antiseptic cream.



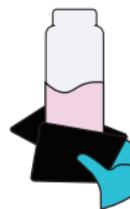
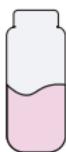
6. If needed take the medical help immediately.

MANDATORY INSTRUCTIONS



1. Pour water sample in the jar.

2. Add the specific reagent.



3. Wait till color changes.

4. Clean the jar with the muslin cloth.



5. Place the jar in the analyzer.

6. Select the parameter to test.



7. Wait for the results.

8. Press home and check other parameters.

Hazen's Test



1. Clean the **0.02 NTU/ Clear standard jar** with cloth.



3. Select Calibration in the Hazen's test from main menu of device/mobile application.



2. Match the mark and put the **0.02 NTU/ Clear standard jar** in the device.



4. After successful calibration, remove the **0.02 NTU/ Clear standard jar** from the device.



5. Clean empty sample jar with distilled water.



6. Fill 15 ml water to the empty sample jar and clean it with cloth.



7. Select Hazen's test from main menu of device/mobile app.



8. Press scan and check the results.

pH Test



INSTRUCTIONS

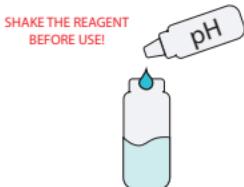
1. Select pH test from main menu of device/mobile app.

2. Follow instructions on the device/mobile application.



3. Clean sample jar with distilled water.

4. Fill 15 ml water sample to be tested in the empty sample jar.



5. Add one drop of pH reagent in the bottle and shake it well.

6. Once color is developed, clean and put the sample jar in sample holder of the device.



7. Press the scan button.

8. Read the value on the display.

Lead Test



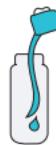
INSTRUCTIONS

1. Select Lead test from main menu of device/mobile app.

2. Follow instructions on the device/mobile application.



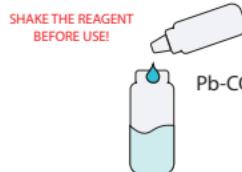
3. Clean sample jar with distilled water



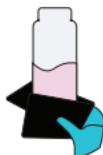
4. Fill 15 ml water sample to be tested in the empty sample jar.



5. Add 4 drops of ammonia buffer and then shake it.



6. Add 1 drop of Pb-CO11 solution, and shake it.



7. Clean the sample jar with cloth and put in the device.



8. Press scan and check the results.

Turbidity Test



1. Clean the **0.02 NTU/ Clear standard jar** with cloth.



3. Select Calibration in the Turbidity test from main menu of device/mobile application.



2. Match the mark and put the **0.02 NTU/ Clear standard jar** in the device.



4. After successful calibration, remove the **0.02 NTU/ Clear standard jar** from the device.



5. Clean empty sample jar with distilled water.



6. Fill 15 ml water to the empty sample jar and clean it with cloth.



7. Select Turbidity test from main menu of device/mobile app.



8. Press scan and check the results.

Free Residual Chlorine



INSTRUCTIONS

1. Select FRC test from main menu of device/mobile app.

2. Follow instructions on the device/mobile application.



3. Clean sample jar with distilled water

4. Fill 15 ml water sample to be tested in the empty sample jar.



5. Add one drop of FRC reagent in the bottle and shake it well.

6. Once color is developed, clean and put the sample jar in sample holder of the device.



7. Press the scan button.

8. Read the value on the display.

Total Hardness Test



INSTRUCTIONS

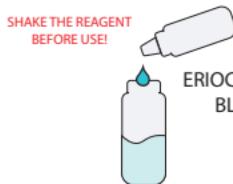
1. Select TH test from main menu of device/mobile app.

2. Follow instructions on the device/mobile application.



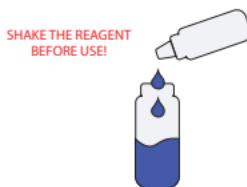
3. Clean sample jar with distilled water

4. Fill 15 ml water sample to be tested in the empty sample jar.



5. Add 4 drops of ammonia buffer and then shake it.

6. Add 1 drop Eriochrome black and shake it as well.



7. Note down no. of EDTA drops added until solution turns blue.

8. Enter no. of drops in the device, press scan and check the results.

Total Dissolved Solids



INSTRUCTIONS

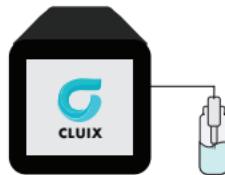
1. Select TDS test from main menu of device/mobile app.

2. Follow instructions on the device/mobile application.



3. Clean sample jar with distilled water

4. Fill 15 ml water sample to be tested in the empty sample jar.



5. Connect TDS probe to the device via aux port.

6. Put the TDS probe in sample jar.



7. Press the scan button.

8. Check the results.

TROUBLESHOOTING

1. The device has hanged

Restart the device, or Turn off the device and start it after 30 seconds.

2. The device prompts Error-Re-Calibrate."

If turbidity is performed without calibration, the device will prompt a request for re-calibration, follow the steps of calibration, and repeat the test.

3. Device displays "Low Battery"

Plug the Type C cable into the device and charge.

4. Device displays "Bluetooth Disconnected"

Connect again from mobile in Bluetooth devices under CLUIX C011.

5. Device has an issue in repeatability during Turbidity and Hazen's test

Match the marking on the sample jar and device carefully during calibration and performing the test.

6. TDS test displays "Zero ppm Result"

Carefully remove the TDS probe port and reconnect gently and try again.

7. In case of any other problem

Write to us at info@cluix.in



Make a difference today!

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