

AQUASOL DIGITAL

BENCH TOP PH / ORP METER

ABM401



Product Manual / Warranty Card

Introduction

We thank you for having purchased bench top PH / ORP 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.

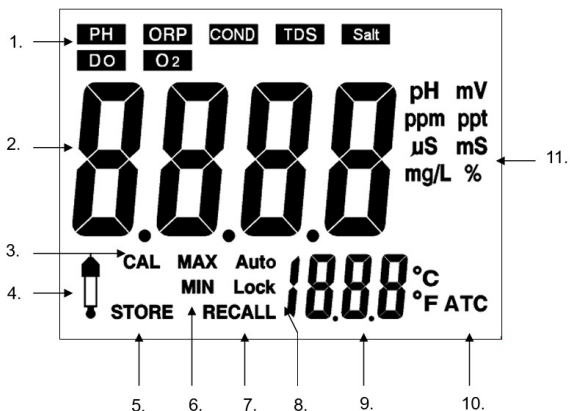
Specification:

Model	ABM401 - Bench Top pH Meter		
Parameter	pH	ORP*	Temp
Range	(-)2.00 to 16.00	± 1999 mV	0 to 110 Deg C
Accuracy	1%	2%	±0.2
Resolution	0.01 pH	1 mV	0.1 Deg C
Calibration	pH - 5 Point USA (1.68/4.00/7.00/10.00/12.46) pH - 5 Point NIST (1.68/4.00/6.86/9.18/12.46)		
ATC	Yes (100 Deg C)		
Output	USB Connectivity with Windows PC Software		
Sensor*	pH & Temperature sensors included. To measure ORP, AMEORLG Required.		

Accessories:






pH/ORP Sensor, Temp. Sensor, Standard Solution,
Power Adapter, Electrode Holder, USB Software,

Display Details



1. Function Mode
2. Measuring Value
3. Calibration Mode
4. Calibration error indicator
5. Reading stored indicator
6. MAX & MIN Value
7. Recall Mode
8. Auto lock or manually lock current reading
9. Temperature Indicator
10. Auto Temperature Compensation
11. Unit

Keyboard Details

	Single Press Lock the current reading, Press for 3 sec. to enter or exit MAX/MIN mode.
	Single Press to Store the current reading. Press 3 sec. to enter Recall mode.
	In Recall mode, browse records. Press both together 3 sec. to enter Advance Setting
	Single Press to Choose different Function mode. Press 3 sec. to switch °C/°F, or switch pH-mV or ORP-mV
	Turn on or off power. Press 3 sec. to enter calibration mode

Meter Preparation

- 1) Connect AC adaptor with power source.
- 2) Connect the pH/ORP and Temperature Electrode
- 3) Clean the Electrodes with DM Water and Power On the Meter

pH Calibration:

pH 7 : Dip the pH electrode and the temperature probe into the pH 7.00 buffer solution and Stir gently until the reading is stable. Press and hold CAL for 3 seconds & the display will appear CAL and flashing 7.00. Then the display indicates "SA", then "End" i.e. calibration is done. Meter will return to Measurement Mode.

pH 4 : Rinse the electrode with clean water and wipe it dry. Dip the electrode into the buffer solution pH 4.01 as previous steps. Once Calibration is done the display will indicate the percentage of slope (PTS) to show the status of the electrode. If the PTS is below 70% or above 130%, the electrode must be replaced.

pH 10 :

Note: Calibration error indicator icon will appear, and "Err" instead of "SA", if calibration fails. When doing a calibration, Calibrate with buffer pH 7 first, and then follow with other buffers.

ORP Calibration

Calibration is not necessary for ORP. However, it could be tested with specific ORP standard solution to check whether the electrode is good.

pH / ORP Measurement:

Press **MODE** to choose pH / ORP mode.

After calibration, rinse the pH / ORP electrode with clean water and wipe it dry. Dip the electrode and the temperature probe into the sample solution which is going to be measured. Stir gently and wait until a stable reading can be obtained.

Note:

The display will appear “----” when it is over measuring range.

After measurement, rinse the electrode with clean water. Replace the soaking bottle. The soaking bottle should be always filled with soaking solution

MAX/MIN mode:

Press and hold **MAX/MIN** button until the display appears flashing MAX and MIN icons to enter MAX/MIN. Press **MAX/MIN** lightly to browse MAX and MIN value during this mode. To exit this mode, press and hold **MAX/MIN** button again until the flashing MAX and MIN icons disappear and return to measuring mode.

Store and Recall mode:

In measuring mode, press **STO** to store the current reading. The Store icon and the ordinal of this record will appear on the display.

Press and hold **RCL** for 3 sec. to enter Recall mode. In this mode, use ▲ or ▼ to browse records. Press and hold **STO** to exit this mode and return to measuring mode.

In Recall mode, press ▲▼ together for 3 sec. to clean all the records in the memory.

Advanced Setting:

In pH measuring mode, press ▲▼ together for 3 sec. will enter advanced setting.

Press **STO** to set pH calibration type and use ▲▼ to choose “USA” or “NIST”. Then press **MODE** to confirm and return to measuring mode.

Press **LOCK** to turn on or off “Auto Lock” function. Use ▲▼ to choose. Then press **MODE** to confirm and return to measuring mode.

In advanced setting, press **CAL** to reset all settings to factory setting.

Connect to PC:

OS: Windows7 or Above. Connect Cable to USB Port.

Software Installation

Download the Software from - bit.ly/4rfVXQ3

Unzip the File Driver folder. Install Drivers and then install "ADB400_APP.exe"

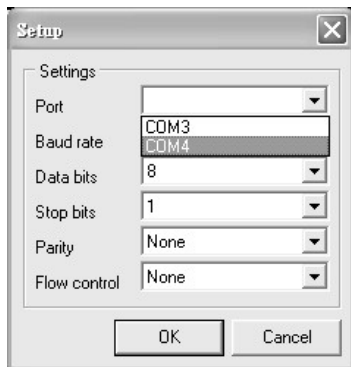
Software Operation

Double-click "ADB400_APP.exe" to start the program.

Click **Setting** button to set COM port in the Setup window.

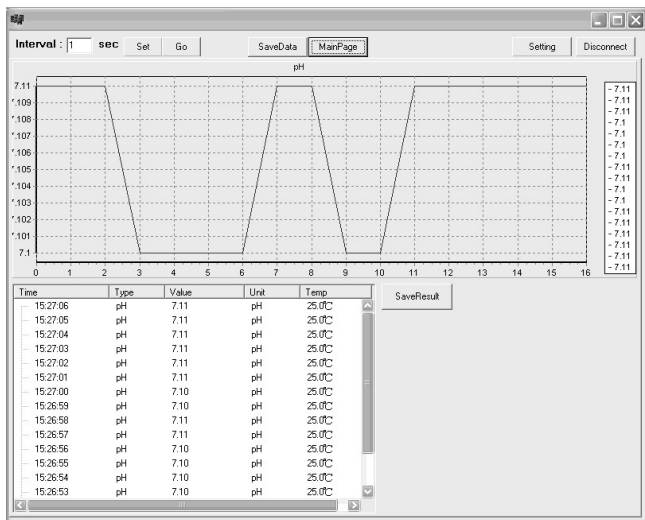


Choose the responding Port and then click **OK**.



Click the small graphs of each mode in the main window can enter a big window with detail reading information. Click **MainPage** to back to the main window.

In each big window, click **SaveResult** will export the readings to .txt file.



Click **SaveData** and then press and hold **RCL** to enter Recall mode.

Press **MODE** to export all the records to the program.

The records can also be saved as a .txt file by clicking **Save Result**

The screenshot shows a software window with a title bar containing standard Windows window controls. Below the title bar, there is a control panel with the following elements:

- Interval:** 1 sec
- Buttons:** Set, Go, SaveData, MainPage, Setting, Disconnect

The main area of the window contains a table with the following data:

DataNo	Type	Value	Unit	Temp	TempUnit
1	ORP	0.7	mV		
2	ORP	0.7	mV		
3	ORP	0.8	mV		
4	pH	0.7	mV	77	°F
5	pH	0.7	mV	77	°F
6	pH	0.7	mV	77	°F
7	TDS	1319	ppm	77	°F
14	DO	8.38	mg/L	25	°C
15	DO	8.38	mg/L	25	°C
16	DO	8.38	mg/L	25	°C
17	O2	11.6	%	25	°C
18	O2	11.6	%	25	°C
19	O2	11.6	%	25	°C
20	O2	11.6	%	25	°C
21	pH	7.10	pH	25	°C
22	pH	7.10	pH	25	°C
23	pH	7.10	pH	25	°C
24	pH	7.10	pH	25	°C
25	TDS	0.9	ppm	25	°C

On the right side of the window, there is a vertical panel with a **SaveResult** button.

Note:

Please click **Disconnect** or close the program before turn off power or remove the USB cable.

QR Code for Windows App Download.



WARRANTY CARD

Customer Details:

Name: _____

Address: _____

Email Id: _____

Contact No: _____

Dealer Details:

Name: _____

Stamp & Signature

Product Details:

Bill No: _____ Bill Date: _____

Product Serial No: _____

Manufactured By



Rakiro Biotech Systems Pvt Ltd

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