

QDB118S

User Manual



Intelligent Digital Pressure Gauge

Statement

This instruction manual applies to the intelligent digital pressure gauges designed and manufactured by our company. It is written to facilitate users' familiarity with and correct use of this product.

Catalogue

Safety Tips	5
I. Instrument Operation Manual	6
1. Introduction	6
1.1 Overview	6
1.2 Technical Specifications	7
1.3 Features	8
1.4 Basic Structure	8
1.5 Power Supply Introduction	9
1.6 Working Hours and System Configuration	9
2. Display and Function Operation	10
2.1 Screen Area Division	10
2.2 Main Operation Interface	10
2.3 Buttons	11
2.4 Pressure Measurement	11
2.4.1 Pressure percentage indication	11
2.4.2 Pressure Reset	11
2.4.3 Pressure Unit Switching	11
2.4.4 Pressure peeling	11
2.5 Peak Pressure Record	12
2.6 Lock Screen and Unlock	13
2.7 Password Keyboard Display and Editing	14
2.8 Numeric Keypad Display and Editing	14
2.9 Cyclic selection keyboard setting parameters	15
3. System Settings	15
3.1 Data Recording Settings	15
3.1.1 Start-stop log	15
3.1.2 Used storage capacity:	16
3.1.3 Recording Interval Setting	16
3.1.4 Delete data record	16
3.2 Configuration Menu	16
3.2.1 Pressure module reading frequency setting	16
3.2.2 Pressure display digit setting:	17
3.2.3 Automatic backlight off time setting	17
3.2.4 Automatic shutdown setting	17
3.2.5 Filter setting	17

3.2.6 Tare Application Settings	17
3.2.7 Current temperature unit displayed	17
3.2.8 Reset switch setting	18
3.3 Date and time display	18
3.4 Pressure calibration switch	18
3.5 System Settings	18
3.5.1 Restore factory settings	18
3.5.2 Viewing Software Version Information	19
3.5.3 View the number of overvoltage records	19
3.5.4 Battery Voltage Check	19
3.6 Communication Settings	19
3.6.1 Bluetooth MAC address	19
3.6.2 Bluetooth Auto-Off Function Settings	19
4. Troubleshooting	19
4.1 Error Code Explanation	19
II. Instructions for Use of the Host Computer	20
1. Introduction	20
1.1 Overview	20
1.2 Main Features	20
1.3 System Requirements	20
Hardware Requirements	20
Software Requirements	20
2. Installation and Uninstallation	20
2.1 Installation Steps	20
2.2 Software Uninstallation	20
3. Software Interface Description	21
3.1 Main Interface Layout	21
3.2 Detailed Explanation of Function Areas	21
3.2.1 Language Switching	21
3.2.2 Data Display Area	22
3.2.3 Real-time Pressure Data Display Area	22
3.2.4 Temperature display area	23
3.2.5 Equipment List Display Area	23
3.2.6 Functional Area	24
4. Basic Operating Procedures	32
4.1 Device Connection	32
4.2 Data Acquisition	32

4.3 Parameter Settings	32
4.4 Data Export	33
5. Troubleshooting	33
5.1 Frequently Asked Questions	33
III. APP User Manual	34
1. Introduction	34
1.1 Overview	34
1.2 Main Features	34
1.3 System Requirements	34
Hardware requirements	34
Software Requirements	34
2. Installation and Uninstallation	34
2.1 Installation Steps	34
2.2 Software Uninstallation	35
3. Software Interface Description	35
3.1 Main Interface Layout	35
3.2 Detailed Explanation of Function Areas	37
3.2.1 Device Section	37
3.2.2 Data Section	37
3.2.3 Configuration Section	56
3.2.3 About Section	56
4. Basic Operating Procedures	56
4.1 Device Connection	56
4.2 Data Acquisition	57
4.3 Parameter Settings	57
4.4 Data Export	57
5. Troubleshooting	58
5.1 Frequently Asked Questions	58
IV. Document Information	59

Safety Precautions

A warning indicates a situation that poses a threat to user safety;

Note that this may cause damage to the intelligent digital pressure gauge or affect the calibration results.

warn:

To prevent injury to the user, please be sure to use this product in accordance with the instruction manual.

To prevent potential fire, electric shock or personal injury:

1. Standard:

Before use, the pressure transmission medium should be identified.

Unless otherwise specified, the following instructions shall apply :

- Before using the product, please read the instruction manual, especially the "Safety Precautions" section;
- Before using the product, please check its appearance for any damage;
- Before using the product, procedures in the instruction manual;
- Please be sure to store, transport, and use this product in the correct orientation;
- Do not use the product if it is damaged or malfunctioning, and contact XingYuTeng ;
- Non-explosion-proof products should not be used in environments with explosive gases, vapors, or dust.

2. Electrical:

- Before use, please make sure the power supply is installed and connected correctly.

Notice:

To prevent damage to the intelligent digital pressure gauge, please be sure to use this product in accordance with the instruction manual.

To prevent possible instrument damage:

- Intelligent digital pressure gauges should be avoided in environments with strong mechanical vibration;
- If the smart digital pressure gauge malfunctions, please stop using it and contact XingYuTeng.

I. Instrument Operation Instructions

1. Introduce

1.1 Overview

1. This series of intelligent digital pressure gauges is the latest generation of digital pressure measuring equipment launched by Baoji XingYuTeng Measure and Control Instrument Co., Ltd. It has a simple design and practical functions. It is mainly used to calibrate precision pressure gauges, general pressure gauges, sphygmomanometers or other pressure instruments, and can also be widely used for precision pressure measurement.
1. This series of intelligent digital pressure gauges has very low power consumption (suitable for long-term continuous operation). The intelligent digital pressure gauge also possesses excellent electromagnetic compatibility characteristics.
3. How to contact XingYuTeng - Phone: +86 0917-3307712- Company website: www.xytsensor.com

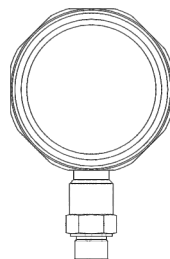
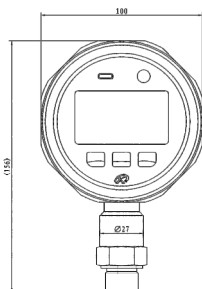
1.2 Technical Specifications

Technical	Specifications
Project	QDB118S
Protection level	Ip67
Shell material	Stainless steel
Reference dimensions	φ104mm*44mm
Weight	≤1000g
Display	FSTN segment LCD screen
Button	3 function keys and 1 power button
Storage	1.03 million items (time + pressure)
Built-in wireless communication	BLE
Communication module	USB
Installation method	Radial
Powered by	3*AA alkaline batteries/USB powered
Usage Environment	1. Storage temperature (-40-70)°C
	2. Operating temperature (-20-70)°C
	3. Humidity (10-95)%RH, non-condensing
Pressure range and accuracy	-0.1MPa~0.01MPa...280MPa, 0.1%
Software features	Peak statistics/pressure unit switching/tare/data recording

1.3 Features

1. Ultra-low power consumption design, capable of long-term operation;
2. Wide pressure range: -0.1MPa to 0.01MPa...280MPa ;
3. Massive data storage, up to 1.03 million records (simultaneously

1.4 Basic Structure



Serial Number	Introduce	Icon	Illustrate
1	LCD monitor	/	Displays pressure, menu, and other information.
2	Unit key		Short press: Used to switch pressure units on the main screen; functions as a right strafe button on non-main screens; and as a back button on other screens. Long press: Enter the settings menu on the main screen.
3	Backlight button		Short press: Turns the lights on or off in the main interface; moves them down in other interfaces. Long press: Enter the peak value viewing interface on the main screen.
4	Zero button		Short press: When the zeroing function is enabled, it is used to zero pressure on the main interface, and as a confirmation button on other interfaces. Long press: Used to turn Bluetooth on/off on the main screen.
5	Power button		Short press: Used to unlock the button; provides a return function in numerical input or menu interfaces; can also be used to power on when the device is off. Long press: Used to turn the pressure gauge on and off.
6	Communication module	/	USB Type-C communication
7	Pressure sensor	/	Integrated with the Gauge body

1.5 Power Supply Introduction

1. Ultra-low power consumption design, capable of long-term operation;
2. Wide pressure range: -0.1MPa to 0.01MPa...280MPa ;
3. Massive data storage, up to 1.03 million records (simultaneously recording time and stress values).

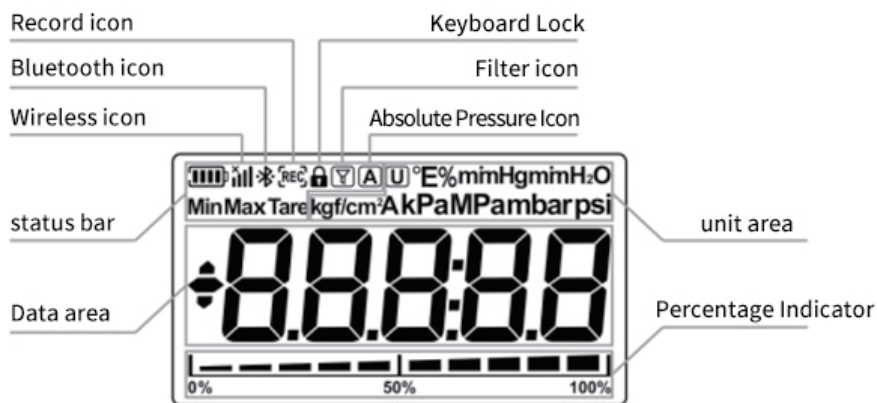
1.6 Working Hours and System Configuration

Model	Pressure sampling frequency	Working hours
Normal mode	10 times/second	
Normal mode	3 times/1 second	
Normal mode	2 times/1 second	
Low power mode	1 time/1 second (L)	
Low power mode	1 time/2 seconds (L)	
Low power mode	1 time/3 seconds (L)	
Low power mode	1 time/4 seconds (L)	
Low power mode	1 time/5 seconds (L)	
Low power mode	1 time/6 seconds (L)	
Low power mode	1 time/7 seconds (L)	
Low power mode	1 time/8 seconds (L)	
Low power mode	1 time/9 seconds (L)	
Low power mode	1 time/10 seconds (L)	

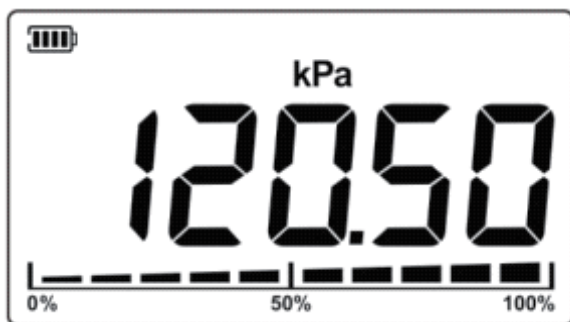
2.Display and Function Operation

2.1 Screen Area Division

1. Status bar: Includes battery icon, wireless icon, Bluetooth icon, record icon, key lock, Min icon, Max icon, and Tare icon. When the battery is low, it will prompt that the device will automatically shut down due to low battery and start a countdown to automatically shut down.
2. Unit Zone: Includes pressure units kPa, Pa, mbar, bar, MPa, mmHg, inHg, psi, mmH₂O, inH₂O, kgf/cm². Different pressure ranges have



2.2 Main Operation Interface



After the pressure gauge is powered on, it first displays the firmware version screen, waits for 3 seconds, and then enters the main interface immediately.

The main interface is divided into the following sections:

1. Status bar: includes battery status icon, Tare on/off status, Bluetooth icon, recording icon, and key lock icon ;
2. Unit area: Displays the currently used pressure unit. Press the unit key to switch pressure units.
3. Data display area: Displays the pressure value for the current unit.

2.3 Buttons

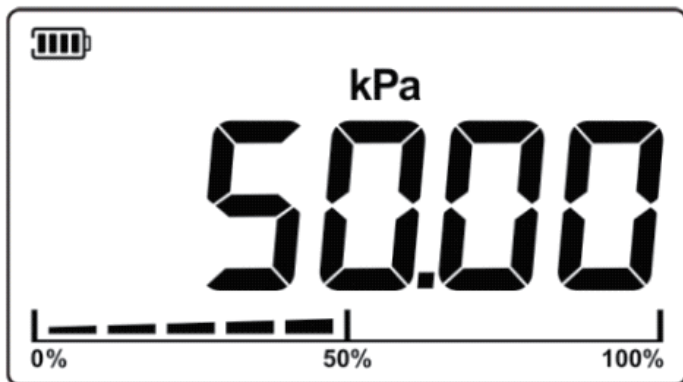
Unit button		Short press: Used to switch pressure units on the main screen; functions as a right strafe button on non-main screens; and as a back button on other screens.
		Long press: Enter the settings menu on the main screen.
Backlight button		Short press: Turns the lights on or off in the main interface; moves them down in other interfaces.
		Long press: Enter the peak value viewing interface on the main screen.
Zero button		Short press: When the zeroing function is enabled, it is used to zero pressure on the main interface and as a confirmation button on other interfaces.
		Long press: Used to turn Bluetooth on/off on the main screen.
Power button		Short press: Used to unlock the button; provides a return function in numerical input or menu interfaces; can also be used to power on when the device is off.
		Long press: Used to turn the pressure gauge on and off.

2.4 Pressure Measurement

After the pressure gauge enters the main interface, the current pressure unit and real-time pressure value will be displayed in the unit area and display area respectively, and the pressure percentage will be displayed at the bottom of the screen.

2.4.1 Pressure percentage indication

After the pressure gauge enters the main interface, the pressure percentage is displayed at the bottom of the display area, using 10 divisions to represent the pressure percentage.



2.4.2 Pressure Reset

After the pressure gauge enters the main interface, the pressure percentage is displayed at the bottom of the display area, using 10 divisions to represent the pressure percentage.

2.4.3 Pressure Unit Switching

On the main interface, a short press of the unit button switches the pressure unit. Different pressure modules have different pressure unit configurations, and not every pressure unit can be selected.

2.4.4 Pressure peeling

The tare function can be turned on or off via the PC host computer, Bluetooth APP, or instrument settings menu. At this time, the Tare icon will be displayed on the instrument panel. The tare value can be manually sent to the meter head via the PC host computer or Bluetooth APP. The pressure value displayed on the meter head is the pressure value after tare.

2.5 Peak Pressure Records

The equipment will automatically record the maximum and minimum pressure values that occur during the pressure measurement process:

1. On the main interface, long press the peak button to enter the pressure peak record interface and view the maximum value;
2. Briefly Press the peak button again to view the minimum value;
3. Briefly Press the peak button again to return to the main screen;
4. The peak value can be reset to zero via a PC host computer or a Bluetooth APP .



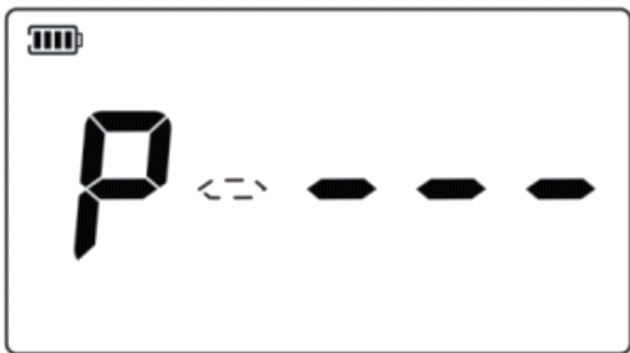
2.6 Lock Screen and Unlock

Short press the power button to perform the unlock/lock screen function:

1. After entering lock screen mode, a key lock icon appears in the status bar;
2. Pressing other buttons while the screen is locked will not execute any functions;

2.7 Password Keyboard Display and Editing

When entering the pressure gauge calibration, factory reset, or data clearing functions, a password keypad will pop up .



1. Editing bit by bit; the bit being edited flashes.
2. Down arrow key: Cycles through the display of the current position;
3. Right arrow key: Move to the next text to edit;
4. Confirm button: Confirm password;
5. Power button: Cancel and return to the previous menu.

2.8 Numeric Keypad Display and Editing



The pressure gauge provides a numerical editing interface .
Adjust the value bit by bit, and the edit bit will blink :

1. Down arrow key: Toggles the cycle of each digit;
2. Right arrow key: Move to the next editing position;
3. Confirm button: Confirm editing;
4. Power button: Cancel editing and return to the previous menu.

2.9 The cyclic selection keyboard display and editing system provides cyclic selection keyboard setting parameters.

Take screen backlight settings as an example:

1. Down arrow key: Switch between selected parameters;
2. Confirm button: Save selections and exit editing;
3. Back button or power button: Cancel settings and return to the previous menu.



3. System Settings

Long press the settings button on the main screen to enter the system settings interface;

Briefly press the settings button to return to the main screen;

Briefly press the down button to cycle through the menus;

For items with submenu, Briefly press the confirmation button to enter the submenu.

System settings include:

1. Data logging settings;
2. Configure menu;
3. Time display;
4. Pressure calibration switch;

3.1 Data Logging Settings

The display area shows 1. r EC., which contains a submenu .

3.1.1 Start-Stop Record

The display area shows 1.OFF or 1.ON (indicating the data recording operation status) .

1. Press the confirmation button briefly to enter edit mode, where you can open/close data records;

3.1.2 Used Storage Capacity

The display area shows 2.CAP .

1. Press the confirmation button briefly to view the used storage capacity.

3.1.2 Used Storage Capacity

The display area shows 3.GAP .

1. Briefly press the confirmation button to edit the time interval, with a setting range of 0001 to 9999 seconds or 0.1 to 0.9 seconds;
2. Briefly press the power button: Return directly without saving;
3. Briefly press the confirmation button: Save and return.

3.1.4 Deleting Data Records

The display area shows 4.dEL .

1. Briefly press the confirmation button to bring up the password keypad, then enter the password 1234;
2. Briefly press the confirmation button to delete all data records. Then it will display "ing...deleting". After waiting for a while, the screen will display "ACHIV" after the deletion is successful. Then you can press the power button to return to the previous menu.
3. Deletion failed and displayed FAIL.

3.2 Configuration Menu

The display area shows 2.CONF , which contains a sub-menu .

3.2.1 Pressure module reading frequency setting

The display area shows 1. r A t E.

1. Press the confirmation button briefly to enter the settings interface. 3-1 indicates 3 samples per second.
2. Supported reading frequencies: 10-1 (10 times/1 second), 3-1 (3 times/1 second), 2-1 (2 times/1 second), 1-1 L (1 time/1 second), 1-2L (1 time/2 seconds), 1-3L (1 time/3 seconds), 1-4 L (1 time/4 seconds), 1-5 L (1 time/5 seconds), 1-6 L (1 time/6 seconds), 1-7 L (1 time/7 seconds), 1-8 L (1 time/8 seconds), 1-9 L (1 time/9 seconds), 1-10L (1 time/10 seconds);

3. With an "L" indicates low power mode, without an "L" indicates normal mode.

3.2.2 Pressure Display Digit Settings

The display area shows 2.bit .

1. Press the confirmation button briefly to enter the settings. It supports 0-4 digit display. The default unit for displaying the number of digits is psi. For other units, the display number of digits will be converted to the corresponding precision according to the psi unit and the set number of digits.

3.2.3 Automatic Backlight Off Time Setting

The display area shows 3.LEd .

1. Press the confirmation button briefly to enter the settings, which supports 15 seconds , 30 seconds , 60 seconds , 120 seconds , 300 seconds, 600 seconds, and ON (always on backlight).

3.2.4 Automatic shutdown setting

The display area shows 4.AOFF .

1. Press the confirmation button briefly to enter the settings, which supports 15 minutes, 30 minutes, 45 minutes, 60 minutes, 90 minutes, 120 minutes , and OFF (disable) selection.

3.2.5 Filter Settings

The display area shows 5.FILT (Mode Reserved) .

3.2.6 Tare Application Settings

The display area shows 6.TARE .

1. Briefly press the confirmation button to enter settings.
2. When enabled: The icon will light up when Tare is active; otherwise, the icon will not light up .

3.2.7 Current temperature unit display

The display area shows 7.TEMP .

1. Briefly press of the confirmation button will display the current ambient temperature.

3.2.8 Reset Switch Setting

The display area shows 8. CLAr .

1. Press the confirmation button briefly to enter the setting to enable or disable zeroing (when enabled, the zeroing button can be used on the main interface to

3.3 Date and Time Display

The display area shows 3.DATE .

1. Briefly press of the confirmation button will display the current time on the instrument panel;
2. Briefly press of the down arrow key cycle through the time, seconds, date, and year .
3. Briefly press the power button to return to the previous level.

3.4 Pressure calibration switch

The display area shows 4.CAL .

1. Briefly press the confirmation button to enter the password (1234), then press the confirmation button again to enter;
2. Calibration status : ON indicates calibration is on , OFF indicates calibration is off ;
1. Press the confirmation button briefly to confirm the calibration status.

3.5 System Settings

The display area shows 5.SYS It includes sub-menus .

3.5.1 Restore factory settings

The display area shows 1. r EST;

1. Briefly press the confirmation button to prompt for a password (default 1234);
2. Briefly press the confirmation button to perform a factory reset.
3. Briefly press the power button to return to the previous level.

3.5.2 Viewing Software Version Information

The display area shows 2.SOFT .

3.5.3 Viewing the number of overvoltage records

The display area shows 3.OVER .

1. Briefly press the confirmation button to view the number of overvoltage records.

3.5.4 Battery Voltage Check

The display area shows 4.VOLT.

1. Briefly press the confirmation button to check the current battery voltage.

3.6 Communication Settings

3.6.1 Bluetooth MAC Address

The display area shows 1.MAC .

1. Briefly press the confirmation button to view the Bluetooth MAC address (only the last 5 digits will be displayed).

3.6.2 Bluetooth Auto-Off Function Settings

The display area shows 2.AbLE .

1. Briefly press the confirmation button to enable/disable this function;
2. Once enabled, Bluetooth will automatically turn off if there is no connection for 5 consecutive minutes.

4. Troubleshooting

4.1 Error Code Explanation

Problem	Possible reasons	Solution.
Display area EE01	Incorrect password	Return to the previous menu and re-enter the correct password.
Display area EE02	Sensor connection error	Check if the sensor is loose.
Display area EE03	RTC initialization failed.	Check if the RTC crystal connection is normal. Is the RTC crystal damaged?
Display area EE04	FLASH initialization failed	Check if the storage module is properly connected.

II. Instructions for Use of the Host Computer

1. Introduce

1.1 Overview

[QDB Host Computer Testing Software V1.0] is a host computer monitoring and management software designed specifically for [QDB118S]. It supports real-time data , instrument settings , and historical data export . This software interacts with lower-level devices via a USB interface , providing an intuitive user interface and powerful data processing capabilities.

1.2 Main Features

1. Real-time monitoring : Displays device operating status and data in real time.
2. Data management : Supports data collection and export
3. Parameter configuration : Allows for setting and adjusting parameters of connected devices.

1.3 System Requirements

Hardware Requirements

1. Processor: [Minimum requirement : i5-7500 , Recommended requirement : i5-12490F or higher]
2. Memory: [Minimum requirement : 4GB , Recommended requirement : 16GB or more]
3. Storage space: [Installation required : 100MB , runtime required : 100MB or more]

Software Requirements

1. Operating System: [Win10/11]
2. Operating environment: [None available]
3. Other requirements: [The Temp folder cannot be deleted]

2. Installation and uninstallation

2.1 Installation Steps

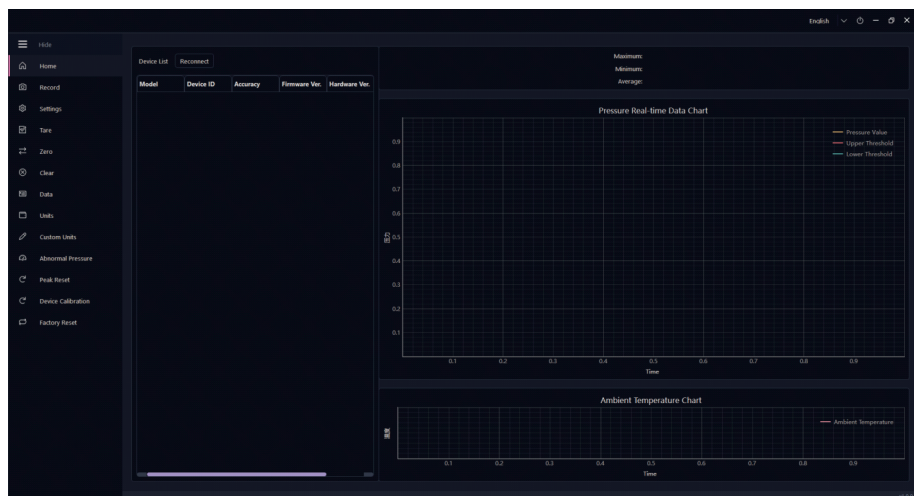
Contact the manufacturer to obtain the software compressed file. After decompression, locate the QDBVx.x.exe file and double-click to run it.

2.2 Software Uninstallation

the .exe file and the generated AppLog, config, and Temp folders.

3. Software Interface Description

3.1 Main Interface Layout

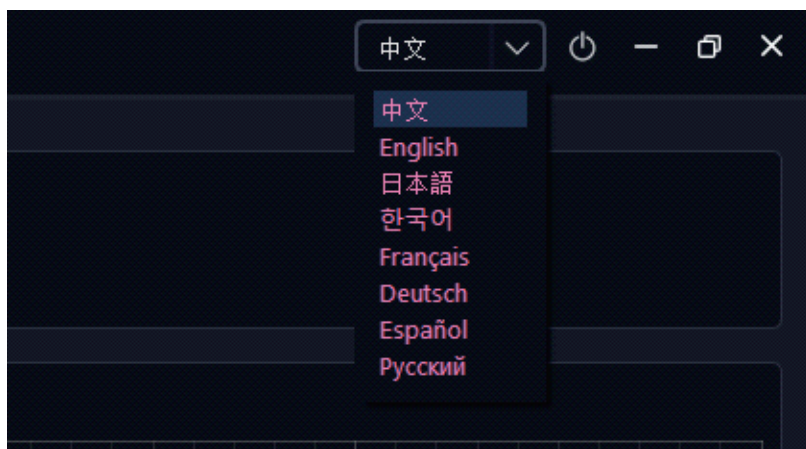


3.2 Detailed Explanation of Functional Areas

3.2.1 Language Switching

* Language switching

- ① Seamless switching between multiple languages



3.2.2 Data Display Area

* Data Display

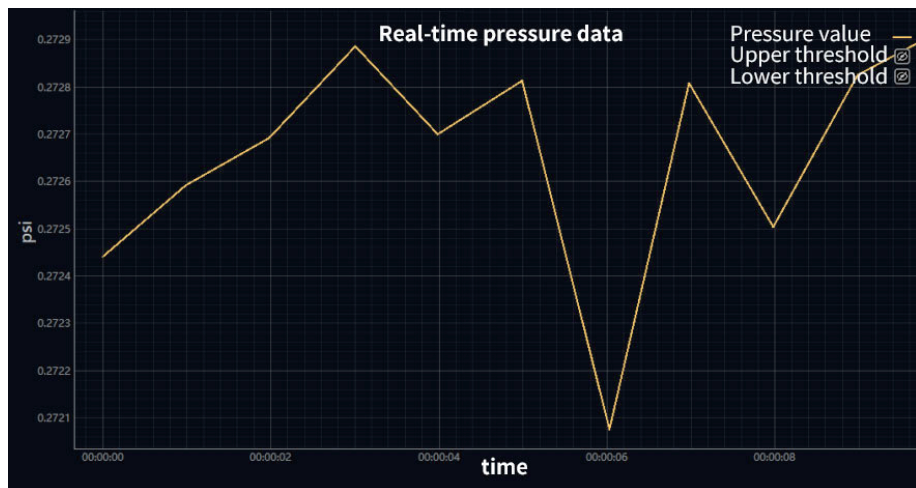
- ① Real-time display of current pressure value
- ② Calculate the average, maximum, and minimum values of the uploaded data.



3.2.3 Real-time pressure data display area

* Real-time pressure data display

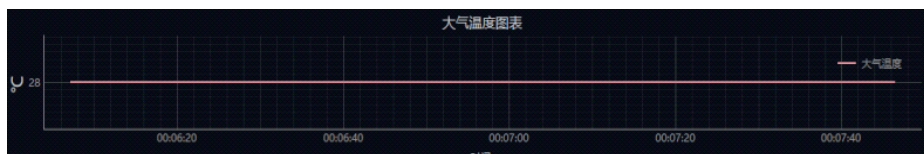
- ① The current pressure value is displayed in real time using a discounted method.
- ② You can choose to enable/disable the display of the upper and lower thresholds.
- ③ The left side displays the current unit.



3.2.4 Temperature display area

* Real-time pressure data display

- ① Display the current temperature value in real time using a discounted method.



3.2.5 Equipment list display area

* Displays basic information about the connected devices.

Settings

Basic Info

Instrument Settings

General Settings

Device Information

Model

Device ID

Accuracy

Hardware Version

Firmware Version

Device Type

Range

Transmit Range High

Transmit Range Low

Pressure Unit

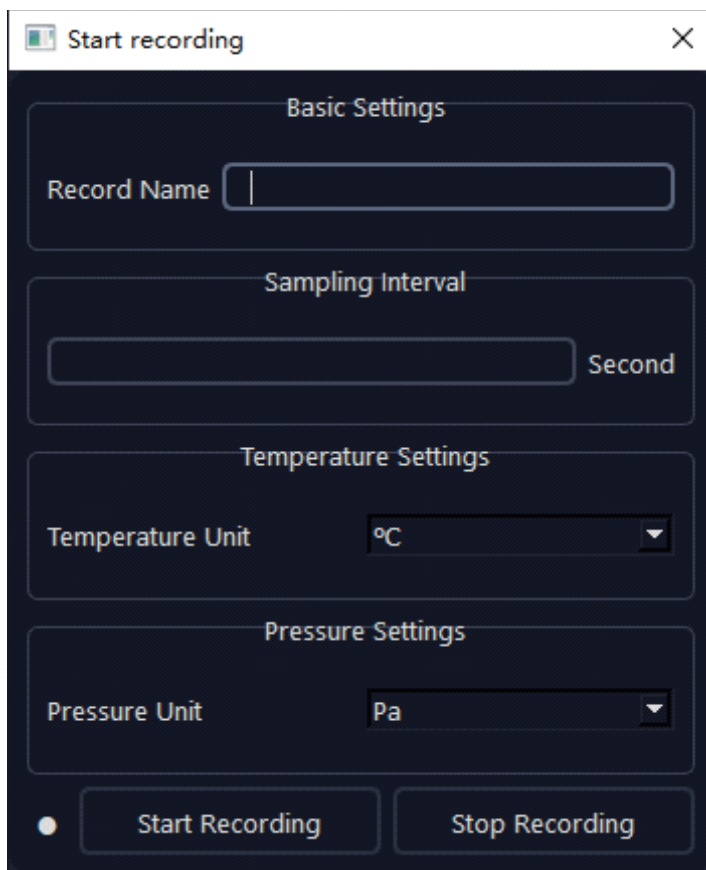
OK

Cancel

3.2.6 Functional area

* Record

- ① Record name settings
- ② Data collection interval settings
- ③ Temperature unit settings
- ④ Pressure unit settings
- ⑤ Start recording
- ⑥ Stop recording



The screenshot shows a software window titled "Start recording" with a close button (X) in the top right corner. The window contains four main sections for configuration:

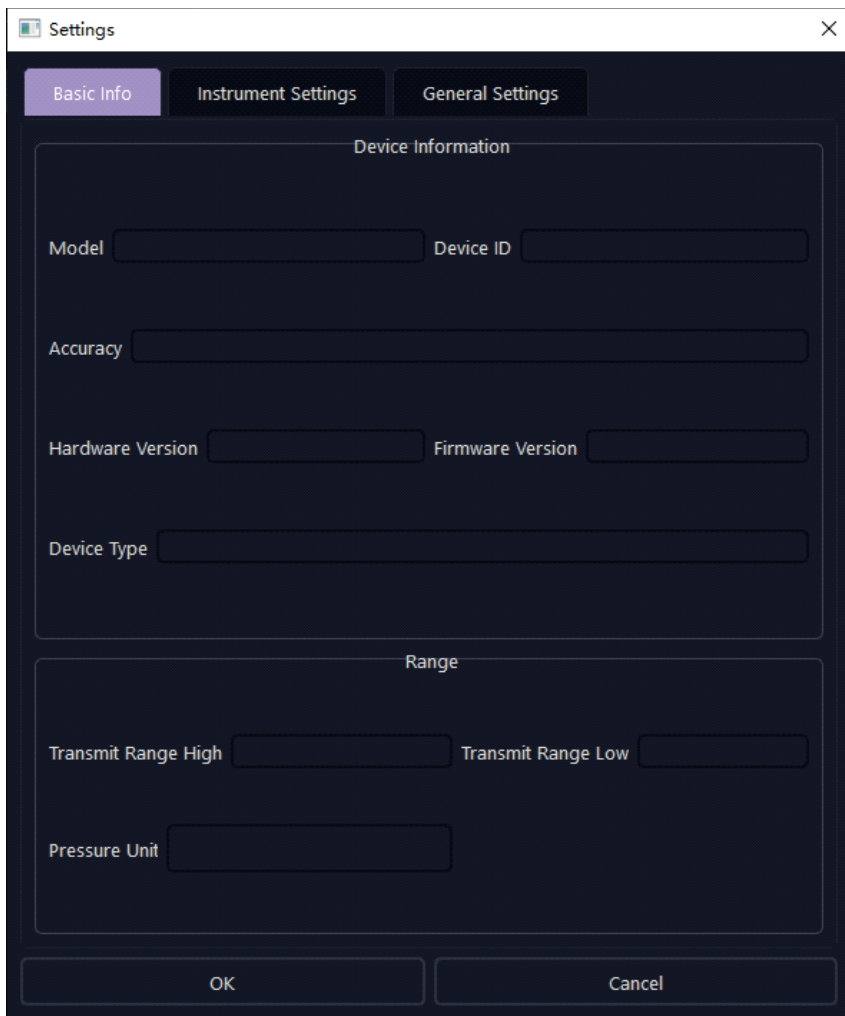
- Basic Settings:** Includes a text input field for "Record Name".
- Sampling Interval:** Includes a numeric input field followed by the unit "Second".
- Temperature Settings:** Includes a label "Temperature Unit" and a dropdown menu currently set to "°C".
- Pressure Settings:** Includes a label "Pressure Unit" and a dropdown menu currently set to "Pa".

At the bottom of the window, there is a radio button (which is selected) and two buttons: "Start Recording" and "Stop Recording".

* Set up

. View basic information

- ① Instrument Model
- ② Equipment Number
- ③ accuracy
- ④ System hardware version, firmware version
- ⑤ Equipment type
- ⑥ High instrument range, low instrument range
- ⑦ Instrument pressure unit



Settings

Basic Info Instrument Settings General Settings

Device Information

Model Device ID

Accuracy

Hardware Version Firmware Version

Device Type

Range

Transmit Range High Transmit Range Low

Pressure Unit

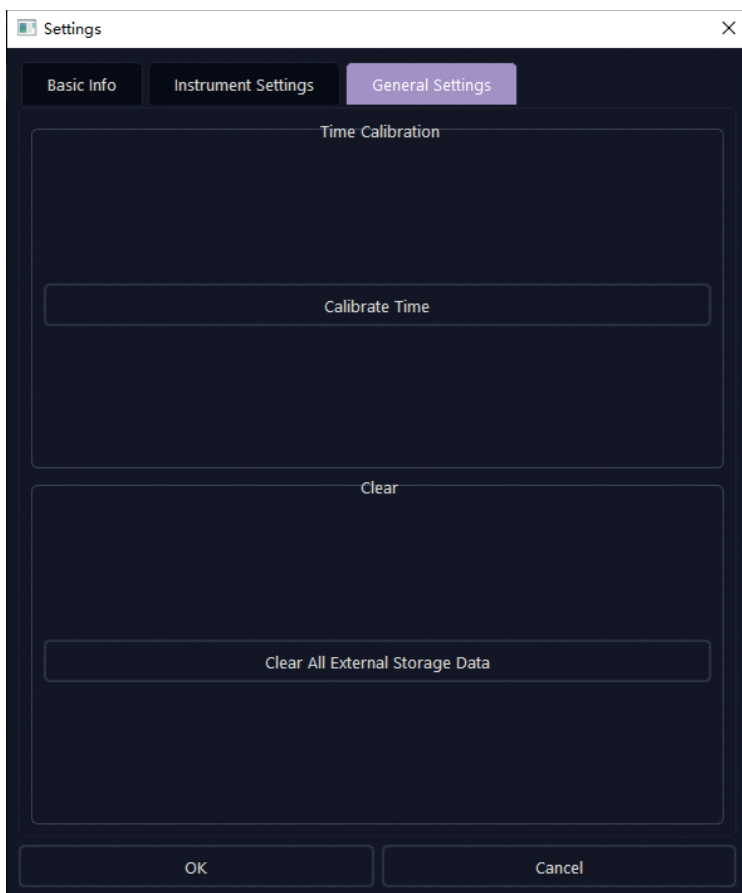
OK Cancel

. Instrument settings

- ① Temperature unit decimal point setting
- ② Temperature unit settings
- ③ Pressure unit decimal point setting
- ④ Overvoltage setting, undervoltage setting
- ⑤ Filter On/Off Settings
- ⑥ Write over the on/off settings when full
- ⑦ Speed measurement settings
- ⑧ Backlight duration setting
- ⑨ Automatic shutdown duration setting

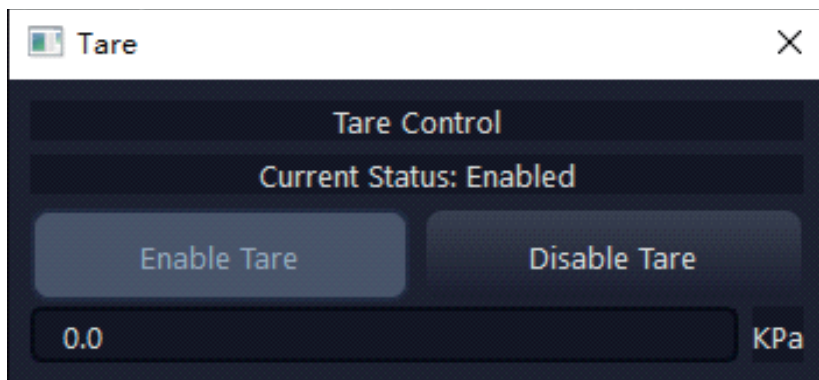
. General settings

- ① Calibration time



* Peel

- ① Enable peel
- ② Turn off peeling
- ③ You need to enter the peeling value before enabling peeling.

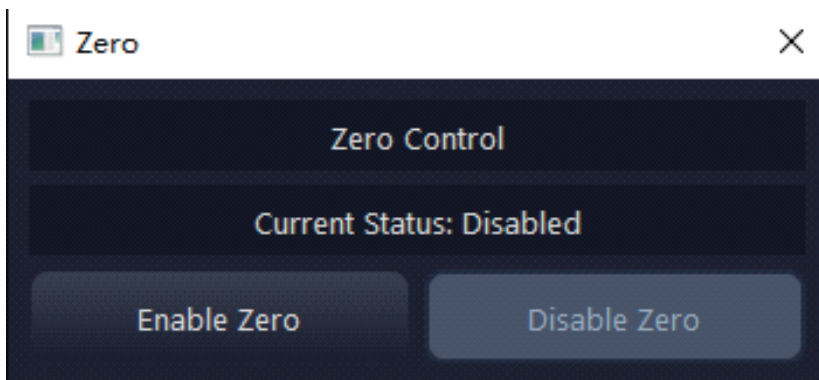


* Clear

- ① Enable Reset
- ② Close Reset

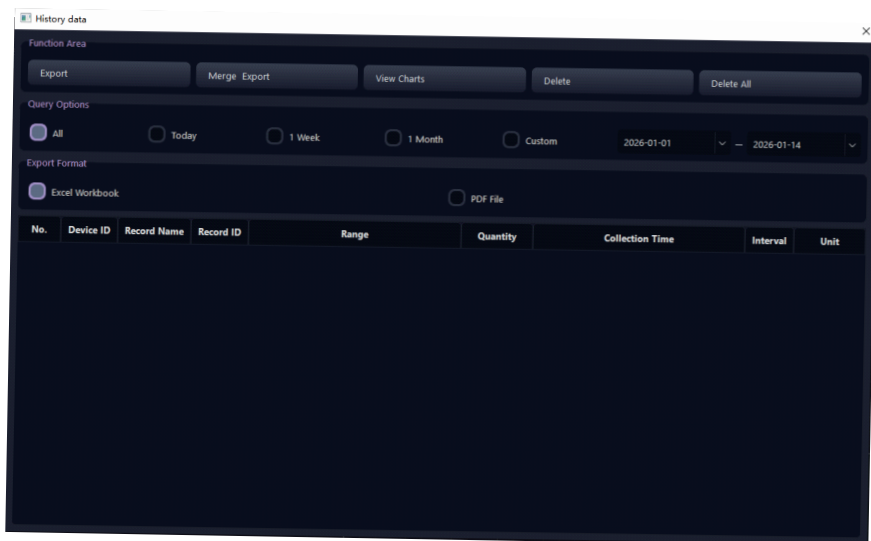
* Clear

- ① Clear the data in the real-time pressure data chart.
- ② Clear data from temperature chart
- ③ Clear maximum, minimum, and average values.
- ④ Clear real-time stress data



* Data

- ① All pressure and temperature data collected and recorded in the display instrument.
- ② Export Excel and PDF files
- ③ View the chart of selected record count
- ④ Delete selected records
- ⑤ Delete all records



* Optional units

- ① Enable/disable unit selection function
- ② Select the required pressure unit


Optional units
×

Switch

Enable
☒

Pressure Units

☒ Pa
☐ kPa
☐ MPa
☐ bar
☐ mbar

☒ psi
☐ kgf/cm²
☐ inH₂O
☐ mmH₂O
☐ inHg

☐ mmHg
☐ mm
☐ U

Save

* Custom units

- ① Customize your desired units
- ② Select a reference unit, enter the coefficient, and a custom unit name. The custom unit can then be used in the instrument (Note: the icon displayed in the instrument is "U").

Custom units

×

Preview

1 KPa = 0.0098692 ATM

Unit Name

ATM

Reference Unit

KPa

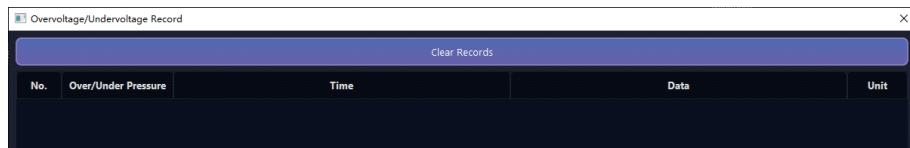
Reference Coefficient

0.0098692

Submit

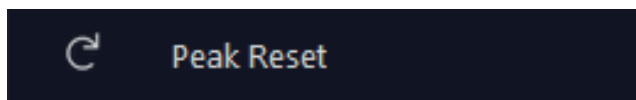
* Overpressure recording

- ① Displays overvoltage/undervoltage log data.
- ② Clear overvoltage/undervoltage log data



* Peak Reset

- ① Reset instrument peak value



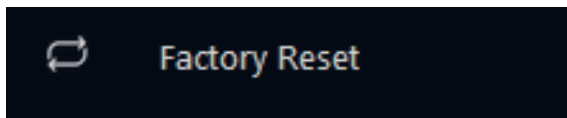
* Equipment calibration

- ① Obtain low or high standard values from the instrument.
- ② Click the corresponding data acquisition button to collect the pressure data.
- ③ After data collection is complete, click "OK" to finish the calibration process.



* Factory reset

- ① Restore instrument panel to factory default settings



4. Basic operating procedures

4.1 Device Connection

1. First, ensure that the instrument is properly connected to the computer.
2. Open the software (the software will automatically scan the device).
3. If no results are found, please click "Reconnect" to try again.
4. If the instruments appear in the device list and the line graph is working correctly, then the connection is successful.

4.2 Data Acquisition

1. Start collecting

- (1) Confirm that the device connection is normal.
- (2) Click the "Record" button
- (3) Set recording parameters
- (4) Click the "Start Data Collection" button

2. Stop collecting

- (1) Click the "Stop Data Collection" button
- (2) Data is automatically saved to the instrument.

4.3 Parameter Settings

1. Select the instrument you want to configure from the device list, and click the "Settings" button on the left.
2. Modify equipment and instrument parameters as needed.
3. Modify the parameter value (note the valid range).
4. Click "OK" to save the settings.

4.4 Data Export

1. Select "Data → Records → Data Export"
2. Choose the export format (Excel/PDF)
3. Choose the save path
4. Click "Export" to complete.

5. Troubleshooting

5.1 Common Issues

Problem	Possible reasons	Solution
Unable to connect to device	1. Communication line not connected 2. The port is occupied.	1. Check physical connections 2. Restart the software or unplug and replug the Type-C data cable.
Data not updated	1. Device communication error 2. Software lag	1. Reconnect the device 2. Restart the software
Software crash	1. Insufficient system resources 2. Software conflict 3. File corruption	1. Close other programs 2. Check antivirus software settings. 3. Reinstall the software

III. APP User Guide

1. Introduce

1.1 Overview

[QDB118s.apk] is a management software app designed specifically for [QDB118S], supporting functions such as real-time data , meter settings , and historical data export . This software interacts wirelessly with lower-level devices via Bluetooth , providing an intuitive user interface and powerful data processing capabilities.

1.2 Main Features

1. Real-time monitoring : Displays device operating status and data in real time.
2. Data management : Supports data collection and export
3. Parameter configuration : Allows for setting and adjusting parameters of connected devices.

1.3 System Requirements

Hardware Requirements

1. Processor: [Minimum configuration : Snapdragon 430 / MediaTek MT6739, Recommended configuration :] Snapdragon 660 / MediaTek G80 and above
2. Memory: [Minimum requirement : 2GB , Recommended requirement : 4GB or more]
3. Storage space: [Installation required : 20MB , runtime required : 100MB or more]
4. Monitor resolution: [Minimum resolution: HD/720P, Recommended resolution : 1080P+]

Software Requirements

1. Operating System: [Android]
2. Operating environment: [Android phone]

2. Installation and Uninstallation

2.1 Installation Steps

Contact the manufacturer to obtain the software compressed file. After decompression, locate the QDB118s.apk file and double-click to run it.

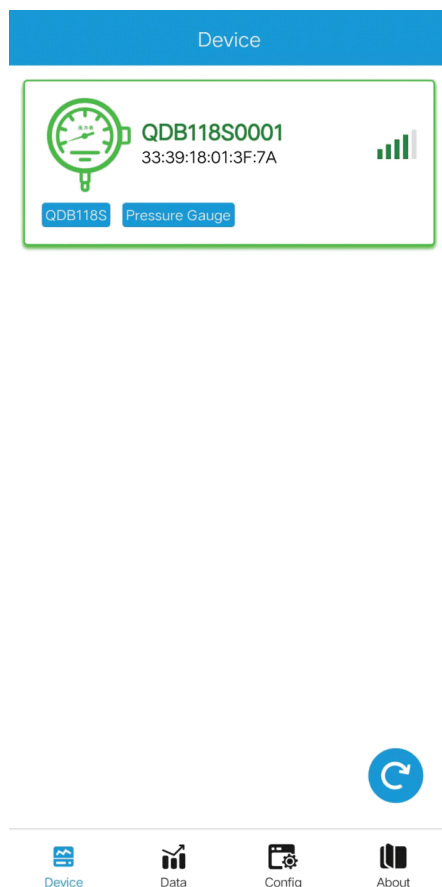
2.2 Software Uninstallation

Delete the QDB118s app and the QDB118s.apk file on your phone.

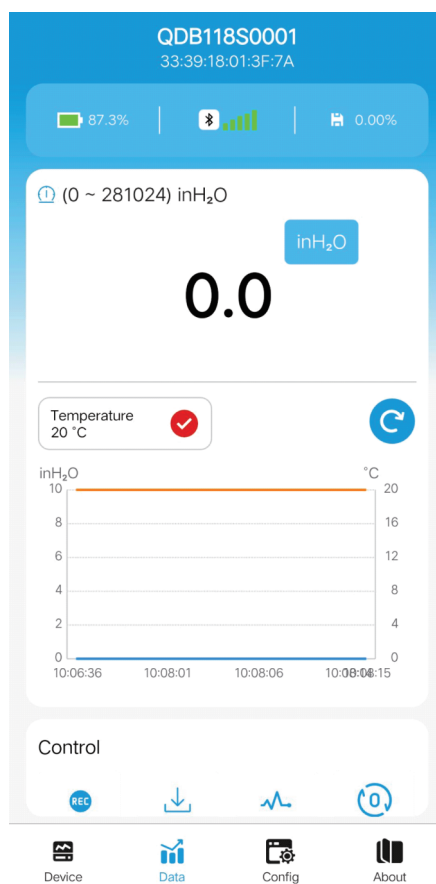
3. Software Interface Description

3.1 Main Interface Layout

Equipment column



Data column



Configuration bar

About the colu

Configuration

Device Information

Basic Configuration

Switch Pressure Unit inH₂O >

Custom Pressure Unit >

Optional Pressure Unit Enable >

Resolution 0.00 >

Measurement Speed 1 time/s >

Filtering ☐

Temperature Unit °C °F

Time Calibration >

Overwrite When Full ☐

Power Options

Backlight 1 min >

Auto Power Off Never >



QDB118S

Meter Model QDB118S

Device Number 202601040001

Accuracy 0.1

Firmware Version 0.01

System Hardware Version 0.0

Language Switch English >



3.2 Detailed Explanation of Functional Areas

3.2.1 Equipment Column

1. Search device

Click the icon in the bottom right corner, when the icon rotates, it means a search is in progress.



2. Connecting devices

Click on the unhighlighted device to connect; once the connection is successful, it will be highlighted in green.



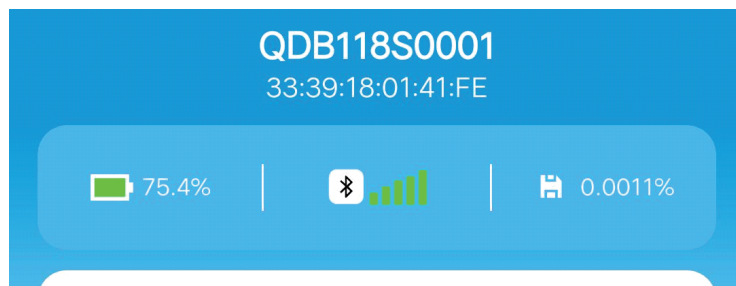
3. Disconnect device

Clicking on the highlighted device will disconnect it, and once disconnected, it will show an unhighlighted state.



3.2.2 Data column

1. Equipment status area



(1) Connect device name area

QDB118S0001
33:39:18:01:41:FE

(2) Battery area

 75.4%

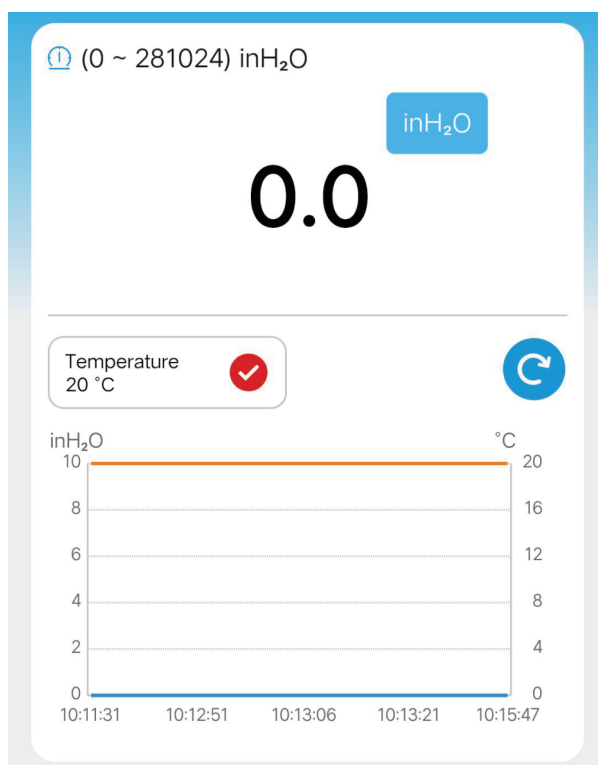
(3) Bluetooth area



(4) Memory area

 0.0011%

2.Real-time data area



(1) Clicking on a unit, will bring up a unit selection box, where you can switch the current device unit.



(2) Clicking the refresh button, will clear the current line chart.



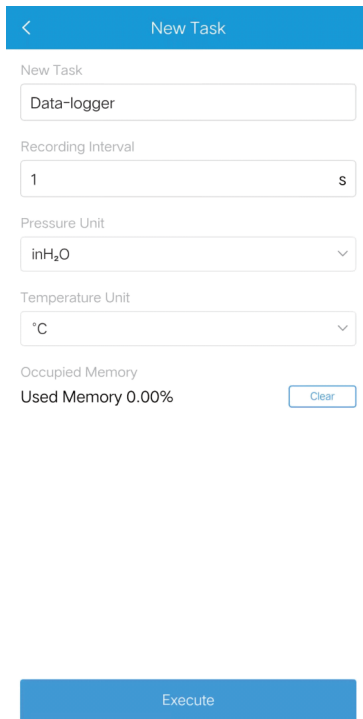
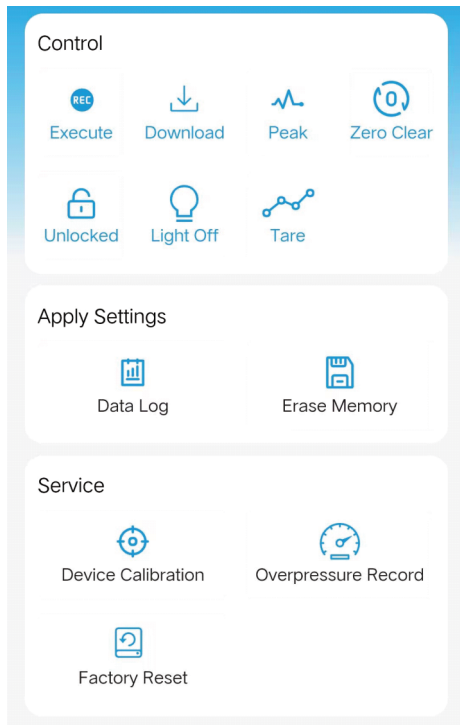
Refresh Button

(3) Clicking the temperature button, will turn the line graph on and off to display temperature statistics.

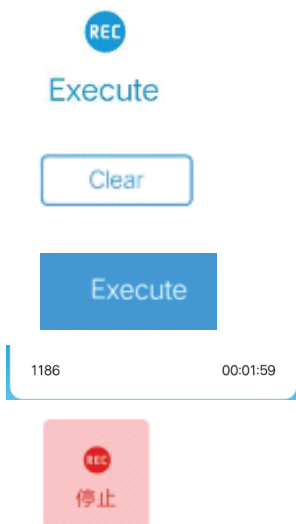


Temperature Button

3. Operating area



(1) Clicking the "Execute" button will bring up a new task dialog box. Entering the password "1234" will clear the current device memory. After filling in the corresponding parameters, clicking "Execute", will cause the dialog box to disappear, and the "Stop" button, will appear in its original position.



The page will also display "Stop"



the current number of records and the duration.

Clicking this button "Stop"



will terminate the recording process and display

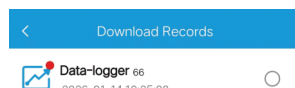
the "Execute" button again.



(2) Clicking the download button



will take you to the download history interface.



Clicking the selected button



will display the "Select All," "Delete,"

and "Download to Local" button



interfaces. Clicking the delete button

Delete

will delete the current data.

Clicking download

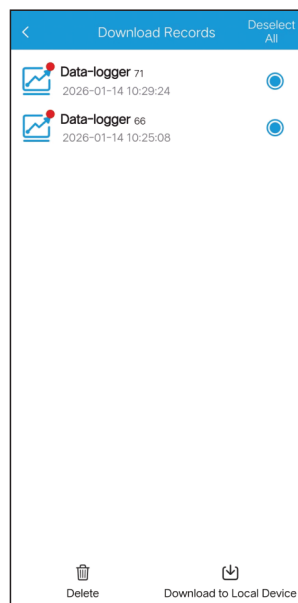


will download this data to the data record

Clicking the select all



button in the upper right corner



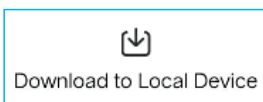
will select all data. When all data is selected,

clicking delete



will delete all selected data.

Clicking the button



will download all data to the local data record.

When the download is complete,

the current data will

be displayed with a green checkmark icon

A green checkmark indicates that the

current data has been downloaded successfully.

You can click the red area to enter the

current data details interface.



Data Log

	Data-logger1 9	
	2026-01-08 15:57:49	
	Data-logger 7454	
	2026-01-08 15:45:00	



	Data-logger1 9	
	2026-01-08 15:57:49	



Time Interval: 0.1s

Recording Points: 71

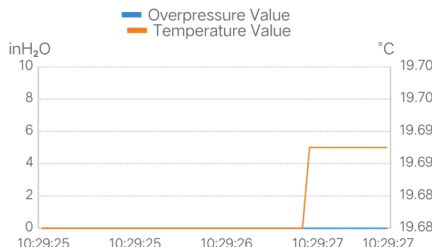
Start Time: 2026-01-14 10:29:24

Recording Duration: 00:00:07

Statistics

Curve

Data



In the data details interface, you can click the corresponding statistics, curves, and data buttons to view the corresponding data.



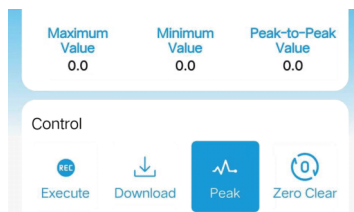
You can also click the export button in the upper right corner to export or share the local data document.

(3) Clicking the button the interface will display



the peak value effect;

clicking it again will return to normal.



(4) Clicking the button indicates that the reset process has begun.



(5) If the device is locked after clicking the unlock button,



clicking it again will change it back to the unlocked state.

(6) If the device backlight is turned on when you click the "Not On" button, clicking it again will turn .



(7) Clicking the peel effect,

a peel pop-up window will appear.



Click to modify the peel value, and then click save.

The pop-up window will disappear,



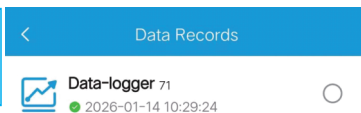
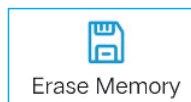
the device will start peeling and display a highlight effect.

Clicking the highlight effect again will turn off peeling.



(8) Clicking on a data record

will display the data that has



been downloaded to your local device

Clicking on the data will take you to the details page where you can view the data and export it. The operation is the same as downloading the record.

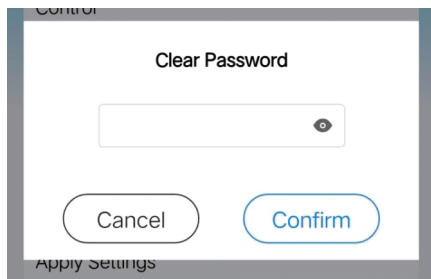
(9) Clicking the "Clear Memory" button

requires entering the password "1234"

to clear the memory.

Clicking "Cancel" will cancel the current memory clearing operation, while clicking "OK"

will execute the memory clearing operation.



(10) Clicking the device calibration button,
requires entering the password "1234".



After entering the password **Photos 1**,
you will enter the device calibration interface.

Before starting calibration ,
you can click on the unit to switch units.



Click "Start Calibration"



to display the settings.

After clicking "OK" ,

the **Photos 2** interface will
be displayed.

Calibration Point Settings

0

281024

Cancel

Confirm

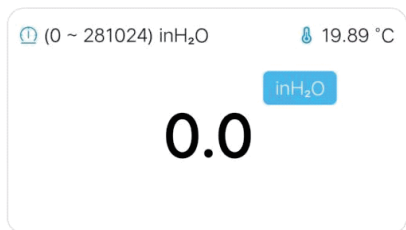
You cannot switch units in
the current interface.

After setting the parameters,
click the corresponding acquisition
button to collect the data.

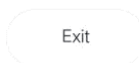


Then click the button to start device calibration.





Standard Value	Measured Value	
0	0.00	Collect
281024	0.00	Collect



Photos 1

Photos 2

(11) Click the overvoltage record button to display the overvoltage record interface, click the  button in the upper right corner to delete all overvoltage records, click the refresh button  to refresh the latest overvoltage records, and click the pagination button below .





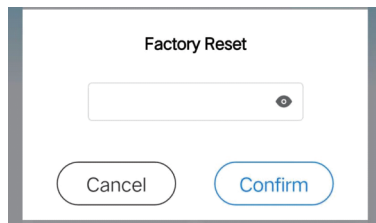
to display the overvoltage record data for the corresponding page.

(12) Clicking the factory reset button

will display a password input prompt.

The factory reset will only be executed

when you enter 1234 and click OK.



3.2.3 Configuration Panel

1. Basic configuration

(1) Click "Switch Pressure Unit"

Switch Pressure Unit inH₂O >

to bring up the pressure

switching pop-up window,

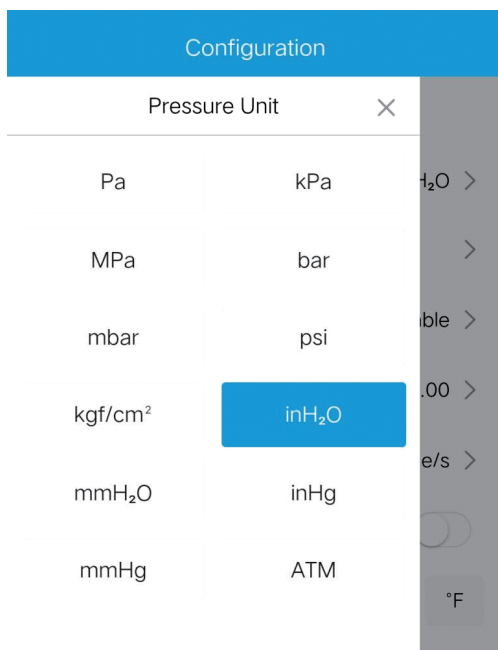
the pressure switching

pop-up window,

then click the corresponding

unit to set the equipment

pressure unit.



(2) Clicking "Custom Pressure Unit"

Custom Pressure Unit >

will bring up a custom pop-up window.

After setting the custom unit, click "Submit." You can then select the custom unit when switching pressure units, etc.

Configuration

Custom Unit X

Custom Unit

1 kPa = 0 ATM

Unit Name

ATM

Reference Unit

kPa

Reference Coefficient

0

Submit

(3) Clicking on "Select Pressure Unit"

Optional Pressure Unit Enable >

will bring up a pop-up window for selecting units. After setting the unit,

Click "Save". You can then display only the currently selected unit when switching pressure units.

Configuration

Optional Unit
×

Select All

CloseEnable

Pa	kPa
MPa	bar
mbar	psi
kgf/cm ²	inH ₂ O
mmH ₂ O	inHg
mmHg	mm
ATM	

Save

(4) Click on the resolution setting

Resolution 0.00 >

to bring up the resolution pop-up window. Click on the corresponding value to set the current device resolution.

Configuration

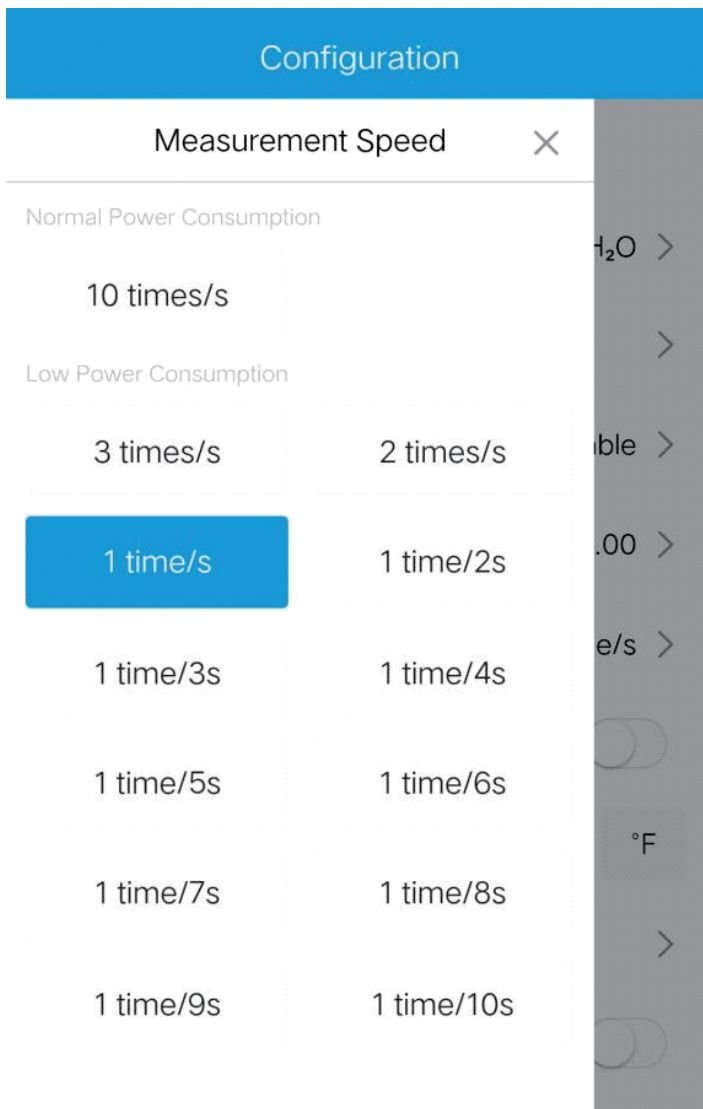
Resolution X

0	1	H ₂ O >
0	0.0	>
2	3	ble >
0.00	0.000	.00 >
4		e/s >
0.0000		

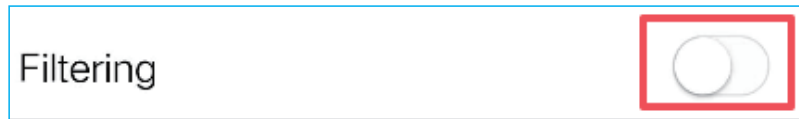
(5)Click "Measure Speed"

Measurement Speed 1 time/s >

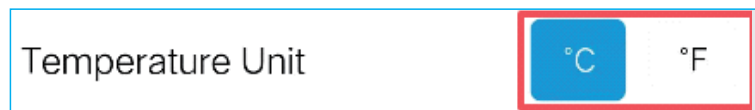
to bring up the "Measure Speed" pop-up window, then click the corresponding value to set the current device's measurement speed.



(6) Click on the filter settings to configure the current device's filter.



(7) Click on Temperature Units to set the current device temperature.



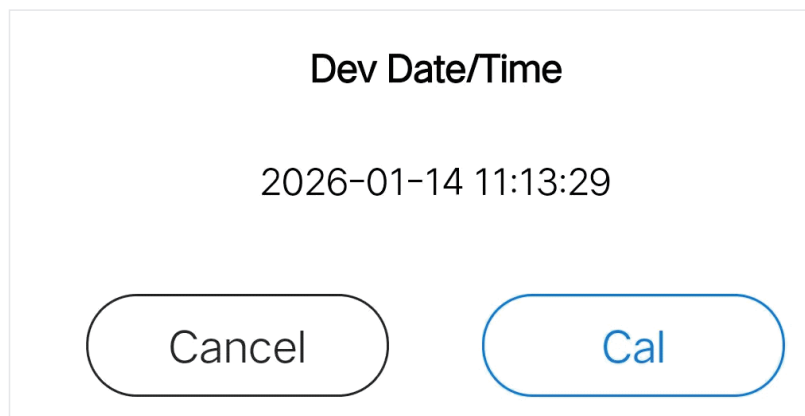
(8) Click on the filter



to bring up the time calibration pop-up window, then click the "Calibrate" button



to set the device time.



(9) Click the full write overwrite slider to turn the full write overwrite function on and off.



2.Power Option

(1)Click on the backlight to bring up the backlight pop-up window, then click on the corresponding option to set the device backlight duration.

Backlight

1 min >

Configuration

Backlight ×

15s

30s

1 min

2 mins

5 mins

10 mins

Always On

(2) Click "Auto Shutdown" to bring up the Auto Shutdown pop-up window, then click the corresponding option to set the automatic shutdown time.

Auto Power Off

Never >

Configuration

Auto Power Off



15 mins

30 mins

45 mins

1 hr

1 hr 30 mins

2 hrs

Never

H₂O >



ble >

.00 >

e/s >

2.Power Option

(1)Click on the backlight to bring up the backlight pop-up window, then click on the corresponding option to set the device backlight duration.

Backlight 1 min >

Configuration

Backlight ×

15s

30s

1 min

2 mins

5 mins

10 mins

Always On

2. Power Option

(1) Click on the backlight to bring up the backlight pop-up window, then click on the corresponding option to set the device backlight duration.

Backlight 1 min >

Configuration

Backlight ×

15s

30s

1 min

2 mins

5 mins

10 mins

Always On

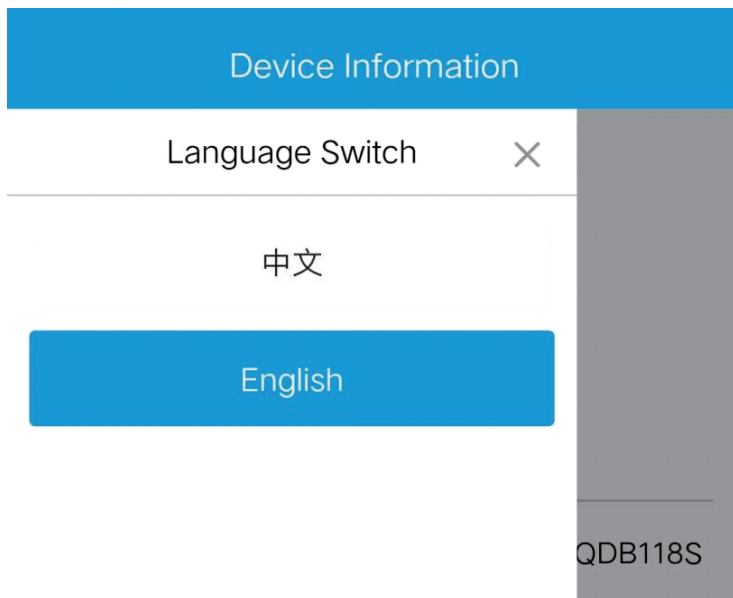
3.2.3 About the column

(1) Clicking the language switching function



will bring up a language pop-up window.

Selecting the corresponding language will switch the interface to that language.



4. Basic operating procedures

4.1 Device Connection

1. First, make sure Bluetooth is enabled on both the QDB118S and the phone.
2. The app will automatically search for the QDB118S device after opening.
3. If no results are found, please click "Search Again" or use the dropdown search bar.
4. Once the device appears in the device list, click on the device to connect. If the device icon has a green edge, the connection is successful.

4.2 Data Acquisition

1. Start collecting

- (1) Click the data bar
- (2) Click the "Execute" button
- (3) Set recording parameters in the pop-up interface
- (4) Click the "Execute" button

2. Stop collecting

- (1) Click the red "Stop" button
- (2) Data is automatically saved to QDB118S

4.3 Parameter Settings

In the Data, Configuration, and About sections, select the content you want to configure, click on the corresponding content you want to configure, and then click to configure.

4.4 Data Export

1. Select "Data Records/Download Records → Data Details → Export to Excel (top right corner down arrow)"
2. Choose to save locally or share with the app.

5. Troubleshooting

5.1 Common Issues

Problem	Possible reasons	Solution
Unable to connect to device	1. Bluetooth was not disconnected in time 2. Bluetooth connection is already in use.	1. The above problem can be solved by turning the instrument panel's Bluetooth function off and on again using the instrument panel buttons, and by also exiting and reopening the mobile app and reconnecting.
Data not updated	1. Device communication error 2. App lag	1. Restart the device 2. Restart the app and check the remaining memory on your phone.
Software crash	1. Insufficient system resources 2. Software conflict 3. File corruption	1. Close and delete other infrequently used apps to free up memory on your phone. 2. Check the mobile app settings 3. Reinstall the app

IV. Document Information

- **Document Version : V1.0**
- **Updated : January 13 , 2026**

Precautions :

1. Please read this instruction manual carefully before using this software.
2. Do not modify important system parameters arbitrarily.
3. Regularly back up important data
4. Please confirm compatibility before upgrading the software.
5. If you encounter any problems, please refer to the troubleshooting section of this manual first.



Baoji XingYuTeng Measure and Control Instruments Co.,Ltd.
Address: Building 10, High-end Equipment Industrial Park,
Xizhong Road, High-tech Development Zone, Baoji, Shaanxi, China
Website: www.xytsensor.com Email: info@xytck.net